Final Feasibility Report Appendix G – Modeling Assumptions for Operations Plan (Alternative D)

North-of-the-Delta Offstream Storage Investigation

U.S. Department of the Interior

December 2020

Mission Statements

The Department of the Interior (DOI) conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provides scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honors the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities to help them prosper.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Final Feasibility Report Appendix G – Modeling Assumptions for Operations Plan (Alternative D)

North-of-the-Delta Offstream Storage Investigation, California
Interior Region 10 • California-Great Basin

prepared for Reclamation by AECOM under Contract/Order No. GS-00F-188CA, 140R2018F0052

Cover Photo: Sites Reservoir proposed site (Sites Project Authority)

This page intentionally left blank.

Contents

This page intentionally left blank.

Appendix G1
Final Alternatives

Contents

Tables

Figures

The following results of the CALSIM and Mortality models are included for the following alternatives:

- No Action Alternative 041320 QAQC2
- Alternative A1 041320 QAQC2
- Alternative D1 041320 QAQC2

Title	Table Numbers	Figure Numbers
Deliveries, Ecosystem benefits, Overall benefits, Sites releases, Sites fills, and Sites storage allocation for ALTA1 041320 QAQC2	G.1-1 to G.1-6	
Deliveries, Ecosystem benefits, Overall benefits, Sites releases, Sites fills, and Sites storage allocation for ALTD1 041320 QAQC2	G.1-7 to G.1-12	
Deliveries and Storage increases by water year type	G.1-13	
Power and pumping cost reporting metrix	G.1-14 to G.1-17	
Percent mortality of listed life-stages as percentage of total population of that life-stage for Winter-Run, Spring-Run, Fall-Run, and LateFall-Run Chinook salmon	G.1.18a-1 to G.1.18d-2	
Annual potential production for Winter-Run, Spring-Run, Fall-Run, and LateFall-Run Chinook salmon	G.1-19a-1 to G.1.19d-2	
Temperature-dependent Winter-Run Chinook Salmon	G.1-20-1 to G.1-20-2	G.1-1 to G.1-6
Annual mortality results for Winter-Run Chinook Salmon		G.1-7a-1 to G.1-7a-19
Annual mortality results for Spring-Run Chinook Salmon		G.1-7b-1 to G.1-7b-19
Annual mortality results for Fall-Run Chinook Salmon		G.1-7c-1 to G.1-7c-19
Annual mortality results for LateFall-Run Chinook Salmon		G.1-7d-1 to G.1-7d-19

Table G.1-1 Deliveries and Storage Increases

Deliveries (TAF/year) (above No Project Alternative conditions)[a]	Alternative A1 041320 QAQC2	
	Average	Dry and Critical
Alternative Facilities	1.27-MAF Reservoir New Intake (2-pipe)	
Authority Deliveries in SWP Service Area	**88**	**190**
SOD Ag	2	4
SOD M&I	86	185
Authority Deliveries in CVP Service Area	**28**	**58**
NOD Ag	28	58
Reclamation Deliveries from CVP Operational Flexibility	**69**	**87**
NOD Ag	11	22
NOD M&I	3	6
SOD Ag	54	59
SOD M&I	0	0
Sub-Total Supplemental Deliveries for Water Supply	**184**	**335**
Refuge Water Supply	**32**	**44**
NOD	9	12
SOD	23	32
Yolo Bypass Habitat Water Supply	**57**	**44**
Total Deliveries	**274**	**423**
Storage Increases (TAF) (above No Project Alternative conditions)[a]	**Alternative A1 041320 QAQC2**	
	Average	**Dry and Critical**
Additional end-of-September storage	**217**	**296**
Trinity	0	-1
Shasta	138	207
Oroville	69	85
Folsom	10	5

Authority Deliveries in SWP Service Area	32%	45%
Authority Deliveries in CVP Service Area	10%	14%
Reclamation Deliveries from CVP Operational Flexibility	25%	20%
Refuge Water Supply	12%	10%
Yolo Bypass Habitat Water Supply	21%	10%
Additional end-of-September storage		
Trinity	0%	0%
Shasta	64%	70%
Oroville	32%	29%
Folsom	5%	2%

Notes:

[a] *Values shown are the net change between the Project Alternative and No Project Alternative*

Results are dependent on storage allocations (see storage allocation table)

Table G.1-2 Ecosystem Benefits Table

Ecosystem Value (above No Project Alternative conditions) [a]	**Alternative A1 041320 QAQC2**
Alternative Facilities	1.27-MAF Reservoir New Intake (2-pipe)
End-of-May Storage in Shasta Reservoir (TAF)	
Average	55
Dry	101
Critical	156
End-of-September Storage in Shasta Reservoir (TAF)	
Average	138
Dry	236
Critical	162
October – February Flow in Sacramento River below Keswick (TAF/period)	
Average	84
Dry	84
Critical	45
October – February Flow in Sacramento River below Keswick (only when flow is <5,000 cfs) (TAF/period)	
Average	22
Dry	34
Critical	29

Notes:

[a] *Values shown are the net change between the Project Alternative and No Project Alternative*

Results are dependent on storage allocations (see storage allocation table)

Table G.1-3 Overall Benefits Table

Benefit (above No Project Alternative conditions) [a]	Alternative A1 041320 QAQC2	
	Average (TAF)	Benefit ($)
Alternative Facilities	1.27-MAF Reservoir	
	New Intake (2-pipe)	
Authority Water Supply		
Agricultural Supply	30	
M&I Supply	86	
CVP Operational Flexibility		
Sites Releases	165	
Agricultural Supply	66	
M&I Supply	3	
Anadromous Fish/Shasta Storage (end of September)	138	
Incremental Level 4 Refuge	32	
Delta Ecosystem Enhancement		
Yolo Bypass Habitat Water Supply	57	
Hydropower (system)		
Recreation		
Flood Damage Reduction		
Total ($)	N/A	
Total (Water Supply Deliveries)	274	N/A
Total (Water Supply Deliveries including all CVP Op Flex release)	370	N/A

Notes:

[a] Values shown are the net change between the Project Alternative and No Project Alternative

Results are dependent on storage allocations (see storage allocation table)

Table G.1-4 Sites Releases Table

Releases (TAF/year)	Alternative A1 041320 QAQC2	
	Average	**Dry and Critical**
Alternative Facilities	1.27-MAF Reservoir New Intake (2-pipe)	
Releases for Authority Deliveries in SWP Service Area	155	277
Releases for Authority Deliveries in CVP Service Area	28	58
Releases for Reclamation Deliveries from CVP Operational Flexibility	165	150
Releases for Refuge Water Supply	36	46
Releases for Yolo Bypass Habitat Water Supply	66	50
Total Releases	**450**	**581**
Releases for Authority Deliveries in SWP Service Area	34%	48%
Releases for Authority Deliveries in CVP Service Area	6%	10%
Releases for Reclamation Deliveries from CVP Operational Flexibility	37%	26%
Releases for Refuge Water Supply	8%	8%
Releases for Yolo Bypass Habitat Water Supply	15%	9%

Notes:

Results are dependent on storage allocations (see storage allocation table)

Table G.1-5 Sites Fills Table

Fills (TAF/year)	Alternative A1 041320 QAQC2	
	Average	**Dry and Critical**
Alternative Facilities	1.27-MAF Reservoir New Intake (2-pipe)	
Fills to Authority Deliveries in SWP Service Area	130	107
Fills to Authority Deliveries in CVP Service Area	48	39
Fills to Reclamation Deliveries from CVP Operational Flexibility	164	135
Fills to Refuge Water Supply	40	28
Fills to Yolo Bypass Habitat Water Supply	70	45
Total Fill	**453**	**356**
Fills to Authority Deliveries in SWP Service Area	29%	30%
Fills to Authority Deliveries in CVP Service Area	11%	11%
Fills to Reclamation Deliveries from CVP Operational Flexibility	36%	38%
Fills to Refuge Water Supply	9%	8%
Fills to Yolo Bypass Habitat Water Supply	16%	13%

Notes:

Results are dependent on storage allocations (see storage allocation table)

Table G.1-6 Sites Storage Allocation Table

Storage Volumes (TAF)	Alternative A1 041320 QAQC2
Alternative Facilities	1.27-MAF Reservoir New Intake (2-pipe)
Authority Deliveries in SWP Service Area	498
Authority Deliveries in CVP Service Area	170
Reclamation Deliveries from CVP Operational Flexibility	264
Refuge Water Supply	98
Yolo Bypass Habitat Water Supply	120
Dead Pool Storage	120
Total Storage	**1270**
Authority Deliveries in SWP Service Area	39%
Authority Deliveries in CVP Service Area	13%
Reclamation Deliveries from CVP Operational Flexibility	21%
Refuge Water Supply	8%
Yolo Bypass Habitat Water Supply	9%
Dead Pool Storage	9%

Notes:
Results are dependent on storage allocations

Table G.1- 7 Deliveries and Storage Increases

Deliveries (TAF/year) (above No Project Alternative conditions) [a]	Alternative D1 041320 QAQC2	
	Average	**Dry and Critical**
Alternative Facilities	1.81-MAF Reservoir New Intake (2-pipe)	
Authority Deliveries in SWP Service Area	**103**	**229**
SOD Ag	2	5
SOD M&I	101	224
Authority Deliveries in CVP Service Area	**28**	**60**
NOD Ag	28	60
Reclamation Deliveries from CVP Operational Flexibility	**73**	**114**
NOD Ag	17	34
NOD M&I	5	9
SOD Ag	52	71
SOD M&I	0	0
Sub-Total Supplemental Deliveries for Water Supply	**205**	**404**
Refuge Water Supply	**34**	**48**
NOD	10	13
SOD	24	35
Yolo Bypass Habitat Water Supply	**51**	**33**
Total Deliveries	**289**	**484**
Storage Increases (TAF) (above No Project Alternative conditions) [a]	**Alternative D1 041320 QAQC2**	
	Average	**Dry and Critical**
Additional end-of-September storage	**255**	**356**
Trinity	0	-1
Shasta	164	248
Oroville	80	104
Folsom	11	5

Authority Deliveries in SWP Service Area	36%	47%
Authority Deliveries in CVP Service Area	10%	12%
Reclamation Deliveries from CVP Operational Flexibility	25%	24%
Refuge Water Supply	12%	10%
Yolo Bypass Habitat Water Supply	18%	7%
Additional end-of-September storage		
Trinity	0%	0%
Shasta	64%	70%
Oroville	31%	29%
Folsom	4%	1%

Notes:

[a] *Values shown are the net change between the Project Alternative and No Project Alternative*

Results are dependent on storage allocations (see storage allocation table)

Table G.1- 8 Ecosystem Benefits Table

Ecosystem Value (above No Project Alternative conditions) [a]	**Alternative D1 041320 QAQC2**
Alternative Facilities	1.81-MAF Reservoir New Intake (2-pipe)
End-of-May Storage in Shasta Reservoir (TAF)	
Average	69
Dry	126
Critical	208
End-of-September Storage in Shasta Reservoir (TAF)	
Average	164
Dry	275
Critical	207
October – February Flow in Sacramento River below Keswick (TAF/period)	
Average	93
Dry	73
Critical	38
October – February Flow in Sacramento River below Keswick (only when flow is <5,000 cfs) (TAF/period)	
Average	25
Dry	29
Critical	33

Notes:

[a] Values shown are the net change between the Project Alternative and No Project Alternative

Results are dependent on storage allocations (see storage allocation table)

Table G.1- 9 Overall Benefits Table

Benefit (above No Project Alternative conditions) [a]	Alternative D1 041320 QAQC2	
	Average (TAF)	**Benefit ($)**
Alternative Facilities	1.81-MAF Reservoir	
	New Intake (2-pipe)	
Authority Water Supply		
Agricultural Supply	30	
M&I Supply	101	
CVP Operational Flexibility		
Sites Releases	194	
Agricultural Supply	68	
M&I Supply	5	
Anadromous Fish/Shasta Storage (end of September)	164	
Incremental Level 4 Refuge	34	
Delta Ecosystem Enhancement		
Yolo Bypass Habitat Water Supply	51	
Hydropower (system)		
Recreation		
Flood Damage Reduction		
Total ($)	N/A	
Total (Water Supply Deliveries)	289	N/A
Total (Water Supply Deliveries including all CVP Op Flex release)	410	N/A

Notes:

[a] *Values shown are the net change between the Project Alternative and No Project Alternative*

Results are dependent on storage allocations (see storage allocation table)

Table G.1- 10 Sites Releases Table

Releases (TAF/year)	Alternative D1 041320 QAQC2	
	Average	**Dry and Critical**
Alternative Facilities	1.81-MAF Reservoir New Intake (2-pipe)	
Releases for Authority Deliveries in SWP Service Area	180	331
Releases for Authority Deliveries in CVP Service Area	28	60
Releases for Reclamation Deliveries from CVP Operational Flexibility	194	184
Releases for Refuge Water Supply	35	45
Releases for Yolo Bypass Habitat Water Supply	59	38
Total Releases	**496**	**659**
Releases for Authority Deliveries in SWP Service Area	36%	50%
Releases for Authority Deliveries in CVP Service Area	6%	9%
Releases for Reclamation Deliveries from CVP Operational Flexibility	39%	28%
Releases for Refuge Water Supply	7%	7%
Releases for Yolo Bypass Habitat Water Supply	12%	6%

Notes:

Results are dependent on storage allocations (see storage allocation table)

Table G.1- 11 Sites Fills Table

Fills (TAF/year)	Alternative D1 041320 QAQC2	
	Average	Dry and Critical
Alternative Facilities	1.81-MAF Reservoir New Intake (2-pipe)	
Fills to Authority Deliveries in SWP Service Area	157	123
Fills to Authority Deliveries in CVP Service Area	53	40
Fills to Reclamation Deliveries from CVP Operational Flexibility	192	141
Fills to Refuge Water Supply	40	24
Fills to Yolo Bypass Habitat Water Supply	63	35
Total Fill	**504**	**363**
Fills to Authority Deliveries in SWP Service Area	31%	34%
Fills to Authority Deliveries in CVP Service Area	10%	11%
Fills to Reclamation Deliveries from CVP Operational Flexibility	38%	39%
Fills to Refuge Water Supply	8%	7%
Fills to Yolo Bypass Habitat Water Supply	12%	10%

Notes:

Results are dependent on storage allocations (see storage allocation table)

Table G.1- 12 Sites Storage Allocation Table

Storage Volumes (TAF)	**Alternative D1 041320 QAQC2**
Alternative Facilities	1.81-MAF Reservoir New Intake (2-pipe)
Authority Deliveries in SWP Service Area	814
Authority Deliveries in CVP Service Area	250
Reclamation Deliveries from CVP Operational Flexibility	390
Refuge Water Supply	116
Yolo Bypass Habitat Water Supply	120
Dead Pool Storage	120
Total Storage	**1810**
Authority Deliveries in SWP Service Area	45%
Authority Deliveries in CVP Service Area	14%
Reclamation Deliveries from CVP Operational Flexibility	22%
Refuge Water Supply	6%
Yolo Bypass Habitat Water Supply	7%
Dead Pool Storage	7%

Notes:

Results are dependent on storage allocations

Table G.1-13 Deliveries Table

Deliveries (TAF/year) (above No Project Alternative conditions)[a]	Alternative A1 041320 QAQC2						Alternative D1 041320 QAQC2					
	Average	Wet	Above Normal	Below Normal	Dry	Critical	Average	Wet	Above Normal	Below Normal	Dry	Critical
Alternative Facilities	1.27-MAF Reservoir New Intake (2-pipe)						1.81-MAF Reservoir New Intake (2-pipe)					
Authority Deliveries in SWP Service Area	88	-15	19	114	250	99	103	-15	5	130	282	150
SOD Ag	2	0	0	2	5	2	2	0	0	3	6	3
SOD M&I	86	-15	18	112	244	97	101	-14	5	127	276	146
Authority Deliveries in CVP Service Area	28	5	5	23	50	71	28	5	5	21	44	84
NOD Ag	28	5	5	23	50	71	28	5	5	21	44	84
Reclamation Deliveries from CVP Operational Flexibility	69	14	11	179	73	107	73	18	10	137	112	118
NOD Ag	11	-1	2	20	29	11	17	0	3	22	47	15
NOD M&I	3	0	1	6	8	2	5	0	1	6	15	1
SOD Ag	54	15	8	154	36	94	52	18	7	110	50	102
SOD M&I	0	0	0	0	0	0	0	0	0	0	0	0
Sub-Total Supplemental Deliveries for Water Supply	184	4	34	316	372	278	205	8	20	288	438	352
Refuge Water Supply	32	12	43	36	52	32	34	12	44	36	53	40
NOD	9	4	14	10	14	8	10	4	14	11	15	10
SOD	23	9	29	26	38	24	24	9	30	24	38	31
Yolo Bypass Habitat Water Supply	57	66	70	58	52	31	51	66	65	50	41	20
Total Deliveries	274	82	147	411	477	341	289	87	130	374	532	413
Storage Increases (TAF) (above No Project Alternative conditions)[a]	Alternative A1 041320 QAQC2						Alternative D1 041320 QAQC2					
	Average	Wet	Above Normal	Below Normal	Dry	Critical	Average	Wet	Above Normal	Below Normal	Dry	Critical
Additional end-of-September storage	**217**	**71**	**284**	**263**	**306**	**281**	**255**	**78**	**332**	**307**	**347**	**369**
Trinity	0	0	0	0	0	-3	0	0	0	0	0	-3
Shasta	138	36	136	178	236	162	164	42	171	203	275	207
Oroville	69	26	105	87	62	119	80	26	117	101	65	163
Folsom	10	9	42	-3	8	2	11	9	43	4	7	1
Authority Deliveries in SWP Service Area	32%	-19%	13%	28%	52%	29%	36%	-17%	4%	35%	53%	36%
Authority Deliveries in CVP Service Area	10%	6%	3%	5%	10%	21%	10%	5%	4%	6%	8%	20%
Reclamation Deliveries from CVP Operational Flexibility	25%	17%	7%	44%	15%	31%	25%	21%	8%	37%	21%	29%
Refuge Water Supply	12%	15%	29%	9%	11%	9%	12%	14%	34%	10%	10%	10%
Yolo Bypass Habitat Water Supply	21%	81%	47%	14%	11%	9%	18%	77%	50%	13%	8%	5%
Additional end-of-September storage												
Trinity	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	-1%
Shasta	64%	51%	48%	68%	77%	58%	64%	55%	52%	66%	79%	56%
Oroville	32%	36%	37%	33%	20%	42%	31%	33%	35%	33%	19%	44%
Folsom	5%	13%	15%	-1%	3%	1%	4%	12%	13%	1%	2%	0%

Notes:

[a] Values shown are the net change between the Project Alternative and No Project Alternative

Results are dependent on storage allocations (see storage allocation table)

Table G.1-14 Power and Pumping Cost Reporting Metrics - Summary
Sites Project Alternatives - 041320 QAQC2

Facility / Metric	Description	Units	Period	No Action Alternative 041320 QAQC2	Alternative A1 041320 QAQC2	Alternative D1 041320 QAQC2	Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2	Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2
Central Valley Project								
Power Facilities								
Capacity	Total of all Facilities at load center	(MW)	Long Term	1,651	1,662	1,663	10	12
			Dry & Critical	1,532	1,551	1,554	18	21
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	4,618	4,624	4,627	6	9
			Dry & Critical	3,401	3,416	3,415	14	14
Generation Revenue	Total of all Facilities	($1,000)	Long Term	250,791	251,242	251,388	451	597
			Dry & Critical	184,041	185,018	184,980	978	939
Pumping Facilities								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	1,336	1,376	1,375	40	39
			Dry & Critical	1,257	1,314	1,312	57	55
Power Costs	Total of all Facilities	($1,000)	Long Term	73,037	75,247	75,209	2,210	2,172
			Dry & Critical	68,795	71,978	71,852	3,183	3,057
Off-peak pumping targets	Percent of time off-peak target not met	(%)	Long Term	0%	0%	0%	0%	0%
			Dry & Critical	0%	0%	0%	0%	0%
Total CVP Facilities								
Net Generation	Total of all Facilities	(GWh)	Long Term	3,282	3,248	3,252	-34	-29
			Dry & Critical	2,145	2,102	2,104	-43	-41
Net Revenue	Total of all Facilities	($1,000)	Long Term	177,754	175,994	176,179	-1,759	-1,575
			Dry & Critical	115,245	113,040	113,128	-2,205	-2,117
State Water Project								
Power Facilities								
Capacity	Total of all Facilities at load center	(MW)	Long Term	1,010	1,038	1,042	28	32
			Dry & Critical	587	644	661	57	74
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	4,263	4,348	4,368	85	104
			Dry & Critical	2,814	2,996	3,030	182	215
Generation Revenue	Total of all Facilities	($1,000)	Long Term	231,291	236,074	237,105	4,784	5,815
			Dry & Critical	152,512	162,736	164,429	10,225	11,917
Pumping Facilities								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	7,966	8,232	8,289	266	322
			Dry & Critical	5,562	6,147	6,248	585	686
Power Costs	Total of all Facilities	($1,000)	Long Term	431,839	446,304	449,335	14,465	17,496
			Dry & Critical	302,210	334,084	339,278	31,874	37,068
Off-peak pumping targets	Percent of time off-peak target not met	(%)	Long Term	32%	33%	33%	1%	2%
			Dry & Critical	0%	0%	0%	0%	0%
Total SWP Facilities								
Net Generation	Total of all Facilities	(GWh)	Long Term	-3,703	-3,884	-3,921	-181	-218
			Dry & Critical	-2,747	-3,151	-3,218	-404	-471
Net Revenue	Total of all Facilities	($1,000)	Long Term	-200,549	-210,229	-212,230	-9,681	-11,681
			Dry & Critical	-149,698	-171,348	-174,848	-21,650	-25,150
Proposed NODOS Facilities								
Power Facilities								
Capacity	At load center	(MW)	Long Term	0	14	18	14	18
			Dry & Critical	0	17	21	17	21
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	0	128	156	128	156
			Dry & Critical	0	155	194	155	194
Generation Revenue	Total of all Facilities	($1,000)	Long Term	0	7,012	8,614	7,012	8,614
			Dry & Critical	0	8,379	10,555	8,379	10,555
Pumping Facilities								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	12	241	292	229	280
			Dry & Critical	11	180	201	169	190
Power Costs	Total of all Facilities	($1,000)	Long Term	627	13,075	15,788	12,448	15,160
			Dry & Critical	571	9,617	10,746	9,047	10,175
Total NODOS Facilities								
Net Generation	Total of all Facilities	(GWh)	Long Term	-12	-114	-136	-102	-124
			Dry & Critical	-11	-25	-7	-14	4
Net Revenue	Total of all Facilities	($1,000)	Long Term	-627	-6,064	-7,174	-5,436	-6,546
			Dry & Critical	-571	-1,239	-191	-668	380
All Facilities								
Total								
Net Generation	Total of all Facilities	(GWh)	Long Term	-433	-752	-808	-319	-374
			Dry & Critical	-613	-1,076	-1,123	-463	-510
Net Revenue	Total of all Facilities	($1,000)	Long Term	-23,437	-40,461	-43,393	-17,023	-19,956
			Dry & Critical	-35,037	-59,692	-62,065	-24,655	-27,028

Notes:
1. Results are estimated using LTGEN, SWP_Power and NODOS_Power utilizing data from the CALSIM II model
2. Long Term is the average quantity for the water years 1922-2003.
3. Dry & Critical is the average quantity for dry and critical years according to the Sacramento River 40-30-30 index
4. Revenue is based on 2030 forecast prices developed by DWR.
5. Net Generation for all facities does not equal sum of Net Generation for CVP, SWP and proposed NODOS facilities because energy use at Red Bluff pumping plant is included in both CVP and propose
Results for Red Bluff pumping from LTGEN are subtracted from Net Generation for all facilities to avoid double-counting.

Table G.1-15 Power and Pumping Cost Reporting Metrics - SWP Detail
Sites Project Alternatives - 041320 QAQC2

				No Action Alternative 041320 QAQC2	Alternative A1 041320 QAQC2	Alternative D1 041320 QAQC2	Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2	Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2
SWP Facilities								
Oroville Reservoir Power Facility								
Capacity	At load center	(MW)	Long Term	625	644	648	19	22
			Dry & Critical	355	406	421	51	66
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	1,901	1,915	1,918	13	16
			Dry & Critical	1,145	1,170	1,177	25	31
Generation Revenue	Total of all Facilities	($1,000)	Long Term	103,186	103,987	104,144	801	958
			Dry & Critical	62,095	63,586	63,898	1,492	1,804
Thermalito Power Facility								
Capacity	At load center	(MW)	Long Term	27	27	27	0	0
			Dry & Critical	13	13	13	0	-1
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	223	222	221	-1	-1
			Dry & Critical	135	132	131	-2	-3
Generation Revenue	Total of all Facilities	($1,000)	Long Term	12,083	12,038	12,022	-46	-61
			Dry & Critical	7,293	7,189	7,141	-104	-152
SWP San Luis Power Facility								
Capacity	At load center	(MW)	Long Term	112	112	111	0	-1
			Dry & Critical	96	93	90	-2	-5
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	104	102	102	-1	-2
			Dry & Critical	87	86	86	-1	-2
Generation Revenue	Total of all Facilities	($1,000)	Long Term	5,621	5,548	5,521	-73	-100
			Dry & Critical	4,741	4,682	4,661	-59	-80
Alamo Power Facility								
Capacity	At load center	(MW)	Long Term	12	12	12	0	0
			Dry & Critical	6	6	6	0	1
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	91	93	94	2	3
			Dry & Critical	63	69	70	6	7
Generation Revenue	Total of all Facilities	($1,000)	Long Term	4,936	5,050	5,082	114	146
			Dry & Critical	3,405	3,718	3,768	313	363
Mojave Power Facility								
Capacity	At load center	(MW)	Long Term	10	11	11	0	0
			Dry & Critical	5	5	5	0	0
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	75	78	78	3	3
			Dry & Critical	48	54	55	6	7
Generation Revenue	Total of all Facilities	($1,000)	Long Term	4,065	4,203	4,239	137	174
			Dry & Critical	2,618	2,920	2,981	303	364
Devil's Canyon Power Facility								
Capacity	At load center	(MW)	Long Term	111	115	116	4	5
			Dry & Critical	50	53	55	4	5
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	906	936	945	30	39
			Dry & Critical	582	648	662	66	80
Generation Revenue	Total of all Facilities	($1,000)	Long Term	49,163	50,854	51,300	1,691	2,137
			Dry & Critical	31,562	35,241	35,980	3,679	4,418
Warner Power Facility								
Capacity	At load center	(MW)	Long Term	43	45	45	2	2
			Dry & Critical	25	26	27	2	3
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	362	376	379	15	17
			Dry & Critical	284	315	319	31	35
Generation Revenue	Total of all Facilities	($1,000)	Long Term	19,571	20,368	20,516	797	945
			Dry & Critical	15,324	17,024	17,244	1,700	1,920
Castaic Power Facility								
Capacity	At load center	(MW)	Long Term	69	71	72	3	3
			Dry & Critical	39	41	43	3	4
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	602	627	631	25	29
			Dry & Critical	470	522	529	52	60
Generation Revenue	Total of all Facilities	($1,000)	Long Term	32,666	34,029	34,281	1,363	1,616
			Dry & Critical	25,475	28,377	28,756	2,902	3,280
SWP Banks Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	768	790	795	22	27
			Dry & Critical	506	555	563	49	58
Power Costs	Total of all Facilities	($1,000)	Long Term	41,719	42,945	43,172	1,227	1,454
			Dry & Critical	27,527	30,214	30,634	2,687	3,107
SWP San Luis Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	158	153	152	-5	-6
			Dry & Critical	125	114	112	-11	-13
Power Costs	Total of all Facilities	($1,000)	Long Term	8,516	8,260	8,202	-256	-314
			Dry & Critical	6,740	6,141	6,017	-599	-723
SWP Dos Amigos Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	344	356	358	12	14
			Dry & Critical	239	268	272	29	33
Power Costs	Total of all Facilities	($1,000)	Long Term	18,638	19,272	19,386	634	748
			Dry & Critical	12,930	14,489	14,697	1,559	1,766

Table G.1-15 Power and Pumping Cost Reporting Metrics - SWP Detail
Sites Project Alternatives - 041320 QAQC2

				No Action Alternative 041320 QAQC2	Alternative A1 041320 QAQC2	Alternative D1 041320 QAQC2	Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2	Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2
Buena Vista Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	417	431	434	15	18
			Dry & Critical	295	327	333	32	37
Power Costs	Total of all Facilities	($1,000)	Long Term	22,623	23,419	23,583	796	960
			Dry & Critical	16,056	17,801	18,085	1,744	2,029
Teerink Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	507	525	529	18	22
			Dry & Critical	359	398	405	39	46
Power Costs	Total of all Facilities	($1,000)	Long Term	27,520	28,489	28,689	970	1,170
			Dry & Critical	19,514	21,641	21,988	2,126	2,473
Chrisman Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	1,067	1,105	1,113	38	46
			Dry & Critical	751	834	848	83	97
Power Costs	Total of all Facilities	($1,000)	Long Term	57,935	59,994	60,431	2,058	2,496
			Dry & Critical	40,821	45,335	46,079	4,514	5,258
Edmonston Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	3,740	3,872	3,901	132	161
			Dry & Critical	2,631	2,921	2,971	290	340
Power Costs	Total of all Facilities	($1,000)	Long Term	202,988	210,200	211,733	7,212	8,745
			Dry & Critical	143,025	158,841	161,447	15,816	18,422
Pearblossom Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	633	654	660	21	27
			Dry & Critical	412	458	469	46	56
Power Costs	Total of all Facilities	($1,000)	Long Term	34,381	35,528	35,833	1,146	1,452
			Dry & Critical	22,409	24,930	25,458	2,521	3,049
Oso Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	184	191	193	7	9
			Dry & Critical	144	160	162	16	18
Power Costs	Total of all Facilities	($1,000)	Long Term	9,983	10,386	10,462	403	478
			Dry & Critical	7,844	8,705	8,817	861	973
South Bay Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	119	124	124	4	5
			Dry & Critical	81	91	92	10	11
Power Costs	Total of all Facilities	($1,000)	Long Term	5,995	6,198	6,224	203	228
			Dry & Critical	4,368	4,845	4,899	477	530
Del Valle Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	1	1	1	0	0
			Dry & Critical	1	1	1	0	0
Power Costs	Total of all Facilities	($1,000)	Long Term	67	67	67	0	0
			Dry & Critical	70	70	70	0	0
Las Perillas Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	8	8	8	0	0
			Dry & Critical	5	5	6	1	1
Power Costs	Total of all Facilities	($1,000)	Long Term	410	429	432	20	22
			Dry & Critical	251	298	302	47	51
Badger Hill Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	20	21	21	1	1
			Dry & Critical	12	14	14	2	2
Power Costs	Total of all Facilities	($1,000)	Long Term	1,064	1,115	1,121	51	57
			Dry & Critical	653	774	785	121	132
Total SWP Facilities								
Net Generation	Total of all Facilities	(GWh)	Long Term	-3,703	-3,884	-3,921	-181	-218
			Dry & Critical	-2,747	-3,151	-3,218	-404	-471
Net Revenue	Total of all Facilities	($1,000)	Long Term	-200,549	-210,229	-212,230	-9,681	-11,681
			Dry & Critical	-149,698	-171,348	-174,848	-21,650	-25,150

Notes:

1. Results are estimated using SWP_Power utilizing data from the CALSIM II model
2. Long Term is the average quantity for the water years 1922-2003.
3. Dry & Critical is the average quantity for dry and critical years according to the Sacramento River 40-30-30 index
4. Revenue is based on 2030 forecast prices developed by DWR.

Table G.1-16 Power and Pumping Cost Reporting Metrics - CVP Detail
Sites Project Alternatives - 041320 QAQC2

				No Action Alternative 041320 QAQC2	Alternative A1 041320 QAQC2	Alternative D1 041320 QAQC2	Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2	Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2
CVP Facilities								
Trinity Reservoir Power Facility								
Capacity	At load center	(MW)	Long Term	112	112	112	0	0
			Dry & Critical	101	101	101	0	0
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	394	394	394	0	0
			Dry & Critical	281	281	281	0	0
Generation Revenue	Total of all Facilities	($1,000)	Long Term	21,409	21,421	21,417	12	8
			Dry & Critical	15,221	15,236	15,234	15	13
Lewiston Power Facility								
Capacity	At load center	(MW)	Long Term	0	0	0	0	0
			Dry & Critical	0	0	0	0	0
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	0	0	0	0	0
			Dry & Critical	0	0	0	0	0
Generation Revenue	Total of all Facilities	($1,000)	Long Term	0	0	0	0	0
			Dry & Critical	0	0	0	0	0
Carr Power Facility								
Capacity	At load center	(MW)	Long Term	145	145	145	0	0
			Dry & Critical	145	145	145	0	0
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	260	260	260	0	0
			Dry & Critical	250	250	250	0	0
Generation Revenue	Total of all Facilities	($1,000)	Long Term	14,094	14,103	14,100	8	5
			Dry & Critical	13,531	13,548	13,546	17	15
Spring Creei Power Facility								
Capacity	At load center	(MW)	Long Term	178	179	178	0	0
			Dry & Critical	178	179	179	0	0
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	302	302	302	0	0
			Dry & Critical	229	227	227	-1	-2
Generation Revenue	Total of all Facilities	($1,000)	Long Term	16,414	16,422	16,410	8	-4
			Dry & Critical	12,367	12,321	12,273	-46	-93
Shasta Power Facility								
Capacity	At load center	(MW)	Long Term	584	594	596	10	12
			Dry & Critical	538	555	560	17	22
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	2,059	2,066	2,069	7	10
			Dry & Critical	1,537	1,552	1,555	14	17
Generation Revenue	Total of all Facilities	($1,000)	Long Term	111,813	112,241	112,418	428	605
			Dry & Critical	83,188	84,041	84,216	853	1,027
Keswick Power Facility								
Capacity	At load center	(MW)	Long Term	47	47	47	0	0
			Dry & Critical	38	38	38	0	0
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	412	411	411	-1	-1
			Dry & Critical	335	334	333	-2	-2
Generation Revenue	Total of all Facilities	($1,000)	Long Term	22,370	22,320	22,339	-50	-31
			Dry & Critical	18,139	18,073	18,042	-66	-97
Folsom Power Facility								
Capacity	At load center	(MW)	Long Term	171	172	172	1	1
			Dry & Critical	162	163	163	2	1
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	547	547	547	0	0
			Dry & Critical	282	283	283	2	1
Generation Revenue	Total of all Facilities	($1,000)	Long Term	29,694	29,701	29,693	7	-1
			Dry & Critical	15,254	15,356	15,332	102	78
Nimbus Power Facility								
Capacity	At load center	(MW)	Long Term	7	7	7	0	0
			Dry & Critical	4	4	4	0	0
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	63	63	63	0	0
			Dry & Critical	37	37	37	0	0
Generation Revenue	Total of all Facilities	($1,000)	Long Term	3,416	3,406	3,405	-10	-11
			Dry & Critical	1,985	1,985	1,980	0	-5
New Melones Power Facility								
Capacity	At load center	(MW)	Long Term	306	306	306	0	0
			Dry & Critical	282	282	282	0	0
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	463	463	463	0	0
			Dry & Critical	346	346	346	0	0
Generation Revenue	Total of all Facilities	($1,000)	Long Term	25,136	25,150	25,146	14	9
			Dry & Critical	18,728	18,749	18,747	21	18
CVP San Luis Power Facility								
Capacity	At load center	(MW)	Long Term	100	99	99	0	-1
			Dry & Critical	82	82	81	0	-2
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	115	116	116	1	1
			Dry & Critical	97	99	97	2	0
Generation Revenue	Total of all Facilities	($1,000)	Long Term	6,254	6,310	6,293	56	39
			Dry & Critical	5,269	5,366	5,266	97	-3

Table G.1-16 Power and Pumping Cost Reporting Metrics - CVP Detail
Sites Project Alternatives - 041320 QAQC2

				No Action Alternative 041320 QAQC2	Alternative A1 041320 QAQC2	Alternative D1 041320 QAQC2	Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2	Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2
O'Neill Power Facility								
Capacity	At load center	(MW)	Long Term	0	0	0	0	0
			Dry & Critical	1	1	1	0	0
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	3	3	3	0	0
			Dry & Critical	7	6	6	0	0
Generation Revenue	Total of all Facilities	($1,000)	Long Term	190	168	168	-22	-22
			Dry & Critical	358	343	345	-15	-13
Jones Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	608	622	621	14	12
			Dry & Critical	579	597	595	18	16
Power Costs	Total of all Facilities	($1,000)	Long Term	33,287	34,049	33,993	762	706
			Dry & Critical	31,746	32,754	32,628	1,009	882
CVP Banks Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	21	22	22	0	1
			Dry & Critical	17	21	22	3	5
Power Costs	Total of all Facilities	($1,000)	Long Term	1,166	1,184	1,220	18	54
			Dry & Critical	950	1,134	1,221	184	271
Contra Costa Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	29	29	29	0	0
			Dry & Critical	28	28	28	0	0
Power Costs	Total of all Facilities	($1,000)	Long Term	1,560	1,563	1,563	3	3
			Dry & Critical	1,541	1,527	1,527	-13	-13
O'Neill Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	72	73	73	1	0
			Dry & Critical	67	69	68	2	1
Power Costs	Total of all Facilities	($1,000)	Long Term	3,947	3,985	3,970	37	22
			Dry & Critical	3,669	3,755	3,730	86	60
CVP San Luis Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	199	203	202	4	3
			Dry & Critical	188	198	197	10	9
Power Costs	Total of all Facilities	($1,000)	Long Term	10,852	11,057	11,026	206	174
			Dry & Critical	10,264	10,819	10,746	555	482
San Felipe Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	43	44	45	2	2
			Dry & Critical	42	44	44	2	2
Power Costs	Total of all Facilities	($1,000)	Long Term	2,344	2,432	2,437	88	93
			Dry & Critical	2,322	2,426	2,420	104	98
CVP Dos Amigos Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	136	142	142	5	5
			Dry & Critical	120	128	128	8	8
Power Costs	Total of all Facilities	($1,000)	Long Term	7,448	7,745	7,735	297	287
			Dry & Critical	6,562	6,997	6,988	435	426
Folsom Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	16	16	16	0	0
			Dry & Critical	16	16	17	0	0
Power Costs	Total of all Facilities	($1,000)	Long Term	870	863	865	-7	-4
			Dry & Critical	904	900	907	-3	3
Corning Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	5	6	6	0	0
			Dry & Critical	5	5	5	0	0
Power Costs	Total of all Facilities	($1,000)	Long Term	292	308	312	16	21
			Dry & Critical	261	276	281	15	20
Red Bluff Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	0	3	3	3	3
			Dry & Critical	0	3	3	2	3
Power Costs	Total of all Facilities	($1,000)	Long Term	15	158	165	143	150
			Dry & Critical	14	143	151	129	138
DMC Intertie Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	2	2	2	0	0
			Dry & Critical	2	2	2	0	0
Power Costs	Total of all Facilities	($1,000)	Long Term	115	119	120	4	5
			Dry & Critical	94	105	103	11	9
San Luis Other Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	97	101	101	4	4
			Dry & Critical	85	91	90	5	5
Power Costs	Total of all Facilities	($1,000)	Long Term	5,312	5,537	5,526	225	213
			Dry & Critical	4,682	4,981	4,961	298	278
DMC Other Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	1	1	1	0	0
			Dry & Critical	1	1	1	0	0
Power Costs	Total of all Facilities	($1,000)	Long Term	35	36	36	1	1
			Dry & Critical	36	36	36	1	1

Table G.1-16 Power and Pumping Cost Reporting Metrics - CVP Detail
Sites Project Alternatives - 041320 QAQC2

				No Action Alternative 041320 QAQC2	Alternative A1 041320 QAQC2	Alternative D1 041320 QAQC2	Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2	Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2
Tehama Other Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	9	17	17	8	8
			Dry & Critical	8	15	16	7	7
Power Costs	Total of all Facilities	($1,000)	Long Term	503	917	945	414	442
			Dry & Critical	454	821	850	367	397
Misc Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	97	97	97	0	0
			Dry & Critical	97	97	97	0	0
Power Costs	Total of all Facilities	($1,000)	Long Term	5,291	5,294	5,295	3	4
			Dry & Critical	5,298	5,303	5,303	4	4
Total CVP Facilities								
Net Generation	Total of all Facilities	(GWh)	Long Term	3,282	3,248	3,252	-34	-29
			Dry & Critical	2,145	2,102	2,104	-43	-41
Net Revenue	Total of all Facilities	($1,000)	Long Term	177,754	175,994	176,179	-1,759	-1,575
			Dry & Critical	115,245	113,040	113,128	-2,205	-2,117

Notes:
1. Results are estimated using LTGEN utilizing data from the CALSIM II model
2. Long Term is the average quantity for the water years 1922-2003.
3. Dry & Critical is the average quantity for dry and critical years according to the Sacramento River 40-30-30 index
4. Revenue is based on 2030 forecast prices developed by DWR.

Table G.1-17 Power and Pumping Cost Reporting Metrics - NODOS Detail
Sites Project Alternatives - 041320 QAQC2

				No Action Alternative 041320 QAQC2	Alternative A1 041320 QAQC2	Alternative D1 041320 QAQC2	Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2	Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2
Proposed NODOS Facilities								
Fletcher Reservoir Power Facility								
Capacity	At load center	(MW)	Long Term	0	9	12	9	12
			Dry & Critical	0	11	14	11	14
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	0	84	107	84	107
			Dry & Critical	0	98	129	98	129
Generation Revenue	Total of all Facilities	($1,000)	Long Term	0	4,586	5,909	4,586	5,909
			Dry & Critical	0	5,292	7,006	5,292	7,006
Sacramento River Pipeline Power Facility								
Capacity	At load center	(MW)	Long Term	0	3	3	3	3
			Dry & Critical	0	4	5	4	5
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	0	24	28	24	28
			Dry & Critical	0	36	44	36	44
Generation Revenue	Total of all Facilities	($1,000)	Long Term	0	1,307	1,523	1,307	1,523
			Dry & Critical	0	1,976	2,395	1,976	2,395
G-C Canal TRR Power Facility								
Capacity	At load center	(MW)	Long Term	0	2	2	2	2
			Dry & Critical	0	2	2	2	2
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	0	20	21	20	21
			Dry & Critical	0	21	21	21	21
Generation Revenue	Total of all Facilities	($1,000)	Long Term	0	1,119	1,183	1,119	1,183
			Dry & Critical	0	1,111	1,154	1,111	1,154
Fletcher Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	0	142	181	142	181
			Dry & Critical	0	104	122	104	122
Power Costs	Total of all Facilities	($1,000)	Long Term	0	7,777	9,839	7,777	9,839
			Dry & Critical	0	5,642	6,595	5,642	6,595
Funks Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	0	22	24	22	24
			Dry & Critical	0	18	19	18	19
Power Costs	Total of all Facilities	($1,000)	Long Term	0	1,123	1,196	1,123	1,196
			Dry & Critical	0	921	932	921	932
Sacramento River Pipeline Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	0	35	42	35	42
			Dry & Critical	0	25	27	25	27
Power Costs	Total of all Facilities	($1,000)	Long Term	0	1,943	2,296	1,943	2,296
			Dry & Critical	0	1,340	1,459	1,340	1,459
G-C Canal TRR Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	0	27	31	27	31
			Dry & Critical	0	19	20	19	20
Power Costs	Total of all Facilities	($1,000)	Long Term	0	1,451	1,666	1,451	1,666
			Dry & Critical	0	1,034	1,089	1,034	1,089
T-C Canal Diversion Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	3	6	6	3	3
			Dry & Critical	2	4	4	2	2
Power Costs	Total of all Facilities	($1,000)	Long Term	165	297	305	132	140
			Dry & Critical	110	229	230	119	120
G-C Canal Diversion Pumping Facility								
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	9	9	9	0	0
			Dry & Critical	9	9	8	0	0
Power Costs	Total of all Facilities	($1,000)	Long Term	462	485	485	22	23
			Dry & Critical	461	451	442	-9	-19
Total NODOS Facilities								
Net Generation	Total of all Facilities	(GWh)	Long Term	-12	-114	-136	-102	-124
			Dry & Critical	-11	-25	-7	-14	4
Net Revenue	Total of all Facilities	($1,000)	Long Term	-627	-6,064	-7,174	-5,436	-6,546
			Dry & Critical	-571	-1,239	-191	-668	380

Notes:
1. Results are estimated using NODOS_Power utilizing data from the CALSIM II model
2. Long Term is the average quantity for the water years 1922-2003.
3. Dry & Critical is the average quantity for dry and critical years according to the Sacramento River 40-30-30 index
4. Revenue is based on 2030 forecast prices developed by DWR.

Table G.1-18a-1 Percent Mortality of Listed Life-stages as percentage of total population of that life-stage for Winter-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTA1 041320 QAQC2

Long-term Average and Average by Water Year Type Annual Mortality

Analysis Period	Pre-Spawn Mortality	Eggs Flow	Eggs - Temperature	Fry - Temperature	Fry - Habitat	Juvenile Temperature	Juvenile Habitat	Total
	Annual Mortality[4] (# of Fish/year)							
Long-term								
Full Simulation Period[1]								
NAA 041320 QAQC2	9,041	339,855	203,034	3,257	118,295	1,202	34	674,717
ALTA1 041320 QAQC2	9,003	309,059	133,624	2,735	122,447	898	31	577,797
Difference	-38	-30,795	-69,410	-523	4,152	-304	-3	-96,921
Percent Difference[3]	0	-9	-34	-16	4	-25	-8	-14
Water Year Types[2]								
Wet (32.5%)								
NAA 041320 QAQC2	9,355	349,040	801	0	145,016	0	23	504,233
ALTA1 041320 QAQC2	9,701	318,143	836	0	147,846	0	11	476,535
Difference	346	-30,897	35	0	2,830	0	-12	-27,698
Percent Difference	4	-9	4	0	2	0	-54	-5
Above Normal (12.5%)								
NAA 041320 QAQC2	9,905	220,348	849,112	4,578	104,433	2,912	1	1,191,288
ALTA1 041320 QAQC2	9,300	214,126	656,721	8,560	110,351	3,865	8	1,002,931
Difference	-605	-6,222	-192,391	3,982	5,918	953	8	-188,356
Percent Difference	-6	-3	-23	87	6	33	833	-16
Below Normal (17.5%)								
NAA 041320 QAQC2	7,714	299,952	283,919	2,621	102,406	973	18	697,604
ALTA1 041320 QAQC2	7,929	267,712	233,665	4,589	103,291	1,108	9	618,302
Difference	214	-32,241	-50,254	1,967	885	135	-10	-79,302
Percent Difference	3	-11	-18	75	1	14	-53	-11
Dry (22.5%)								
NAA 041320 QAQC2	9,000	382,440	79,632	3,976	106,600	631	70	582,350
ALTA1 041320 QAQC2	9,000	346,125	11,802	0	115,130	0	60	482,117
Difference	0	-36,315	-67,830	-3,976	8,530	-631	-10	-100,233
Percent Difference	0	-9	-85	-100	8	-100	-14	-17
Critical (15%)								
NAA 041320 QAQC2	9,250	402,215	193,544	8,877	108,030	3,508	51	725,475
ALTA1 041320 QAQC2	8,500	361,130	51,435	5,744	110,819	1,473	79	539,180
Difference	-750	-41,085	-142,109	-3,133	2,790	-2,035	28	-186,295
Percent Difference	-8	-10	-73	-35	3	-58	54	-26

[1] Based on the 80-year simulation period

[2] As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

[3] Relative difference of the Annual average

[4] Mortality values do not include base mortality

Table G.1-18a-2 Percent Mortality of Listed Life-stages as percentage of total population of that life-stage for Winter-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTD1 041320 QAQC2

Long-term Average and Average by Water Year Type Annual Mortality

	Annual Mortality[4] (# of Fish/year)							
Analysis Period	**Pre-Spawn Mortality**	**Eggs Flow**	**Eggs - Temperature**	**Fry - Temperature**	**Fry - Habitat**	**Juvenile Temperature**	**Juvenile Habitat**	**Total**
Long-term								
Full Simulation Period[1]								
NAA 041320 QAQC2	9,041	339,855	203,034	3,257	118,295	1,202	34	674,717
ALTD1 041320 QAQC2	8,778	307,654	122,002	2,286	124,139	786	33	565,679
Difference	-263	-32,200	-81,032	-971	5,844	-416	-1	-109,038
Percent Difference[3]	-3	-9	-40	-30	5	-35	-3	-16
Water Year Types[2]								
Wet (32.5%)								
NAA 041320 QAQC2	9,355	349,040	801	0	145,016	0	23	504,233
ALTD1 041320 QAQC2	9,355	329,573	820	0	150,153	0	10	489,912
Difference	1	-19,467	20	0	5,138	0	-13	-14,321
Percent Difference	0	-6	2	0	4	0	-57	-3
Above Normal (12.5%)								
NAA 041320 QAQC2	9,905	220,348	849,112	4,578	104,433	2,912	1	1,191,288
ALTD1 041320 QAQC2	9,900	219,169	632,745	10,869	111,902	4,463	6	989,055
Difference	-5	-1,179	-216,367	6,292	7,470	1,551	5	-202,233
Percent Difference	0	-1	-25	137	7	53	556	-17
Below Normal (17.5%)								
NAA 041320 QAQC2	7,714	299,952	283,919	2,621	102,406	973	18	697,604
ALTD1 041320 QAQC2	7,500	247,728	218,178	4,507	106,987	1,067	11	585,978
Difference	-214	-52,225	-65,741	1,886	4,581	94	-8	-111,626
Percent Difference	-3	-17	-23	72	4	10	-42	-16
Dry (22.5%)								
NAA 041320 QAQC2	9,000	382,440	79,632	3,976	106,600	631	70	582,350
ALTD1 041320 QAQC2	8,500	333,736	3,724	0	115,751	0	51	461,762
Difference	-500	-48,704	-75,909	-3,976	9,151	-631	-19	-120,588
Percent Difference	-6	-13	-95	-100	9	-100	-28	-21
Critical (15%)								
NAA 041320 QAQC2	9,250	402,215	193,544	8,877	108,030	3,508	51	725,475
ALTD1 041320 QAQC2	8,502	364,693	24,156	925	110,565	277	106	509,224
Difference	-749	-37,522	-169,388	-7,952	2,535	-3,231	55	-216,250
Percent Difference	-8	-9	-88	-90	2	-92	108	-30

[1] Based on the 80-year simulation period

[2] As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

[3] Relative difference of the Annual average

[4] Mortality values do not include base mortality

Table G.1-18b-1 Percent Mortality of Listed Life-stages as percentage of total population of that life-stage for Spring-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTA1 041320 QAQC2

Long-term Average and Average by Water Year Type Annual Mortality

Analysis Period	Annual Mortality[4] (# of Fish/year) Pre-Spawn Mortality	Eggs Flow	Eggs - Temperature	Fry - Temperature	Fry - Habitat	Juvenile Temperature	Juvenile Habitat	Total
Long-term								
Full Simulation Period[1]								
NAA 041320 QAQC2	11,322	3,081	81,003	0	2,450	0	0	97,857
ALTA1 041320 QAQC2	8,435	2,151	63,570	0	2,474	0	0	76,631
Difference	-2,887	-930	-17,433	0	24	0	0	-21,226
Percent Difference[3]	-25	-30	-22	0	1	0	0	-22
Water Year Types[2]								
Wet (32.5%)								
NAA 041320 QAQC2	161	3,907	7,046	0	2,324	0	0	13,438
ALTA1 041320 QAQC2	171	2,600	7,030	0	2,210	0	0	12,012
Difference	11	-1,307	-16	0	-113	0	0	-1,426
Percent Difference	7	-33	0	0	-5	0	0	-11
Above Normal (12.5%)								
NAA 041320 QAQC2	69,333	3,477	171,638	0	1,969	0	0	246,417
ALTA1 041320 QAQC2	57,515	330	175,878	0	2,207	0	0	235,930
Difference	-11,818	-3,147	4,240	0	238	0	0	-10,486
Percent Difference	-17	-91	2	0	12	0	0	-4
Below Normal (17.5%)								
NAA 041320 QAQC2	13,200	1,458	74,520	0	2,513	0	0	91,691
ALTA1 041320 QAQC2	6,192	1,972	78,241	0	2,553	0	0	88,958
Difference	-7,008	514	3,722	0	39	0	0	-2,733
Percent Difference	-53	35	5	0	2	0	0	-3
Dry (22.5%)								
NAA 041320 QAQC2	145	3,405	106,710	0	2,790	0	0	113,049
ALTA1 041320 QAQC2	60	2,858	45,698	0	2,732	0	0	51,349
Difference	-85	-547	-61,011	0	-58	0	0	-61,701
Percent Difference	-59	-16	-57	0	-2	0	0	-55
Critical (15%)								
NAA 041320 QAQC2	1,739	2,371	134,718	0	2,542	0	0	141,370
ALTA1 041320 QAQC2	620	1,846	102,175	0	2,790	0	0	107,431
Difference	-1,118	-525	-32,544	0	248	0	0	-33,939
Percent Difference	-64	-22	-24	0	10	0	0	-24

[1] Based on the 80-year simulation period

[2] As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

[3] Relative difference of the Annual average

[4] Mortality values do not include base mortality

Table G.1-18b-2 Percent Mortality of Listed Life-stages as percentage of total population of that life-stage for Spring-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTD1 041320 QAQC2

Long-term Average and Average by Water Year Type Annual Mortality

Analysis Period	Pre-Spawn Mortality	Eggs Flow	Eggs - Temperature	Fry - Temperature	Fry - Habitat	Juvenile Temperature	Juvenile Habitat	Total
	Annual Mortality[4] (# of Fish/year)							
Long-term								
Full Simulation Period[1]								
NAA 041320 QAQC2	11,322	3,081	81,003	0	2,450	0	0	97,857
ALTD1 041320 QAQC2	7,487	1,936	56,990	0	2,417	0	0	68,830
Difference	-3,835	-1,145	-24,013	0	-33	0	0	-29,027
Percent Difference[3]	-34	-37	-30	0	-1	0	0	-30
Water Year Types[2]								
Wet (32.5%)								
NAA 041320 QAQC2	161	3,907	7,046	0	2,324	0	0	13,438
ALTD1 041320 QAQC2	179	1,916	6,930	0	2,141	0	0	11,166
Difference	18	-1,991	-117	0	-182	0	0	-2,272
Percent Difference	11	-51	-2	0	-8	0	0	-17
Above Normal (12.5%)								
NAA 041320 QAQC2	69,333	3,477	171,638	0	1,969	0	0	246,417
ALTD1 041320 QAQC2	53,600	357	179,954	0	2,045	0	0	235,956
Difference	-15,733	-3,120	8,316	0	76	0	0	-10,461
Percent Difference	-23	-90	5	0	4	0	0	-4
Below Normal (17.5%)								
NAA 041320 QAQC2	13,200	1,458	74,520	0	2,513	0	0	91,691
ALTD1 041320 QAQC2	3,498	1,869	80,374	0	2,701	0	0	88,441
Difference	-9,702	411	5,854	0	188	0	0	-3,250
Percent Difference	-74	28	8	0	7	0	0	-4
Dry (22.5%)								
NAA 041320 QAQC2	145	3,405	106,710	0	2,790	0	0	113,049
ALTD1 041320 QAQC2	79	3,037	22,742	0	2,670	0	0	28,529
Difference	-66	-368	-83,967	0	-120	0	0	-84,520
Percent Difference	-45	-11	-79	0	-4	0	0	-75
Critical (15%)								
NAA 041320 QAQC2	1,739	2,371	134,718	0	2,542	0	0	141,370
ALTD1 041320 QAQC2	661	1,723	87,073	0	2,613	0	0	92,070
Difference	-1,078	-648	-47,646	0	71	0	0	-49,300
Percent Difference	-62	-27	-35	0	3	0	0	-35

[1] Based on the 80-year simulation period

[2] As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

[3] Relative difference of the Annual average

[4] Mortality values do not include base mortality

Table G.1-18c-1 Percent Mortality of Listed Life-stages as percentage of total population of that life-stage for Fall-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTA1 041320 QAQC2

Long-term Average and Average by Water Year Type Annual Mortality

Analysis Period	Annual Mortality[4] (# of Fish/year): Pre-Spawn Mortality	Eggs Flow	Eggs - Temperature	Fry - Temperature	Fry - Habitat	Juvenile Temperature	Juvenile Habitat	Total
Long-term								
Full Simulation Period[1]								
NAA 041320 QAQC2	1,919,424	1,543,740	904,041	175	5,159,629	4,190	281,329	9,812,529
ALTA1 041320 QAQC2	1,352,193	1,628,119	886,258	180	5,168,893	7,897	245,971	9,289,513
Difference	-567,231	84,380	-17,783	5	9,264	3,707	-35,358	-523,017
Percent Difference[3]	-30	5	-2	3	0	88	-13	-5
Water Year Types[2]								
Wet (32.5%)								
NAA 041320 QAQC2	3,754	3,818,257	104,129	540	5,770,680	7,583	65,638	9,770,580
ALTA1 041320 QAQC2	4,716	4,081,281	107,654	553	5,654,738	7,670	62,537	9,919,149
Difference	962	263,024	3,525	14	-115,942	87	-3,102	148,569
Percent Difference	26	7	3	3	-2	1	-5	2
Above Normal (12.5%)								
NAA 041320 QAQC2	8,765,588	234,966	1,372,587	0	5,344,445	0	112,489	15,830,075
ALTA1 041320 QAQC2	6,918,018	194,916	2,251,713	0	5,379,156	1,664	101,079	14,846,546
Difference	-1,847,570	-40,050	879,126	0	34,711	1,664	-11,410	-983,529
Percent Difference	-21	-17	64	0	1	0	-10	-6
Below Normal (17.5%)								
NAA 041320 QAQC2	2,976,382	576,747	401,294	0	4,995,953	417	230,206	9,180,999
ALTA1 041320 QAQC2	2,489,048	618,130	556,509	2	4,998,597	2,627	220,761	8,885,674
Difference	-487,334	41,383	155,216	2	2,644	2,209	-9,445	-295,325
Percent Difference	-16	7	39	0	0	529	-4	-3
Dry (22.5%)								
NAA 041320 QAQC2	182,685	501,838	1,404,459	0	4,789,934	1,337	411,179	7,291,432
ALTA1 041320 QAQC2	5,327	486,641	784,842	0	4,771,648	15,606	407,194	6,471,259
Difference	-177,358	-15,197	-619,617	0	-18,286	14,269	-3,985	-820,173
Percent Difference	-97	-3	-44	0	0	1,068	-1	-11
Critical (15%)								
NAA 041320 QAQC2	1,736,899	397,274	2,082,641	0	4,427,170	9,015	754,231	9,407,229
ALTA1 041320 QAQC2	327,508	397,811	1,972,187	0	4,735,555	8,169	551,735	7,992,965
Difference	-1,409,391	537	-110,454	0	308,385	-846	-202,496	-1,414,264
Percent Difference	-81	0	-5	0	7	-9	-27	-15

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the Annual average

4 Mortality values do not include base mortality

Table G.1-18c-2 Percent Mortality of Listed Life-stages as percentage of total population of that life-stage for Fall-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTD1 041320 QAQC2

Long-term Average and Average by Water Year Type Annual Mortality

	Annual Mortality[4] (# of Fish/year)							
Analysis Period	**Pre-Spawn Mortality**	**Eggs Flow**	**Eggs - Temperature**	**Fry - Temperature**	**Fry - Habitat**	**Juvenile Temperature**	**Juvenile Habitat**	**Total**
Long-term								
Full Simulation Period[1]								
NAA 041320 QAQC2	1,919,424	1,543,740	904,041	175	5,159,629	4,190	281,329	9,812,529
ALTD1 041320 QAQC2	1,223,002	1,637,751	812,470	180	5,185,672	8,498	254,974	9,122,549
Difference	-696,422	94,012	-91,571	5	26,043	4,307	-26,355	-689,980
Percent Difference[3]	-36	6	-10	3	1	103	-9	-7
Water Year Types[2]								
Wet (32.5%)								
NAA 041320 QAQC2	3,754	3,818,257	104,129	540	5,770,680	7,583	65,638	9,770,580
ALTD1 041320 QAQC2	2,769	4,098,149	109,116	553	5,673,165	7,686	61,411	9,952,849
Difference	-984	279,892	4,987	13	-97,515	104	-4,227	182,269
Percent Difference	-26	7	5	2	-2	1	-6	2
Above Normal (12.5%)								
NAA 041320 QAQC2	8,765,588	234,966	1,372,587	0	5,344,445	0	112,489	15,830,075
ALTD1 041320 QAQC2	6,953,149	203,854	2,237,023	0	5,356,301	1,692	104,728	14,856,748
Difference	-1,812,439	-31,112	864,435	0	11,857	1,692	-7,761	-973,327
Percent Difference	-21	-13	63	0	0	0	-7	-6
Below Normal (17.5%)								
NAA 041320 QAQC2	2,976,382	576,747	401,294	0	4,995,953	417	230,206	9,180,999
ALTD1 041320 QAQC2	1,914,646	597,938	752,857	4	5,057,902	2,912	244,822	8,571,081
Difference	-1,061,736	21,191	351,563	4	61,949	2,494	14,616	-609,918
Percent Difference	-36	4	88	0	1	597	6	-7
Dry (22.5%)								
NAA 041320 QAQC2	182,685	501,838	1,404,459	0	4,789,934	1,337	411,179	7,291,432
ALTD1 041320 QAQC2	6,363	505,816	451,230	0	4,836,687	17,966	382,937	6,201,000
Difference	-176,322	3,978	-953,229	0	46,753	16,629	-28,241	-1,090,432
Percent Difference	-97	1	-68	0	1	1,244	-7	-15
Critical (15%)								
NAA 041320 QAQC2	1,736,899	397,274	2,082,641	0	4,427,170	9,015	754,231	9,407,229
ALTD1 041320 QAQC2	109,760	412,824	1,760,685	0	4,659,792	8,244	619,464	7,570,769
Difference	-1,627,140	15,550	-321,956	0	232,622	-772	-134,766	-1,836,461
Percent Difference	-94	4	-15	0	5	-9	-18	-20

[1] Based on the 80-year simulation period

[2] As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

[3] Relative difference of the Annual average

[4] Mortality values do not include base mortality

Table G.1-18d-1 Percent Mortality of Listed Life-stages as percentage of total population of that life-stage for LateFall-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTA1 041320 QAQC2

Long-term Average and Average by Water Year Type Annual Mortality

Analysis Period	Pre-Spawn Mortality	Eggs Flow	Eggs - Temperature	Fry - Temperature	Fry - Habitat	Juvenile Temperature	Juvenile Habitat	Total
	Annual Mortality[4] (# of Fish/year)							
Long-term								
Full Simulation Period[1]								
NAA 041320 QAQC2	0	467,103	7,409	1,141	1,656,481	36,654	7,484	2,176,271
ALTA1 041320 QAQC2	0	492,802	7,718	493	1,631,221	27,445	7,357	2,167,036
Difference	0	25,699	310	-648	-25,260	-9,209	-127	-9,235
Percent Difference[3]	0	6	4	-57	-2	-25	-2	0
Water Year Types[2]								
Wet (32.5%)								
NAA 041320 QAQC2	0	1,183,672	11,722	112	1,419,818	43	2,507	2,617,875
ALTA1 041320 QAQC2	0	1,205,164	11,984	116	1,375,236	23	2,574	2,595,099
Difference	0	21,493	262	4	-44,582	-20	67	-22,776
Percent Difference	0	2	2	3	-3	-46	3	-1
Above Normal (12.5%)								
NAA 041320 QAQC2	0	497,048	2,807	0	1,632,753	0	999	2,133,607
ALTA1 041320 QAQC2	0	640,060	2,748	0	1,552,077	27	1,080	2,195,992
Difference	0	143,012	-59	0	-80,676	27	82	62,385
Percent Difference	0	29	-2	0	-5	0	8	3
Below Normal (17.5%)								
NAA 041320 QAQC2	0	39,776	7,729	44	1,865,056	54	5,266	1,917,926
ALTA1 041320 QAQC2	0	42,143	7,201	51	1,817,643	34	7,268	1,874,340
Difference	0	2,366	-528	7	-47,413	-20	2,001	-43,586
Percent Difference	0	6	-7	17	-3	-37	38	-2
Dry (22.5%)								
NAA 041320 QAQC2	0	36,341	5,877	0	1,778,343	1,001	4,703	1,826,265
ALTA1 041320 QAQC2	0	36,350	6,235	136	1,794,631	1,175	5,166	1,843,693
Difference	0	8	359	136	16,287	175	464	17,428
Percent Difference	0	0	6	0	1	17	10	1
Critical (15%)								
NAA 041320 QAQC2	0	34,271	3,823	7,310	1,762,891	242,705	30,428	2,081,428
ALTA1 041320 QAQC2	0	37,082	5,446	2,769	1,789,200	181,094	26,338	2,041,930
Difference	0	2,811	1,624	-4,541	26,309	-61,612	-4,090	-39,498
Percent Difference	0	8	42	-62	1	-25	-13	-2

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the Annual average

4 Mortality values do not include base mortality

Table G.1-18d-2 Percent Mortality of Listed Life-stages as percentage of total population of that life-stage for LateFall-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTD1 041320 QAQC2

Long-term Average and Average by Water Year Type Annual Mortality

Analysis Period	Pre-Spawn Mortality	Eggs Flow	Eggs - Temperature	Fry - Temperature	Fry - Habitat	Juvenile Temperature	Juvenile Habitat	Total
	Annual Mortality[4] (# of Fish/year)							
Long-term								
Full Simulation Period[1]								
NAA 041320 QAQC2	0	467,103	7,409	1,141	1,656,481	36,654	7,484	2,176,271
ALTD1 041320 QAQC2	0	494,851	7,867	310	1,623,142	23,505	8,332	2,158,006
Difference	0	27,748	458	-831	-33,338	-13,150	848	-18,265
Percent Difference[3]	0	6	6	-73	-2	-36	11	-1
Water Year Types[2]								
Wet (32.5%)								
NAA 041320 QAQC2	0	1,183,672	11,722	112	1,419,818	43	2,507	2,617,875
ALTD1 041320 QAQC2	0	1,212,212	12,326	113	1,351,262	30	2,756	2,578,699
Difference	0	28,541	604	1	-68,556	-13	249	-39,176
Percent Difference	0	2	5	0	-5	-31	10	-1
Above Normal (12.5%)								
NAA 041320 QAQC2	0	497,048	2,807	0	1,632,753	0	999	2,133,607
ALTD1 041320 QAQC2	0	639,340	2,713	0	1,618,847	27	1,274	2,262,201
Difference	0	142,291	-94	0	-13,906	27	275	128,594
Percent Difference	0	29	-3	0	-1	0	28	6
Below Normal (17.5%)								
NAA 041320 QAQC2	0	39,776	7,729	44	1,865,056	54	5,266	1,917,926
ALTD1 041320 QAQC2	0	41,005	6,637	55	1,784,286	94	9,100	1,841,178
Difference	0	1,229	-1,091	11	-80,770	40	3,834	-76,747
Percent Difference	0	3	-14	25	-4	74	73	-4
Dry (22.5%)								
NAA 041320 QAQC2	0	36,341	5,877	0	1,778,343	1,001	4,703	1,826,265
ALTD1 041320 QAQC2	0	36,146	6,626	179	1,775,439	1,268	6,933	1,826,592
Difference	0	-195	749	179	-2,904	267	2,230	327
Percent Difference	0	-1	13	0	0	27	47	0
Critical (15%)								
NAA 041320 QAQC2	0	34,271	3,823	7,310	1,762,891	242,705	30,428	2,081,428
ALTD1 041320 QAQC2	0	37,703	5,796	1,488	1,799,350	154,599	27,496	2,026,431
Difference	0	3,432	1,973	-5,822	36,459	-88,106	-2,932	-54,997
Percent Difference	0	10	52	-80	2	-36	-10	-3

[1] Based on the 80-year simulation period

[2] As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

[3] Relative difference of the Annual average

[4] Mortality values do not include base mortality

Table G.1-19a-1 Annual Potential Production for Winter-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTA1 041320 QAQC2

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
NAA 041320 QAQC2	1,894,094
ALTA1 041320 QAQC2	1,944,832
Difference	50,738
Percent Difference[3]	2.7
Water Year Types[2]	
Wet (31.7%)	
NAA 041320 QAQC2	1,961,541
ALTA1 041320 QAQC2	1,975,769
Difference	14,227
Percent Difference	0.7
Above Normal (14.6%)	
NAA 041320 QAQC2	1,629,032
ALTA1 041320 QAQC2	1,725,461
Difference	96,429
Percent Difference	5.9
Below Normal (17.1%)	
NAA 041320 QAQC2	1,864,765
ALTA1 041320 QAQC2	1,901,091
Difference	36,326
Percent Difference	1.9
Dry (22%)	
NAA 041320 QAQC2	1,951,079
ALTA1 041320 QAQC2	2,006,519
Difference	55,440
Percent Difference	2.8
Critical (14.6%)	
NAA 041320 QAQC2	1,917,586
ALTA1 041320 QAQC2	2,019,114
Difference	101,528
Percent Difference	5.3

[1] Based on the 80-year simulation period

[2] As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

[3] Relative difference of the annual average

Table G.1-19a-2 Annual Potential Production for Winter-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTD1 041320 QAQC2

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
NAA 041320 QAQC2	1,894,094
ALTD1 041320 QAQC2	1,950,747
Difference	56,653
Percent Difference[3]	3.0
Water Year Types[2]	
Wet (31.7%)	
NAA 041320 QAQC2	1,961,541
ALTD1 041320 QAQC2	1,970,921
Difference	9,379
Percent Difference	0.5
Above Normal (14.6%)	
NAA 041320 QAQC2	1,629,032
ALTD1 041320 QAQC2	1,726,726
Difference	97,693
Percent Difference	6.0
Below Normal (17.1%)	
NAA 041320 QAQC2	1,864,765
ALTD1 041320 QAQC2	1,914,224
Difference	49,459
Percent Difference	2.7
Dry (22%)	
NAA 041320 QAQC2	1,951,079
ALTD1 041320 QAQC2	2,015,605
Difference	64,526
Percent Difference	3.3
Critical (14.6%)	
NAA 041320 QAQC2	1,917,586
ALTD1 041320 QAQC2	2,039,046
Difference	121,460
Percent Difference	6.3

[1] Based on the 80-year simulation period

[2] As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

[3] Relative difference of the annual average

Table G.1-19b-1 Annual Potential Production for Spring-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTA1 041320 QAQC2

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
NAA 041320 QAQC2	423,973
ALTA1 041320 QAQC2	430,327
Difference	6,354
Percent Difference[3]	1.5
Water Year Types[2]	
Wet (31.7%)	
NAA 041320 QAQC2	453,623
ALTA1 041320 QAQC2	452,653
Difference	-970
Percent Difference	-0.2
Above Normal (14.6%)	
NAA 041320 QAQC2	365,372
ALTA1 041320 QAQC2	365,882
Difference	510
Percent Difference	0.1
Below Normal (17.1%)	
NAA 041320 QAQC2	424,242
ALTA1 041320 QAQC2	422,014
Difference	-2,228
Percent Difference	-0.5
Dry (22%)	
NAA 041320 QAQC2	418,193
ALTA1 041320 QAQC2	442,470
Difference	24,277
Percent Difference	5.8
Critical (14.6%)	
NAA 041320 QAQC2	416,921
ALTA1 041320 QAQC2	427,141
Difference	10,220
Percent Difference	2.5

[1] Based on the 80-year simulation period

[2] As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

[3] Relative difference of the annual average

Table G.1-19b-2 Annual Potential Production for Spring-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTD1 041320 QAQC2

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
NAA 041320 QAQC2	423,973
ALTD1 041320 QAQC2	433,558
Difference	9,585
Percent Difference[3]	2.3
Water Year Types[2]	
Wet (31.7%)	
NAA 041320 QAQC2	453,623
ALTD1 041320 QAQC2	452,879
Difference	-745
Percent Difference	-0.2
Above Normal (14.6%)	
NAA 041320 QAQC2	365,372
ALTD1 041320 QAQC2	365,660
Difference	289
Percent Difference	0.1
Below Normal (17.1%)	
NAA 041320 QAQC2	424,242
ALTD1 041320 QAQC2	422,037
Difference	-2,205
Percent Difference	-0.5
Dry (22%)	
NAA 041320 QAQC2	418,193
ALTD1 041320 QAQC2	452,829
Difference	34,636
Percent Difference	8.3
Critical (14.6%)	
NAA 041320 QAQC2	416,921
ALTD1 041320 QAQC2	432,811
Difference	15,890
Percent Difference	3.8

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Table G.1-19c-1 Annual Potential Production for Fall-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTA1 041320 QAQC2

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
NAA 041320 QAQC2	17,747,757
ALTA1 041320 QAQC2	17,886,498
Difference	138,741
Percent Difference[3]	0.8
Water Year Types[2]	
Wet (31.7%)	
NAA 041320 QAQC2	17,047,948
ALTA1 041320 QAQC2	16,949,867
Difference	-98,081
Percent Difference	-0.6
Above Normal (14.6%)	
NAA 041320 QAQC2	15,922,495
ALTA1 041320 QAQC2	16,226,851
Difference	304,357
Percent Difference	1.9
Below Normal (17.1%)	
NAA 041320 QAQC2	18,107,296
ALTA1 041320 QAQC2	18,180,273
Difference	72,977
Percent Difference	0.4
Dry (22%)	
NAA 041320 QAQC2	18,936,315
ALTA1 041320 QAQC2	19,181,035
Difference	244,720
Percent Difference	1.3
Critical (14.6%)	
NAA 041320 QAQC2	18,582,766
ALTA1 041320 QAQC2	19,014,365
Difference	431,599
Percent Difference	2.3

[1] Based on the 80-year simulation period

[2] As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

[3] Relative difference of the annual average

Table G.1-19c-2 Annual Potential Production for Fall-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTD1 041320 QAQC2

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
NAA 041320 QAQC2	17,747,757
ALTD1 041320 QAQC2	17,918,367
Difference	170,610
Percent Difference[3]	1.0
Water Year Types[2]	
Wet (31.7%)	
NAA 041320 QAQC2	17,047,948
ALTD1 041320 QAQC2	16,917,490
Difference	-130,458
Percent Difference	-0.8
Above Normal (14.6%)	
NAA 041320 QAQC2	15,922,495
ALTD1 041320 QAQC2	16,223,017
Difference	300,522
Percent Difference	1.9
Below Normal (17.1%)	
NAA 041320 QAQC2	18,107,296
ALTD1 041320 QAQC2	18,240,889
Difference	133,593
Percent Difference	0.7
Dry (22%)	
NAA 041320 QAQC2	18,936,315
ALTD1 041320 QAQC2	19,251,969
Difference	315,654
Percent Difference	1.7
Critical (14.6%)	
NAA 041320 QAQC2	18,582,766
ALTD1 041320 QAQC2	19,123,047
Difference	540,281
Percent Difference	2.9

1 Based on the 80-year simulation period

2 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

3 Relative difference of the annual average

Table G.1-19d-1 Annual Potential Production for LateFall-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTA1 041320 QAQC2

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
NAA 041320 QAQC2	2,889,046
ALTA1 041320 QAQC2	2,907,404
Difference	18,358
Percent Difference[3]	0.6
Water Year Types[2]	
Wet (31.7%)	
NAA 041320 QAQC2	2,723,968
ALTA1 041320 QAQC2	2,745,086
Difference	21,117
Percent Difference	0.8
Above Normal (14.6%)	
NAA 041320 QAQC2	2,865,992
ALTA1 041320 QAQC2	2,873,709
Difference	7,717
Percent Difference	0.3
Below Normal (17.1%)	
NAA 041320 QAQC2	2,954,814
ALTA1 041320 QAQC2	2,975,039
Difference	20,225
Percent Difference	0.7
Dry (22%)	
NAA 041320 QAQC2	3,063,018
ALTA1 041320 QAQC2	3,060,012
Difference	-3,005
Percent Difference	-0.1
Critical (14.6%)	
NAA 041320 QAQC2	2,928,240
ALTA1 041320 QAQC2	2,979,352
Difference	51,111
Percent Difference	1.7

[1] Based on the 80-year simulation period

[2] As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

[3] Relative difference of the annual average

Table G.1-19d-2 Annual Potential Production for LateFall-Run Chinook Salmon, NAA 041320 QAQC2 vs. ALTD1 041320 QAQC2

Analysis Period	Annual Potential Production (# of Fish/year)
Long-term	
Full Simulation Period[1]	
NAA 041320 QAQC2	2,889,046
ALTD1 041320 QAQC2	2,914,822
Difference	25,776
Percent Difference[3]	0.9
Water Year Types[2]	
Wet (31.7%)	
NAA 041320 QAQC2	2,723,968
ALTD1 041320 QAQC2	2,755,149
Difference	31,180
Percent Difference	1.1
Above Normal (14.6%)	
NAA 041320 QAQC2	2,865,992
ALTD1 041320 QAQC2	2,838,195
Difference	-27,798
Percent Difference	-1.0
Below Normal (17.1%)	
NAA 041320 QAQC2	2,954,814
ALTD1 041320 QAQC2	2,998,448
Difference	43,634
Percent Difference	1.5
Dry (22%)	
NAA 041320 QAQC2	3,063,018
ALTD1 041320 QAQC2	3,070,962
Difference	7,944
Percent Difference	0.3
Critical (14.6%)	
NAA 041320 QAQC2	2,928,240
ALTD1 041320 QAQC2	2,992,867
Difference	64,626
Percent Difference	2.2

[1] Based on the 80-year simulation period

[2] As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995). Water years may not correspond to the biological years in SALMOD.

[3] Relative difference of the annual average

Table G.1-20-1 Annual Temperature-Dependent Winter-Run Chinook Salmon Mortalities, NAA 041320 QAQC2 vs. Alternative A1 041320 QAQC2

Statistic	Annual Mortality					
	NAA 041320 QAQC2		Alternative A1 041320 QAQC2		Difference[d]	
	Martin	Anderson	Martin	Anderson	Martin	Anderson
Probability of Exceedance						
10%	0.36	0.19	0.25	0.22	-0.11	0.02
20%	0.08	0.06	0.06	0.06	-0.02	0.00
30%	0.03	0.03	0.03	0.04	0.00	0.01
40%	0.02	0.02	0.03	0.03	0.00	0.00
50%	0.01	0.02	0.02	0.02	0.00	0.00
60%	0.01	0.01	0.01	0.01	0.00	0.00
70%	0.01	0.01	0.01	0.01	0.00	0.00
80%	0.01	0.01	0.01	0.01	0.00	0.00
90%	0.00	0.00	0.00	0.00	0.00	0.00
Long Term						
Full Simulation Period[a]	0.10	0.09	0.08	0.08	-0.01	-0.01
Water Year Types[b,c]						
Wet (32%)	0.03	0.02	0.03	0.02	0.00	0.00
Above Normal (16%)	0.01	0.01	0.01	0.01	0.00	0.00
Below Normal (13%)	0.03	0.02	0.02	0.02	0.00	0.00
Dry (24%)	0.06	0.06	0.06	0.07	0.00	0.01
Critical (15%)	0.47	0.41	0.38	0.33	-0.09	-0.08

[a] Based on the 82-year simulation period.
[b] As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
[c] These results are displayed with calendar year - year type sorting.
[d] Alternative A1 041320 QAQC2 minus NAA 041320 QAQC2

Table G.1-20-2 Annual Temperature-Dependent Winter-Run Chinook Salmon Mortalities, NAA 041320 QAQC2 vs. Alternative D1 041320 QAQC2

Statistic	Annual Mortality					
	NAA 041320 QAQC2		Alternative D1 041320 QAQC2		Difference[d]	
	Martin	Anderson	Martin	Anderson	Martin	Anderson
Probability of Exceedance						
10%	0.36	0.19	0.23	0.20	-0.13	0.01
20%	0.08	0.06	0.06	0.07	-0.02	0.01
30%	0.03	0.03	0.03	0.04	0.00	0.01
40%	0.02	0.02	0.03	0.03	0.01	0.01
50%	0.01	0.02	0.02	0.02	0.00	0.00
60%	0.01	0.01	0.01	0.01	0.00	0.00
70%	0.01	0.01	0.01	0.01	0.00	0.00
80%	0.01	0.01	0.01	0.01	0.00	0.00
90%	0.00	0.00	0.00	0.00	0.00	0.00
Long Term						
Full Simulation Period[a]	0.10	0.09	0.08	0.08	-0.02	-0.01
Water Year Types[b,c]						
Wet (32%)	0.03	0.02	0.03	0.02	0.00	0.00
Above Normal (16%)	0.01	0.01	0.01	0.01	0.00	0.00
Below Normal (13%)	0.03	0.02	0.02	0.03	0.00	0.00
Dry (24%)	0.06	0.06	0.06	0.08	0.00	0.02
Critical (15%)	0.47	0.41	0.36	0.32	-0.11	-0.09

[a] Based on the 82-year simulation period.

[b] As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

[c] These results are displayed with calendar year - year type sorting.

[d] Alternative D1 041320 QAQC2 minus NAA 041320 QAQC2

Figure G.1-1 Upper Sacramento Winter Run Chinook Salmon Temperature- dependent Egg Mortality, Long-term Average

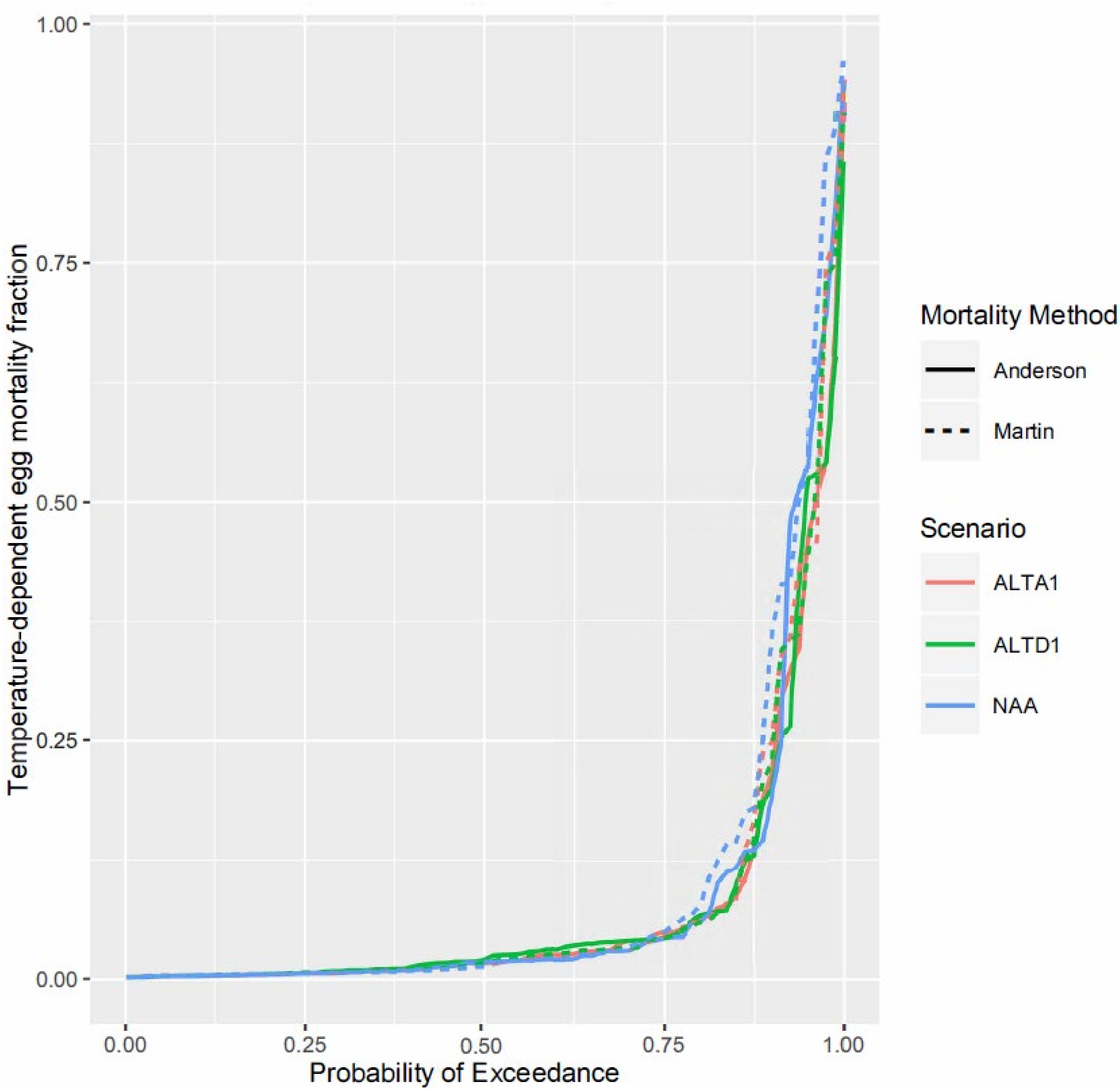


Figure G.1-2 Upper Sacramento Winter Run Chinook Salmon Temperature- dependent Egg Mortality, Wet Year Average

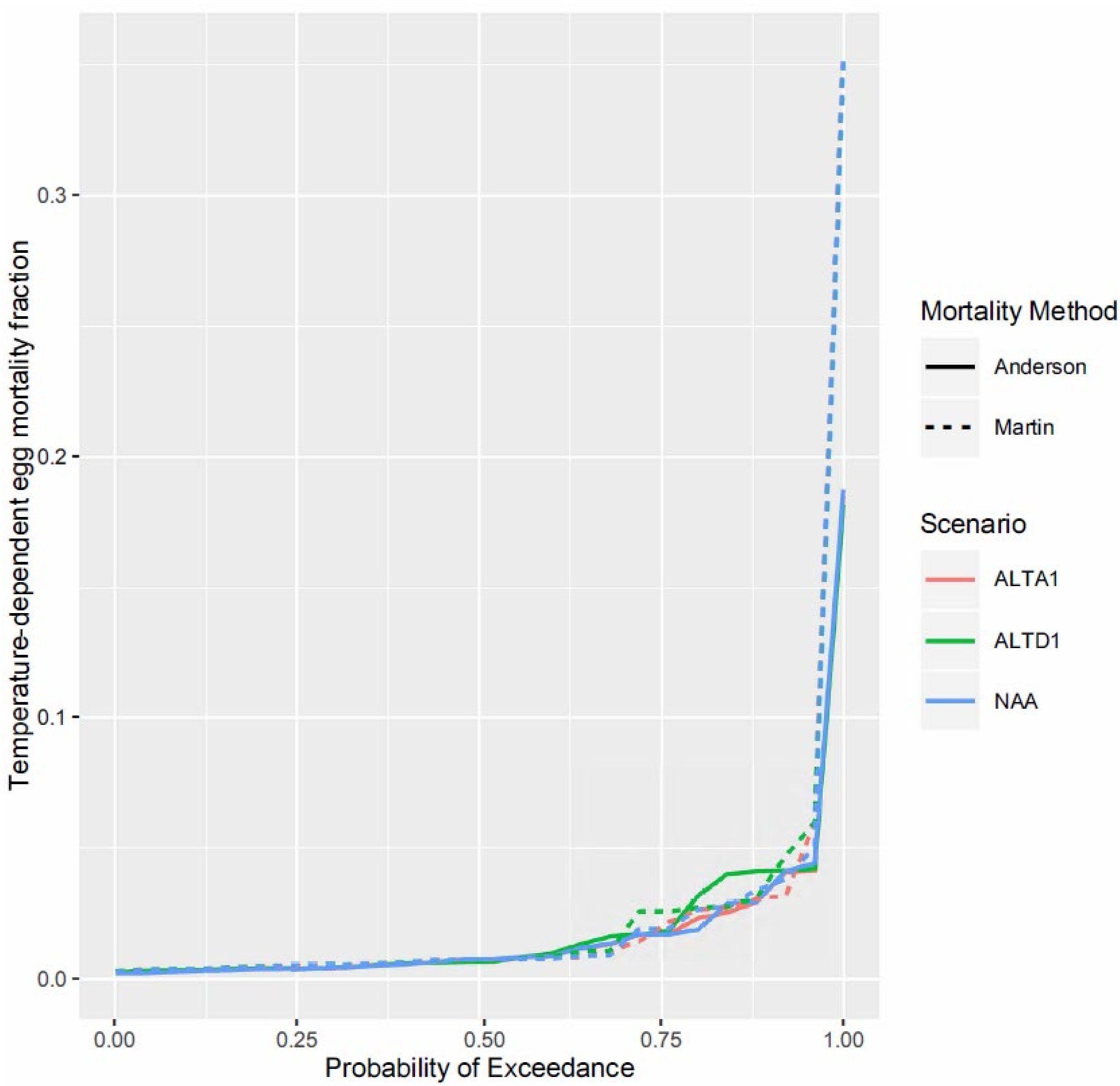


Figure G.1-3 Upper Sacramento Winter Run Chinook Salmon Temperature-dependent Egg Mortality, Above Normal Year Average

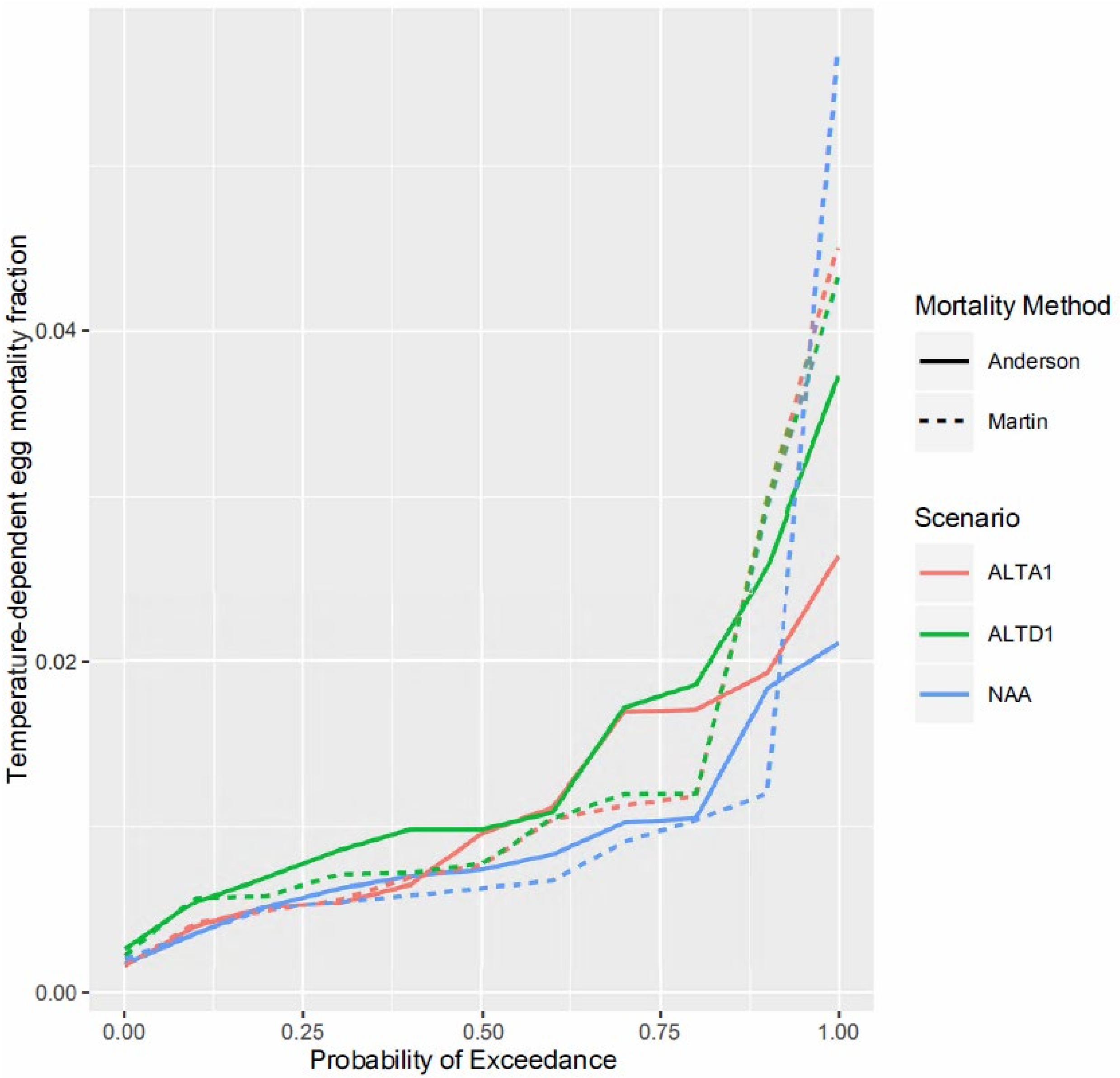


Figure G.1-4 Upper Sacramento Winter Run Chinook Salmon Temperature-dependent Egg Mortality, Below Normal Year Average

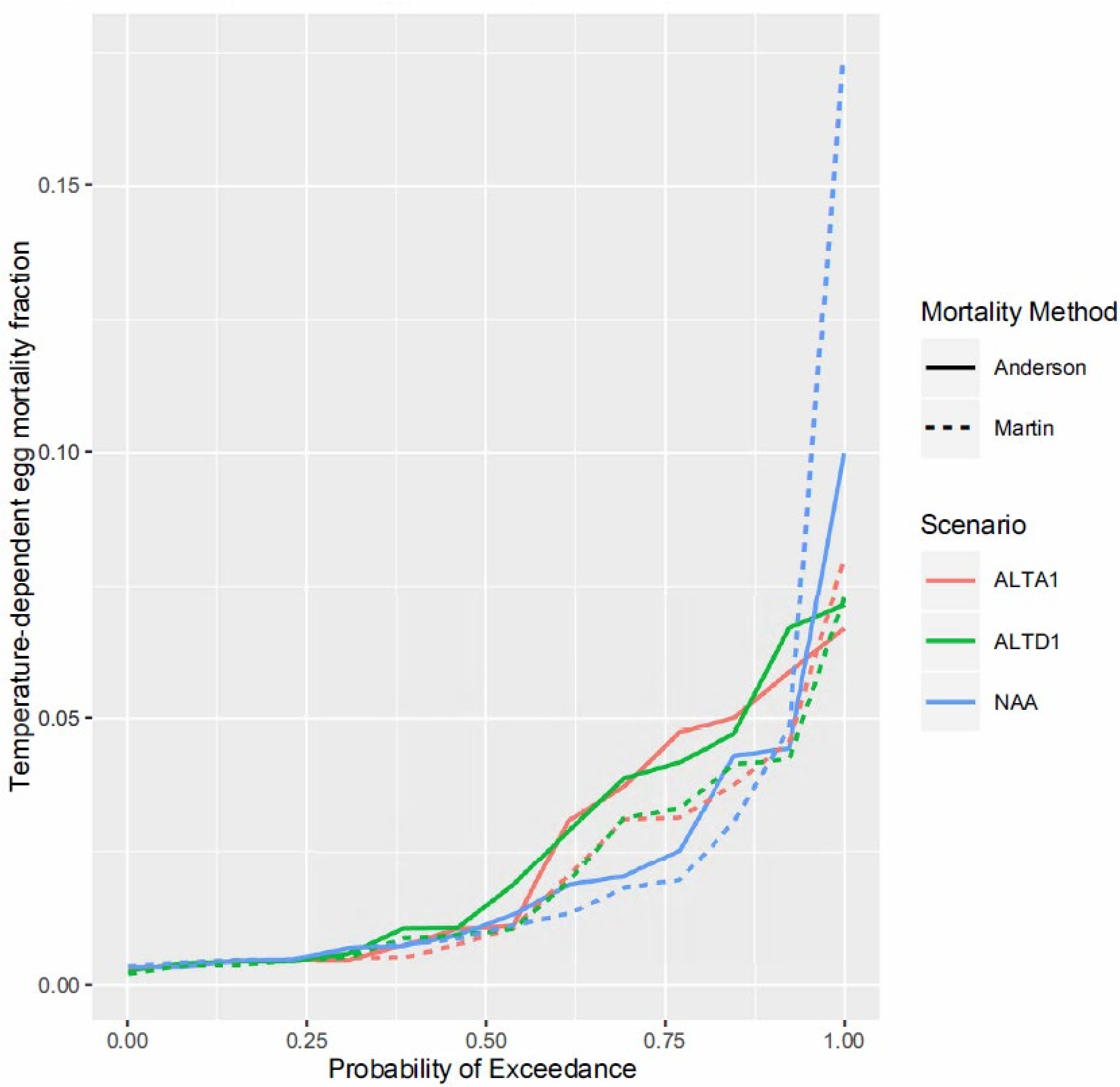


Figure G.1-5 Upper Sacramento Winter Run Chinook Salmon Temperature- dependent Egg Mortality, Dry Year Average

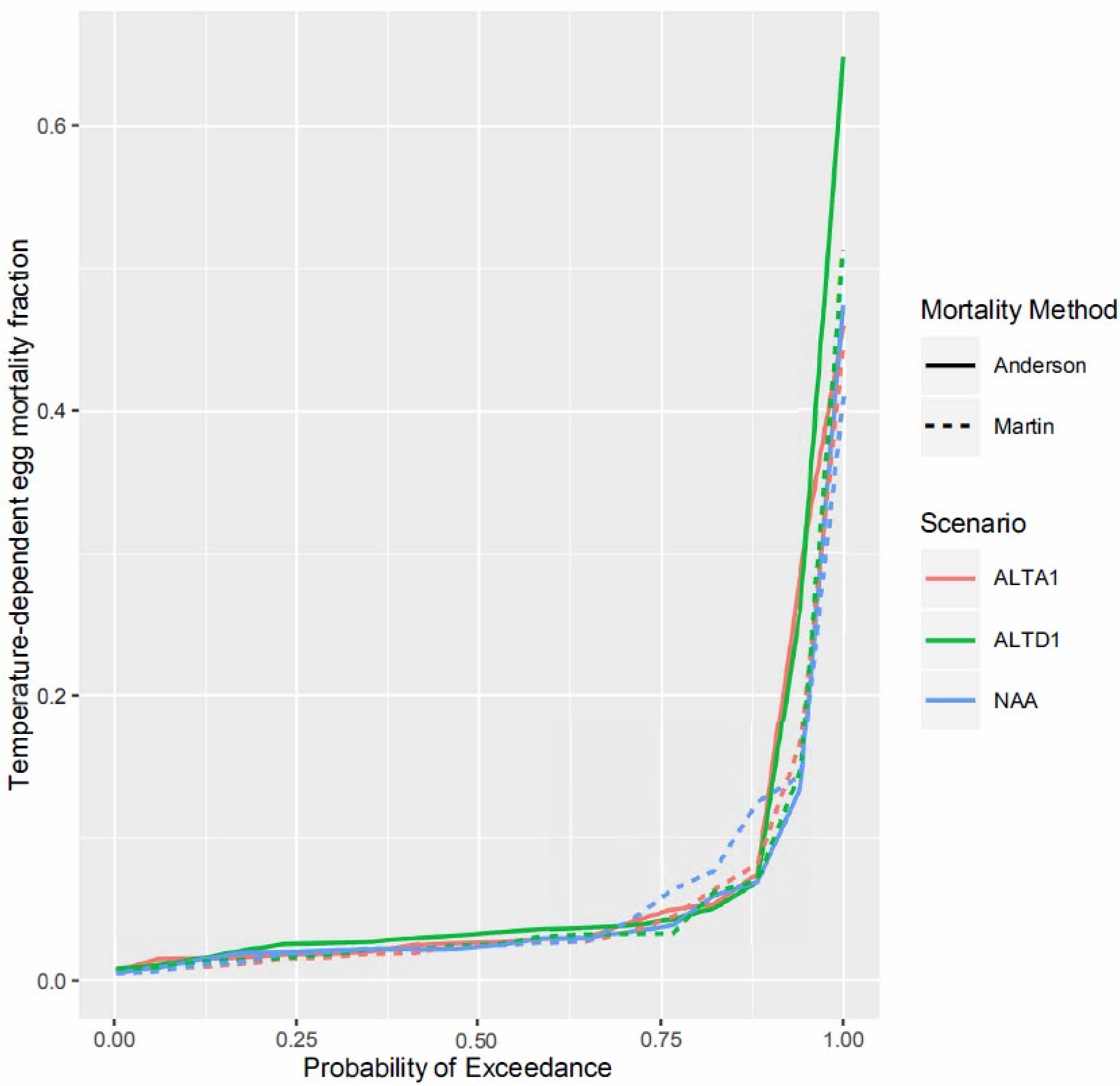


Figure G.1-6 Upper Sacramento Winter Run Chinook Salmon Temperature- dependent Egg Mortality, Critical Year Average

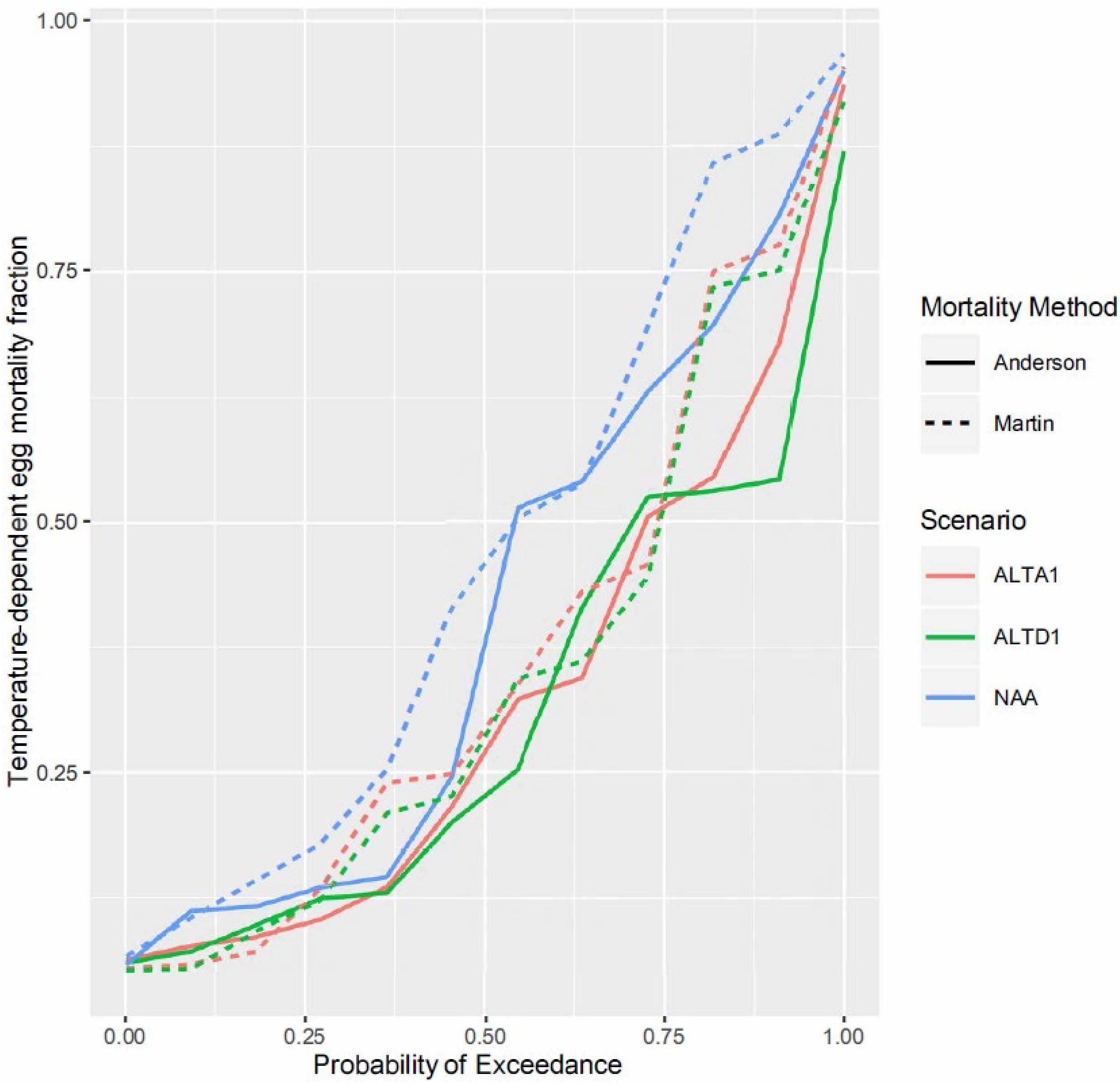


Figure G.1-7a-1 Annual Potential Production for Winter-Run Chinook Salmon

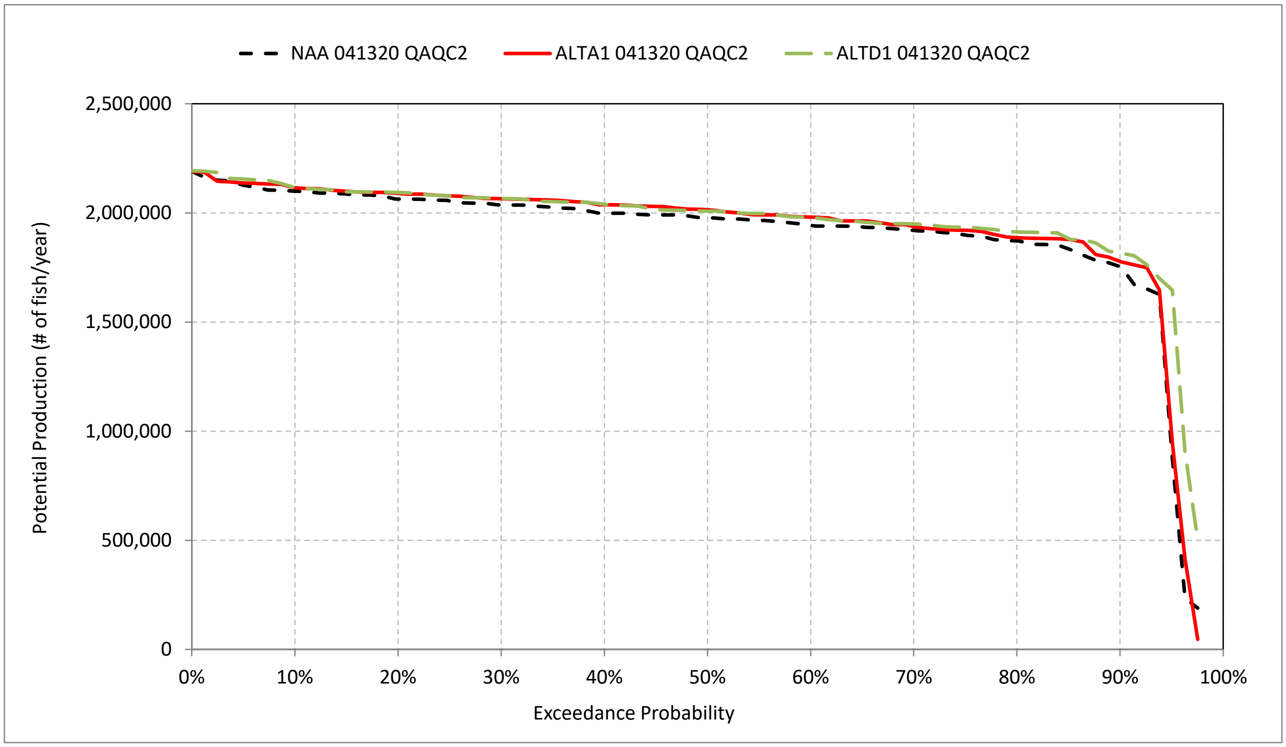


Figure G.1-7a-2 Annual Mortality for Winter-Run Chinook Salmon - Eggs

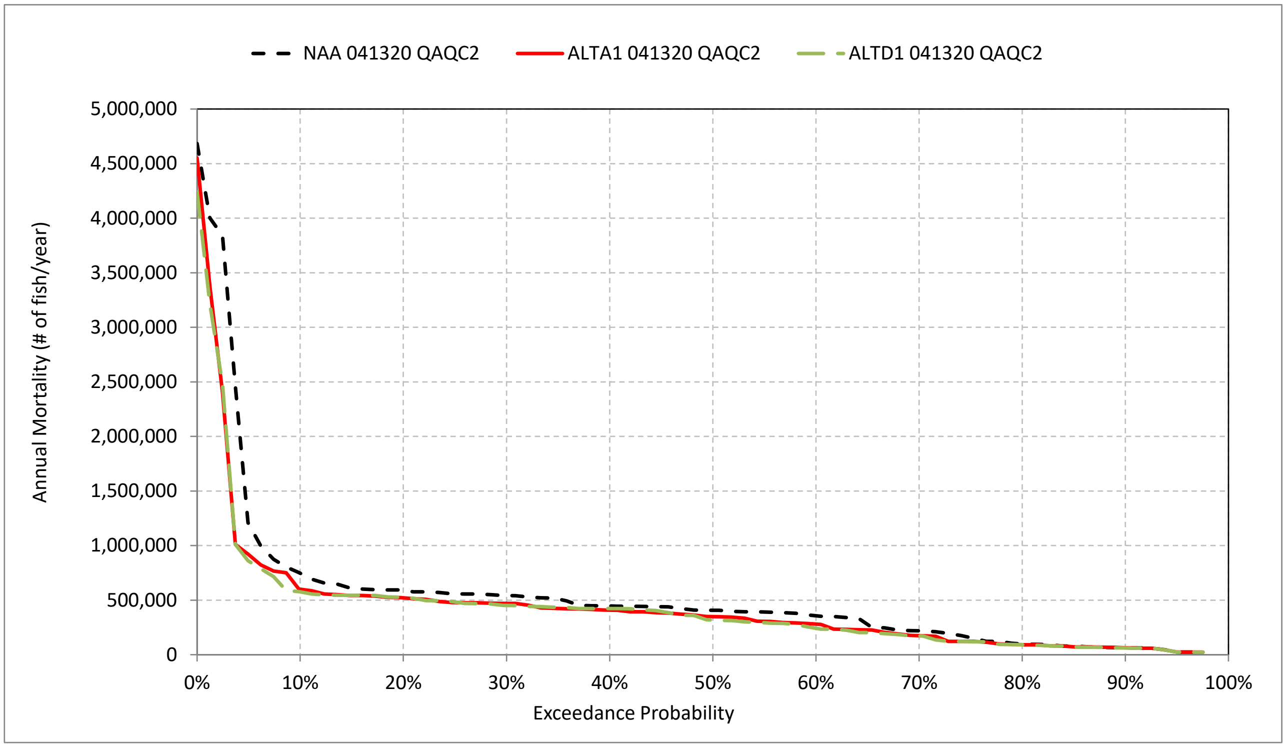


Figure G.1-7a-3 Annual Mortality for Winter-Run Chinook Salmon - Fry

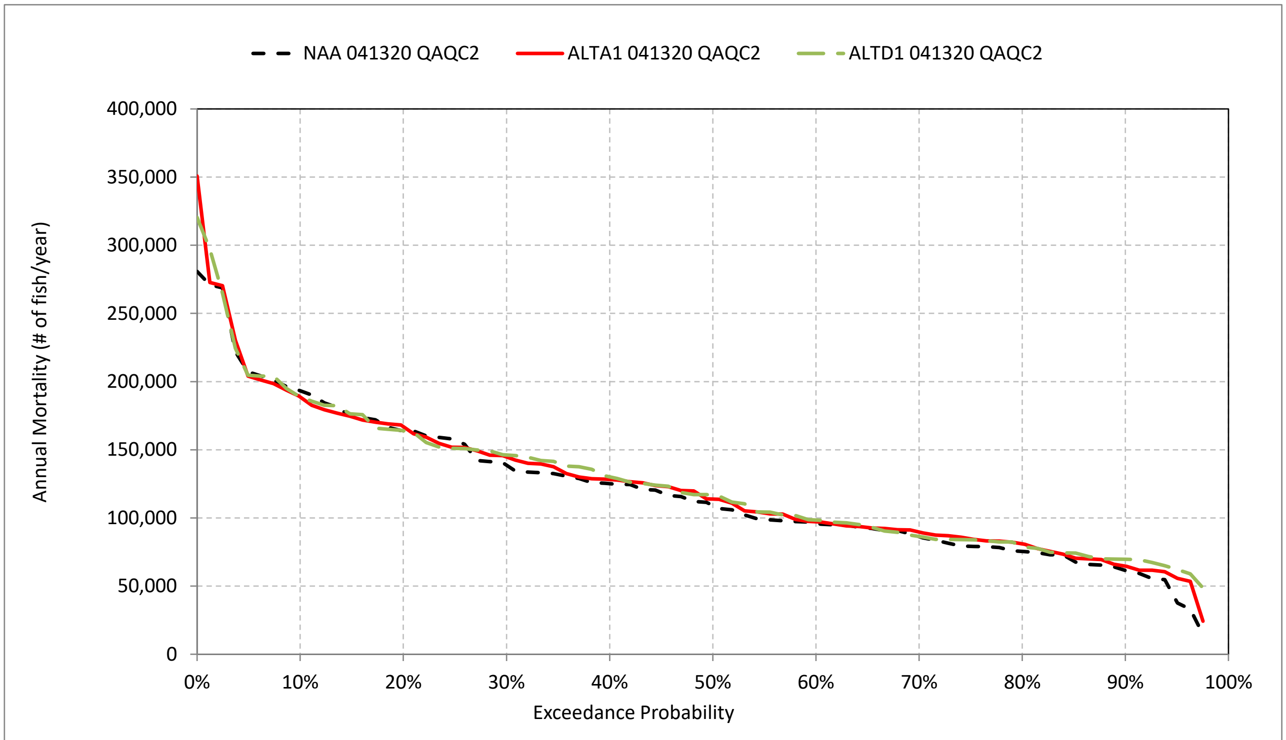


Figure G.1-7a-4 Annual Mortality for Winter-Run Chinook Salmon - Pre-Smolt

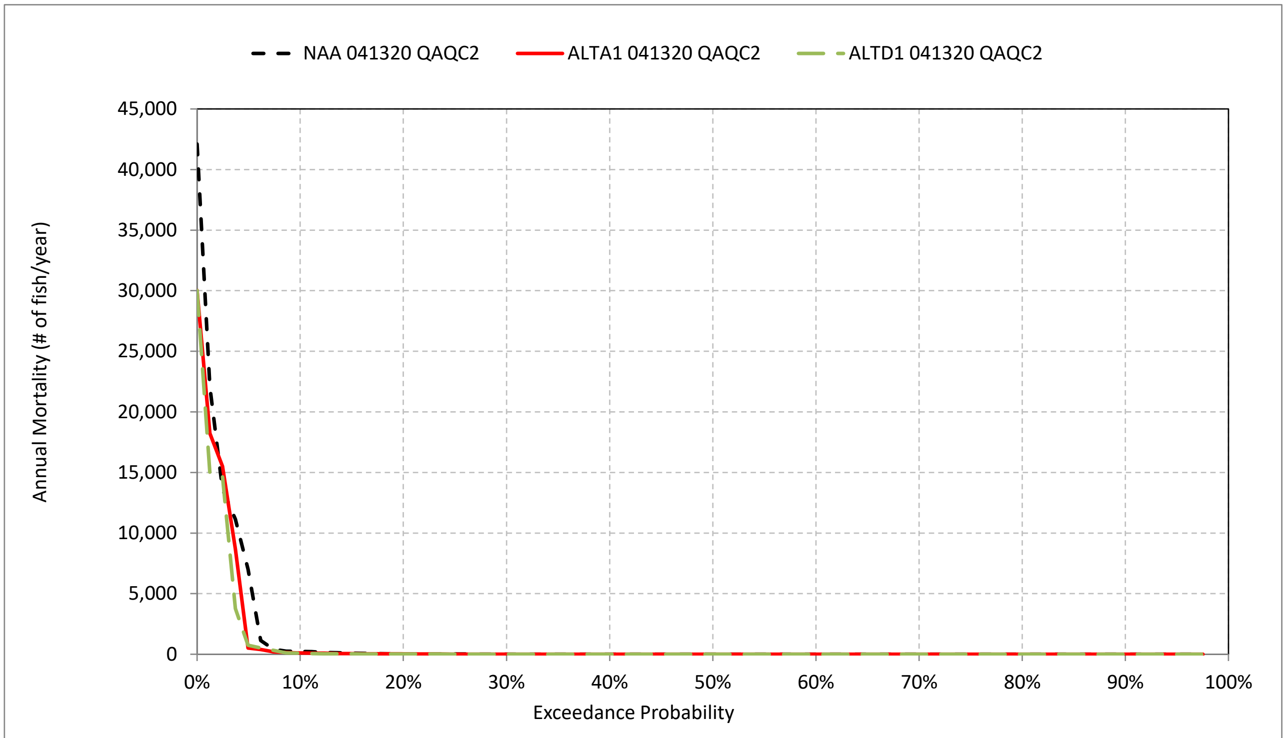


Figure G.1-7a-5 Annual Mortality for Winter-Run Chinook Salmon - Immature Smolt

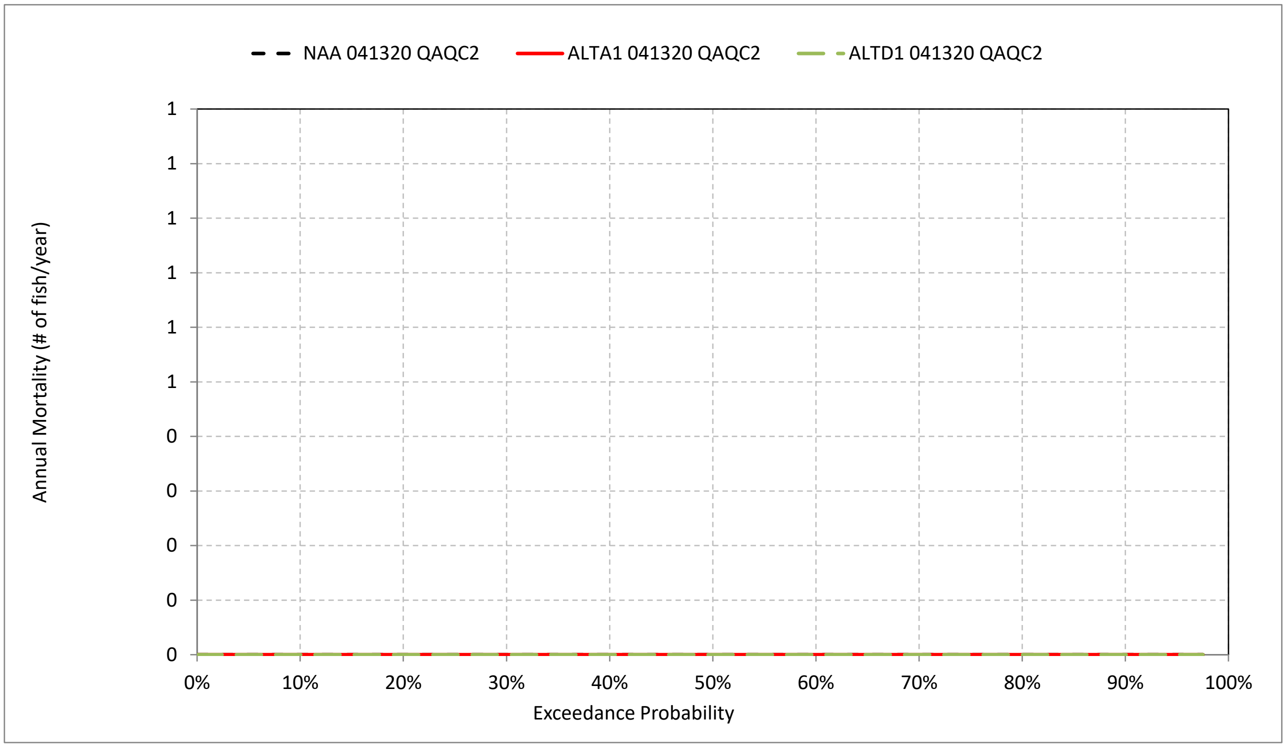


Figure G.1-7a-6 Annual Mortality for Winter-Run Chinook Salmon - Pre- & Immature Smolts

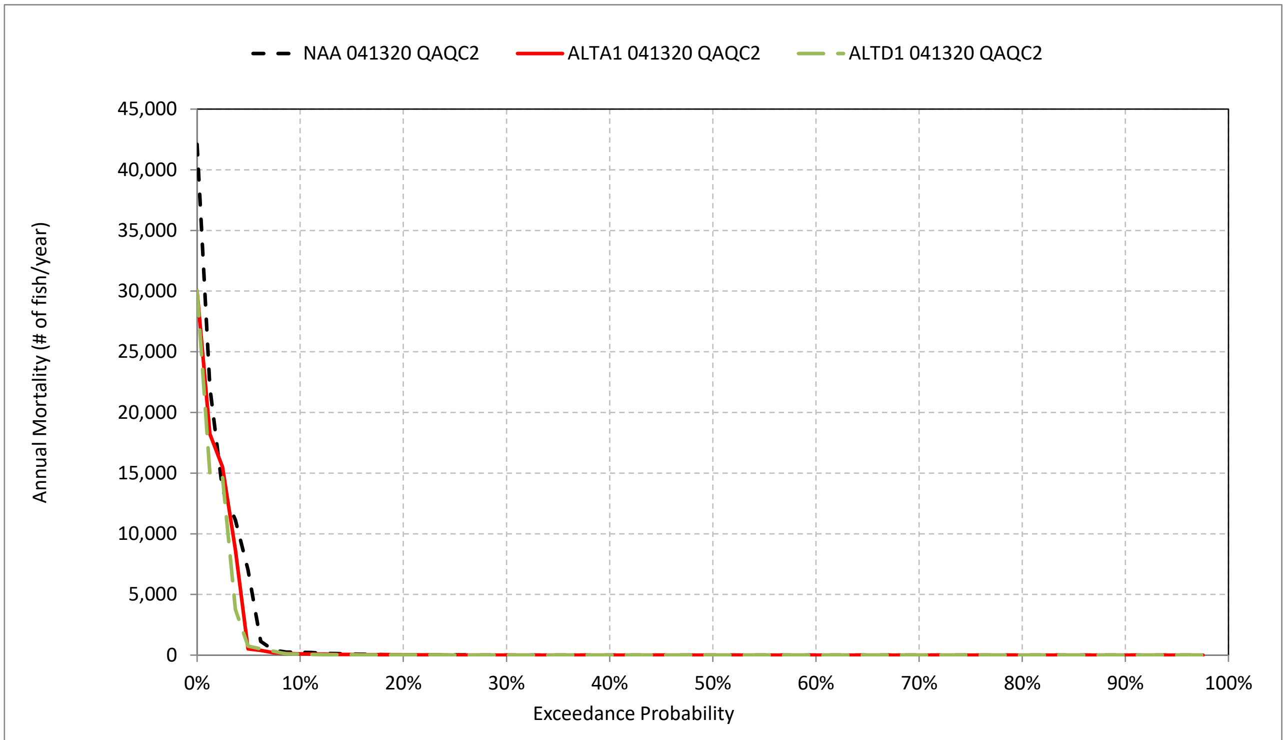


Figure G.1-7a-7 Annual Mortality for Winter-Run Chinook Salmon - All Lifestages

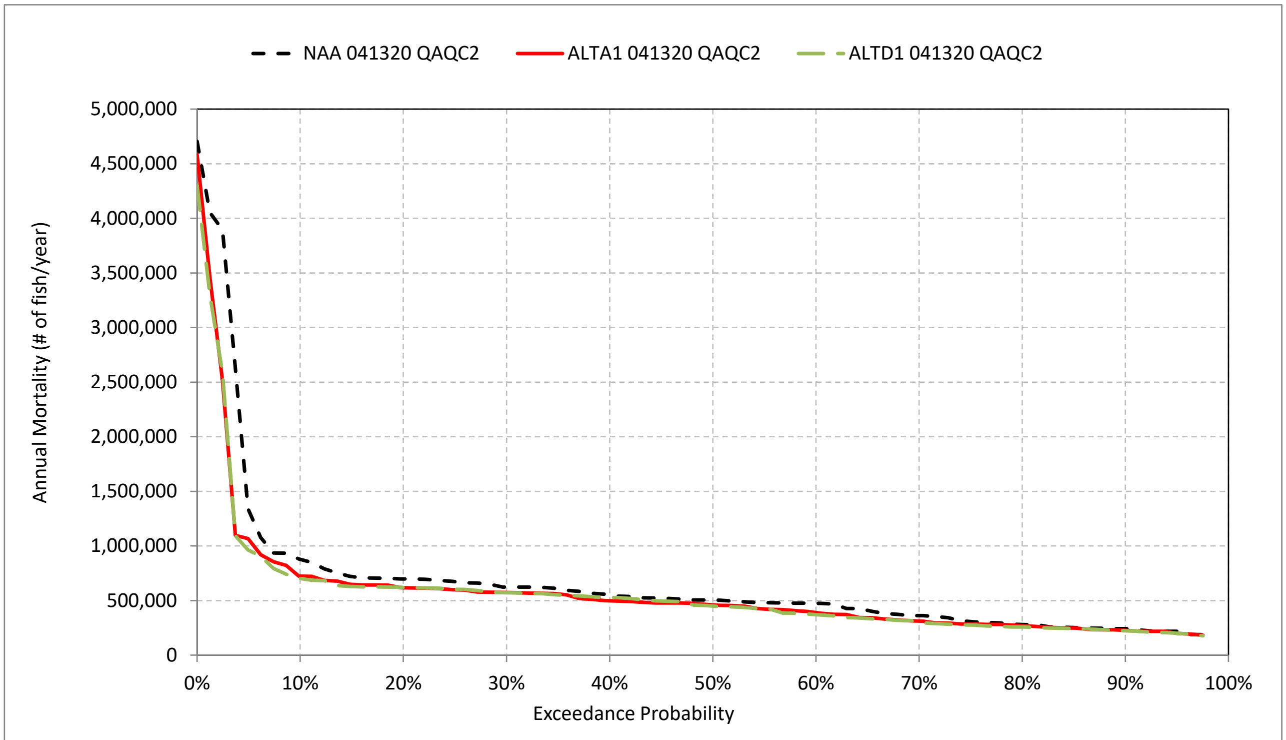


Figure G.1-7a-8 Incubation - Habitat based Annual Mortality for Winter-Run Chinook Salmon

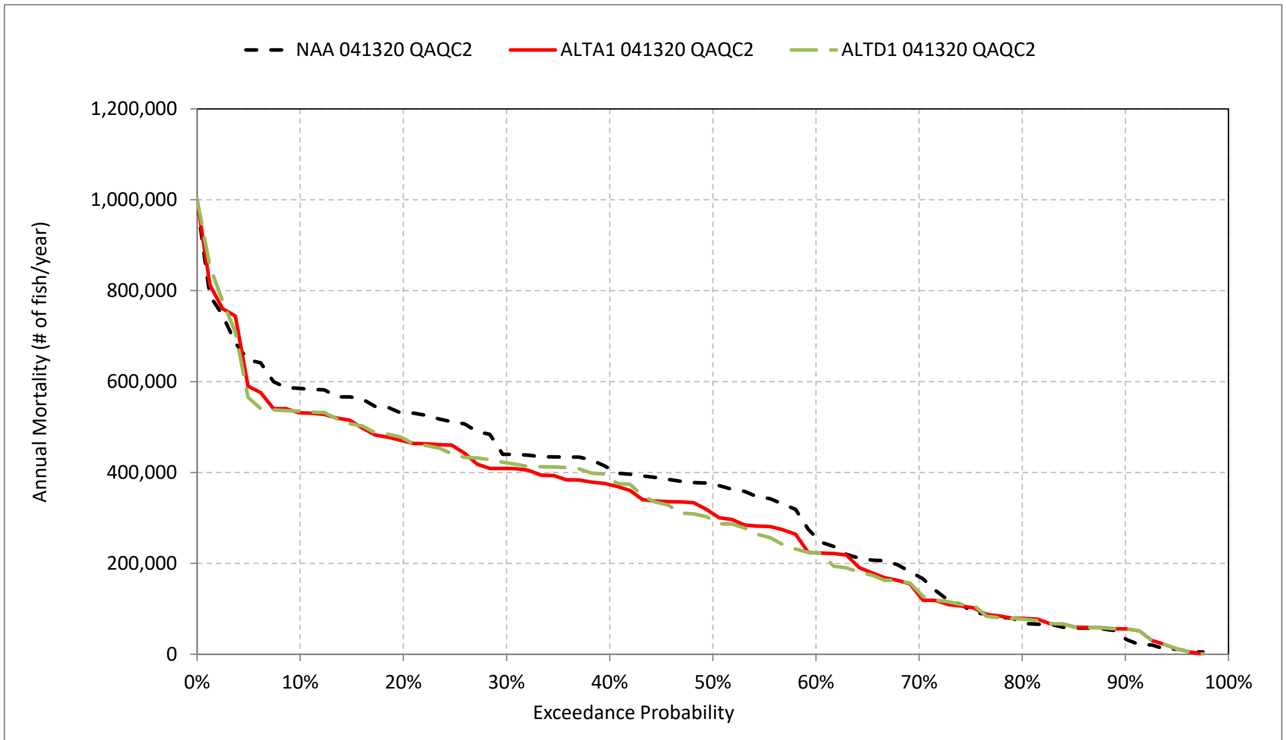


Figure G.1-7a-9 Super-imposition - Habitat based Annual Mortality for Winter-Run Chinook Salmon

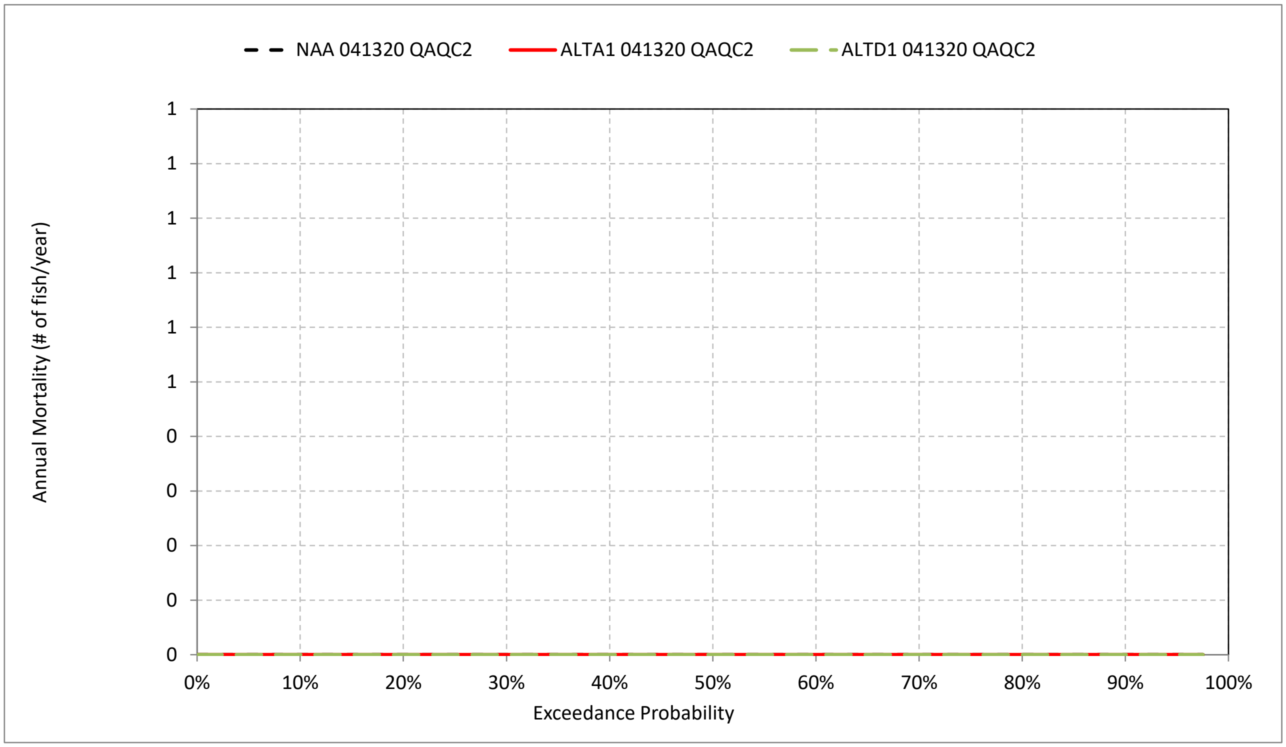


Figure G.1-7a-10 Fry - Habitat based Annual Mortality for Winter-Run Chinook Salmon

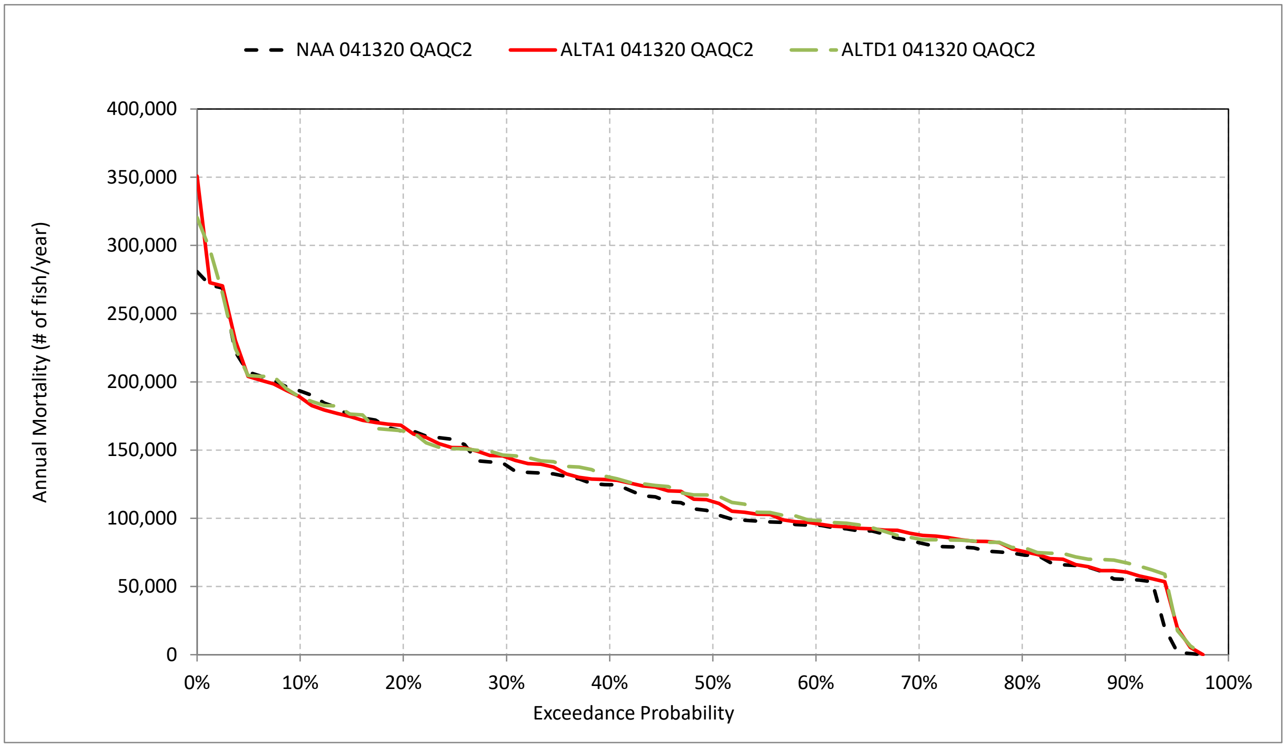


Figure G.1-7a-11 Pre-smolt - Habitat based Annual Mortality for Winter-Run Chinook Salmon

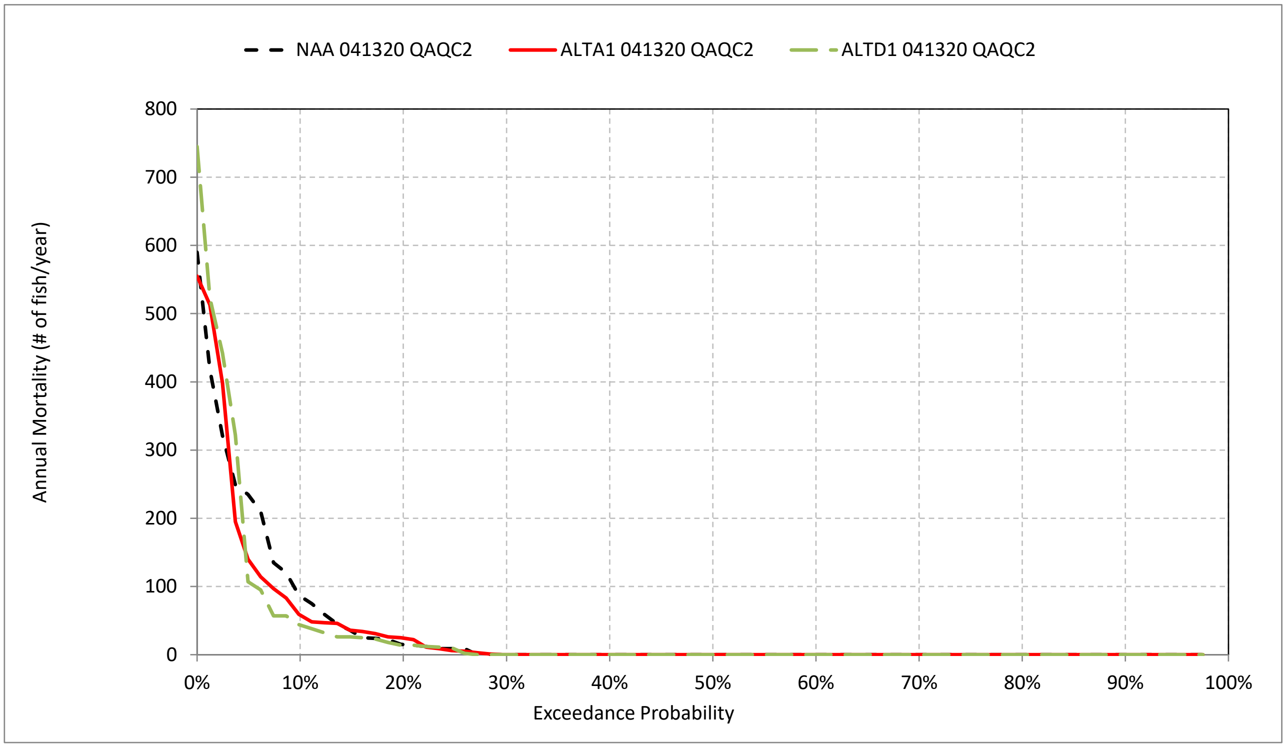


Figure G.1-7a-12 Immature Smolt - Habitat based Annual Mortality for Winter-Run Chinook Salmon

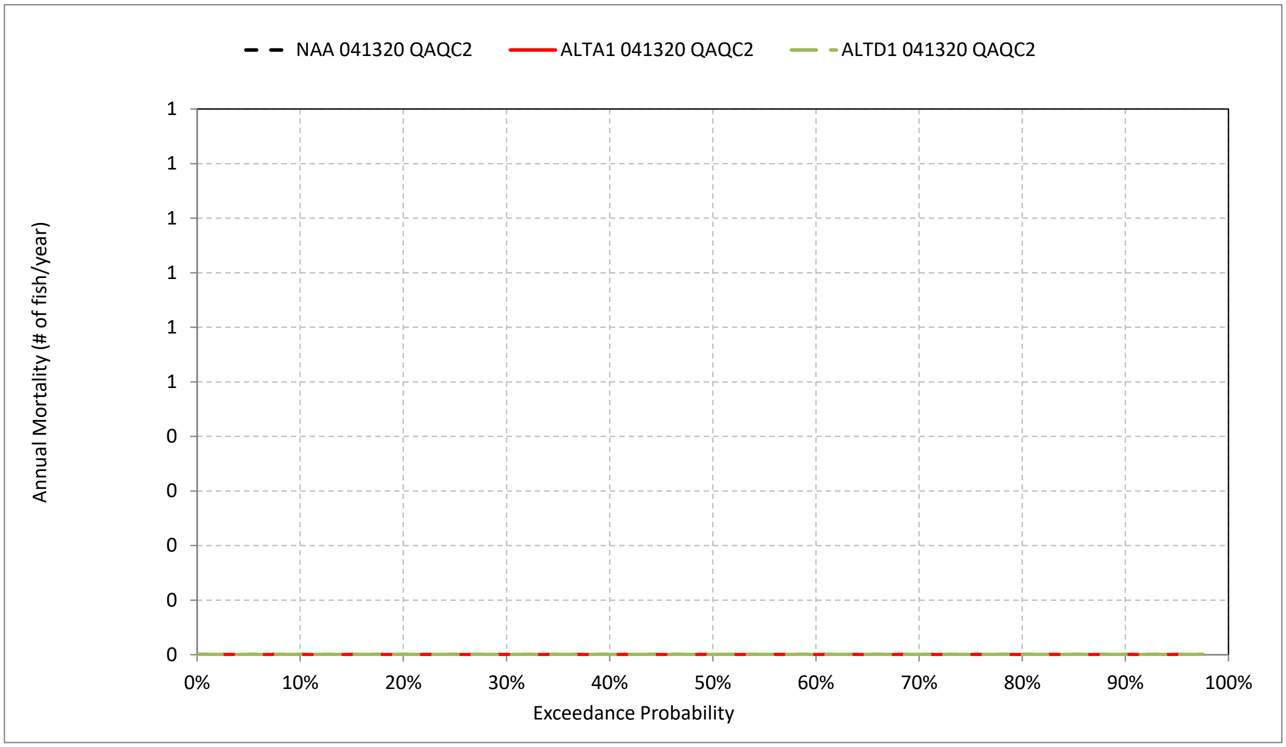


Figure G.1-7a-13 Total Habitat based Annual Mortality for Winter-Run Chinook Salmon

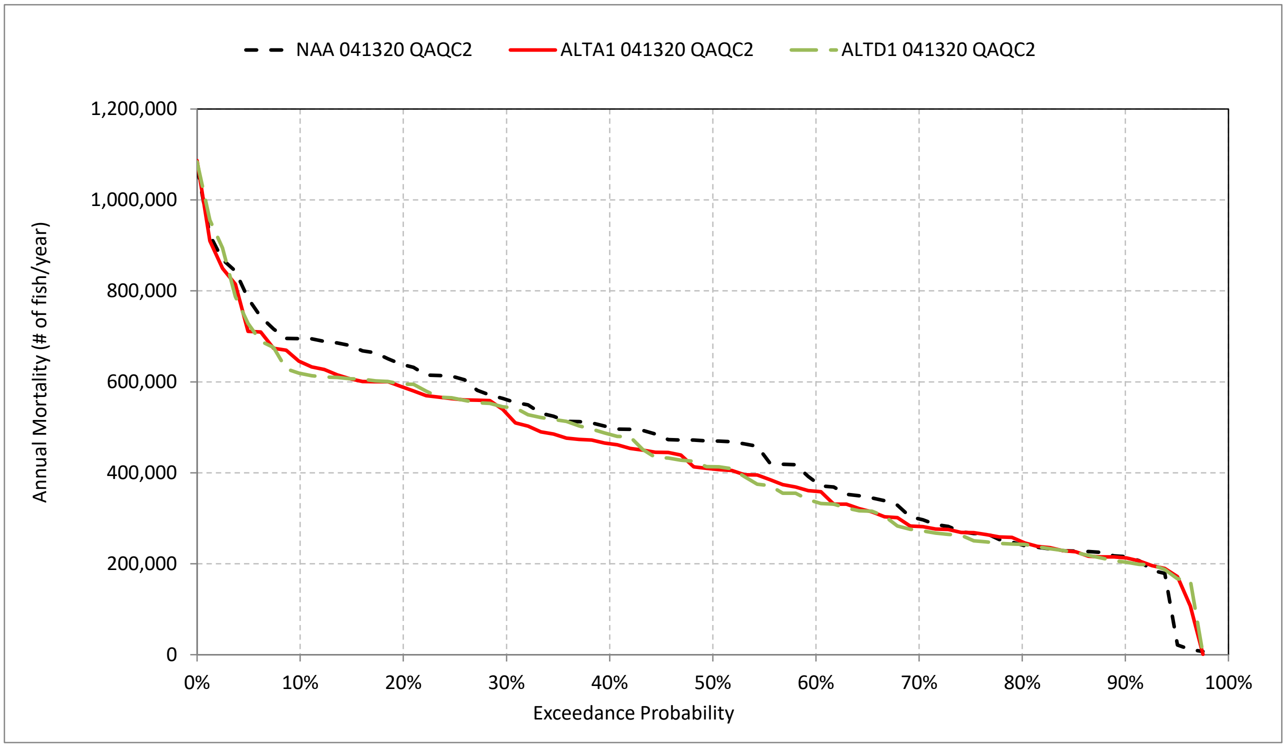


Figure G.1-7a-14 Pre-Spawn Mortality - Temperature based Annual Mortality for Winter-Run Chinook Salmon

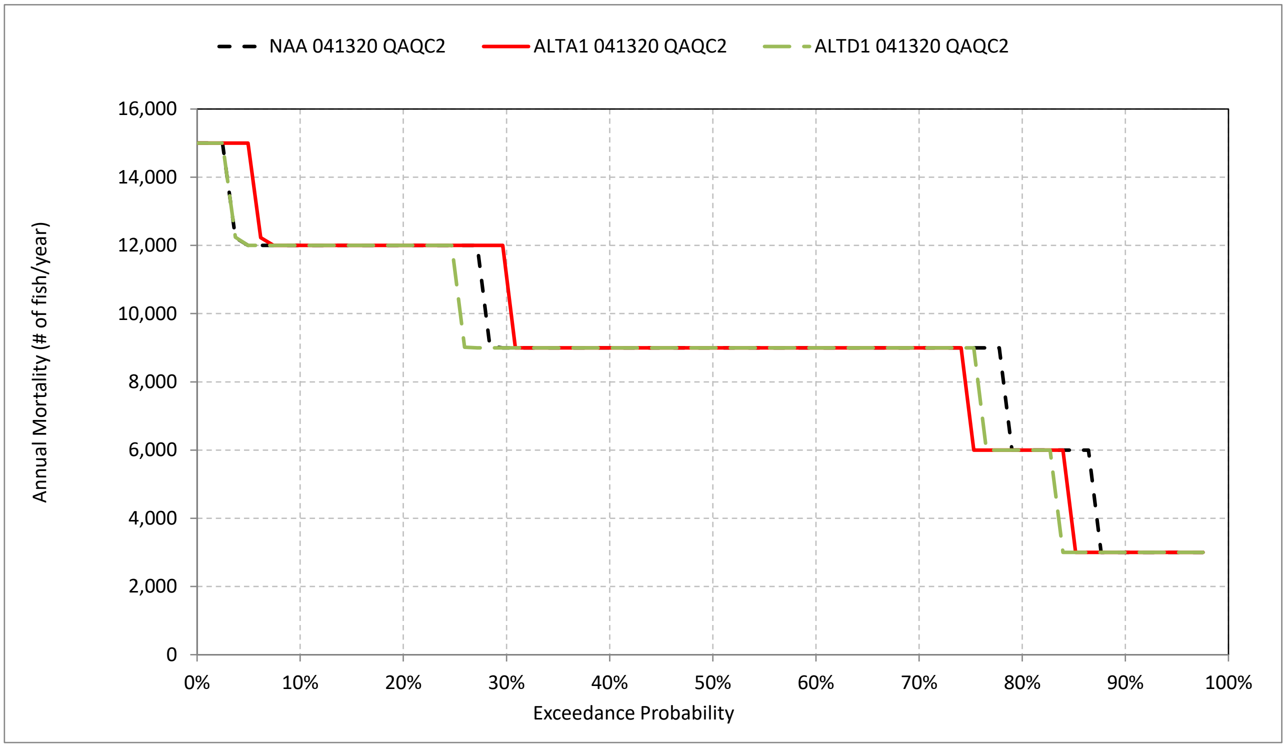


Figure G.1-7a-15 Eggs - Temperature based Annual Mortality for Winter-Run Chinook Salmon

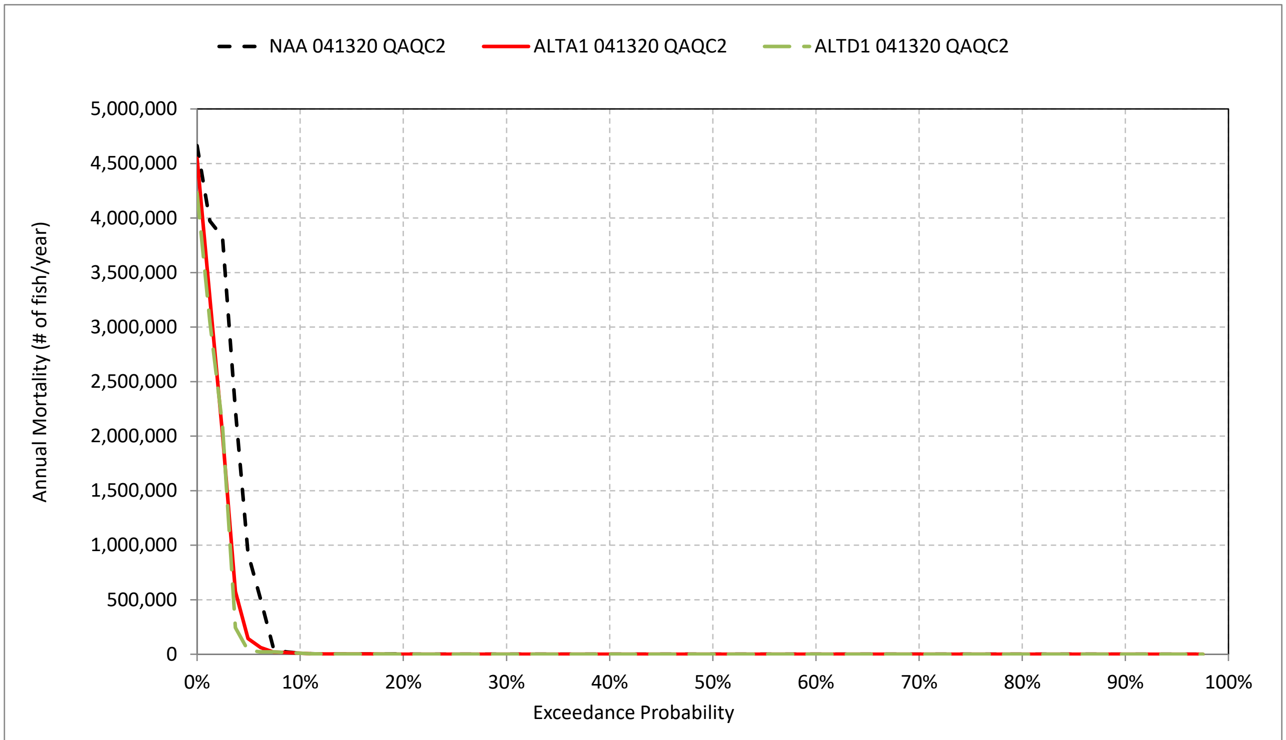


Figure G.1-7a-16 Fry - Temperature based Annual Mortality for Winter-Run Chinook Salmon

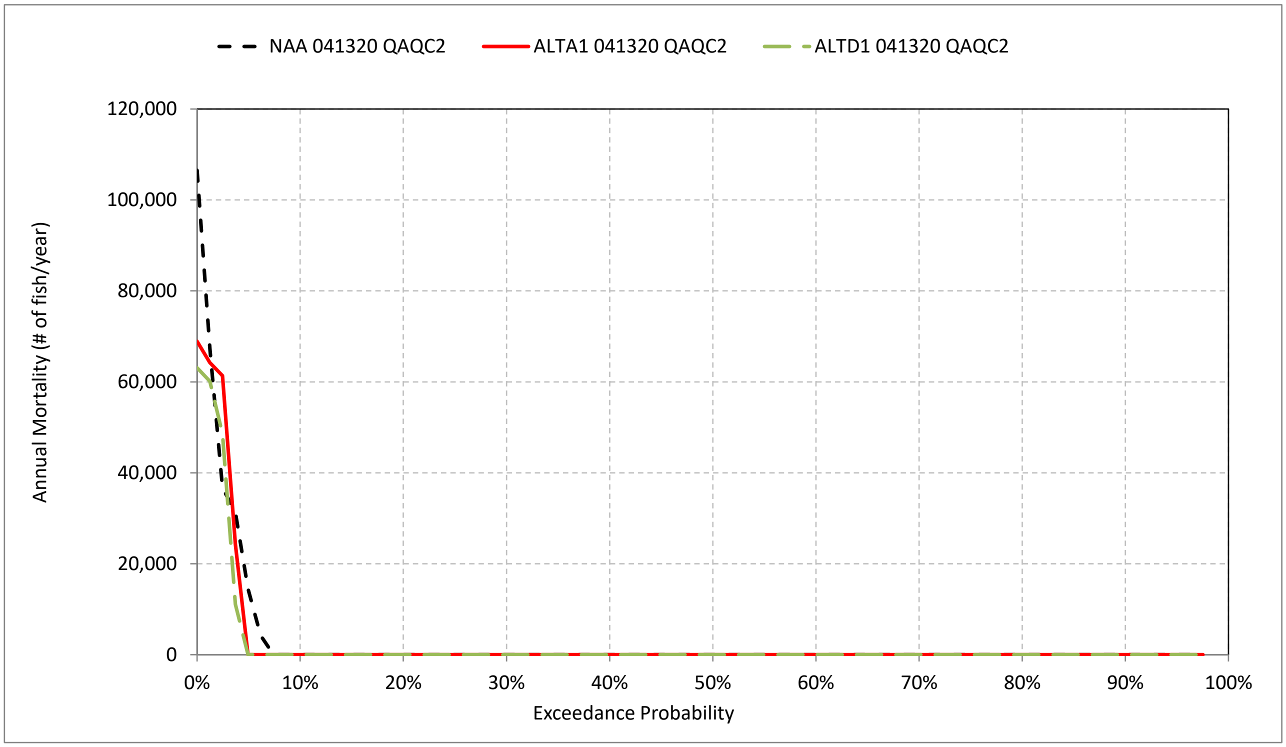


Figure G.1-7a-17 Pre-smolt - Temperature based Annual Mortality for Winter-Run Chinook Salmon

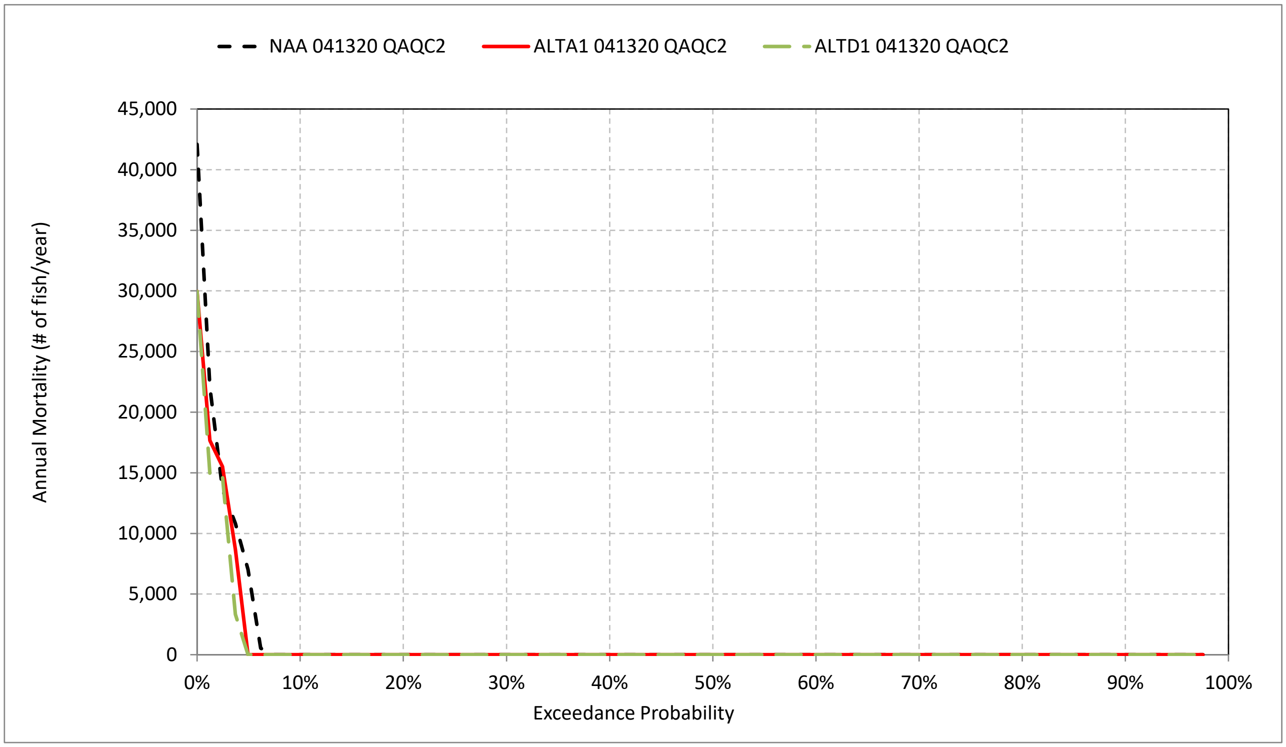


Figure G.1-7a-18 Immature Smolt - Temperature based Annual Mortality for Winter-Run Chinook Salmon

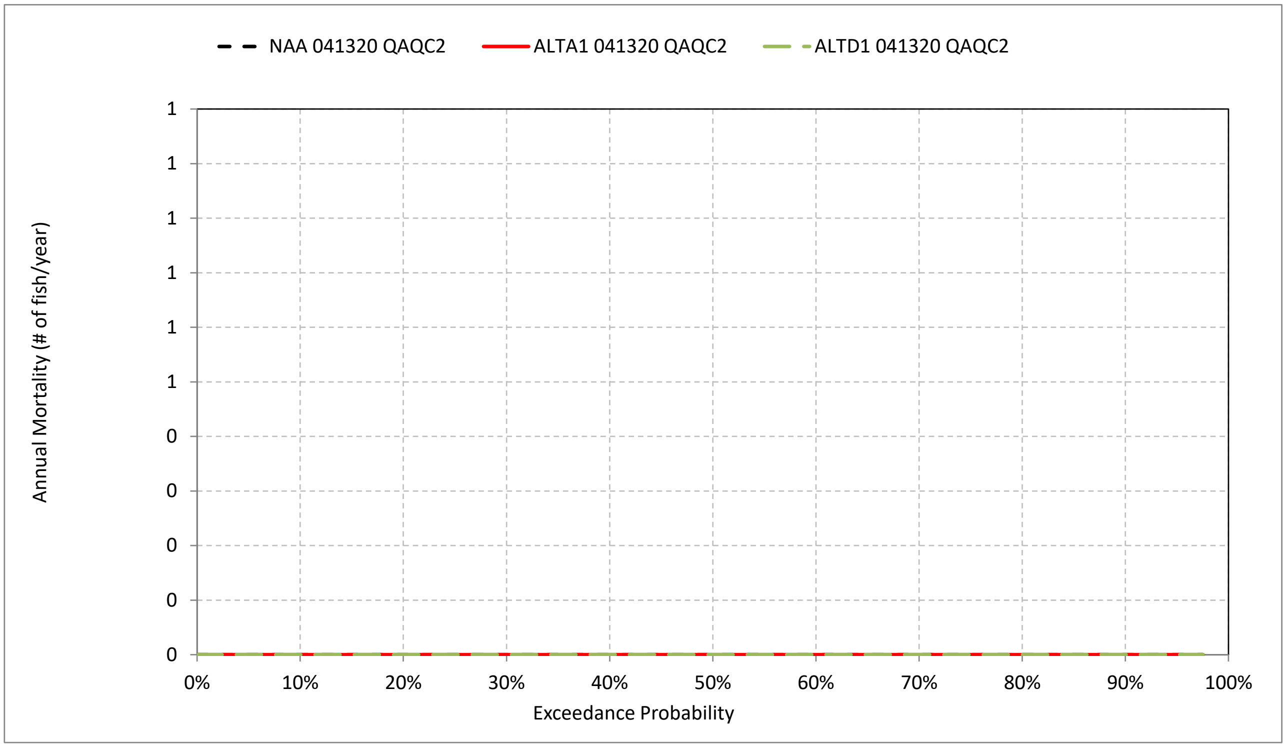


Figure G.1-7a-19 Total Temperature based Annual Mortality for Winter-Run Chinook Salmon

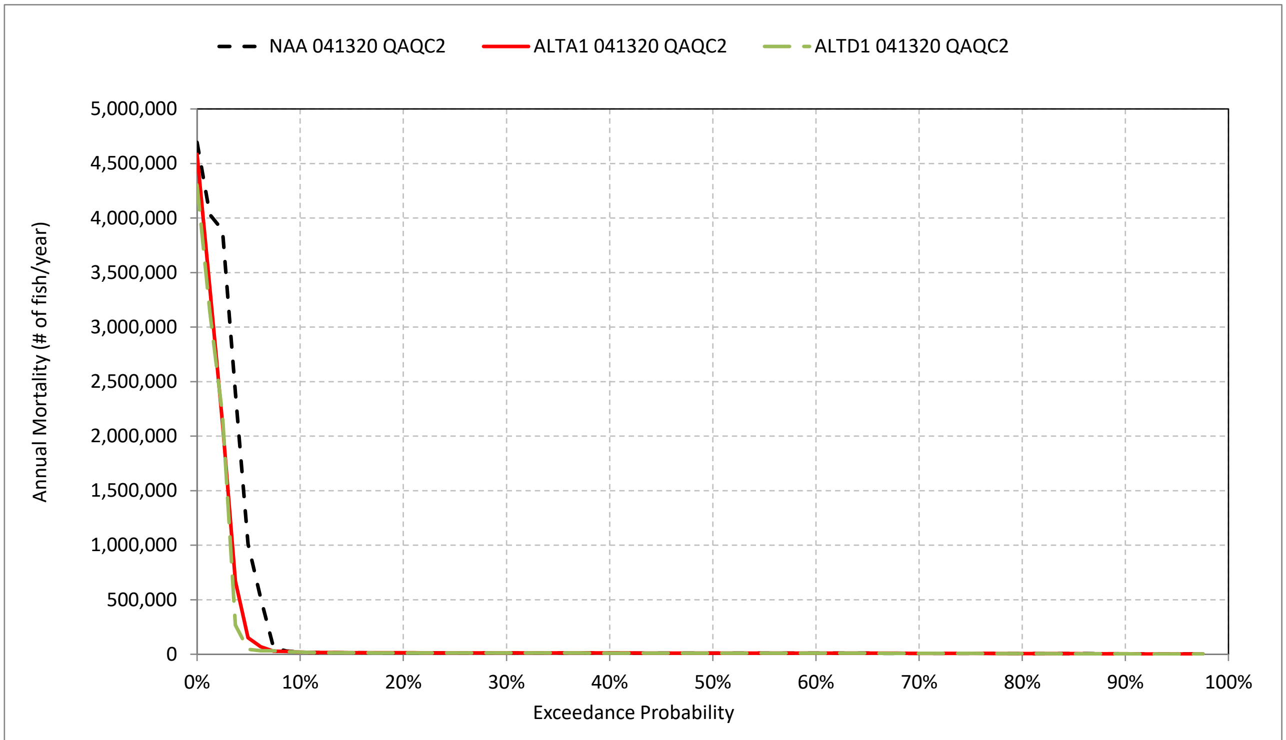


Figure G.1-7b-1 Annual Potential Production for Spring-Run Chinook Salmon

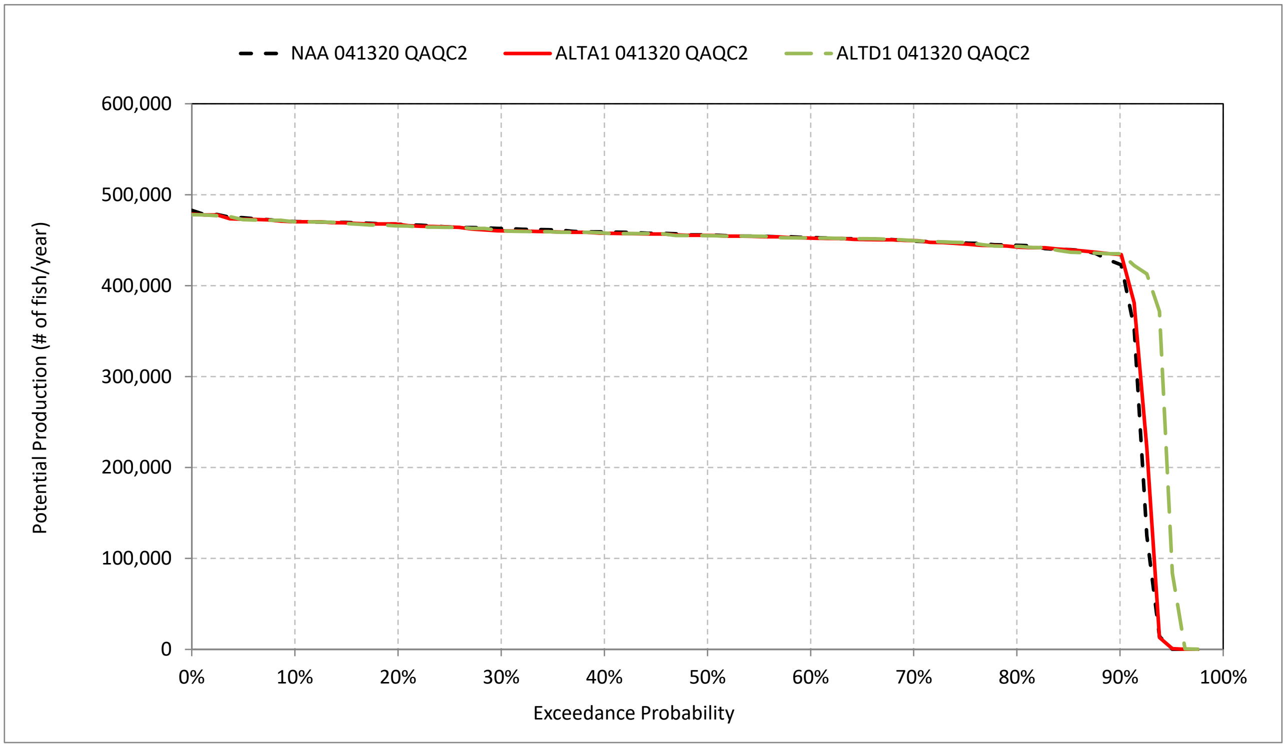


Figure G.1-7b-2 Annual Mortality for Spring-Run Chinook Salmon - Eggs

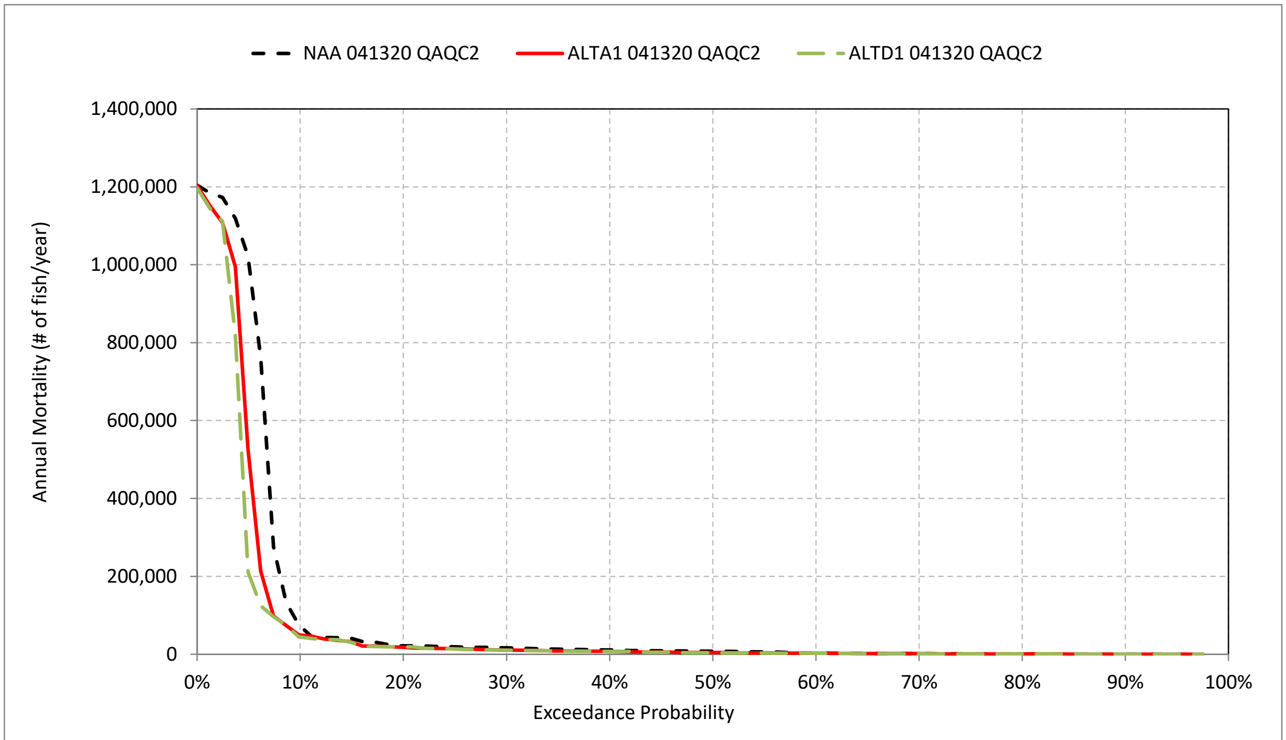


Figure G.1-7b-3 Annual Mortality for Spring-Run Chinook Salmon - Fry

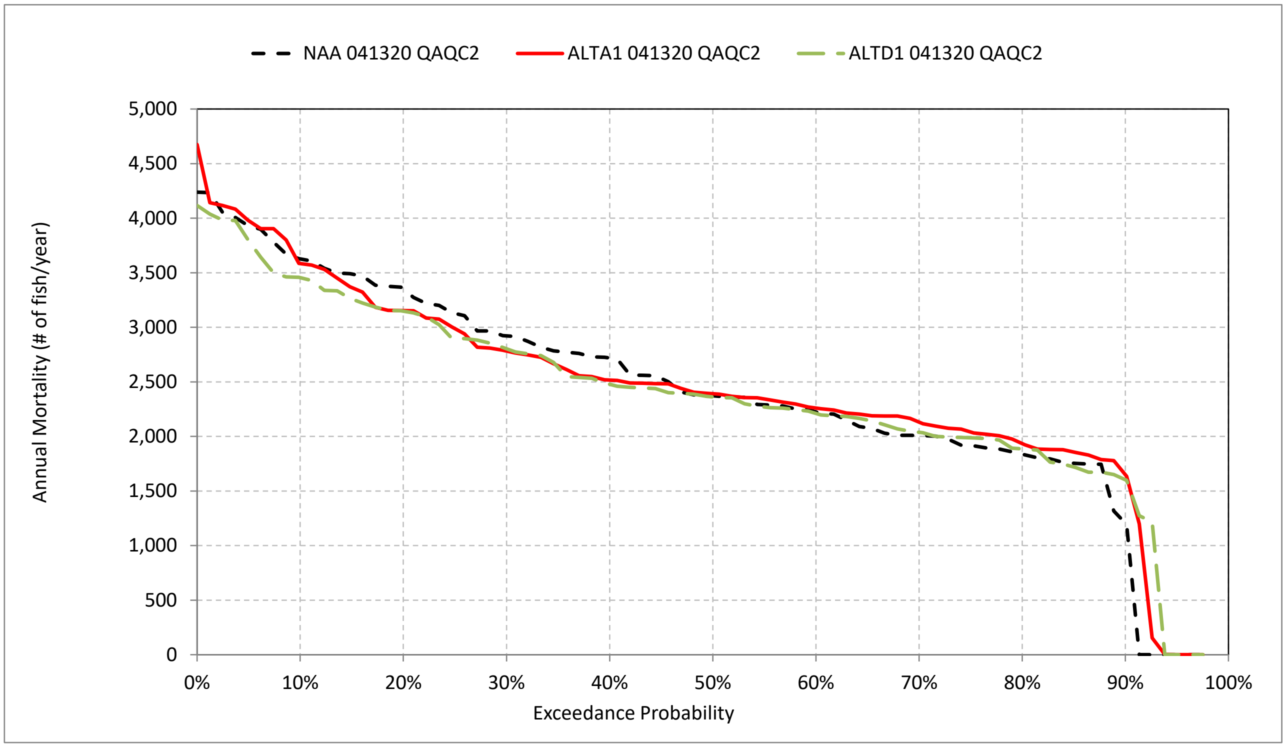


Figure G.1-7b-4 Annual Mortality for Spring-Run Chinook Salmon - Pre-Smolt

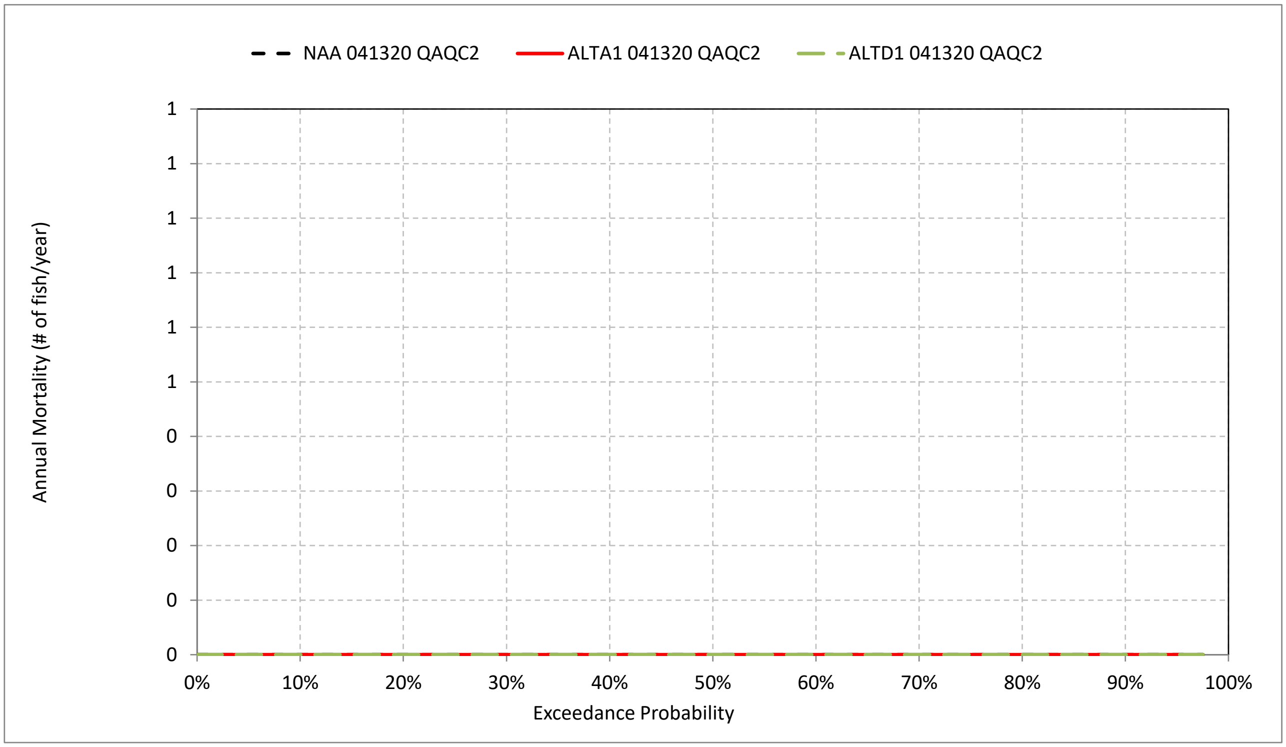


Figure G.1-7b-5 Annual Mortality for Spring-Run Chinook Salmon - Immature Smolt

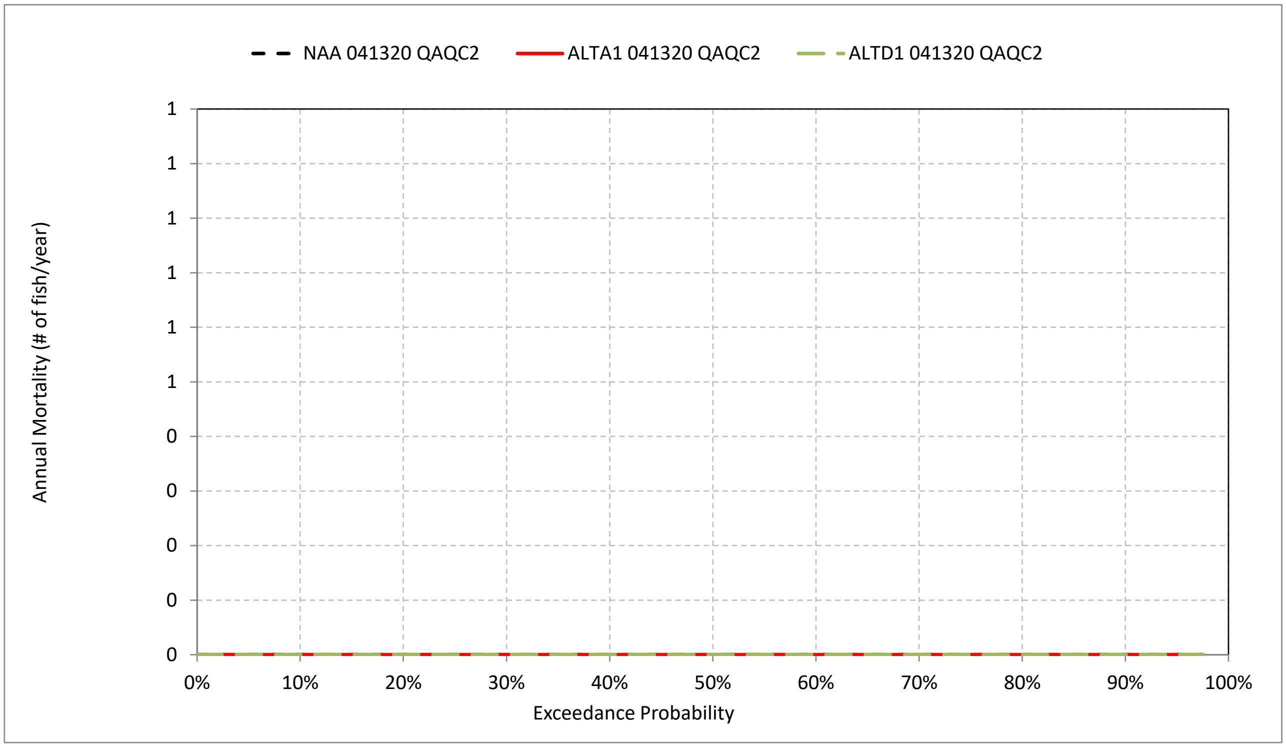


Figure G.1-7b-6 Annual Mortality for Spring-Run Chinook Salmon - Pre- & Immature Smolts

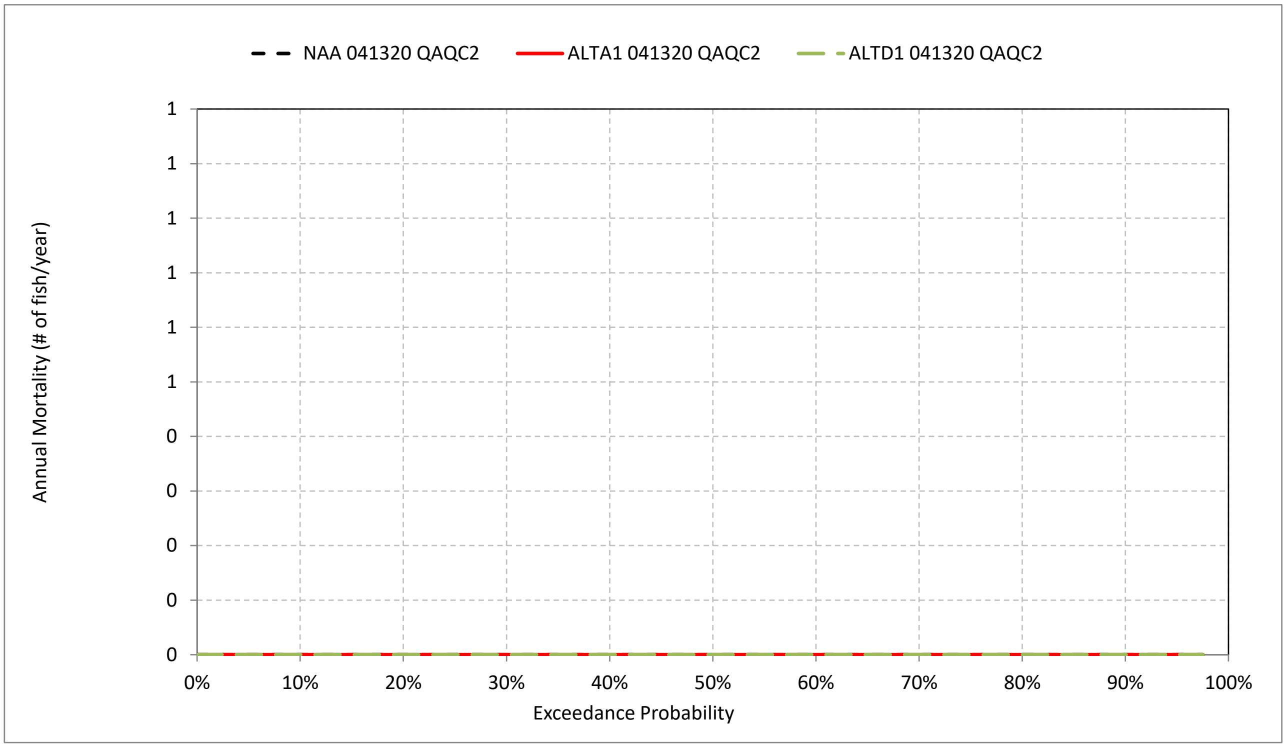


Figure G.1-7b-7 Annual Mortality for Spring-Run Chinook Salmon - All Lifestages

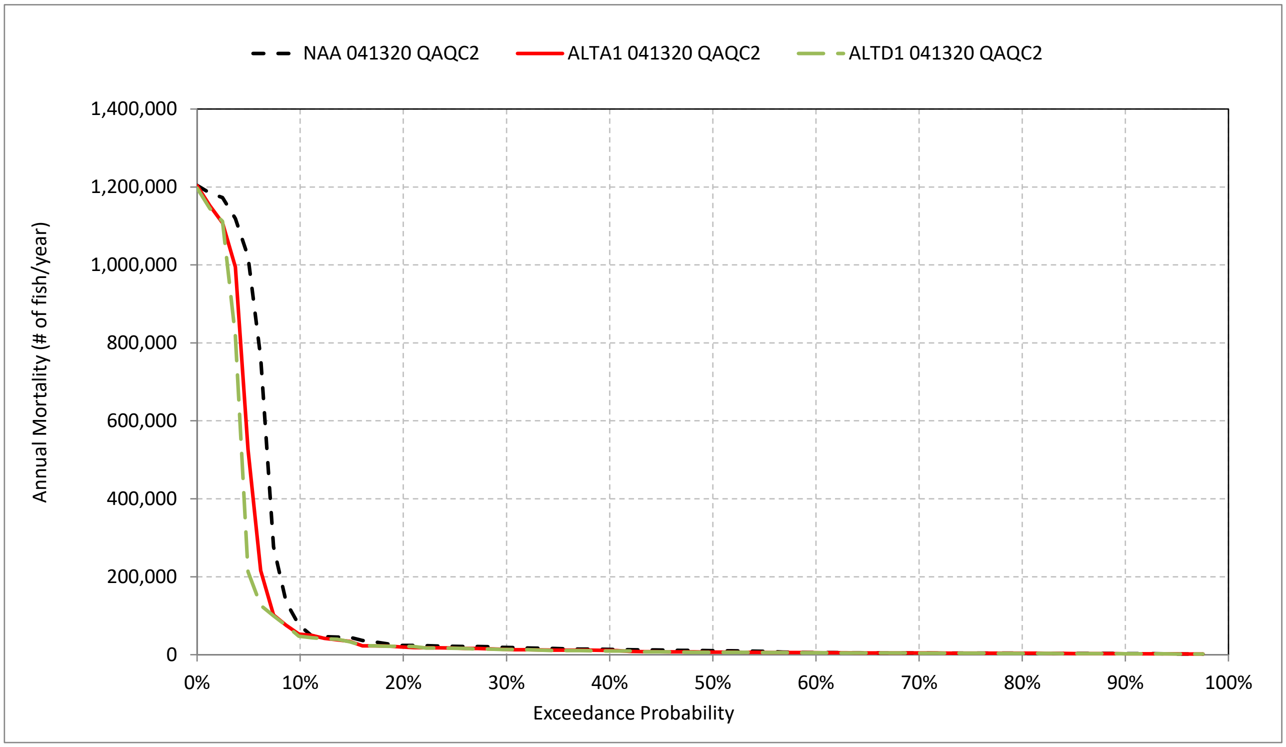


Figure G.1-7b-8 Incubation - Habitat based Annual Mortality for Spring-Run Chinook Salmon

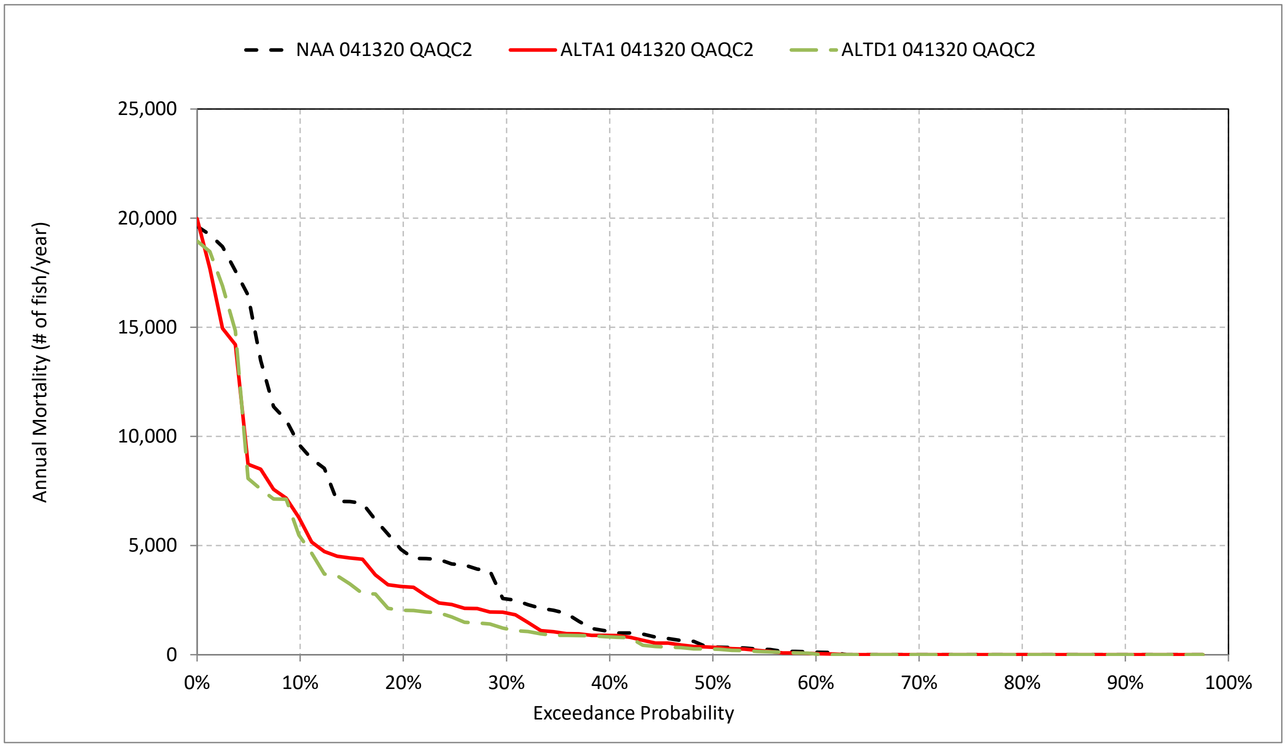


Figure G.1-7b-9 Super-imposition - Habitat based Annual Mortality for Spring-Run Chinook Salmon

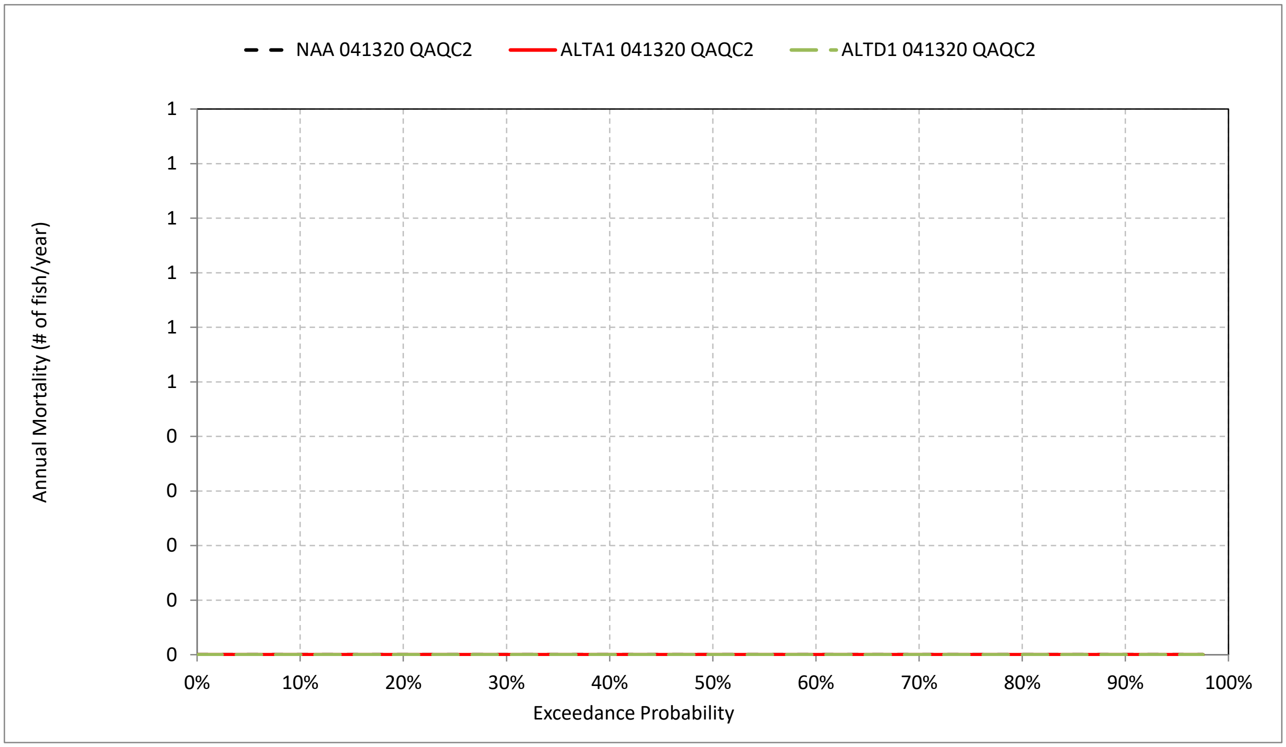


Figure G.1-7b-10 Fry - Habitat based Annual Mortality for Spring-Run Chinook Salmon

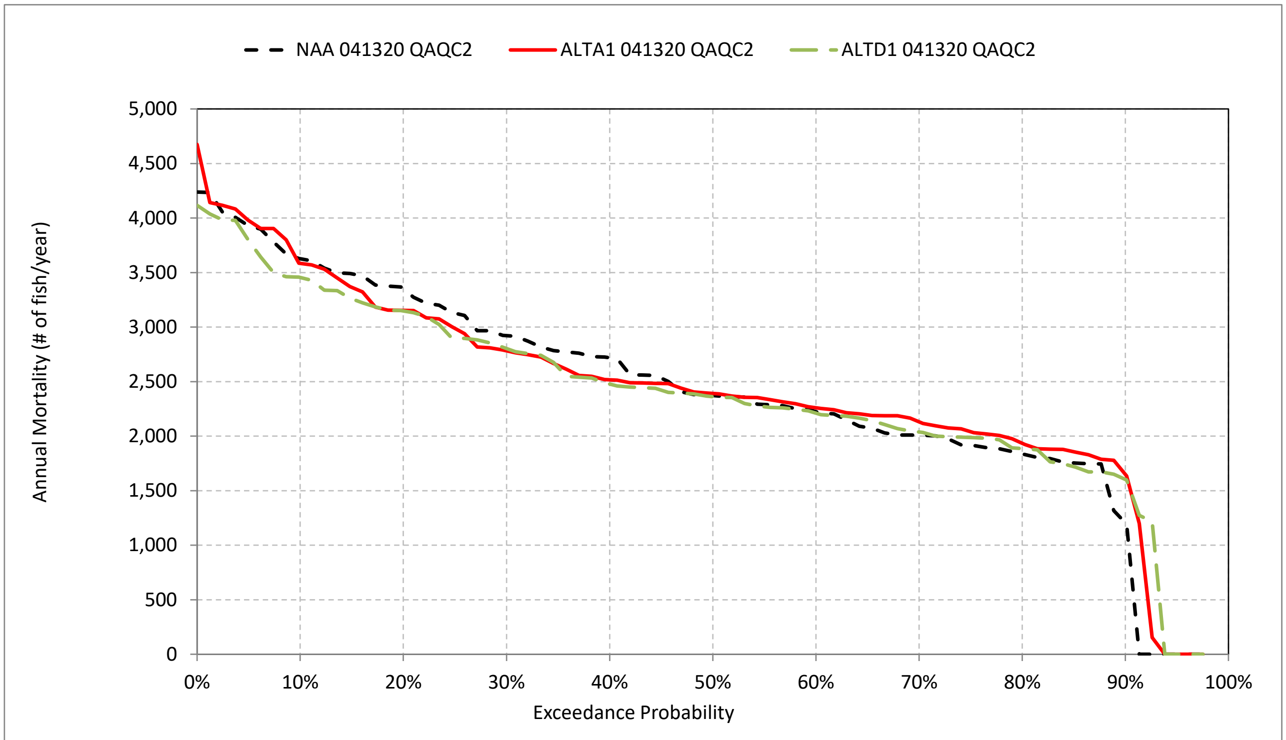


Figure G.1-7b-11 Pre-smolt - Habitat based Annual Mortality for Spring-Run Chinook Salmon

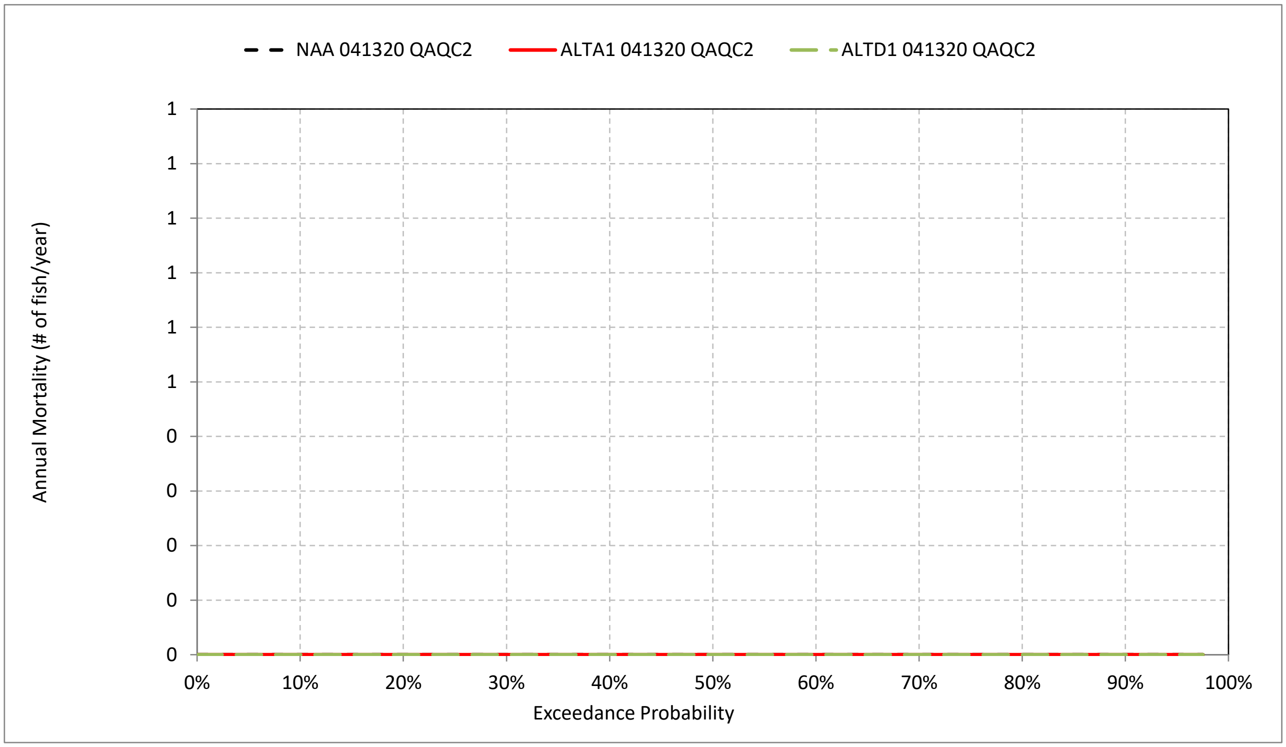


Figure G.1-7b-12 Immature Smolt - Habitat based Annual Mortality for Spring-Run Chinook Salmon

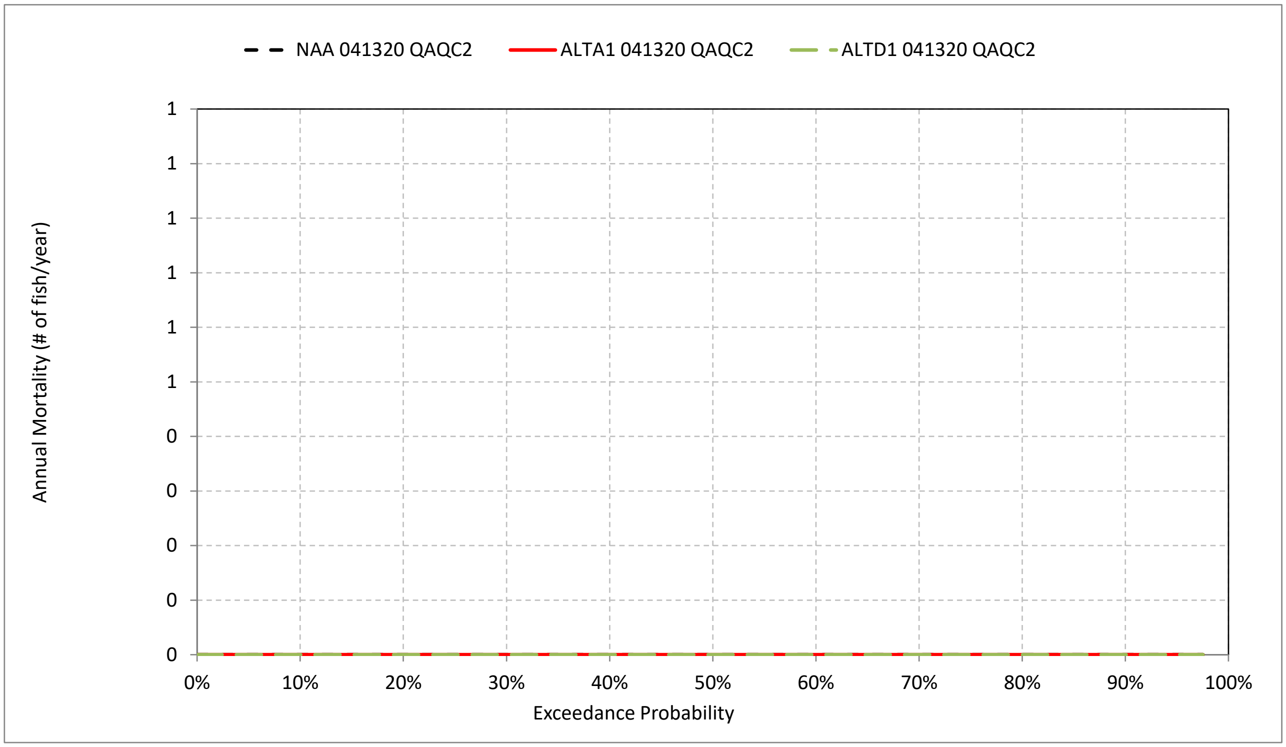


Figure G.1-7b-13 Total Habitat based Annual Mortality for Spring-Run Chinook Salmon

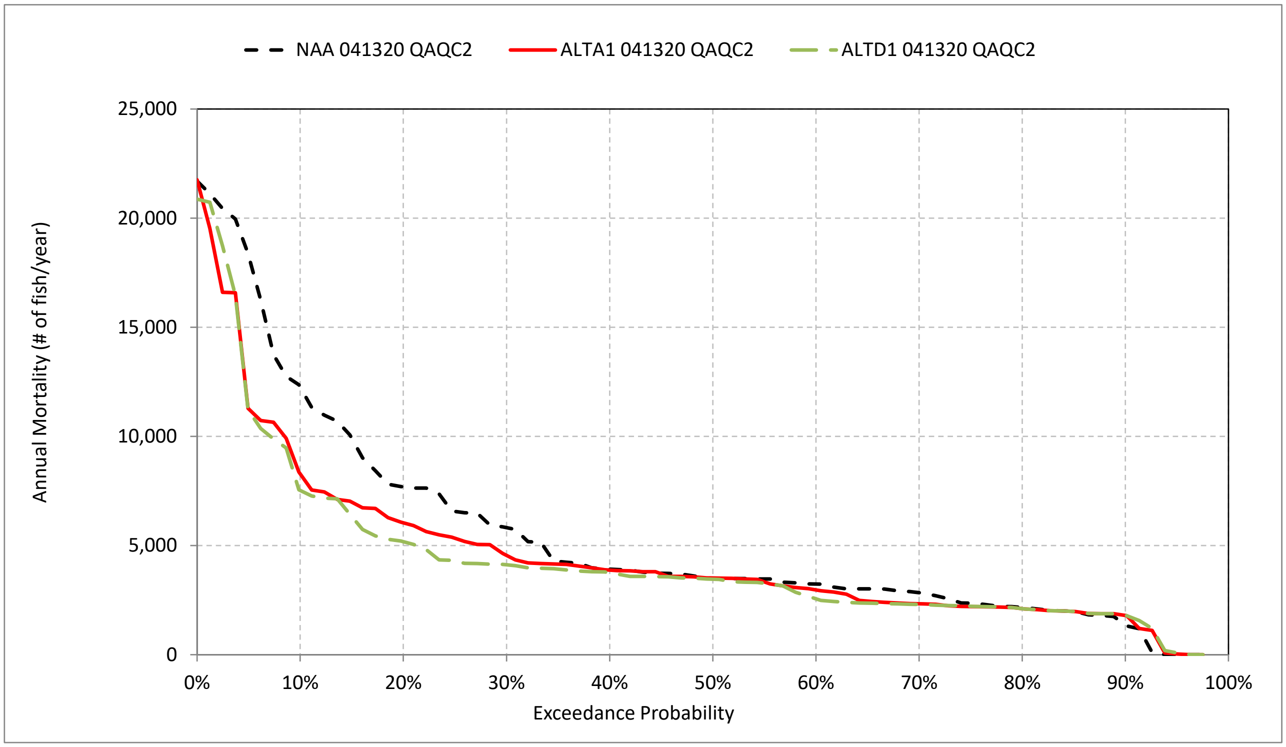


Figure G.1-7b-14 Pre-Spawn Mortality - Temperature based Annual Mortality for Spring-Run Chinook Salmon

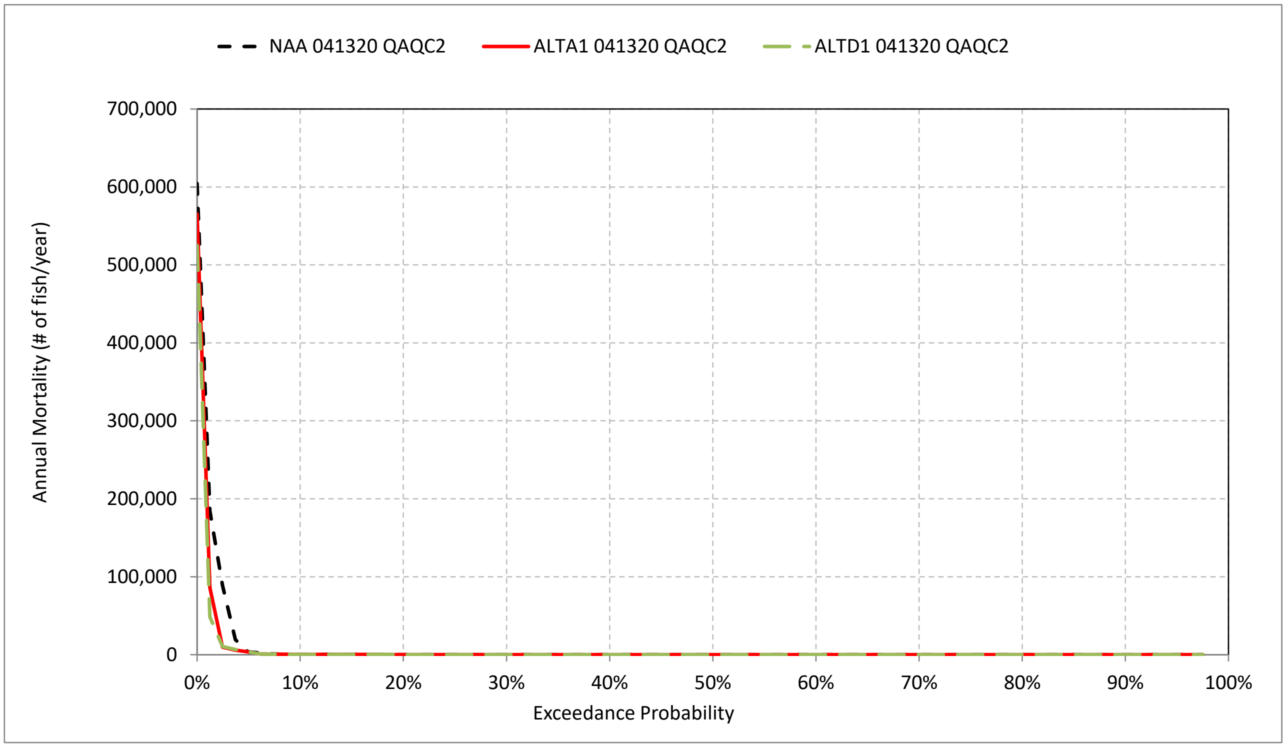


Figure G.1-7b-15 Eggs - Temperature based Annual Mortality for Spring-Run Chinook Salmon

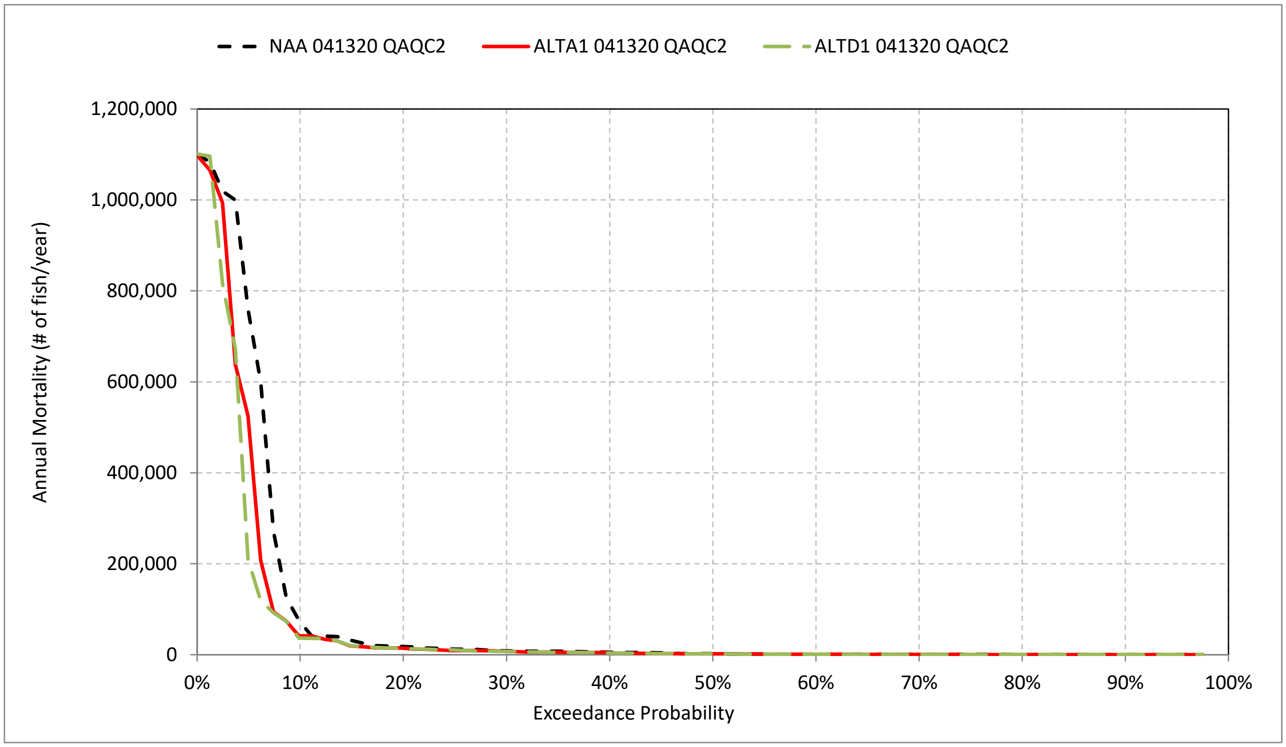


Figure G.1-7b-16 Fry - Temperature based Annual Mortality for Spring-Run Chinook Salmon

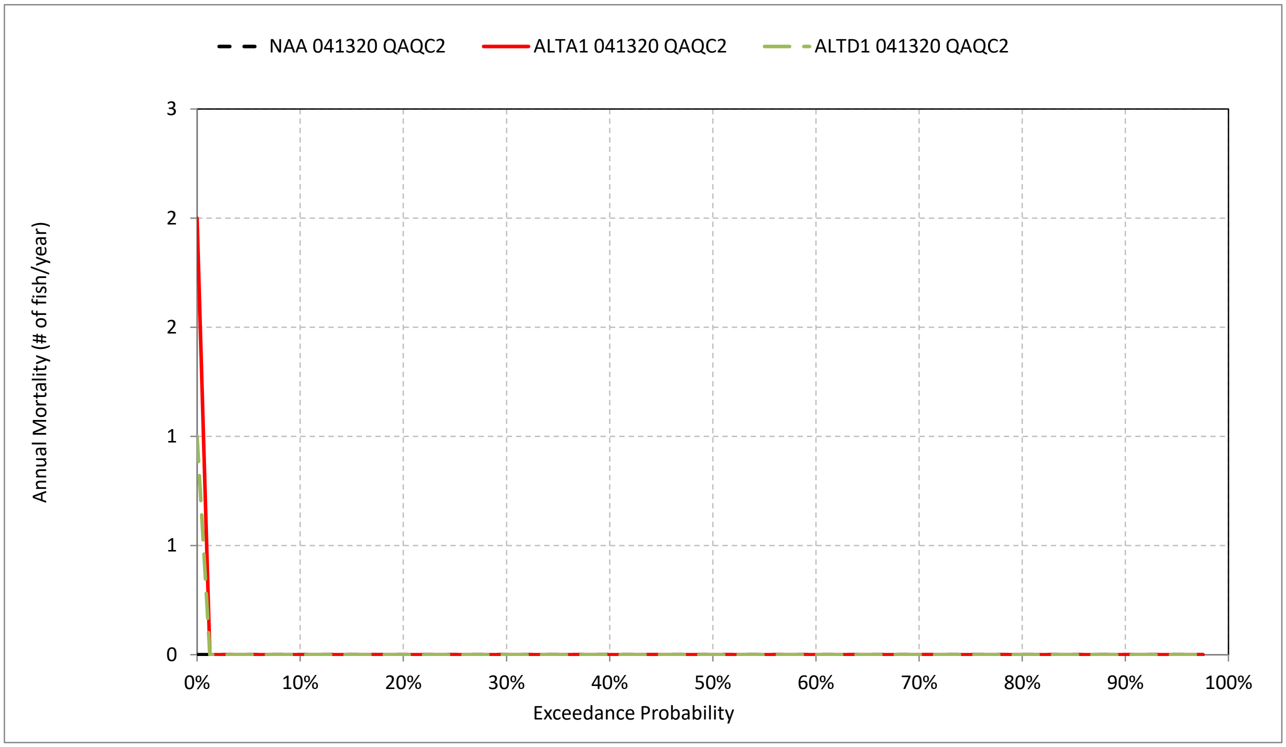


Figure G.1-7b-17 Pre-smolt - Temperature based Annual Mortality for Spring-Run Chinook Salmon

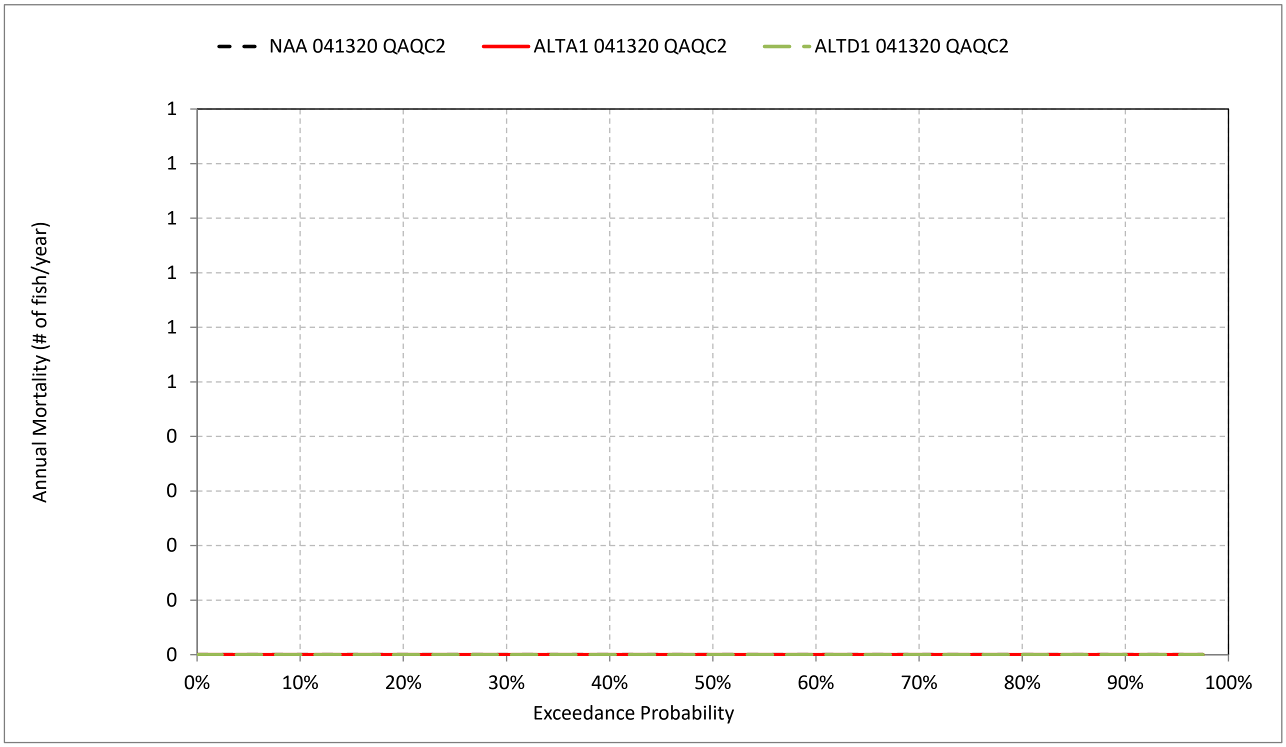


Figure G.1-7b-18 Immature Smolt - Temperature based Annual Mortality for Spring-Run Chinook Salmon

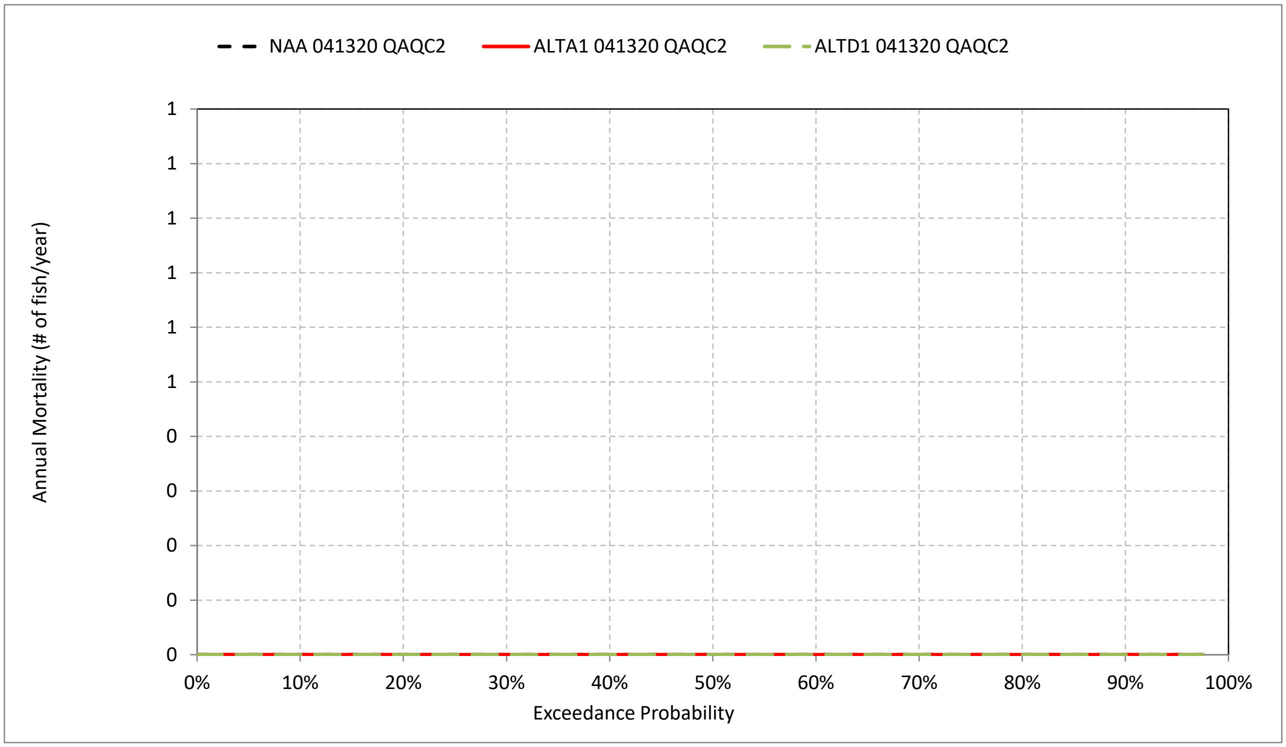


Figure G.1-7b-19 Total Temperature based Annual Mortality for Spring-Run Chinook Salmon

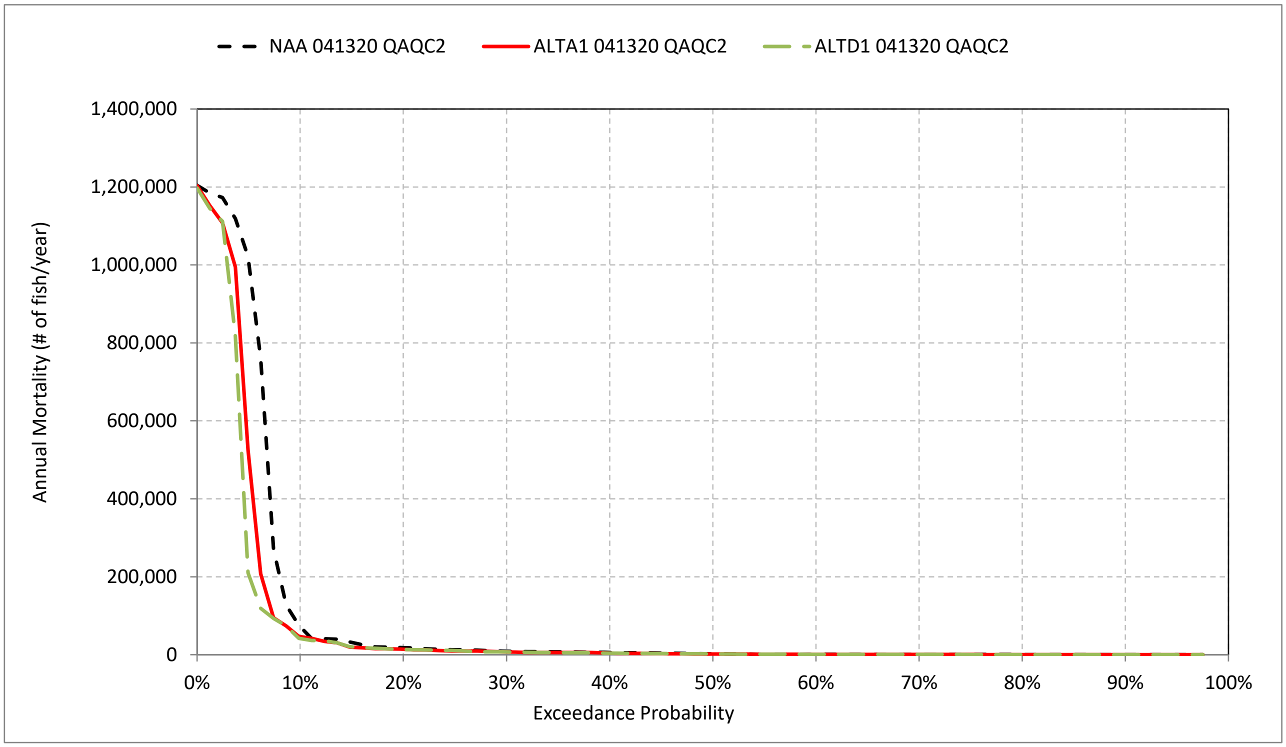


Figure G.1-7c-1 Annual Potential Production for Fall-Run Chinook Salmon

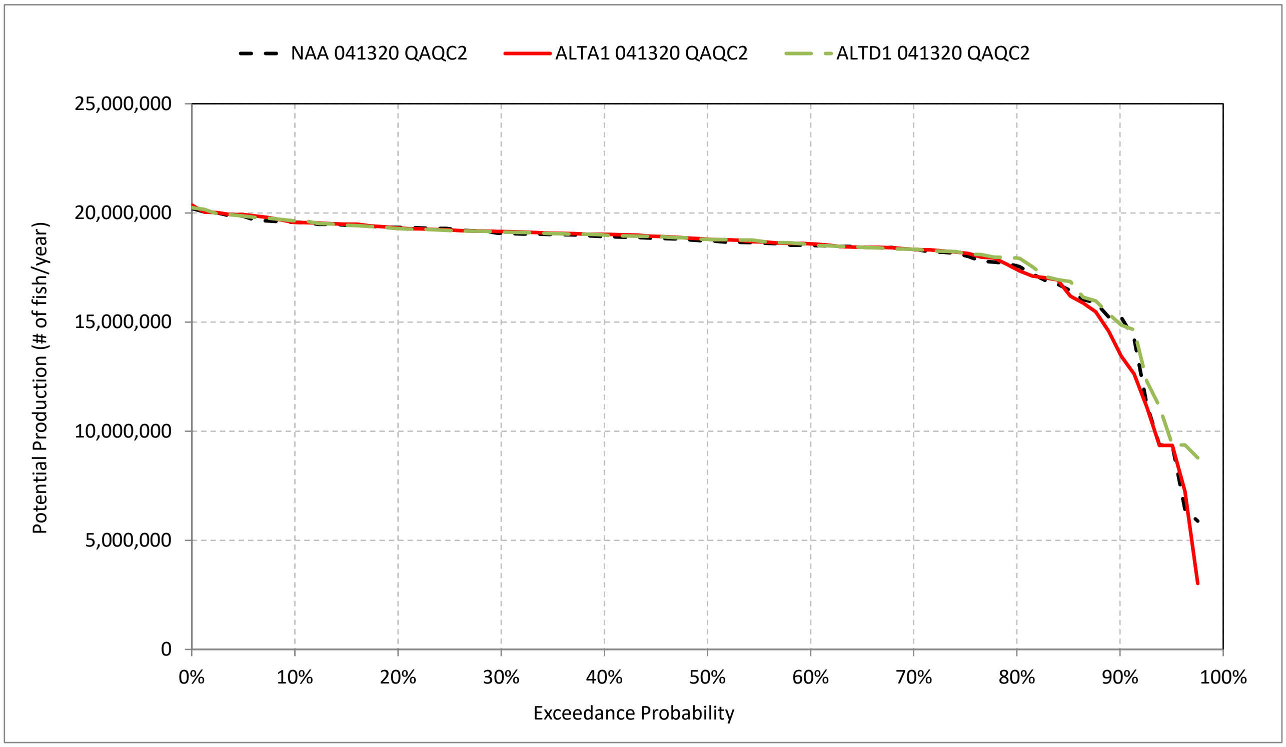


Figure G.1-7c-2 Annual Mortality for Fall-Run Chinook Salmon - Eggs

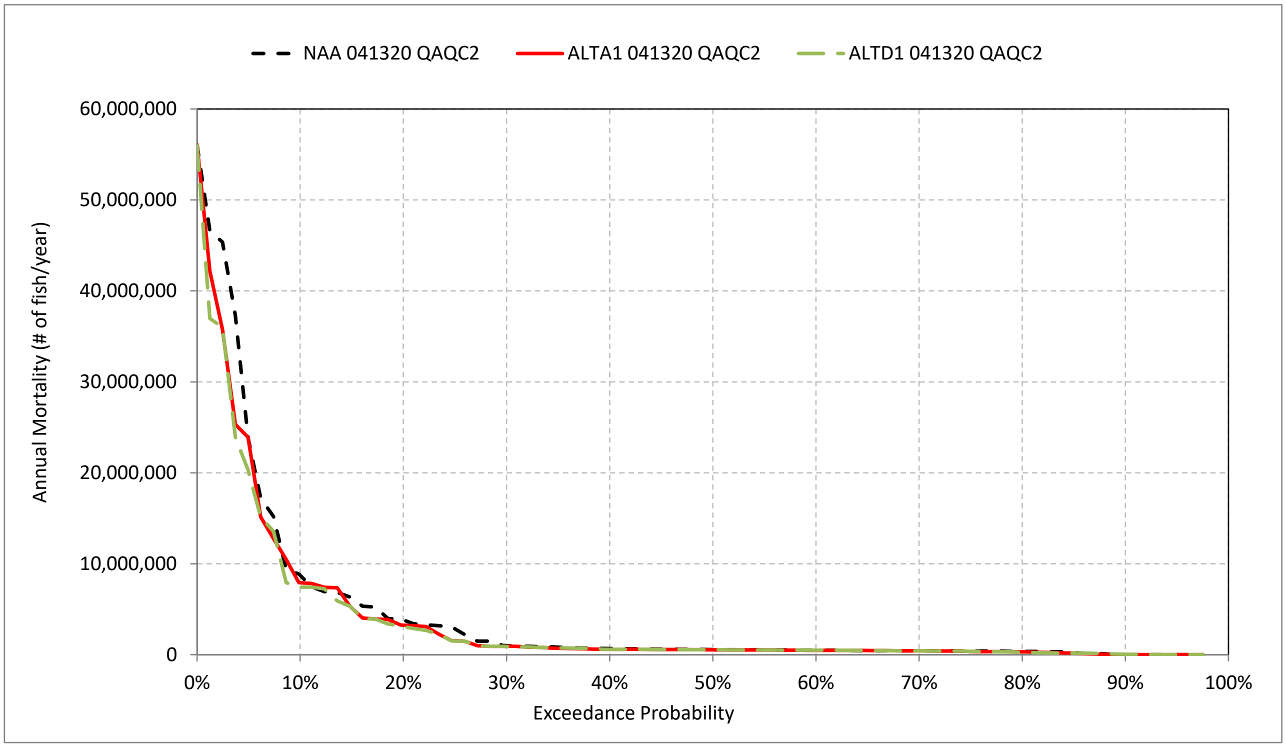


Figure G.1-7c-3 Annual Mortality for Fall-Run Chinook Salmon - Fry

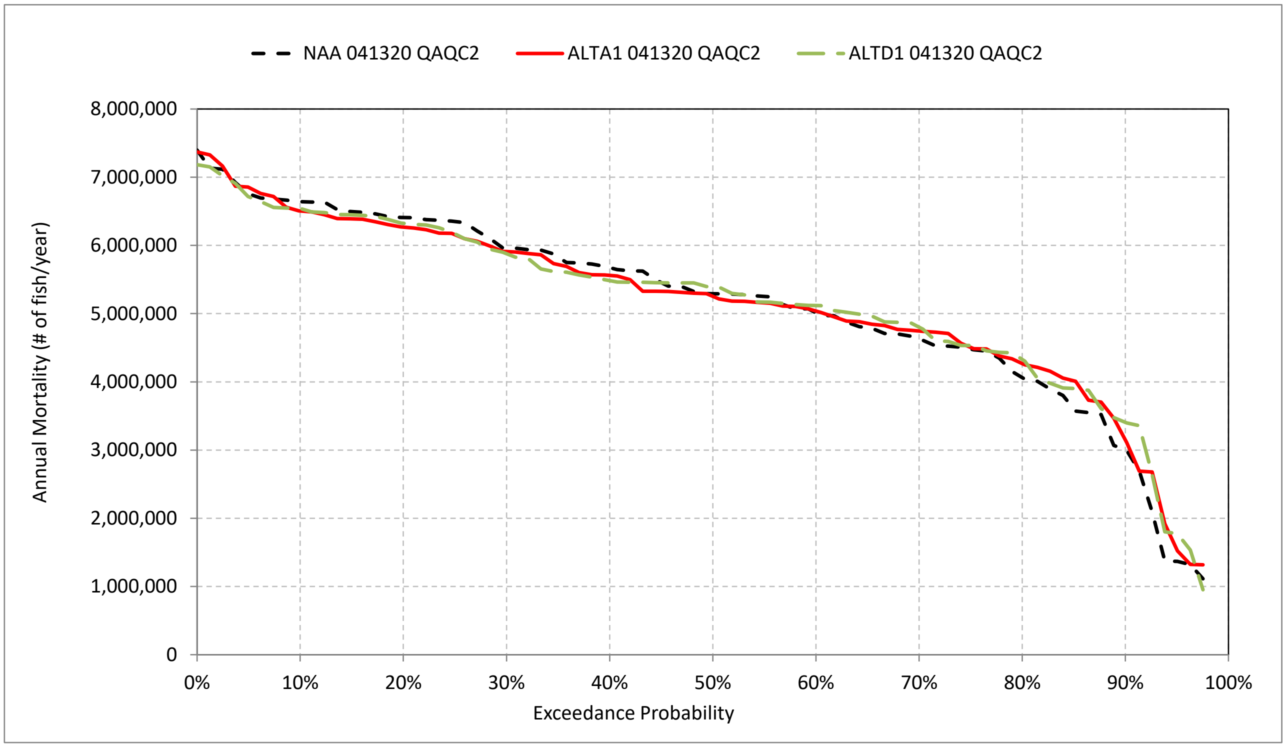


Figure G.1-7c-4 Annual Mortality for Fall-Run Chinook Salmon - Pre-Smolt

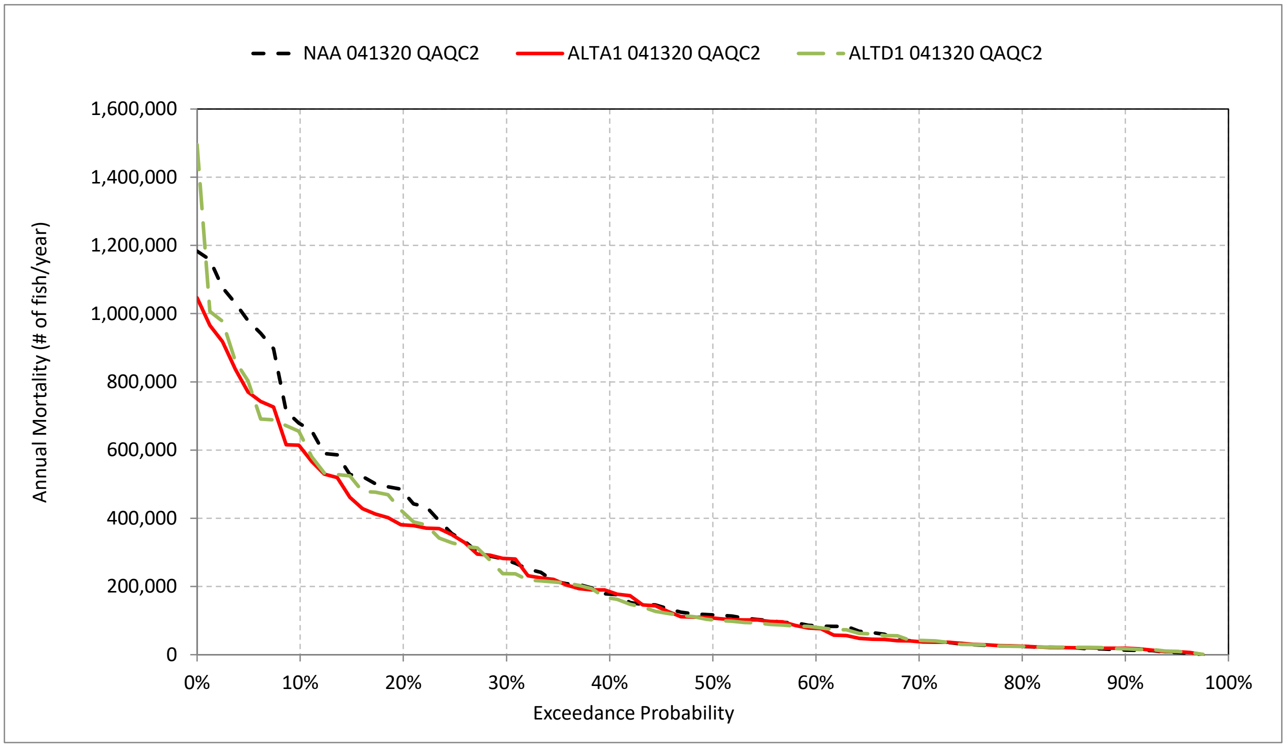


Figure G.1-7c-5 Annual Mortality for Fall-Run Chinook Salmon - Immature Smolt

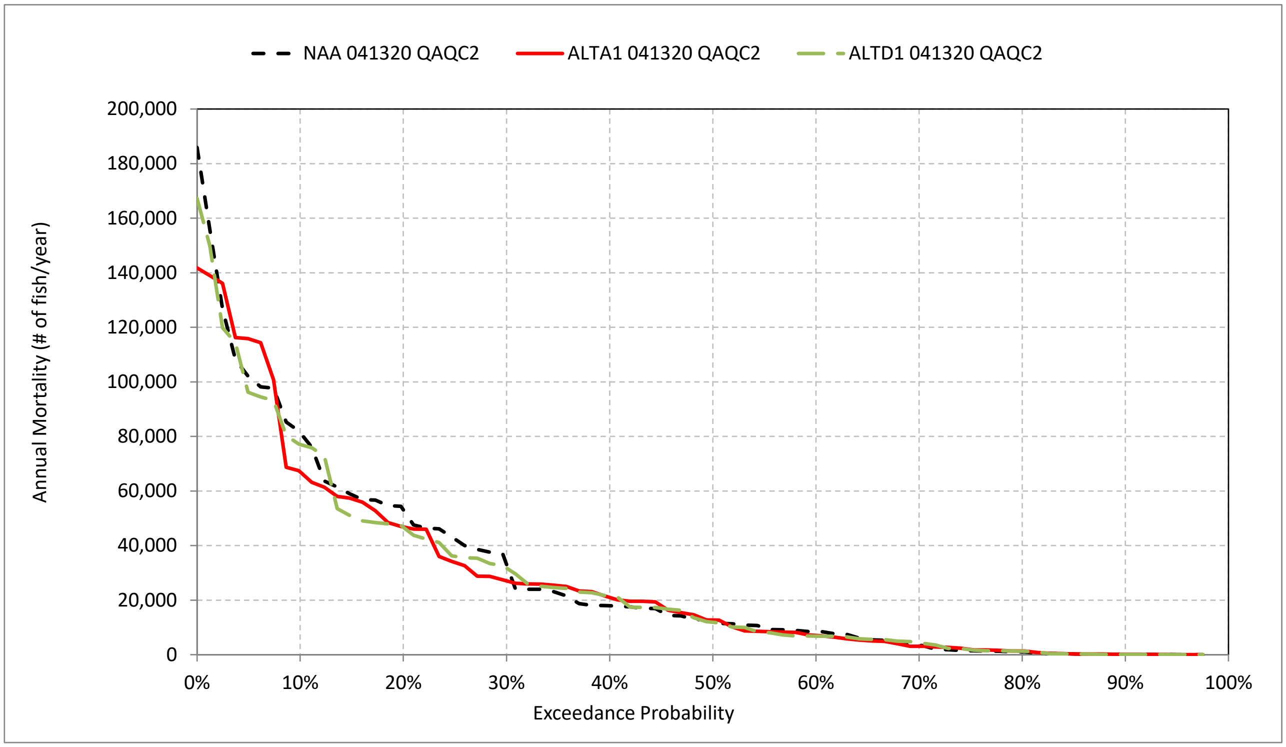


Figure G.1-7c-6 Annual Mortality for Fall-Run Chinook Salmon - Pre- & Immature Smolts

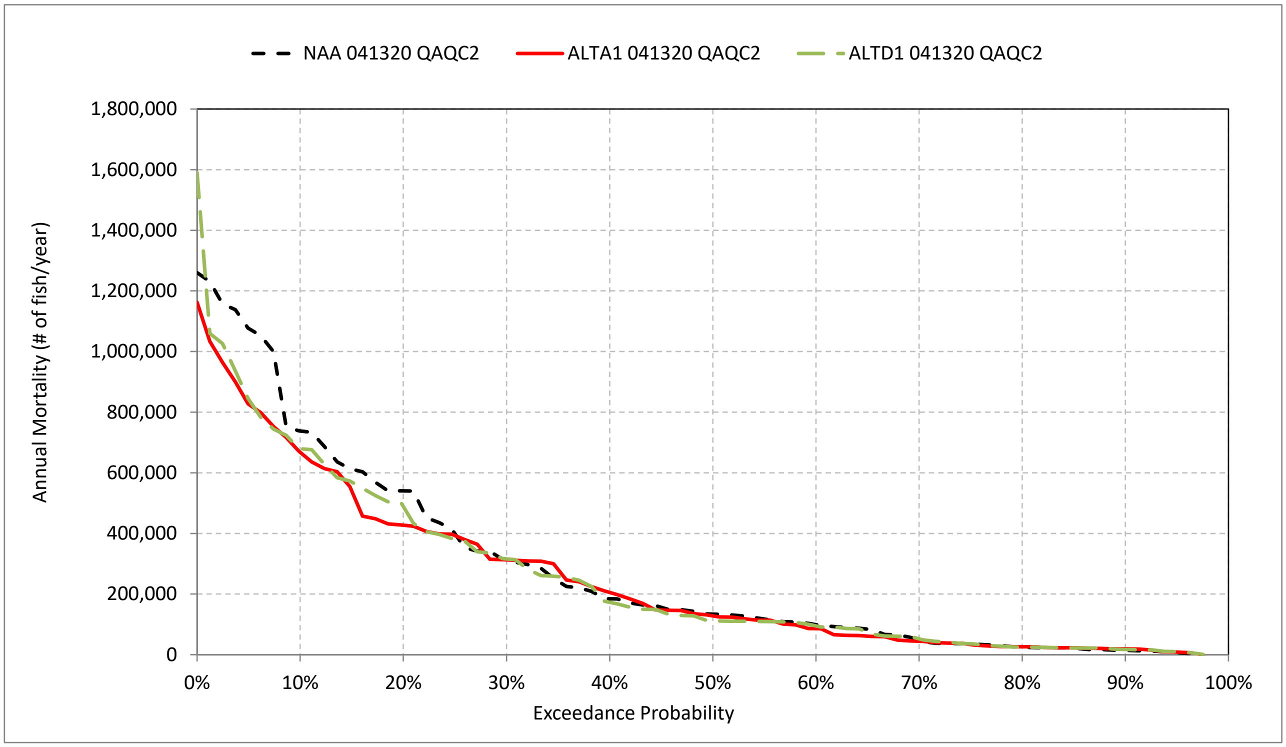


Figure G.1-7c-7 Annual Mortality for Fall-Run Chinook Salmon - All Lifestages

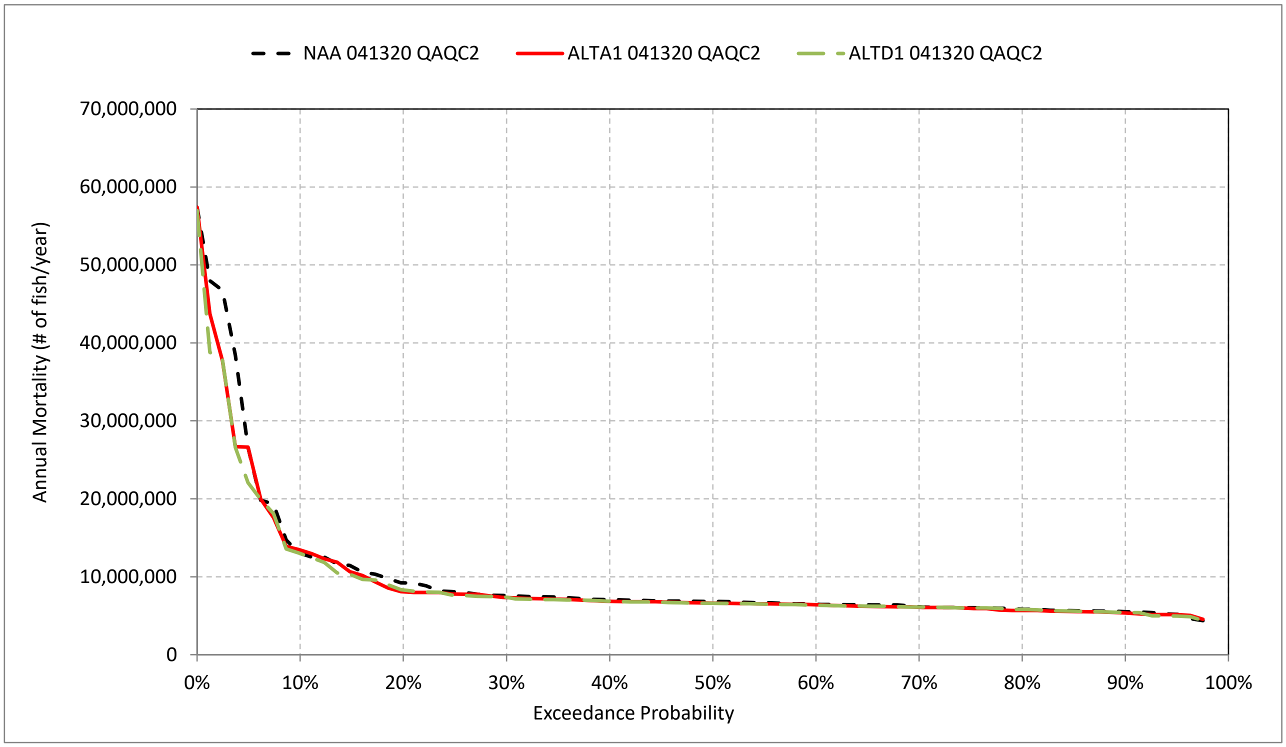


Figure G.1-7c-8 Incubation - Habitat based Annual Mortality for Fall-Run Chinook Salmon

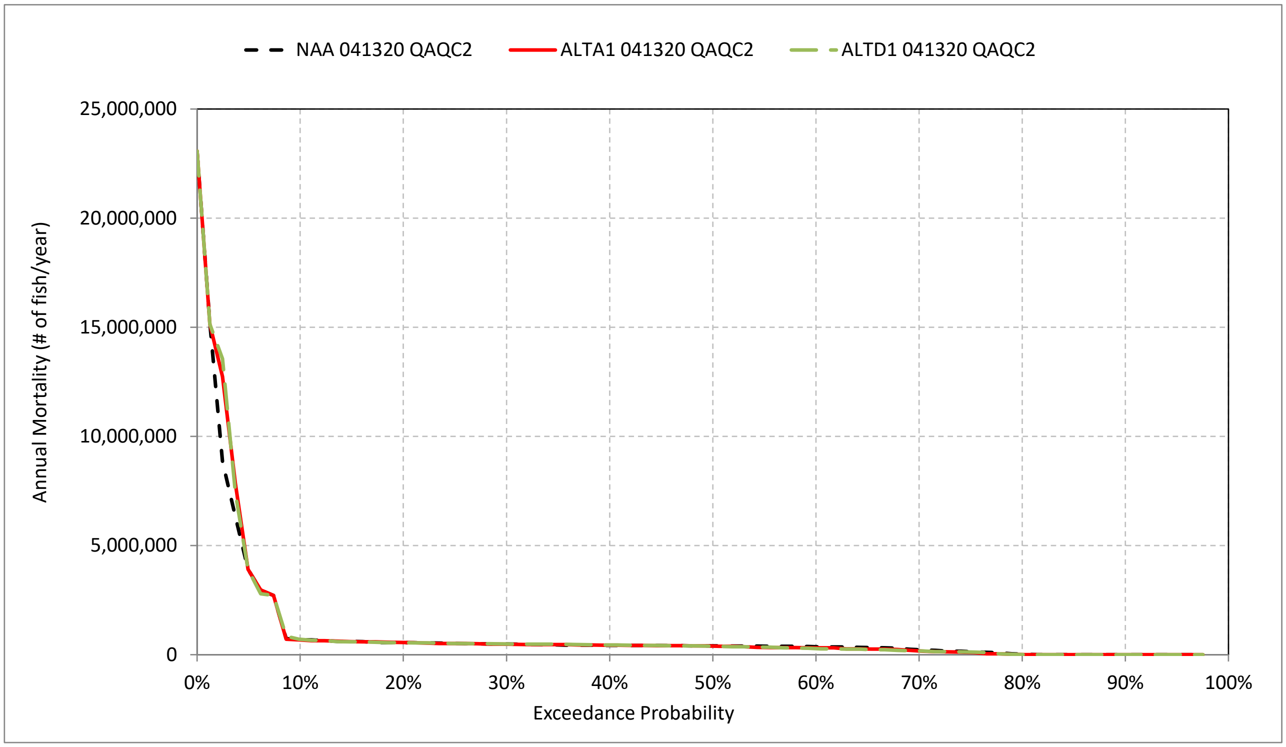


Figure G.1-7c-9 Super-imposition - Habitat based Annual Mortality for Fall-Run Chinook Salmon

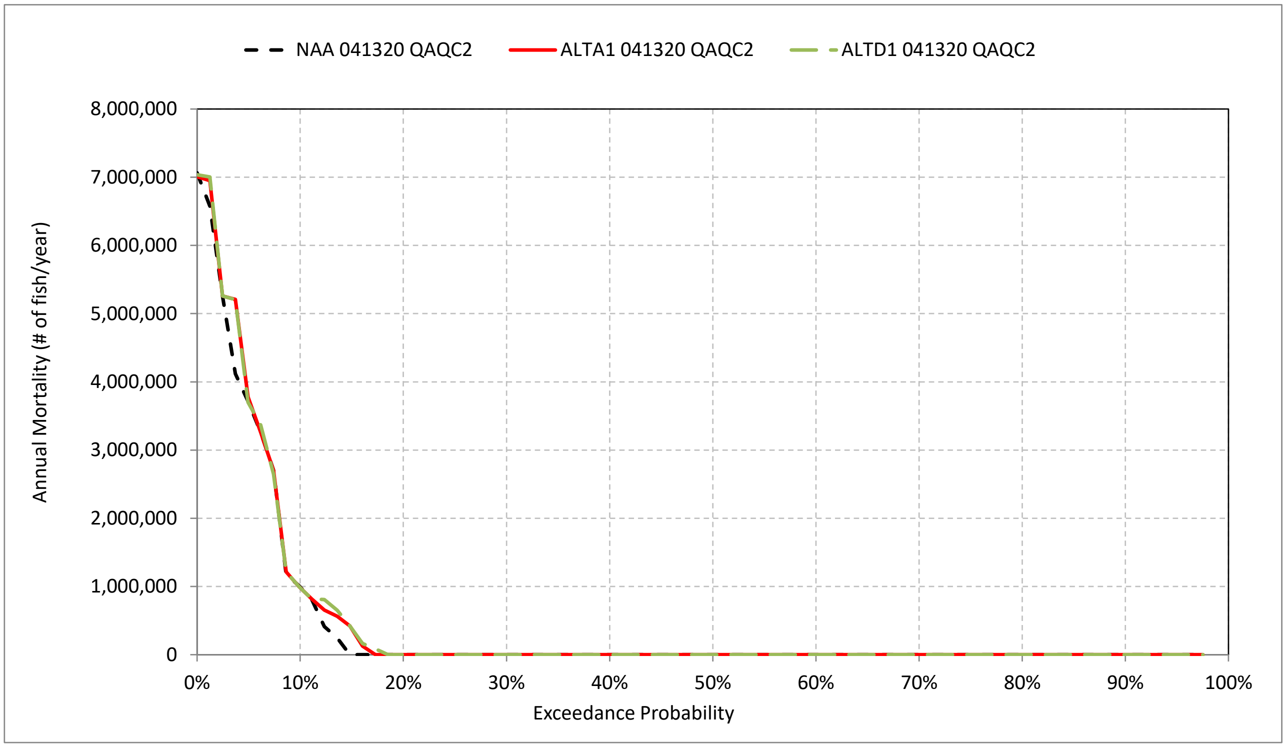


Figure G.1-7c-10 Fry - Habitat based Annual Mortality for Fall-Run Chinook Salmon

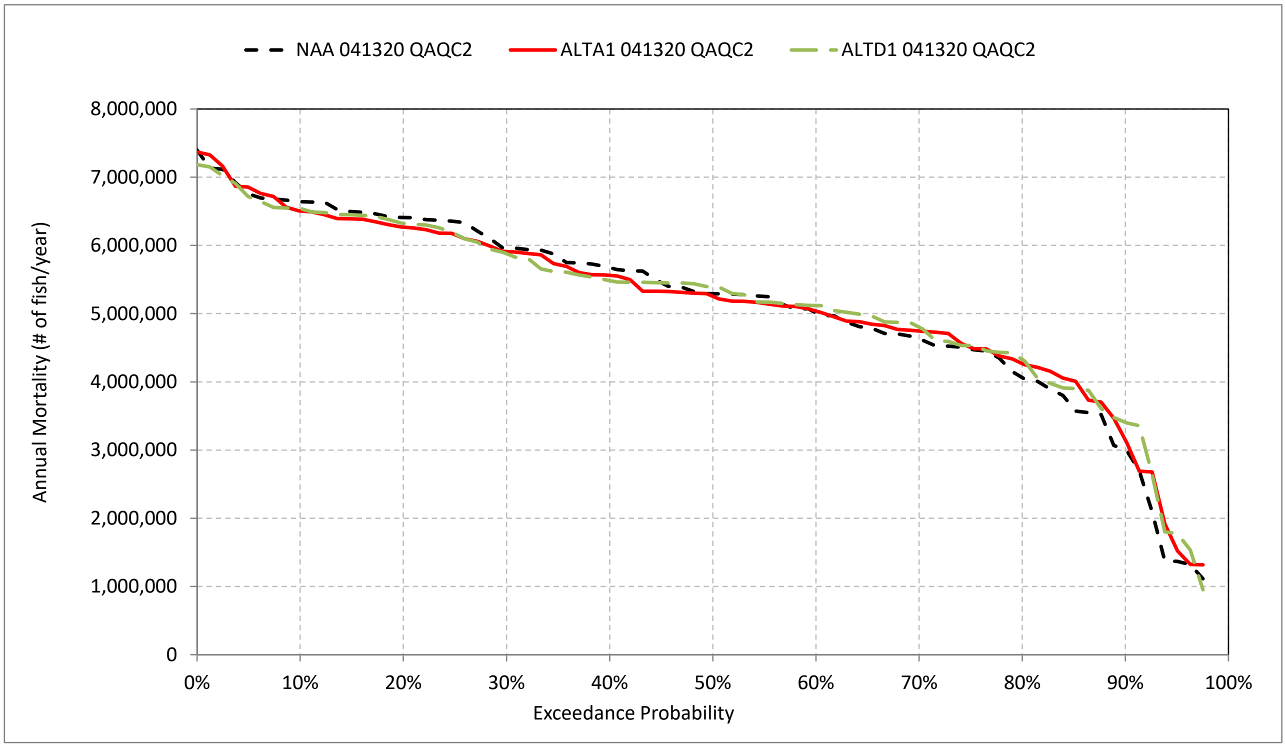


Figure G.1-7c-11 Pre-smolt - Habitat based Annual Mortality for Fall-Run Chinook Salmon

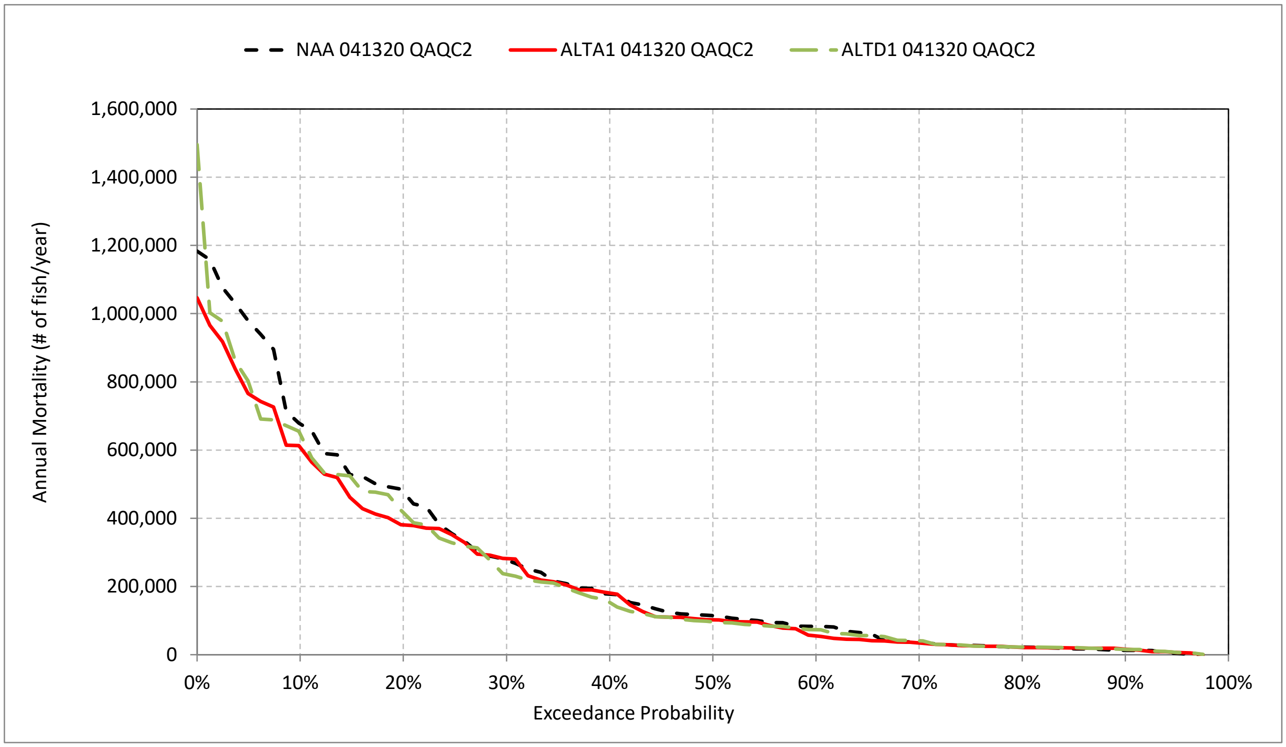


Figure G.1-7c-12 Immature Smolt - Habitat based Annual Mortality for Fall-Run Chinook Salmon

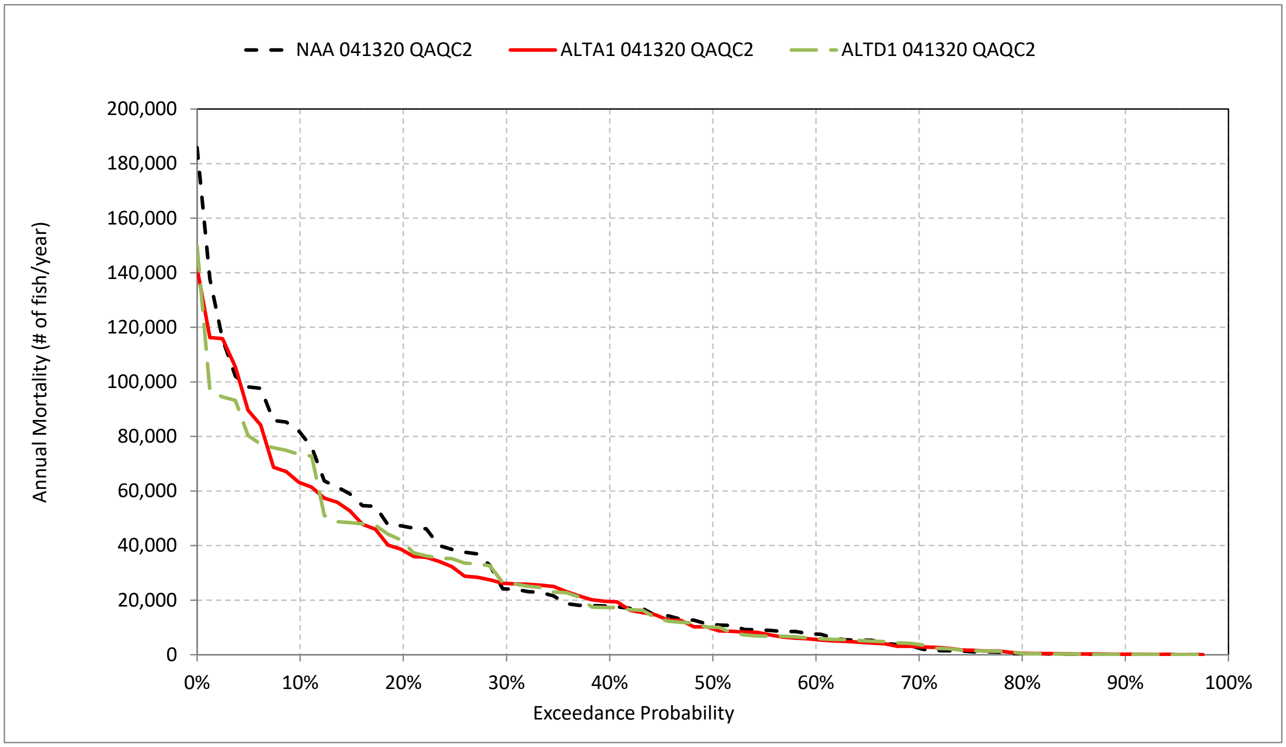


Figure G.1-7c-13 Total Habitat based Annual Mortality for Fall-Run Chinook Salmon

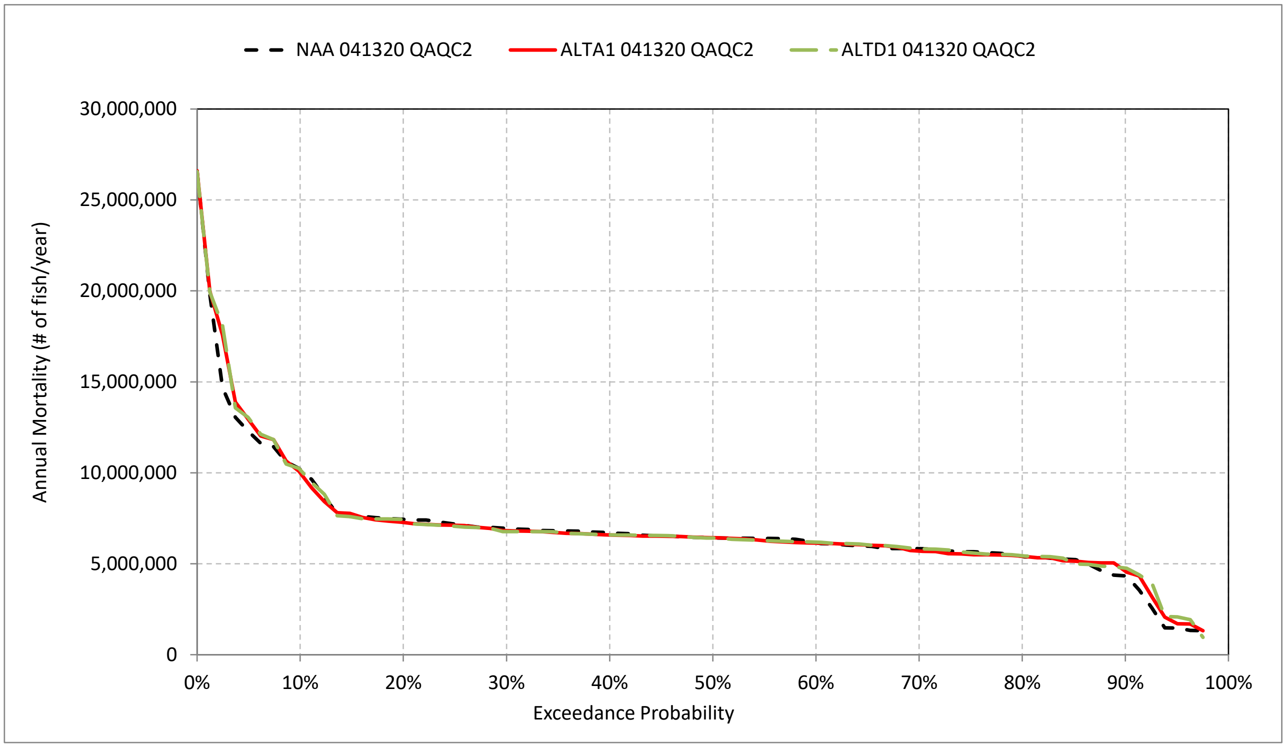


Figure G.1-7c-14 Pre-Spawn Mortality - Temperature based Annual Mortality for Fall-Run Chinook Salmon

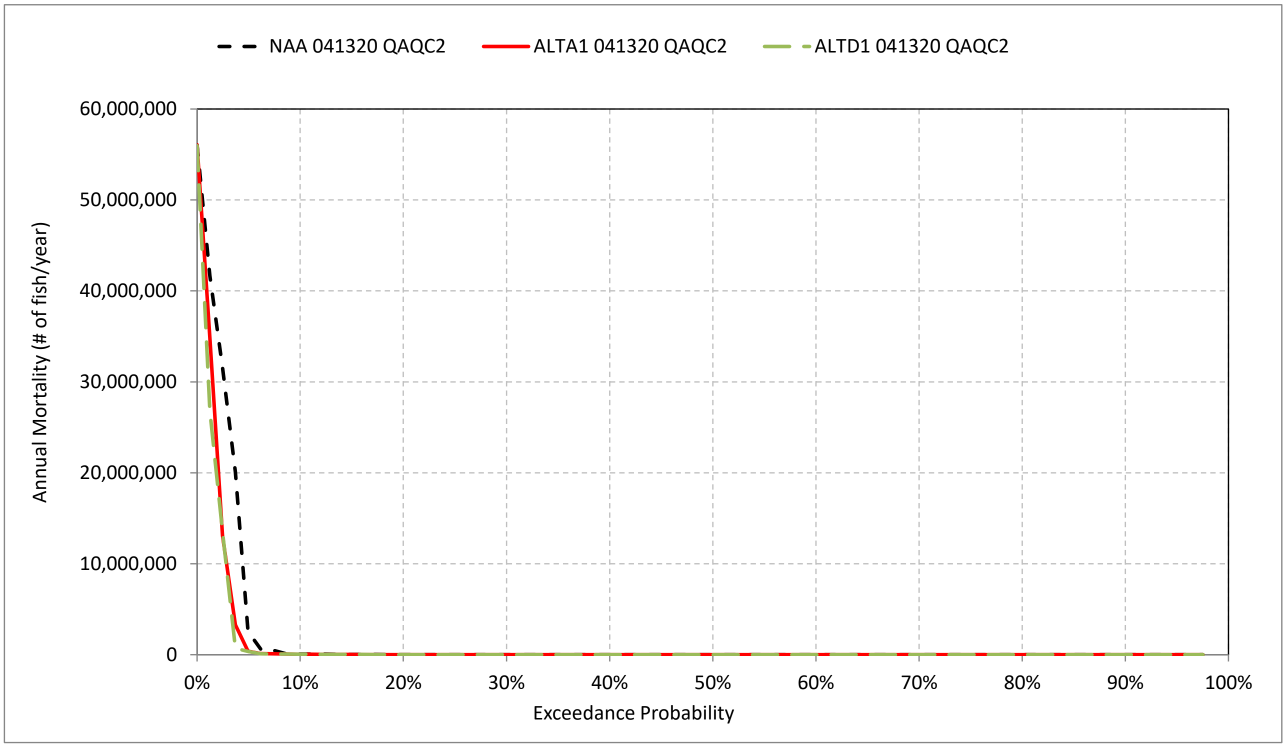


Figure G.1-7c-15 Eggs - Temperature based Annual Mortality for Fall-Run Chinook Salmon

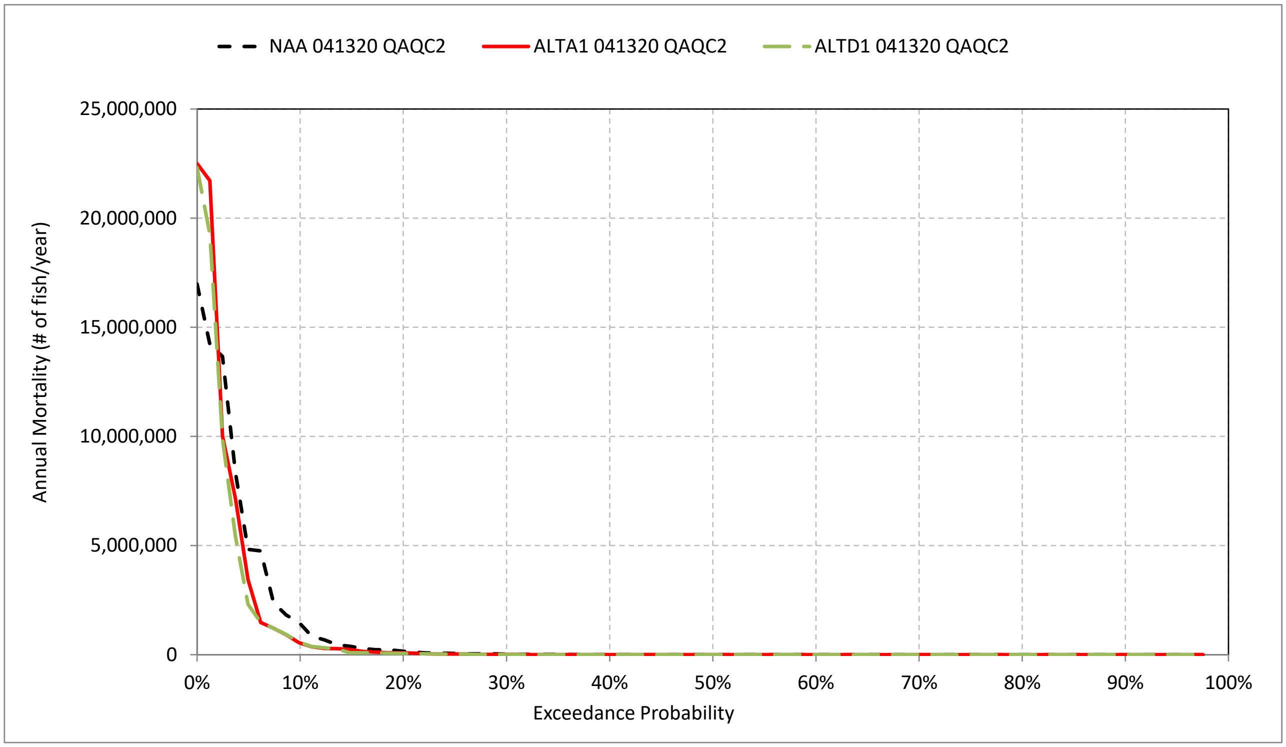


Figure G.1-7c-16 Fry - Temperature based Annual Mortality for Fall-Run Chinook Salmon

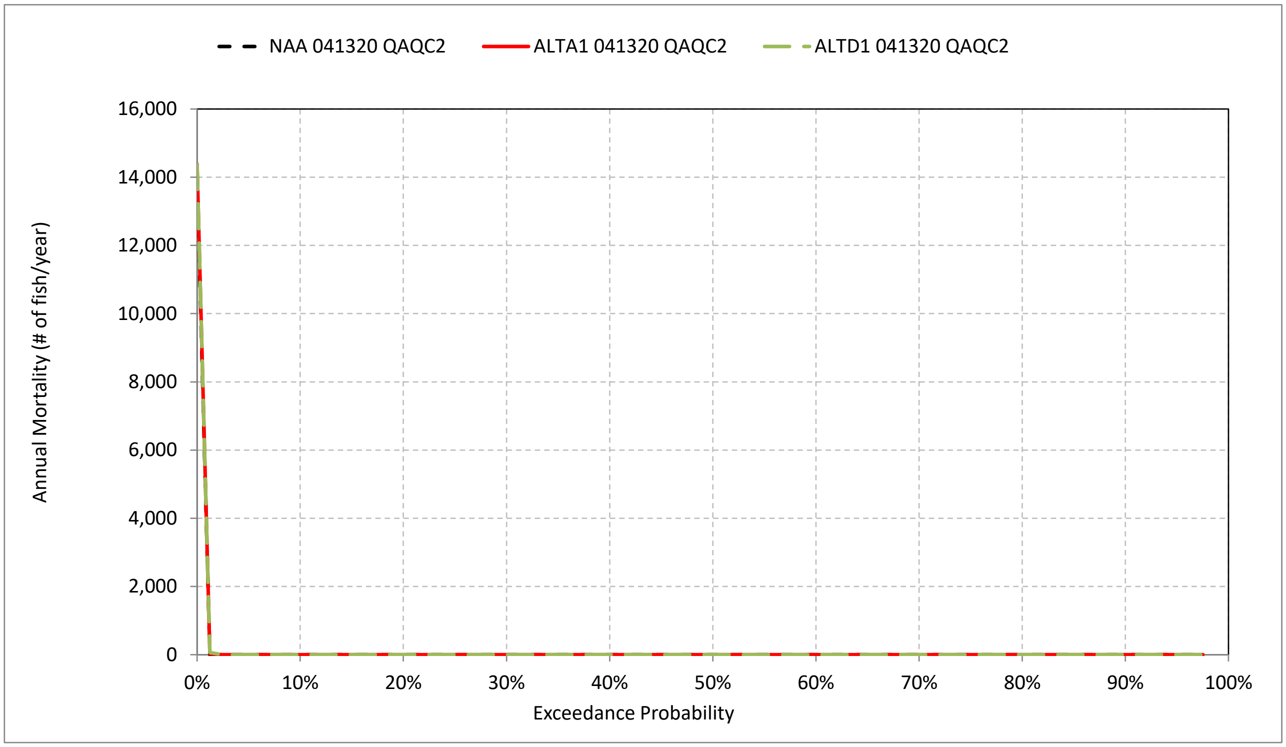


Figure G.1-7c-17 Pre-smolt - Temperature based Annual Mortality for Fall-Run Chinook Salmon

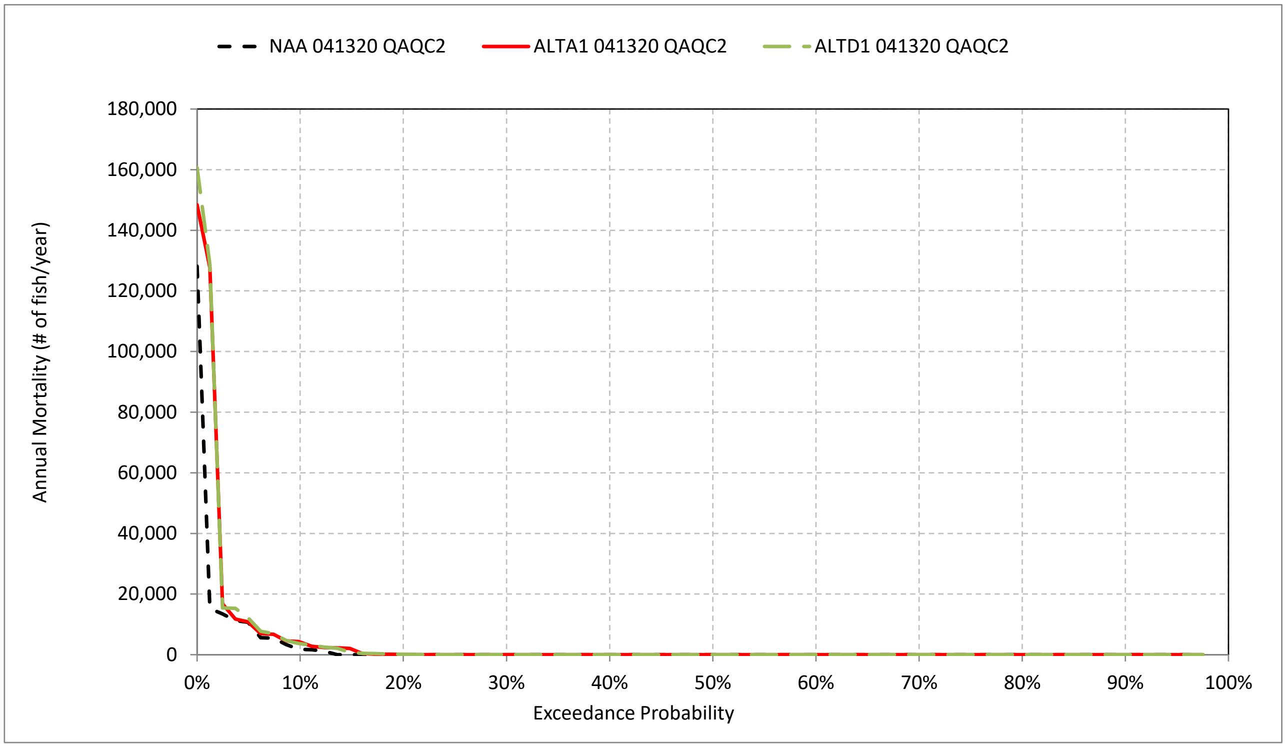


Figure G.1-7c-18 Immature Smolt - Temperature based Annual Mortality for Fall-Run Chinook Salmon

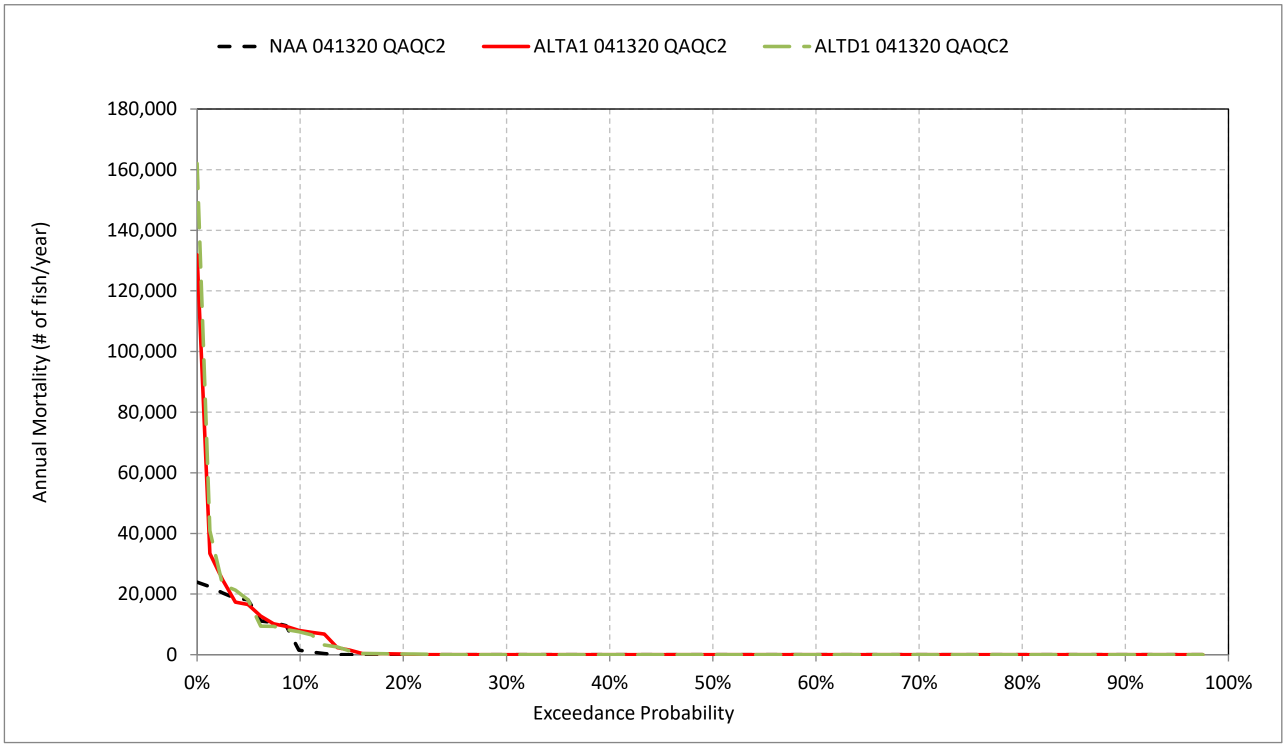


Figure G.1-7c-19 Total Temperature based Annual Mortality for Fall-Run Chinook Salmon

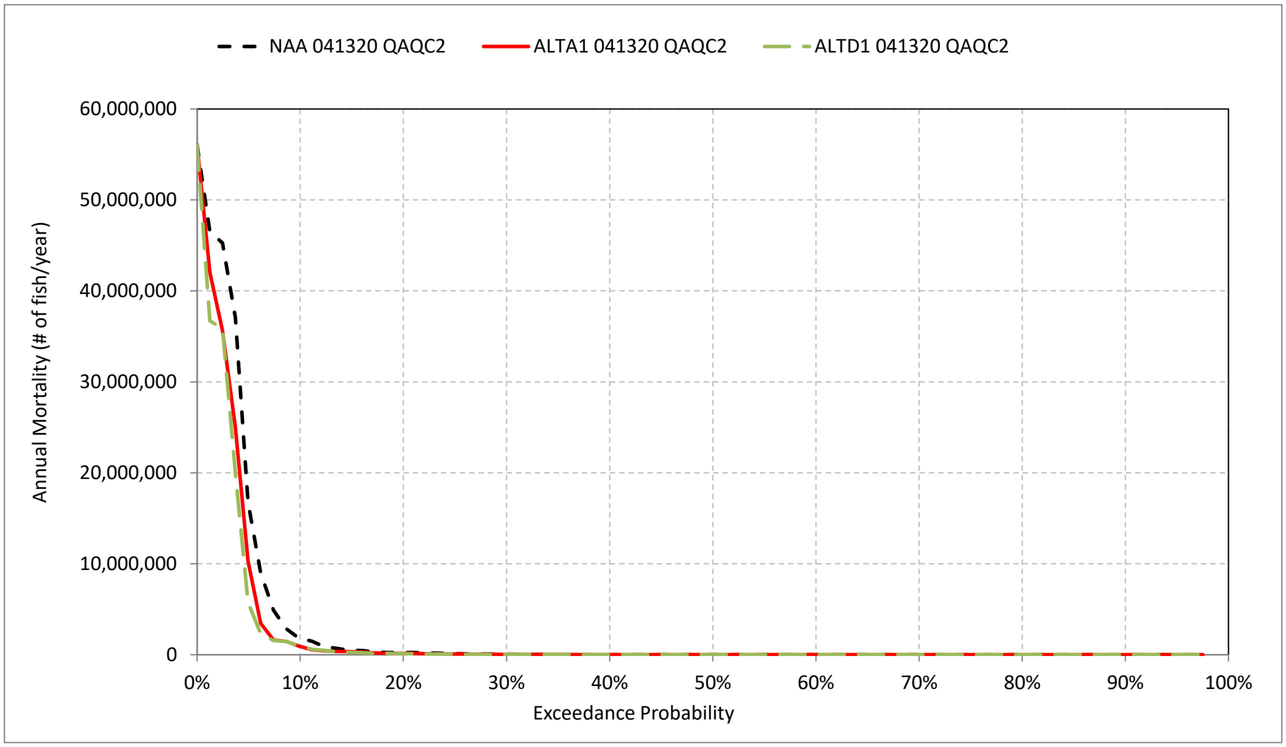


Figure G.1-7d-1 Annual Potential Production for Late Fall-Run Chinook Salmon

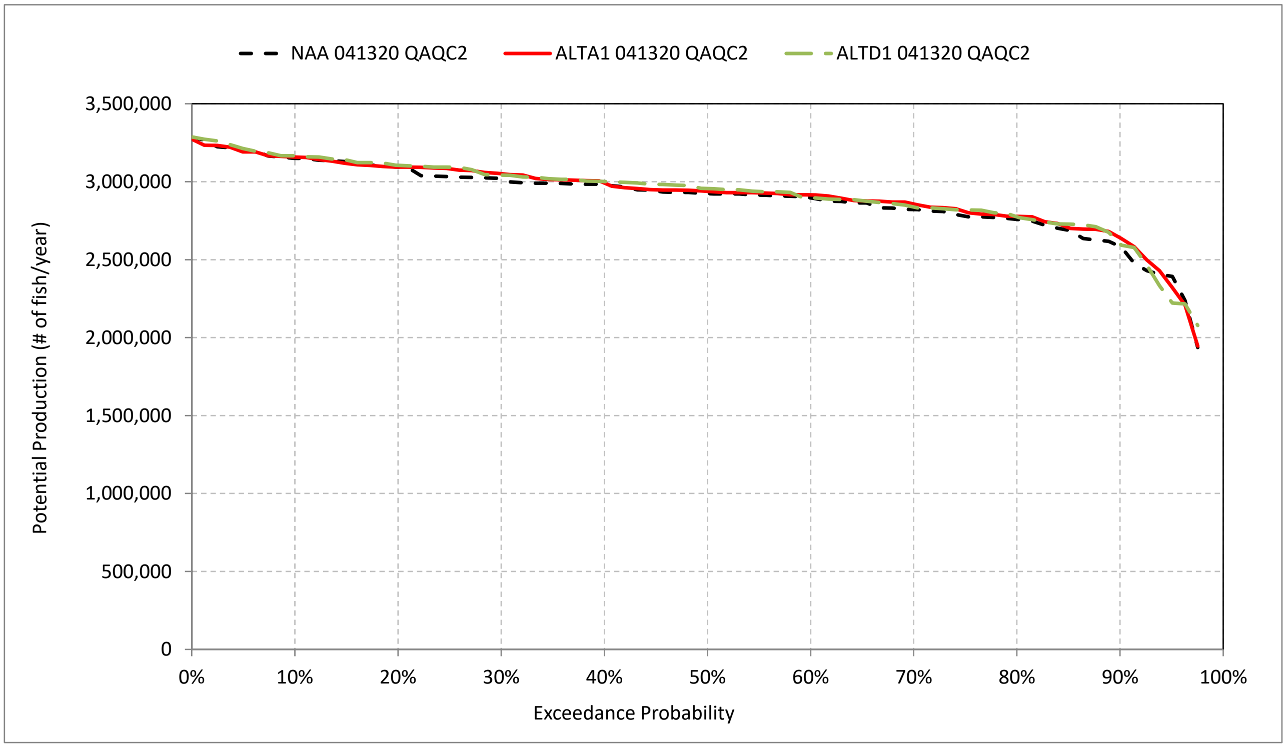


Figure G.1-7d-2 Annual Mortality for Late Fall-Run Chinook Salmon - Eggs

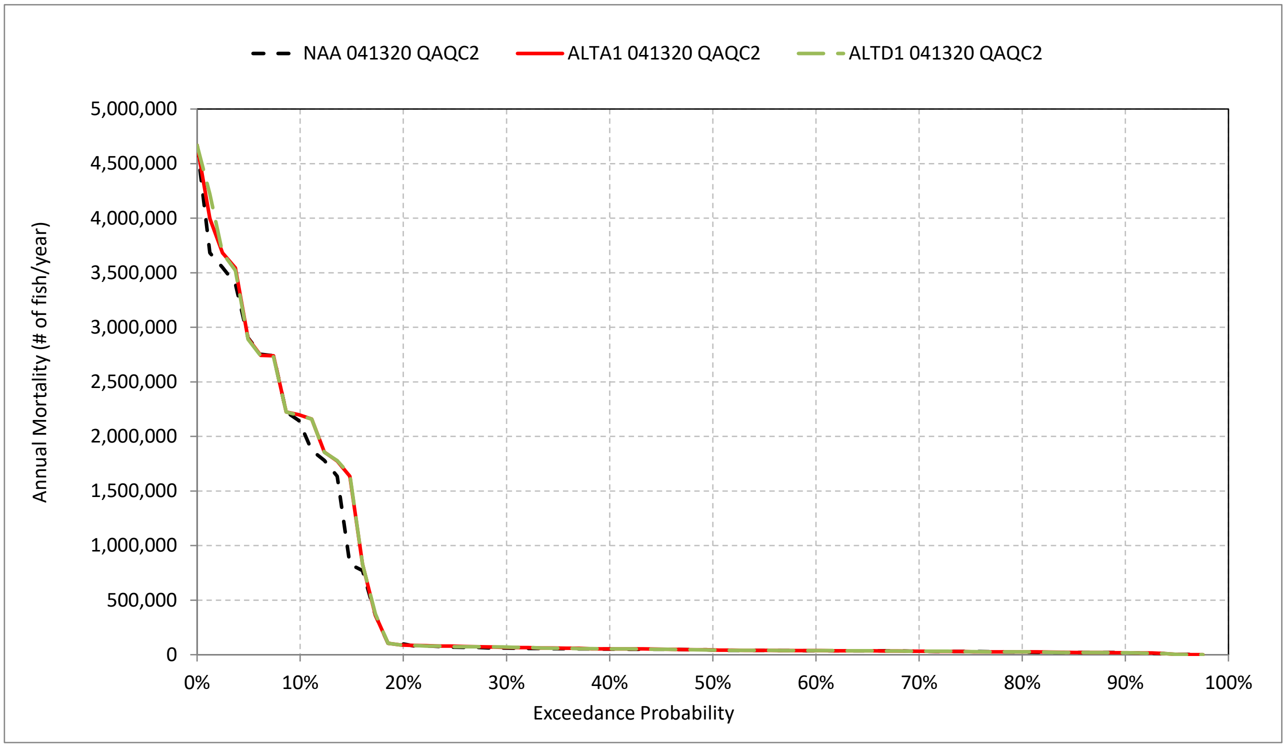


Figure G.1-7d-3 Annual Mortality for Late Fall-Run Chinook Salmon - Fry

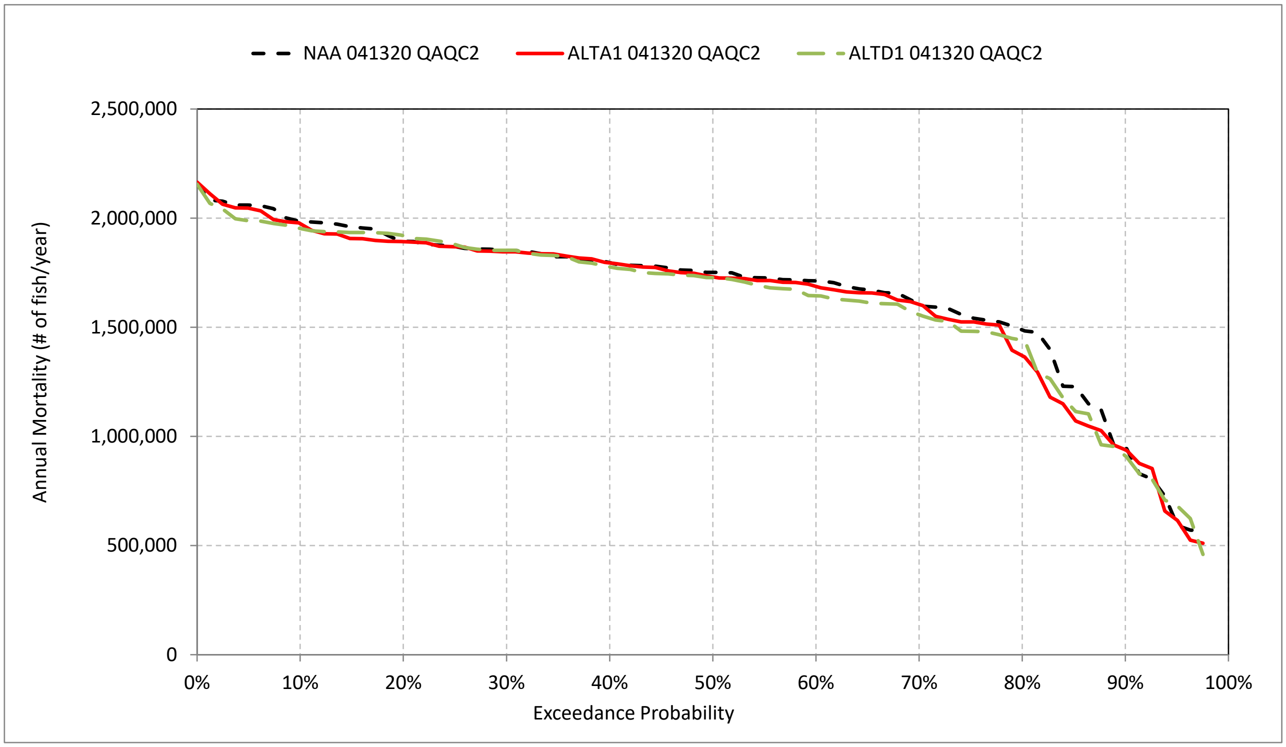


Figure G.1-7d-4 Annual Mortality for Late Fall-Run Chinook Salmon - Pre-Smolt

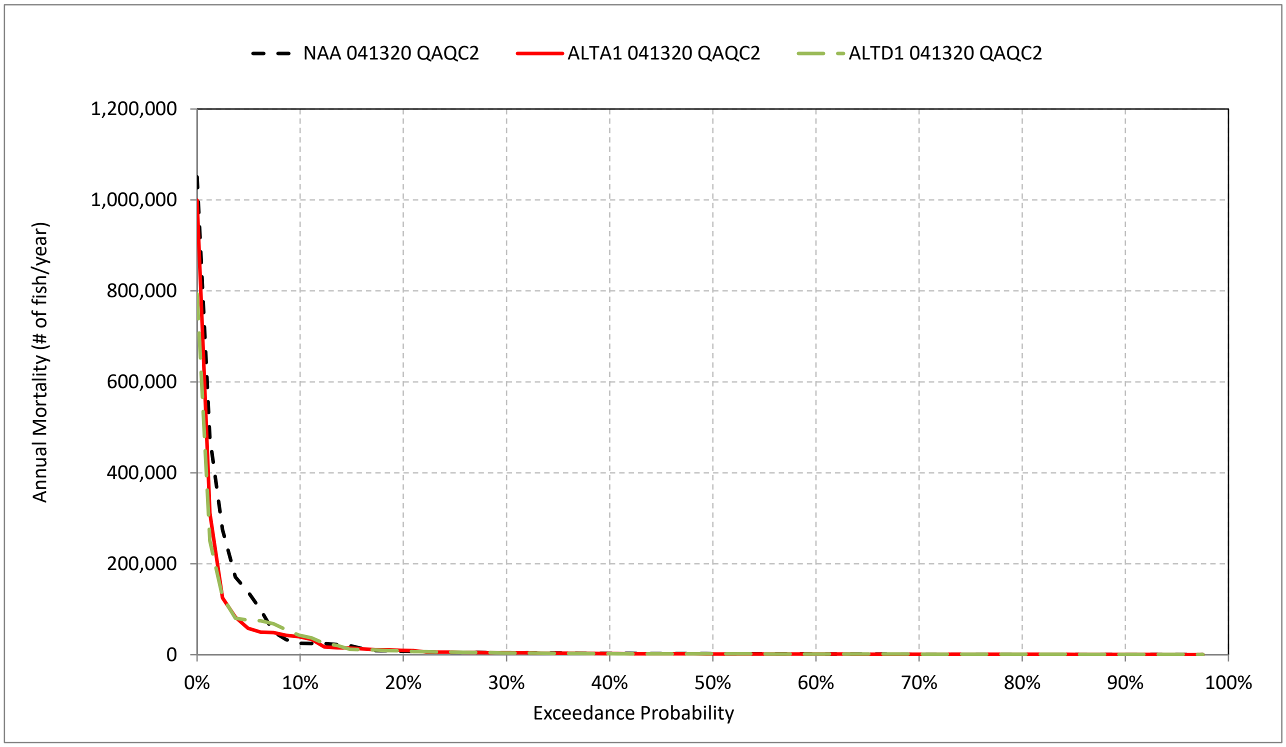


Figure G.1-7d-5 Annual Mortality for Late Fall-Run Chinook Salmon - Immature Smolt

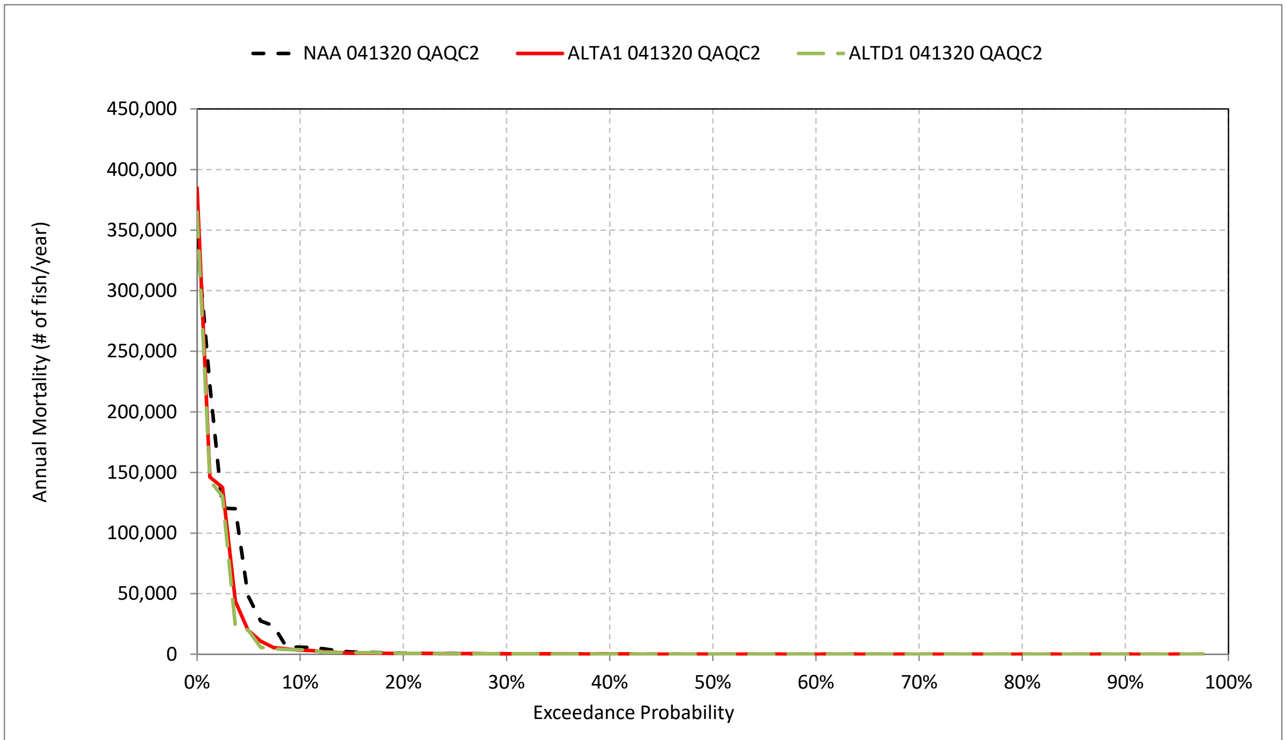


Figure G.1-7d-6 Annual Mortality for Late Fall-Run Chinook Salmon - Pre- & Immature Smolts

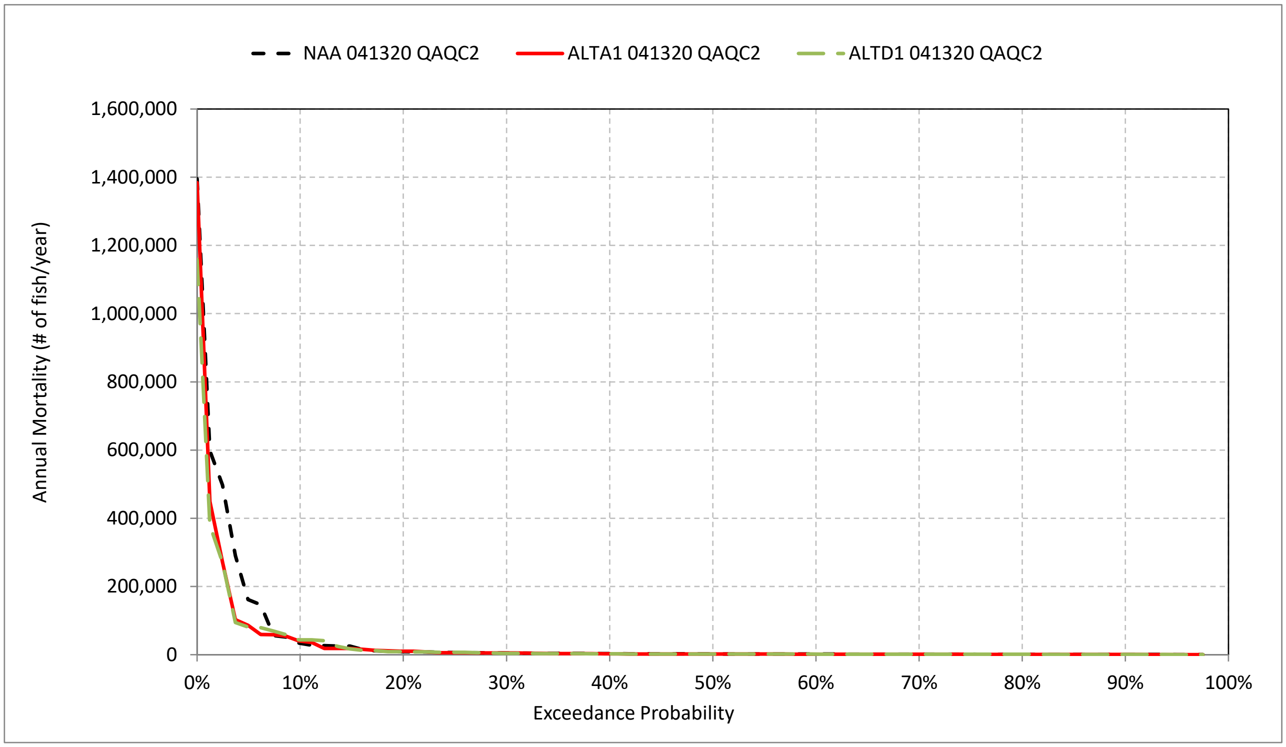


Figure G.1-7d-7 Annual Mortality for Late Fall-Run Chinook Salmon - All Lifestages

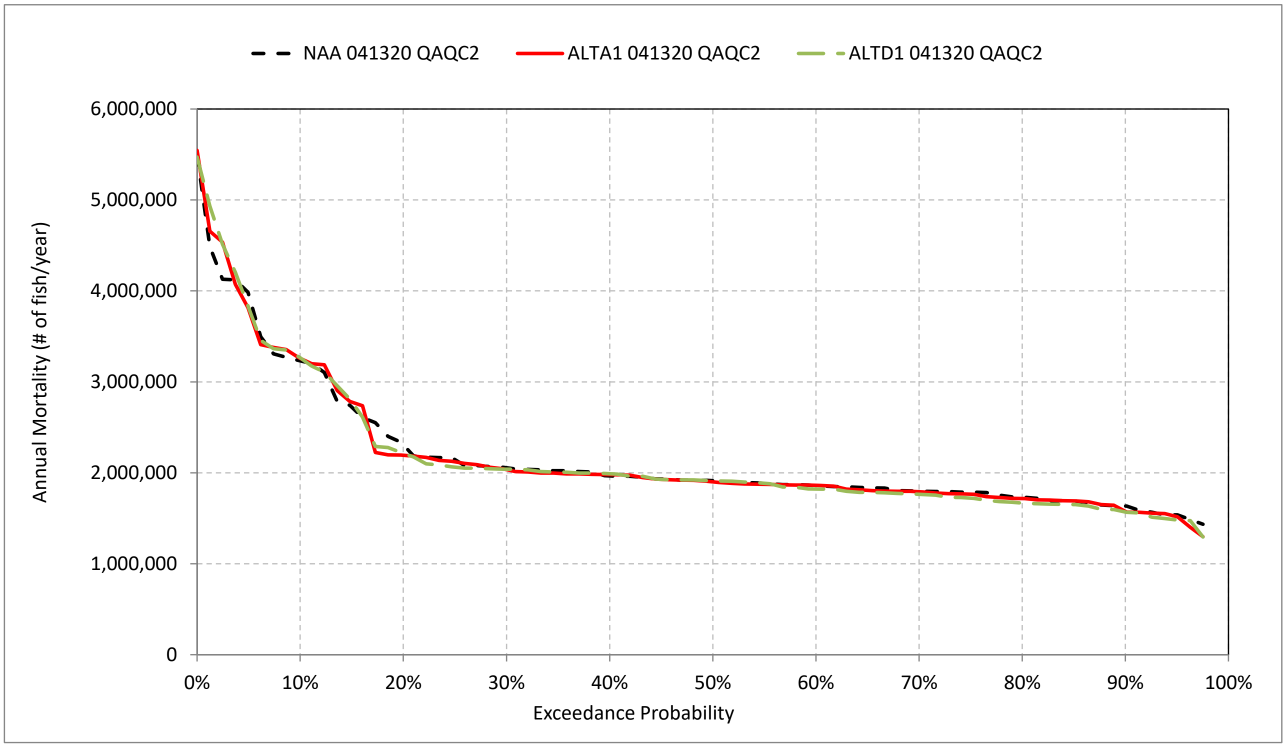


Figure G.1-7d-8 Incubation - Habitat based Annual Mortality for Late Fall-Run Chinook Salmon

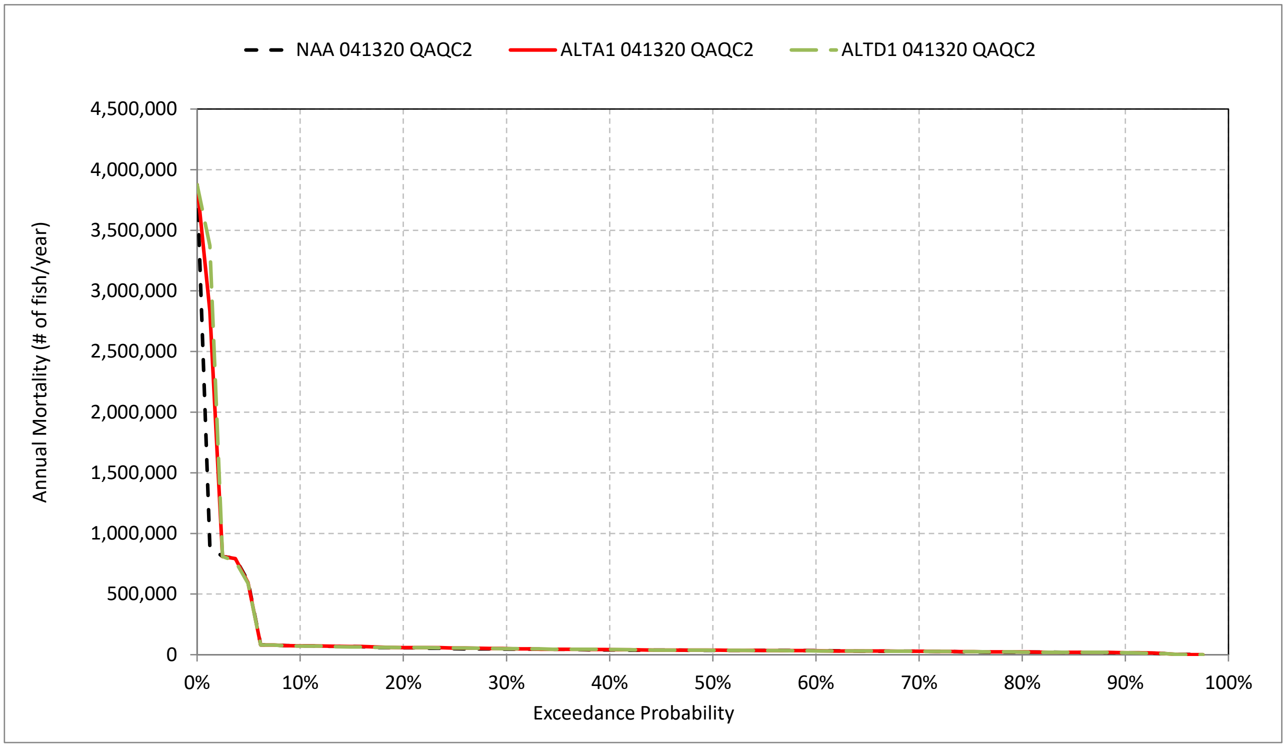


Figure G.1-7d-9 Super-imposition - Habitat based Annual Mortality for Late Fall-Run Chinook Salmon

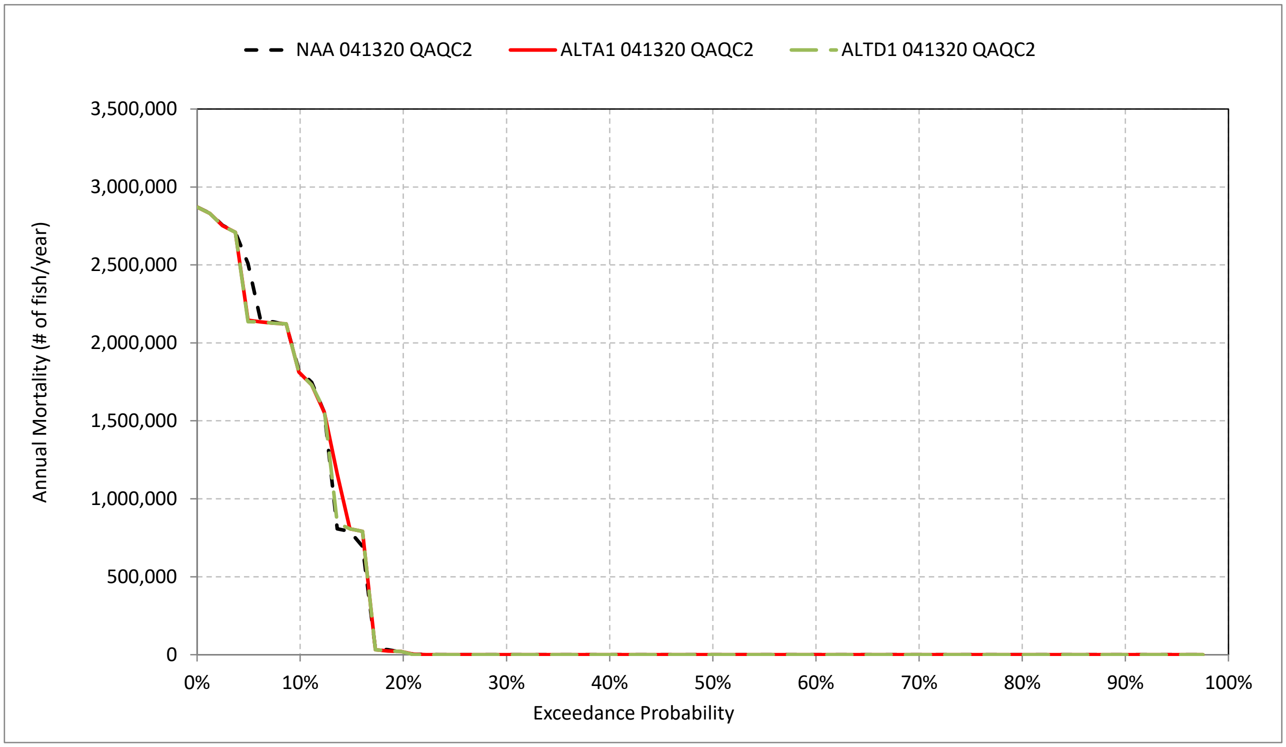


Figure G.1-7d-10 Fry - Habitat based Annual Mortality for Late Fall-Run Chinook Salmon

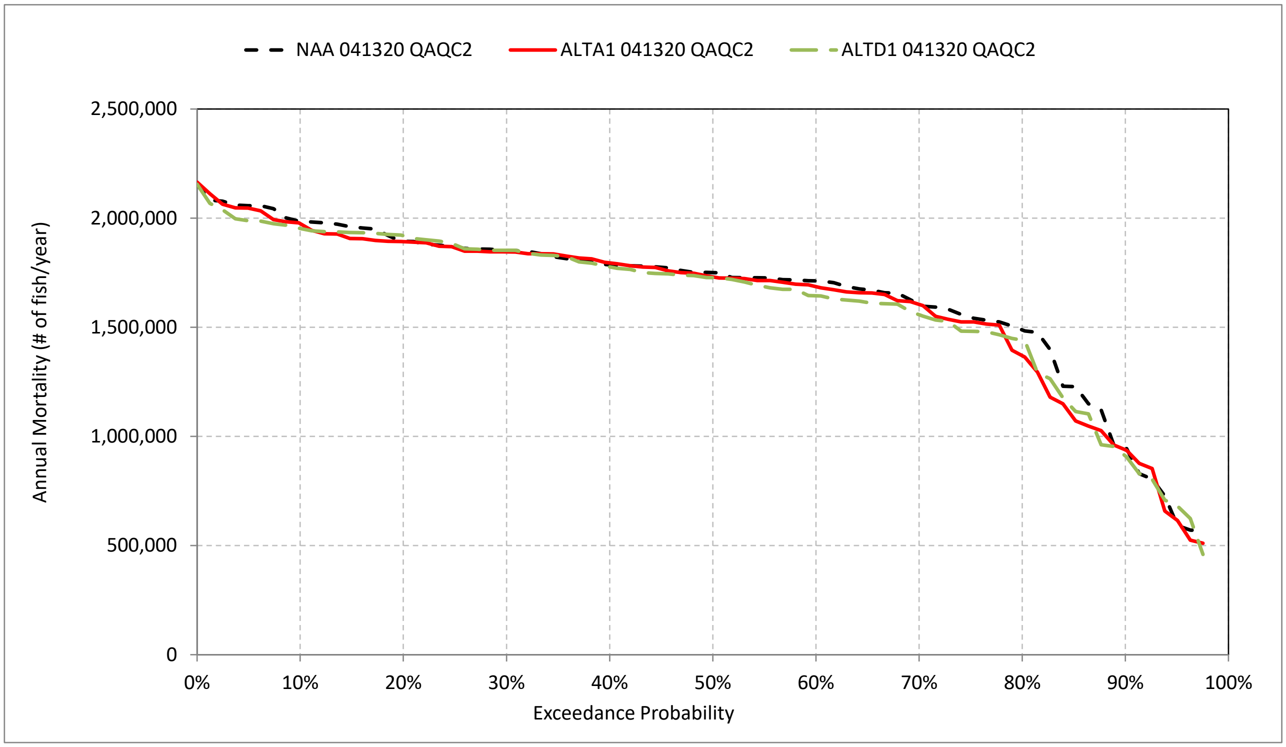


Figure G.1-7d-11 Pre-smolt - Habitat based Annual Mortality for Late Fall-Run Chinook Salmon

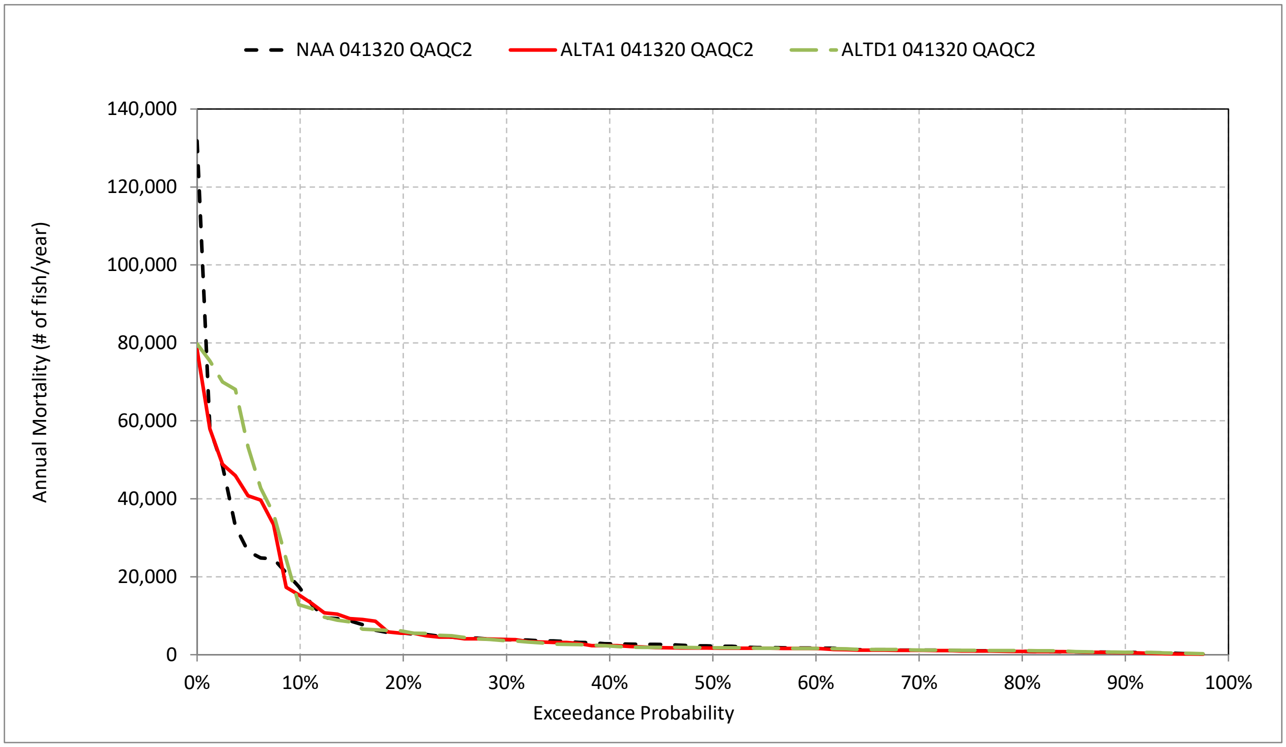


Figure G.1-7d-12 Immature Smolt - Habitat based Annual Mortality for Late Fall-Run Chinook Salmon

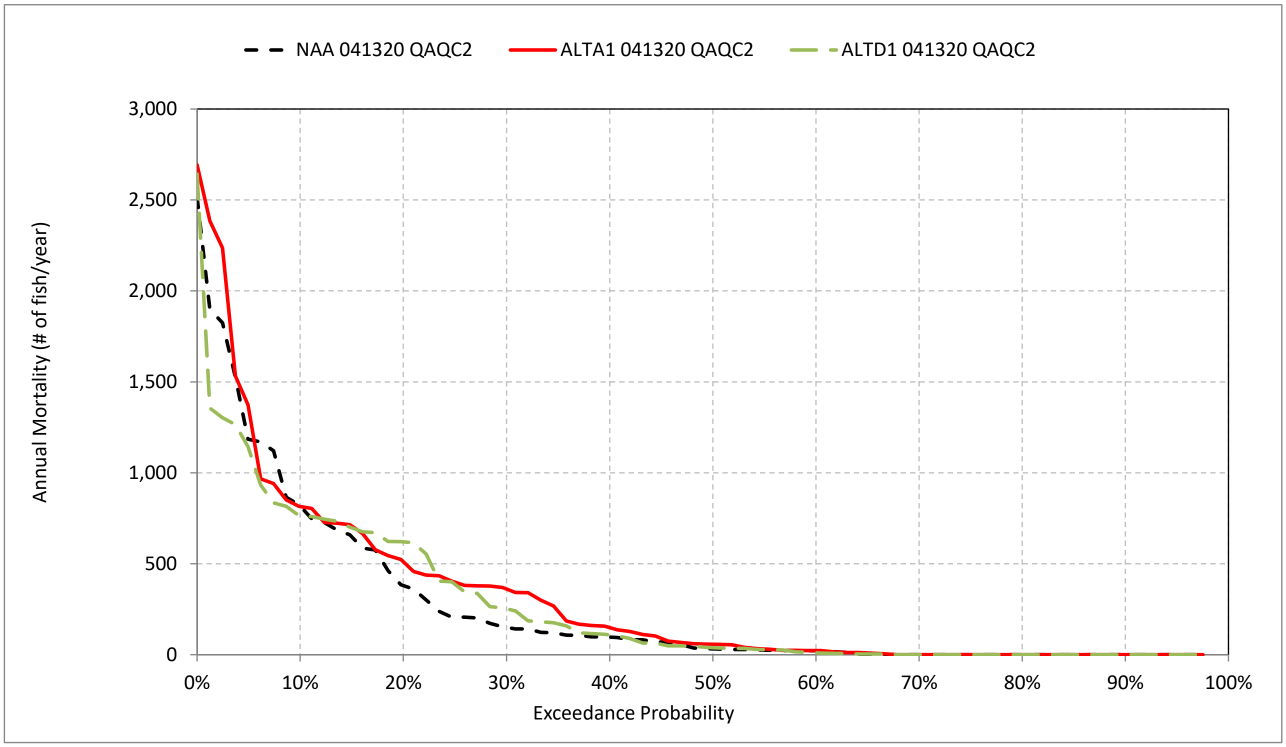


Figure G.1-7d-13 Total Habitat based Annual Mortality for Late Fall-Run Chinook Salmon

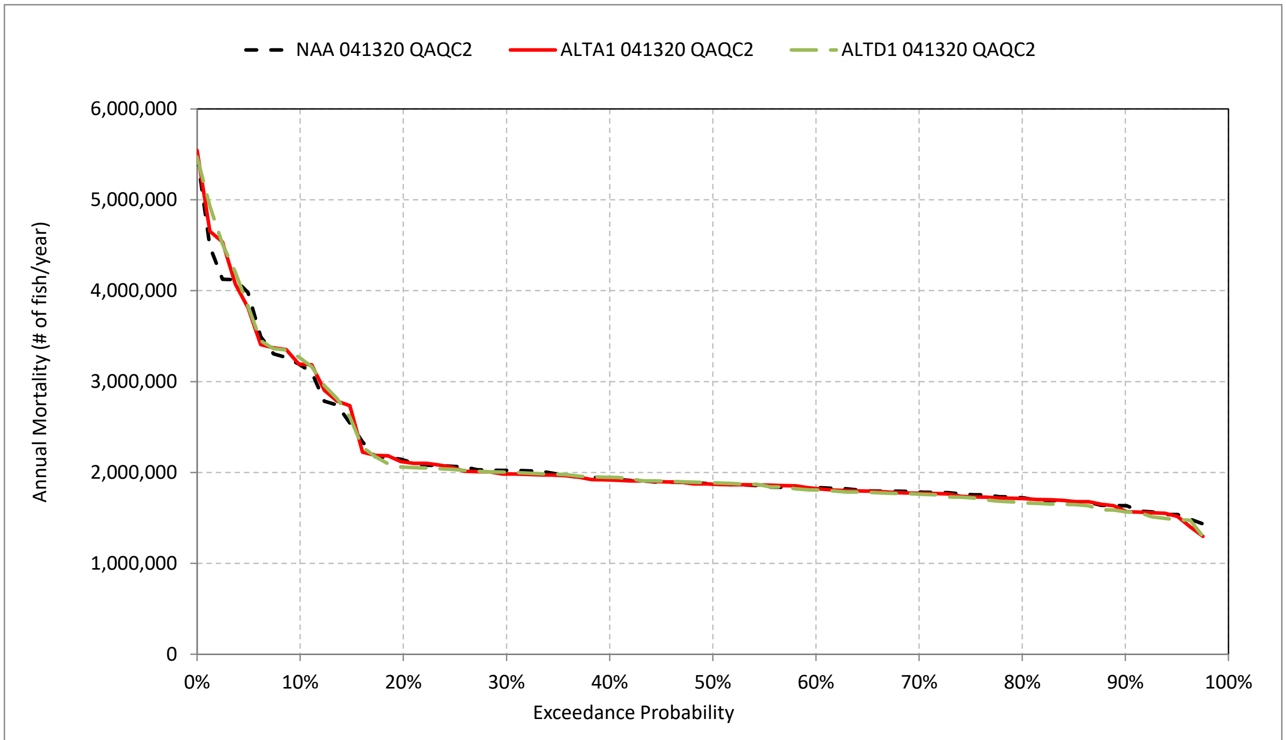


Figure G.1-7d-14 Pre-Spawn Mortality - Temperature based Annual Mortality for Late Fall-Run Chinook Salmon

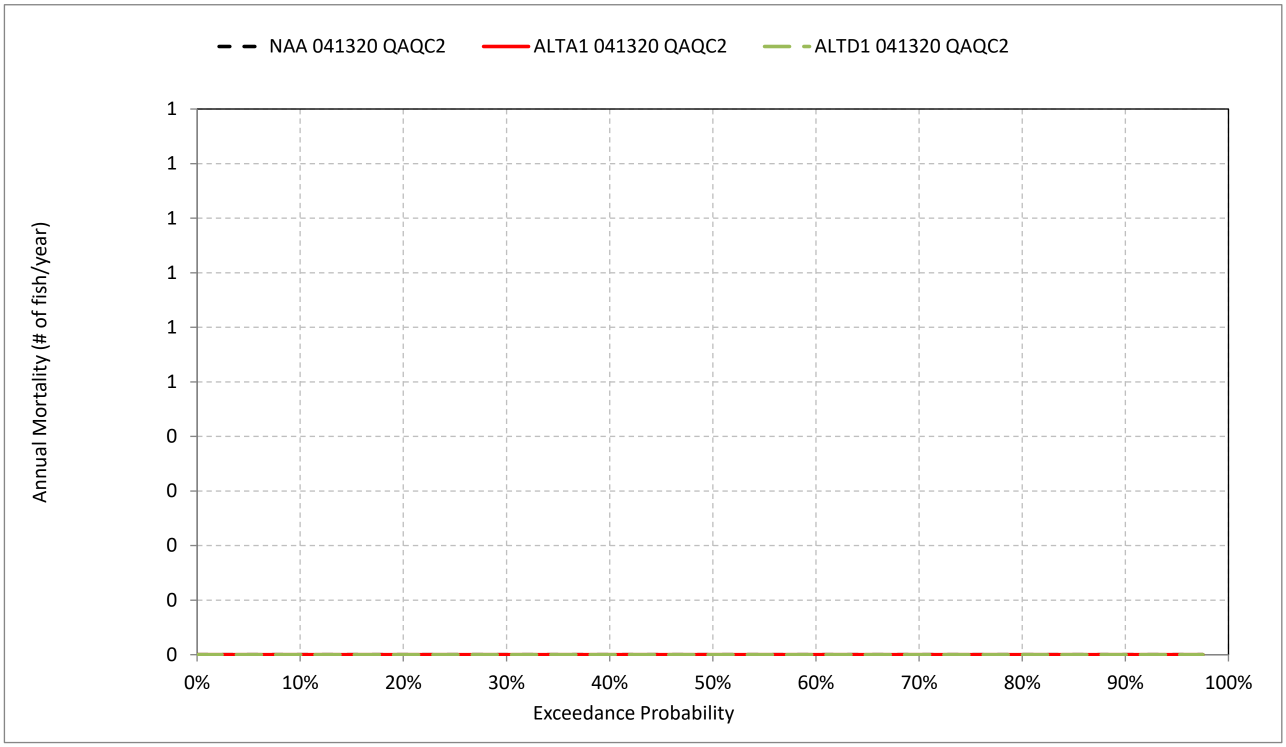


Figure G.1-7d-15 Eggs - Temperature based Annual Mortality for Late Fall-Run Chinook Salmon

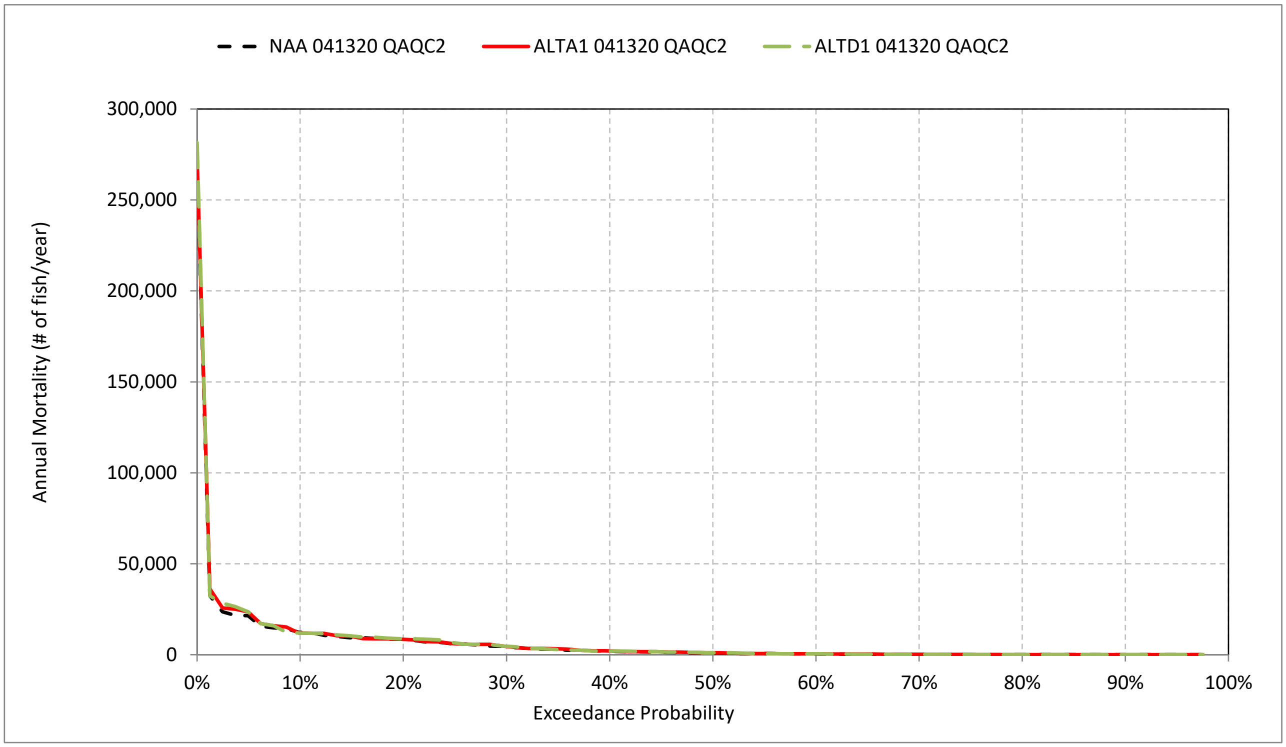


Figure G.1-7d-16 Fry - Temperature based Annual Mortality for Late Fall-Run Chinook Salmon

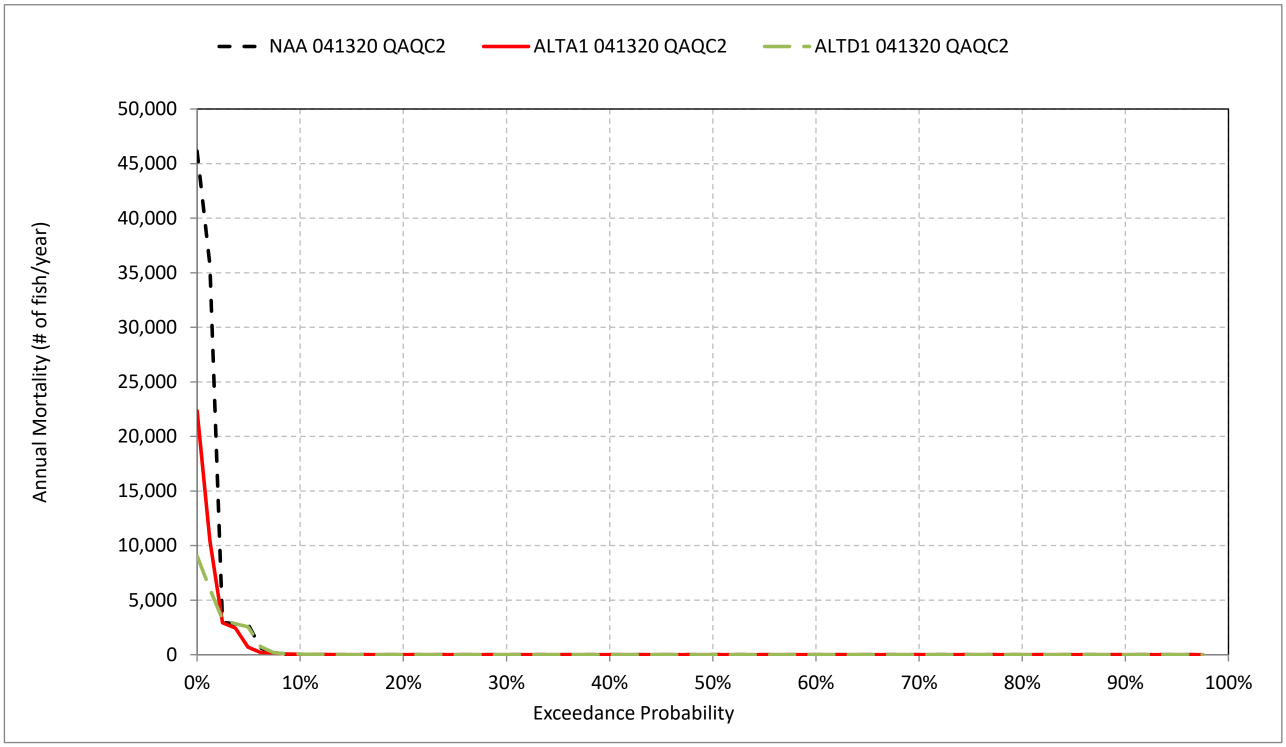


Figure G.1-7d-17 Pre-smolt - Temperature based Annual Mortality for Late Fall-Run Chinook Salmon

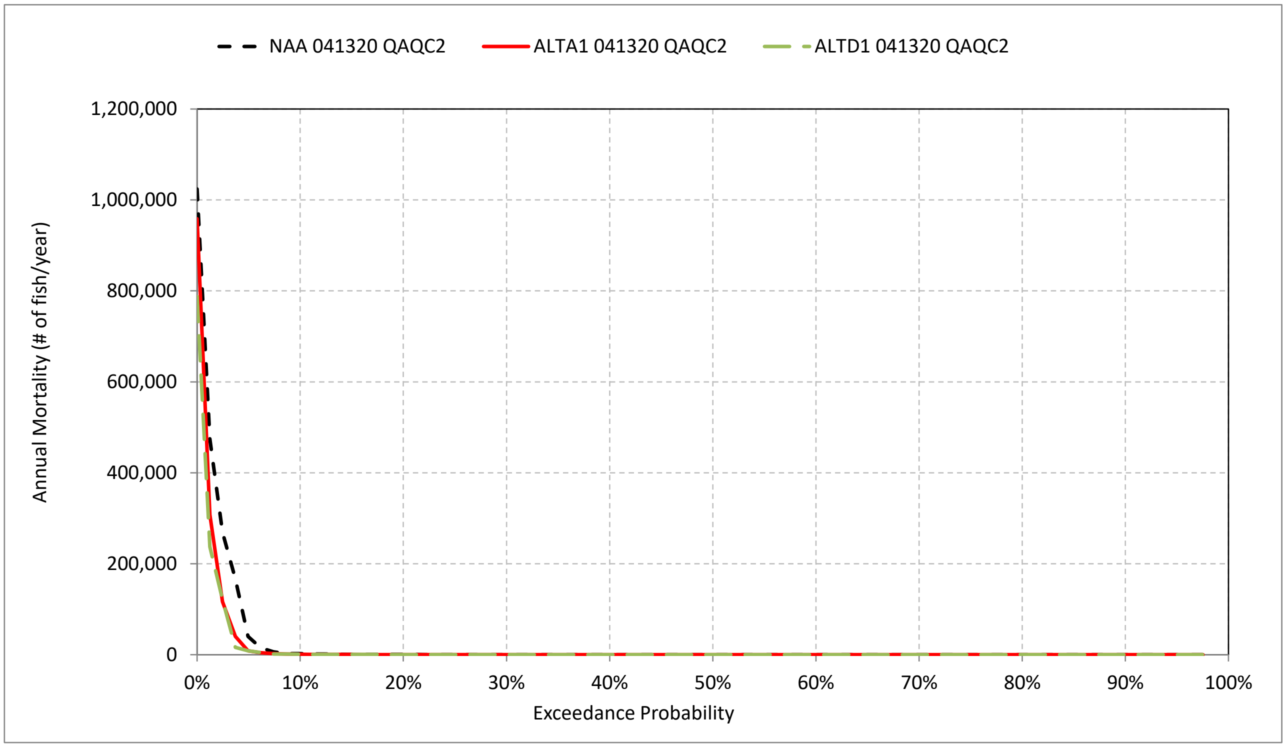


Figure G.1-7d-18 Immature Smolt - Temperature based Annual Mortality for Late Fall-Run Chinook Salmon

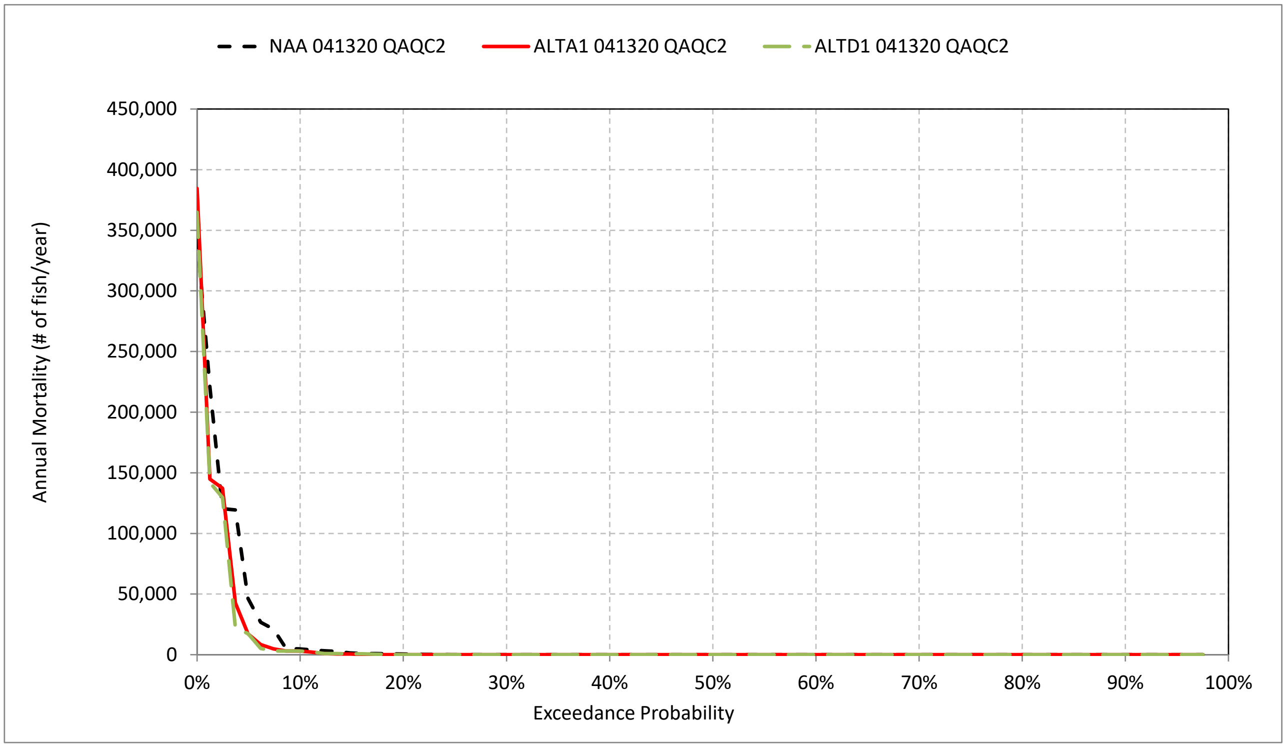
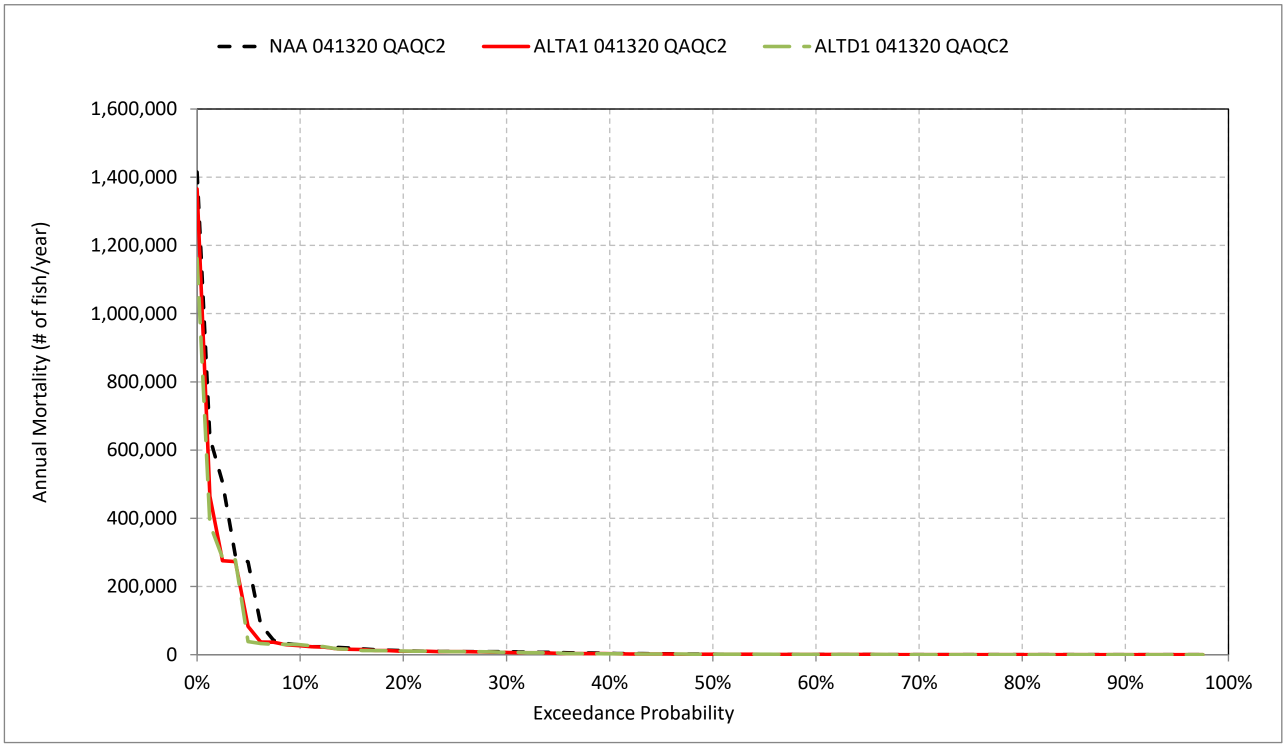


Figure G.1-7d-19 Total Temperature based Annual Mortality for Late Fall-Run Chinook Salmon



This page intentionally left blank

Appendix G2
Power Modeling Results for Final Alternatives

Contents

Tables

Figures

Acronyms and Other Abbreviations

Alternative A1	1.3 MAF reservoir with operations designated by the Authority and no pumpback
Alternative D1	1.8 MAF reservoir with operations designated by the Authority and no pumpback
CALSIM	water resources planning model developed by DWR and the U.S. Bureau of Reclamation
CVP	Central Valley Project
DCR	Delivery capability report
DWR	California Department of Water Resources
GWh	gigawatt hours
MAF	million-acre-foot (feet)
MW	megawatts
NODOS	North of the Delta Offstream Storage
QAQC2	Designation for final CALSIM model simulation for Alternative D
SWP	State Water Project
SWRCB	State Water Resources Control Board

Attachment 1 – Power Modeling Results (LTGen, SWP Power, and NODOS Power)

Attachment 1 – Monthly Power Modeling Results (LTGen, SWP, and NODOS Power)

The following results of the LTGen and SWP Power models are included for energy capacity, energy generation, and energy use at key project locations for the following alternatives:

- No Action Alternative 041320 QAQC2
- Alternative A1 041320 QAQC2
- Alternative D1 041320 QAQC2

Title	Model Parameter	Table Numbers	Figure Numbers	Page Numbers
CVP Total Capacity	CVP_TOTAL	G.2.1-1-1 to G.2.1-1-3	G.2.1-1-1 to G.2.1-1-18	G2-2 to G2-22
CVP Total Generation	CVP_TOTAL	G.2.1-2-1 to G.2.1-2-3	G.2.1-2-1 to G.2.1-2-18	G2-23 to G2-43
CVP Total Energy Use	CVP_TOTAL	G.2.1-3-1 to G.2.1-3-3	G.2.1-3-1 to G.2.1-3-18	G2-44 to G2-64
CVP Net Generation	CVP_TOTAL	G.2.1-4-1 to G.2.1-4-3	G.2.1-4-1 to G.2.1-4-18	G2-65 to G2-85
CVP Net Revenue	CVP_TOTAL	G.2.1-5-1 to G.2.1-5-3	G.2.1-5-1 to G.2.1-5-18	G2-86 to G2-106
SWP Total Capacity	SWP_TOTAL	G.2.1-6-1 to G.2.1-6-3	G.2.1-6-1 to G.2.1-6-18	G2-107 to G2-127
SWP Total Generation	SWP_TOTAL	G.2.1-7-1 to G.2.1-7-3	G.2.1-7-1 to G.2.1-7-18	G2-128 to G2-148
SWP Total Energy Use	SWP_TOTAL	G.2.1-8-1 to G.2.1-8-3	G.2.1-8-1 to G.2.1-8-18	G2-149 to G2-169
SWP Net Generation	SWP_TOTAL	G.2.1-9-1 to G.2.1-9-3	G.2.1-9-1 to G.2.1-9-18	G2-170 to G2-190
SWP Net Revenue	SWP_TOTAL	G.2.1-10-1 to G.2.1-10-3	G.2.1-10-1 to G.2.1-10-18	G2-191 to G2-211
CVP and SWP Net Generation	CVP_SWP_TOTAL	G.2.1-11-1 to G.2.1-11-3	G.2.1-11-1 to G.2.1-11-18	G2-212 to G2-232
NODOS Total Capacity	NODOS_TOTAL	G.2.1-12-1 to G.2.1-12-3	G.2.1-12-1 to G.2.1-12-18	G2-233 to G2-253
NODOS Total Generation	NODOS_TOTAL	G.2.1-13-1 to G.2.1-13-3	G.2.1-13-1 to G.2.1-13-18	G2-254 to G2-274
NODOS Total Energy Use	NODOS_TOTAL	G.2.1-14-1 to G.2.1-14-3	G.2.1-14-1 to G.2.1-14-18	G2-275 to G2-295
NODOS Net Generation	NODOS_TOTAL	G.2.1-15-1 to G.2.1-15-3	G.2.1-15-1 to G.2.1-15-18	G2-296 to G2-316
NODOS Net Revenue	NODOS_TOTAL	G.2.1-16-1 to G.2.1-16-3	G.2.1-16-1 to G.2.1-16-18	G2-317 to G2-337
CVP, SWP, and NODOS Net Generation	CVP_SWP_NODOS _T OTAL	G.2.1-17-1 to G.2.1-17-3	G.2.1-17-1 to G.2.1-17-18	G2-338 to G2-358
CVP, SWP, and NODOS Net Revenue	CVP_SWP_NODOS_T OTAL	G.2.1-18-1 to G.2.1-18-3	G.2.1-18-1 to G.2.1-18-18	G2-359 to G2-379

Report formats

- Exceedance tables comparing power modeling results of two scenarios
- Monthly pattern charts including all scenarios
- Monthly exceedance charts including all scenarios

Table G.2.1-1-1. CVP Total Capacity, Monthly Capacity

No Action Alternative 041320 QAQC2

	Monthly Capacity (MW)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,736	1,773	1,839	1,859	1,895	1,937	1,923	1,899	1,832	1,773	1,728	1,713
20%	1,699	1,745	1,796	1,842	1,879	1,917	1,901	1,869	1,789	1,721	1,671	1,679
30%	1,670	1,714	1,769	1,817	1,850	1,888	1,872	1,831	1,728	1,681	1,639	1,645
40%	1,644	1,685	1,732	1,794	1,835	1,858	1,839	1,778	1,690	1,632	1,591	1,608
50%	1,612	1,654	1,721	1,776	1,814	1,830	1,800	1,763	1,653	1,585	1,559	1,569
60%	1,581	1,617	1,686	1,743	1,793	1,808	1,766	1,715	1,625	1,544	1,521	1,527
70%	1,532	1,592	1,646	1,701	1,753	1,781	1,745	1,693	1,591	1,517	1,492	1,492
80%	1,472	1,501	1,556	1,635	1,679	1,722	1,703	1,639	1,538	1,468	1,448	1,443
90%	1,172	1,337	1,451	1,544	1,565	1,557	1,539	1,478	1,329	1,231	1,178	1,177
Long Term												
Full Simulation Period[a]	1,550	1,603	1,667	1,724	1,767	1,798	1,772	1,725	1,628	1,554	1,515	1,516
Water Year Types[b,c]												
Wet (32%)	1,710	1,741	1,782	1,823	1,868	1,912	1,901	1,875	1,803	1,742	1,690	1,686
Above Normal (15%)	1,612	1,648	1,692	1,787	1,833	1,863	1,844	1,802	1,700	1,622	1,569	1,577
Below Normal (17%)	1,566	1,620	1,695	1,689	1,741	1,793	1,772	1,723	1,623	1,551	1,539	1,539
Dry (22%)	1,523	1,578	1,642	1,705	1,748	1,767	1,733	1,673	1,567	1,495	1,478	1,480
Critical (15%)	1,163	1,277	1,395	1,517	1,542	1,535	1,478	1,402	1,275	1,170	1,111	1,116

Alternative A1 041320 QAQC2

	Monthly Capacity (MW)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,733	1,774	1,838	1,859	1,897	1,938	1,918	1,897	1,839	1,779	1,729	1,705
20%	1,702	1,751	1,797	1,842	1,881	1,914	1,901	1,866	1,796	1,740	1,684	1,679
30%	1,686	1,717	1,773	1,821	1,854	1,894	1,879	1,827	1,753	1,700	1,655	1,656
40%	1,654	1,695	1,743	1,802	1,841	1,852	1,834	1,786	1,699	1,647	1,617	1,623
50%	1,618	1,657	1,724	1,774	1,807	1,833	1,793	1,769	1,663	1,608	1,569	1,585
60%	1,607	1,634	1,685	1,744	1,797	1,811	1,771	1,721	1,634	1,569	1,549	1,547
70%	1,548	1,595	1,662	1,713	1,760	1,784	1,746	1,703	1,615	1,545	1,509	1,510
80%	1,493	1,525	1,564	1,648	1,689	1,732	1,691	1,643	1,558	1,490	1,474	1,472
90%	1,188	1,341	1,481	1,563	1,588	1,578	1,557	1,489	1,362	1,269	1,179	1,183
Long Term												
Full Simulation Period[a]	1,565	1,613	1,673	1,730	1,772	1,801	1,774	1,732	1,643	1,573	1,535	1,531
Water Year Types[b,c]												
Wet (32%)	1,711	1,745	1,785	1,822	1,868	1,911	1,899	1,875	1,809	1,748	1,696	1,690
Above Normal (15%)	1,632	1,655	1,701	1,786	1,833	1,862	1,838	1,803	1,710	1,645	1,587	1,591
Below Normal (17%)	1,581	1,631	1,704	1,697	1,748	1,797	1,773	1,726	1,640	1,576	1,560	1,554
Dry (22%)	1,547	1,588	1,648	1,714	1,754	1,770	1,734	1,681	1,588	1,520	1,502	1,502
Critical (15%)	1,188	1,298	1,405	1,538	1,562	1,553	1,499	1,433	1,307	1,201	1,155	1,141

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

	Monthly Capacity (MW)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-2	1	-1	0	2	0	-5	-3	7	5	1	-8
20%	3	6	0	0	2	-2	1	-3	6	20	13	0
30%	17	3	3	3	3	6	7	-5	25	19	16	10
40%	10	10	11	8	6	-6	-5	8	8	15	26	15
50%	6	3	3	-2	-7	3	-6	6	11	23	10	16
60%	25	17	-1	1	4	2	4	6	9	25	28	20
70%	16	4	16	12	7	3	0	10	25	28	17	19
80%	22	24	7	13	10	10	-12	4	19	22	26	29
90%	16	5	30	19	23	21	18	10	33	38	1	6
Long Term												
Full Simulation Period[a]	15	9	7	6	5	4	2	7	15	19	20	15
Water Year Types[b,c]												
Wet (32%)	1	4	3	-1	0	-1	-1	1	6	6	6	5
Above Normal (15%)	20	7	9	0	0	-2	-6	2	10	23	18	15
Below Normal (17%)	15	12	9	8	7	4	1	3	16	25	21	15
Dry (22%)	24	9	7	9	6	3	0	8	21	25	23	21
Critical (15%)	25	21	10	21	20	18	20	31	32	30	44	25

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-1-2. CVP Total Capacity, Monthly Capacity

No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Capacity (MW)											
Probability of Exceedance												
10%	1,736	1,773	1,839	1,859	1,895	1,937	1,923	1,899	1,832	1,773	1,728	1,713
20%	1,699	1,745	1,796	1,842	1,879	1,917	1,901	1,869	1,789	1,721	1,671	1,679
30%	1,670	1,714	1,769	1,817	1,850	1,888	1,872	1,831	1,728	1,681	1,639	1,645
40%	1,644	1,685	1,732	1,794	1,835	1,858	1,839	1,778	1,690	1,632	1,591	1,608
50%	1,612	1,654	1,721	1,776	1,814	1,830	1,800	1,763	1,653	1,585	1,559	1,569
60%	1,581	1,617	1,686	1,743	1,793	1,808	1,766	1,715	1,625	1,544	1,521	1,527
70%	1,532	1,592	1,646	1,701	1,753	1,781	1,745	1,693	1,591	1,517	1,492	1,492
80%	1,472	1,501	1,556	1,635	1,679	1,722	1,703	1,639	1,538	1,468	1,448	1,443
90%	1,172	1,337	1,451	1,544	1,565	1,557	1,539	1,478	1,329	1,231	1,178	1,177
Long Term												
Full Simulation Period[a]	1,550	1,603	1,667	1,724	1,767	1,798	1,772	1,725	1,628	1,554	1,515	1,516
Water Year Types[b,c]												
Wet (32%)	1,710	1,741	1,782	1,823	1,868	1,912	1,901	1,875	1,803	1,742	1,690	1,686
Above Normal (15%)	1,612	1,648	1,692	1,787	1,833	1,863	1,844	1,802	1,700	1,622	1,569	1,577
Below Normal (17%)	1,566	1,620	1,695	1,689	1,741	1,793	1,772	1,723	1,623	1,551	1,539	1,539
Dry (22%)	1,523	1,578	1,642	1,705	1,748	1,767	1,733	1,673	1,567	1,495	1,478	1,480
Critical (15%)	1,163	1,277	1,395	1,517	1,542	1,535	1,478	1,402	1,275	1,170	1,111	1,116

Alternative D1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Capacity (MW)											
Probability of Exceedance												
10%	1,727	1,774	1,838	1,859	1,895	1,938	1,918	1,896	1,840	1,778	1,727	1,709
20%	1,701	1,747	1,797	1,842	1,881	1,914	1,901	1,866	1,796	1,740	1,681	1,679
30%	1,686	1,721	1,769	1,817	1,855	1,890	1,874	1,830	1,752	1,705	1,657	1,656
40%	1,651	1,690	1,744	1,801	1,841	1,852	1,839	1,789	1,698	1,653	1,620	1,624
50%	1,627	1,658	1,724	1,774	1,810	1,837	1,792	1,768	1,664	1,608	1,577	1,588
60%	1,615	1,630	1,687	1,749	1,800	1,811	1,772	1,726	1,634	1,571	1,557	1,548
70%	1,551	1,597	1,675	1,716	1,755	1,786	1,749	1,702	1,621	1,555	1,515	1,514
80%	1,502	1,523	1,557	1,652	1,686	1,727	1,696	1,641	1,552	1,482	1,464	1,468
90%	1,215	1,347	1,471	1,560	1,591	1,579	1,564	1,499	1,360	1,286	1,189	1,210
Long Term												
Full Simulation Period[a]	1,568	1,613	1,674	1,731	1,773	1,801	1,775	1,734	1,644	1,578	1,540	1,532
Water Year Types[b,c]												
Wet (32%)	1,712	1,745	1,785	1,822	1,868	1,911	1,899	1,875	1,809	1,748	1,697	1,691
Above Normal (15%)	1,637	1,659	1,704	1,786	1,832	1,861	1,838	1,803	1,708	1,647	1,592	1,596
Below Normal (17%)	1,582	1,629	1,704	1,696	1,747	1,795	1,772	1,732	1,640	1,580	1,562	1,553
Dry (22%)	1,551	1,589	1,652	1,717	1,754	1,770	1,738	1,682	1,588	1,524	1,505	1,504
Critical (15%)	1,194	1,297	1,404	1,541	1,565	1,556	1,502	1,438	1,310	1,217	1,175	1,142

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Capacity (MW)											
Probability of Exceedance												
10%	-9	1	-1	0	1	0	-5	-3	7	5	-2	-4
20%	2	2	0	0	2	-2	0	-3	6	19	10	0
30%	16	6	0	0	4	2	2	-2	25	24	17	10
40%	7	5	12	7	6	-5	-1	11	8	21	29	16
50%	15	4	3	-2	-4	7	-7	6	12	23	18	19
60%	33	12	0	6	7	2	6	11	9	28	36	21
70%	19	6	28	15	2	5	3	8	30	38	23	22
80%	30	22	1	18	6	5	-7	2	13	15	16	25
90%	43	11	20	16	26	22	26	20	31	55	11	33
Long Term												
Full Simulation Period[a]	18	10	8	7	6	4	3	9	16	24	25	16
Water Year Types[b,c]												
Wet (32%)	2	4	3	-1	0	-1	-2	0	6	7	6	5
Above Normal (15%)	25	11	12	-1	-1	-2	-6	1	8	26	23	19
Below Normal (17%)	15	9	9	6	6	2	-1	9	17	29	22	13
Dry (22%)	28	10	10	12	7	3	4	10	22	29	27	23
Critical (15%)	31	20	9	24	23	21	23	36	36	46	64	27

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-1-3. CVP Total Capacity, Monthly Capacity

Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Capacity (MW)											
Probability of Exceedance												
10%	1,733	1,774	1,838	1,859	1,897	1,938	1,918	1,897	1,839	1,779	1,729	1,705
20%	1,702	1,751	1,797	1,842	1,881	1,914	1,901	1,866	1,796	1,740	1,684	1,679
30%	1,686	1,717	1,773	1,821	1,854	1,894	1,879	1,827	1,753	1,700	1,655	1,656
40%	1,654	1,695	1,743	1,802	1,841	1,852	1,834	1,786	1,699	1,647	1,617	1,623
50%	1,618	1,657	1,724	1,774	1,807	1,833	1,793	1,769	1,663	1,608	1,569	1,585
60%	1,607	1,634	1,685	1,744	1,797	1,811	1,771	1,721	1,634	1,569	1,549	1,547
70%	1,548	1,595	1,662	1,713	1,760	1,784	1,746	1,703	1,615	1,545	1,509	1,510
80%	1,493	1,525	1,564	1,648	1,689	1,732	1,691	1,643	1,558	1,490	1,474	1,472
90%	1,188	1,341	1,481	1,563	1,588	1,578	1,557	1,489	1,362	1,269	1,179	1,183
Long Term												
Full Simulation Period[a]	1,565	1,613	1,673	1,730	1,772	1,801	1,774	1,732	1,643	1,573	1,535	1,531
Water Year Types[b,c]												
Wet (32%)	1,711	1,745	1,785	1,822	1,868	1,911	1,899	1,875	1,809	1,748	1,696	1,690
Above Normal (15%)	1,632	1,655	1,701	1,786	1,833	1,862	1,838	1,803	1,710	1,645	1,587	1,591
Below Normal (17%)	1,581	1,631	1,704	1,697	1,748	1,797	1,773	1,726	1,640	1,576	1,560	1,554
Dry (22%)	1,547	1,588	1,648	1,714	1,754	1,770	1,734	1,681	1,588	1,520	1,502	1,502
Critical (15%)	1,188	1,298	1,405	1,538	1,562	1,553	1,499	1,433	1,307	1,201	1,155	1,141

Alternative D1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Capacity (MW)											
Probability of Exceedance												
10%	1,727	1,774	1,838	1,859	1,895	1,938	1,918	1,896	1,840	1,778	1,727	1,709
20%	1,701	1,747	1,797	1,842	1,881	1,914	1,901	1,866	1,796	1,740	1,681	1,679
30%	1,686	1,721	1,769	1,817	1,855	1,890	1,874	1,830	1,752	1,705	1,657	1,656
40%	1,651	1,690	1,744	1,801	1,841	1,852	1,839	1,789	1,698	1,653	1,620	1,624
50%	1,627	1,658	1,724	1,774	1,810	1,837	1,792	1,768	1,664	1,608	1,577	1,588
60%	1,615	1,630	1,687	1,749	1,800	1,811	1,772	1,726	1,634	1,571	1,557	1,548
70%	1,551	1,597	1,675	1,716	1,755	1,786	1,749	1,702	1,621	1,555	1,515	1,514
80%	1,502	1,523	1,557	1,652	1,686	1,727	1,696	1,641	1,552	1,482	1,464	1,468
90%	1,215	1,347	1,471	1,560	1,591	1,579	1,564	1,499	1,360	1,286	1,189	1,210
Long Term												
Full Simulation Period[a]	1,568	1,613	1,674	1,731	1,773	1,801	1,775	1,734	1,644	1,578	1,540	1,532
Water Year Types[b,c]												
Wet (32%)	1,712	1,745	1,785	1,822	1,868	1,911	1,899	1,875	1,809	1,748	1,697	1,691
Above Normal (15%)	1,637	1,659	1,704	1,786	1,832	1,861	1,838	1,803	1,708	1,647	1,592	1,596
Below Normal (17%)	1,582	1,629	1,704	1,696	1,747	1,795	1,772	1,732	1,640	1,580	1,562	1,553
Dry (22%)	1,551	1,589	1,652	1,717	1,754	1,770	1,738	1,682	1,588	1,524	1,505	1,504
Critical (15%)	1,194	1,297	1,404	1,541	1,565	1,556	1,502	1,438	1,310	1,217	1,175	1,142

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Capacity (MW)											
Probability of Exceedance												
10%	-6	0	0	0	-2	0	0	0	1	0	-3	4
20%	-1	-4	0	0	0	0	0	0	0	0	-3	0
30%	0	3	-4	-3	1	-4	-5	3	-1	5	1	0
40%	-3	-6	1	-1	-1	0	4	3	-1	7	3	1
50%	9	1	0	1	3	4	-1	0	1	0	8	2
60%	8	-5	1	5	3	0	1	5	0	2	8	1
70%	3	2	13	3	-4	2	3	-1	5	10	6	4
80%	8	-2	-7	4	-3	-5	5	-3	-6	-8	-10	-4
90%	27	6	-10	-3	3	1	7	10	-2	17	10	27
Long Term												
Full Simulation Period[a]	3	0	1	1	0	0	1	2	0	5	5	1
Water Year Types[b,c]												
Wet (32%)	1	0	0	0	0	0	0	0	0	1	1	1
Above Normal (15%)	5	3	3	-1	-1	0	0	0	-1	3	5	5
Below Normal (17%)	0	-2	0	-2	-1	-2	-2	6	1	4	1	-2
Dry (22%)	4	1	4	3	1	0	4	2	1	4	4	2
Critical (15%)	6	-1	0	3	3	3	3	4	3	16	20	2

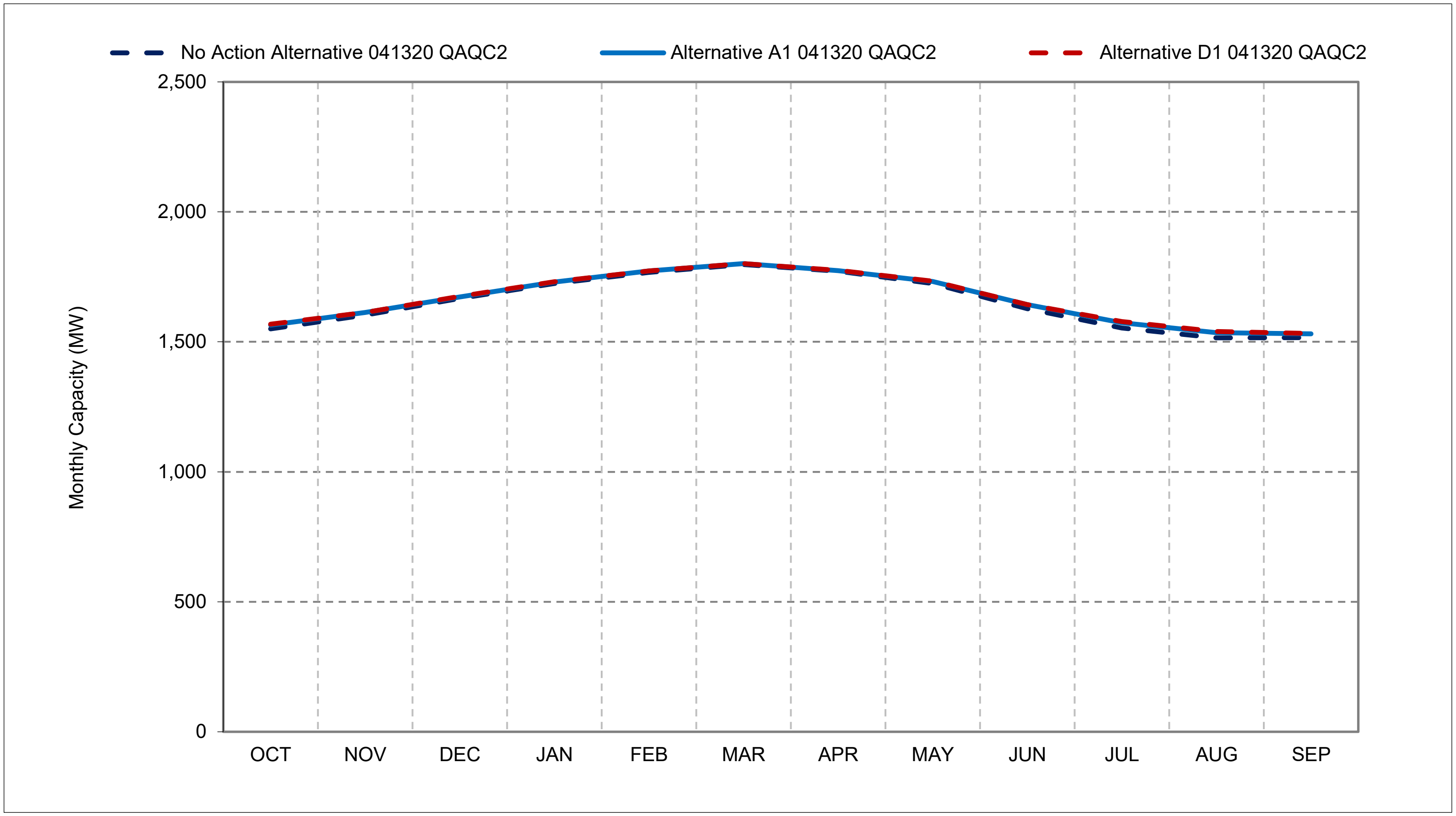
a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-1. CVP Total Capacity, Long-Term Average Capacity

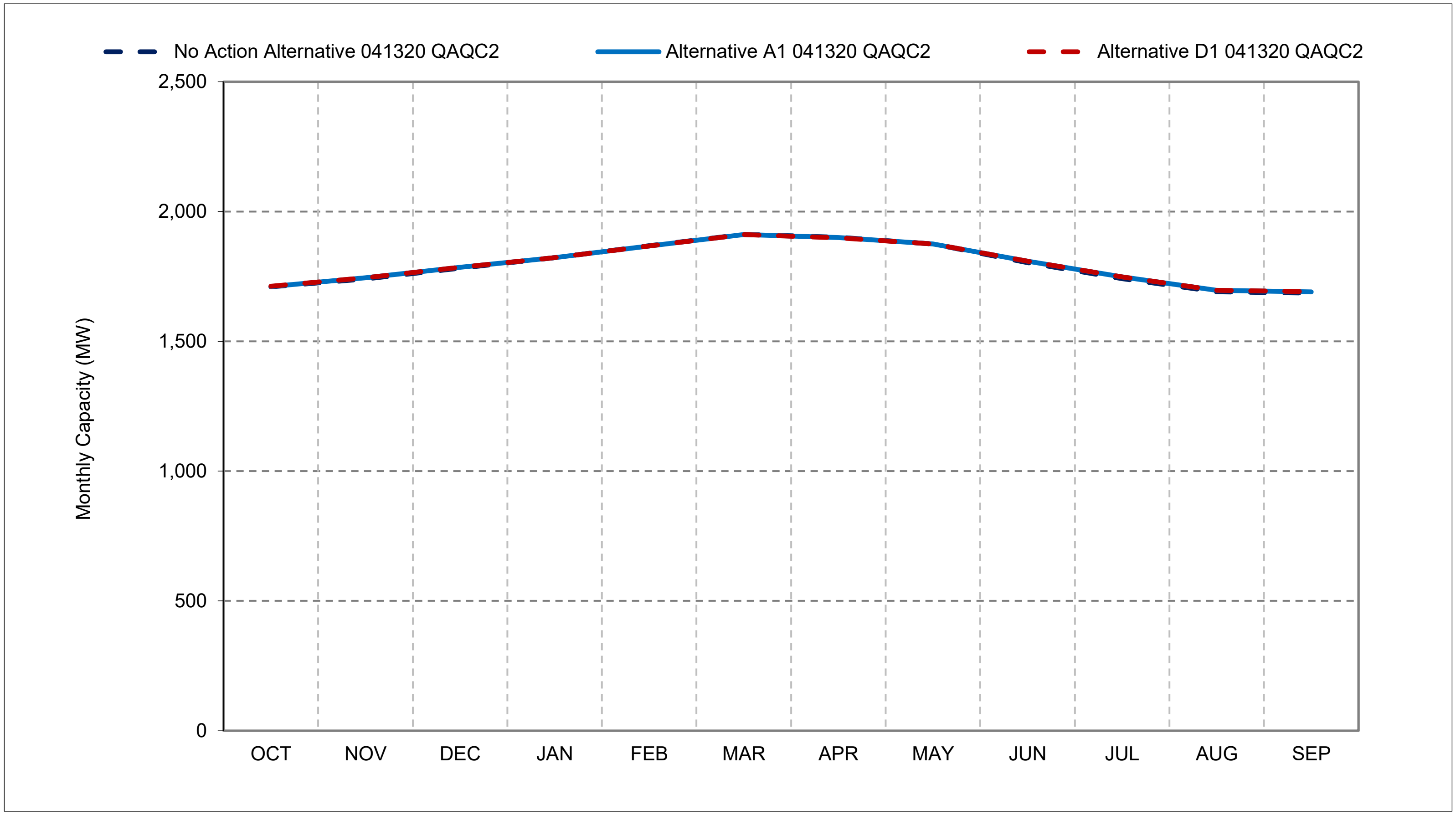


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-2. CVP Total Capacity, Wet Year Average Capacity

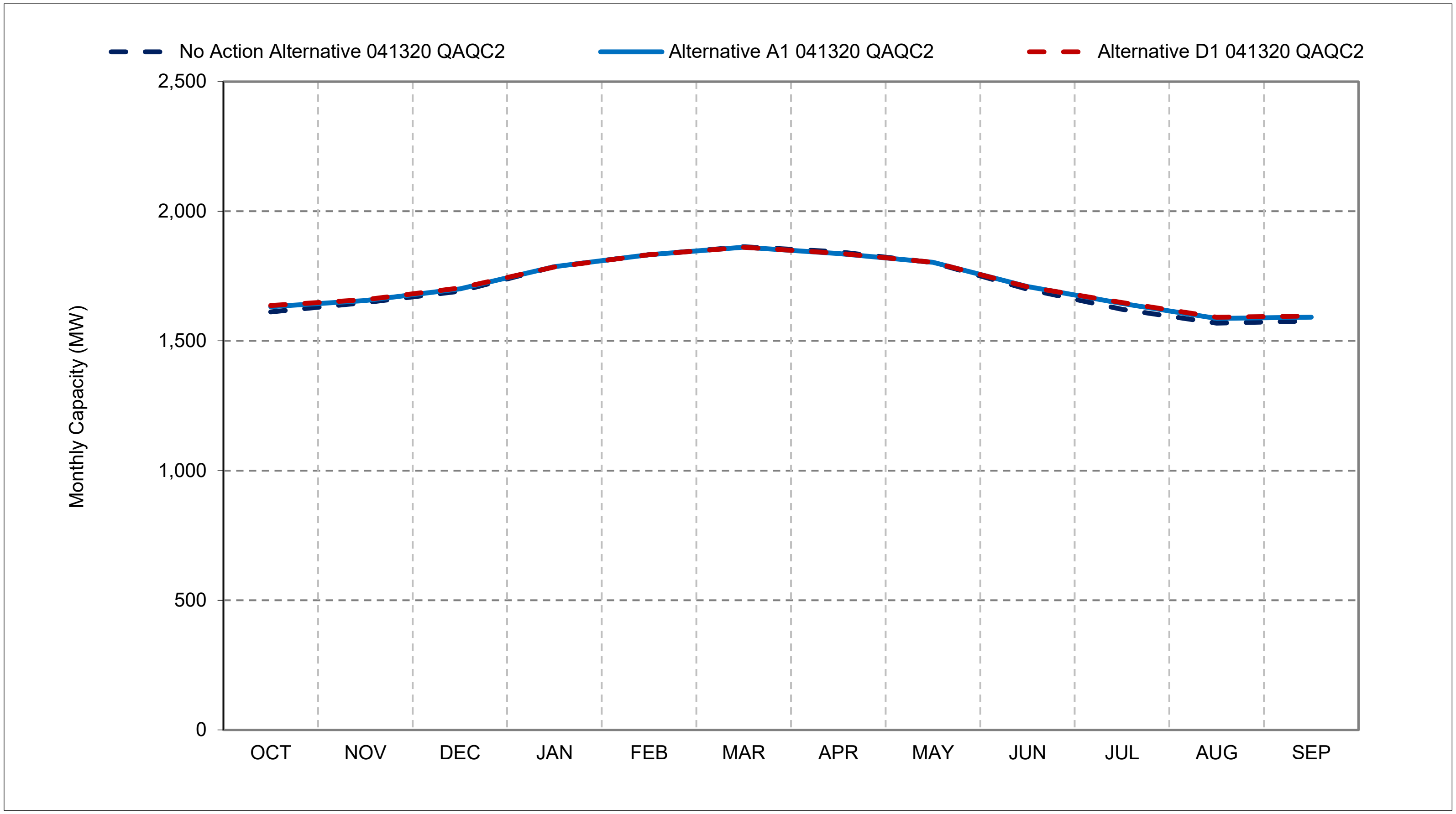


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-3. CVP Total Capacity, Above Normal Year Average Capacity

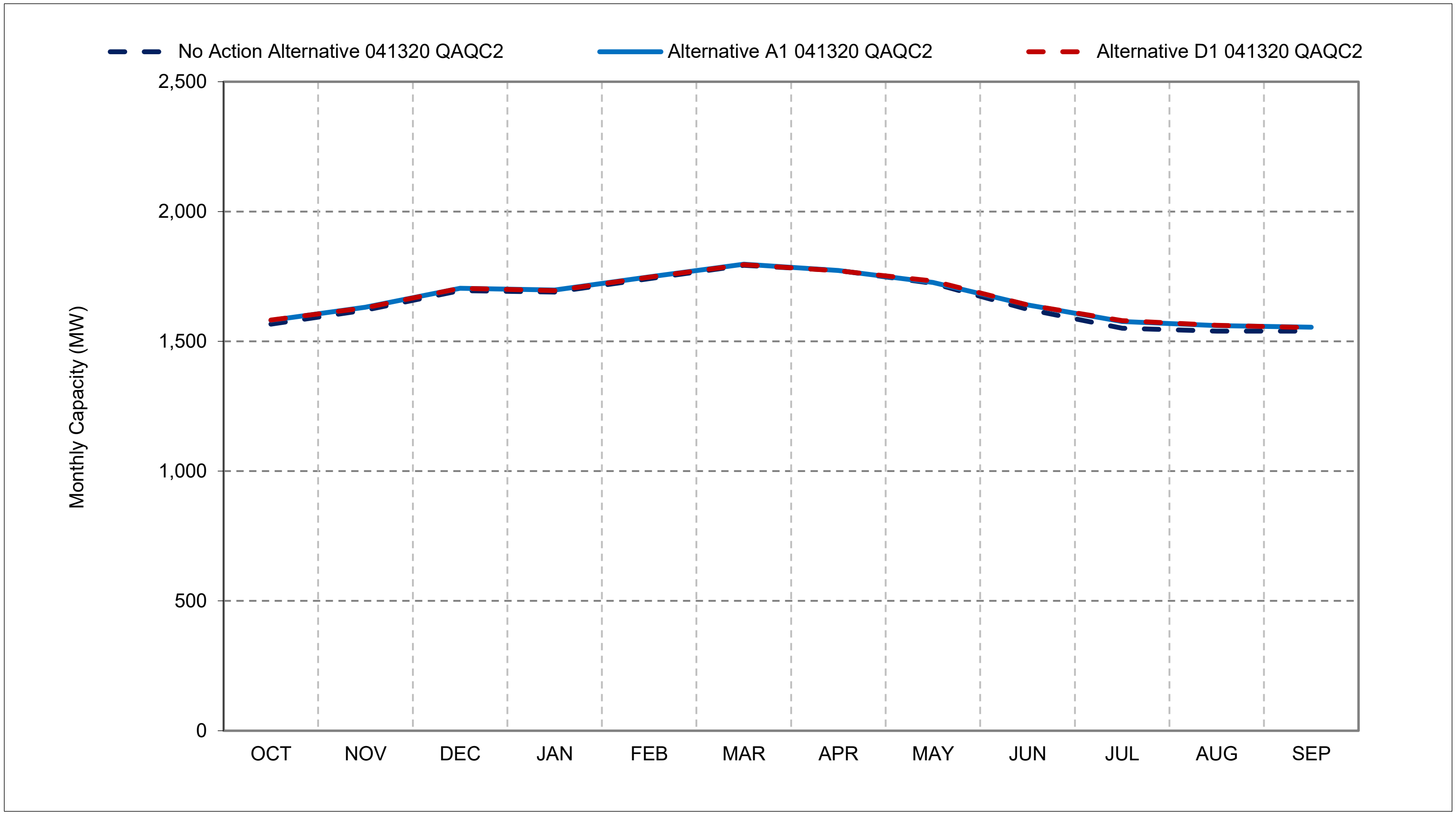


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-4. CVP Total Capacity, Below Normal Year Average Capacity

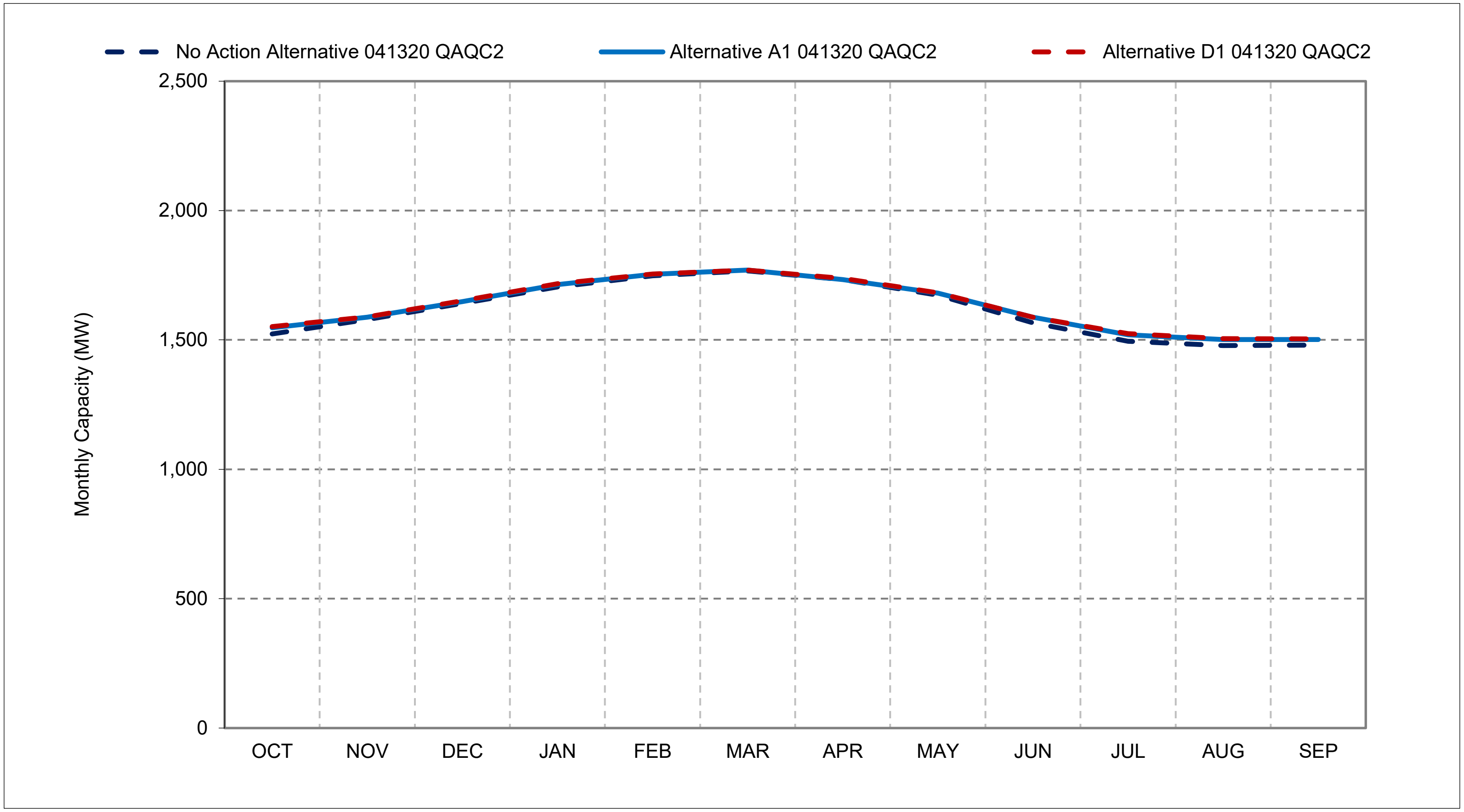


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-5. CVP Total Capacity, Dry Year Average Capacity

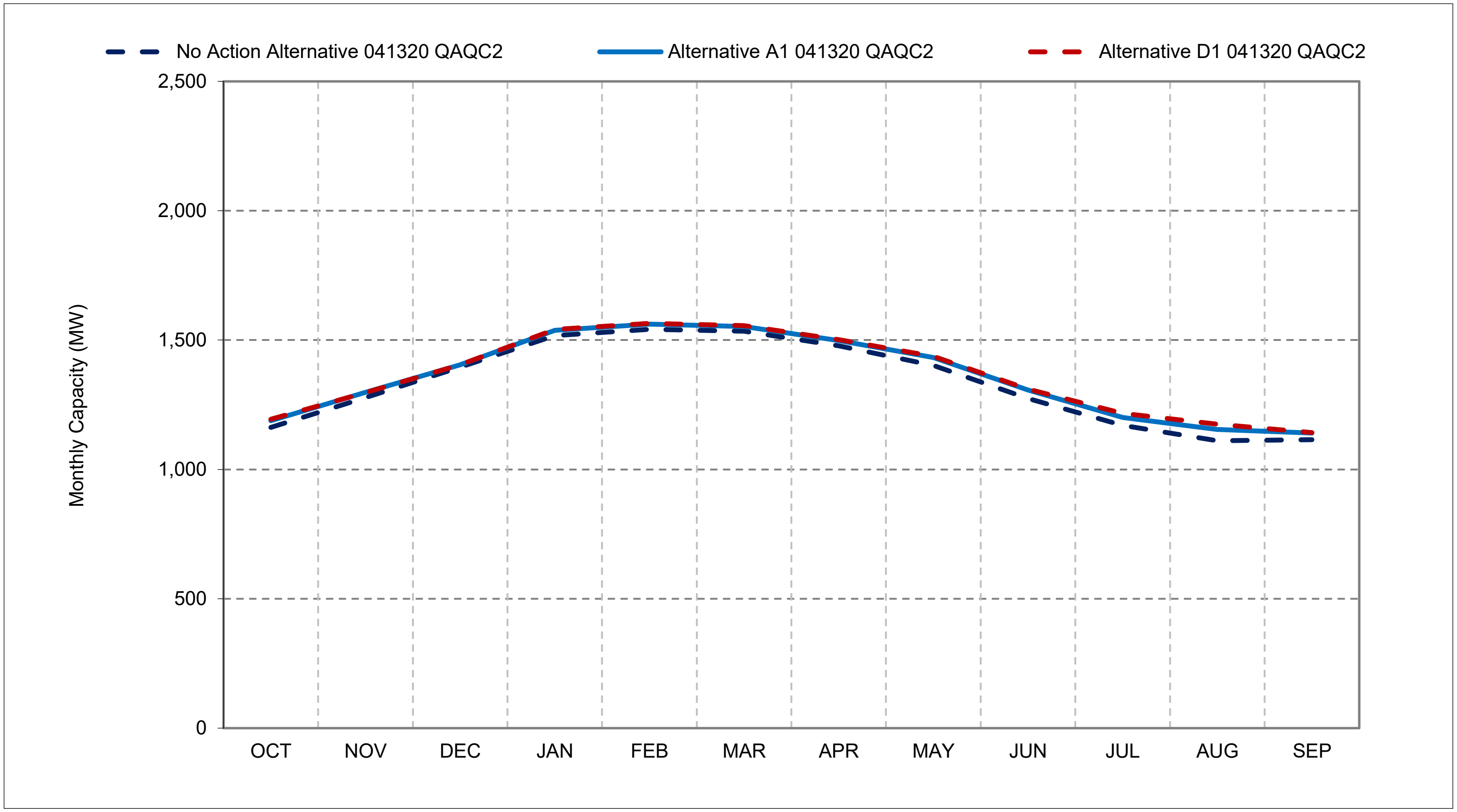


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-6. CVP Total Capacity, Critical Year Average Capacity

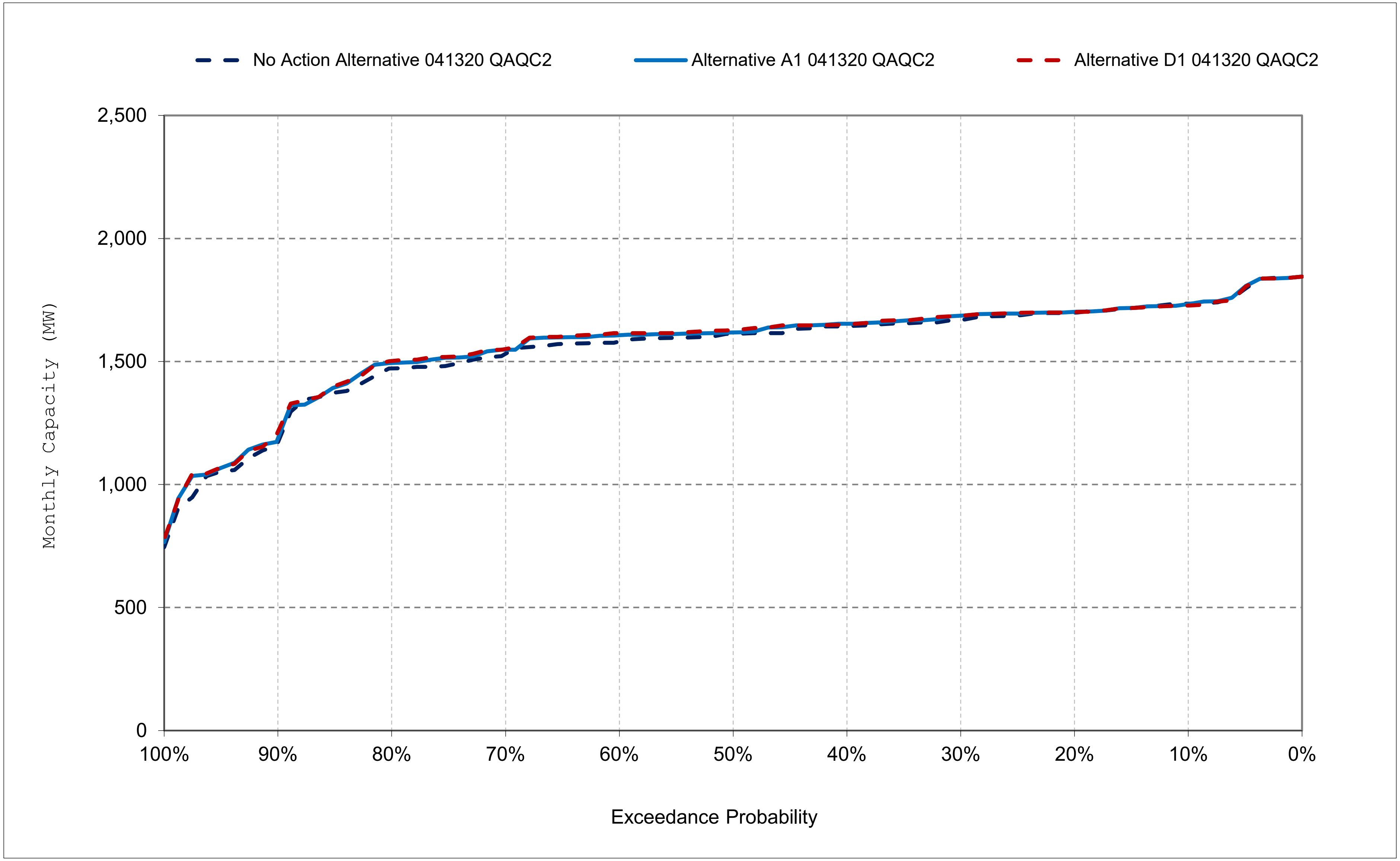


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

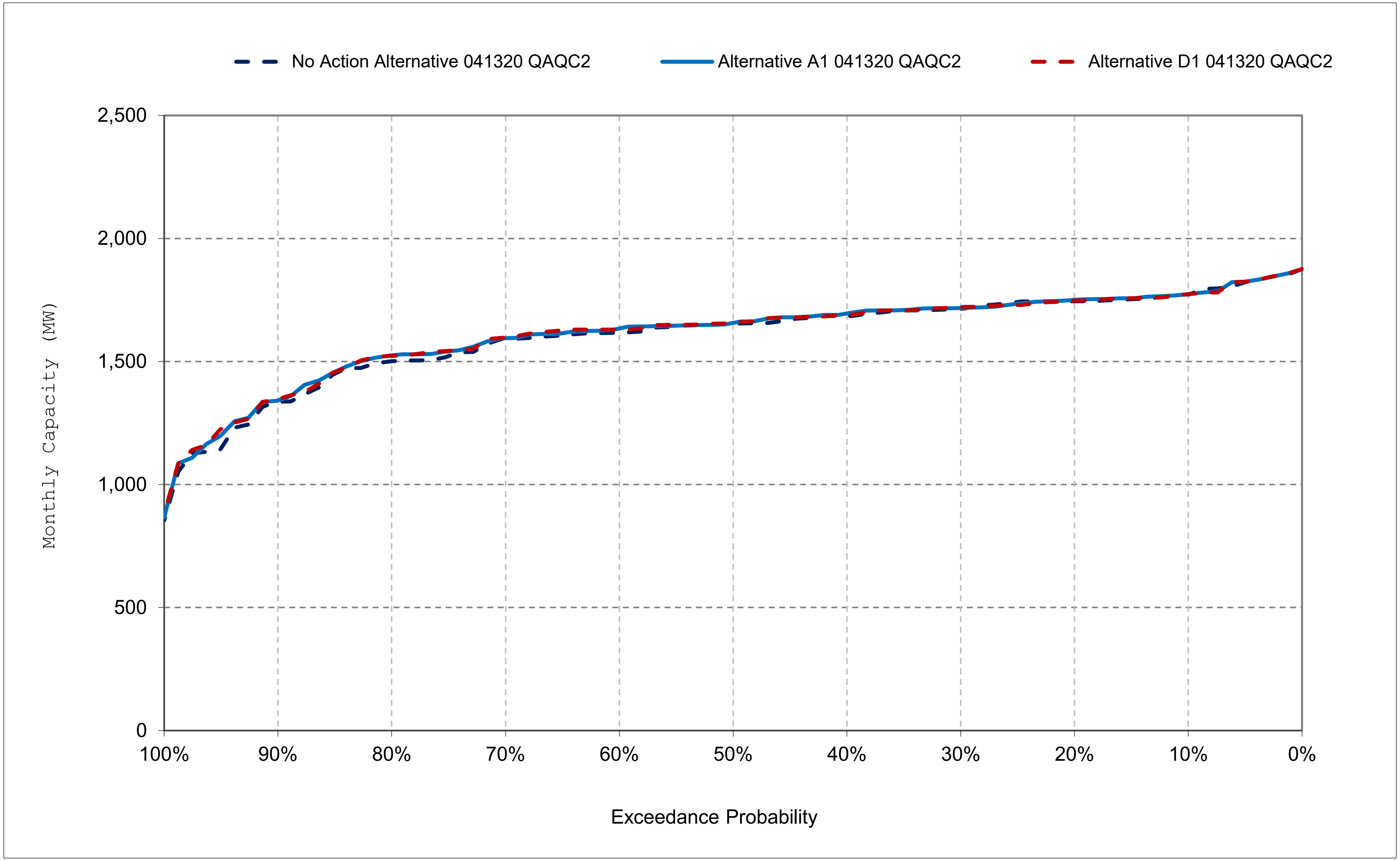
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-7. CVP Total Capacity, October



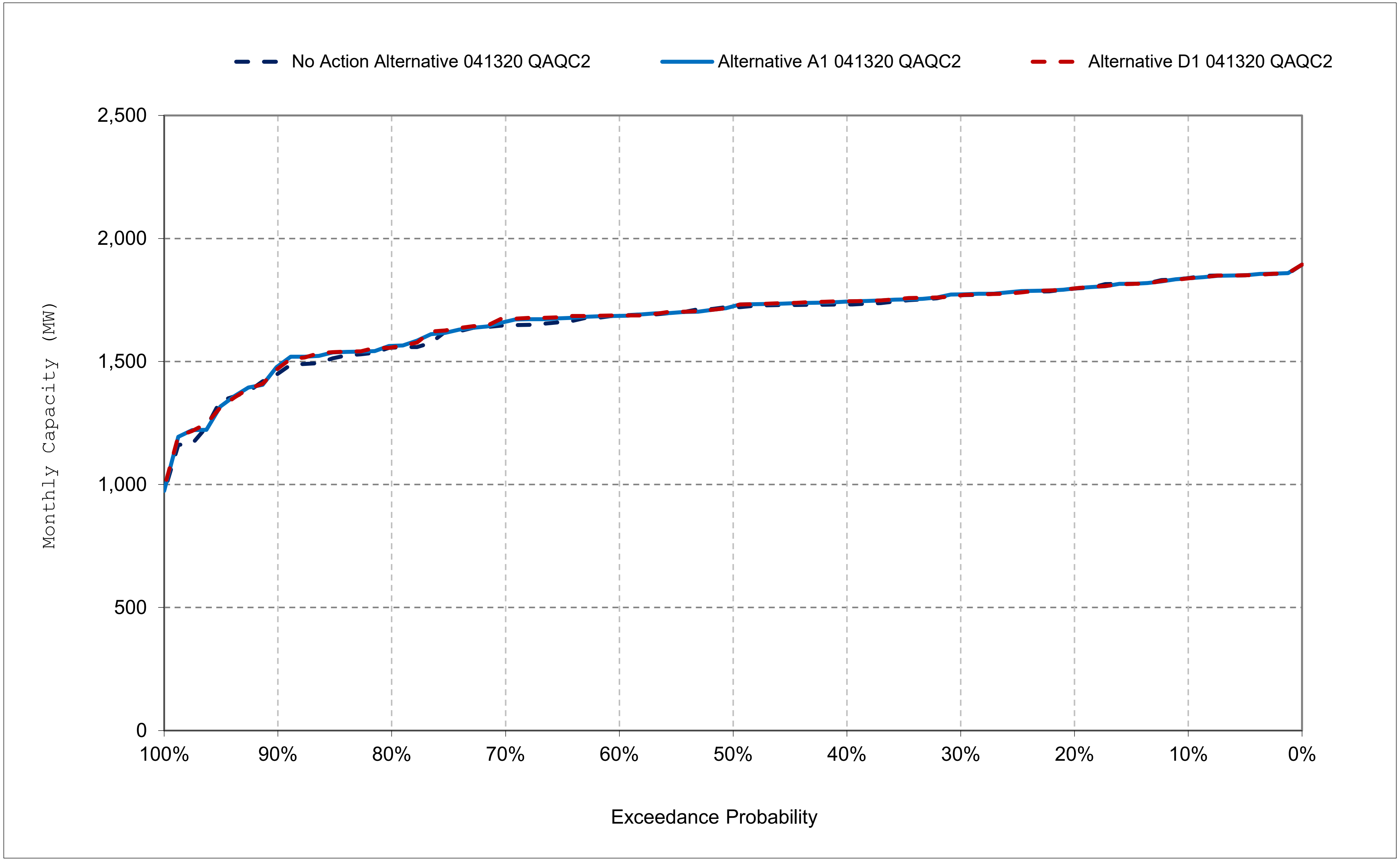
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-8. CVP Total Capacity, November



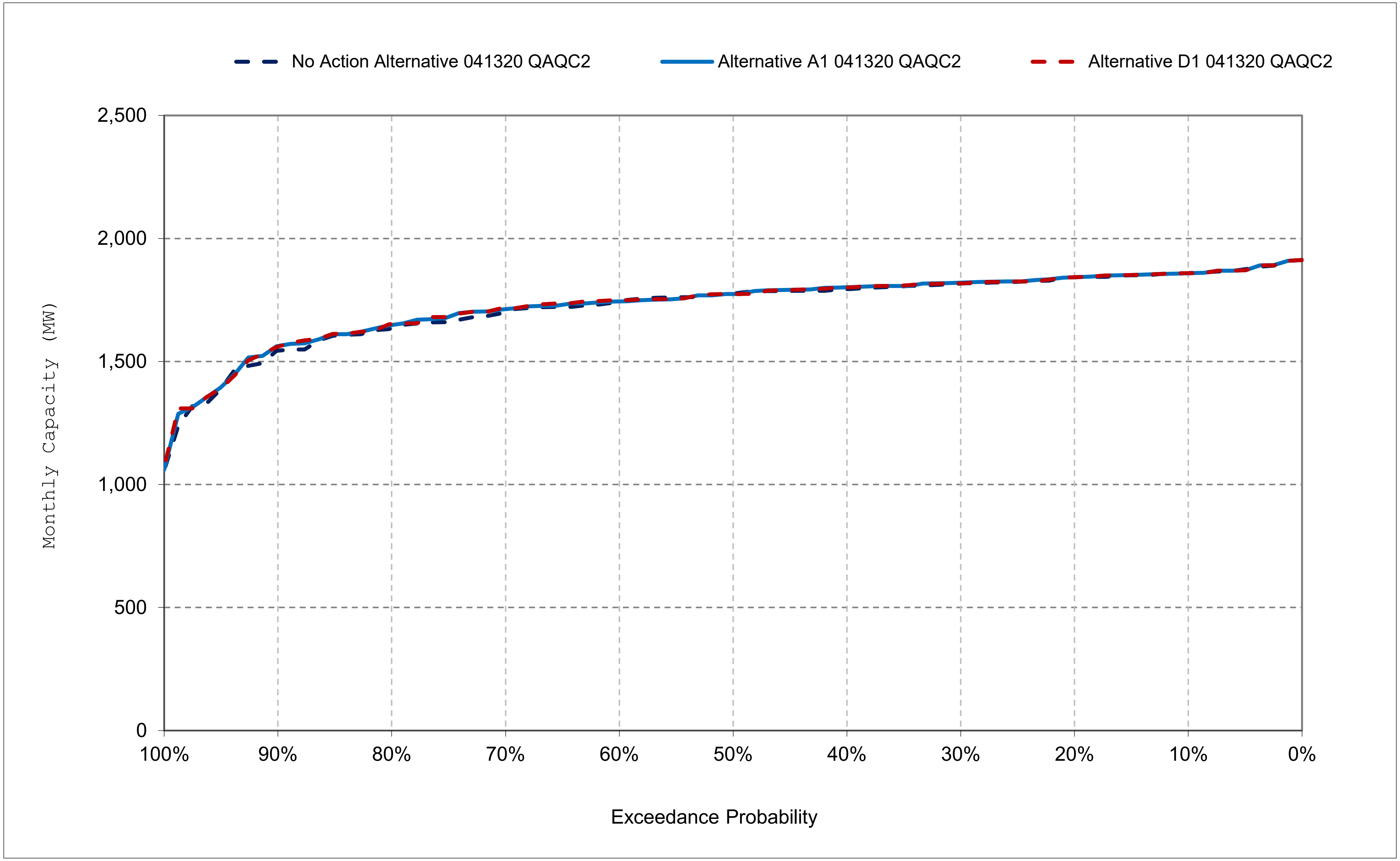
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-9. CVP Total Capacity, December



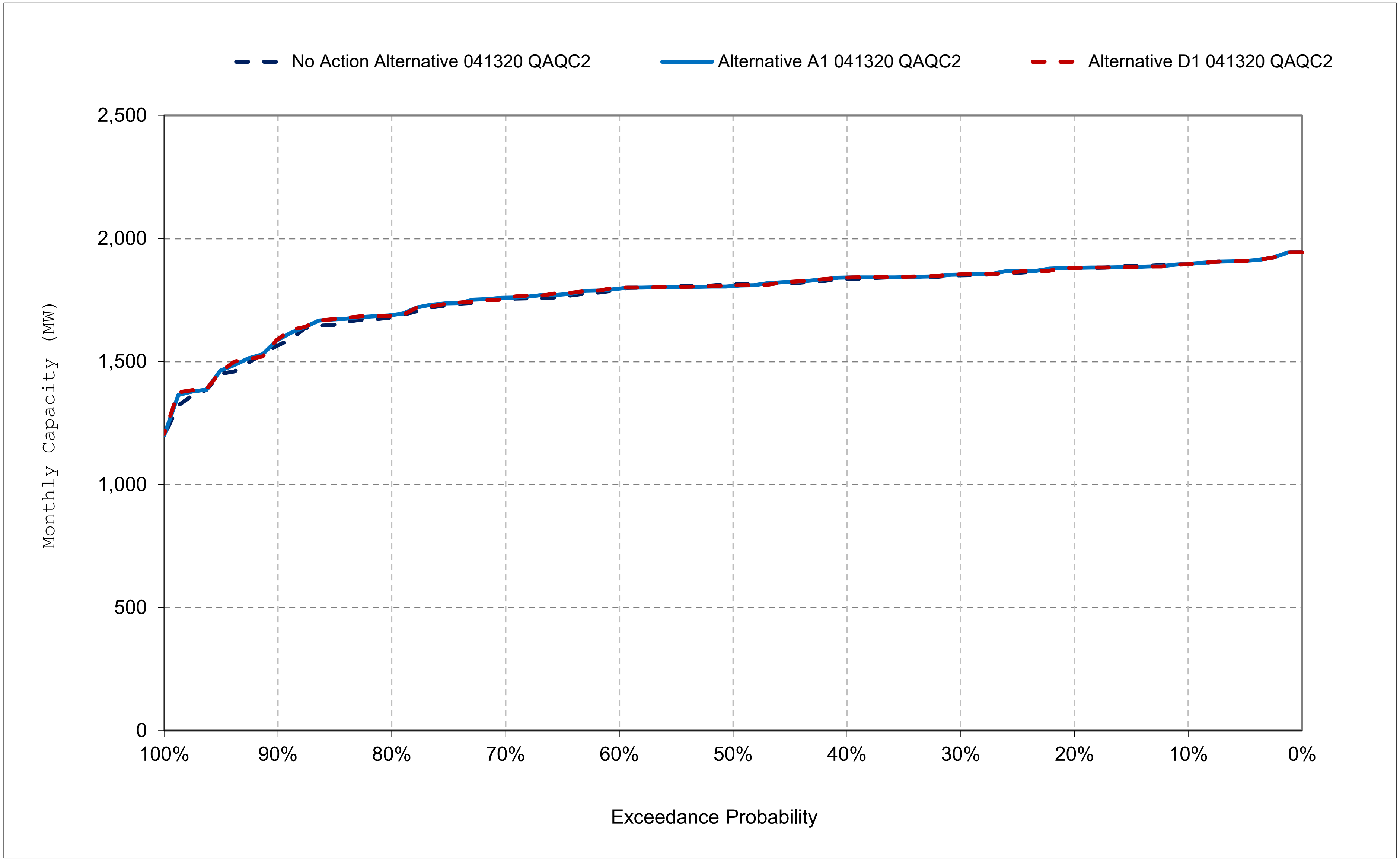
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-10. CVP Total Capacity, January



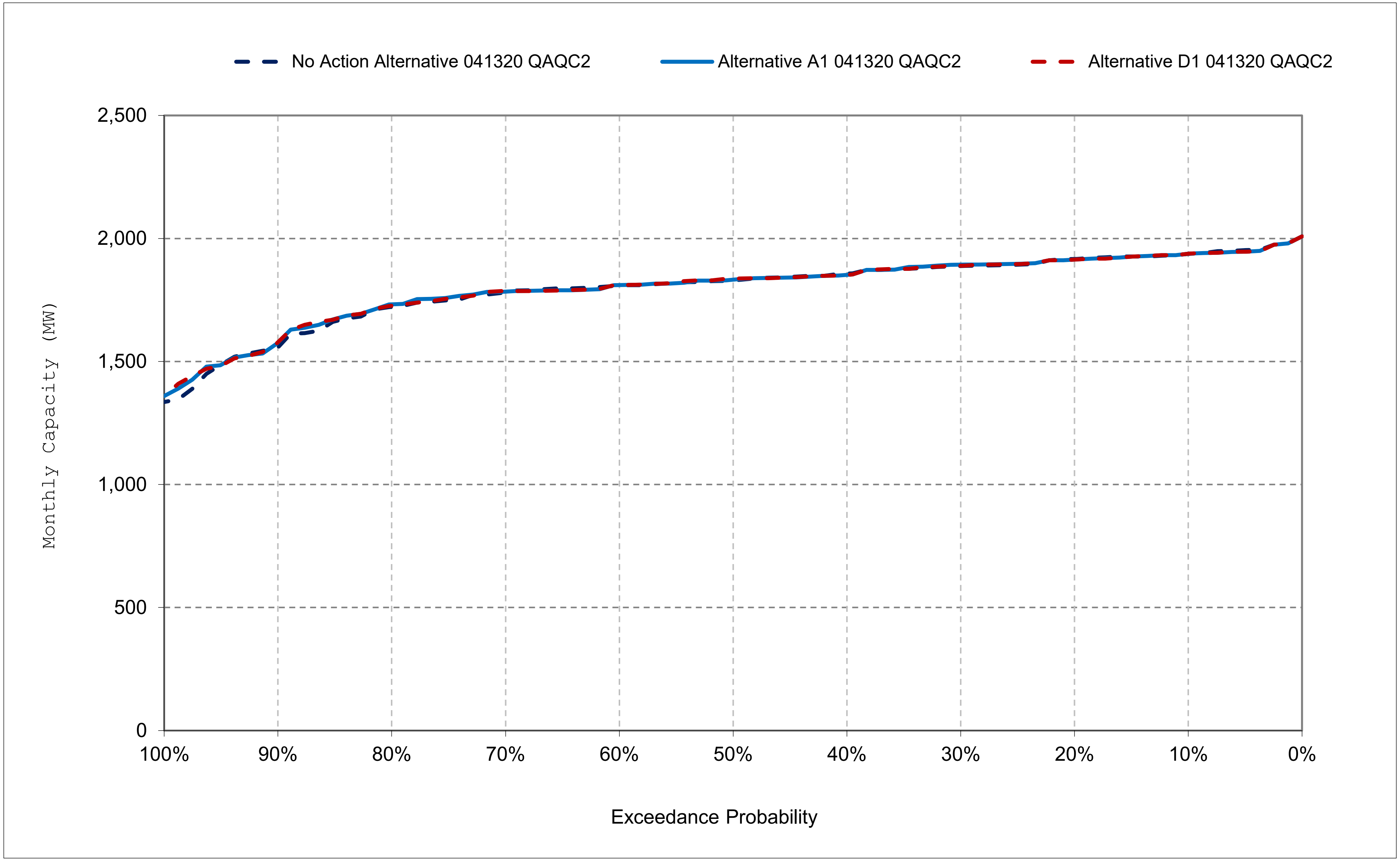
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-11. CVP Total Capacity, February



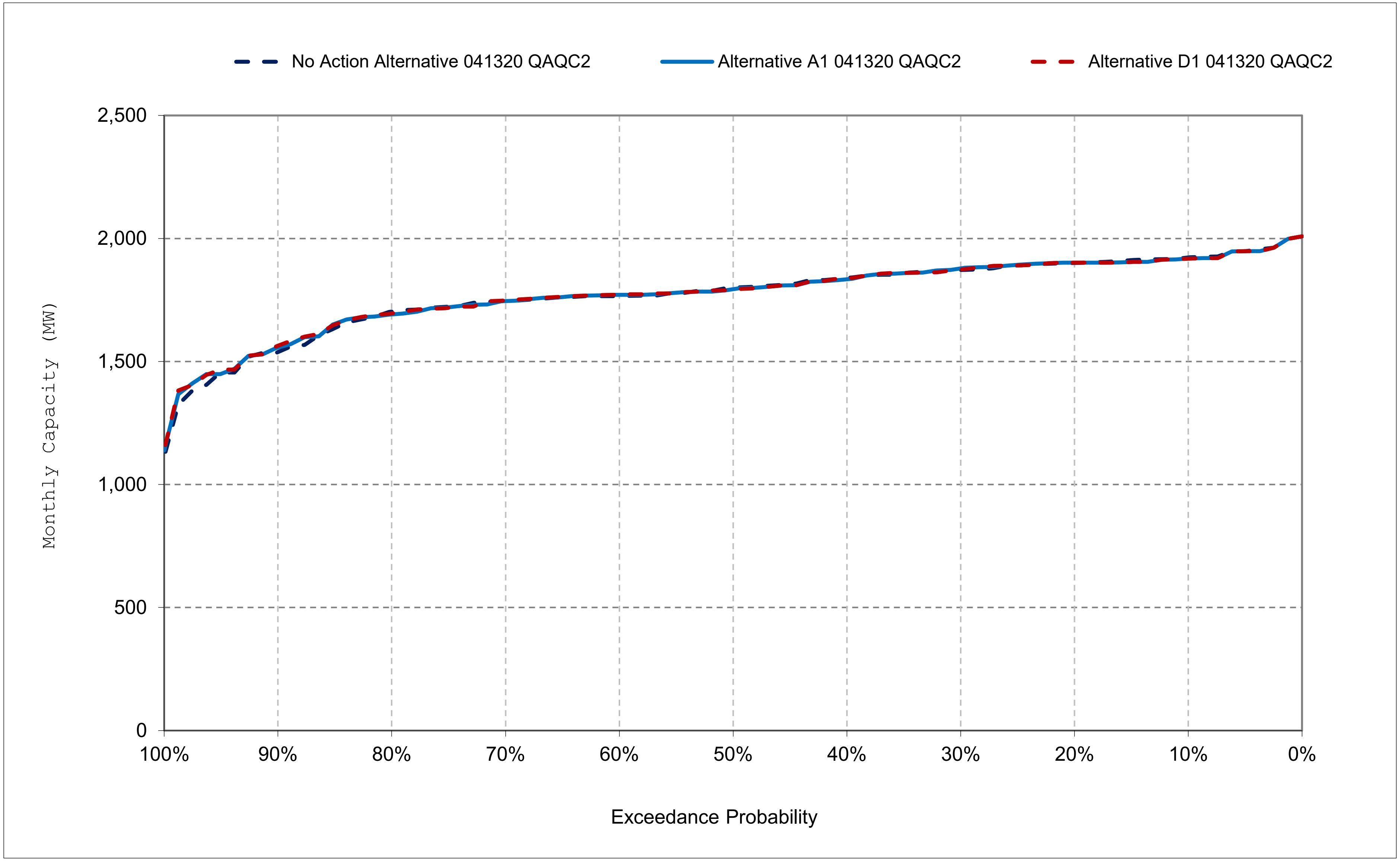
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-12. CVP Total Capacity, March



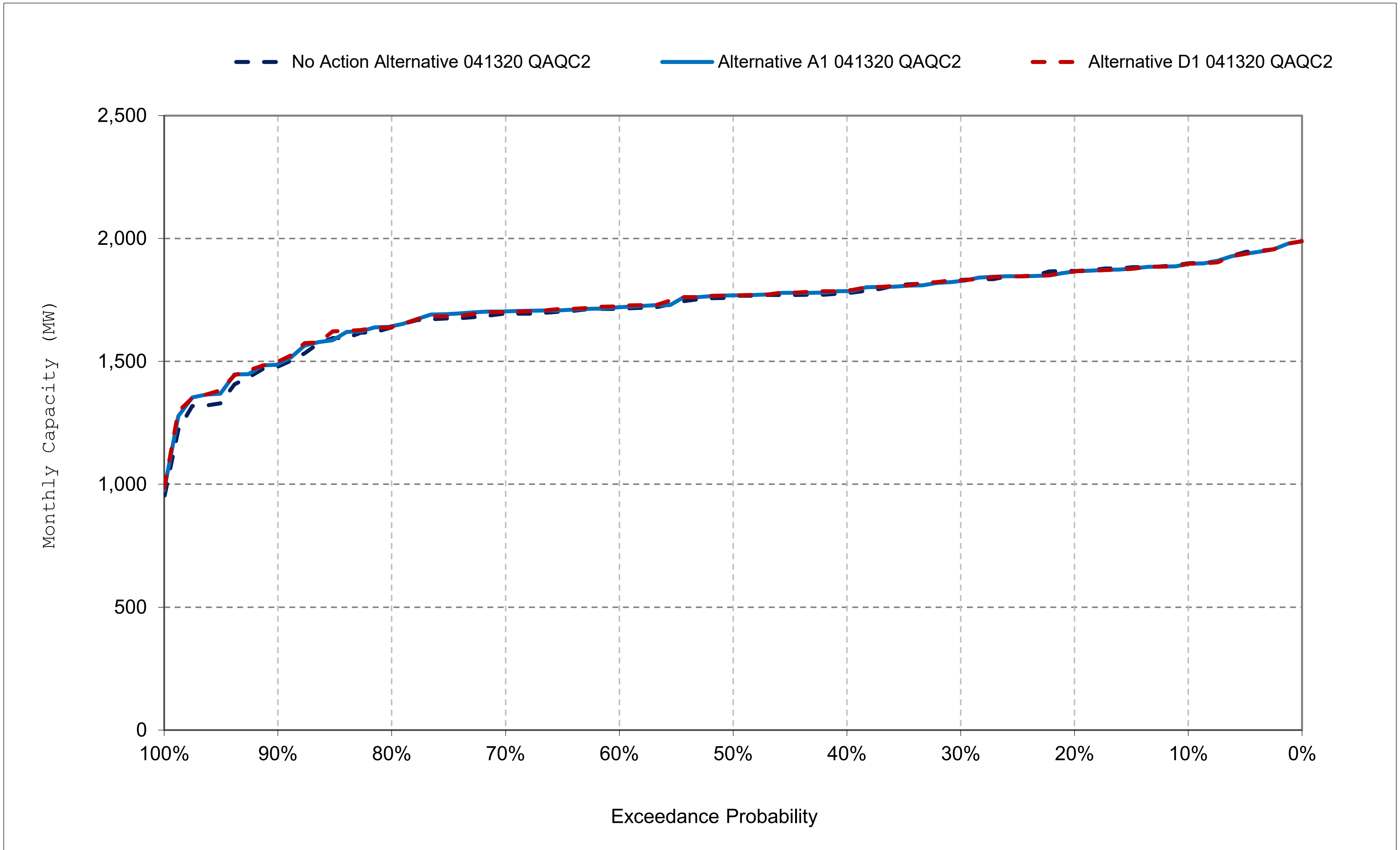
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-13. CVP Total Capacity, April



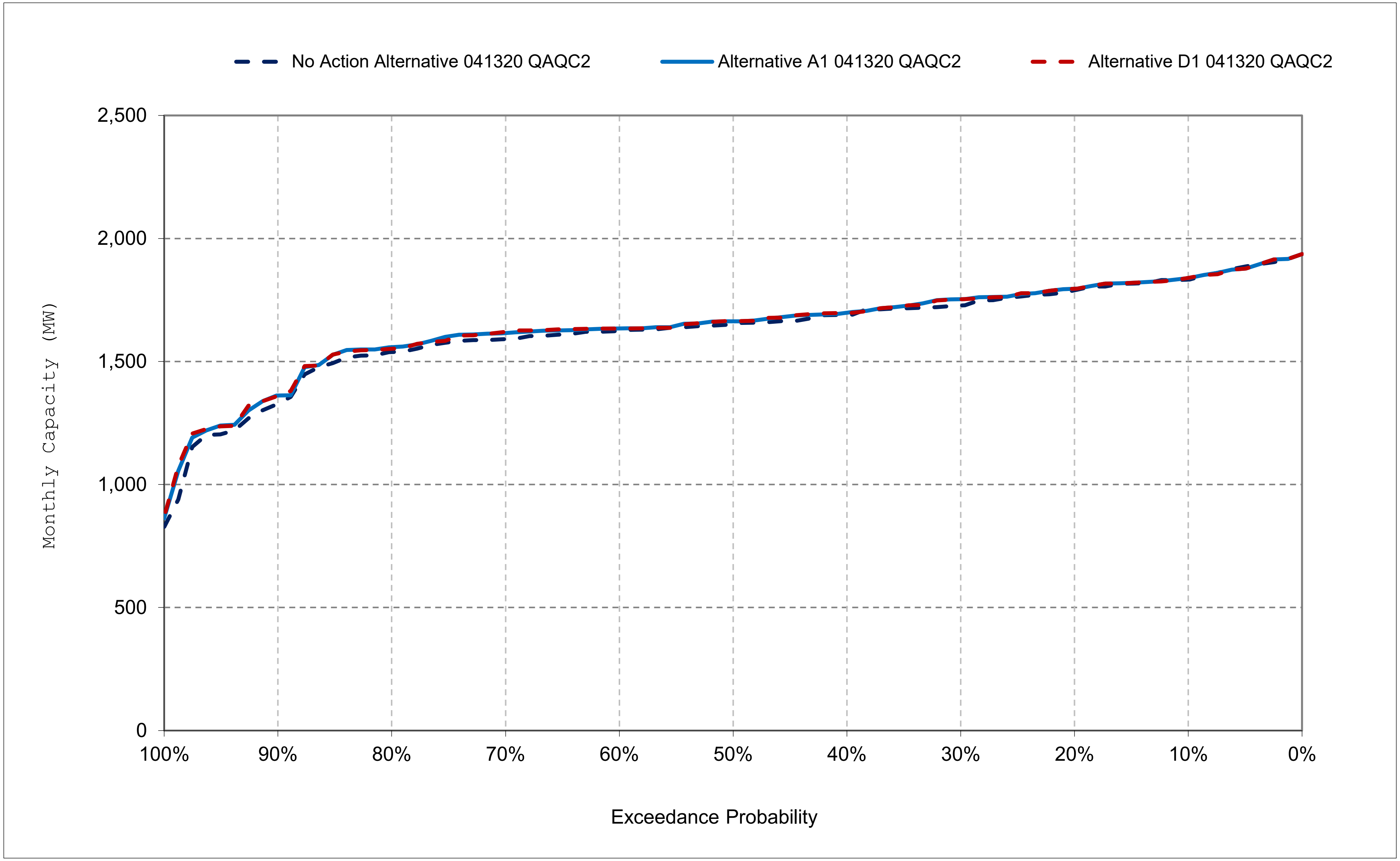
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-14. CVP Total Capacity, May



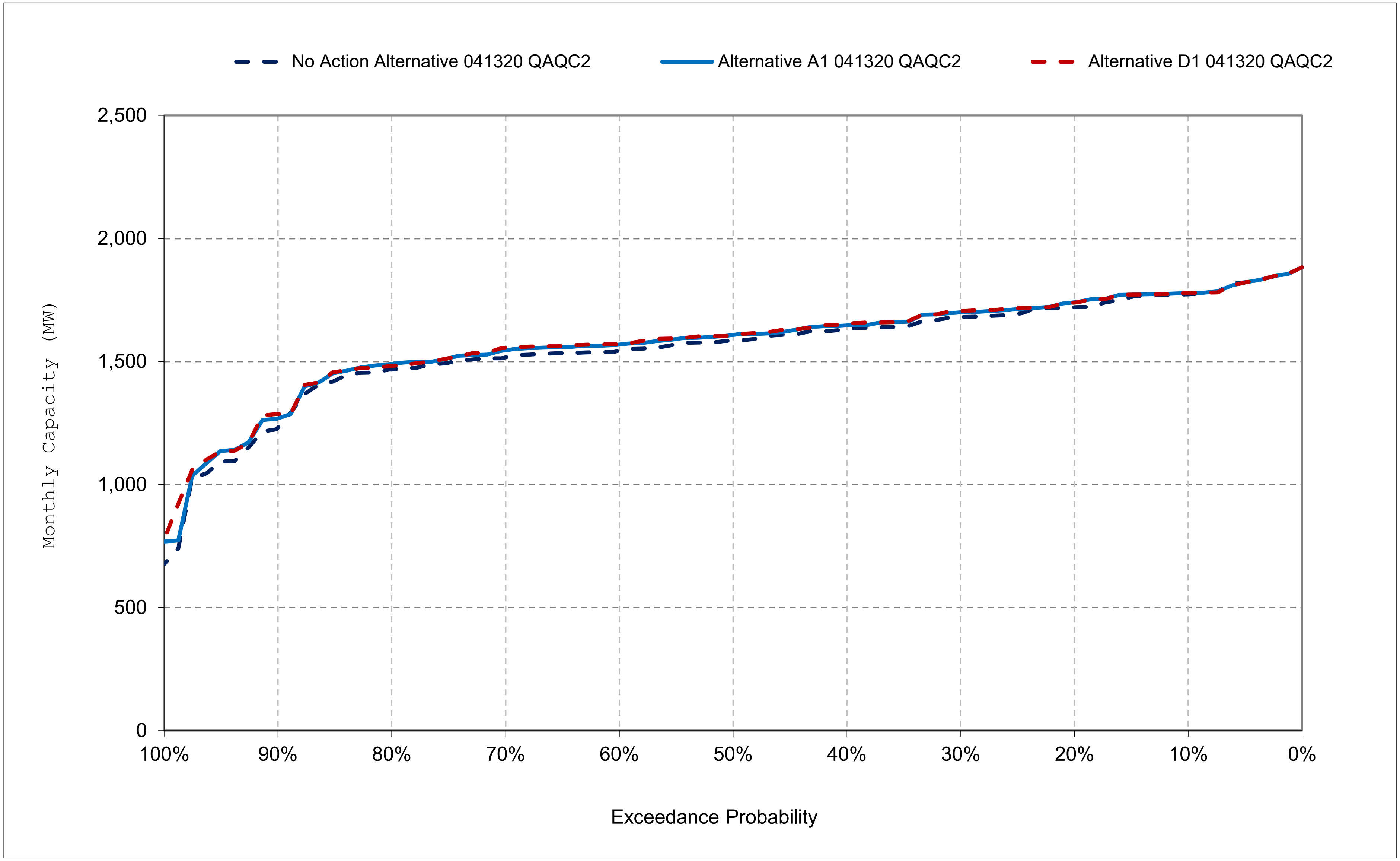
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-15. CVP Total Capacity, June



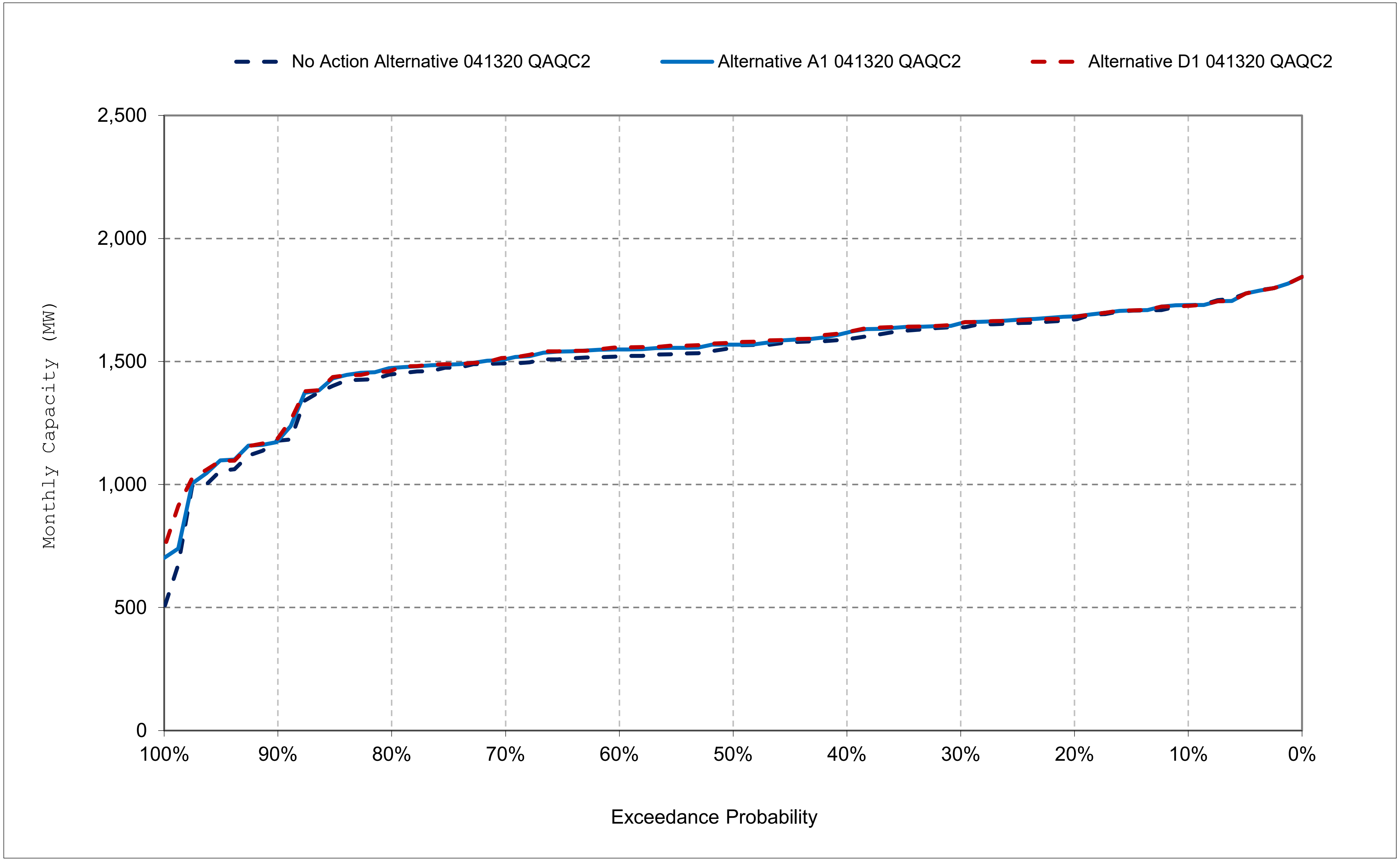
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-16. CVP Total Capacity, July



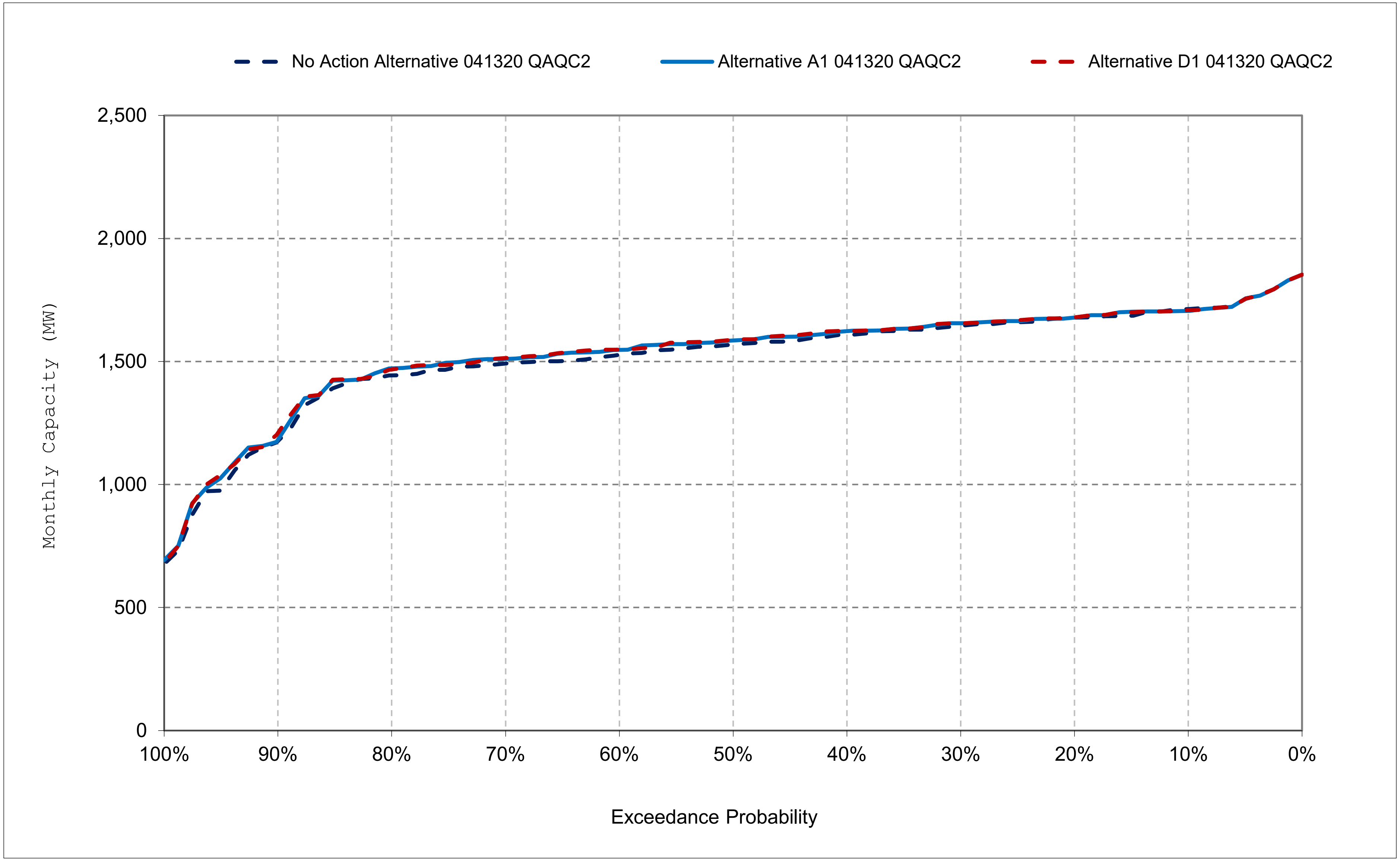
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-17. CVP Total Capacity, August



*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-1-18. CVP Total Capacity, September



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-2-1. CVP Total Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	434	357	655	715	683	743	493	694	603	798	641	557
20%	417	286	416	520	625	595	393	600	580	759	587	468
30%	329	255	254	381	404	375	315	510	553	703	562	407
40%	310	239	210	246	279	261	293	487	535	677	547	375
50%	289	221	190	190	197	246	272	479	526	656	520	331
60%	265	202	165	160	165	197	257	457	507	610	495	294
70%	244	177	151	145	139	176	239	428	484	577	467	277
80%	207	148	135	137	129	158	218	386	456	544	431	254
90%	170	136	113	123	120	138	202	308	394	473	388	209
Long Term												
Full Simulation Period[a]	295	236	273	317	320	342	315	488	519	641	518	355
Water Year Types[b,c]												
Wet (32%)	394	295	346	554	519	551	427	610	578	713	612	491
Above Normal (15%)	307	287	276	326	422	415	337	521	544	717	564	402
Below Normal (17%)	274	217	296	200	259	235	268	450	515	649	490	309
Dry (22%)	244	191	249	163	147	190	240	425	504	607	472	269
Critical (15%)	170	145	122	160	120	166	215	326	390	452	370	198

Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	434	362	655	715	683	743	493	683	582	769	661	557
20%	417	296	480	523	625	595	393	599	558	717	603	483
30%	339	258	302	381	405	376	315	513	535	677	561	436
40%	315	239	226	255	291	275	290	486	515	654	536	390
50%	303	225	194	199	194	246	273	461	500	630	511	346
60%	273	211	180	174	165	197	257	444	486	579	489	312
70%	244	194	165	147	145	178	234	431	472	544	456	287
80%	208	175	148	139	130	159	224	397	437	513	414	250
90%	171	140	119	124	120	142	201	319	367	457	384	213
Long Term												
Full Simulation Period[a]	302	244	289	320	325	343	315	486	500	619	515	366
Water Year Types[b,c]												
Wet (32%)	398	298	346	556	519	551	427	607	571	693	613	501
Above Normal (15%)	316	284	301	325	423	416	339	525	511	670	552	423
Below Normal (17%)	293	237	311	203	278	235	267	452	485	625	479	318
Dry (22%)	241	207	291	168	149	193	237	425	476	581	465	279
Critical (15%)	182	153	126	167	123	169	218	318	391	459	378	201

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	0	5	0	0	0	0	0	-11	-21	-30	20	0
20%	0	10	64	3	0	0	0	-1	-22	-42	17	16
30%	9	3	48	0	1	1	0	3	-19	-26	0	28
40%	6	0	16	9	12	14	-3	-1	-20	-23	-11	14
50%	14	3	4	9	-2	0	1	-19	-27	-26	-9	14
60%	8	9	15	14	0	0	0	-12	-22	-31	-6	17
70%	0	17	14	2	6	1	-5	3	-12	-33	-12	9
80%	2	27	13	2	1	1	6	11	-20	-31	-17	-4
90%	2	4	6	1	0	4	-1	11	-27	-16	-4	4
Long Term												
Full Simulation Period[a]	7	9	16	3	4	1	0	-1	-18	-22	-3	10
Water Year Types[b,c]												
Wet (32%)	4	4	0	2	0	0	0	-3	-6	-20	2	10
Above Normal (15%)	9	-3	24	-2	2	0	3	4	-33	-48	-12	21
Below Normal (17%)	19	20	15	3	19	0	-2	2	-30	-24	-11	9
Dry (22%)	-3	15	43	6	2	4	-3	0	-28	-26	-6	10
Critical (15%)	12	8	3	7	3	3	3	-8	1	6	8	3

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-2-2. CVP Total Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	434	357	655	715	683	743	493	694	603	798	641	557
20%	417	286	416	520	625	595	393	600	580	759	587	468
30%	329	255	254	381	404	375	315	510	553	703	562	407
40%	310	239	210	246	279	261	293	487	535	677	547	375
50%	289	221	190	190	197	246	272	479	526	656	520	331
60%	265	202	165	160	165	197	257	457	507	610	495	294
70%	244	177	151	145	139	176	239	428	484	577	467	277
80%	207	148	135	137	129	158	218	386	456	544	431	254
90%	170	136	113	123	120	138	202	308	394	473	388	209
Long Term												
Full Simulation Period[a]	295	236	273	317	320	342	315	488	519	641	518	355
Water Year Types[b,c]												
Wet (32%)	394	295	346	554	519	551	427	610	578	713	612	491
Above Normal (15%)	307	287	276	326	422	415	337	521	544	717	564	402
Below Normal (17%)	274	217	296	200	259	235	268	450	515	649	490	309
Dry (22%)	244	191	249	163	147	190	240	425	504	607	472	269
Critical (15%)	170	145	122	160	120	166	215	326	390	452	370	198

Alternative D1 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	435	363	655	715	683	743	493	683	582	767	661	557
20%	419	302	480	523	625	595	393	599	558	717	577	483
30%	336	259	302	381	404	389	315	514	535	676	544	436
40%	319	237	226	255	291	274	292	487	520	652	527	391
50%	304	221	200	196	194	246	272	462	502	629	504	342
60%	269	211	182	172	163	199	255	445	483	577	479	316
70%	242	197	169	144	145	178	234	425	473	545	451	291
80%	208	180	152	138	131	160	224	399	435	515	415	250
90%	177	139	119	125	120	143	201	315	366	486	387	214
Long Term												
Full Simulation Period[a]	304	246	293	320	325	344	315	486	501	619	508	367
Water Year Types[b,c]												
Wet (32%)	397	298	349	557	519	551	427	607	571	693	611	501
Above Normal (15%)	317	284	308	325	426	416	339	525	514	669	537	421
Below Normal (17%)	300	242	308	203	275	235	269	451	483	624	469	320
Dry (22%)	238	206	301	165	150	201	238	427	478	579	458	282
Critical (15%)	189	157	127	168	120	168	216	318	390	462	378	206

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1	6	0	0	0	0	0	-11	-21	-31	21	0
20%	2	16	64	3	0	0	0	-1	-21	-42	-10	15
30%	7	4	48	0	0	14	0	4	-19	-28	-18	29
40%	9	-2	16	9	12	12	-1	0	-15	-24	-20	16
50%	15	0	9	6	-2	0	0	-18	-24	-27	-16	11
60%	4	9	17	12	-2	2	-2	-12	-24	-33	-16	22
70%	-2	21	18	-1	6	1	-5	-3	-11	-32	-16	14
80%	2	31	18	1	2	1	6	13	-21	-29	-17	-4
90%	7	3	6	2	0	5	-1	6	-27	13	0	5
Long Term												
Full Simulation Period[a]	8	10	20	3	4	3	1	-1	-18	-22	-10	12
Water Year Types[b,c]												
Wet (32%)	3	4	3	3	1	0	0	-3	-6	-20	-1	10
Above Normal (15%)	10	-3	32	-2	5	0	3	4	-30	-48	-27	19
Below Normal (17%)	27	25	12	3	16	0	1	0	-32	-25	-21	11
Dry (22%)	-6	15	52	2	3	12	-2	1	-26	-28	-14	13
Critical (15%)	19	11	5	8	0	3	2	-9	0	9	8	8

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-2-3. CVP Total Generation, Monthly Generation

Alternative A1 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	434	362	655	715	683	743	493	683	582	769	661	557
20%	417	296	480	523	625	595	393	599	558	717	603	483
30%	339	258	302	381	405	376	315	513	535	677	561	436
40%	315	239	226	255	291	275	290	486	515	654	536	390
50%	303	225	194	199	194	246	273	461	500	630	511	346
60%	273	211	180	174	165	197	257	444	486	579	489	312
70%	244	194	165	147	145	178	234	431	472	544	456	287
80%	208	175	148	139	130	159	224	397	437	513	414	250
90%	171	140	119	124	120	142	201	319	367	457	384	213
Long Term												
Full Simulation Period[a]	302	244	289	320	325	343	315	486	500	619	515	366
Water Year Types[b,c]												
Wet (32%)	398	298	346	556	519	551	427	607	571	693	613	501
Above Normal (15%)	316	284	301	325	423	416	339	525	511	670	552	423
Below Normal (17%)	293	237	311	203	278	235	267	452	485	625	479	318
Dry (22%)	241	207	291	168	149	193	237	425	476	581	465	279
Critical (15%)	182	153	126	167	123	169	218	318	391	459	378	201

Alternative D1 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	435	363	655	715	683	743	493	683	582	767	661	557
20%	419	302	480	523	625	595	393	599	558	717	577	483
30%	336	259	302	381	404	389	315	514	535	676	544	436
40%	319	237	226	255	291	274	292	487	520	652	527	391
50%	304	221	200	196	194	246	272	462	502	629	504	342
60%	269	211	182	172	163	199	255	445	483	577	479	316
70%	242	197	169	144	145	178	234	425	473	545	451	291
80%	208	180	152	138	131	160	224	399	435	515	415	250
90%	177	139	119	125	120	143	201	315	366	486	387	214
Long Term												
Full Simulation Period[a]	304	246	293	320	325	344	315	486	501	619	508	367
Water Year Types[b,c]												
Wet (32%)	397	298	349	557	519	551	427	607	571	693	611	501
Above Normal (15%)	317	284	308	325	426	416	339	525	514	669	537	421
Below Normal (17%)	300	242	308	203	275	235	269	451	483	624	469	320
Dry (22%)	238	206	301	165	150	201	238	427	478	579	458	282
Critical (15%)	189	157	127	168	120	168	216	318	390	462	378	206

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	1	0	0	0	0	0	0	0	-1	0	0
20%	2	6	0	0	0	0	0	0	1	0	-27	0
30%	-2	1	0	0	-1	14	0	1	0	-1	-17	0
40%	3	-2	0	0	0	-1	2	1	4	-1	-8	1
50%	1	-3	5	-3	0	0	-1	1	2	-1	-7	-3
60%	-4	0	2	-2	-2	2	-2	0	-3	-2	-10	5
70%	-1	4	4	-3	0	0	0	-6	1	1	-5	5
80%	0	4	5	0	0	0	0	2	-1	2	1	0
90%	6	-1	0	0	0	1	0	-4	0	29	3	1
Long Term												
Full Simulation Period[a]	2	1	4	0	0	2	0	0	0	0	-6	1
Water Year Types[b,c]												
Wet (32%)	-1	0	2	1	0	0	0	0	0	0	-3	0
Above Normal (15%)	1	0	8	0	3	0	0	0	3	-1	-15	-2
Below Normal (17%)	7	5	-3	0	-3	0	3	-2	-2	-1	-10	1
Dry (22%)	-3	0	9	-4	1	8	1	2	2	-2	-7	3
Critical (15%)	6	4	1	1	-3	0	-1	0	-1	3	0	5

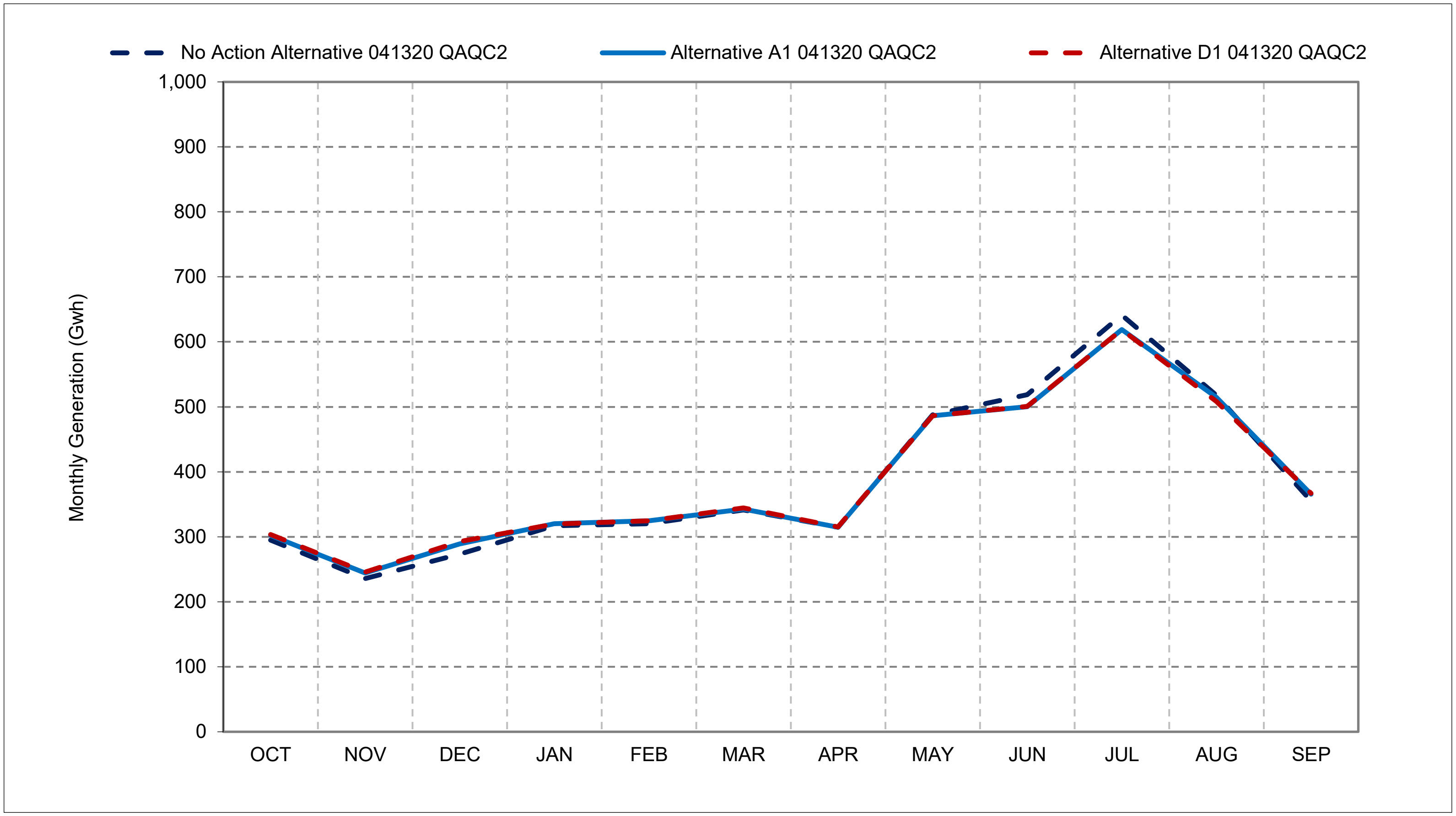
a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-1. CVP Total Generation, Long-Term Average Generation

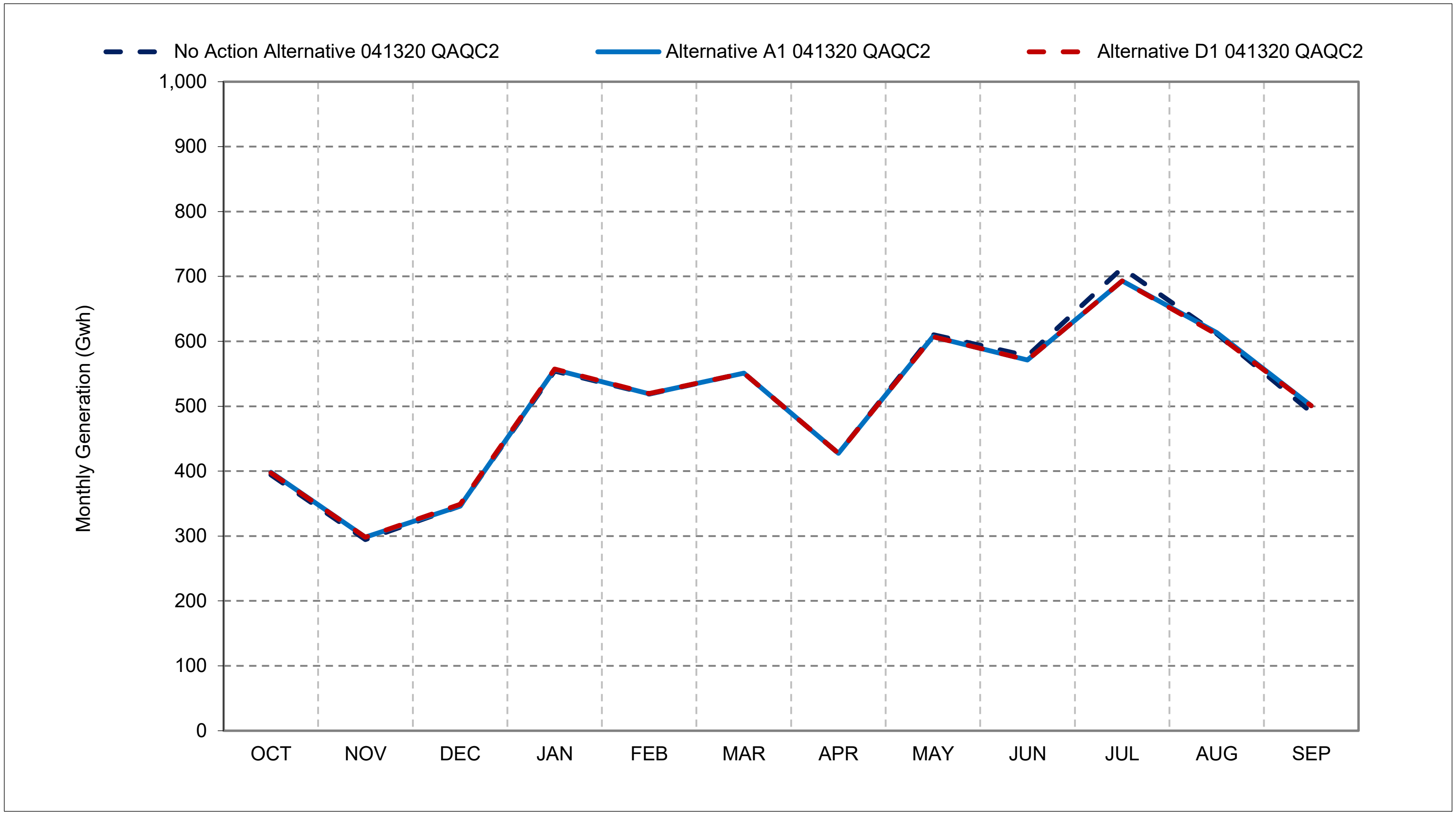


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-2. CVP Total Generation, Wet Year Average Generation

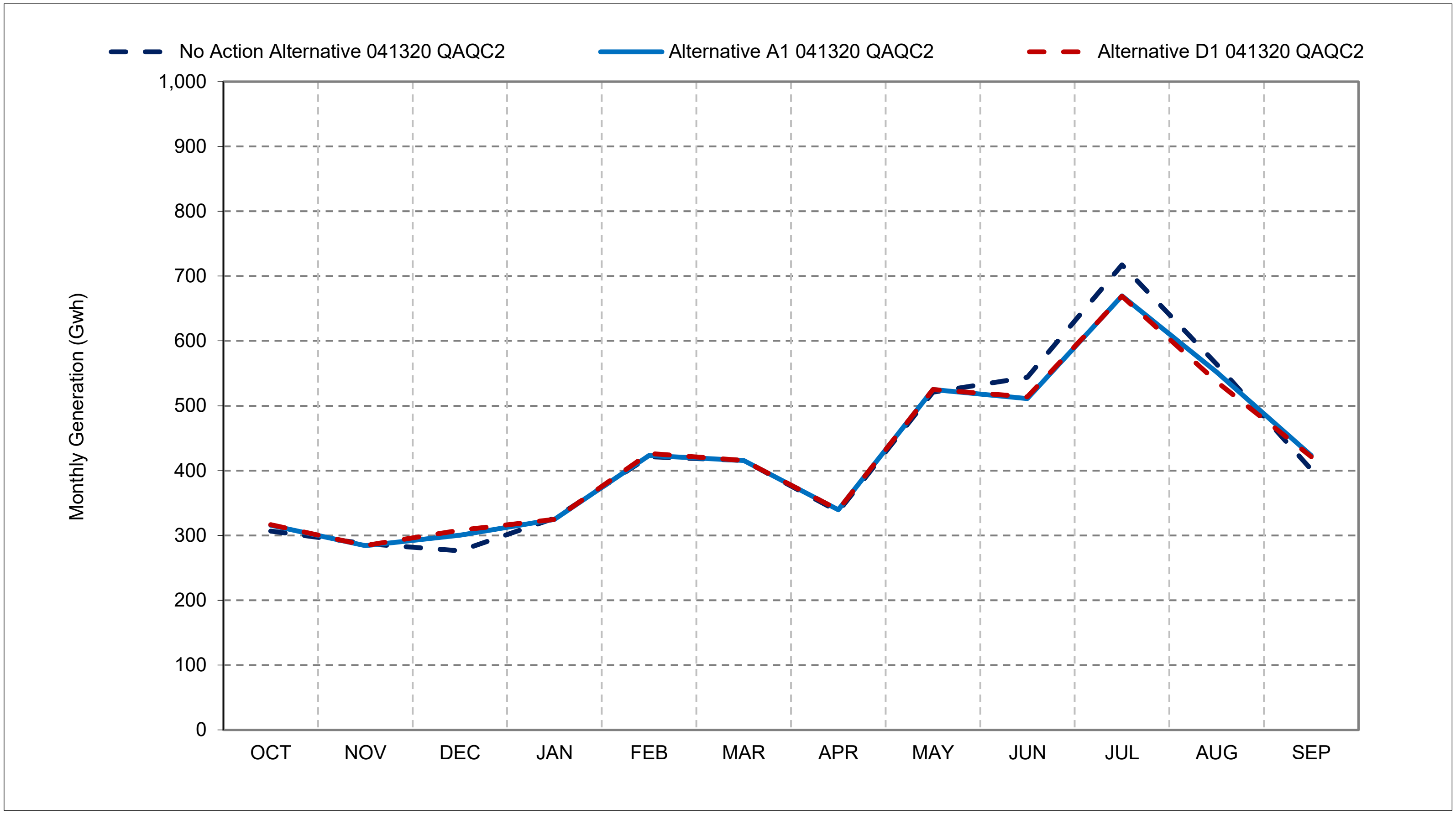


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-3. CVP Total Generation, Above Normal Year Average Generation

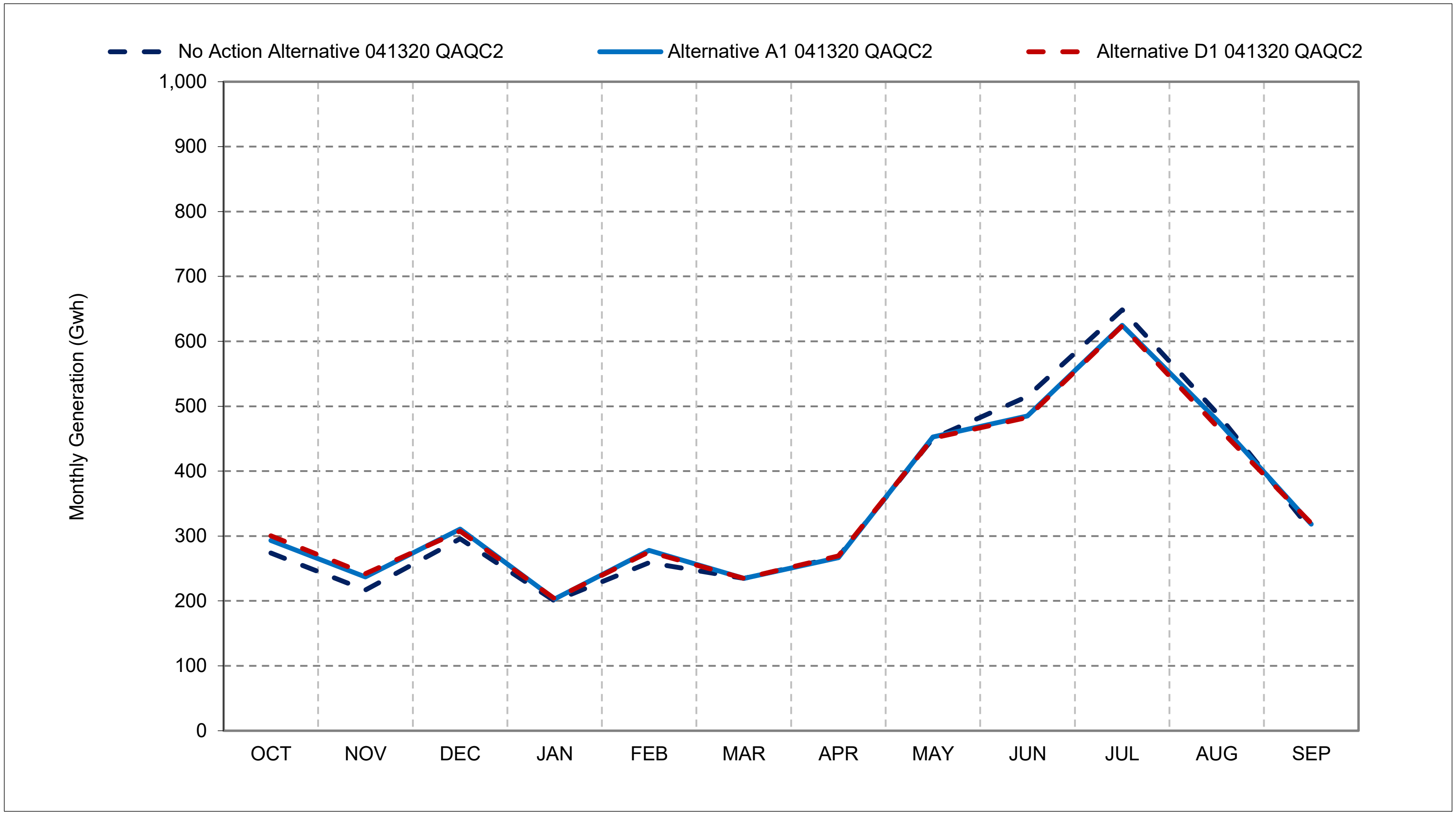


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-4. CVP Total Generation, Below Normal Year Average Generation

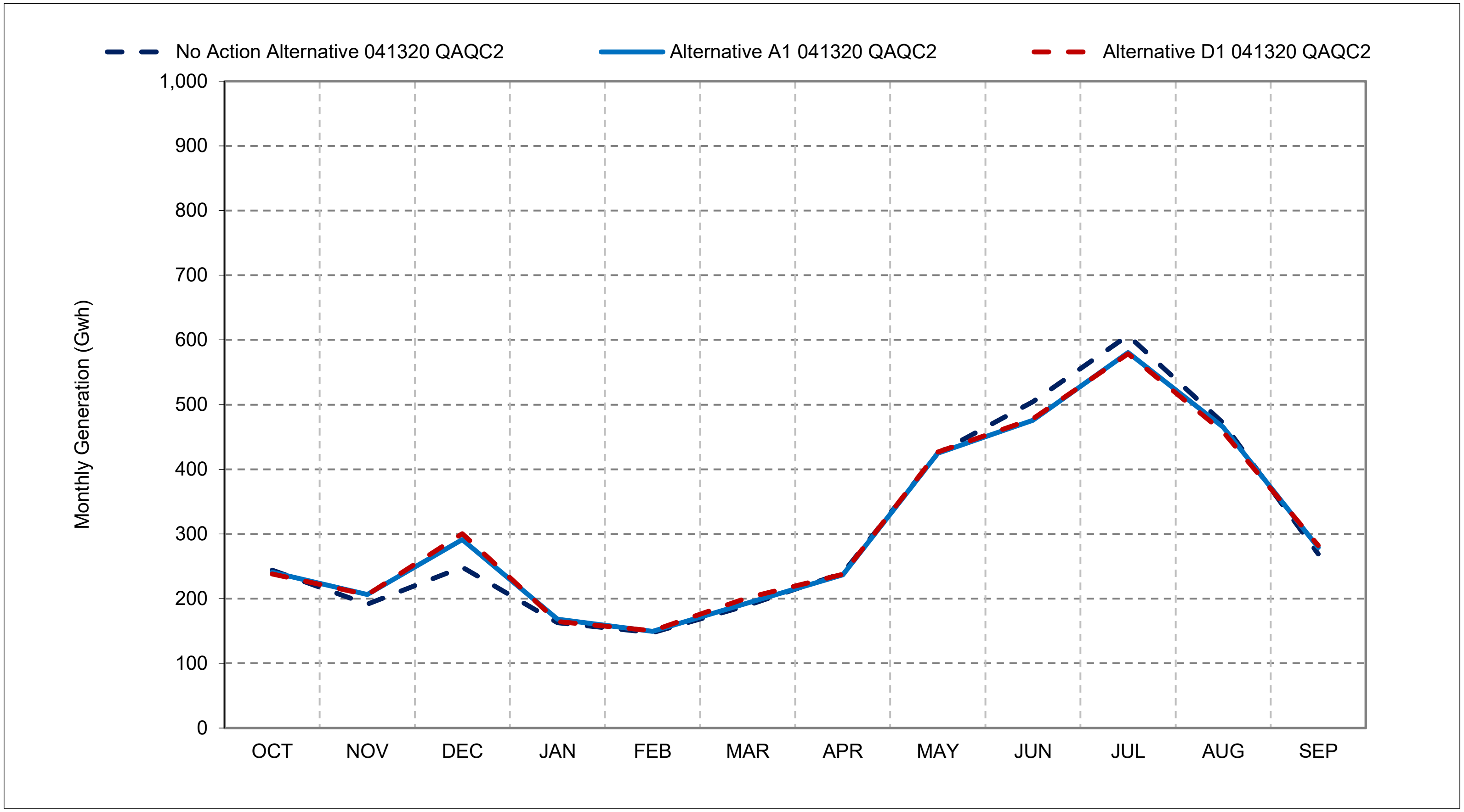


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-5. CVP Total Generation, Dry Year Average Generation

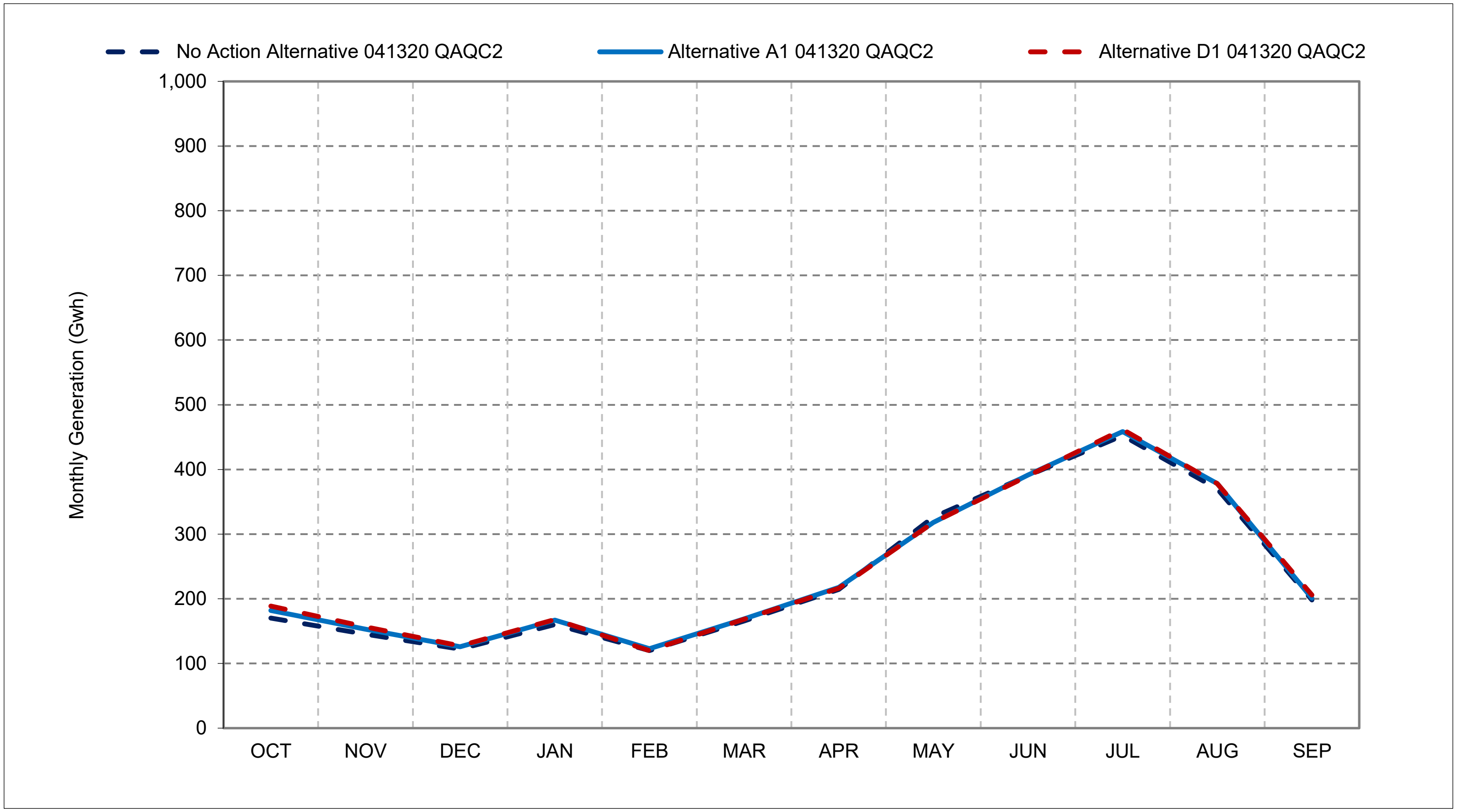


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-6. CVP Total Generation, Critical Year Average Generation

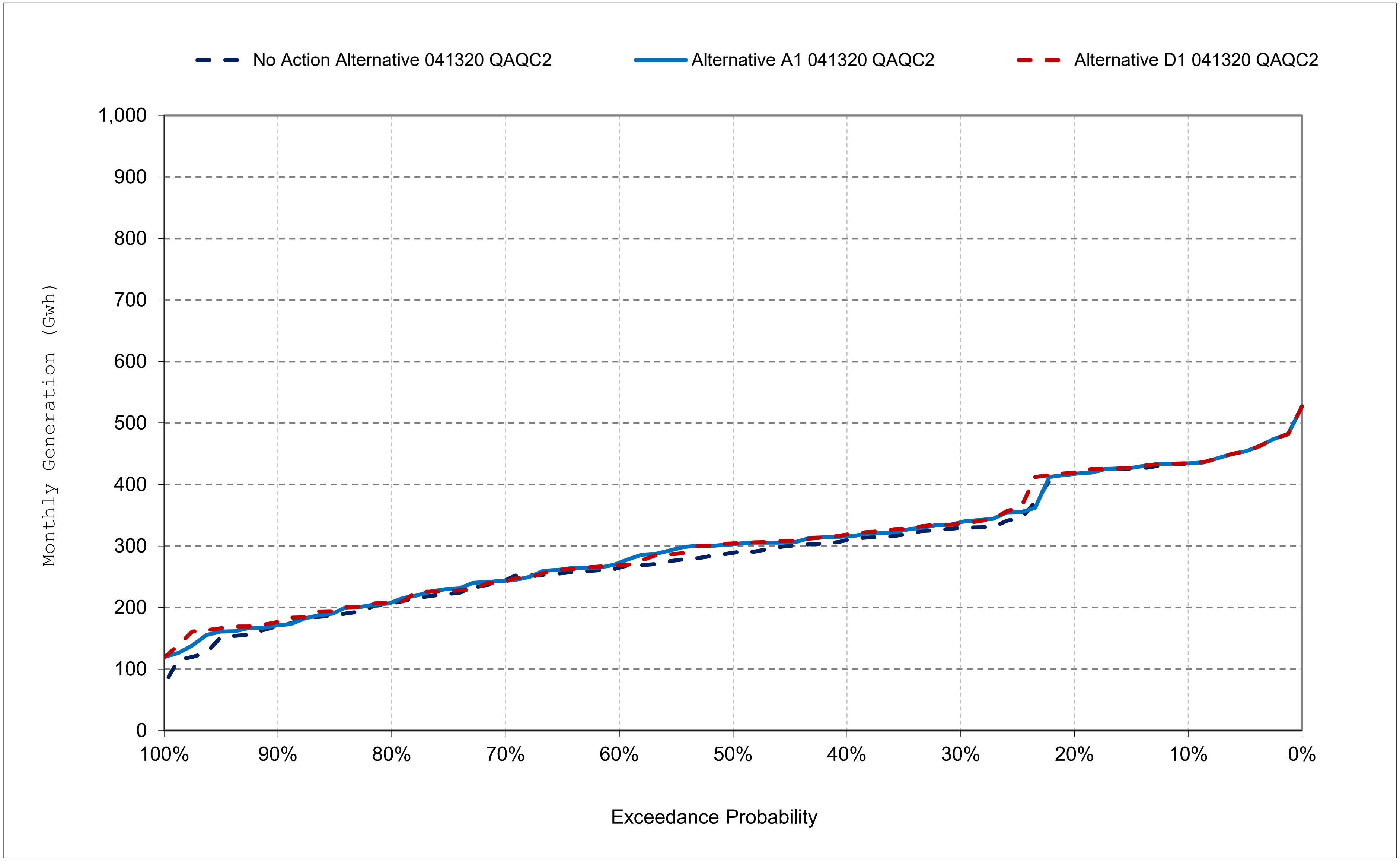


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

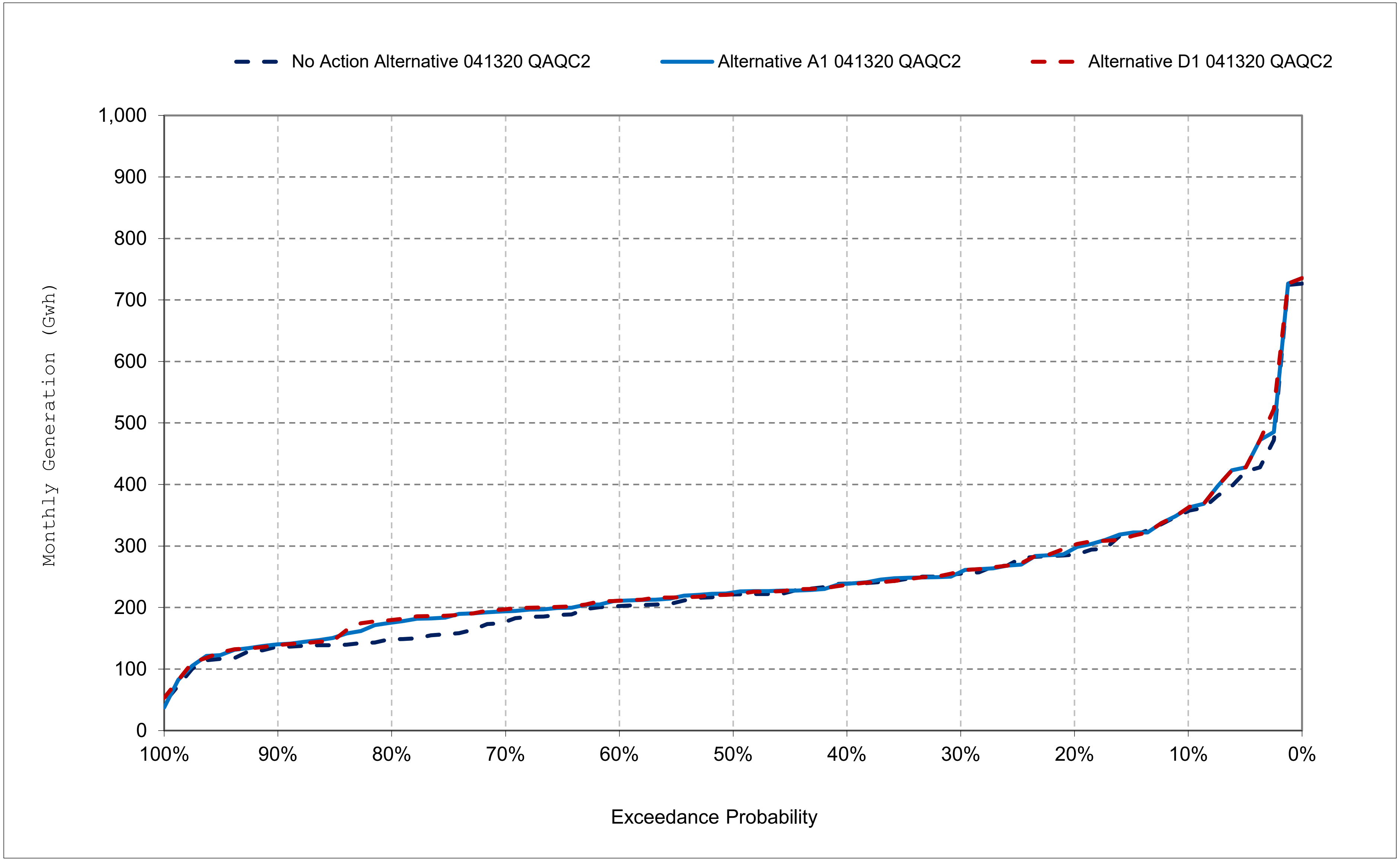
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-7. CVP Total Generation, October



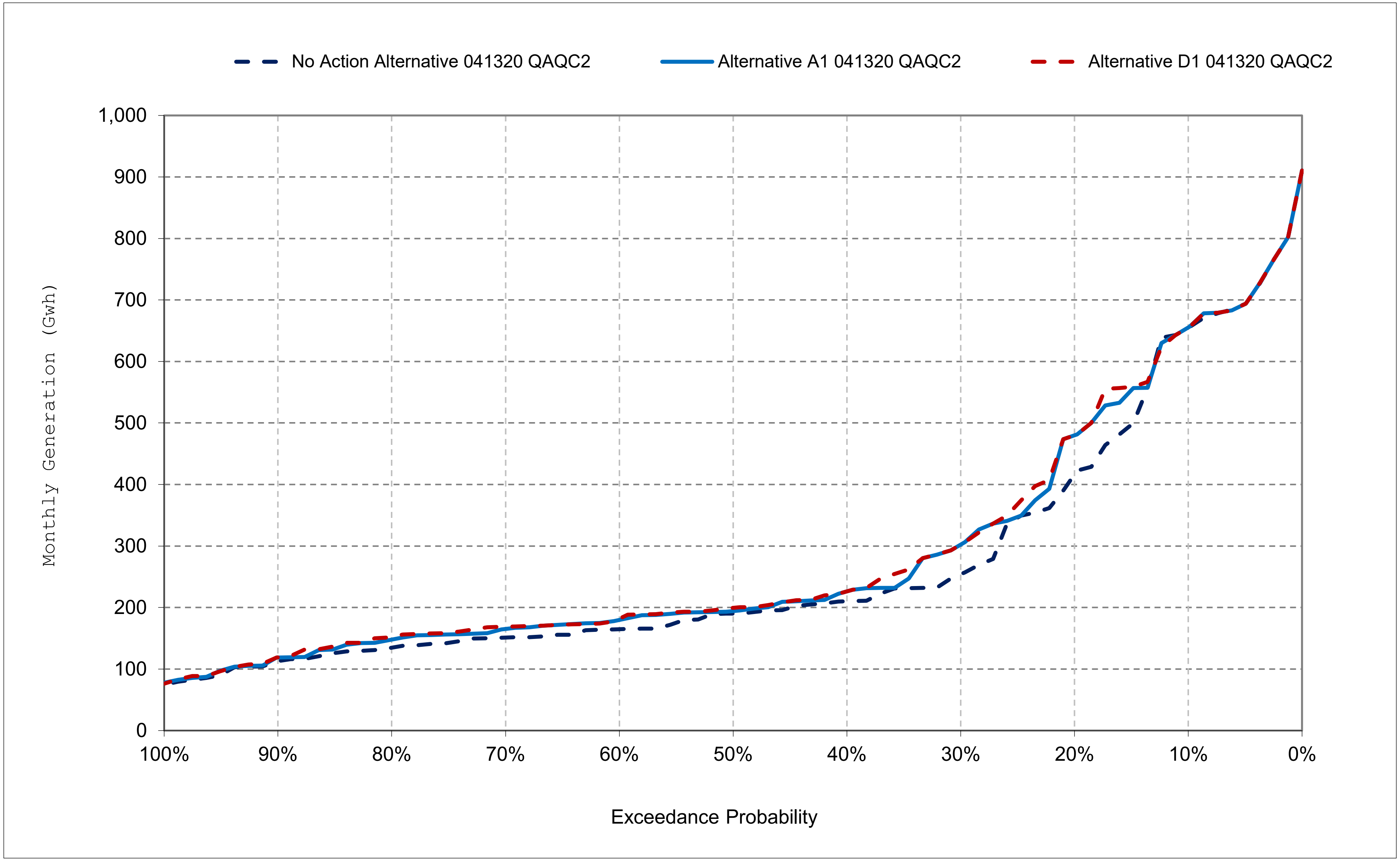
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-8. CVP Total Generation, November



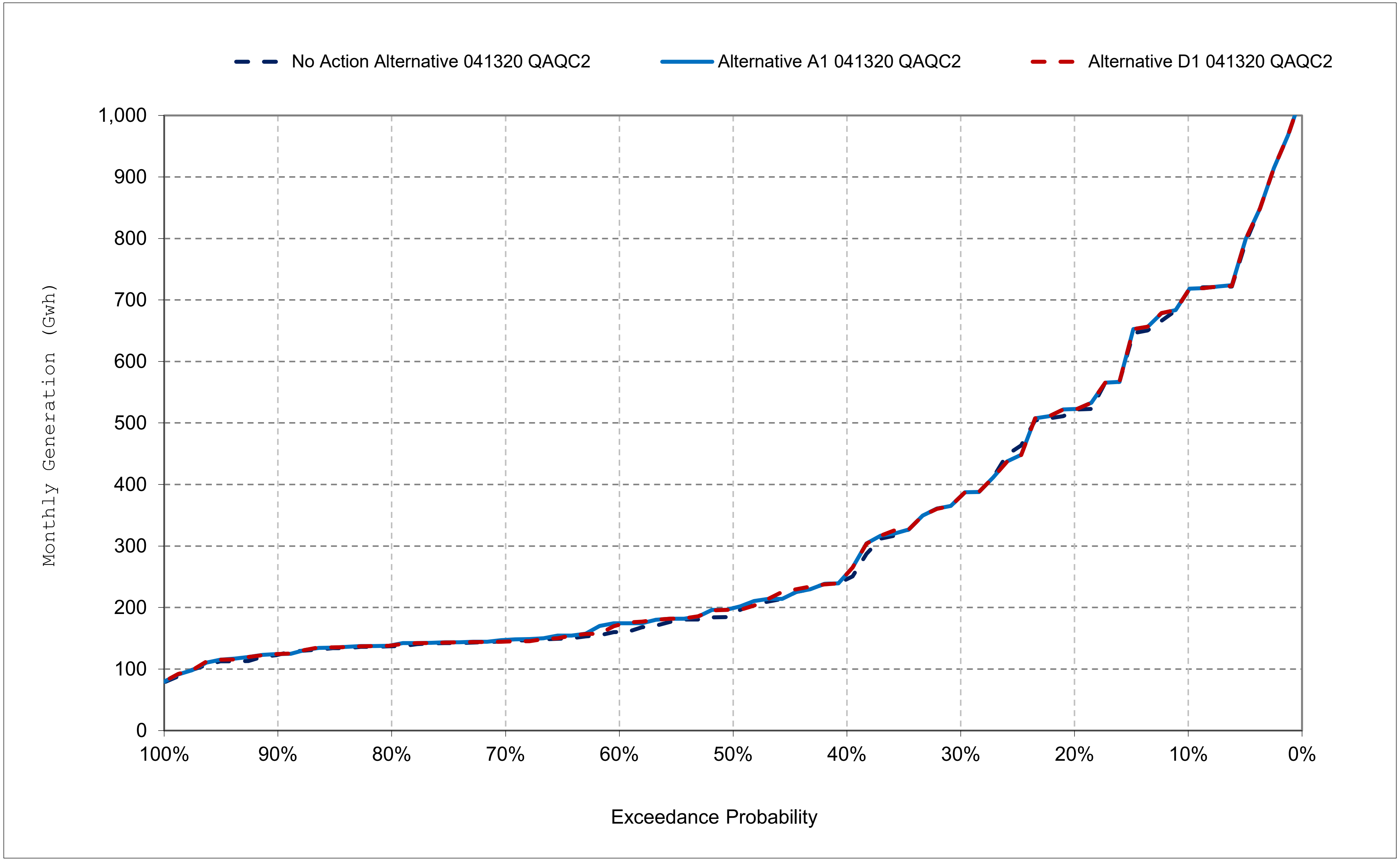
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-9. CVP Total Generation, December



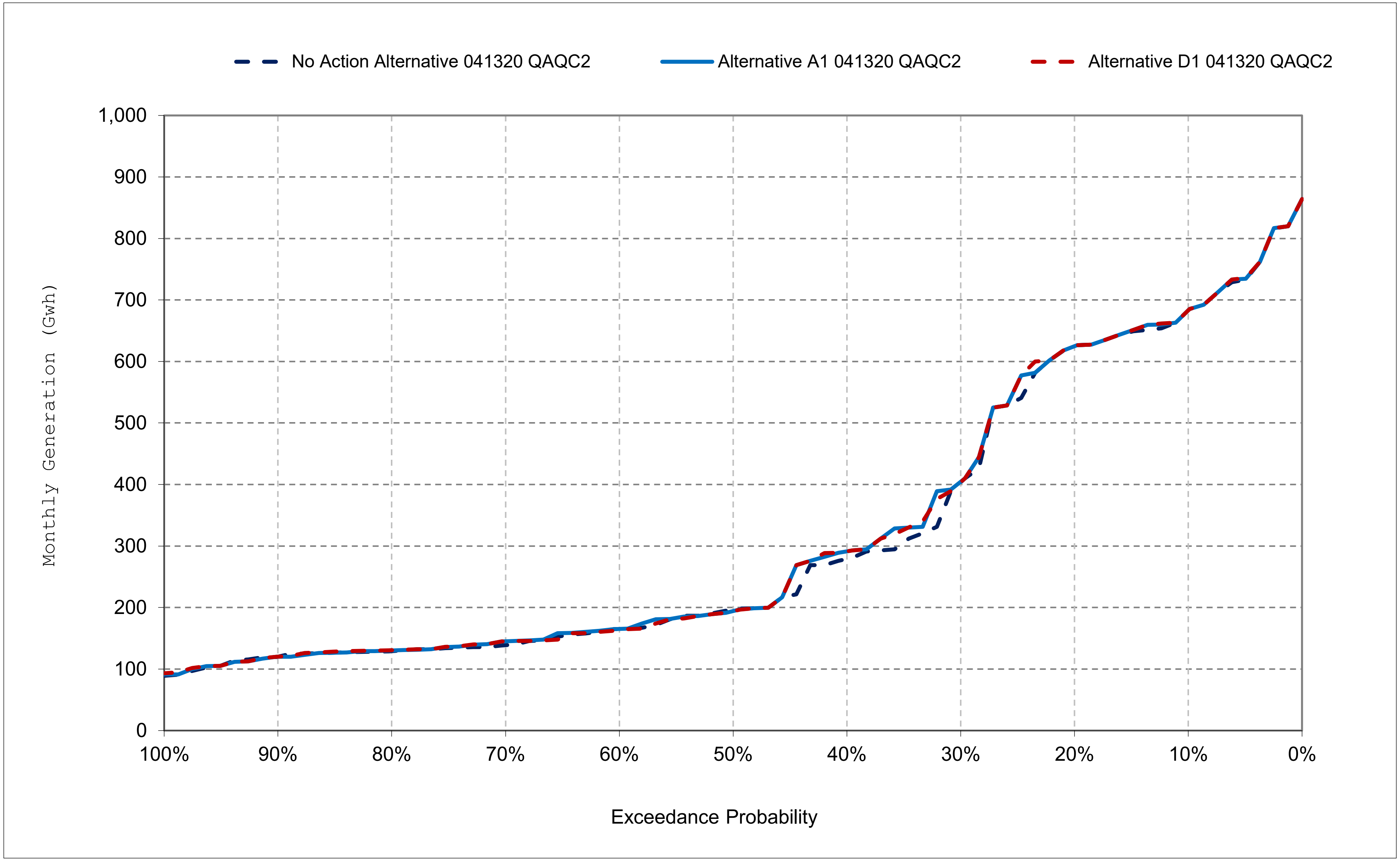
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-10. CVP Total Generation, January



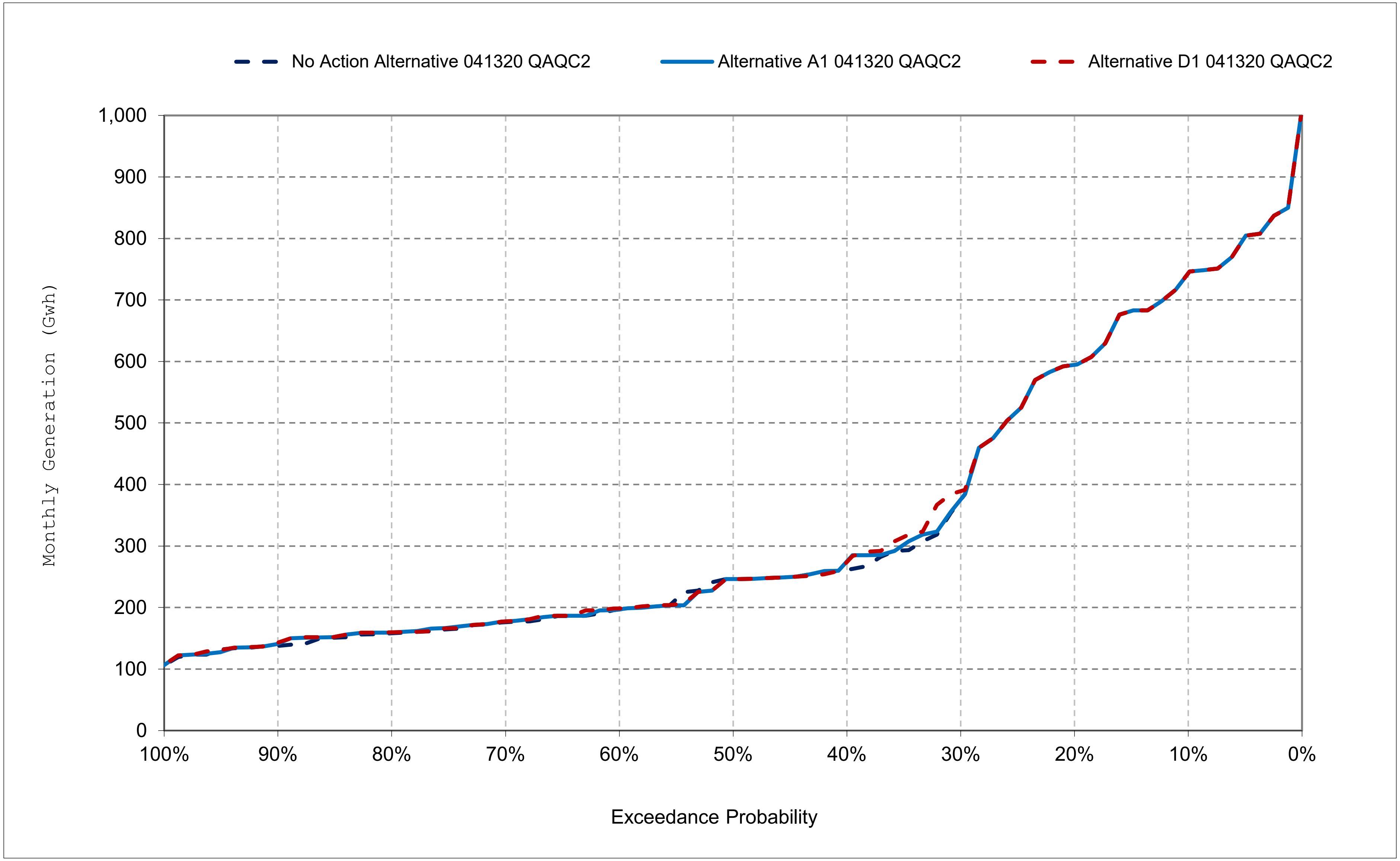
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-11. CVP Total Generation, February



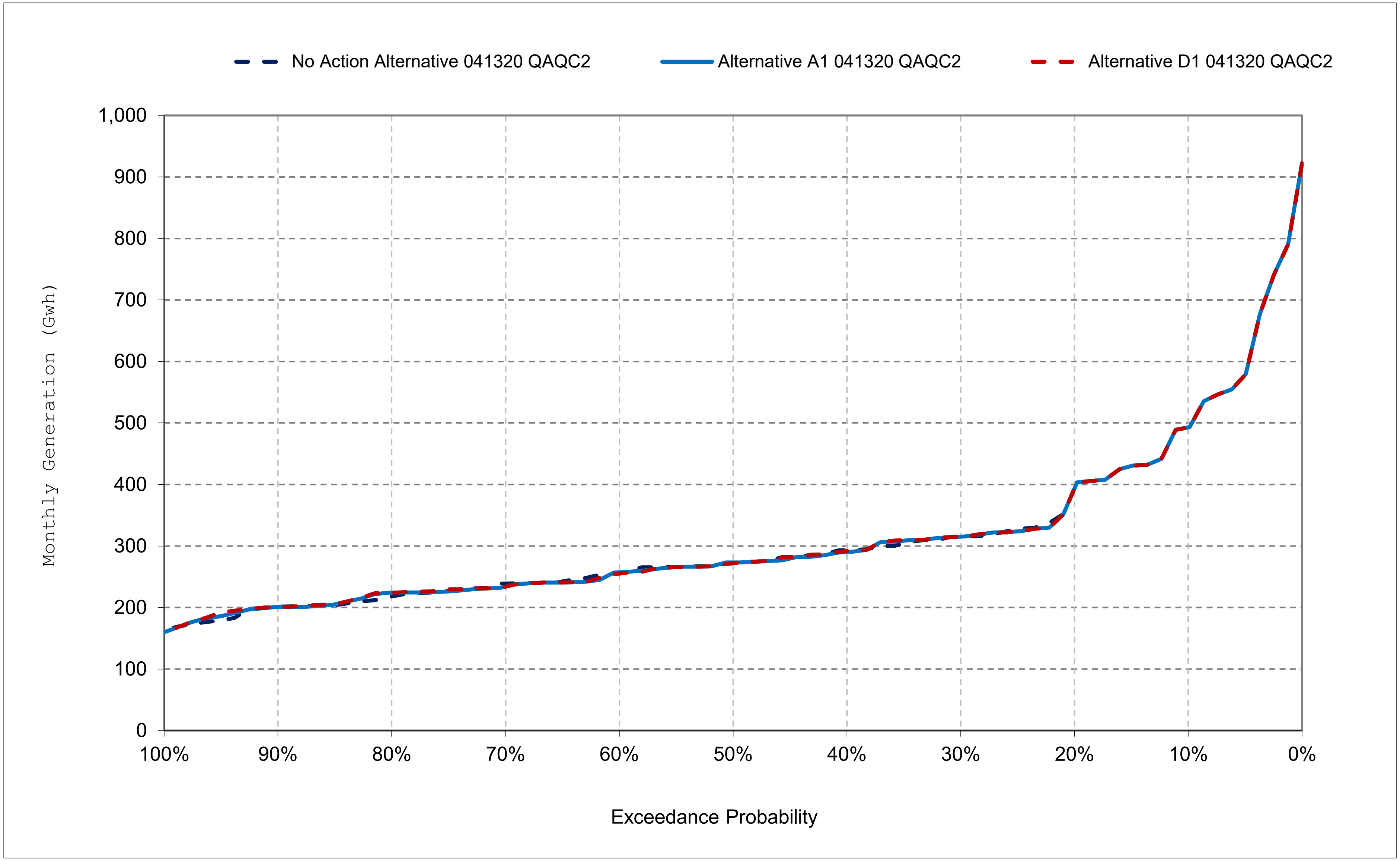
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-12. CVP Total Generation, March



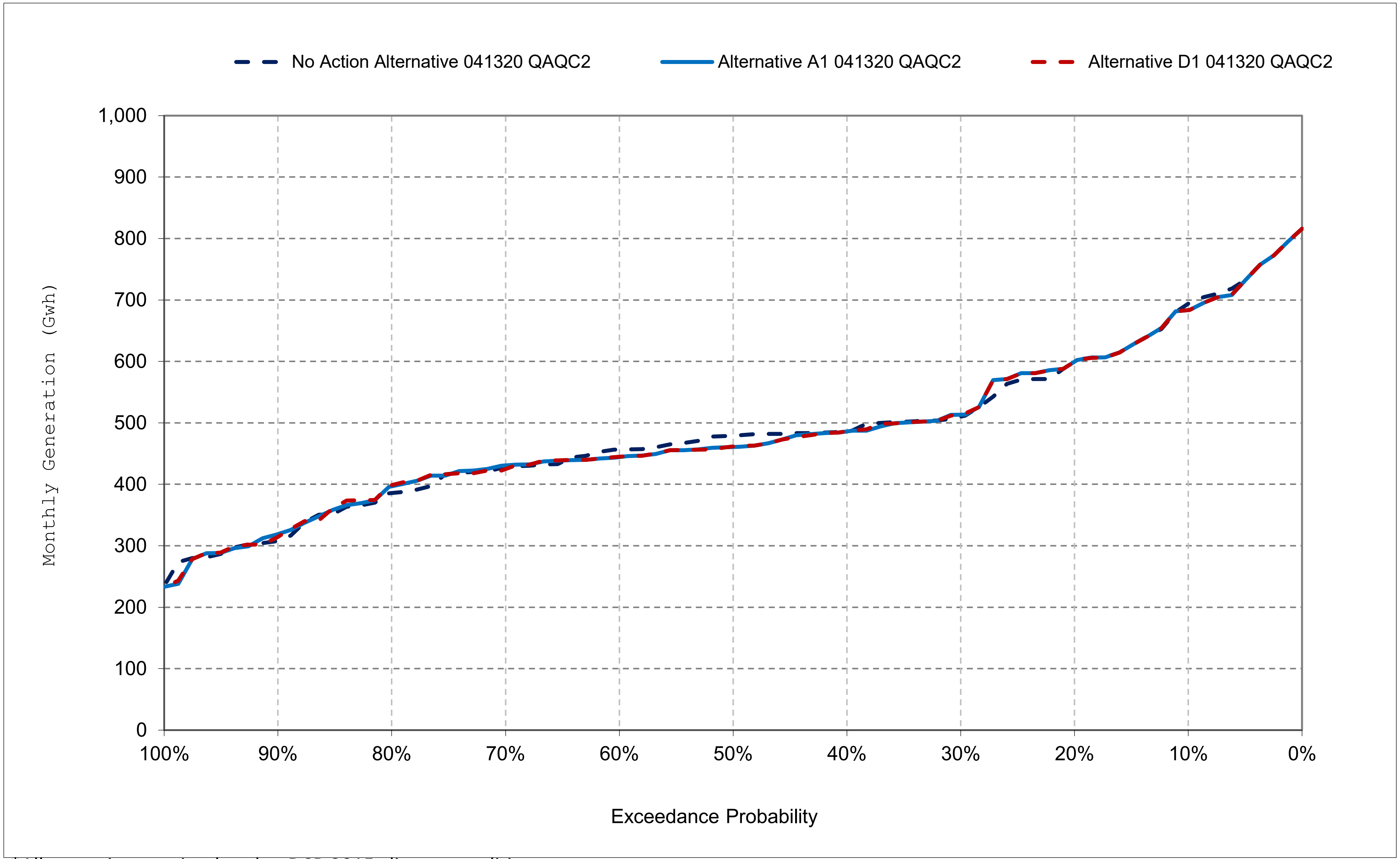
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-13. CVP Total Generation, April



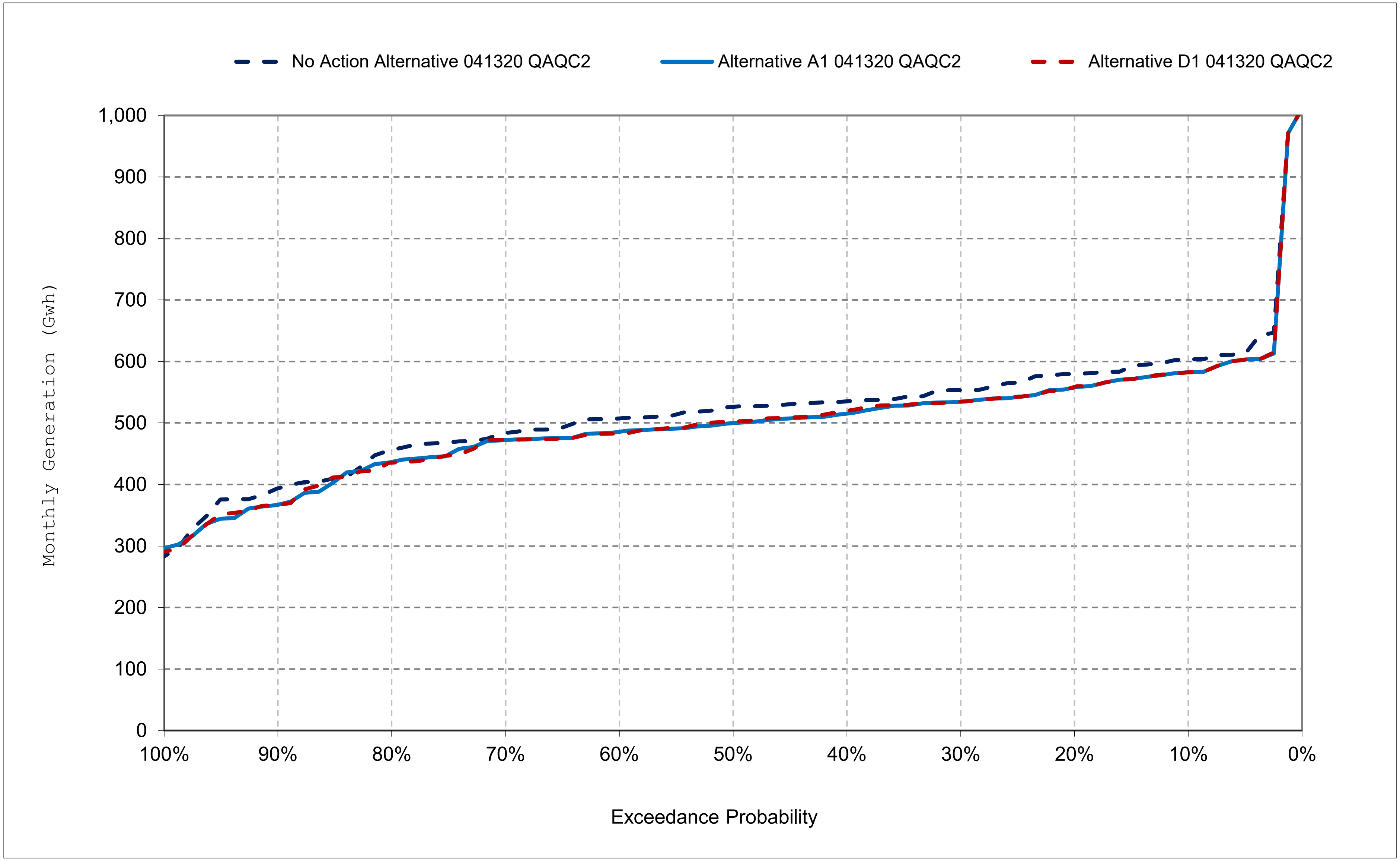
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-14. CVP Total Generation, May



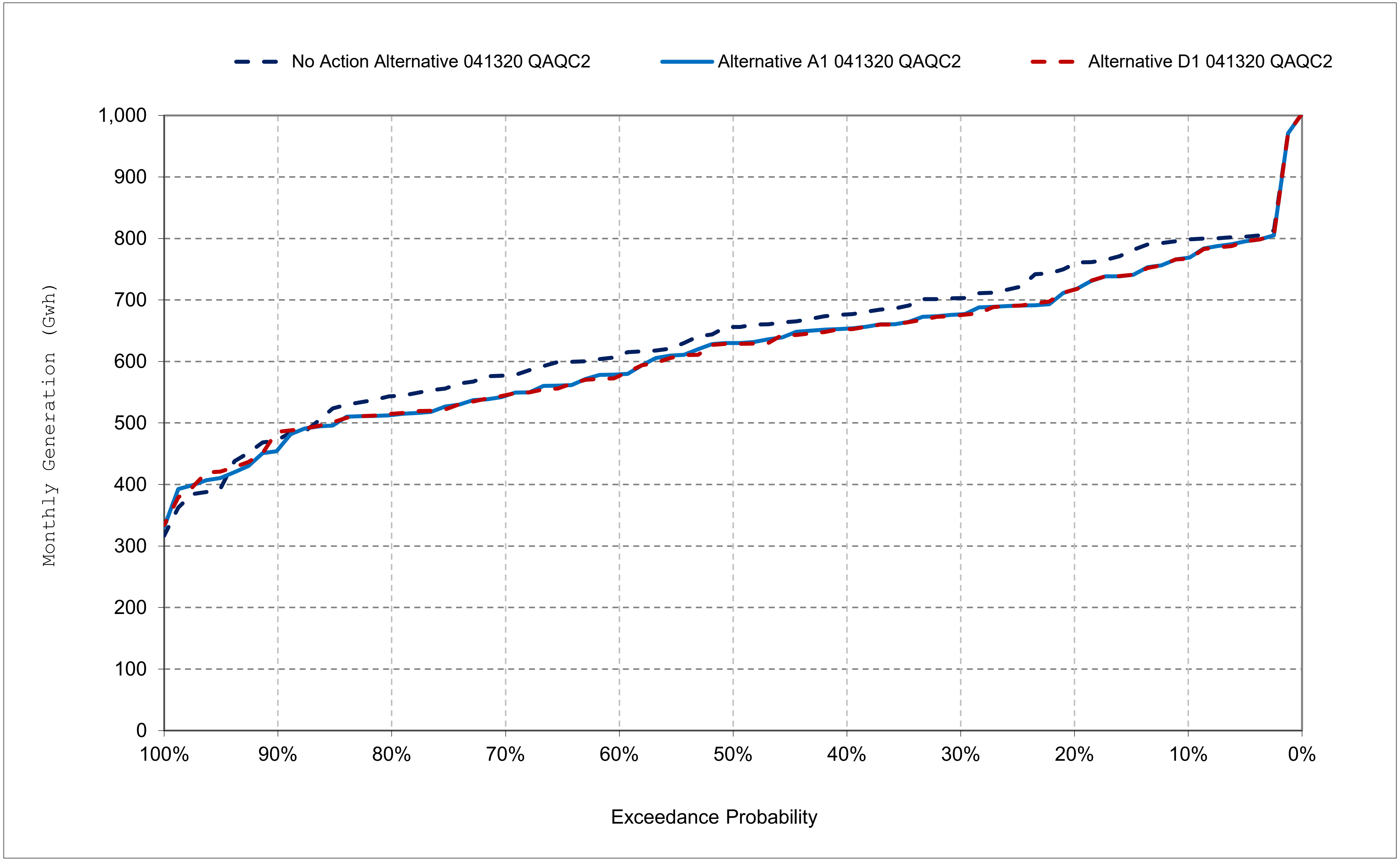
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-15. CVP Total Generation, June



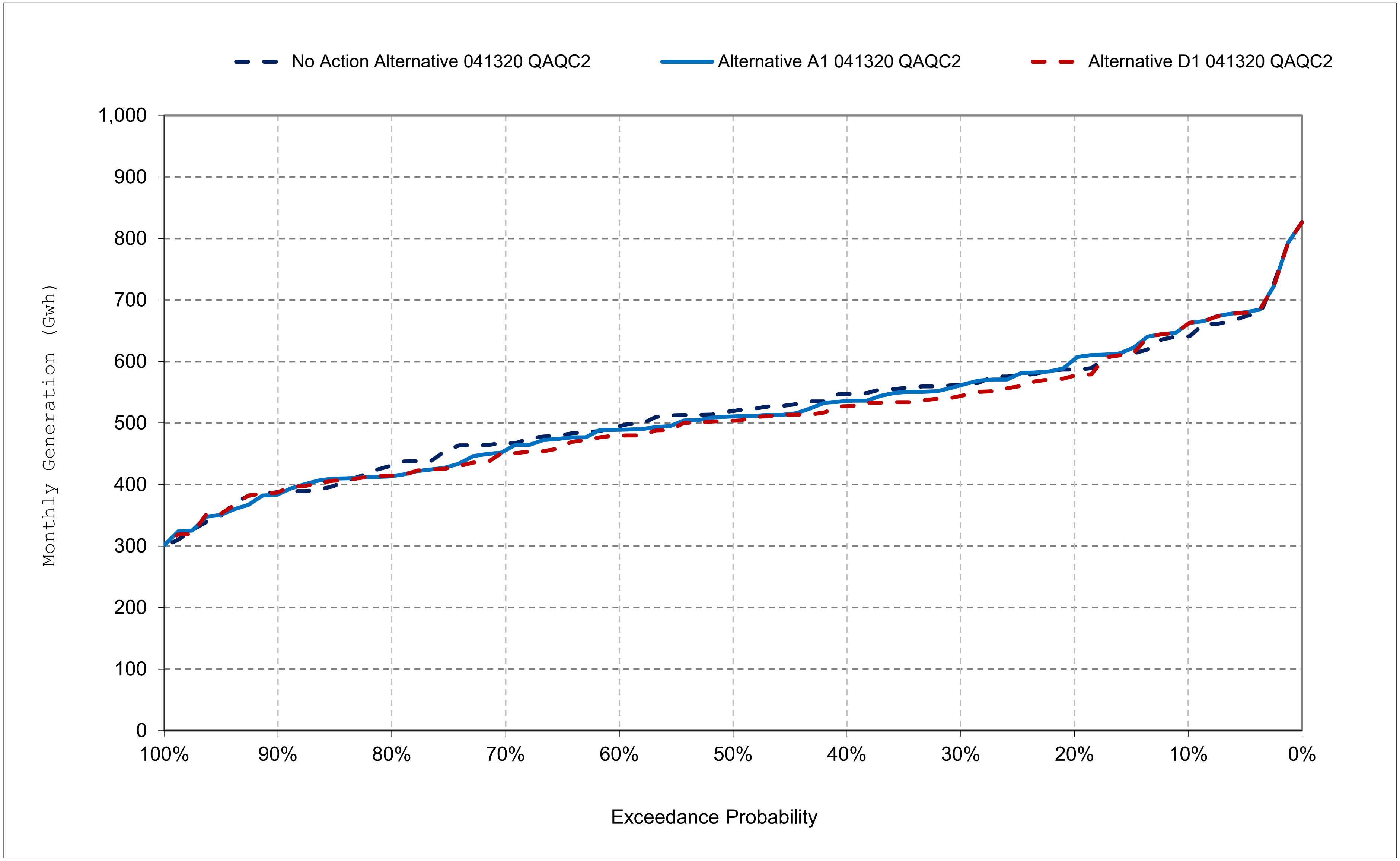
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-16. CVP Total Generation, July



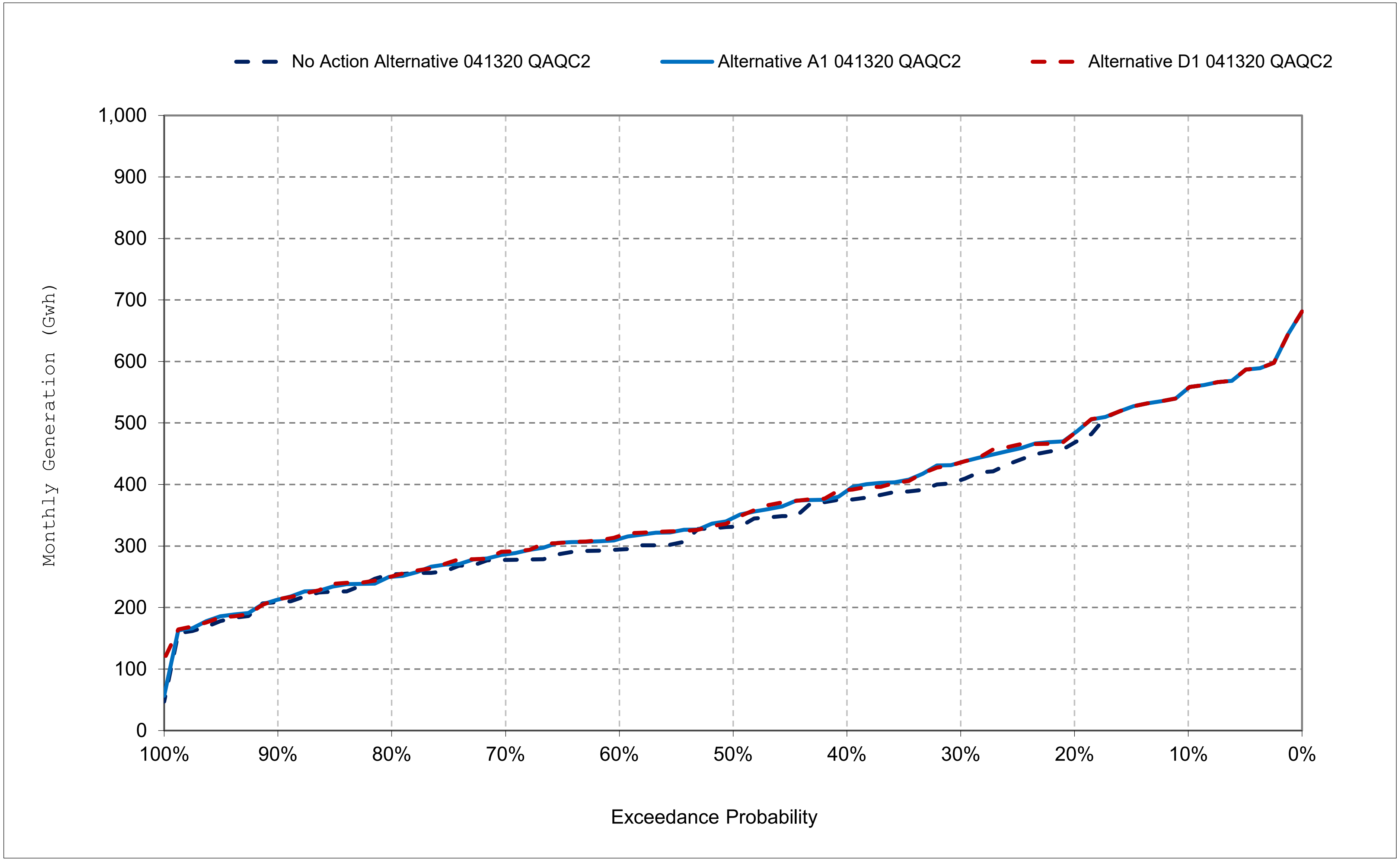
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-17. CVP Total Generation, August



*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-2-18. CVP Total Generation, September



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-3-1. CVP Total Energy Use, Monthly Energy Use

No Action Alternative 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	126	161	167	163	151	155	130	122	153	170	159	114
20%	119	153	159	154	144	144	115	104	142	169	157	111
30%	116	140	154	149	138	129	100	98	126	163	155	109
40%	96	129	148	145	131	111	90	92	118	153	148	100
50%	80	127	146	137	124	102	83	84	110	143	138	86
60%	73	100	135	133	117	93	64	78	104	136	133	81
70%	68	89	124	126	114	86	54	70	92	113	128	71
80%	64	72	106	111	107	78	46	55	83	106	121	61
90%	53	62	81	101	82	68	31	49	64	78	98	45
Long Term												
Full Simulation Period[a]	89	115	134	134	122	108	81	84	109	136	138	87
Water Year Types[b,c]												
Wet (32%)	111	147	159	140	128	123	111	110	141	168	162	91
Above Normal (15%)	81	155	148	138	129	121	102	97	124	147	149	56
Below Normal (17%)	111	97	142	133	126	98	78	83	103	126	128	121
Dry (22%)	70	80	108	134	118	93	55	65	91	126	120	93
Critical (15%)	55	76	93	116	106	96	33	45	60	82	110	62

Alternative A1 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	126	162	168	171	157	160	128	122	153	170	158	114
20%	118	150	159	161	151	146	112	114	143	167	157	112
30%	115	141	154	156	144	134	100	99	125	163	155	109
40%	100	135	149	151	138	114	91	93	119	155	148	107
50%	88	130	145	142	129	105	85	87	109	147	140	98
60%	75	111	136	137	126	98	68	79	104	139	136	85
70%	67	90	130	131	123	94	55	73	101	128	130	75
80%	61	76	104	117	115	80	43	57	86	106	124	71
90%	46	66	81	106	103	71	33	50	67	87	108	47
Long Term												
Full Simulation Period[a]	89	116	136	141	132	113	81	86	111	139	140	91
Water Year Types[b,c]												
Wet (32%)	114	147	161	145	136	126	112	111	141	169	162	94
Above Normal (15%)	84	151	146	148	142	122	98	97	123	150	149	69
Below Normal (17%)	113	110	147	140	135	106	81	87	109	140	131	122
Dry (22%)	61	81	116	140	126	97	55	67	92	122	126	97
Critical (15%)	57	77	88	126	120	107	36	45	65	87	117	62

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	0	8	6	6	-3	0	0	0	-1	0
20%	-1	-3	-1	7	7	2	-3	10	1	-2	0	1
30%	-1	1	0	7	6	5	0	1	-1	-1	0	1
40%	4	6	1	6	7	3	1	1	1	2	0	7
50%	8	3	0	4	5	3	2	3	-1	4	2	11
60%	2	11	2	4	8	5	4	1	1	3	3	3
70%	-1	2	6	5	9	8	1	3	8	15	2	3
80%	-3	4	-2	5	8	2	-3	2	3	0	4	11
90%	-7	4	-1	5	21	4	2	1	3	9	10	2
Long Term												
Full Simulation Period[a]	0	2	2	7	10	5	1	1	2	3	3	4
Water Year Types[b,c]												
Wet (32%)	3	0	2	5	8	3	1	1	0	1	0	4
Above Normal (15%)	3	-4	-3	10	13	0	-4	0	-1	3	0	14
Below Normal (17%)	1	13	4	7	10	8	2	4	6	14	3	1
Dry (22%)	-9	1	8	6	8	4	0	2	1	-3	6	5
Critical (15%)	2	2	-5	10	14	11	2	0	5	6	6	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-3-2. CVP Total Energy Use, Monthly Energy Use

No Action Alternative 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	126	161	167	163	151	155	130	122	153	170	159	114
20%	119	153	159	154	144	144	115	104	142	169	157	111
30%	116	140	154	149	138	129	100	98	126	163	155	109
40%	96	129	148	145	131	111	90	92	118	153	148	100
50%	80	127	146	137	124	102	83	84	110	143	138	86
60%	73	100	135	133	117	93	64	78	104	136	133	81
70%	68	89	124	126	114	86	54	70	92	113	128	71
80%	64	72	106	111	107	78	46	55	83	106	121	61
90%	53	62	81	101	82	68	31	49	64	78	98	45
Long Term												
Full Simulation Period[a]	89	115	134	134	122	108	81	84	109	136	138	87
Water Year Types[b,c]												
Wet (32%)	111	147	159	140	128	123	111	110	141	168	162	91
Above Normal (15%)	81	155	148	138	129	121	102	97	124	147	149	56
Below Normal (17%)	111	97	142	133	126	98	78	83	103	126	128	121
Dry (22%)	70	80	108	134	118	93	55	65	91	126	120	93
Critical (15%)	55	76	93	116	106	96	33	45	60	82	110	62

Alternative D1 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	128	162	169	170	158	166	127	122	153	170	158	115
20%	119	150	160	161	151	146	111	116	143	167	156	112
30%	115	141	156	155	144	133	98	99	124	163	155	110
40%	102	135	148	149	138	119	91	93	119	156	151	108
50%	83	130	144	143	130	106	85	86	110	144	141	101
60%	72	106	137	137	126	101	69	79	105	137	135	87
70%	66	90	130	133	123	94	55	72	97	125	131	76
80%	59	70	106	120	117	85	43	57	87	106	123	72
90%	45	48	79	114	97	73	33	52	68	91	112	45
Long Term												
Full Simulation Period[a]	89	114	136	141	133	114	80	86	111	139	140	92
Water Year Types[b,c]												
Wet (32%)	113	147	161	145	137	127	110	111	141	169	162	95
Above Normal (15%)	86	151	146	148	140	123	98	97	123	150	148	69
Below Normal (17%)	113	102	145	141	137	106	81	86	107	137	129	120
Dry (22%)	58	78	119	139	128	99	55	68	93	122	128	100
Critical (15%)	56	75	86	128	120	111	36	45	65	89	117	62

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	2	1	2	7	7	11	-3	0	0	0	-1	1
20%	0	-3	1	7	7	2	-3	11	1	-2	-1	1
30%	0	2	1	6	6	4	-2	1	-2	-1	0	1
40%	6	6	0	4	8	8	1	1	1	3	3	8
50%	4	3	-2	5	6	4	1	1	0	1	3	15
60%	-1	6	2	4	8	8	6	1	2	1	3	5
70%	-2	2	6	6	9	8	1	2	4	12	3	4
80%	-5	-2	0	9	10	7	-3	2	4	0	2	11
90%	-8	-14	-3	13	15	5	2	3	4	13	14	0
Long Term												
Full Simulation Period[a]	-1	0	2	7	10	6	0	1	2	3	3	5
Water Year Types[b,c]												
Wet (32%)	3	0	3	5	8	4	-1	1	0	1	0	4
Above Normal (15%)	5	-4	-2	9	11	2	-4	0	-1	3	-1	14
Below Normal (17%)	2	5	2	8	11	7	3	3	4	11	1	-1
Dry (22%)	-12	-2	11	6	9	6	0	3	2	-4	8	8
Critical (15%)	0	-1	-7	12	14	15	3	0	5	7	6	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-3-3. CVP Total Energy Use, Monthly Energy Use

Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Energy Use (GWh)											
Probability of Exceedance												
10%	126	162	168	171	157	160	128	122	153	170	158	114
20%	118	150	159	161	151	146	112	114	143	167	157	112
30%	115	141	154	156	144	134	100	99	125	163	155	109
40%	100	135	149	151	138	114	91	93	119	155	148	107
50%	88	130	145	142	129	105	85	87	109	147	140	98
60%	75	111	136	137	126	98	68	79	104	139	136	85
70%	67	90	130	131	123	94	55	73	101	128	130	75
80%	61	76	104	117	115	80	43	57	86	106	124	71
90%	46	66	81	106	103	71	33	50	67	87	108	47
Long Term												
Full Simulation Period[a]	89	116	136	141	132	113	81	86	111	139	140	91
Water Year Types[b,c]												
Wet (32%)	114	147	161	145	136	126	112	111	141	169	162	94
Above Normal (15%)	84	151	146	148	142	122	98	97	123	150	149	69
Below Normal (17%)	113	110	147	140	135	106	81	87	109	140	131	122
Dry (22%)	61	81	116	140	126	97	55	67	92	122	126	97
Critical (15%)	57	77	88	126	120	107	36	45	65	87	117	62

Alternative D1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Energy Use (GWh)											
Probability of Exceedance												
10%	128	162	169	170	158	166	127	122	153	170	158	115
20%	119	150	160	161	151	146	111	116	143	167	156	112
30%	115	141	156	155	144	133	98	99	124	163	155	110
40%	102	135	148	149	138	119	91	93	119	156	151	108
50%	83	130	144	143	130	106	85	86	110	144	141	101
60%	72	106	137	137	126	101	69	79	105	137	135	87
70%	66	90	130	133	123	94	55	72	97	125	131	76
80%	59	70	106	120	117	85	43	57	87	106	123	72
90%	45	48	79	114	97	73	33	52	68	91	112	45
Long Term												
Full Simulation Period[a]	89	114	136	141	133	114	80	86	111	139	140	92
Water Year Types[b,c]												
Wet (32%)	113	147	161	145	137	127	110	111	141	169	162	95
Above Normal (15%)	86	151	146	148	140	123	98	97	123	150	148	69
Below Normal (17%)	113	102	145	141	137	106	81	86	107	137	129	120
Dry (22%)	58	78	119	139	128	99	55	68	93	122	128	100
Critical (15%)	56	75	86	128	120	111	36	45	65	89	117	62

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Energy Use (GWh)											
Probability of Exceedance												
10%	2	1	2	-1	0	5	0	0	0	0	0	1
20%	0	-1	2	0	0	0	-1	1	0	0	-1	0
30%	0	1	1	-1	0	-1	-2	0	-1	0	0	0
40%	2	0	-1	-2	0	5	0	0	0	1	2	1
50%	-5	0	-1	1	1	1	0	-1	1	-2	1	3
60%	-3	-5	0	0	0	2	1	0	1	-2	0	2
70%	-2	0	-1	1	0	0	0	-2	-4	-3	1	1
80%	-2	-6	2	4	2	6	0	1	2	0	-1	1
90%	-1	-18	-2	7	-6	1	0	2	1	3	4	-2
Long Term												
Full Simulation Period[a]	-1	-2	1	0	0	1	-1	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	1	0	0	1	-3	0	0	0	0	0
Above Normal (15%)	2	0	1	0	-2	1	0	0	0	0	-1	0
Below Normal (17%)	1	-8	-2	1	1	0	0	-1	-2	-3	-2	-2
Dry (22%)	-3	-3	4	0	1	2	0	1	1	-1	2	3
Critical (15%)	-2	-2	-2	2	0	4	1	0	1	1	0	0

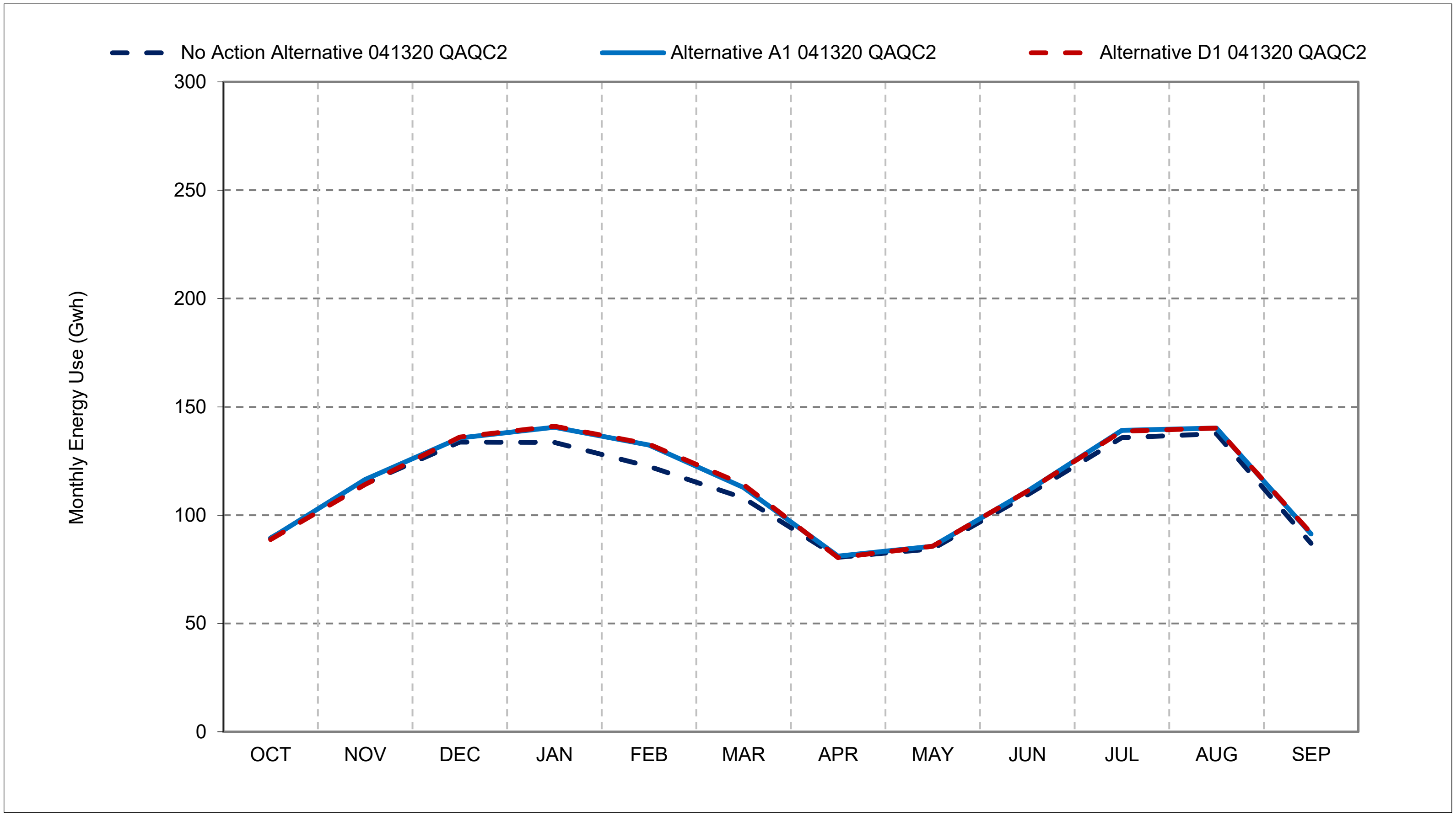
a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-1. CVP Total Energy Use, Long-Term Average Energy Use

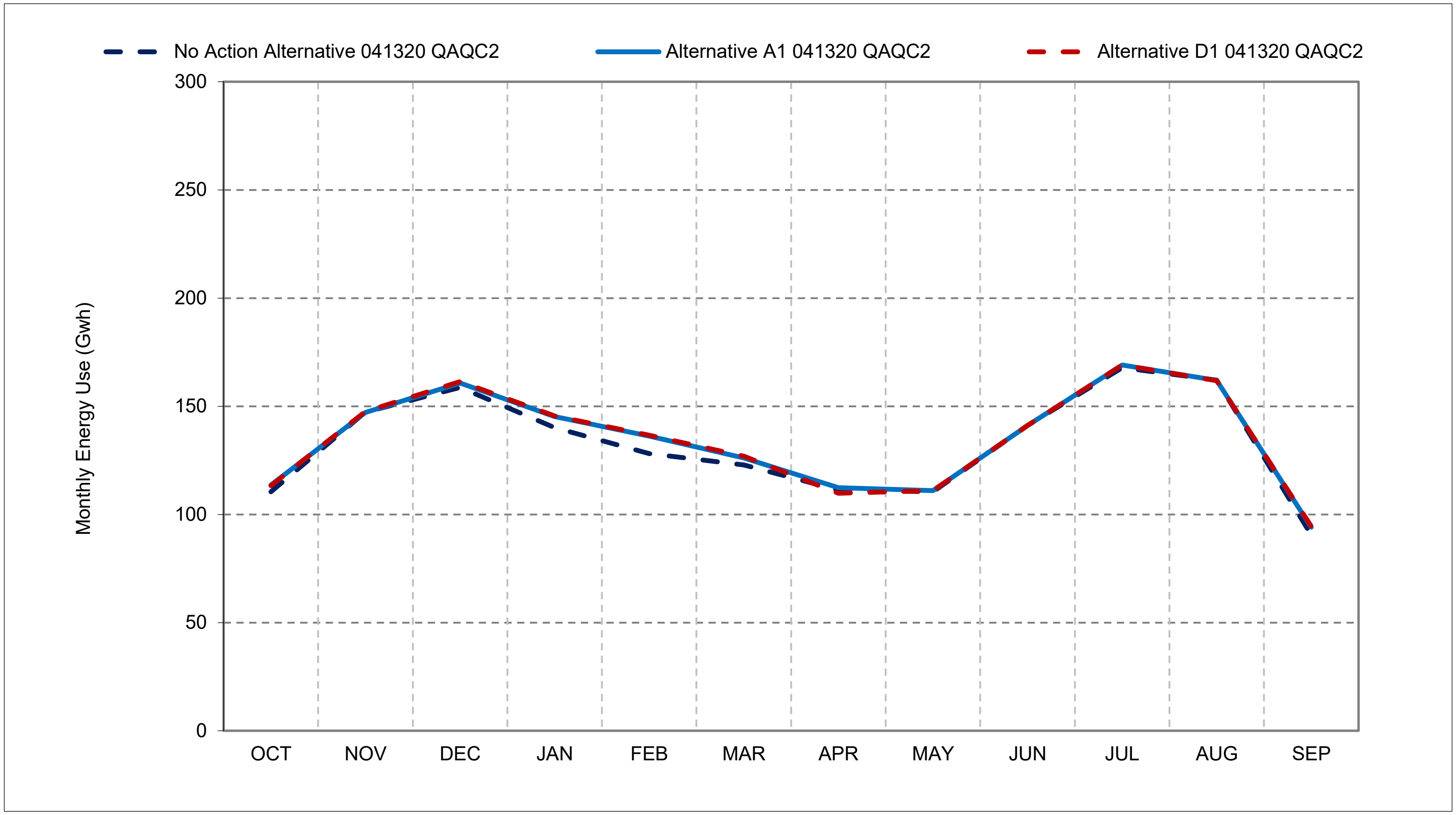


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-2. CVP Total Energy Use, Wet Year Average Energy Use

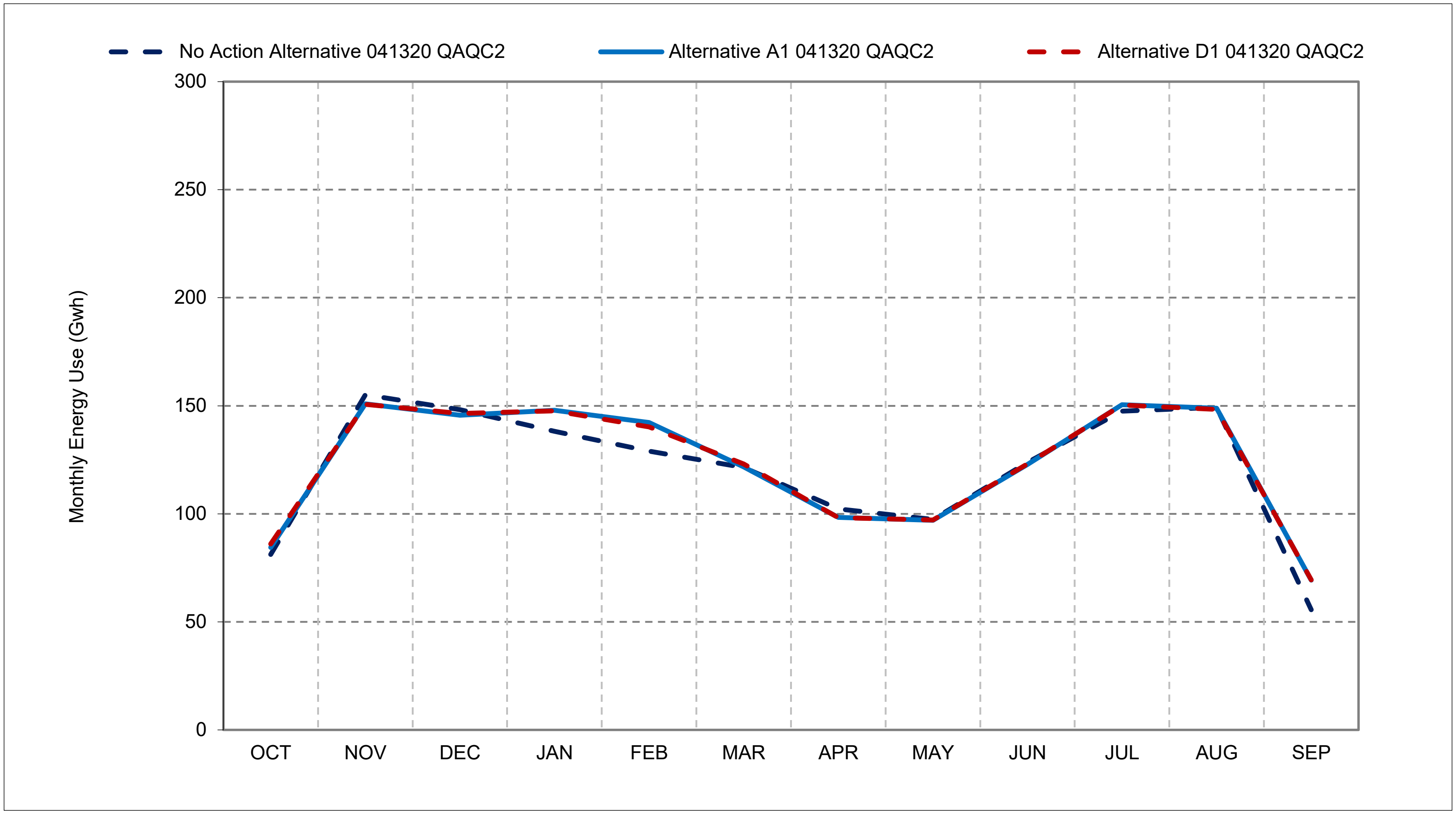


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-3. CVP Total Energy Use, Above Normal Year Average Energy Use

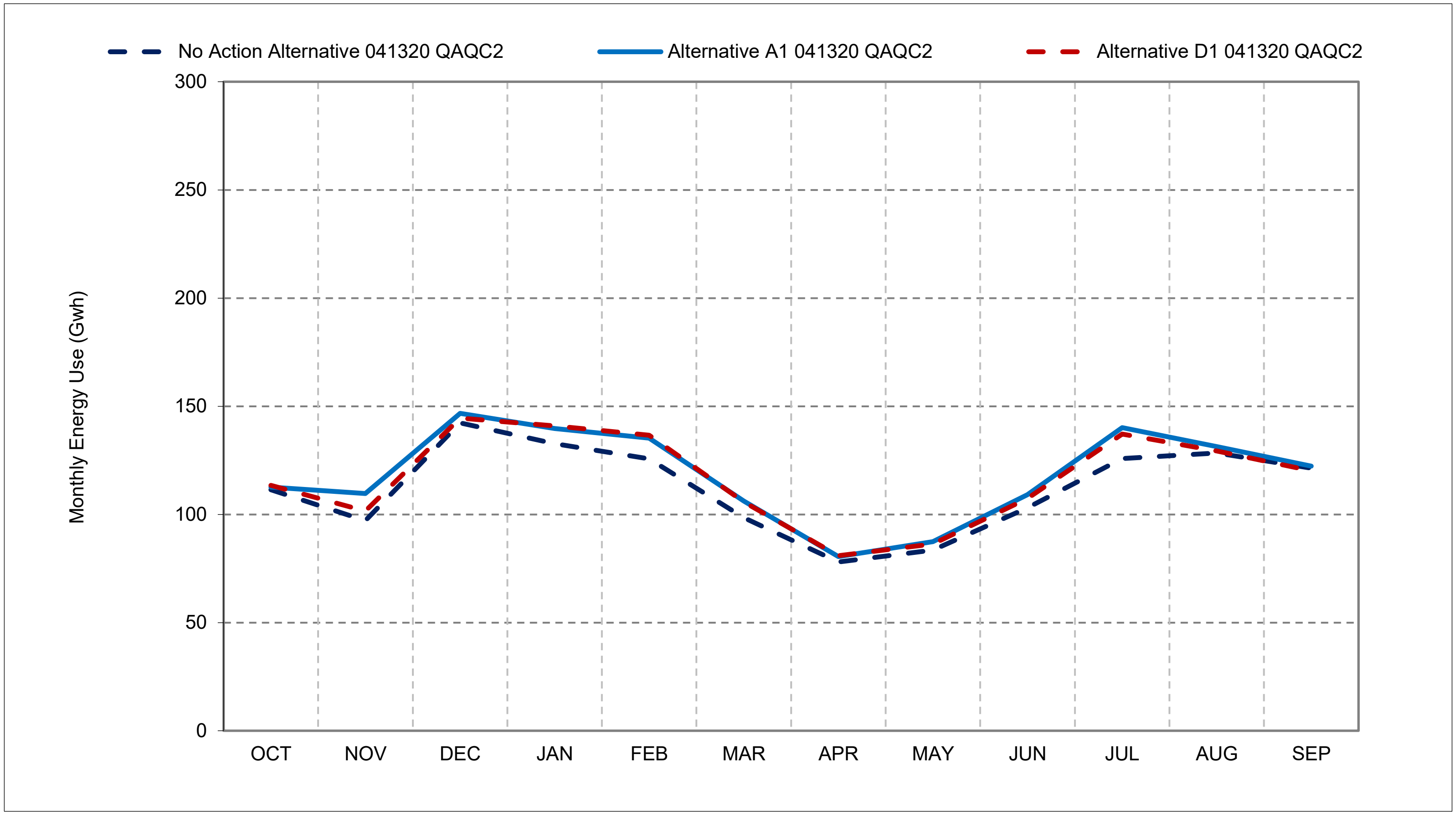


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-4. CVP Total Energy Use, Below Normal Year Average Energy Use

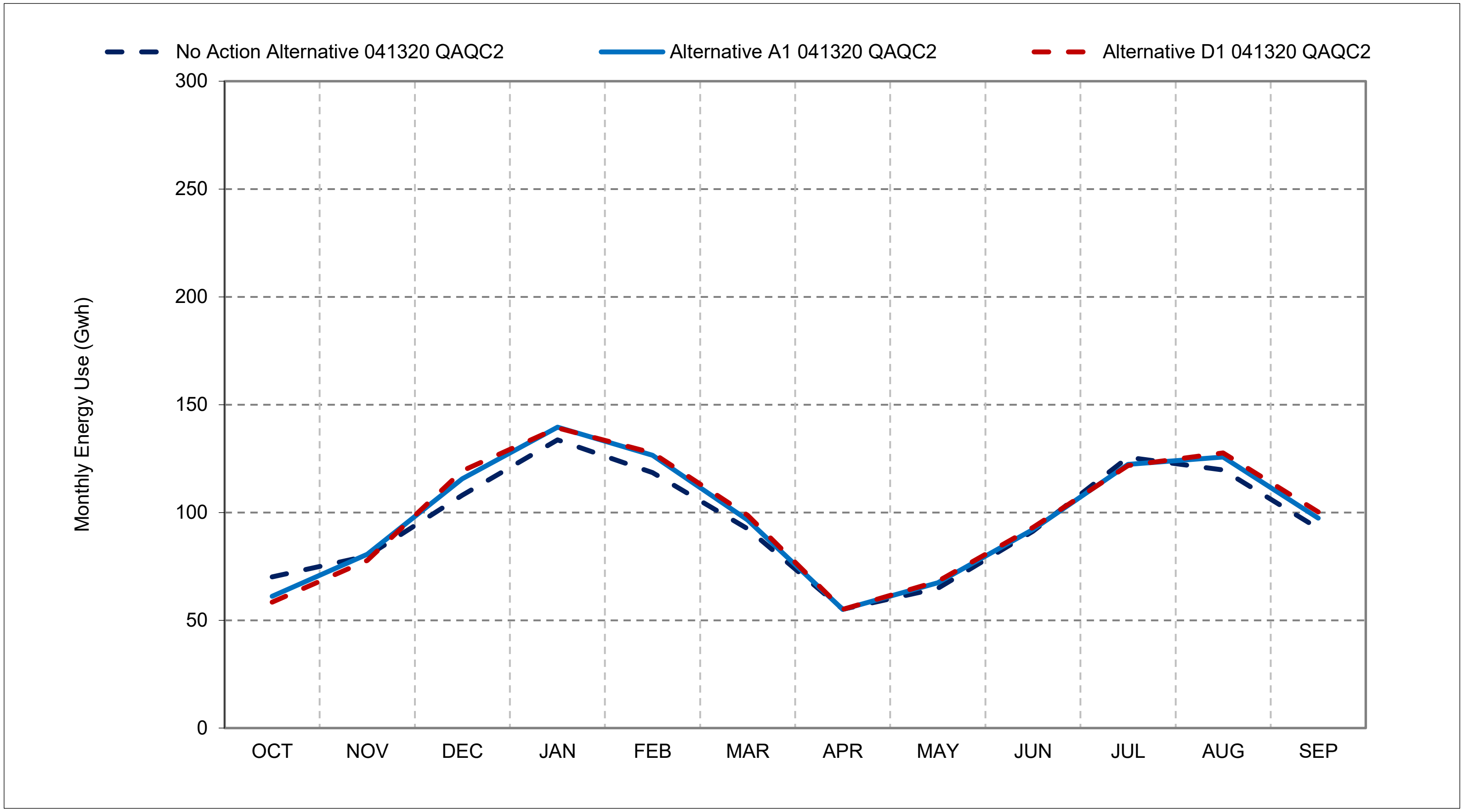


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-5. CVP Total Energy Use, Dry Year Average Energy Use

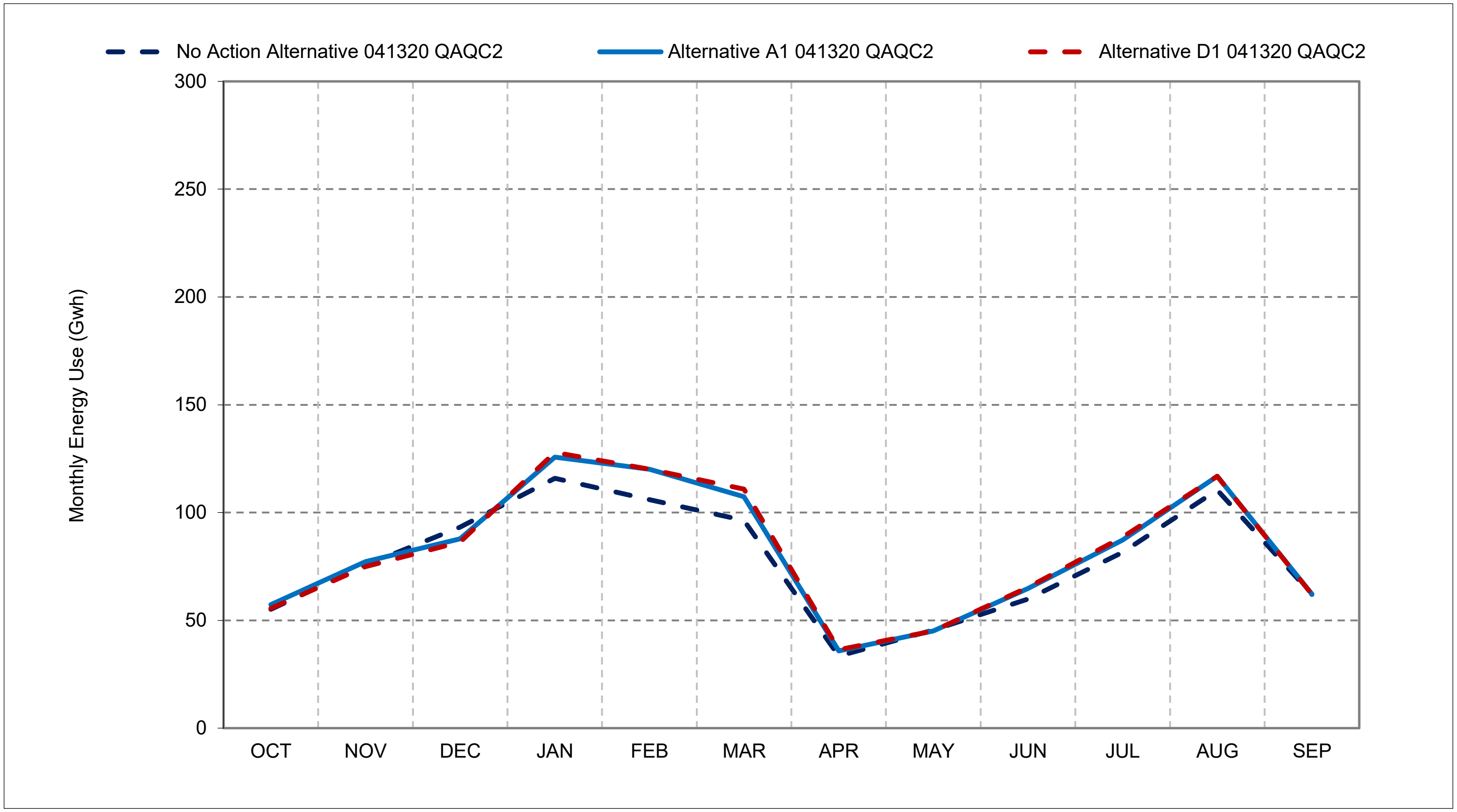


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-6. CVP Total Energy Use, Critical Year Average Energy Use

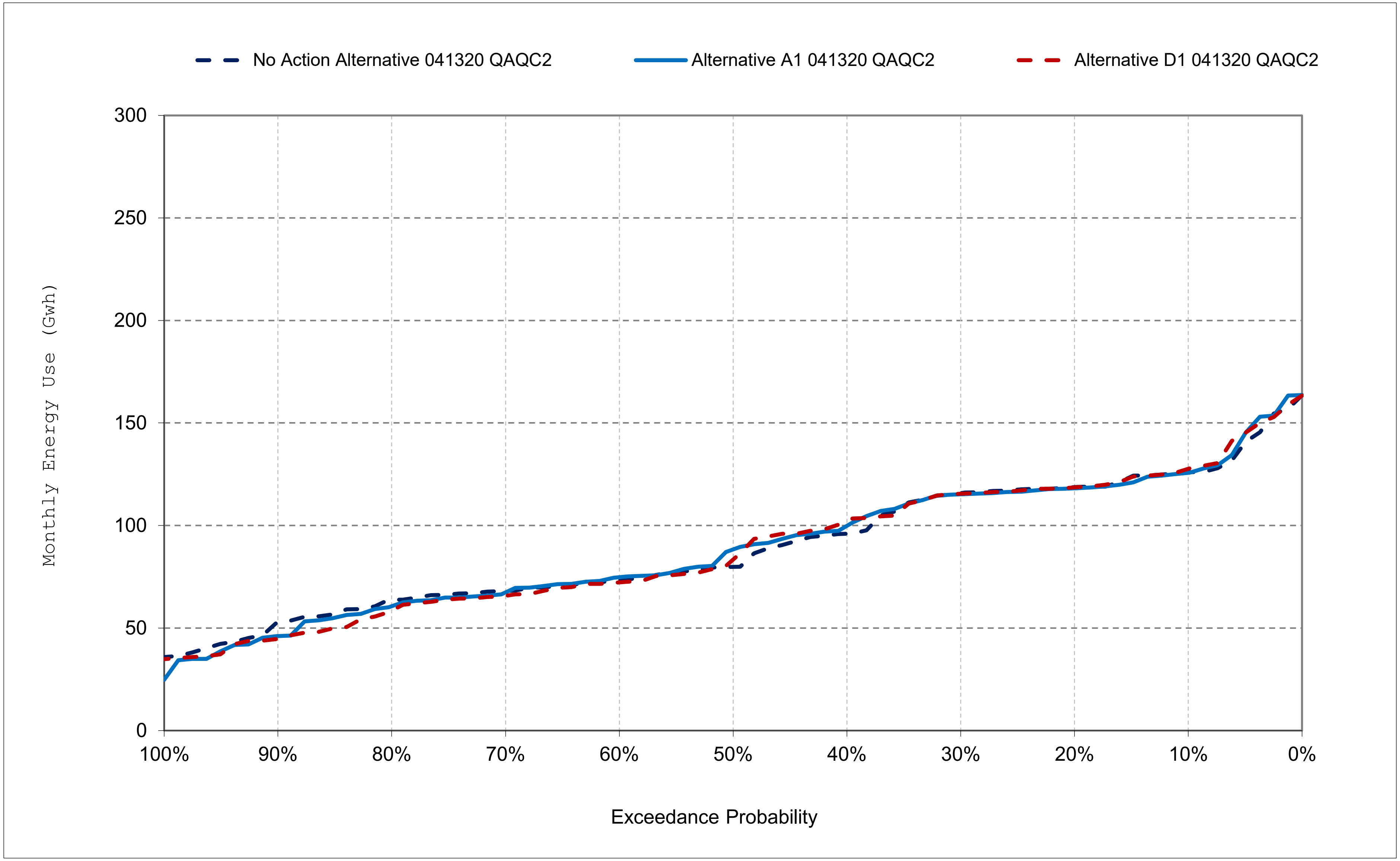


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

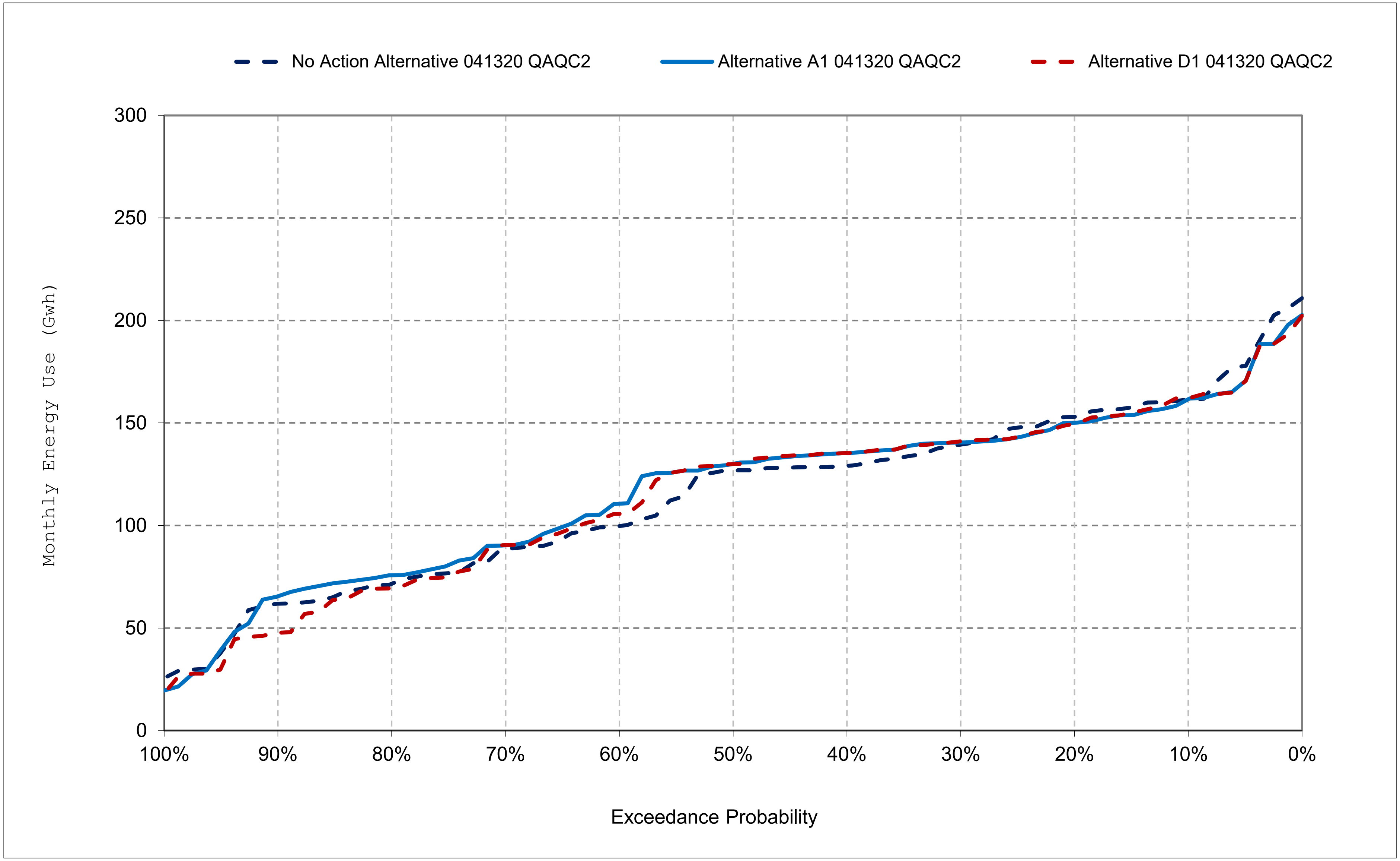
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-7. CVP Total Energy Use, October



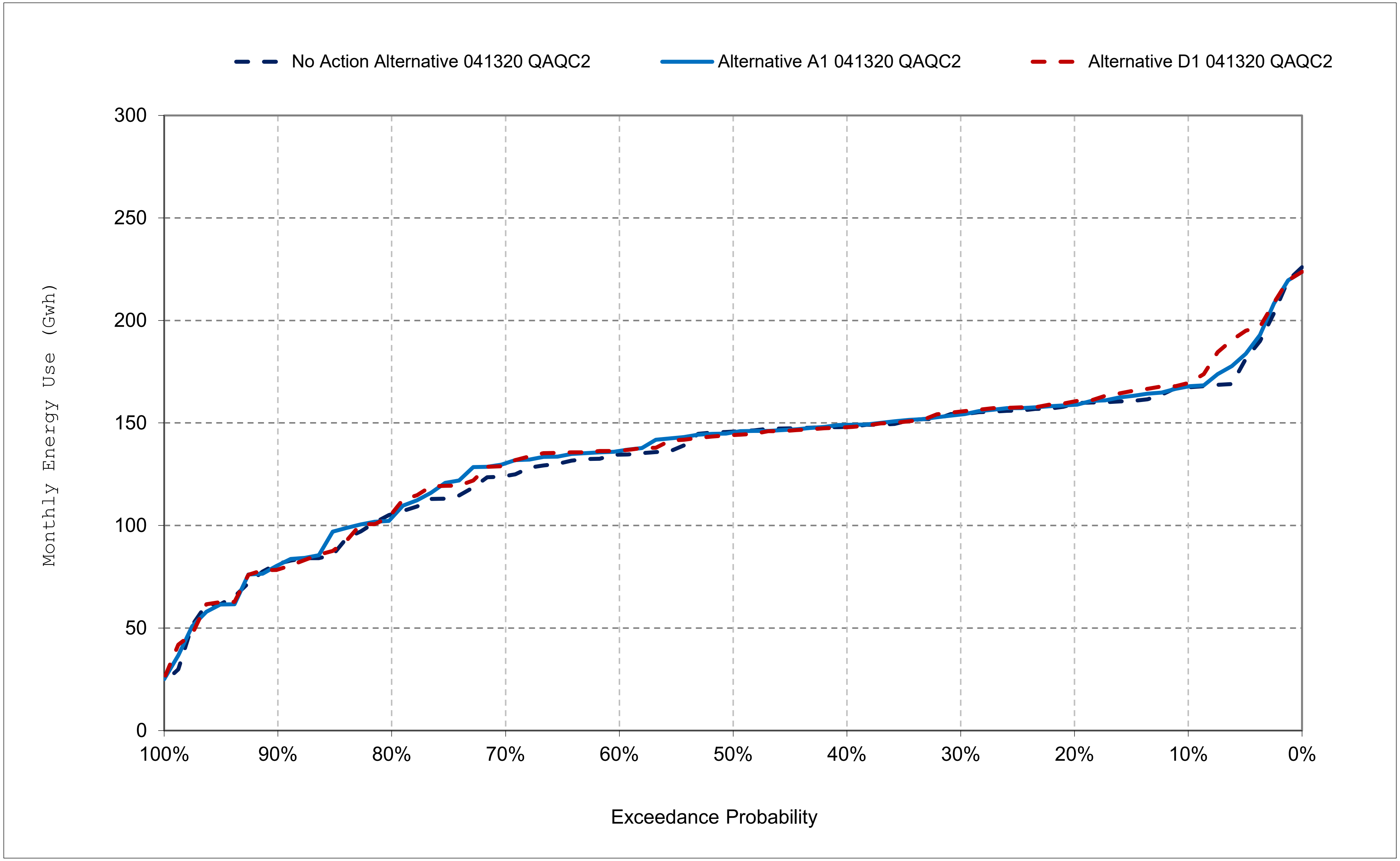
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-8. CVP Total Energy Use, November



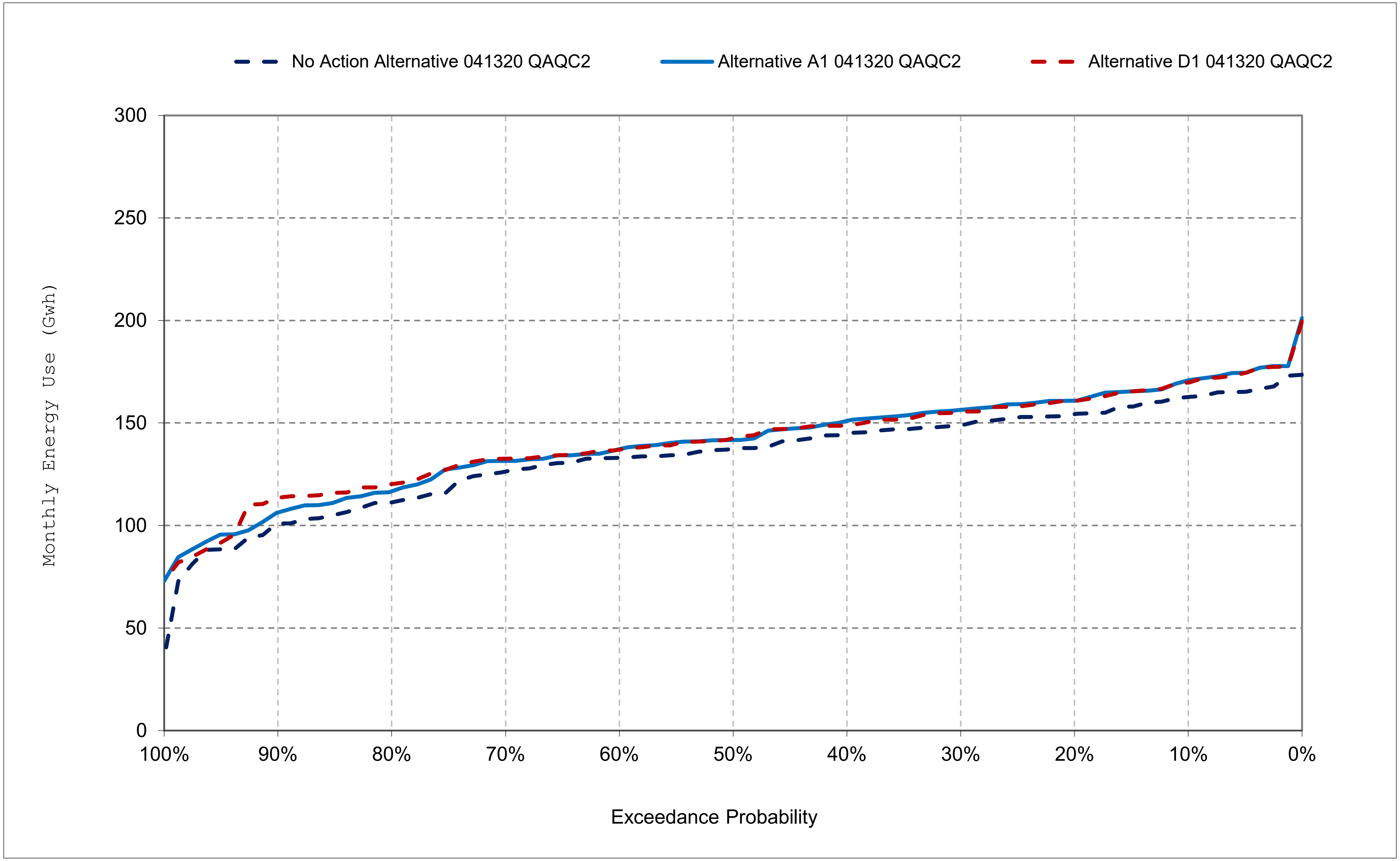
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-9. CVP Total Energy Use, December



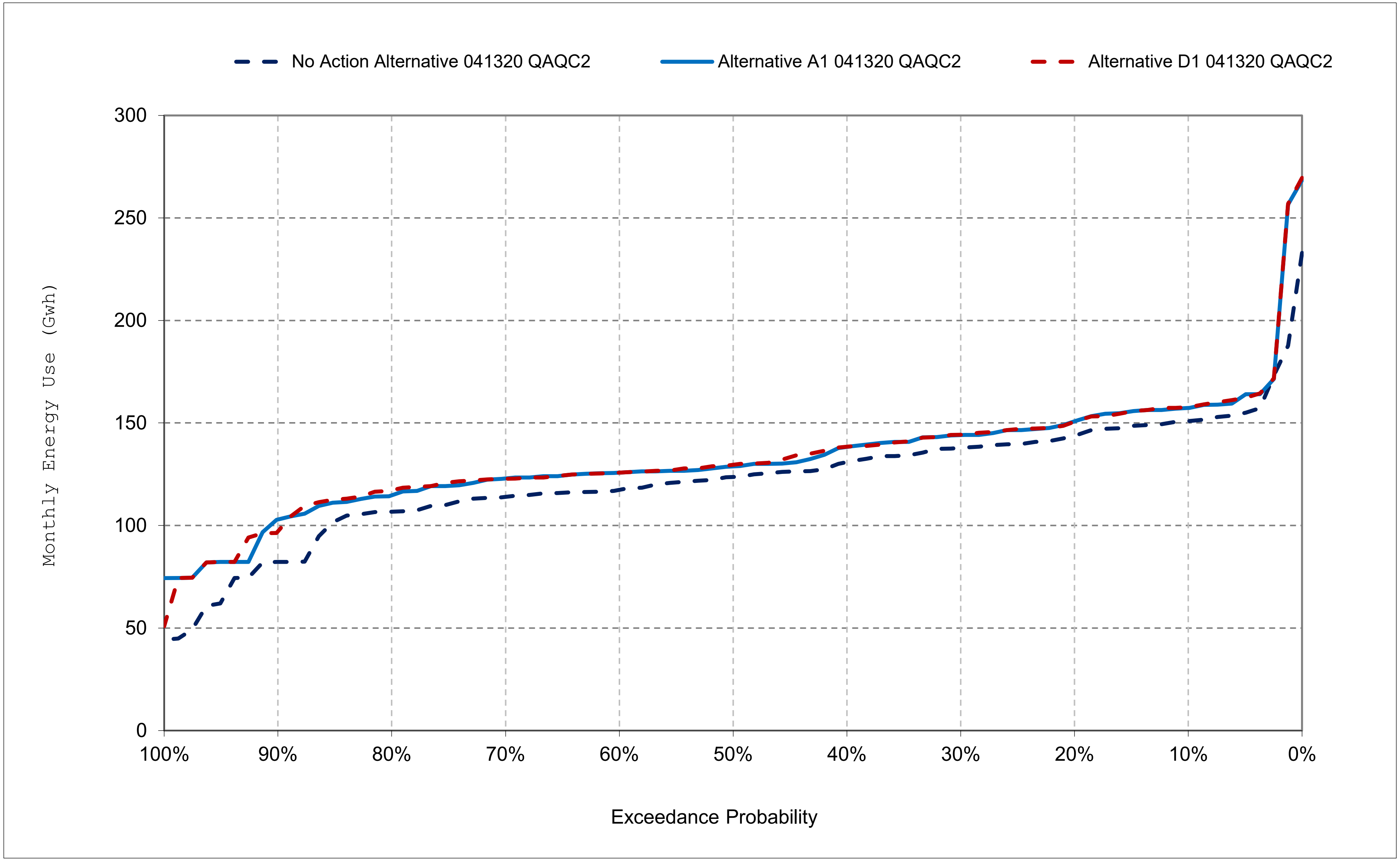
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-10. CVP Total Energy Use, January



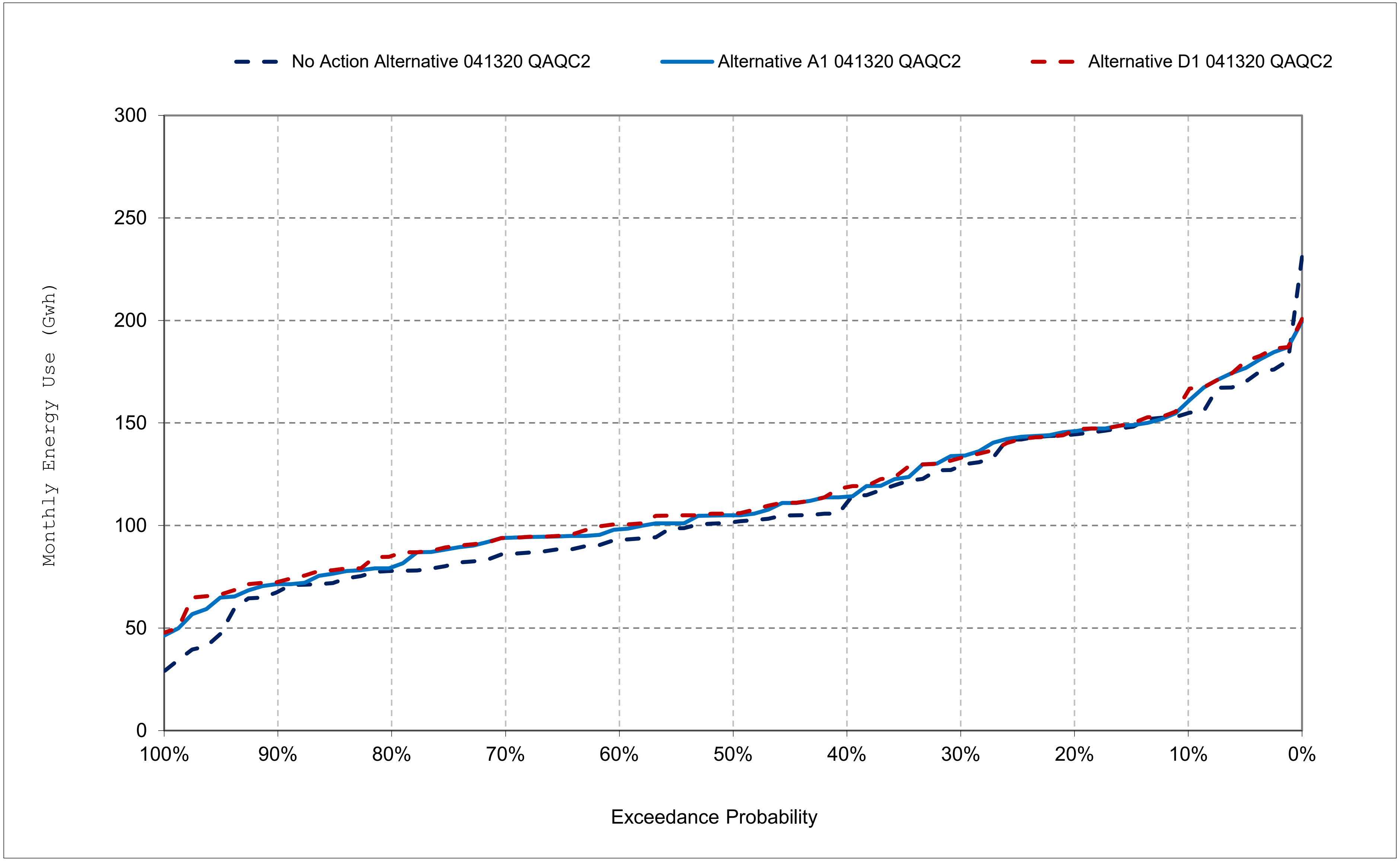
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-11. CVP Total Energy Use, February



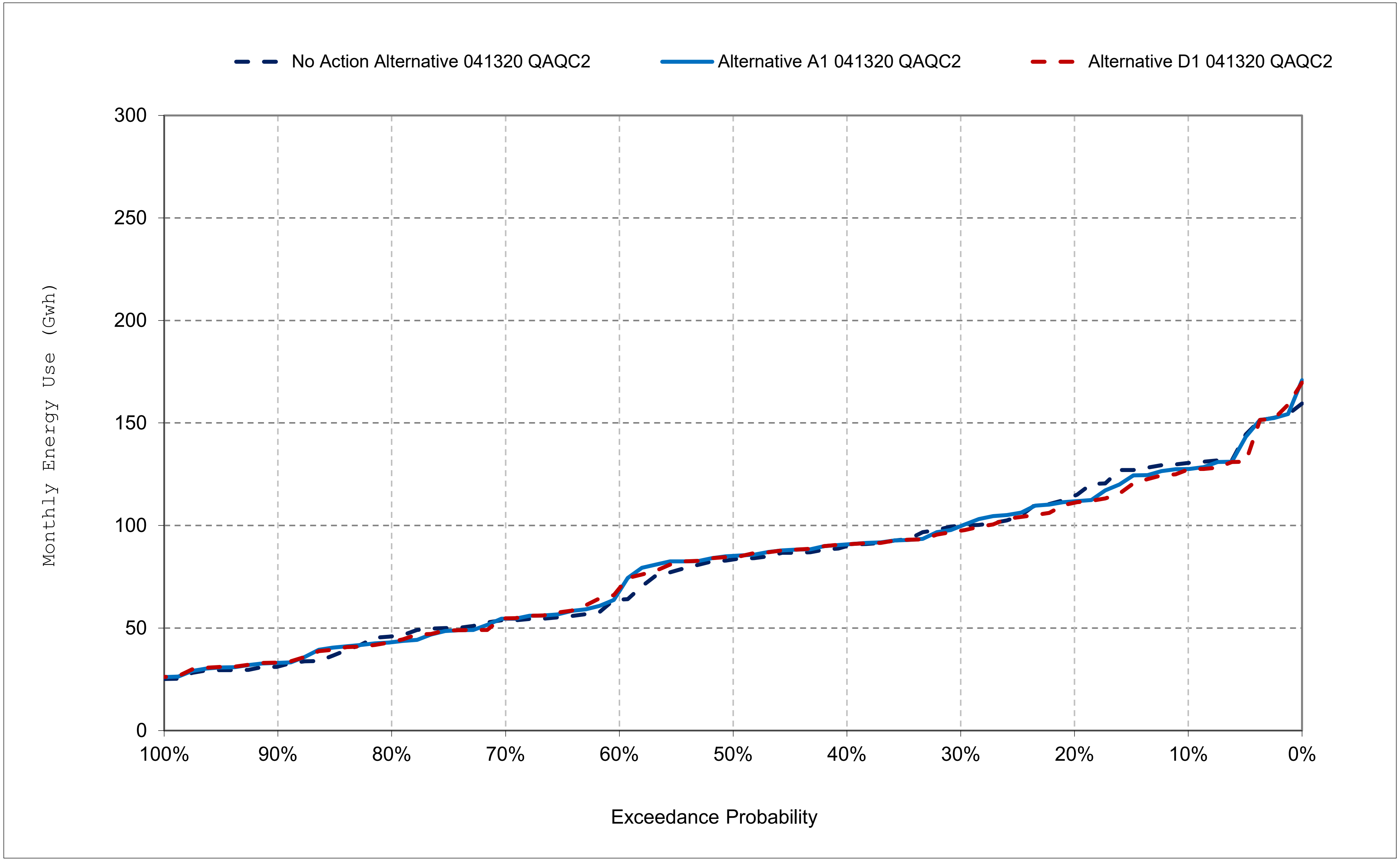
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-12. CVP Total Energy Use, March



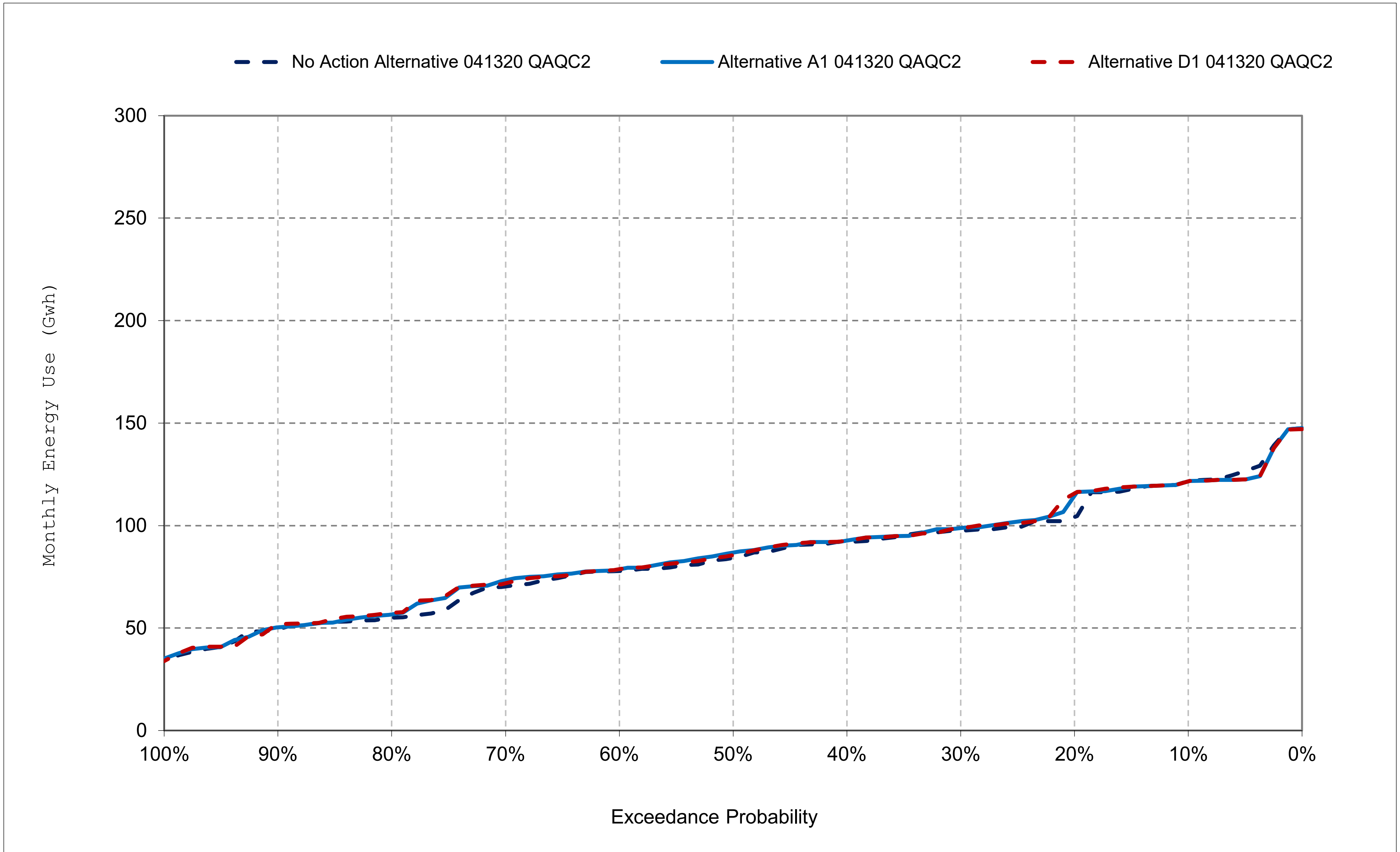
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-13. CVP Total Energy Use, April



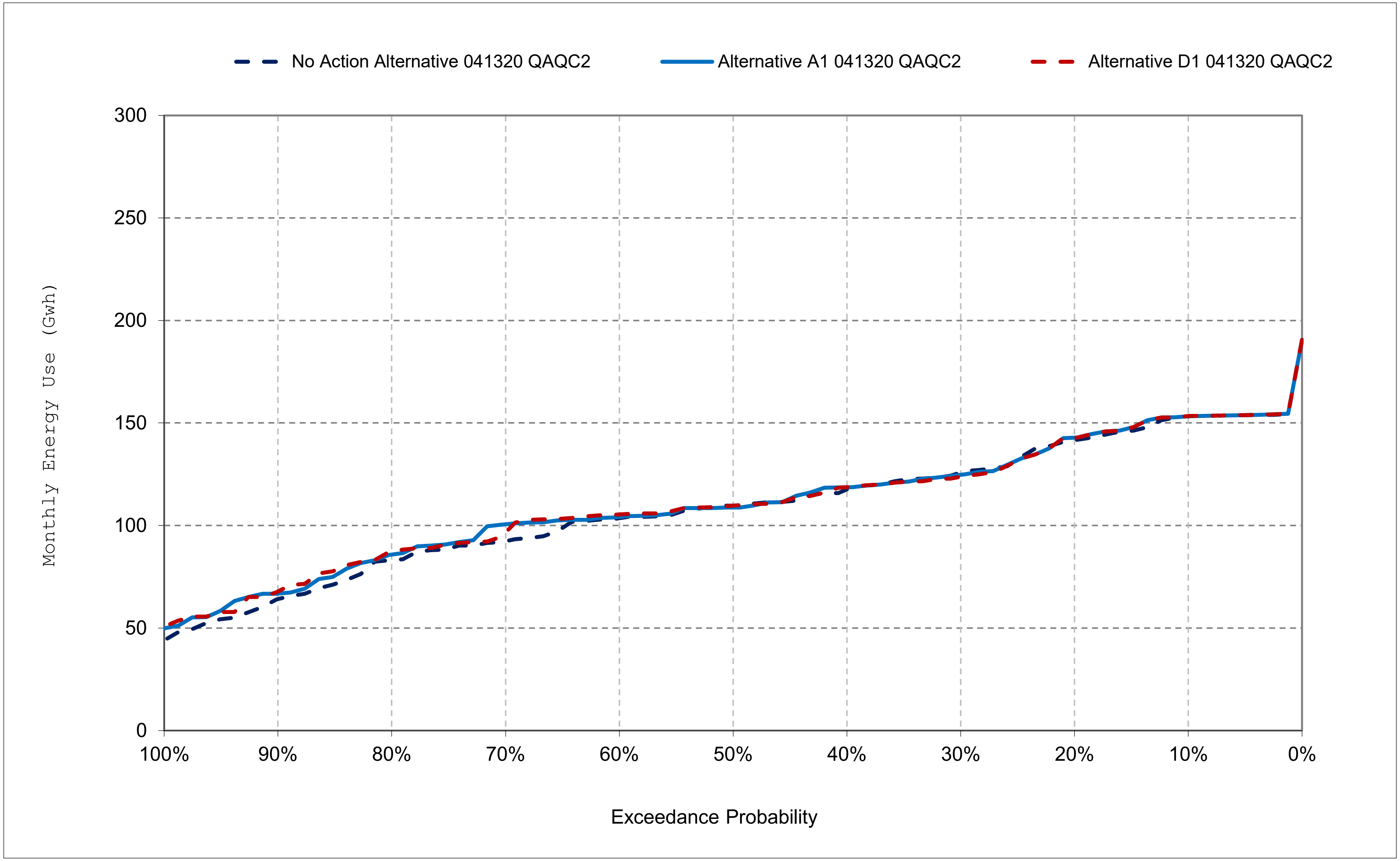
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-14. CVP Total Energy Use, May



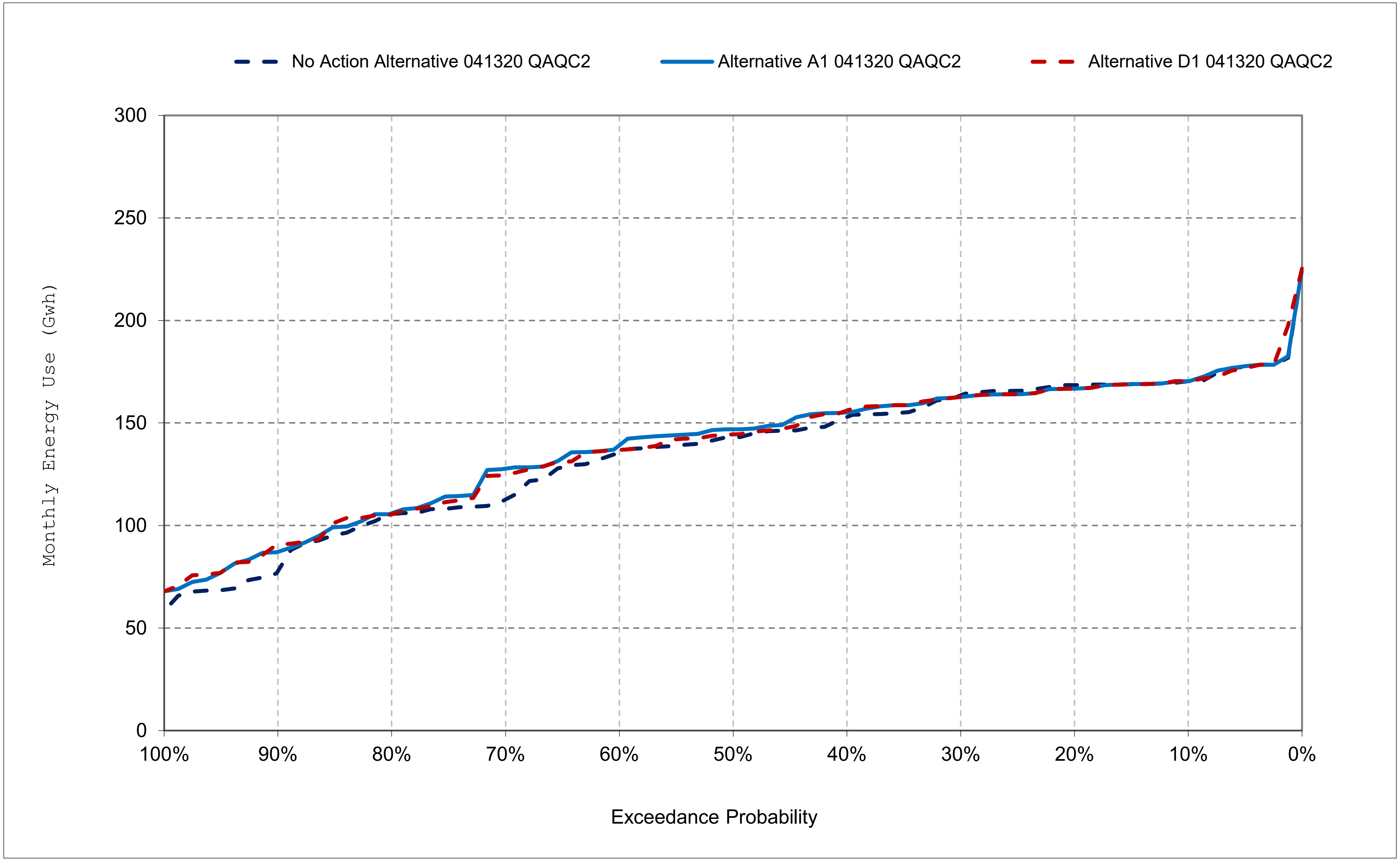
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-15. CVP Total Energy Use, June



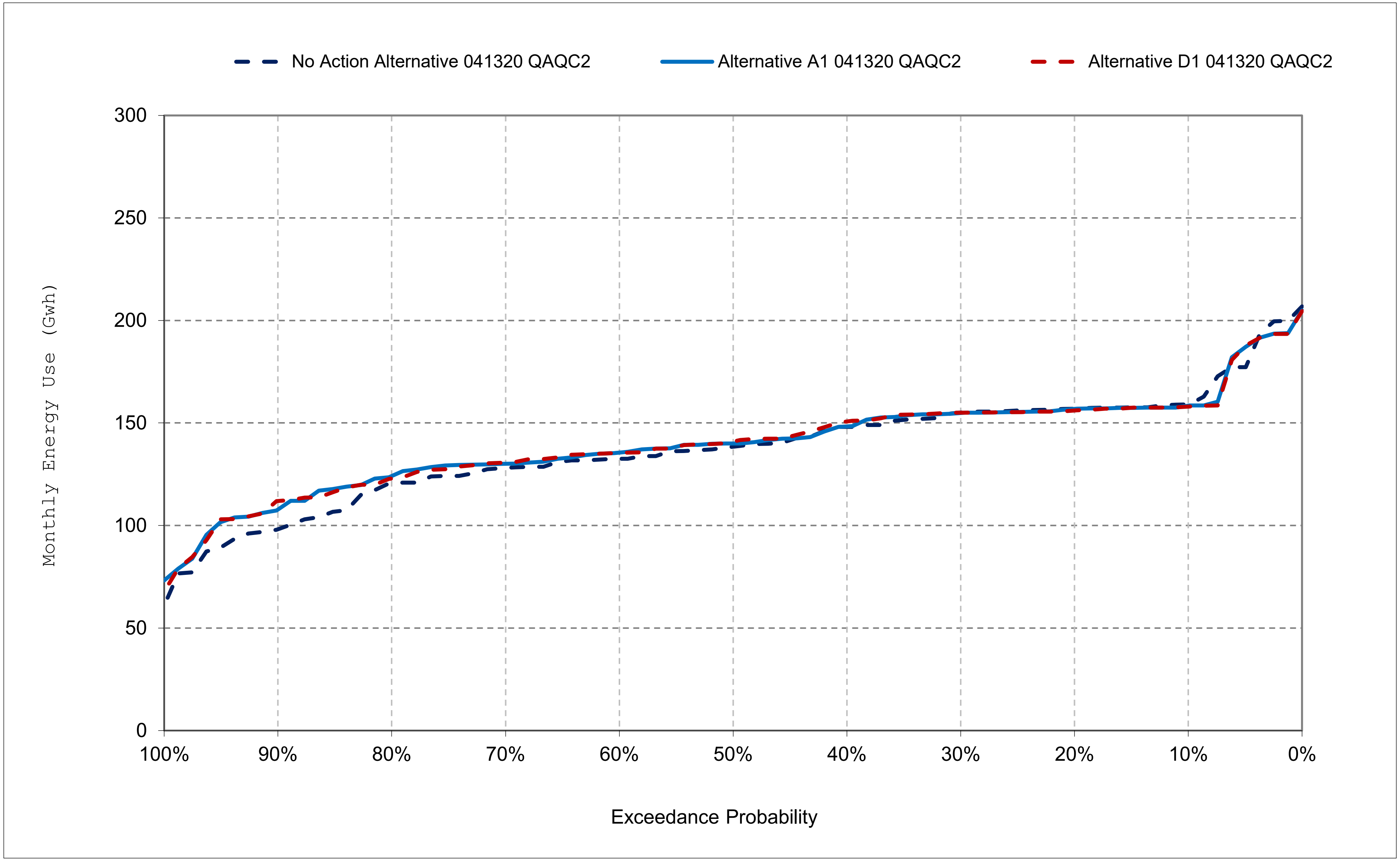
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-16. CVP Total Energy Use, July



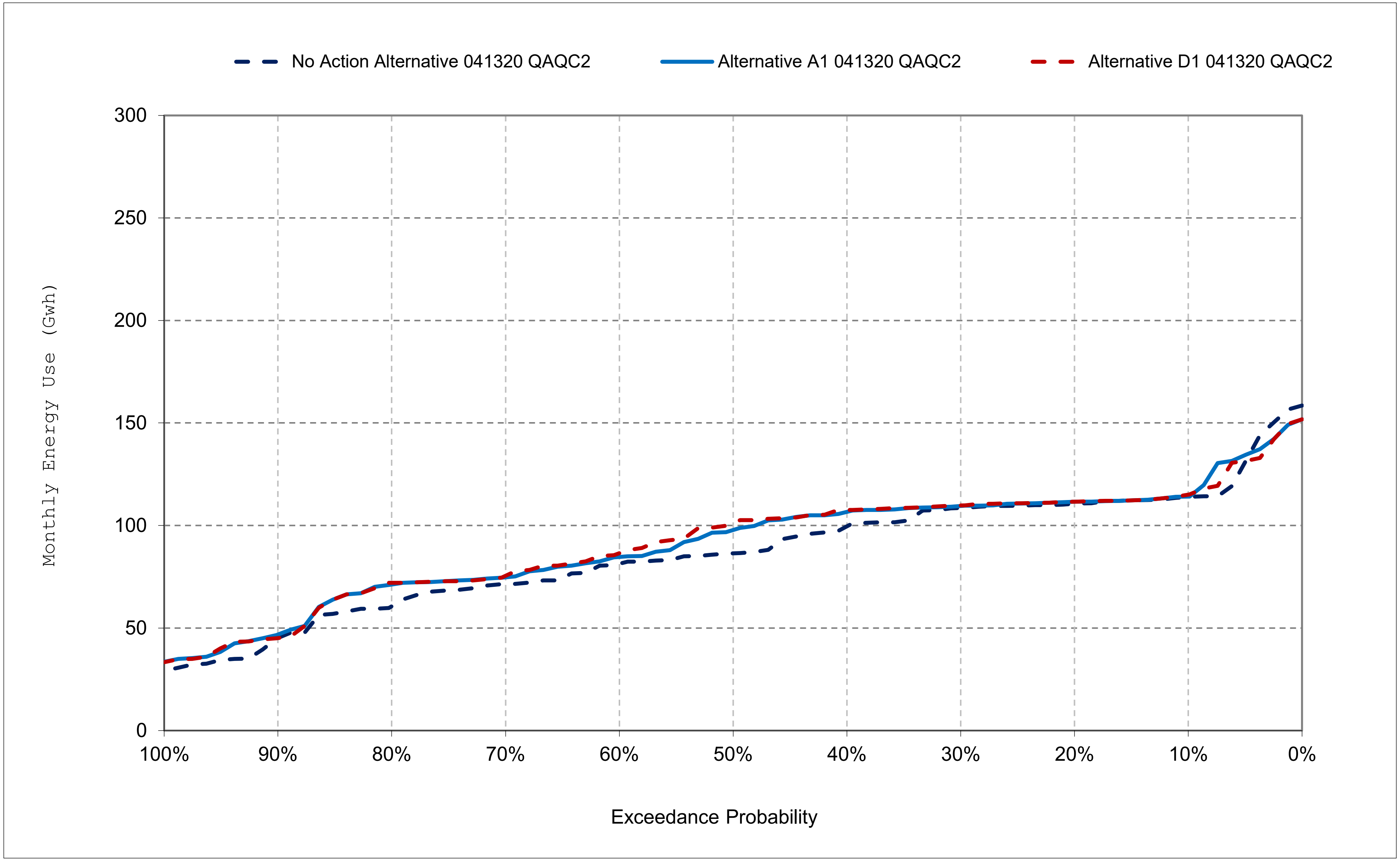
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-17. CVP Total Energy Use, August



*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-3-18. CVP Total Energy Use, September



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-4-1. CVP Net Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	315	233	505	544	565	575	405	565	490	636	483	447
20%	302	153	284	393	477	510	274	492	450	599	442	408
30%	245	122	99	234	265	254	238	424	433	557	412	348
40%	231	110	79	117	150	161	206	406	420	534	398	306
50%	201	96	62	69	65	131	194	388	405	500	378	229
60%	180	86	42	36	43	100	176	374	387	479	362	194
70%	159	75	16	7	24	79	169	339	375	447	337	180
80%	128	62	6	-1	16	63	154	317	352	420	308	168
90%	103	40	-3	-10	7	44	134	264	312	363	282	138
Long Term												
Full Simulation Period[a]	206	121	139	183	198	234	234	403	409	505	380	268
Water Year Types[b,c]												
Wet (32%)	284	147	187	414	391	428	316	500	437	545	450	400
Above Normal (15%)	225	132	128	188	293	294	234	424	420	570	415	346
Below Normal (17%)	162	120	154	67	133	137	190	367	412	523	362	188
Dry (22%)	174	112	141	29	29	97	185	360	413	481	352	177
Critical (15%)	115	70	29	44	14	69	181	281	330	371	260	136

Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	319	227	516	544	543	576	406	565	453	618	491	447
20%	305	158	336	402	456	510	278	492	434	575	449	404
30%	239	135	162	228	264	261	236	440	410	529	410	360
40%	231	116	89	120	163	163	211	393	398	501	383	317
50%	212	101	77	69	58	119	195	380	386	476	371	238
60%	189	92	46	42	36	93	181	368	375	461	347	206
70%	169	85	22	8	18	75	167	340	362	424	327	192
80%	144	69	13	-3	5	57	146	320	334	377	296	168
90%	114	51	2	-18	-5	41	135	270	299	346	266	138
Long Term												
Full Simulation Period[a]	213	128	154	179	192	230	234	401	389	480	374	274
Water Year Types[b,c]												
Wet (32%)	285	151	185	411	383	425	315	496	430	524	452	406
Above Normal (15%)	231	133	155	177	281	294	241	428	388	519	403	354
Below Normal (17%)	180	127	164	63	143	129	186	365	376	485	348	196
Dry (22%)	180	126	176	29	23	97	182	358	384	458	340	182
Critical (15%)	125	76	38	41	3	61	182	273	326	371	261	139

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	4	-7	10	0	-21	2	1	0	-37	-19	8	0
20%	3	5	52	8	-21	0	4	0	-17	-24	7	-3
30%	-5	12	63	-5	-2	7	-2	16	-23	-28	-2	11
40%	1	6	10	3	12	2	4	-13	-23	-33	-14	11
50%	12	6	16	0	-6	-12	1	-8	-19	-24	-7	9
60%	9	5	4	6	-8	-7	5	-6	-12	-18	-15	12
70%	10	9	6	1	-6	-4	-2	2	-14	-23	-10	13
80%	15	6	8	-2	-11	-6	-8	3	-18	-43	-12	0
90%	11	11	5	-9	-12	-3	0	5	-13	-17	-16	1
Long Term												
Full Simulation Period[a]	7	7	14	-4	-6	-4	-1	-2	-20	-26	-6	6
Water Year Types[b,c]												
Wet (32%)	1	4	-2	-3	-8	-3	-1	-3	-6	-21	2	6
Above Normal (15%)	6	1	27	-11	-12	0	7	4	-32	-51	-12	8
Below Normal (17%)	18	7	10	-4	9	-8	-4	-2	-36	-38	-14	8
Dry (22%)	6	14	35	0	-6	0	-3	-3	-29	-23	-12	5
Critical (15%)	10	6	9	-3	-11	-8	1	-8	-4	1	2	2

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-4-2. CVP Net Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	315	233	505	544	565	575	405	565	490	636	483	447
20%	302	153	284	393	477	510	274	492	450	599	442	408
30%	245	122	99	234	265	254	238	424	433	557	412	348
40%	231	110	79	117	150	161	206	406	420	534	398	306
50%	201	96	62	69	65	131	194	388	405	500	378	229
60%	180	86	42	36	43	100	176	374	387	479	362	194
70%	159	75	16	7	24	79	169	339	375	447	337	180
80%	128	62	6	-1	16	63	154	317	352	420	308	168
90%	103	40	-3	-10	7	44	134	264	312	363	282	138
Long Term												
Full Simulation Period[a]	206	121	139	183	198	234	234	403	409	505	380	268
Water Year Types[b,c]												
Wet (32%)	284	147	187	414	391	428	316	500	437	545	450	400
Above Normal (15%)	225	132	128	188	293	294	234	424	420	570	415	346
Below Normal (17%)	162	120	154	67	133	137	190	367	412	523	362	188
Dry (22%)	174	112	141	29	29	97	185	360	413	481	352	177
Critical (15%)	115	70	29	44	14	69	181	281	330	371	260	136

Alternative D1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	321	233	515	544	543	576	406	565	455	619	491	446
20%	307	168	336	402	462	510	279	492	429	576	427	408
30%	240	140	170	229	266	293	239	442	414	529	401	359
40%	229	114	87	126	159	163	206	393	399	494	377	310
50%	215	102	74	63	58	119	196	380	385	474	362	240
60%	188	95	48	41	34	93	181	368	375	454	341	206
70%	171	84	29	3	17	70	169	341	360	425	319	191
80%	145	73	14	-3	6	54	152	322	333	381	289	169
90%	115	50	4	-16	-5	34	141	263	301	348	268	138
Long Term												
Full Simulation Period[a]	215	132	157	179	192	230	235	401	390	480	368	275
Water Year Types[b,c]												
Wet (32%)	284	151	187	412	383	424	318	496	430	524	449	406
Above Normal (15%)	231	134	162	177	286	293	241	428	391	519	389	352
Below Normal (17%)	187	140	163	62	139	129	188	364	375	487	340	200
Dry (22%)	180	128	181	25	23	103	183	358	385	457	330	182
Critical (15%)	133	82	41	40	0	58	180	273	324	373	262	144

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	6	0	10	0	-21	2	1	-1	-36	-18	8	0
20%	5	15	52	9	-15	0	5	0	-21	-23	-16	1
30%	-4	17	72	-5	1	39	1	19	-18	-27	-11	11
40%	-1	3	8	9	9	2	-1	-13	-21	-40	-21	4
50%	14	7	12	-6	-7	-12	2	-9	-20	-26	-16	10
60%	8	9	7	5	-10	-7	5	-6	-12	-25	-21	12
70%	12	8	13	-4	-7	-9	0	2	-15	-23	-19	11
80%	17	10	9	-2	-10	-9	-3	6	-19	-40	-19	1
90%	12	10	7	-6	-12	-10	7	-2	-11	-15	-13	0
Long Term												
Full Simulation Period[a]	9	10	17	-5	-6	-3	1	-2	-20	-25	-12	7
Water Year Types[b,c]												
Wet (32%)	0	3	0	-2	-8	-4	1	-3	-6	-21	-1	6
Above Normal (15%)	5	2	34	-11	-6	-1	7	4	-29	-51	-26	6
Below Normal (17%)	25	21	9	-5	5	-8	-2	-3	-37	-36	-22	12
Dry (22%)	6	17	41	-4	-6	5	-2	-2	-28	-25	-22	5
Critical (15%)	18	12	12	-4	-14	-12	-1	-8	-6	2	2	8

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-4-3. CVP Net Generation, Monthly Generation

Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	319	227	516	544	543	576	406	565	453	618	491	447
20%	305	158	336	402	456	510	278	492	434	575	449	404
30%	239	135	162	228	264	261	236	440	410	529	410	360
40%	231	116	89	120	163	163	211	393	398	501	383	317
50%	212	101	77	69	58	119	195	380	386	476	371	238
60%	189	92	46	42	36	93	181	368	375	461	347	206
70%	169	85	22	8	18	75	167	340	362	424	327	192
80%	144	69	13	-3	5	57	146	320	334	377	296	168
90%	114	51	2	-18	-5	41	135	270	299	346	266	138
Long Term												
Full Simulation Period[a]	213	128	154	179	192	230	234	401	389	480	374	274
Water Year Types[b,c]												
Wet (32%)	285	151	185	411	383	425	315	496	430	524	452	406
Above Normal (15%)	231	133	155	177	281	294	241	428	388	519	403	354
Below Normal (17%)	180	127	164	63	143	129	186	365	376	485	348	196
Dry (22%)	180	126	176	29	23	97	182	358	384	458	340	182
Critical (15%)	125	76	38	41	3	61	182	273	326	371	261	139

Alternative D1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	321	233	515	544	543	576	406	565	455	619	491	446
20%	307	168	336	402	462	510	279	492	429	576	427	408
30%	240	140	170	229	266	293	239	442	414	529	401	359
40%	229	114	87	126	159	163	206	393	399	494	377	310
50%	215	102	74	63	58	119	196	380	385	474	362	240
60%	188	95	48	41	34	93	181	368	375	454	341	206
70%	171	84	29	3	17	70	169	341	360	425	319	191
80%	145	73	14	-3	6	54	152	322	333	381	289	169
90%	115	50	4	-16	-5	34	141	263	301	348	268	138
Long Term												
Full Simulation Period[a]	215	132	157	179	192	230	235	401	390	480	368	275
Water Year Types[b,c]												
Wet (32%)	284	151	187	412	383	424	318	496	430	524	449	406
Above Normal (15%)	231	134	162	177	286	293	241	428	391	519	389	352
Below Normal (17%)	187	140	163	62	139	129	188	364	375	487	340	200
Dry (22%)	180	128	181	25	23	103	183	358	385	457	330	182
Critical (15%)	133	82	41	40	0	58	180	273	324	373	262	144

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	3	6	-1	0	0	0	0	0	1	1	0	0
20%	2	10	0	0	6	0	1	0	-5	1	-23	4
30%	1	5	9	1	3	31	3	2	4	1	-9	0
40%	-2	-3	-2	6	-3	0	-5	0	1	-7	-6	-7
50%	2	1	-4	-5	0	0	2	0	-1	-1	-9	2
60%	-1	3	3	-1	-2	0	0	0	0	-6	-6	0
70%	2	-1	7	-5	-1	-5	2	1	-1	0	-8	-1
80%	2	4	1	0	1	-3	6	3	-1	4	-7	1
90%	1	-1	1	2	0	-7	7	-7	2	2	3	-1
Long Term												
Full Simulation Period[a]	2	4	3	-1	0	0	1	0	0	0	-6	1
Water Year Types[b,c]												
Wet (32%)	0	0	2	1	0	-1	3	0	0	0	-3	0
Above Normal (15%)	-1	1	7	0	5	-1	0	0	3	0	-14	-2
Below Normal (17%)	6	13	-1	-1	-4	0	2	-1	-1	2	-8	4
Dry (22%)	0	3	6	-3	0	6	1	1	1	-1	-9	0
Critical (15%)	8	6	3	-1	-3	-4	-2	0	-2	2	0	6

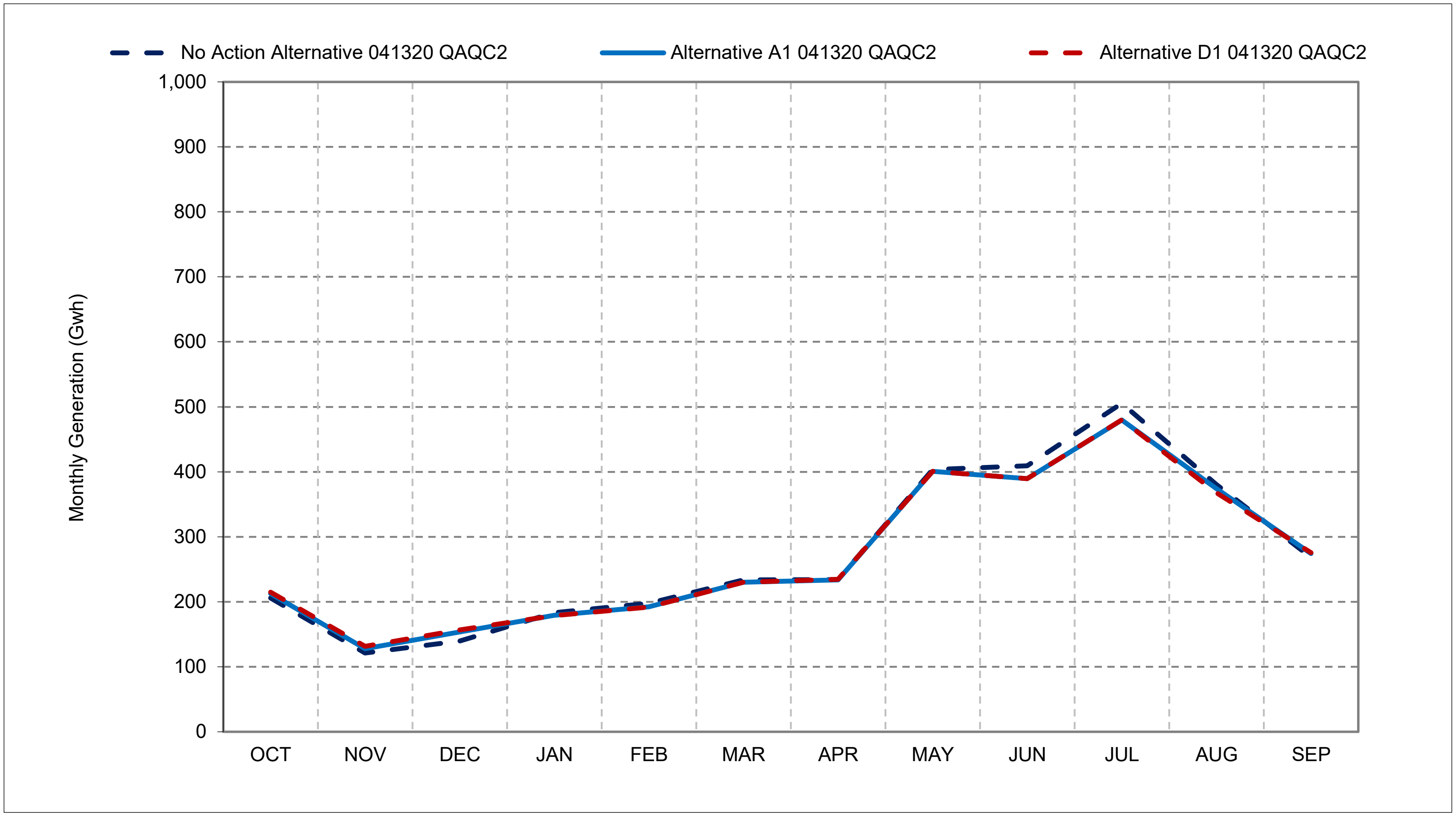
a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-1. CVP Net Generation, Long-Term Average Generation

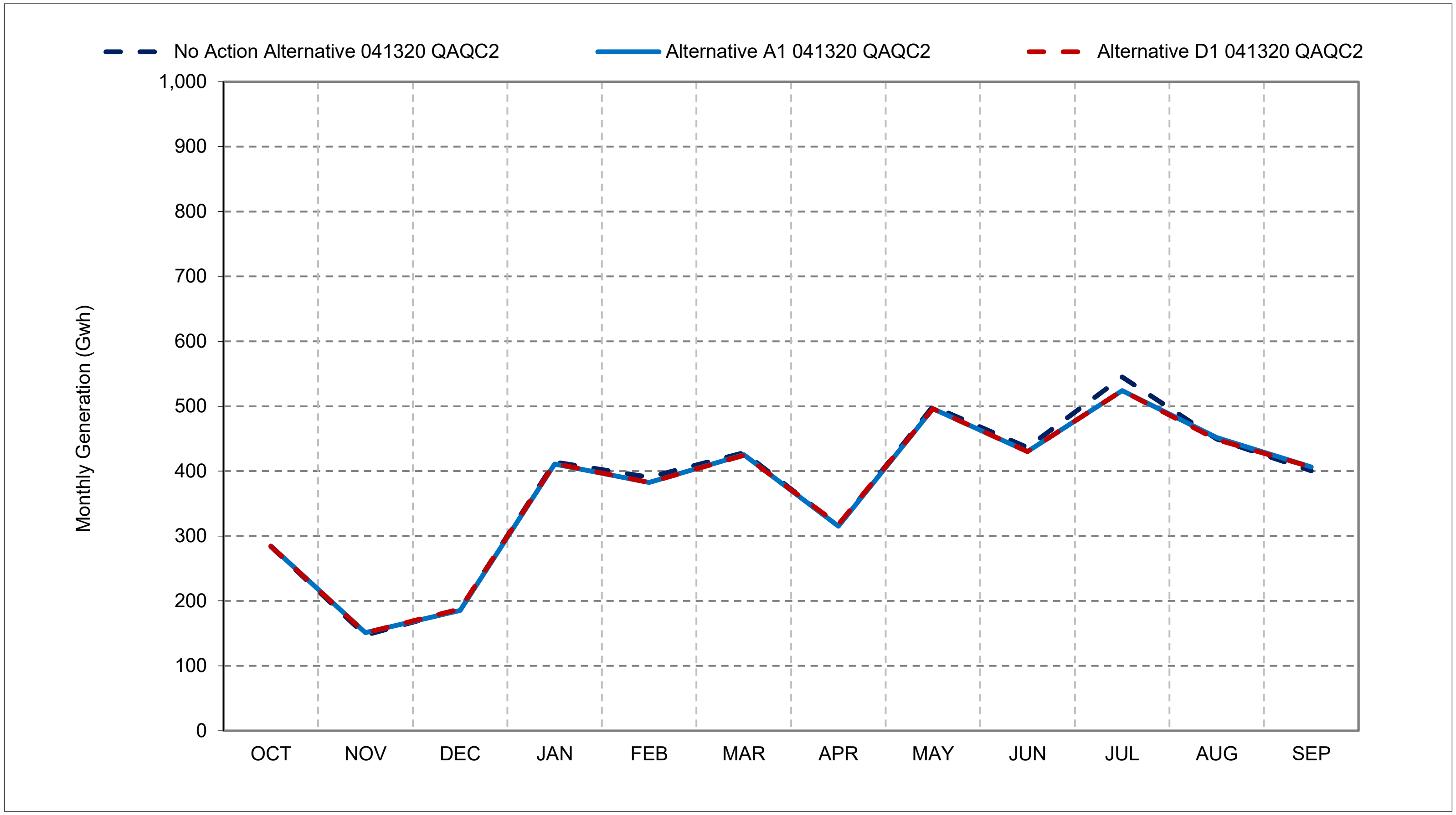


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-2. CVP Net Generation, Wet Year Average Generation

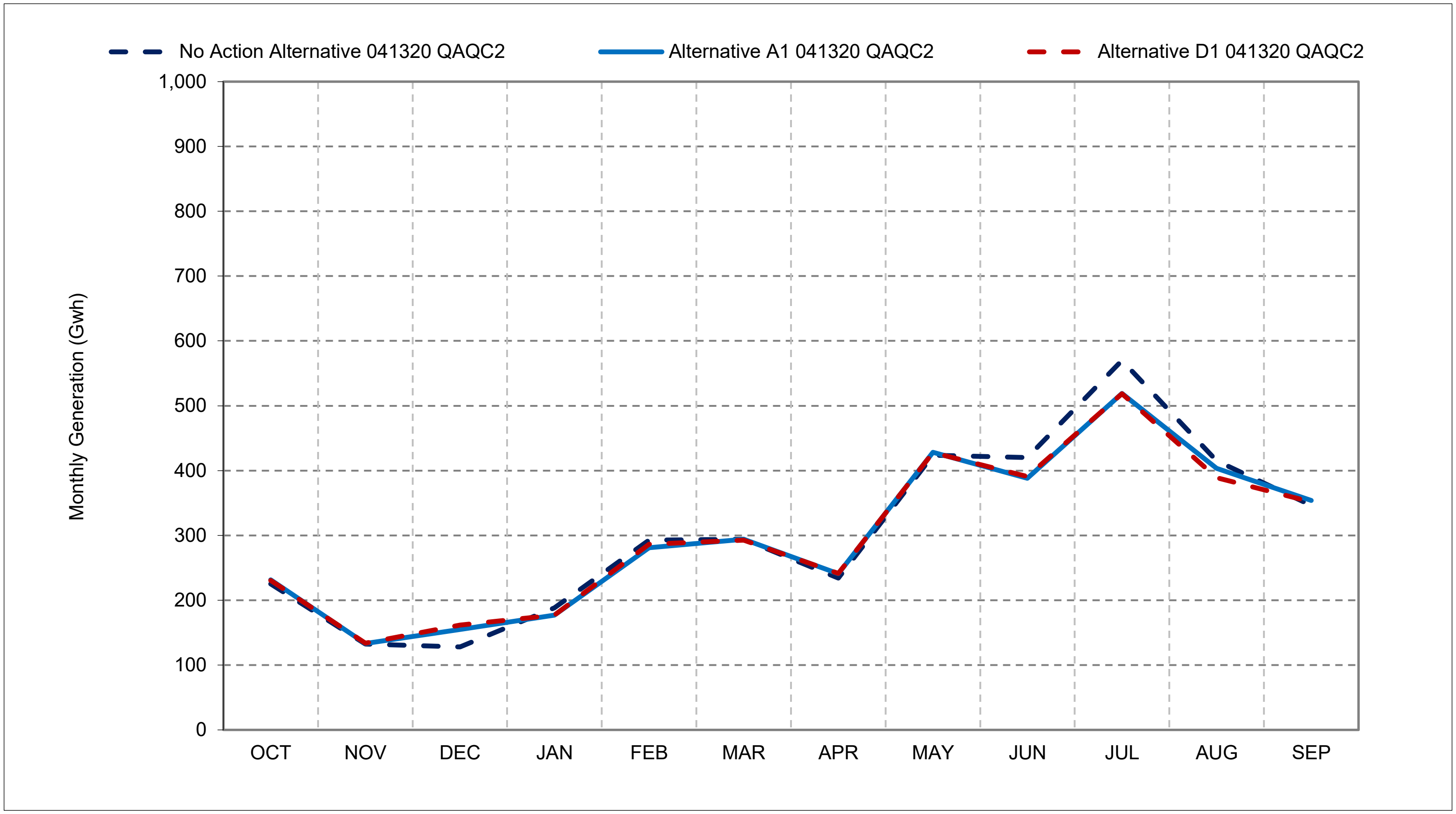


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-3. CVP Net Generation, Above Normal Year Average Generation

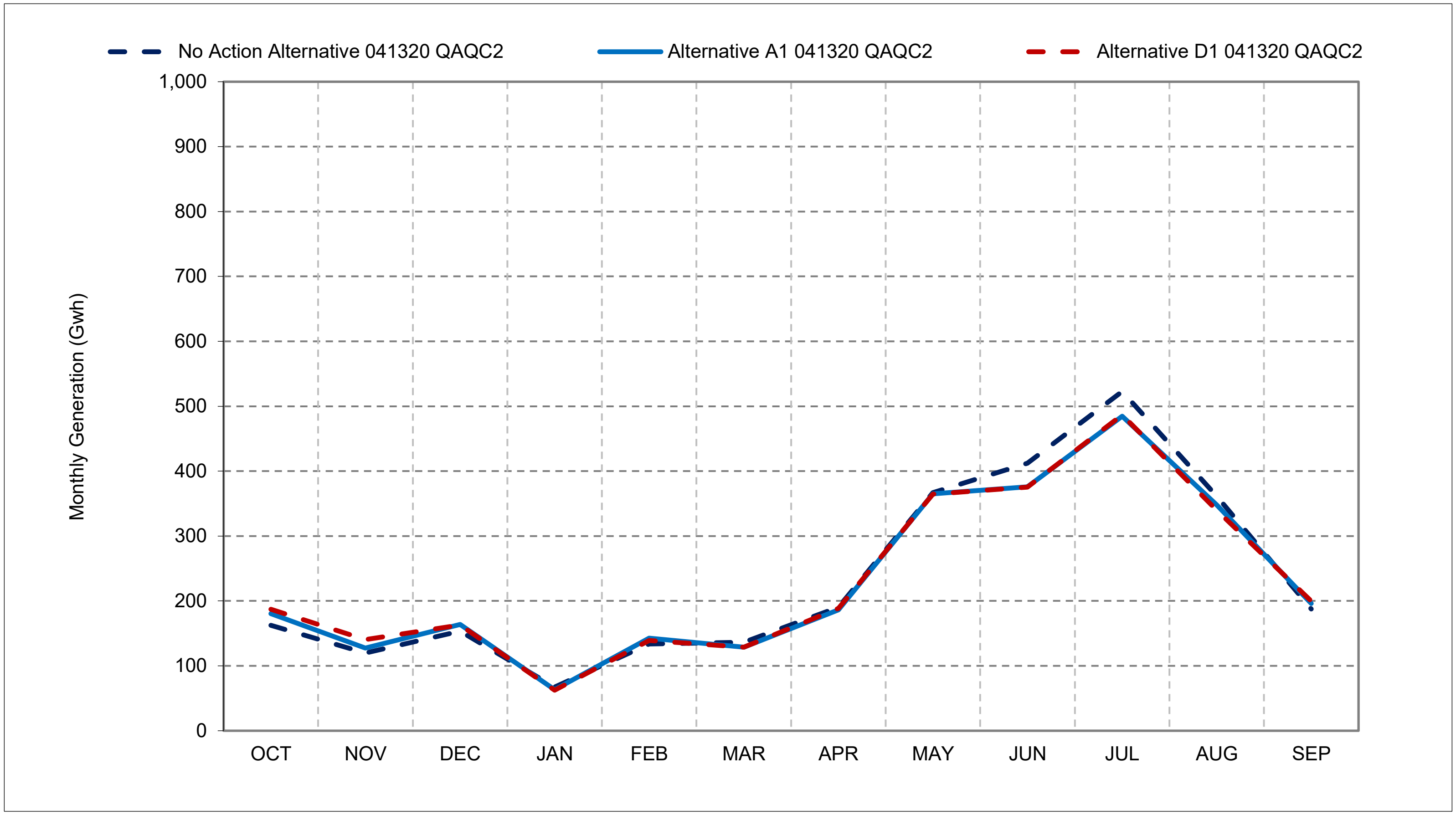


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-4. CVP Net Generation, Below Normal Year Average Generation

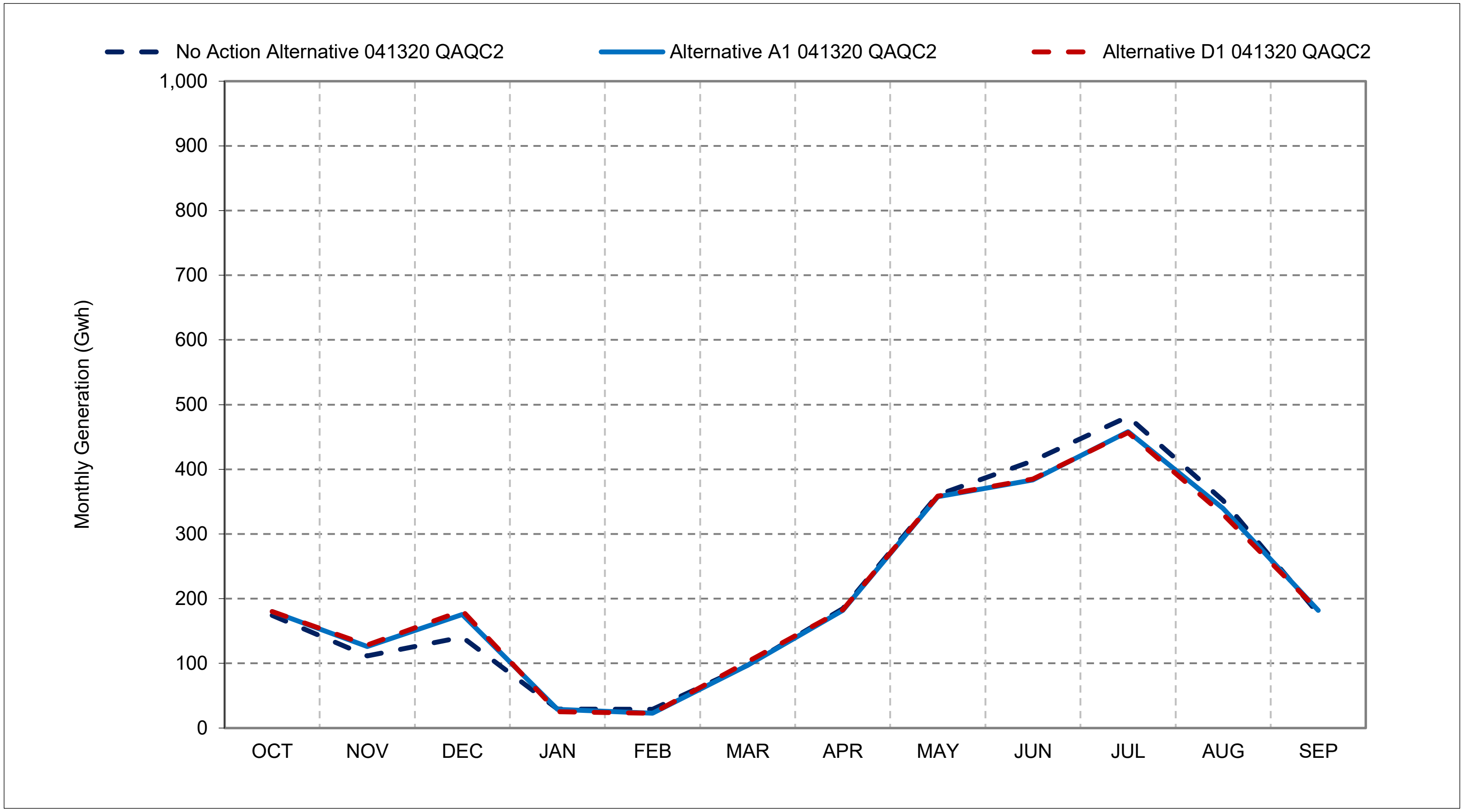


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-5. CVP Net Generation, Dry Year Average Generation

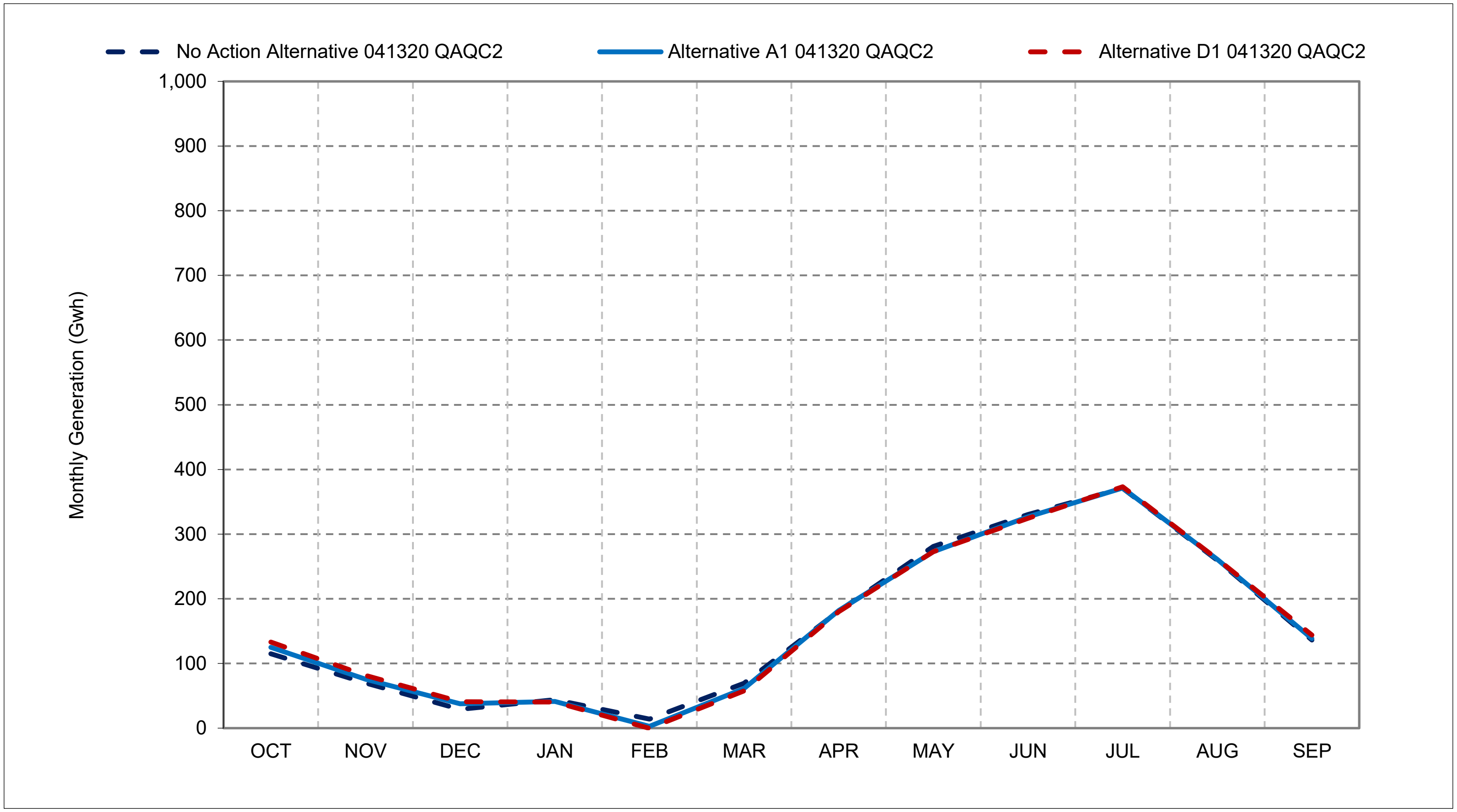


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

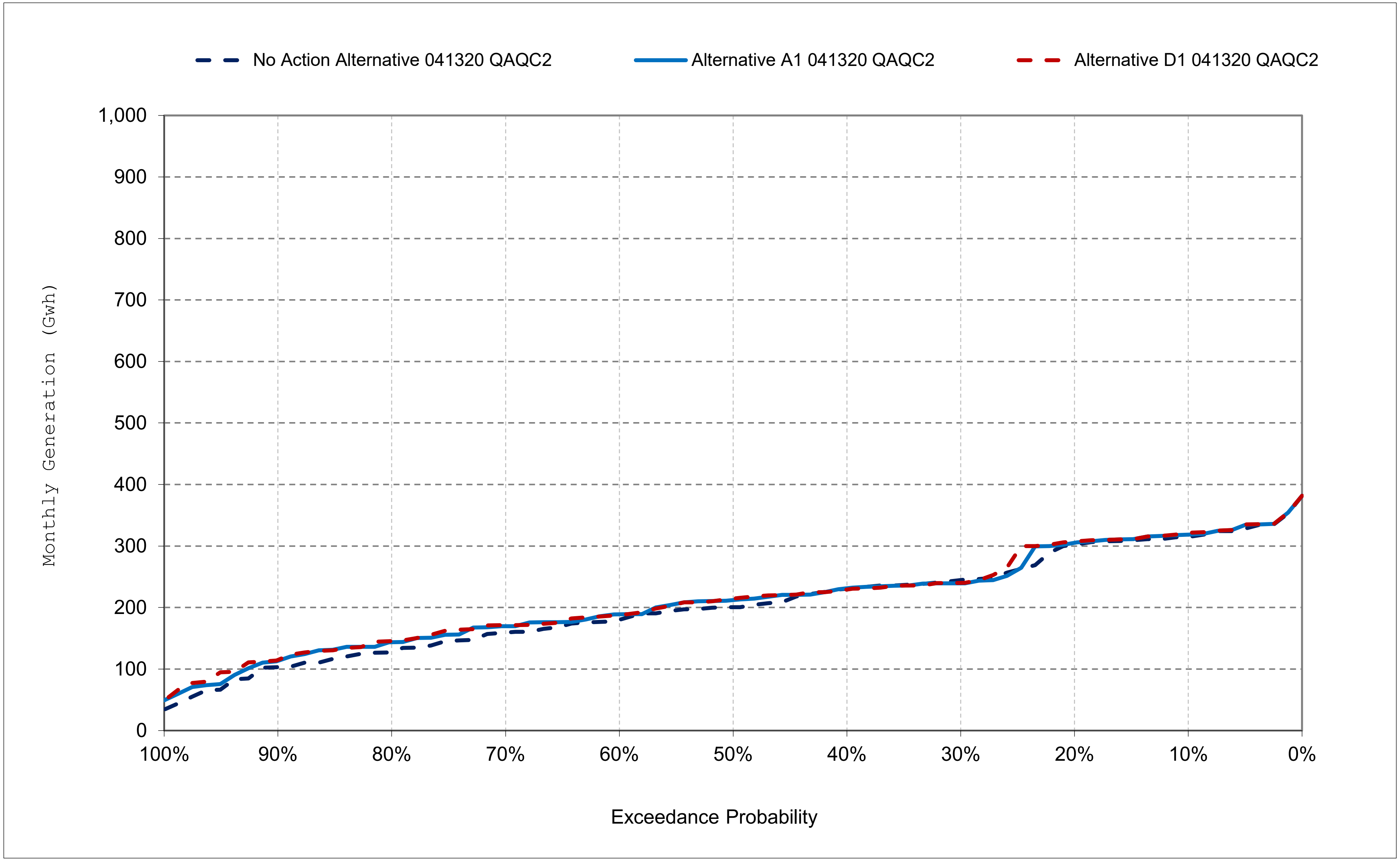
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-6. CVP Net Generation, Critical Year Average Generation



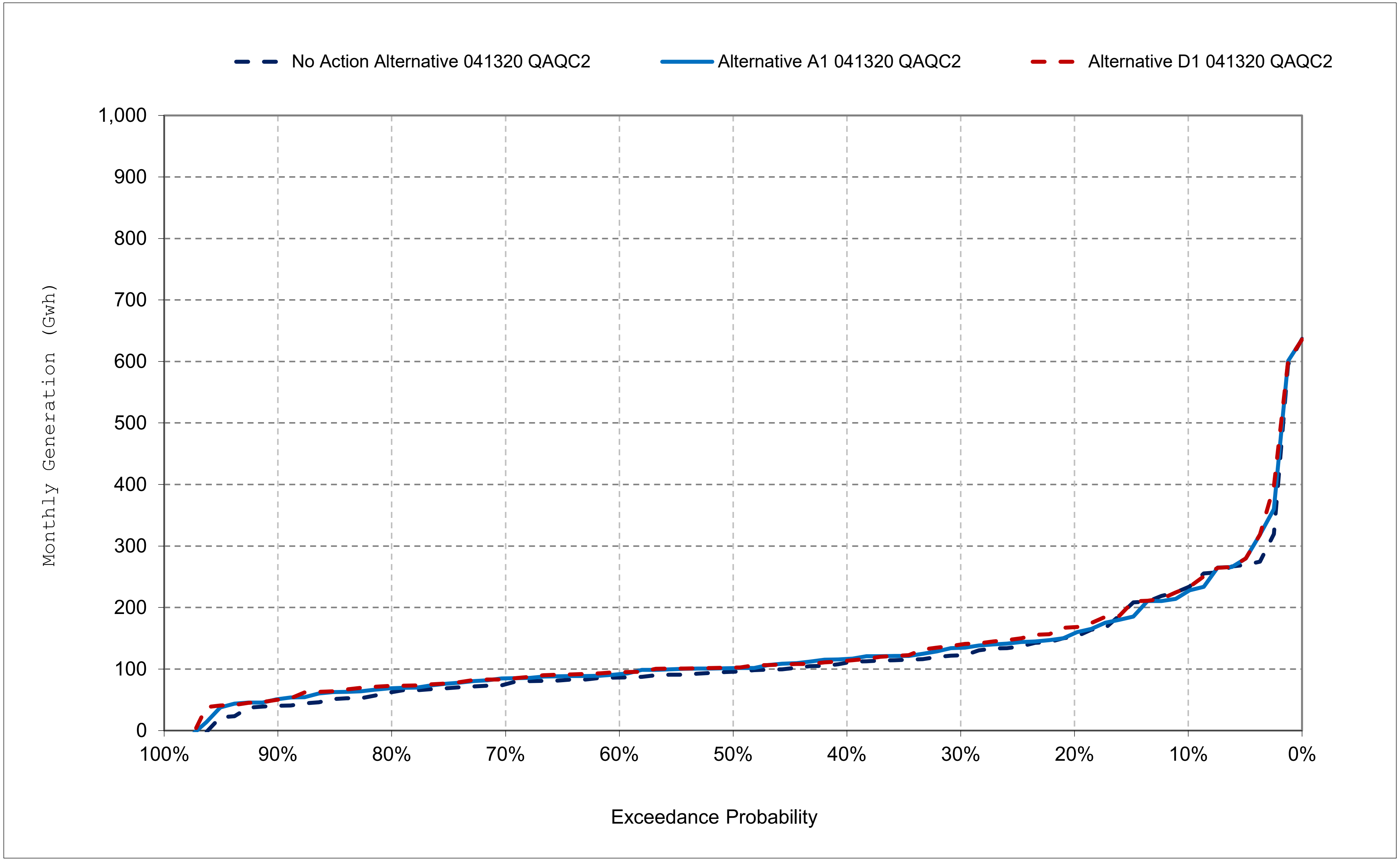
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-7. CVP Net Generation, October



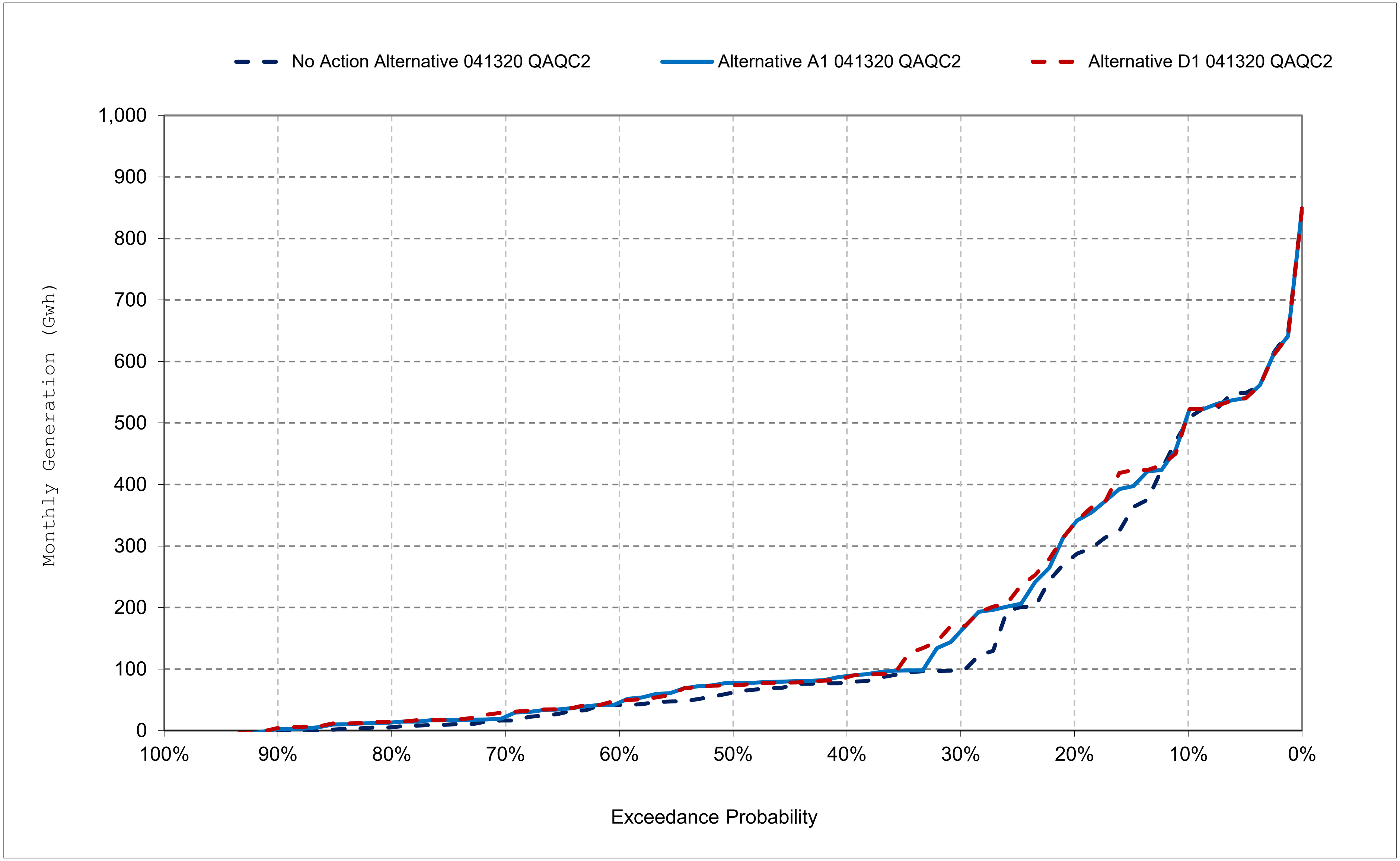
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-8. CVP Net Generation, November



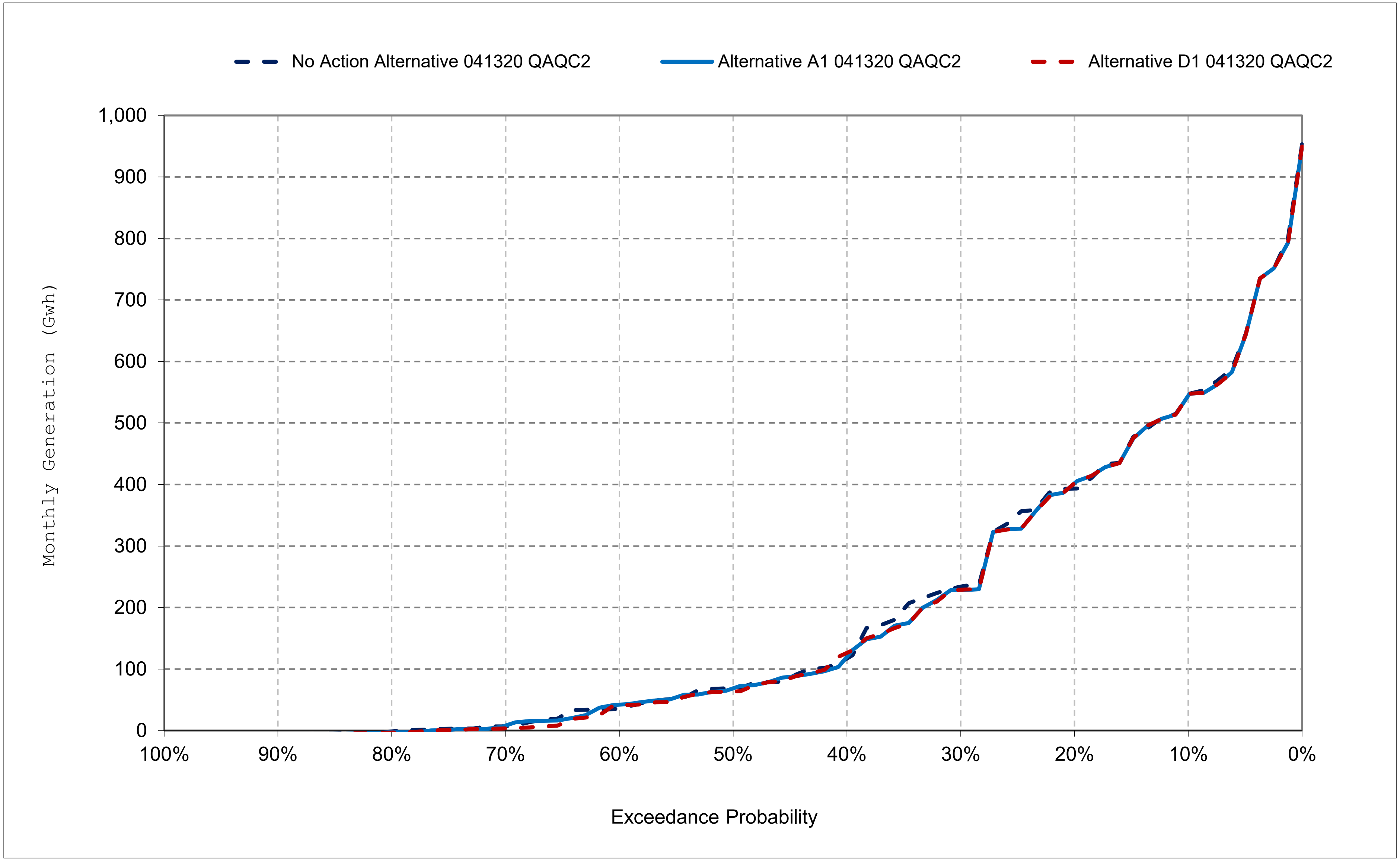
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-9. CVP Net Generation, December



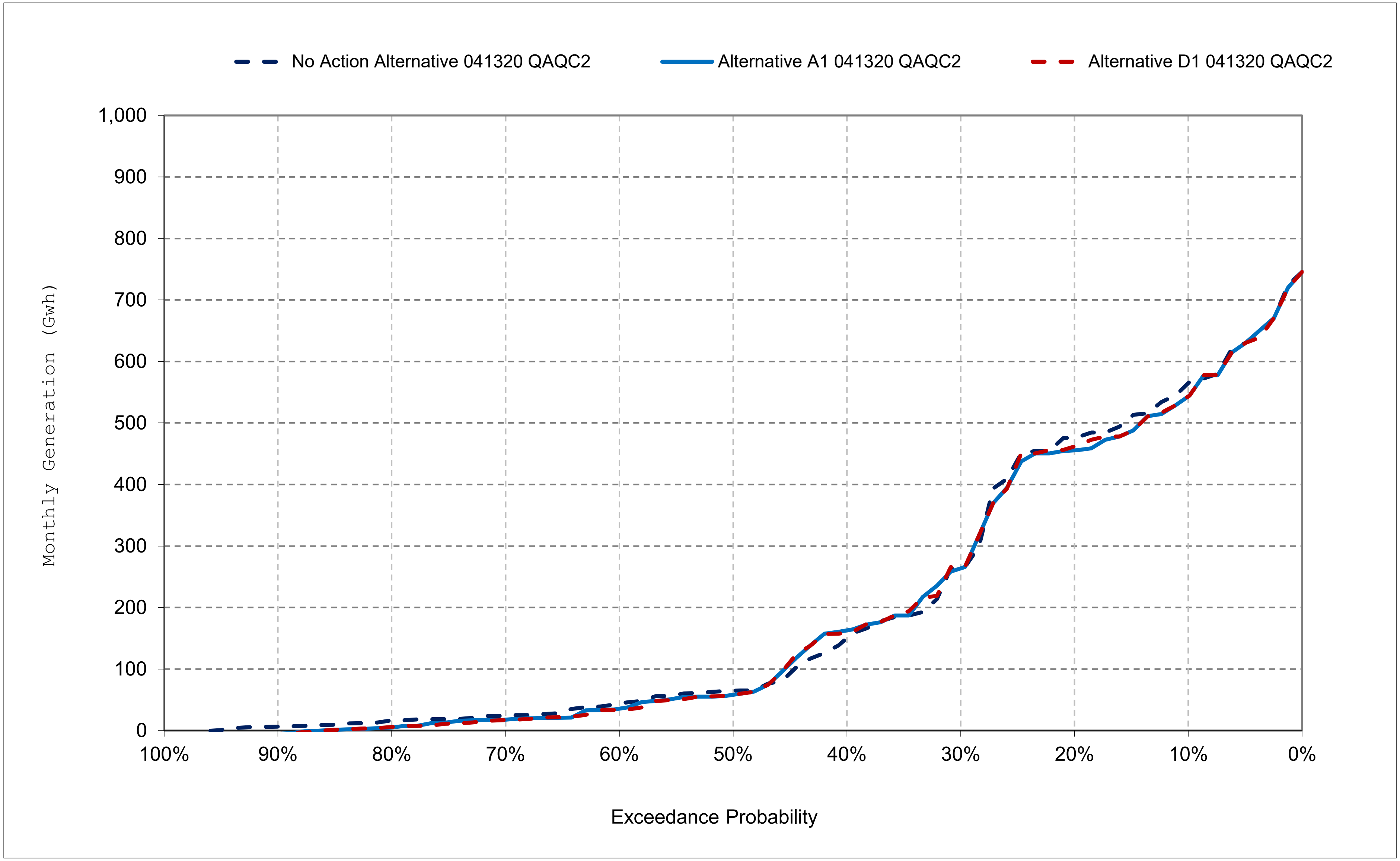
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-10. CVP Net Generation, January



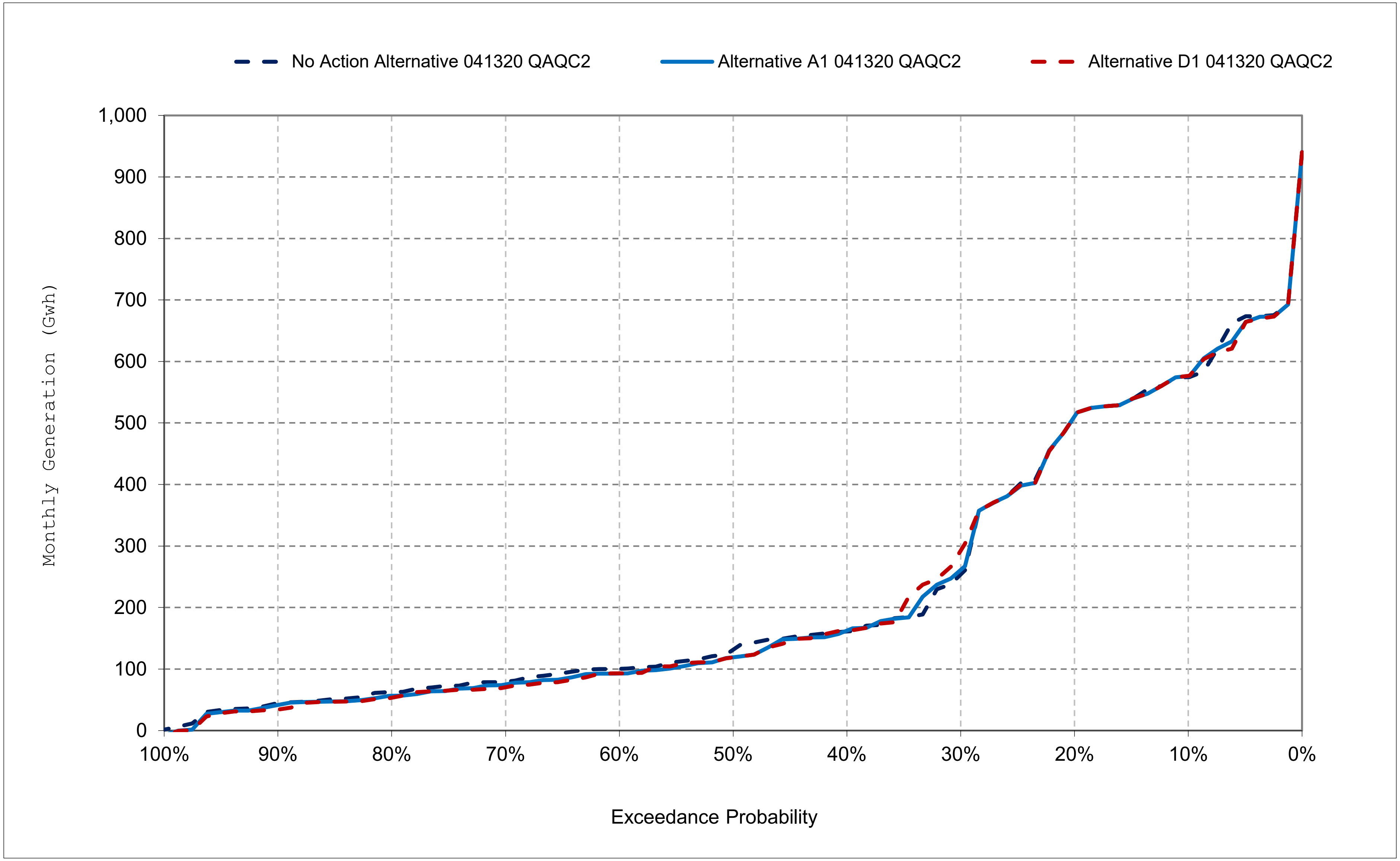
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-11. CVP Net Generation, February



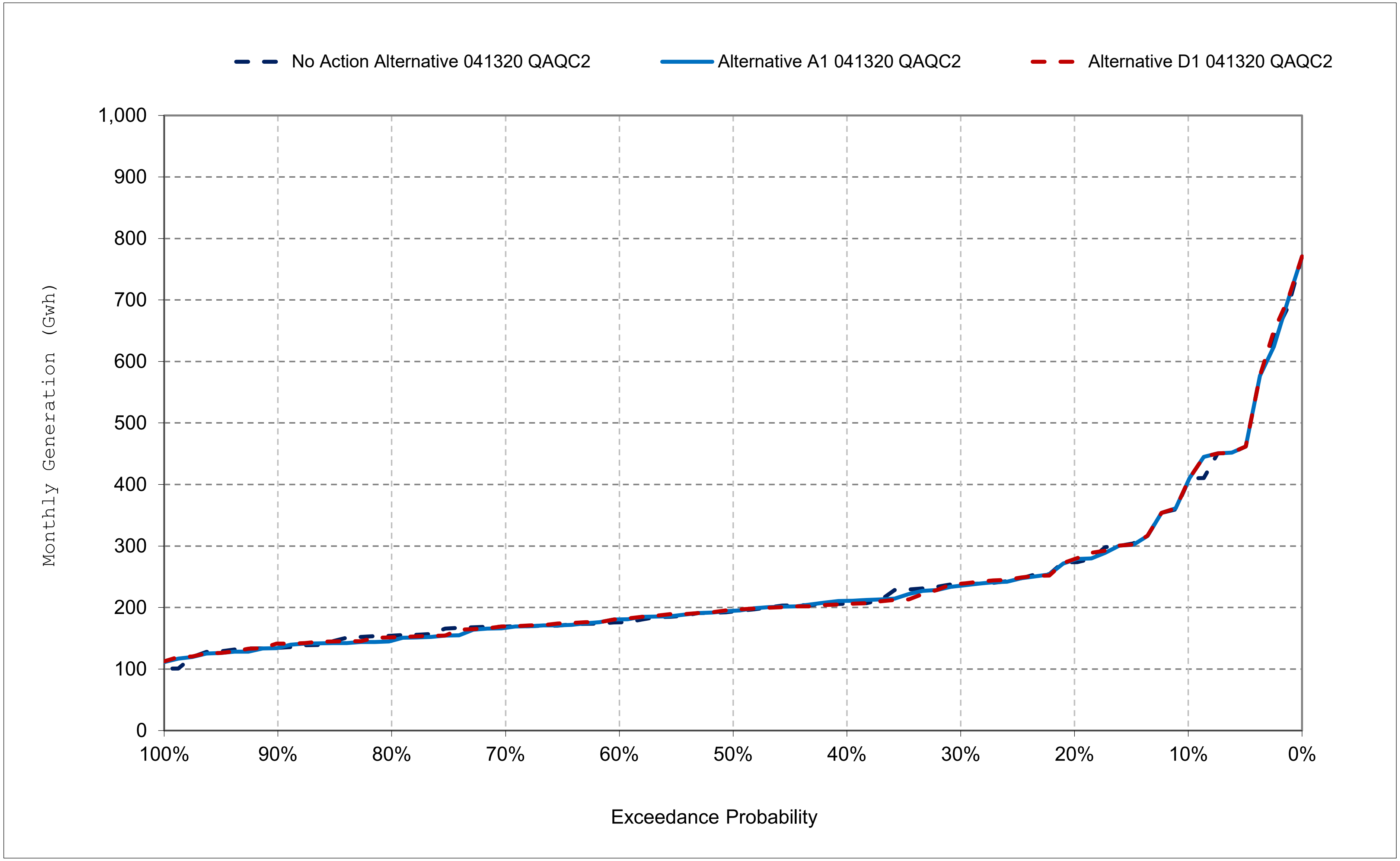
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-12. CVP Net Generation, March



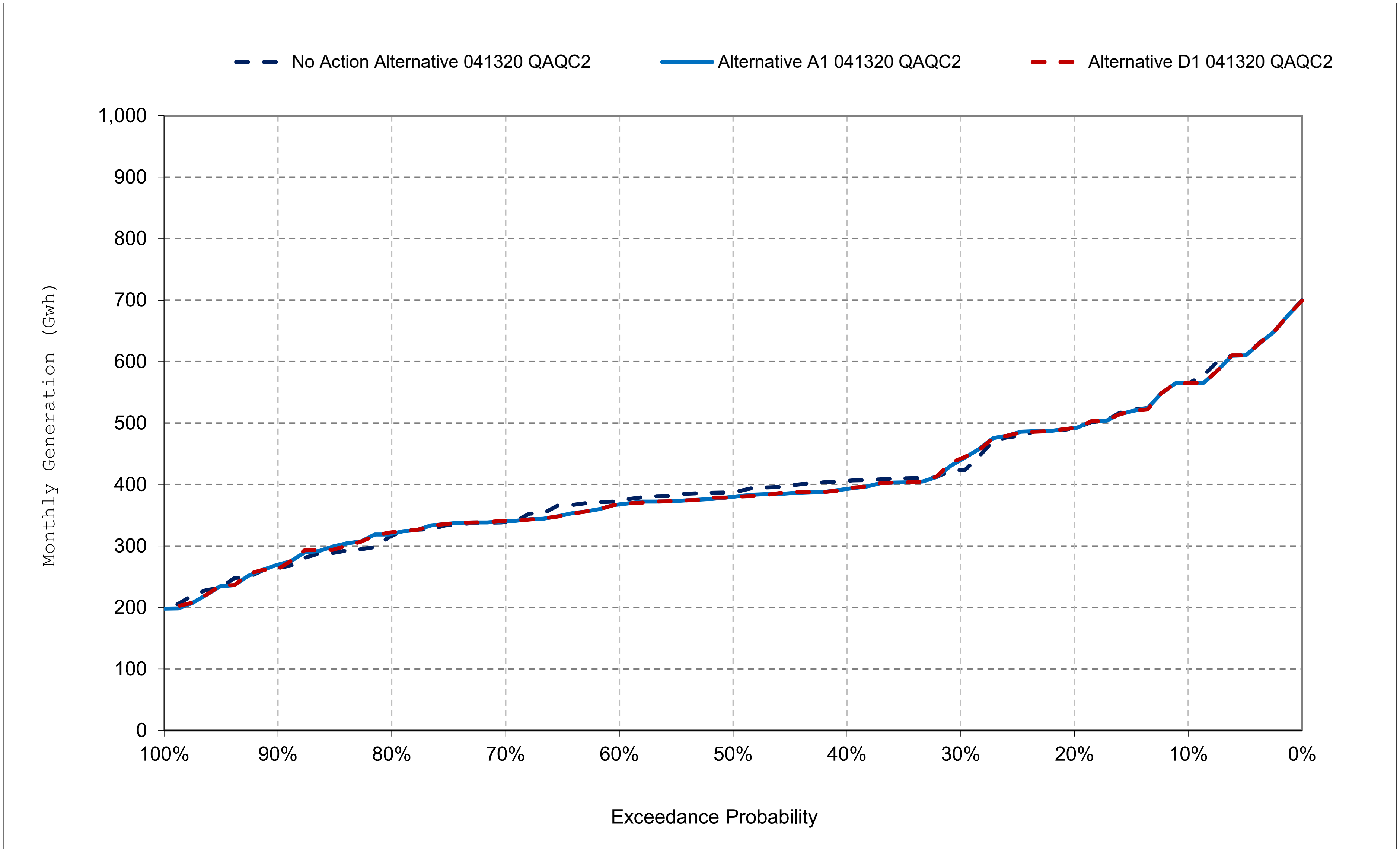
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-13. CVP Net Generation, April



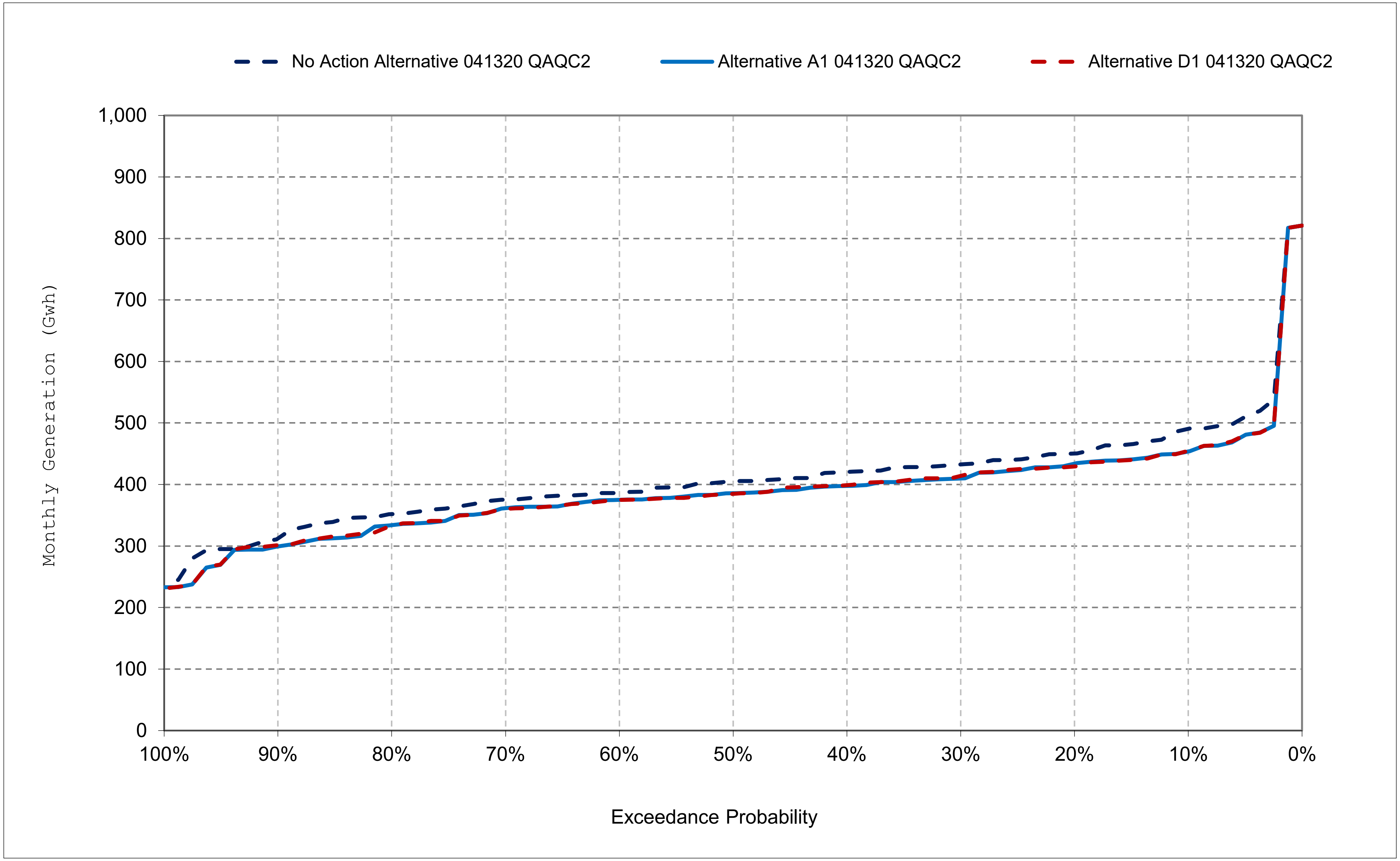
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-14. CVP Net Generation, May



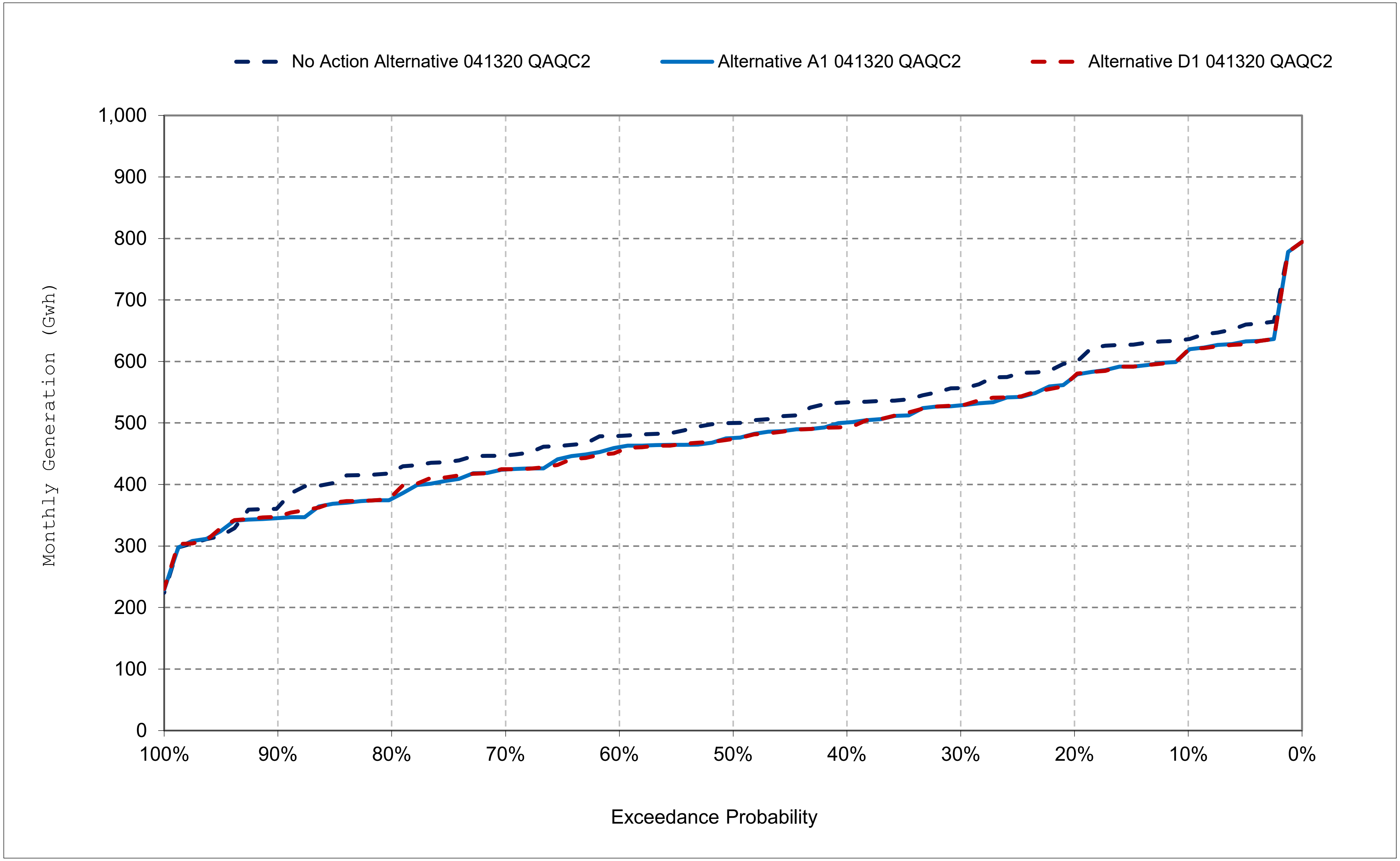
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-15. CVP Net Generation, June



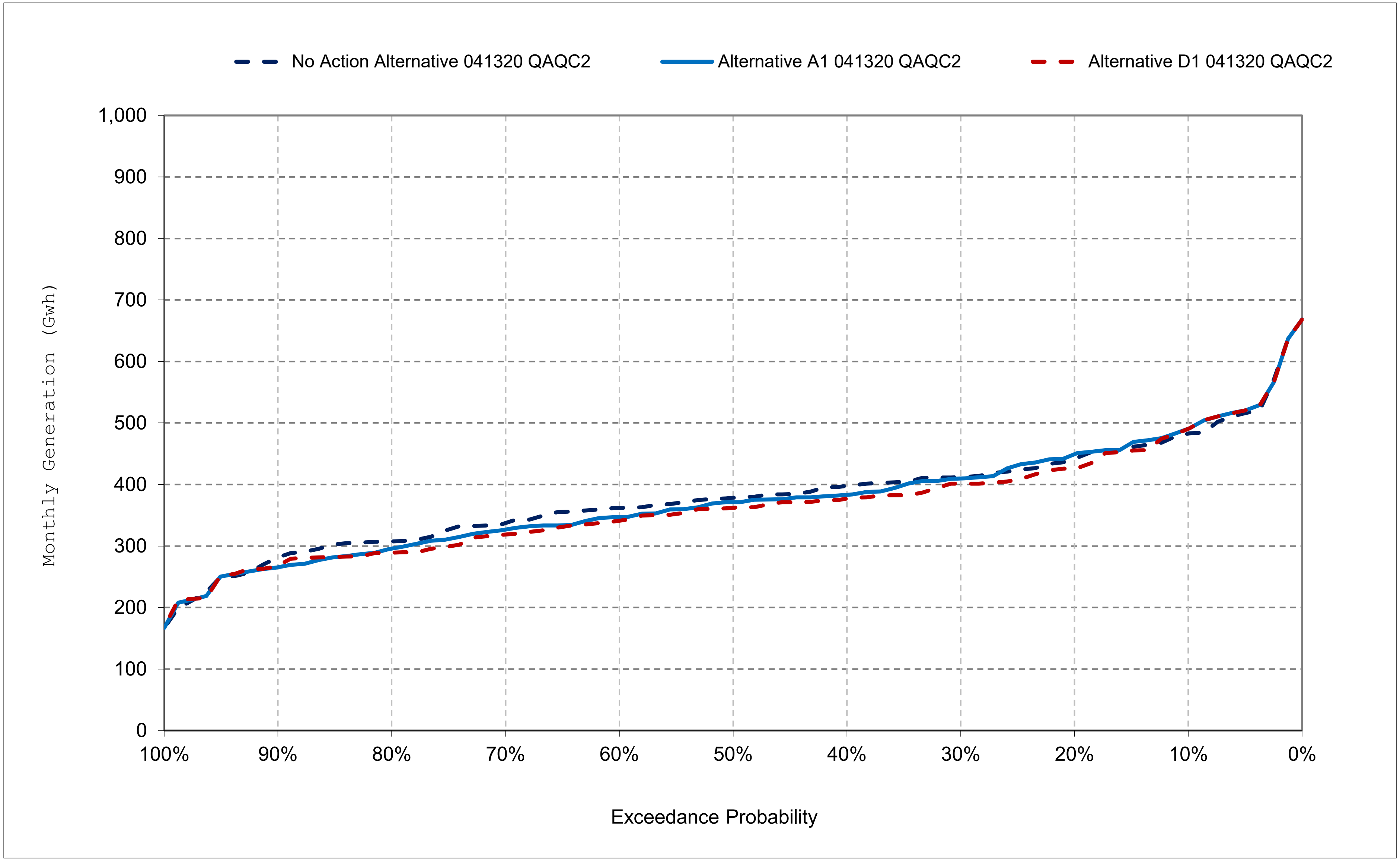
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-16. CVP Net Generation, July



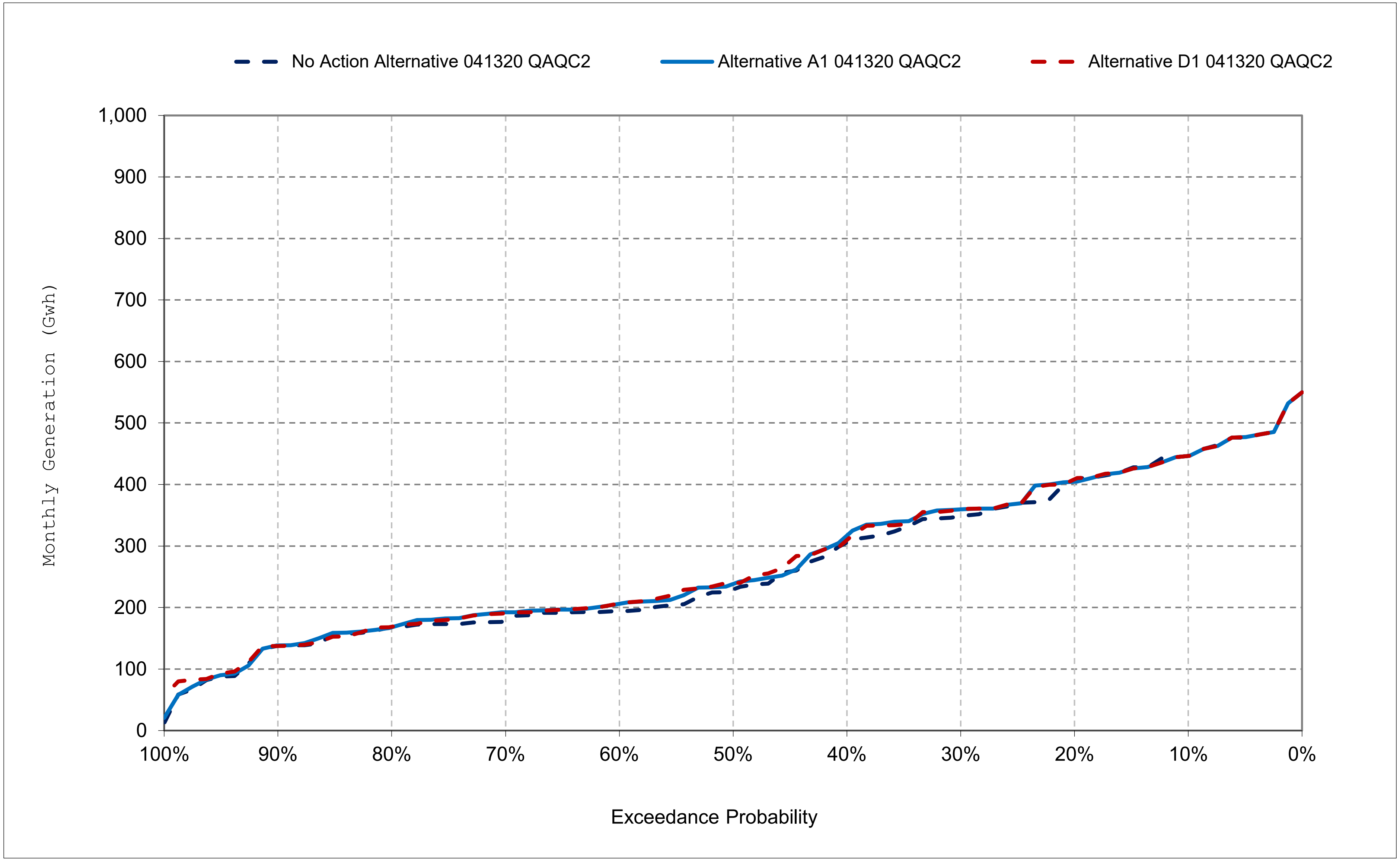
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-17. CVP Net Generation, August



*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-4-18. CVP Net Generation, September



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-5-1. CVP Net Revenue, Monthly Revenue

No Action Alternative 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	16,673	12,668	29,162	33,159	31,309	29,125	19,795	25,920	23,605	36,004	30,171	26,624
20%	16,035	8,349	16,435	23,946	26,398	25,965	13,431	22,452	21,658	33,900	27,634	24,340
30%	12,936	6,647	5,753	14,324	14,660	12,814	11,701	19,426	20,840	31,490	25,816	20,796
40%	12,190	5,991	4,610	7,217	8,282	8,183	10,115	18,545	20,213	30,196	24,877	18,236
50%	10,656	5,276	3,693	4,288	3,523	6,552	9,498	17,735	19,483	28,293	23,680	13,840
60%	9,584	4,773	2,592	2,334	2,349	4,992	8,611	17,091	18,588	27,096	22,665	11,747
70%	8,486	4,193	1,137	586	1,282	3,942	8,241	15,504	18,012	25,314	21,156	10,866
80%	6,826	3,544	614	65	834	3,041	7,467	14,497	16,882	23,771	19,239	10,158
90%	5,626	2,284	42	-440	312	2,135	6,553	12,125	15,041	20,524	17,608	8,312
Long Term												
Full Simulation Period[a]	10,931	6,645	8,172	11,239	10,928	11,778	11,448	18,435	19,687	28,595	23,796	16,098
Water Year Types[b,c]												
Wet (32%)	15,068	8,089	10,947	25,234	21,625	21,696	15,460	22,820	20,961	30,838	28,132	23,916
Above Normal (15%)	11,936	7,284	7,536	11,548	16,183	14,842	11,431	19,345	20,196	32,245	25,971	20,618
Below Normal (17%)	8,697	6,550	9,000	4,212	7,353	6,836	9,286	16,766	19,829	29,576	22,622	11,424
Dry (22%)	9,236	6,080	8,193	1,911	1,555	4,835	9,045	16,496	19,899	27,238	22,011	10,688
Critical (15%)	6,110	3,837	1,798	2,798	728	3,403	8,901	12,878	15,933	20,980	16,275	8,210

Alternative A1 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	16,843	12,252	29,726	33,147	30,087	29,182	19,922	25,851	21,830	34,955	30,662	26,620
20%	16,204	8,554	19,428	24,498	25,213	25,969	13,534	22,427	20,888	32,559	28,138	24,059
30%	12,711	7,350	9,449	13,987	14,568	13,231	11,530	20,168	19,689	29,914	25,662	21,462
40%	12,244	6,361	5,232	7,402	8,965	8,223	10,308	17,962	19,138	28,332	23,968	18,899
50%	11,279	5,601	4,562	4,285	3,172	5,849	9,568	17,335	18,516	26,912	23,204	14,395
60%	10,015	5,012	2,823	2,716	1,916	4,618	8,760	16,790	17,993	26,070	21,704	12,472
70%	8,987	4,680	1,499	599	943	3,671	8,174	15,497	17,327	24,015	20,532	11,641
80%	7,649	3,777	972	-30	228	2,816	7,119	14,650	16,090	21,326	18,528	10,072
90%	6,032	2,857	311	-972	-360	1,911	6,582	12,349	14,416	19,549	16,697	8,362
Long Term												
Full Simulation Period[a]	11,295	7,007	8,979	11,009	10,616	11,590	11,423	18,317	18,718	27,146	23,433	16,463
Water Year Types[b,c]												
Wet (32%)	15,108	8,297	10,848	25,040	21,184	21,528	15,401	22,661	20,647	29,652	28,251	24,285
Above Normal (15%)	12,258	7,336	9,066	10,870	15,536	14,843	11,774	19,552	18,641	29,366	25,236	21,110
Below Normal (17%)	9,651	6,965	9,587	3,976	7,866	6,419	9,082	16,667	18,072	27,420	21,774	11,923
Dry (22%)	9,533	6,856	10,206	1,896	1,219	4,823	8,915	16,371	18,472	25,924	21,262	11,009
Critical (15%)	6,630	4,156	2,292	2,623	101	2,985	8,943	12,511	15,738	21,009	16,382	8,349

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	169	-416	564	-12	-1,222	57	128	-70	-1,775	-1,049	490	-4
20%	169	205	2,994	552	-1,185	3	103	-25	-770	-1,340	504	-282
30%	-225	703	3,696	-337	-92	417	-171	742	-1,151	-1,576	-154	666
40%	53	370	623	186	683	40	193	-583	-1,075	-1,863	-909	663
50%	623	325	869	-2	-350	-703	69	-400	-967	-1,380	-476	555
60%	431	239	231	382	-434	-374	149	-301	-595	-1,025	-960	726
70%	502	488	362	13	-339	-271	-67	-7	-685	-1,299	-624	775
80%	823	233	358	-95	-606	-225	-349	153	-792	-2,446	-711	-86
90%	406	573	269	-532	-672	-224	28	225	-625	-975	-911	49
Long Term												
Full Simulation Period[a]	364	362	807	-230	-313	-188	-26	-118	-969	-1,450	-363	365
Water Year Types[b,c]												
Wet (32%)	41	208	-100	-194	-442	-167	-59	-159	-314	-1,186	119	369
Above Normal (15%)	322	52	1,531	-677	-647	1	343	207	-1,555	-2,879	-735	491
Below Normal (17%)	953	416	587	-236	512	-417	-204	-98	-1,757	-2,156	-849	499
Dry (22%)	296	777	2,013	-15	-337	-12	-130	-125	-1,427	-1,313	-750	321
Critical (15%)	520	319	493	-175	-627	-418	42	-368	-195	29	108	139

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

f Net revenue is based on 2030 pricing forecasts developed by DWR.

Table G.2.1-5-2. CVP Net Revenue, Monthly Revenue

No Action Alternative 041320 QAQC2

	Monthly Revenue (1000)											
Statistic	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Probability of Exceedance												
10%	16,673	12,668	29,162	33,159	31,309	29,125	19,795	25,920	23,605	36,004	30,171	26,624
20%	16,035	8,349	16,435	23,946	26,398	25,965	13,431	22,452	21,658	33,900	27,634	24,340
30%	12,936	6,647	5,753	14,324	14,660	12,814	11,701	19,426	20,840	31,490	25,816	20,796
40%	12,190	5,991	4,610	7,217	8,282	8,183	10,115	18,545	20,213	30,196	24,877	18,236
50%	10,656	5,276	3,693	4,288	3,523	6,552	9,498	17,735	19,483	28,293	23,680	13,840
60%	9,584	4,773	2,592	2,334	2,349	4,992	8,611	17,091	18,588	27,096	22,665	11,747
70%	8,486	4,193	1,137	586	1,282	3,942	8,241	15,504	18,012	25,314	21,156	10,866
80%	6,826	3,544	614	65	834	3,041	7,467	14,497	16,882	23,771	19,239	10,158
90%	5,626	2,284	42	-440	312	2,135	6,553	12,125	15,041	20,524	17,608	8,312
Long Term												
Full Simulation Period[a]	10,931	6,645	8,172	11,239	10,928	11,778	11,448	18,435	19,687	28,595	23,796	16,098
Water Year Types[b,c]												
Wet (32%)	15,068	8,089	10,947	25,234	21,625	21,696	15,460	22,820	20,961	30,838	28,132	23,916
Above Normal (15%)	11,936	7,284	7,536	11,548	16,183	14,842	11,431	19,345	20,196	32,245	25,971	20,618
Below Normal (17%)	8,697	6,550	9,000	4,212	7,353	6,836	9,286	16,766	19,829	29,576	22,622	11,424
Dry (22%)	9,236	6,080	8,193	1,911	1,555	4,835	9,045	16,496	19,899	27,238	22,011	10,688
Critical (15%)	6,110	3,837	1,798	2,798	728	3,403	8,901	12,878	15,933	20,980	16,275	8,210

Alternative D1 041320 QAQC2

	Monthly Revenue (1000)											
Statistic	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Probability of Exceedance												
10%	17,022	12,648	29,673	33,141	30,087	29,191	19,922	25,851	21,891	35,012	30,655	26,619
20%	16,334	9,085	19,428	24,502	25,580	25,969	13,558	22,427	20,587	32,608	26,678	24,354
30%	12,685	7,587	9,874	14,025	14,713	14,819	11,715	20,276	19,931	29,945	25,093	21,476
40%	12,108	6,224	5,143	7,778	8,780	8,200	10,095	17,969	19,194	27,941	23,600	18,469
50%	11,402	5,674	4,353	3,973	3,169	5,836	9,601	17,355	18,496	26,830	22,668	14,534
60%	10,051	5,170	2,920	2,657	1,807	4,615	8,857	16,790	17,972	25,701	21,320	12,509
70%	9,119	4,656	1,881	352	884	3,486	8,264	15,508	17,304	24,032	19,921	11,612
80%	7,758	4,103	1,040	-40	264	2,590	7,406	14,762	15,966	21,532	18,163	10,154
90%	6,105	2,799	406	-843	-354	1,532	6,808	12,051	14,510	19,688	16,854	8,396
Long Term												
Full Simulation Period[a]	11,402	7,198	9,159	10,965	10,595	11,601	11,483	18,317	18,730	27,159	23,042	16,529
Water Year Types[b,c]												
Wet (32%)	15,084	8,273	10,957	25,088	21,186	21,486	15,536	22,659	20,648	29,650	28,083	24,276
Above Normal (15%)	12,230	7,363	9,459	10,881	15,824	14,767	11,779	19,547	18,771	29,344	24,348	20,989
Below Normal (17%)	9,993	7,664	9,538	3,931	7,649	6,439	9,197	16,638	18,043	27,531	21,270	12,134
Dry (22%)	9,522	6,987	10,540	1,687	1,210	5,107	8,964	16,408	18,528	25,845	20,692	11,017
Critical (15%)	7,060	4,478	2,452	2,570	-71	2,780	8,849	12,498	15,637	21,116	16,404	8,677

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

	Monthly Revenue (1000)											
Statistic	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Probability of Exceedance												
10%	348	-20	512	-18	-1,222	66	127	-70	-1,714	-992	484	-5
20%	299	736	2,993	556	-817	3	127	-25	-1,071	-1,292	-957	14
30%	-251	940	4,122	-298	54	2,006	14	850	-909	-1,545	-722	680
40%	-82	233	533	561	498	17	-20	-576	-1,019	-2,255	-1,277	233
50%	746	398	660	-314	-354	-716	103	-379	-987	-1,463	-1,013	694
60%	467	397	328	322	-542	-377	246	-301	-617	-1,394	-1,345	762
70%	633	464	744	-234	-397	-456	23	4	-708	-1,282	-1,235	745
80%	932	559	425	-105	-571	-451	-61	265	-916	-2,240	-1,076	-4
90%	480	516	365	-404	-667	-603	254	-74	-532	-836	-754	84
Long Term												
Full Simulation Period[a]	471	553	987	-274	-334	-177	34	-118	-957	-1,436	-755	430
Water Year Types[b,c]												
Wet (32%)	17	183	10	-146	-439	-210	76	-161	-313	-1,187	-50	360
Above Normal (15%)	294	79	1,924	-667	-358	-75	348	202	-1,425	-2,901	-1,622	371
Below Normal (17%)	1,296	1,114	537	-281	295	-397	-90	-127	-1,786	-2,046	-1,352	710
Dry (22%)	285	907	2,347	-224	-345	273	-81	-89	-1,371	-1,393	-1,319	329
Critical (15%)	950	641	654	-228	-798	-623	-52	-380	-297	135	129	467

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

f Net revenue is based on 2030 pricing forecasts developed by DWR.

Table G.2.1-5-3. CVP Net Revenue, Monthly Revenue

Alternative A1 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	16,843	12,252	29,726	33,147	30,087	29,182	19,922	25,851	21,830	34,955	30,662	26,620
20%	16,204	8,554	19,428	24,498	25,213	25,969	13,534	22,427	20,888	32,559	28,138	24,059
30%	12,711	7,350	9,449	13,987	14,568	13,231	11,530	20,168	19,689	29,914	25,662	21,462
40%	12,244	6,361	5,232	7,402	8,965	8,223	10,308	17,962	19,138	28,332	23,968	18,899
50%	11,279	5,601	4,562	4,285	3,172	5,849	9,568	17,335	18,516	26,912	23,204	14,395
60%	10,015	5,012	2,823	2,716	1,916	4,618	8,760	16,790	17,993	26,070	21,704	12,472
70%	8,987	4,680	1,499	599	943	3,671	8,174	15,497	17,327	24,015	20,532	11,641
80%	7,649	3,777	972	-30	228	2,816	7,119	14,650	16,090	21,326	18,528	10,072
90%	6,032	2,857	311	-972	-360	1,911	6,582	12,349	14,416	19,549	16,697	8,362
Long Term												
Full Simulation Period[a]	11,295	7,007	8,979	11,009	10,616	11,590	11,423	18,317	18,718	27,146	23,433	16,463
Water Year Types[b,c]												
Wet (32%)	15,108	8,297	10,848	25,040	21,184	21,528	15,401	22,661	20,647	29,652	28,251	24,285
Above Normal (15%)	12,258	7,336	9,066	10,870	15,536	14,843	11,774	19,552	18,641	29,366	25,236	21,110
Below Normal (17%)	9,651	6,965	9,587	3,976	7,866	6,419	9,082	16,667	18,072	27,420	21,774	11,923
Dry (22%)	9,533	6,856	10,206	1,896	1,219	4,823	8,915	16,371	18,472	25,924	21,262	11,009
Critical (15%)	6,630	4,156	2,292	2,623	101	2,985	8,943	12,511	15,738	21,009	16,382	8,349

Alternative D1 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	17,022	12,648	29,673	33,141	30,087	29,191	19,922	25,851	21,891	35,012	30,655	26,619
20%	16,334	9,085	19,428	24,502	25,580	25,969	13,558	22,427	20,587	32,608	26,678	24,354
30%	12,685	7,587	9,874	14,025	14,713	14,819	11,715	20,276	19,931	29,945	25,093	21,476
40%	12,108	6,224	5,143	7,778	8,780	8,200	10,095	17,969	19,194	27,941	23,600	18,469
50%	11,402	5,674	4,353	3,973	3,169	5,836	9,601	17,355	18,496	26,830	22,668	14,534
60%	10,051	5,170	2,920	2,657	1,807	4,615	8,857	16,790	17,972	25,701	21,320	12,509
70%	9,119	4,656	1,881	352	884	3,486	8,264	15,508	17,304	24,032	19,921	11,612
80%	7,758	4,103	1,040	-40	264	2,590	7,406	14,762	15,966	21,532	18,163	10,154
90%	6,105	2,799	406	-843	-354	1,532	6,808	12,051	14,510	19,688	16,854	8,396
Long Term												
Full Simulation Period[a]	11,402	7,198	9,159	10,965	10,595	11,601	11,483	18,317	18,730	27,159	23,042	16,529
Water Year Types[b,c]												
Wet (32%)	15,084	8,273	10,957	25,088	21,186	21,486	15,536	22,659	20,648	29,650	28,083	24,276
Above Normal (15%)	12,230	7,363	9,459	10,881	15,824	14,767	11,779	19,547	18,771	29,344	24,348	20,989
Below Normal (17%)	9,993	7,664	9,538	3,931	7,649	6,439	9,197	16,638	18,043	27,531	21,270	12,134
Dry (22%)	9,522	6,987	10,540	1,687	1,210	5,107	8,964	16,408	18,528	25,845	20,692	11,017
Critical (15%)	7,060	4,478	2,452	2,570	-71	2,780	8,849	12,498	15,637	21,116	16,404	8,677

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	179	396	-52	-6	0	9	0	0	61	57	-7	-1
20%	130	531	0	4	367	0	24	0	-301	48	-1,460	296
30%	-26	237	426	38	145	1,589	185	108	242	31	-568	14
40%	-136	-137	-90	375	-185	-23	-213	8	56	-391	-368	-430
50%	122	74	-209	-312	-4	-13	33	20	-20	-83	-537	139
60%	36	158	97	-59	-108	-3	96	0	-22	-369	-385	37
70%	131	-24	382	-247	-58	-185	90	11	-23	17	-611	-30
80%	109	325	68	-10	36	-226	288	112	-124	206	-364	82
90%	73	-58	96	128	6	-379	226	-298	94	139	157	35
Long Term												
Full Simulation Period[a]	107	191	181	-45	-21	11	60	0	12	13	-391	65
Water Year Types[b,c]												
Wet (32%)	-24	-24	109	48	3	-43	135	-2	2	-1	-169	-9
Above Normal (15%)	-29	27	393	11	288	-76	5	-5	130	-22	-887	-121
Below Normal (17%)	342	698	-49	-45	-217	20	114	-29	-29	110	-503	211
Dry (22%)	-11	131	334	-209	-8	285	49	36	56	-79	-569	8
Critical (15%)	430	322	161	-53	-171	-205	-94	-12	-101	106	22	329

a Based on the 82-year simulation period.

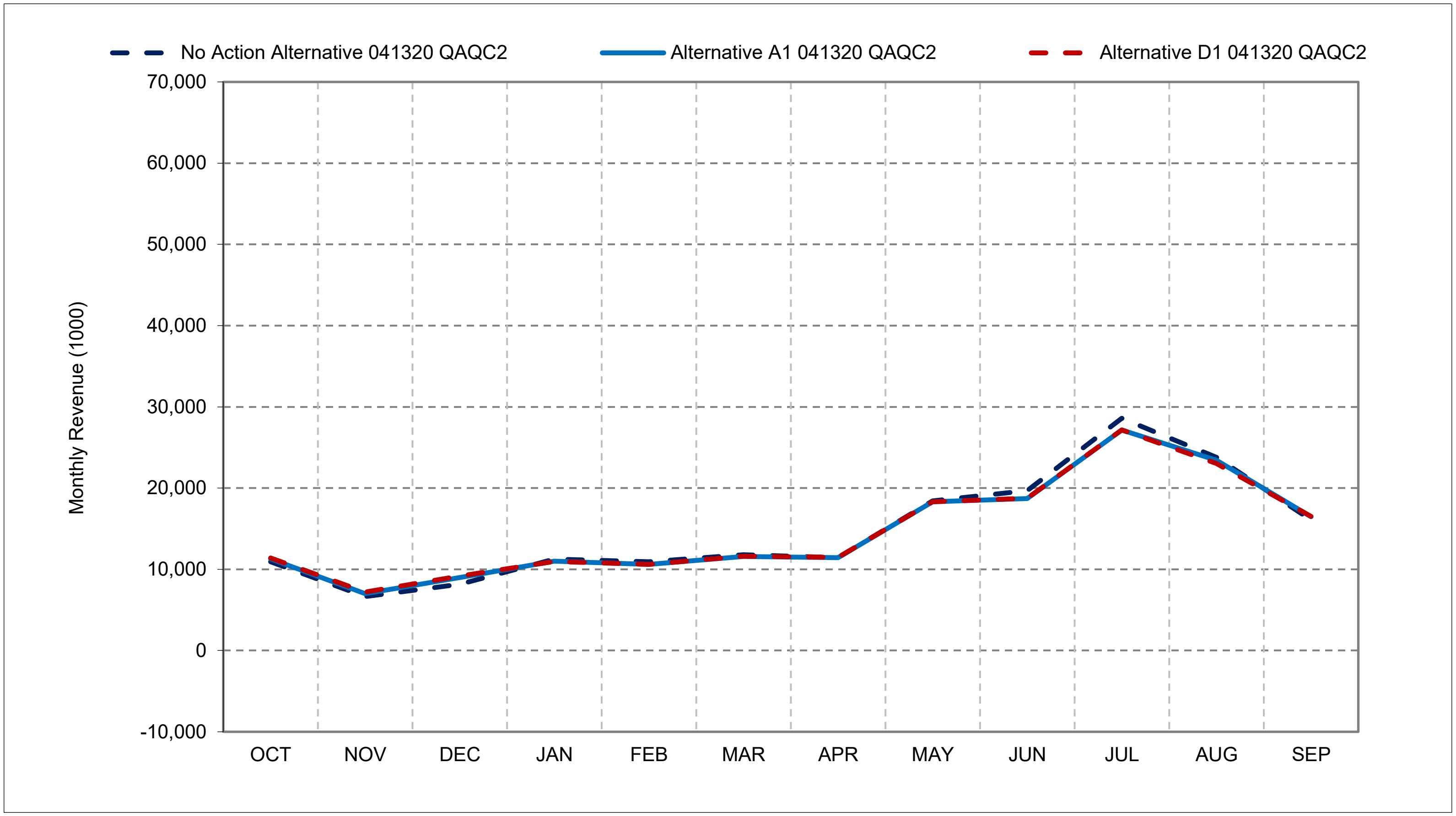
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

f Net revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-5-1. CVP Net Revenue, Long-Term Average Revenue



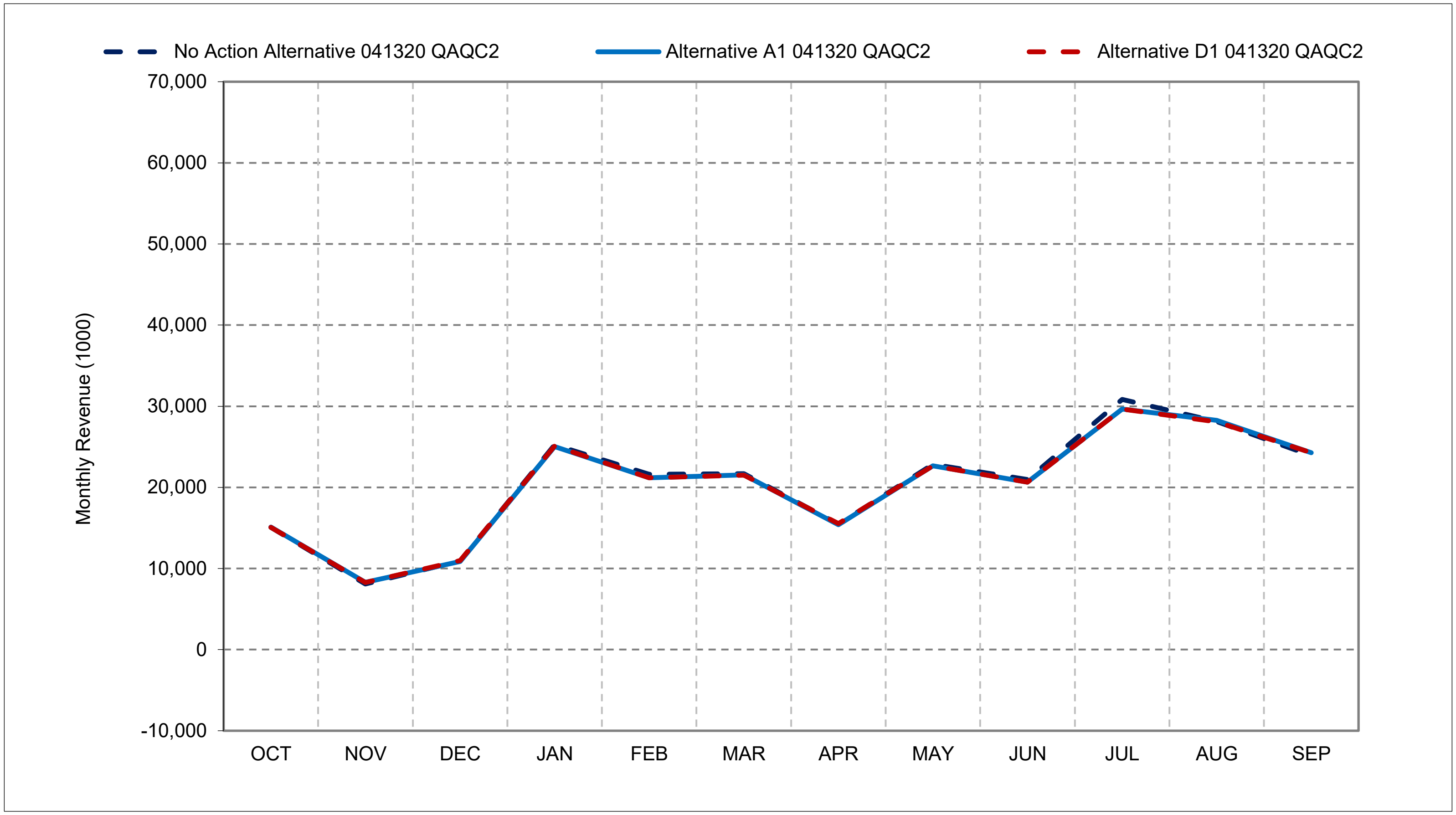
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-5-2. CVP Net Revenue, Wet Year Average Revenue



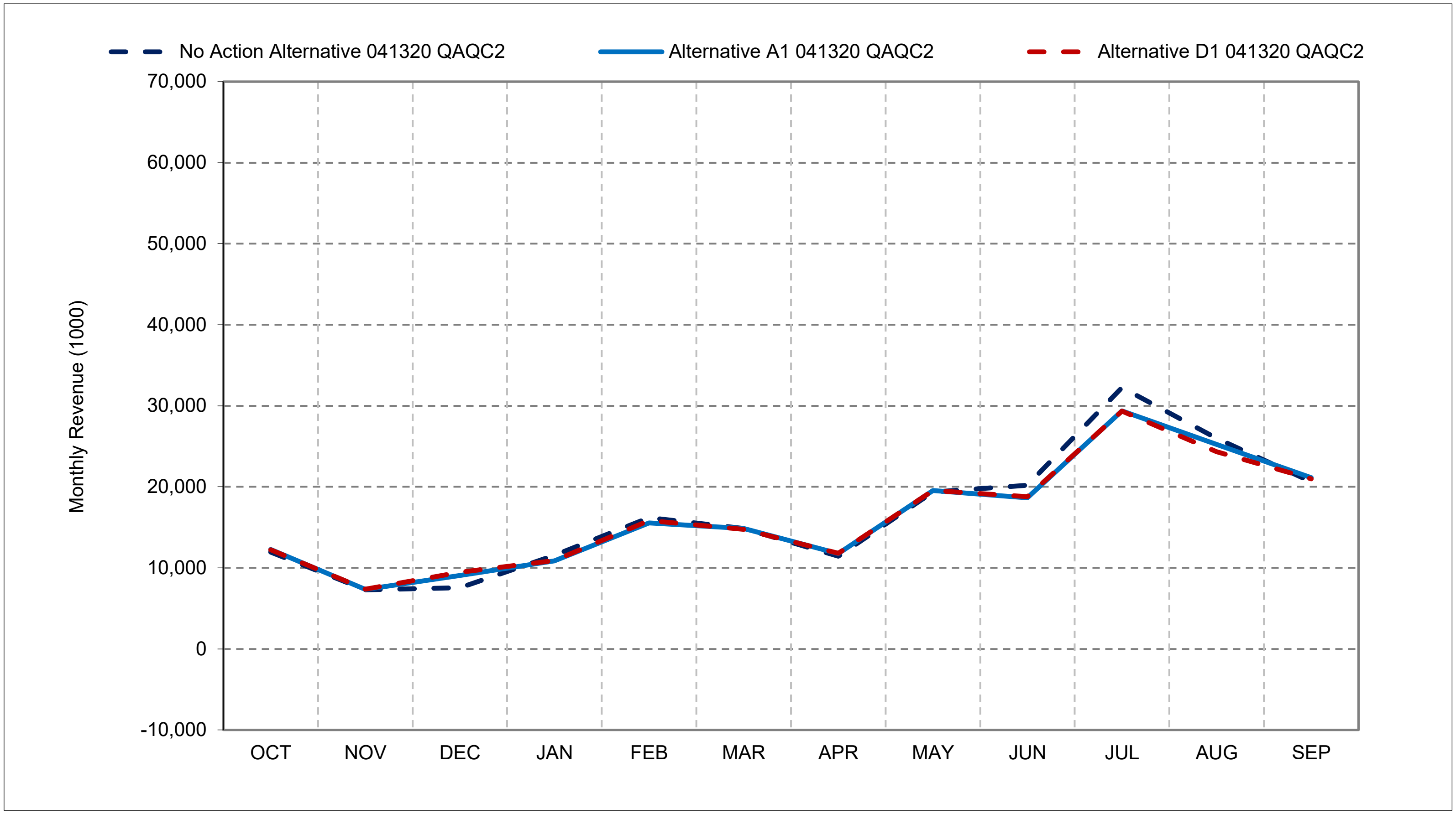
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-5-3. CVP Net Revenue, Above Normal Year Average Revenue



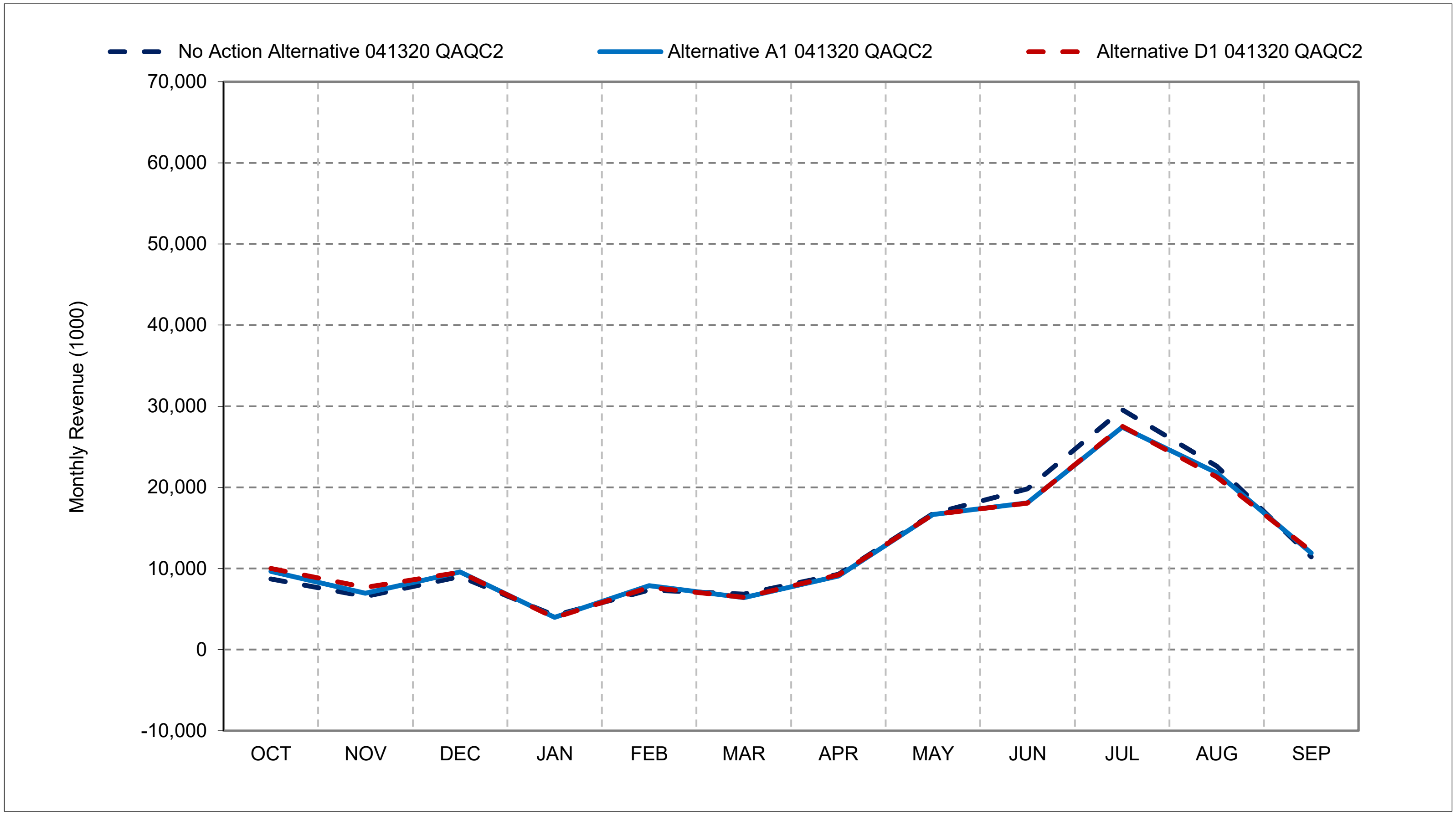
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-5-4. CVP Net Revenue, Below Normal Year Average Revenue



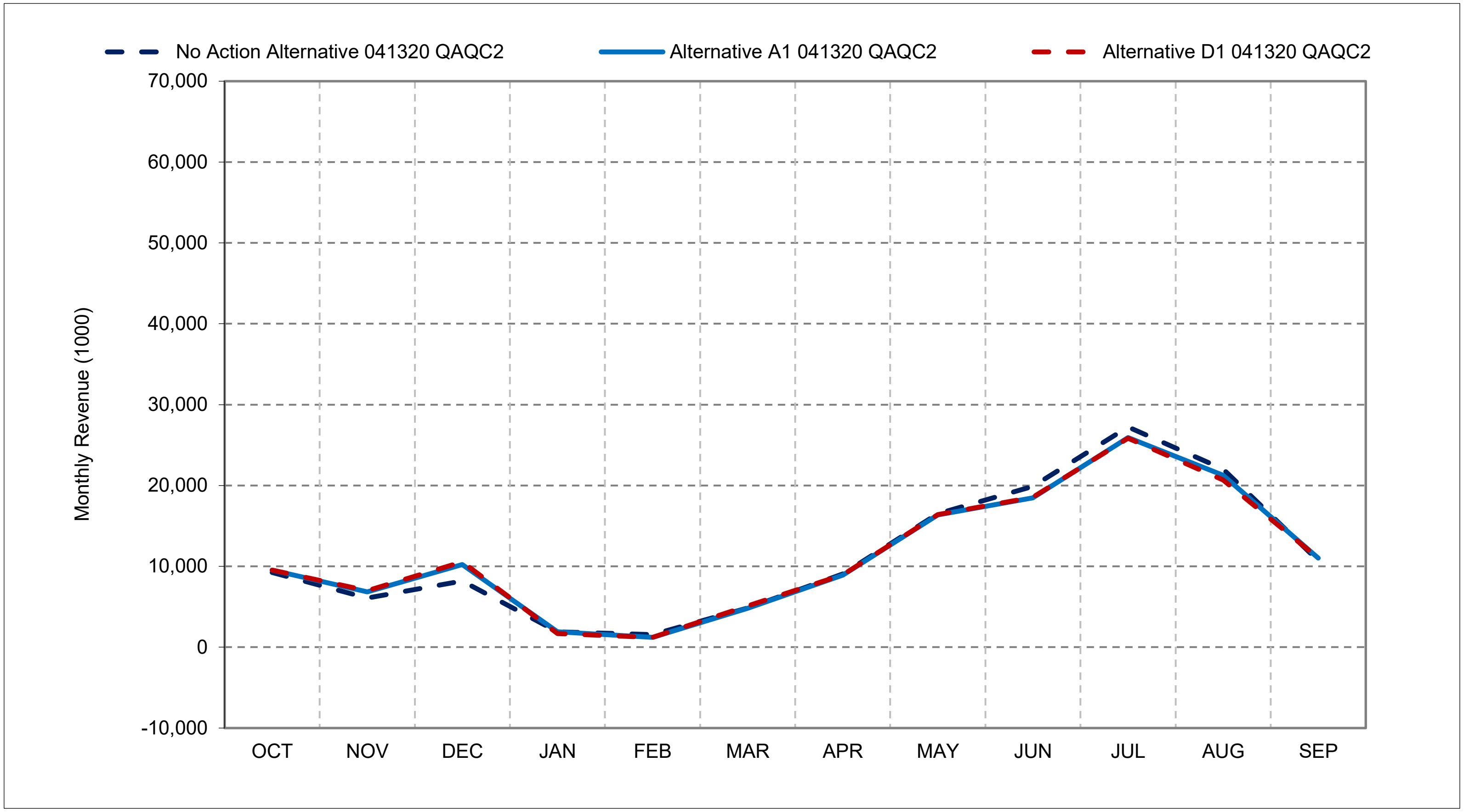
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

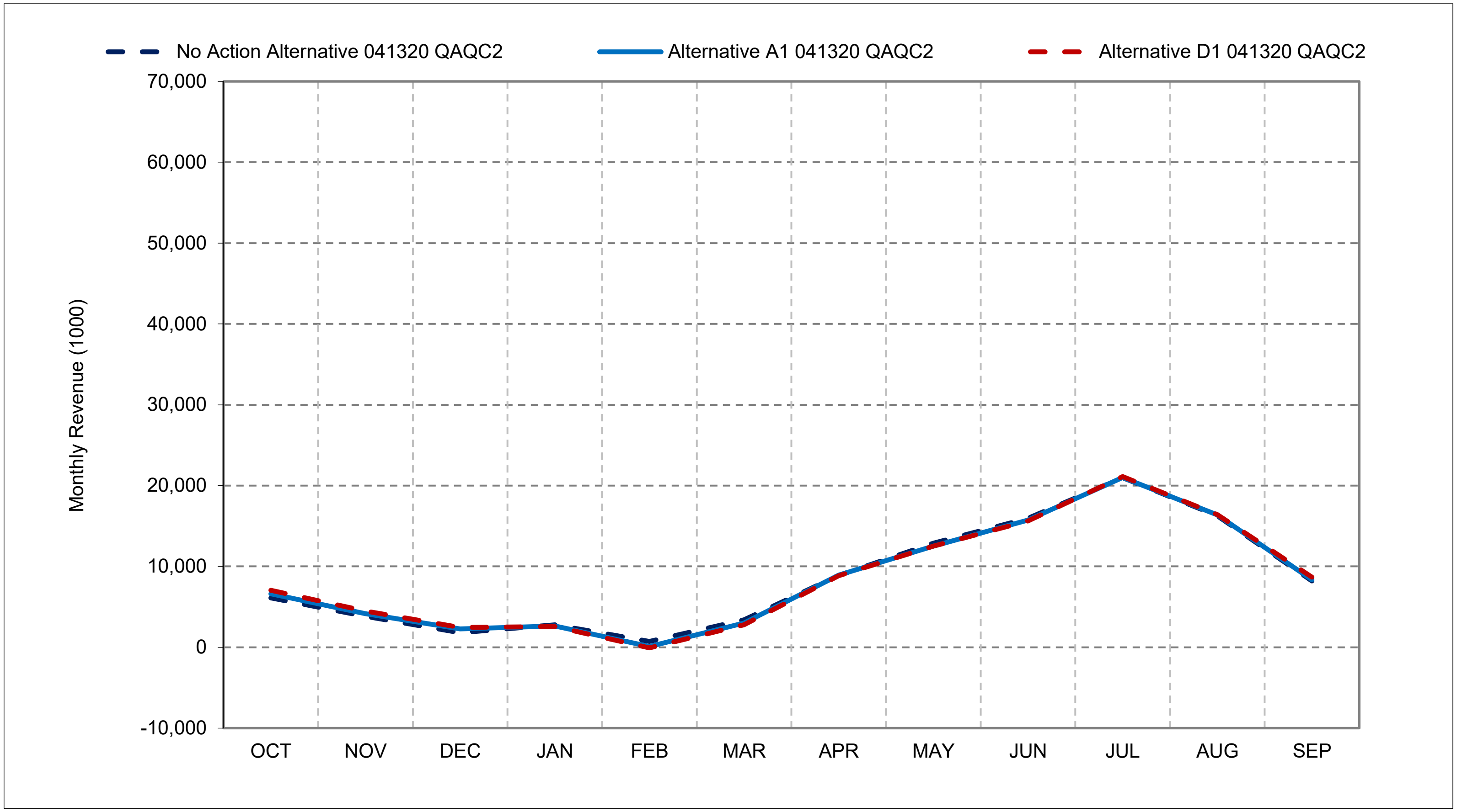
*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-5-5. CVP Net Revenue, Dry Year Average Revenue



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.
*All scenarios are simulated at DCR 2015 climate conditions.
*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-5-6. CVP Net Revenue, Critical Year Average Revenue



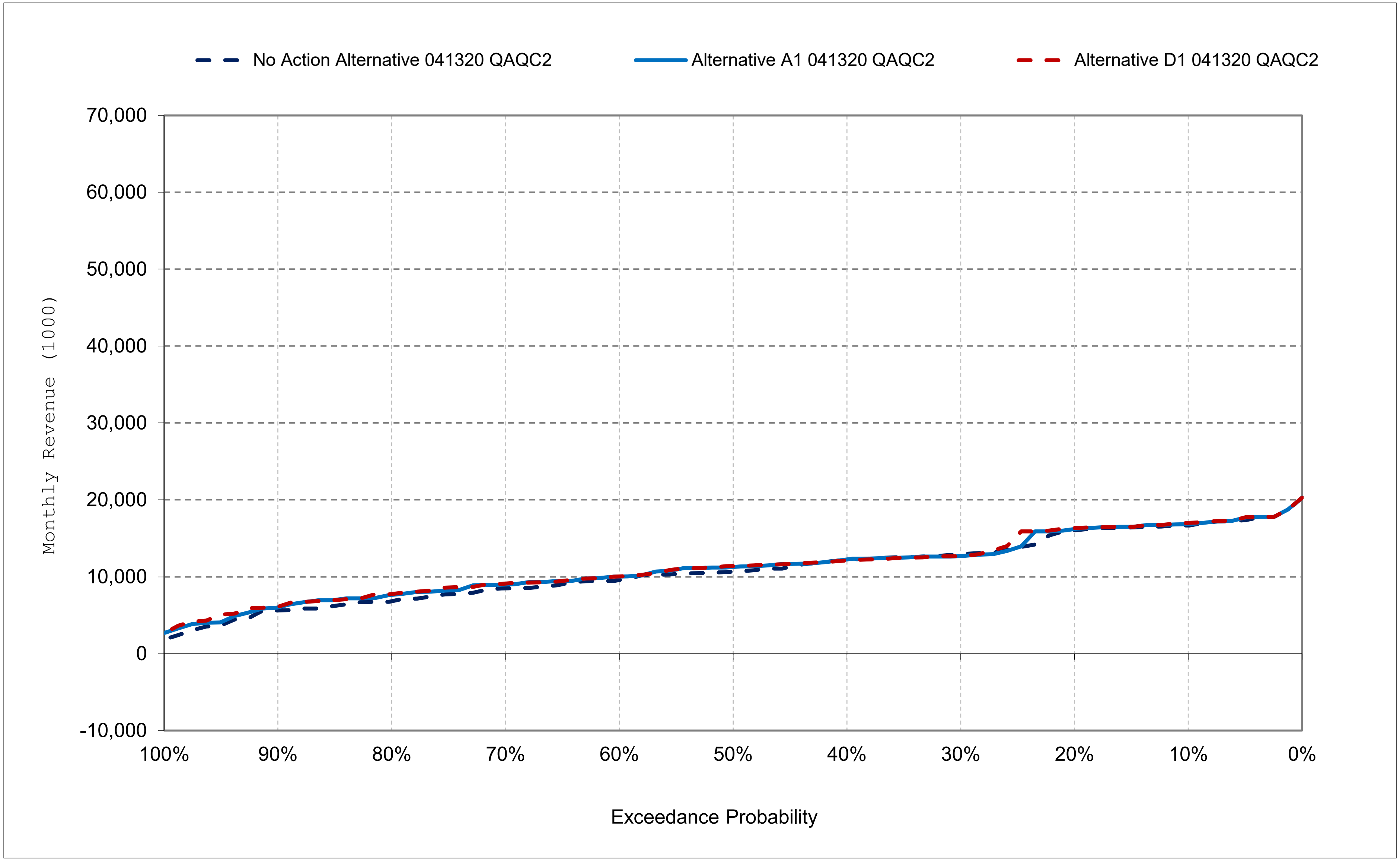
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

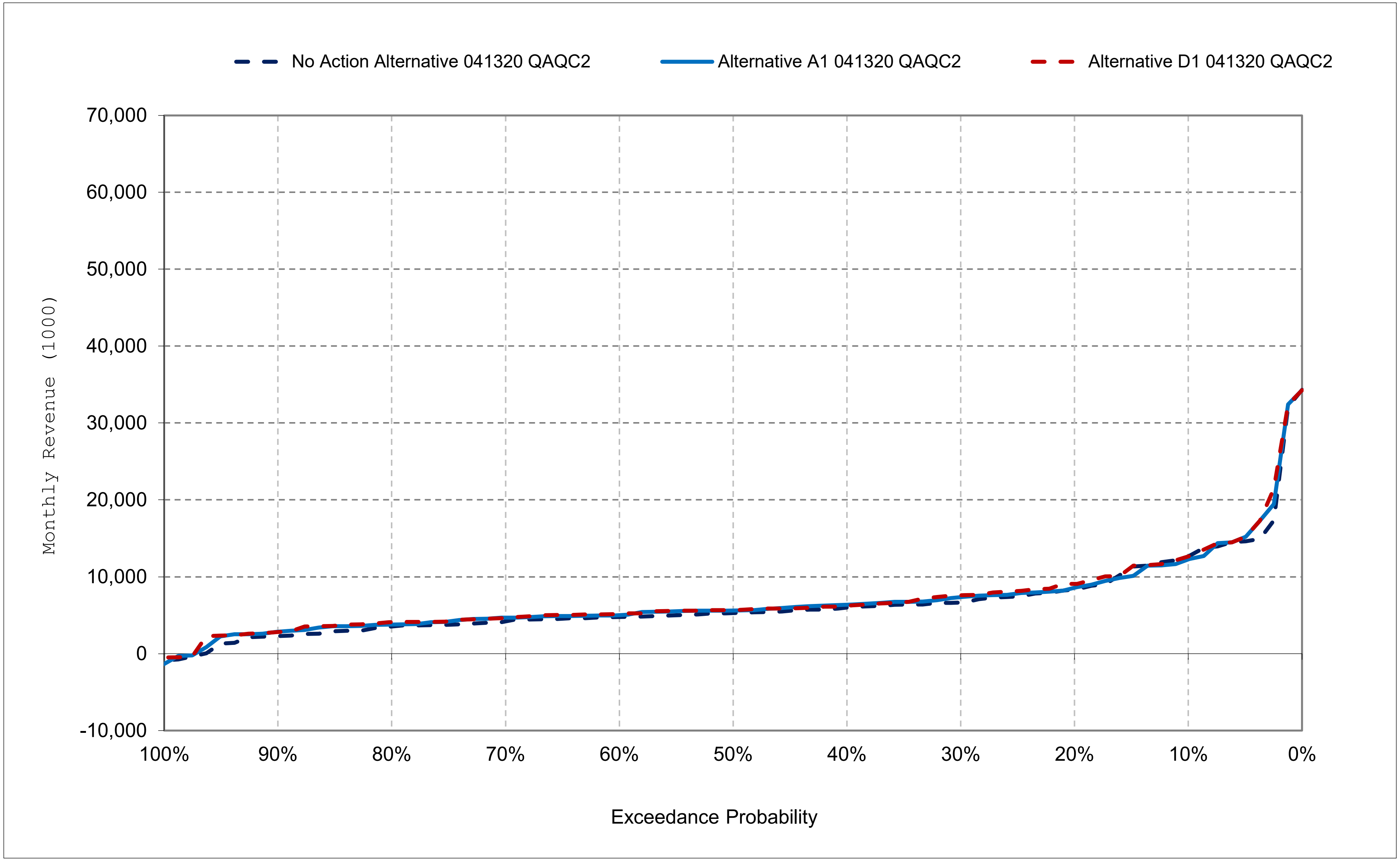
*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-5-7. CVP Net Revenue, October



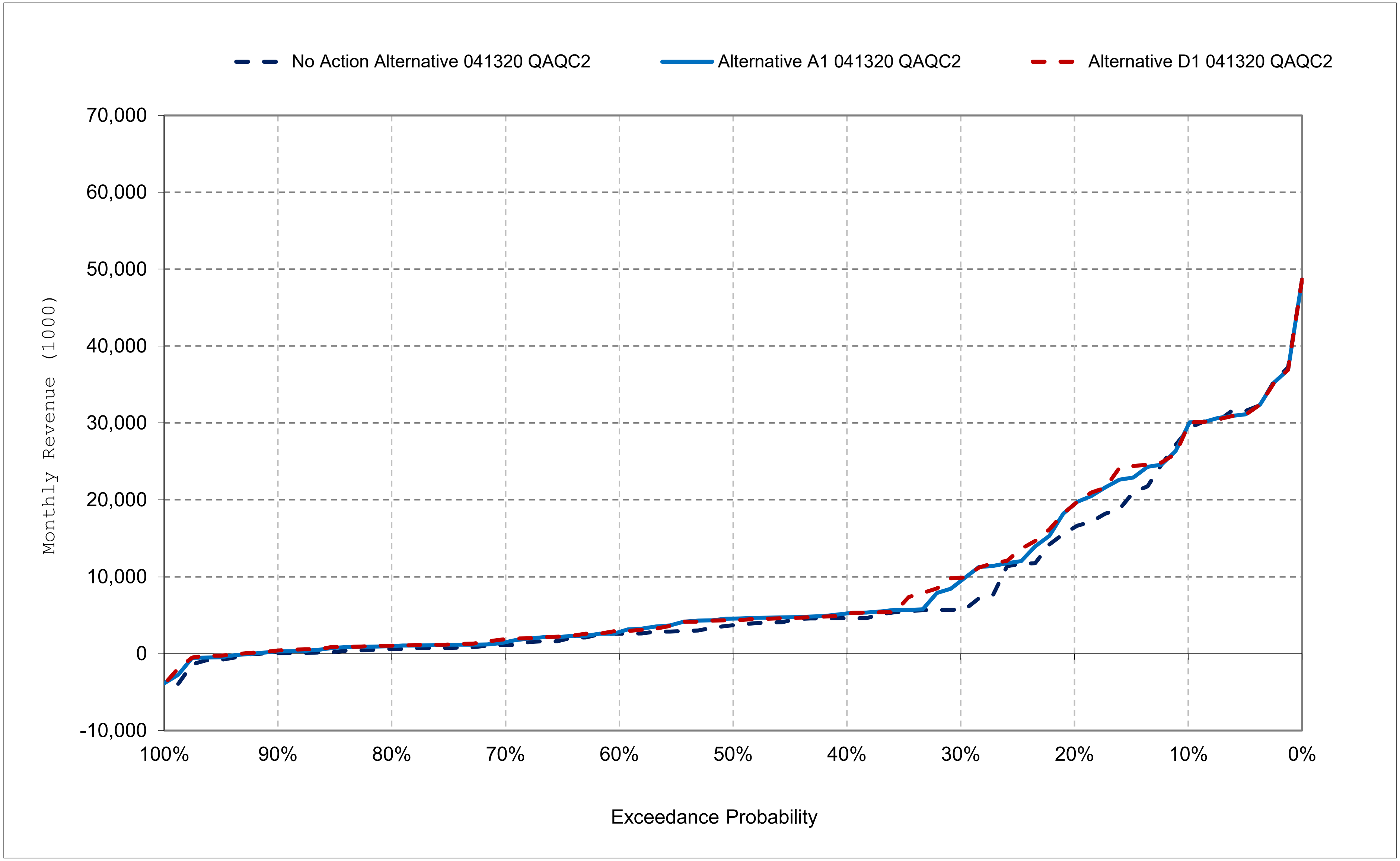
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-5-8. CVP Net Revenue, November



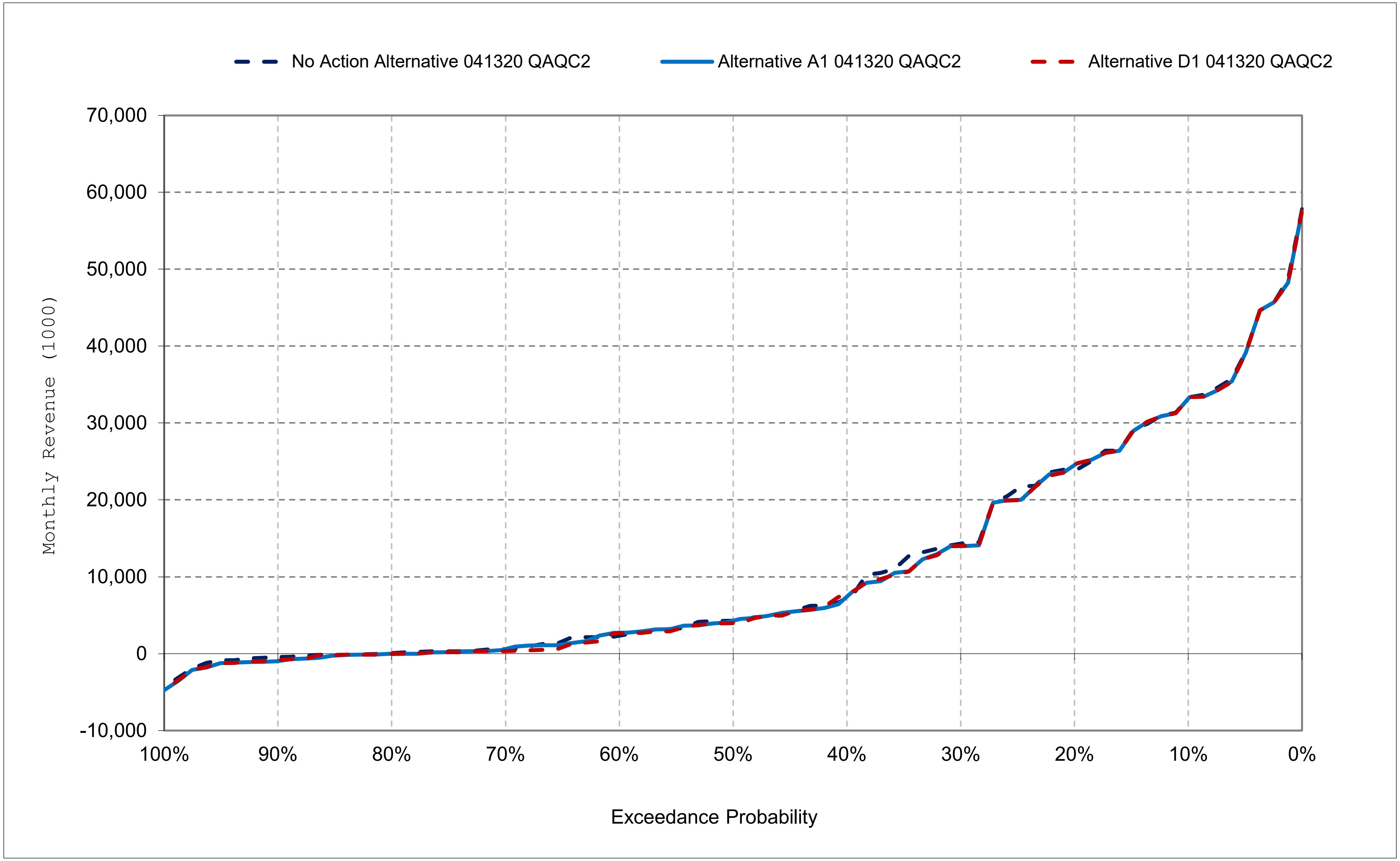
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-5-9. CVP Net Revenue, December



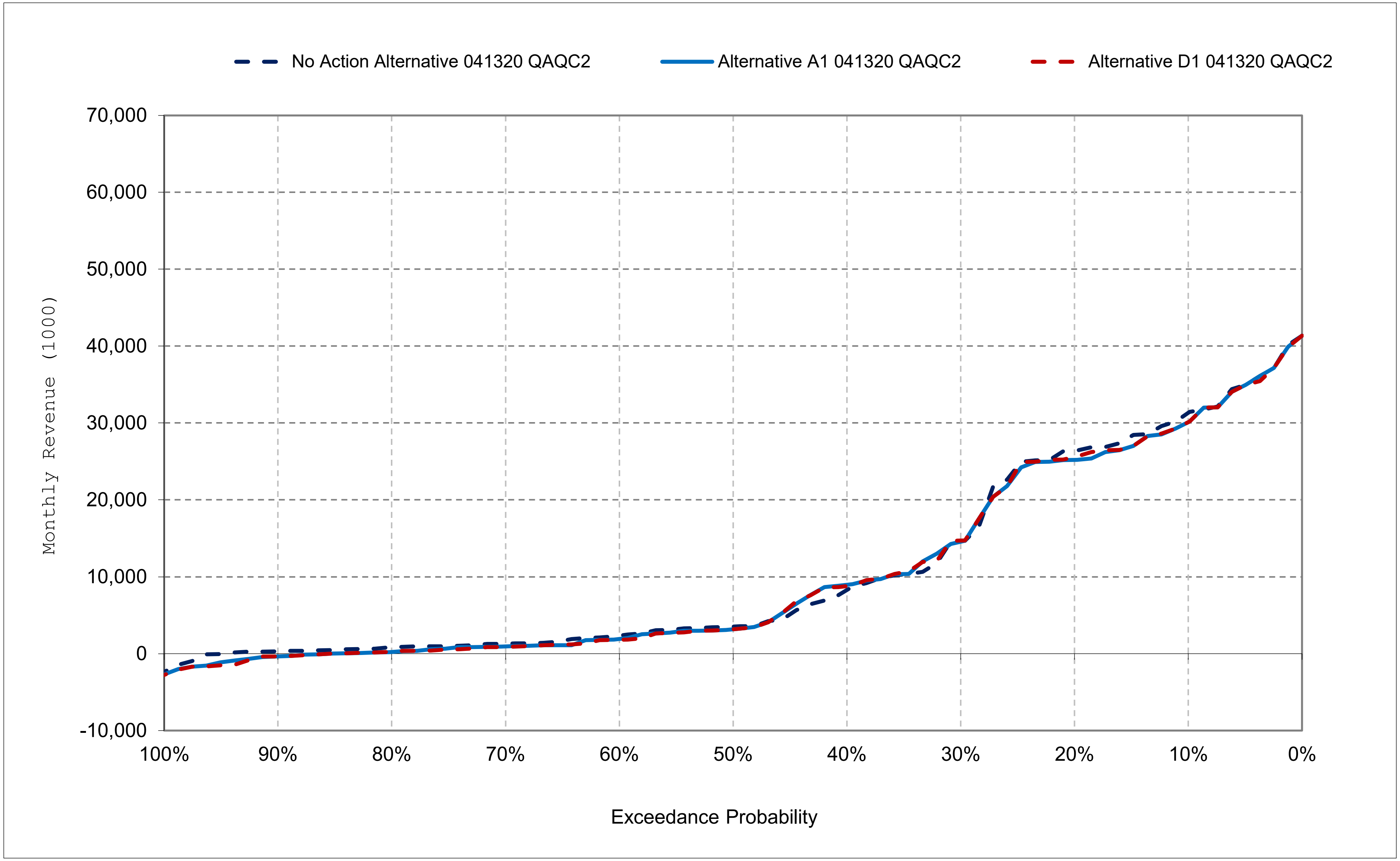
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-5-10. CVP Net Revenue, January



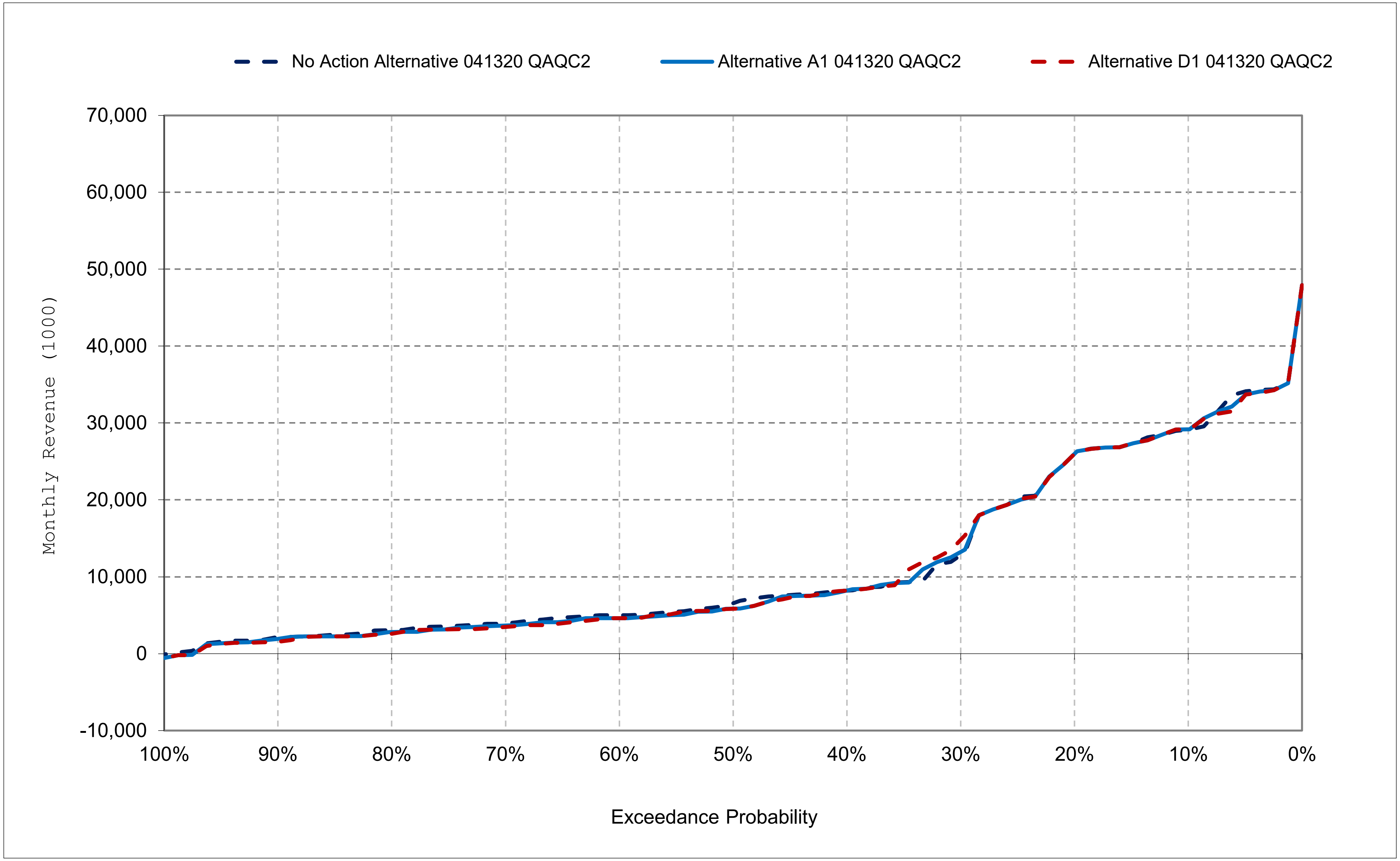
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-5-11. CVP Net Revenue, February



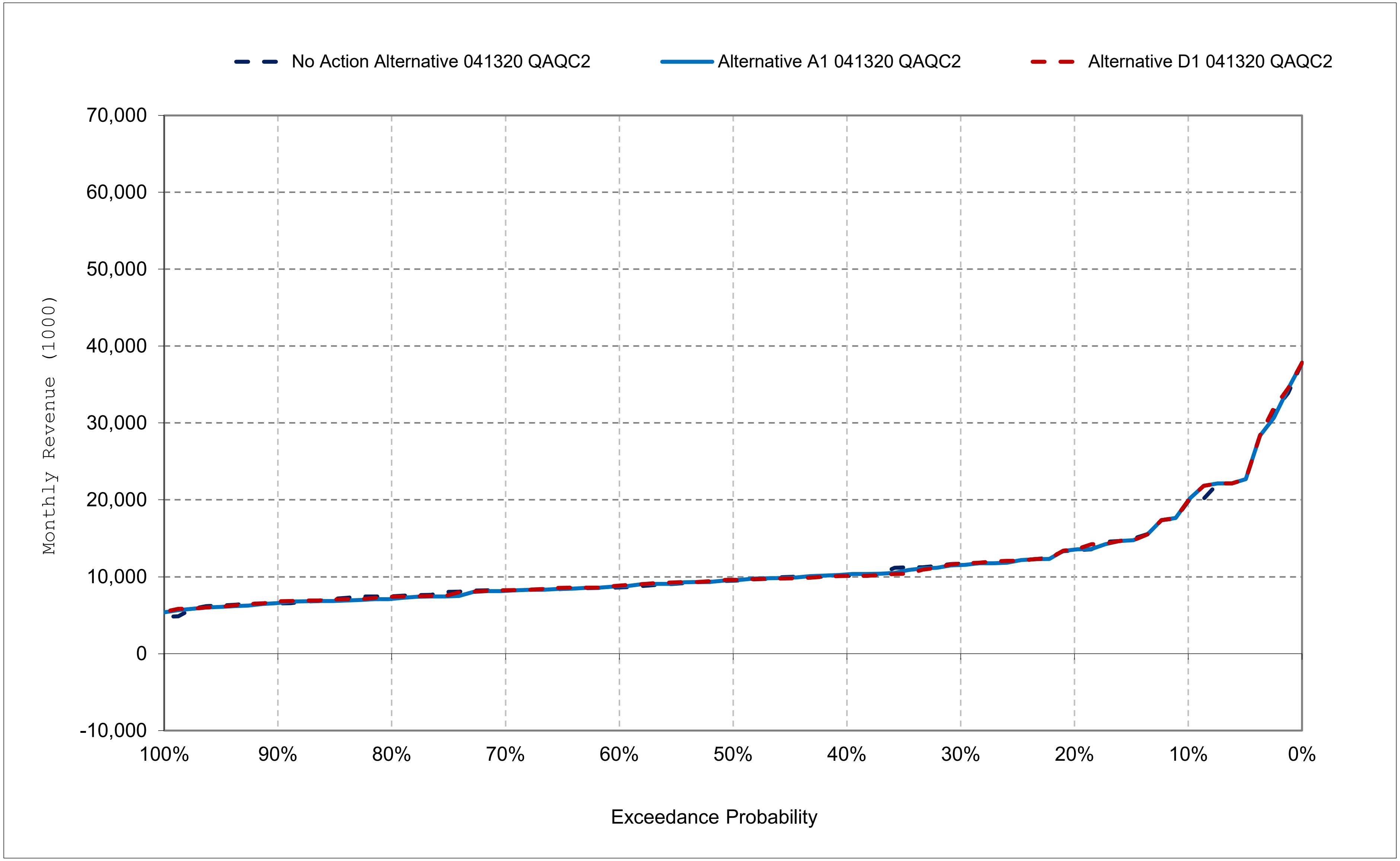
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-5-12. CVP Net Revenue, March



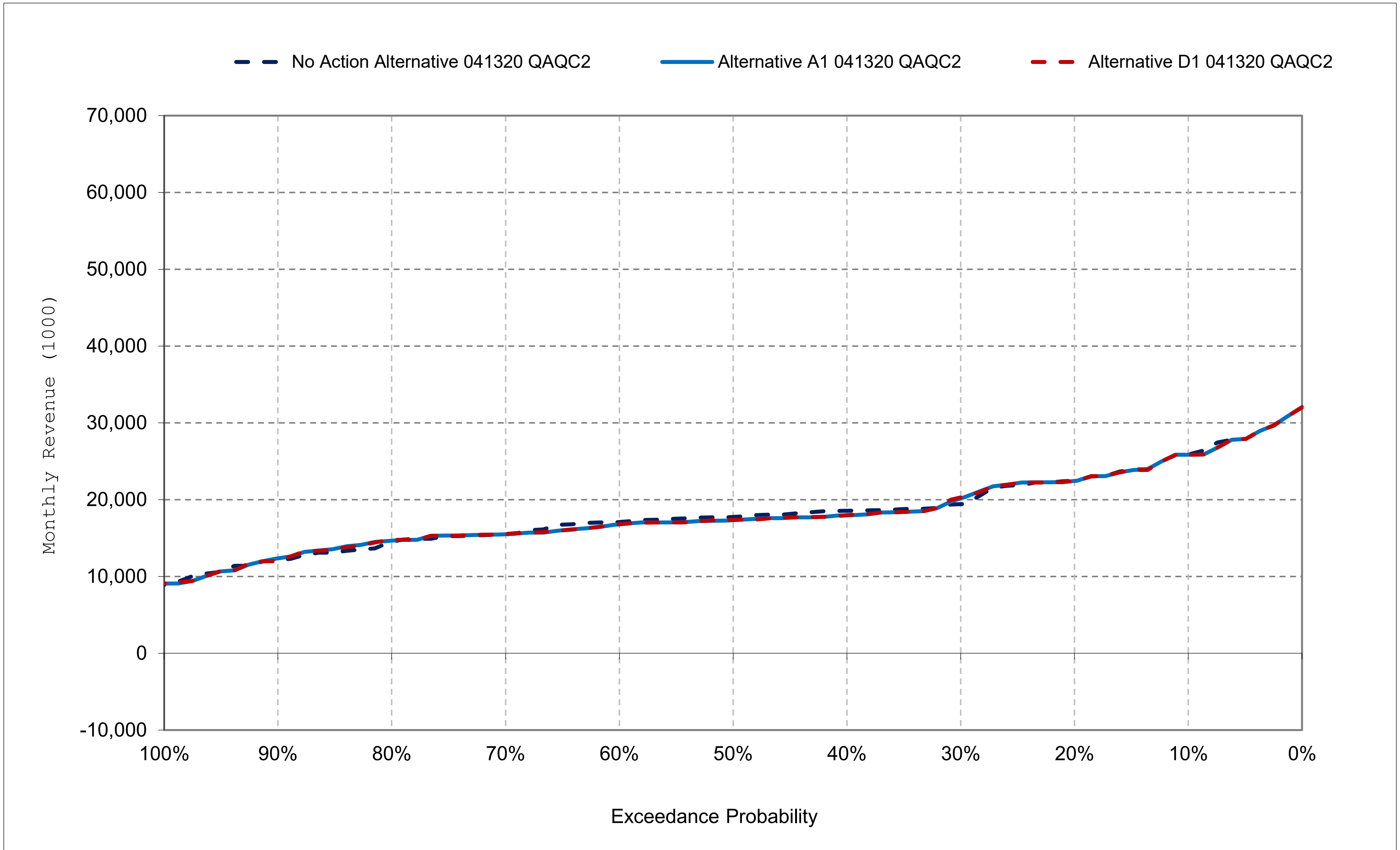
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-5-13. CVP Net Revenue, April



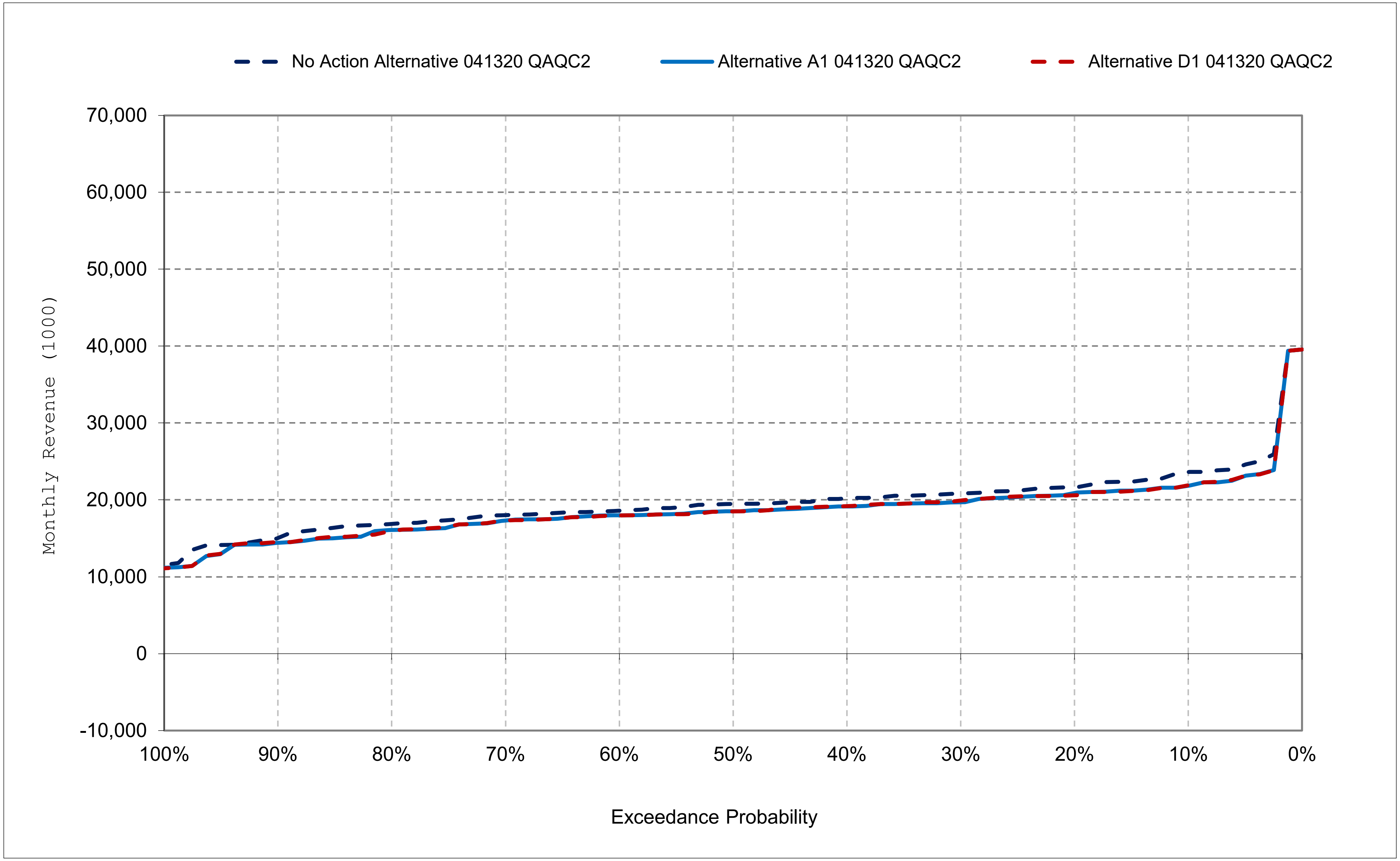
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-5-14. CVP Net Revenue, May



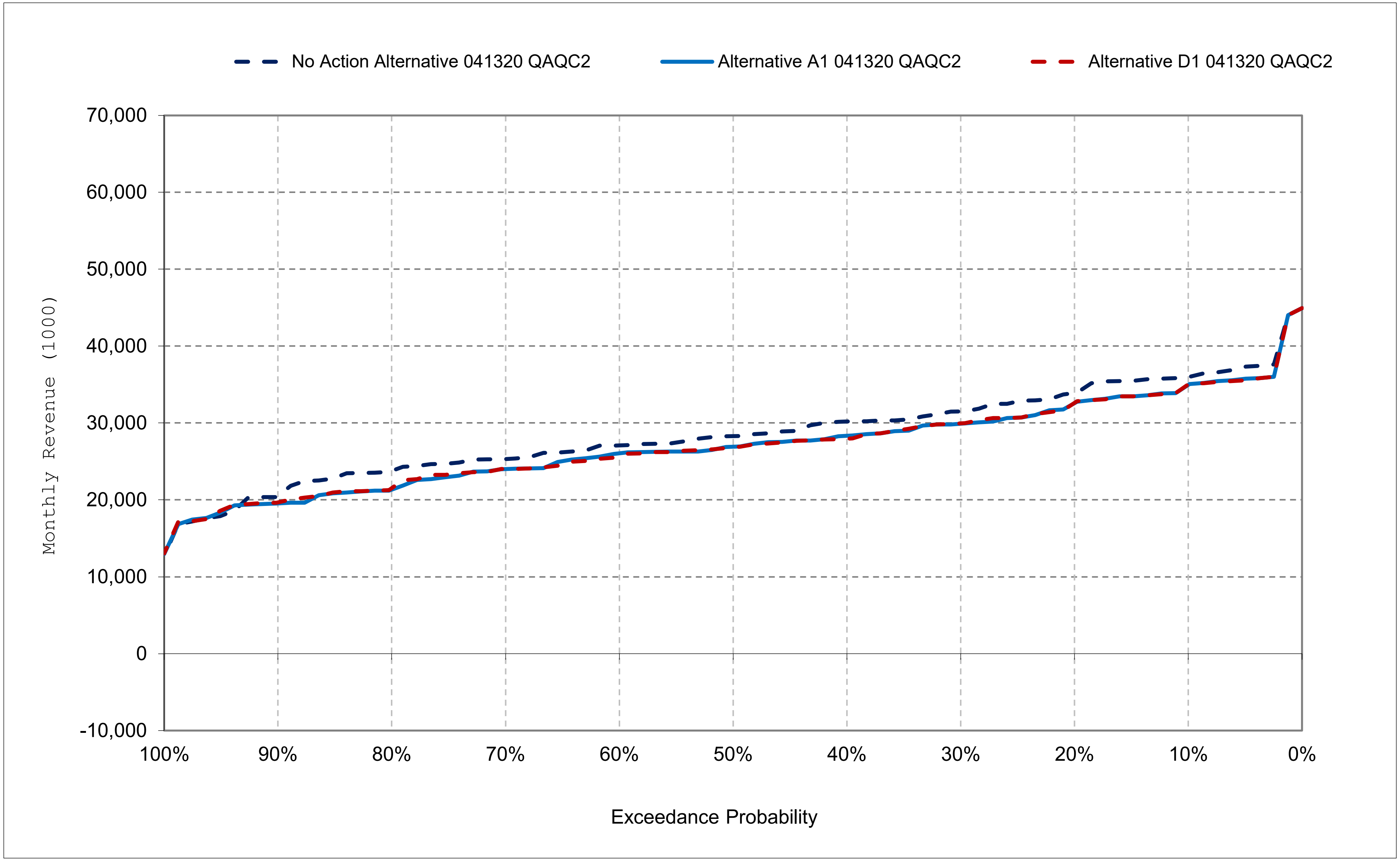
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-5-15. CVP Net Revenue, June



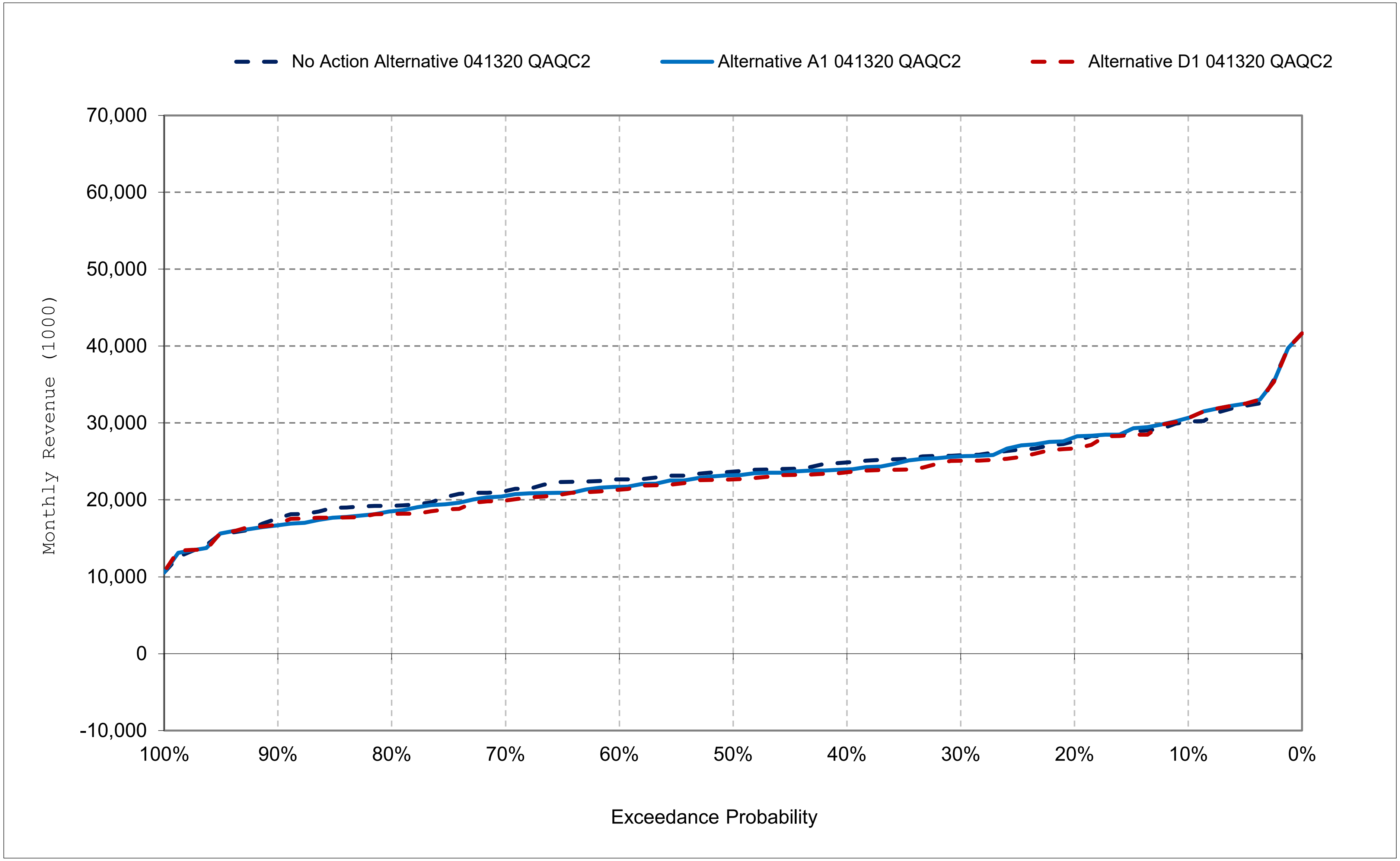
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-5-16. CVP Net Revenue, July



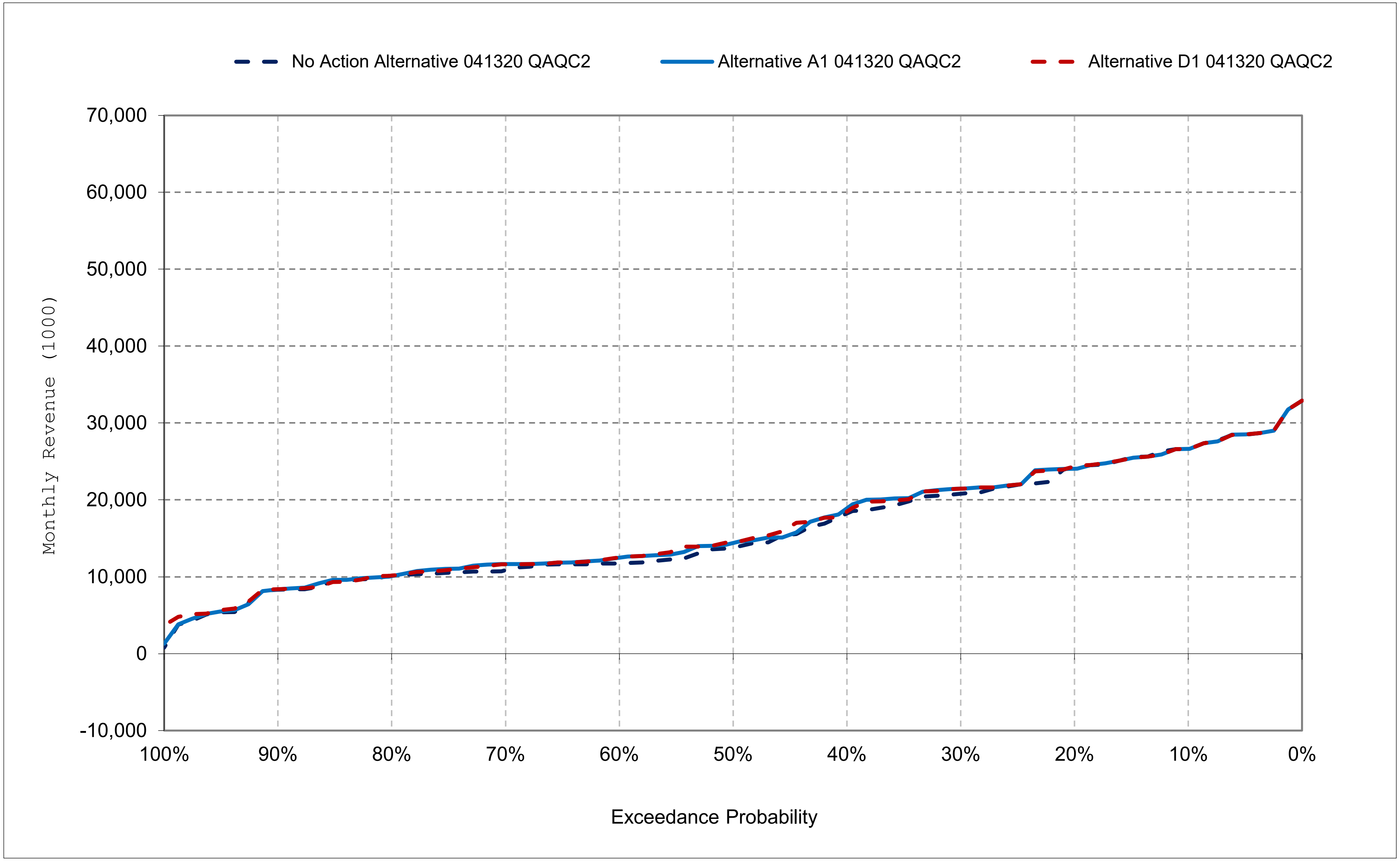
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-5-17. CVP Net Revenue, August



*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-5-18. CVP Net Revenue, September



*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Table G.2.1-6-1. SWP Total Capacity, Monthly Capacity

No Action Alternative 041320 QAQC2

Statistic	Monthly Capacity (MW) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,294	1,289	1,295	1,350	1,439	1,392	1,343	1,408	1,355	1,360	1,330	1,315
20%	1,203	1,182	1,198	1,163	1,288	1,306	1,299	1,344	1,289	1,315	1,290	1,232
30%	1,106	1,143	1,134	1,062	1,143	1,214	1,270	1,301	1,251	1,290	1,272	1,189
40%	1,001	1,078	1,095	984	1,089	1,168	1,218	1,257	1,204	1,268	1,246	1,118
50%	940	971	1,025	880	987	1,110	1,166	1,190	1,183	1,252	1,217	1,062
60%	894	906	897	752	869	983	1,116	1,126	1,174	1,225	1,127	1,016
70%	818	745	819	648	763	873	1,050	1,088	1,146	1,175	1,054	948
80%	674	500	517	478	701	785	938	1,007	1,056	1,049	826	830
90%	329	270	340	246	376	690	754	872	905	753	605	449
Long Term												
Full Simulation Period[a]	896	886	908	828	954	1,042	1,110	1,164	1,141	1,145	1,066	994
Water Year Types[b,c]												
Wet (32%)	1,183	1,231	1,229	1,136	1,251	1,304	1,296	1,338	1,290	1,311	1,295	1,244
Above Normal (15%)	1,055	1,106	1,114	816	1,040	1,181	1,217	1,250	1,228	1,298	1,280	1,127
Below Normal (17%)	986	929	929	750	908	1,000	1,128	1,201	1,205	1,255	1,180	1,066
Dry (22%)	725	619	697	678	766	857	1,005	1,066	1,104	1,085	913	890
Critical (15%)	263	268	298	493	562	663	734	805	712	593	455	388

Alternative A1 041320 QAQC2

Statistic	Monthly Capacity (MW) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,279	1,278	1,283	1,342	1,393	1,388	1,342	1,401	1,355	1,354	1,338	1,303
20%	1,209	1,221	1,232	1,172	1,272	1,307	1,299	1,358	1,301	1,329	1,299	1,250
30%	1,128	1,183	1,166	1,097	1,161	1,231	1,271	1,311	1,252	1,289	1,279	1,213
40%	1,041	1,110	1,136	1,019	1,087	1,153	1,235	1,266	1,199	1,273	1,258	1,117
50%	974	1,025	1,049	888	977	1,108	1,176	1,217	1,181	1,262	1,236	1,081
60%	913	960	949	785	895	981	1,134	1,148	1,171	1,248	1,167	1,027
70%	860	839	836	667	782	892	1,081	1,099	1,145	1,209	1,099	963
80%	782	572	619	595	704	793	1,022	1,010	1,079	1,113	918	917
90%	488	351	400	265	616	729	761	890	935	821	742	730
Long Term												
Full Simulation Period[a]	940	933	944	859	969	1,054	1,135	1,177	1,155	1,171	1,104	1,020
Water Year Types[b,c]												
Wet (32%)	1,183	1,246	1,239	1,132	1,232	1,291	1,295	1,340	1,291	1,313	1,299	1,244
Above Normal (15%)	1,078	1,157	1,164	842	1,055	1,170	1,213	1,251	1,224	1,299	1,286	1,111
Below Normal (17%)	1,035	988	959	806	933	1,021	1,155	1,219	1,209	1,274	1,225	1,104
Dry (22%)	813	711	765	701	782	872	1,063	1,079	1,115	1,136	993	954
Critical (15%)	353	298	336	585	633	737	796	847	790	667	525	446

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Capacity (MW) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-16	-11	-12	-8	-45	-4	-1	-7	0	-6	8	-12
20%	7	39	34	8	-16	1	-1	14	12	14	9	18
30%	21	39	31	35	18	17	1	10	1	-1	7	24
40%	40	31	41	35	-2	-15	17	9	-4	5	13	-1
50%	34	53	25	8	-9	-2	9	27	-2	9	19	20
60%	20	54	51	33	26	-2	18	22	-3	24	40	11
70%	42	94	17	19	19	19	32	11	-1	33	45	16
80%	108	72	102	117	3	9	84	3	24	64	92	87
90%	160	81	60	19	240	38	7	18	31	68	137	281
Long Term												
Full Simulation Period[a]	44	47	36	31	14	12	25	13	14	26	38	26
Water Year Types[b,c]												
Wet (32%)	0	15	11	-4	-19	-13	-1	2	1	2	5	-1
Above Normal (15%)	22	52	51	27	15	-11	-4	1	-4	1	6	-16
Below Normal (17%)	49	59	30	56	25	21	27	18	4	19	45	39
Dry (22%)	88	92	68	23	16	14	57	13	11	52	81	63
Critical (15%)	90	30	37	92	71	74	62	42	77	74	71	58

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-6-2. SWP Total Capacity, Monthly Capacity

No Action Alternative 041320 QAQC2

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,294	1,289	1,295	1,350	1,439	1,392	1,343	1,408	1,355	1,360	1,330	1,315
20%	1,203	1,182	1,198	1,163	1,288	1,306	1,299	1,344	1,289	1,315	1,290	1,232
30%	1,106	1,143	1,134	1,062	1,143	1,214	1,270	1,301	1,251	1,290	1,272	1,189
40%	1,001	1,078	1,095	984	1,089	1,168	1,218	1,257	1,204	1,268	1,246	1,118
50%	940	971	1,025	880	987	1,110	1,166	1,190	1,183	1,252	1,217	1,062
60%	894	906	897	752	869	983	1,116	1,126	1,174	1,225	1,127	1,016
70%	818	745	819	648	763	873	1,050	1,088	1,146	1,175	1,054	948
80%	674	500	517	478	701	785	938	1,007	1,056	1,049	826	830
90%	329	270	340	246	376	690	754	872	905	753	605	449
Long Term												
Full Simulation Period[a]	896	886	908	828	954	1,042	1,110	1,164	1,141	1,145	1,066	994
Water Year Types[b,c]												
Wet (32%)	1,183	1,231	1,229	1,136	1,251	1,304	1,296	1,338	1,290	1,311	1,295	1,244
Above Normal (15%)	1,055	1,106	1,114	816	1,040	1,181	1,217	1,250	1,228	1,298	1,280	1,127
Below Normal (17%)	986	929	929	750	908	1,000	1,128	1,201	1,205	1,255	1,180	1,066
Dry (22%)	725	619	697	678	766	857	1,005	1,066	1,104	1,085	913	890
Critical (15%)	263	268	298	493	562	663	734	805	712	593	455	388

Alternative D1 041320 QAQC2

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,270	1,277	1,281	1,339	1,388	1,388	1,347	1,402	1,344	1,353	1,336	1,299
20%	1,207	1,219	1,236	1,167	1,280	1,299	1,298	1,360	1,299	1,330	1,299	1,250
30%	1,139	1,184	1,171	1,106	1,155	1,219	1,266	1,306	1,251	1,291	1,278	1,213
40%	1,037	1,120	1,135	1,020	1,087	1,163	1,241	1,259	1,206	1,275	1,258	1,127
50%	981	1,030	1,063	881	979	1,107	1,167	1,221	1,178	1,259	1,239	1,076
60%	908	966	954	768	897	988	1,132	1,151	1,169	1,251	1,162	1,021
70%	880	849	849	675	788	892	1,082	1,097	1,147	1,206	1,095	969
80%	803	565	608	615	705	788	1,030	1,018	1,093	1,129	937	917
90%	528	353	410	271	640	726	764	885	936	822	745	728
Long Term												
Full Simulation Period[a]	950	935	951	863	974	1,057	1,136	1,177	1,157	1,177	1,109	1,029
Water Year Types[b,c]												
Wet (32%)	1,180	1,245	1,237	1,135	1,234	1,293	1,295	1,342	1,290	1,311	1,298	1,248
Above Normal (15%)	1,071	1,161	1,172	845	1,058	1,170	1,211	1,250	1,223	1,301	1,287	1,109
Below Normal (17%)	1,033	972	968	809	934	1,021	1,151	1,214	1,206	1,281	1,225	1,109
Dry (22%)	842	722	766	710	801	888	1,071	1,082	1,123	1,142	999	957
Critical (15%)	396	313	366	584	631	730	797	849	794	696	553	493

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-24	-12	-14	-11	-51	-4	4	-6	-11	-6	6	-16
20%	5	38	37	4	-7	-7	-1	16	10	16	9	18
30%	33	40	37	44	12	5	-4	6	0	1	6	24
40%	35	41	41	37	-3	-5	23	2	2	7	13	9
50%	41	58	38	1	-8	-3	1	30	-5	7	21	14
60%	14	60	57	16	28	5	16	25	-5	26	34	5
70%	62	104	30	27	25	19	32	10	1	31	41	21
80%	129	65	92	138	4	3	92	11	37	80	112	87
90%	200	82	70	25	264	36	10	13	32	69	140	280
Long Term												
Full Simulation Period[a]	54	49	43	35	20	15	26	14	16	33	43	36
Water Year Types[b,c]												
Wet (32%)	-3	13	9	-1	-17	-11	-1	4	0	0	4	3
Above Normal (15%)	15	56	59	30	19	-11	-6	0	-5	3	8	-18
Below Normal (17%)	47	44	38	59	26	21	23	12	1	26	45	43
Dry (22%)	117	103	69	33	35	31	65	17	19	57	86	66
Critical (15%)	133	46	68	91	70	67	63	45	82	103	99	105

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-6-3. SWP Total Capacity, Monthly Capacity

Alternative A1 041320 QAQC2

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,279	1,278	1,283	1,342	1,393	1,388	1,342	1,401	1,355	1,354	1,338	1,303
20%	1,209	1,221	1,232	1,172	1,272	1,307	1,299	1,358	1,301	1,329	1,299	1,250
30%	1,128	1,183	1,166	1,097	1,161	1,231	1,271	1,311	1,252	1,289	1,279	1,213
40%	1,041	1,110	1,136	1,019	1,087	1,153	1,235	1,266	1,199	1,273	1,258	1,117
50%	974	1,025	1,049	888	977	1,108	1,176	1,217	1,181	1,262	1,236	1,081
60%	913	960	949	785	895	981	1,134	1,148	1,171	1,248	1,167	1,027
70%	860	839	836	667	782	892	1,081	1,099	1,145	1,209	1,099	963
80%	782	572	619	595	704	793	1,022	1,010	1,079	1,113	918	917
90%	488	351	400	265	616	729	761	890	935	821	742	730
Long Term												
Full Simulation Period[a]	940	933	944	859	969	1,054	1,135	1,177	1,155	1,171	1,104	1,020
Water Year Types[b,c]												
Wet (32%)	1,183	1,246	1,239	1,132	1,232	1,291	1,295	1,340	1,291	1,313	1,299	1,244
Above Normal (15%)	1,078	1,157	1,164	842	1,055	1,170	1,213	1,251	1,224	1,299	1,286	1,111
Below Normal (17%)	1,035	988	959	806	933	1,021	1,155	1,219	1,209	1,274	1,225	1,104
Dry (22%)	813	711	765	701	782	872	1,063	1,079	1,115	1,136	993	954
Critical (15%)	353	298	336	585	633	737	796	847	790	667	525	446

Alternative D1 041320 QAQC2

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,270	1,277	1,281	1,339	1,388	1,388	1,347	1,402	1,344	1,353	1,336	1,299
20%	1,207	1,219	1,236	1,167	1,280	1,299	1,298	1,360	1,299	1,330	1,299	1,250
30%	1,139	1,184	1,171	1,106	1,155	1,219	1,266	1,306	1,251	1,291	1,278	1,213
40%	1,037	1,120	1,135	1,020	1,087	1,163	1,241	1,259	1,206	1,275	1,258	1,127
50%	981	1,030	1,063	881	979	1,107	1,167	1,221	1,178	1,259	1,239	1,076
60%	908	966	954	768	897	988	1,132	1,151	1,169	1,251	1,162	1,021
70%	880	849	849	675	788	892	1,082	1,097	1,147	1,206	1,095	969
80%	803	565	608	615	705	788	1,030	1,018	1,093	1,129	937	917
90%	528	353	410	271	640	726	764	885	936	822	745	728
Long Term												
Full Simulation Period[a]	950	935	951	863	974	1,057	1,136	1,177	1,157	1,177	1,109	1,029
Water Year Types[b,c]												
Wet (32%)	1,180	1,245	1,237	1,135	1,234	1,293	1,295	1,342	1,290	1,311	1,298	1,248
Above Normal (15%)	1,071	1,161	1,172	845	1,058	1,170	1,211	1,250	1,223	1,301	1,287	1,109
Below Normal (17%)	1,033	972	968	809	934	1,021	1,151	1,214	1,206	1,281	1,225	1,109
Dry (22%)	842	722	766	710	801	888	1,071	1,082	1,123	1,142	999	957
Critical (15%)	396	313	366	584	631	730	797	849	794	696	553	493

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-8	-1	-2	-4	-6	0	5	1	-10	0	-2	-4
20%	-2	-2	3	-4	8	-8	0	2	-2	2	0	0
30%	12	1	6	9	-6	-12	-4	-5	-1	2	-1	0
40%	-5	10	-1	1	0	10	6	-7	6	2	0	10
50%	7	5	14	-7	2	-1	-8	4	-3	-2	3	-6
60%	-5	6	5	-17	2	7	-1	3	-2	3	-6	-6
70%	20	10	13	8	6	0	0	-2	2	-2	-4	6
80%	20	-8	-10	20	1	-5	9	8	13	16	20	-1
90%	40	1	10	6	24	-3	4	-5	1	1	3	-1
Long Term												
Full Simulation Period[a]	10	2	7	4	5	3	1	1	2	6	5	9
Water Year Types[b,c]												
Wet (32%)	-3	-2	-2	3	1	2	0	2	-1	-2	-1	4
Above Normal (15%)	-7	4	8	3	3	0	-2	-1	-2	2	1	-2
Below Normal (17%)	-2	-15	9	3	1	0	-4	-5	-3	7	-1	5
Dry (22%)	29	11	1	9	19	17	8	4	8	6	6	3
Critical (15%)	43	16	30	-1	-2	-7	1	3	5	29	28	47

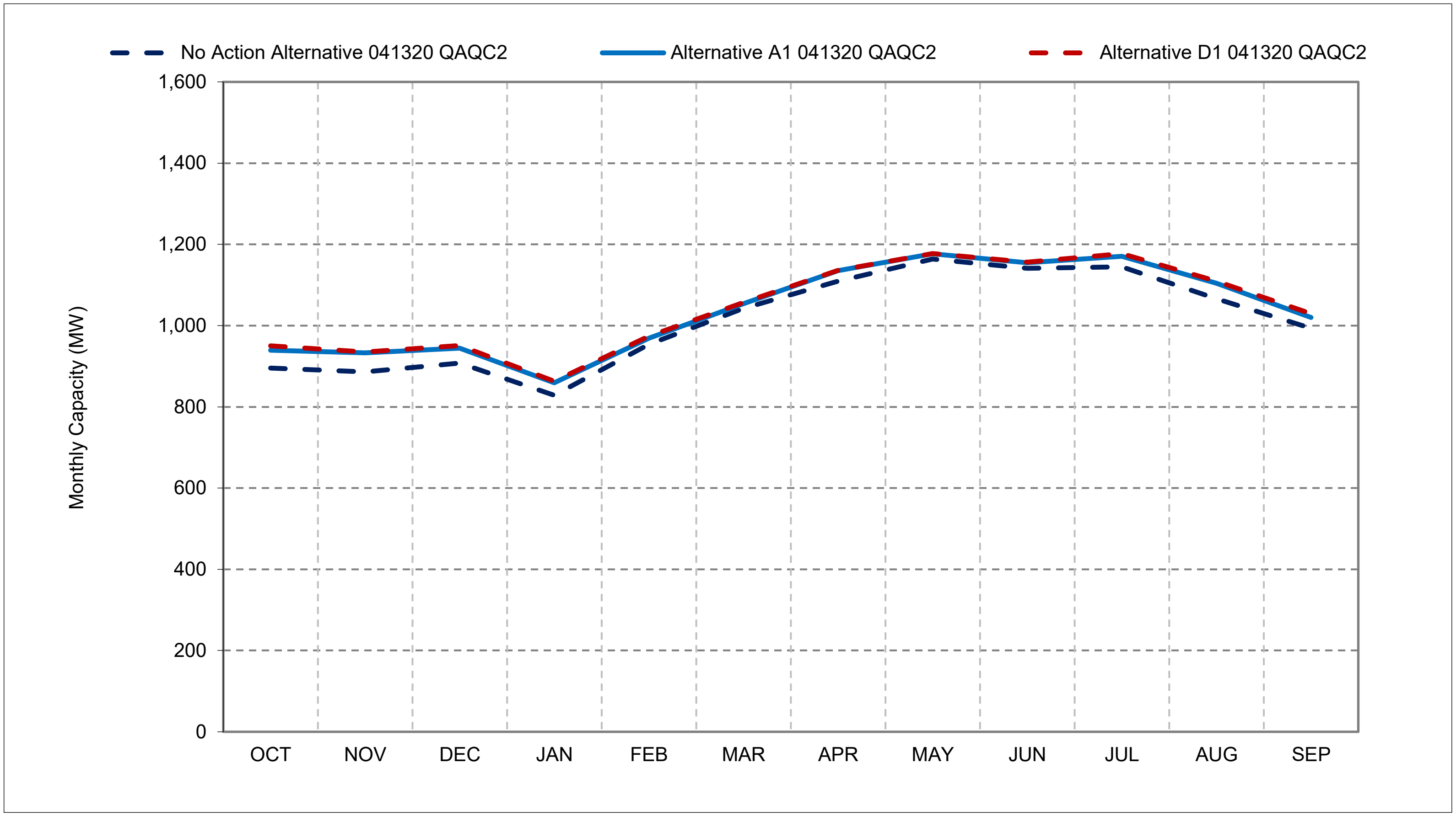
a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-1. SWP Total Capacity, Long-Term Average Capacity

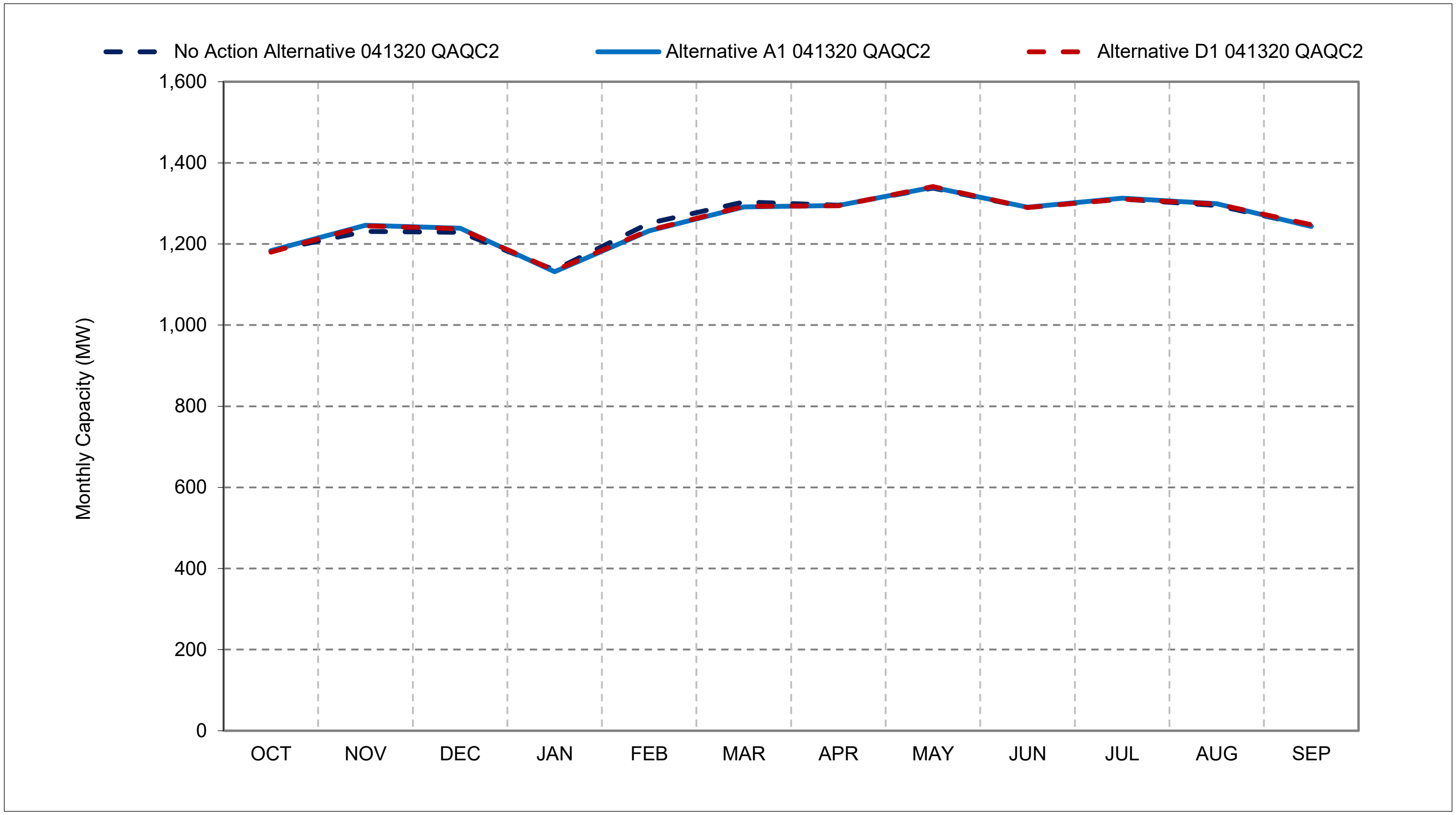


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-2. SWP Total Capacity, Wet Year Average Capacity

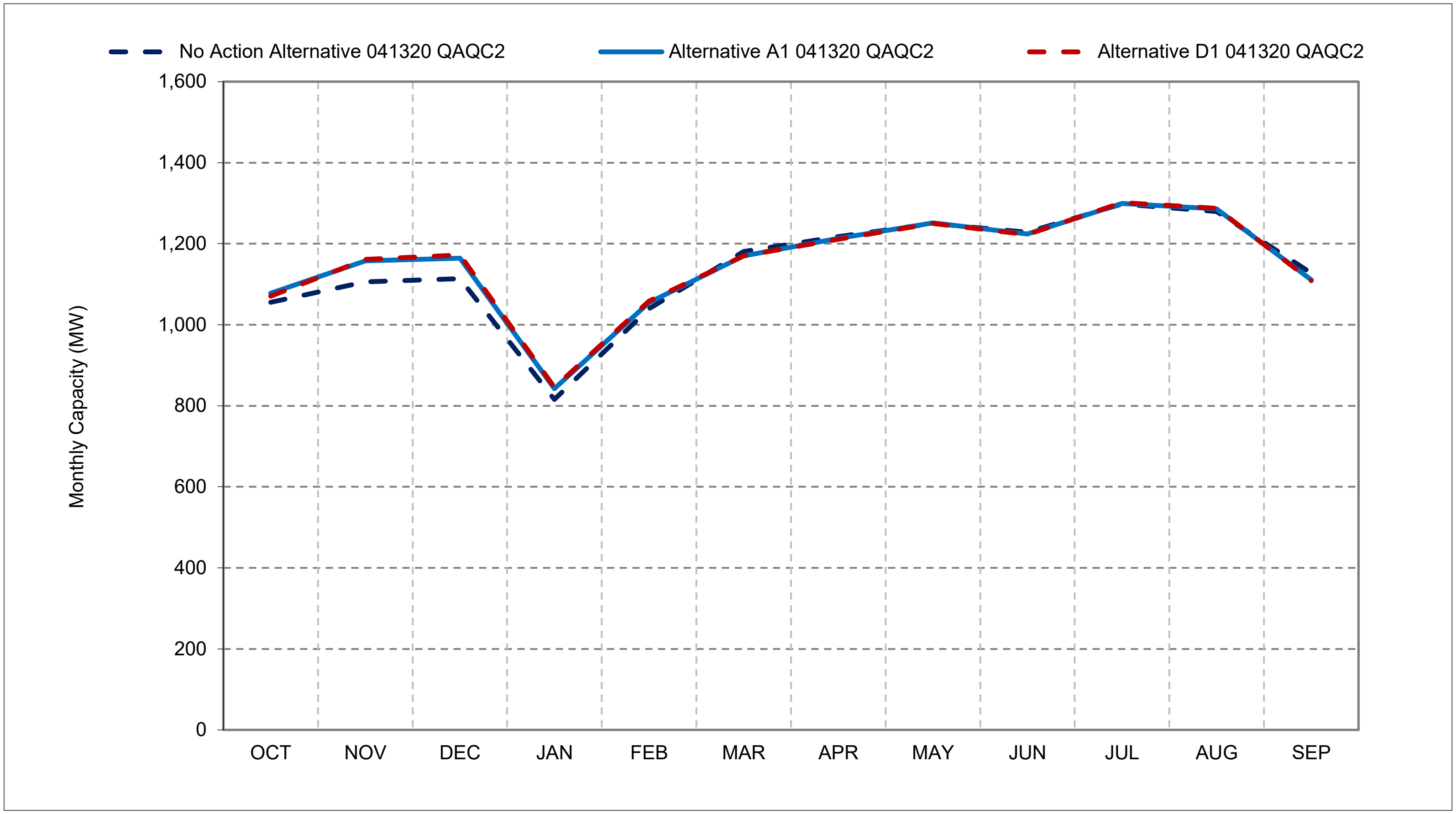


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-3. SWP Total Capacity, Above Normal Year Average Capacity

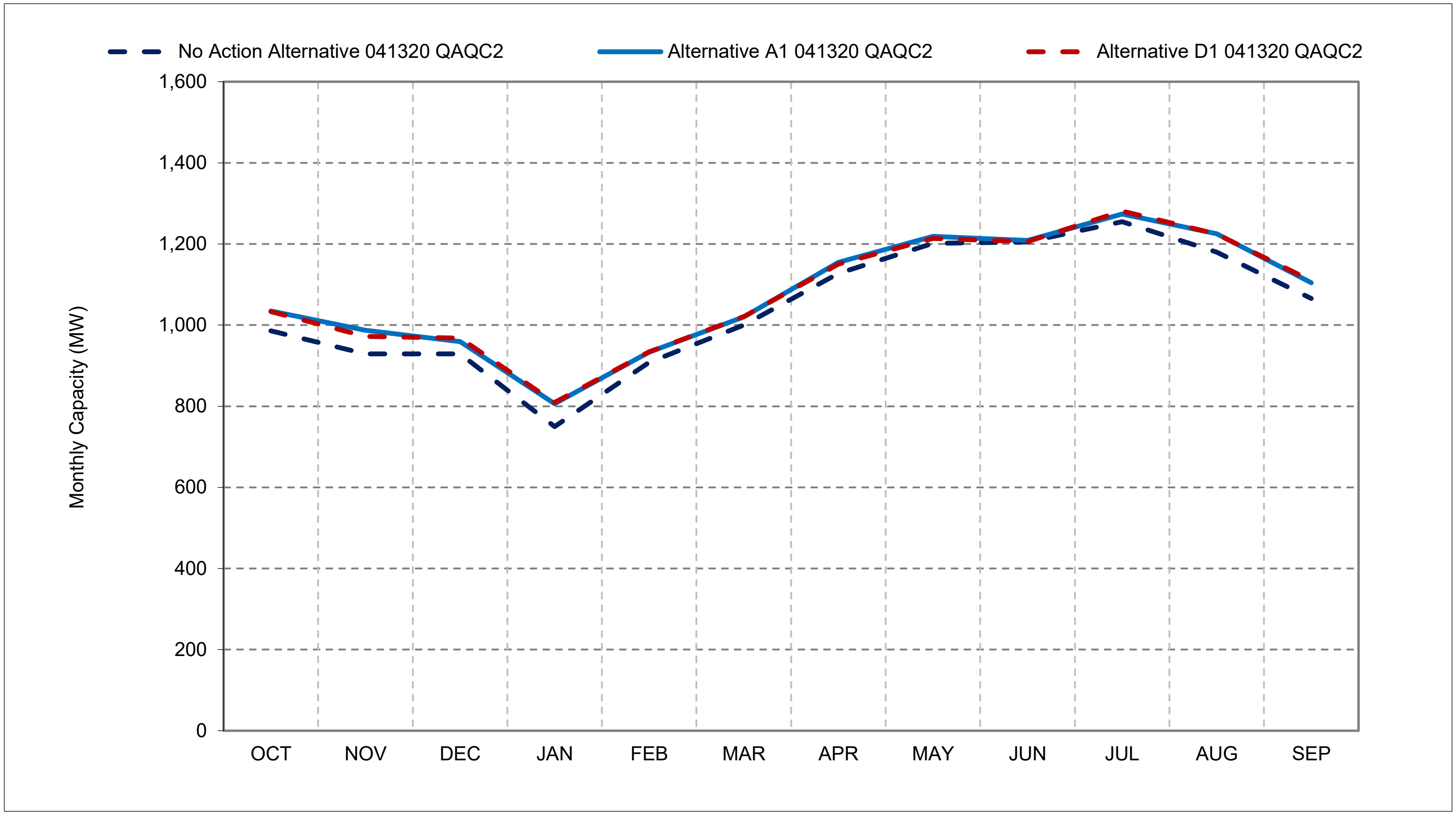


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-4. SWP Total Capacity, Below Normal Year Average Capacity

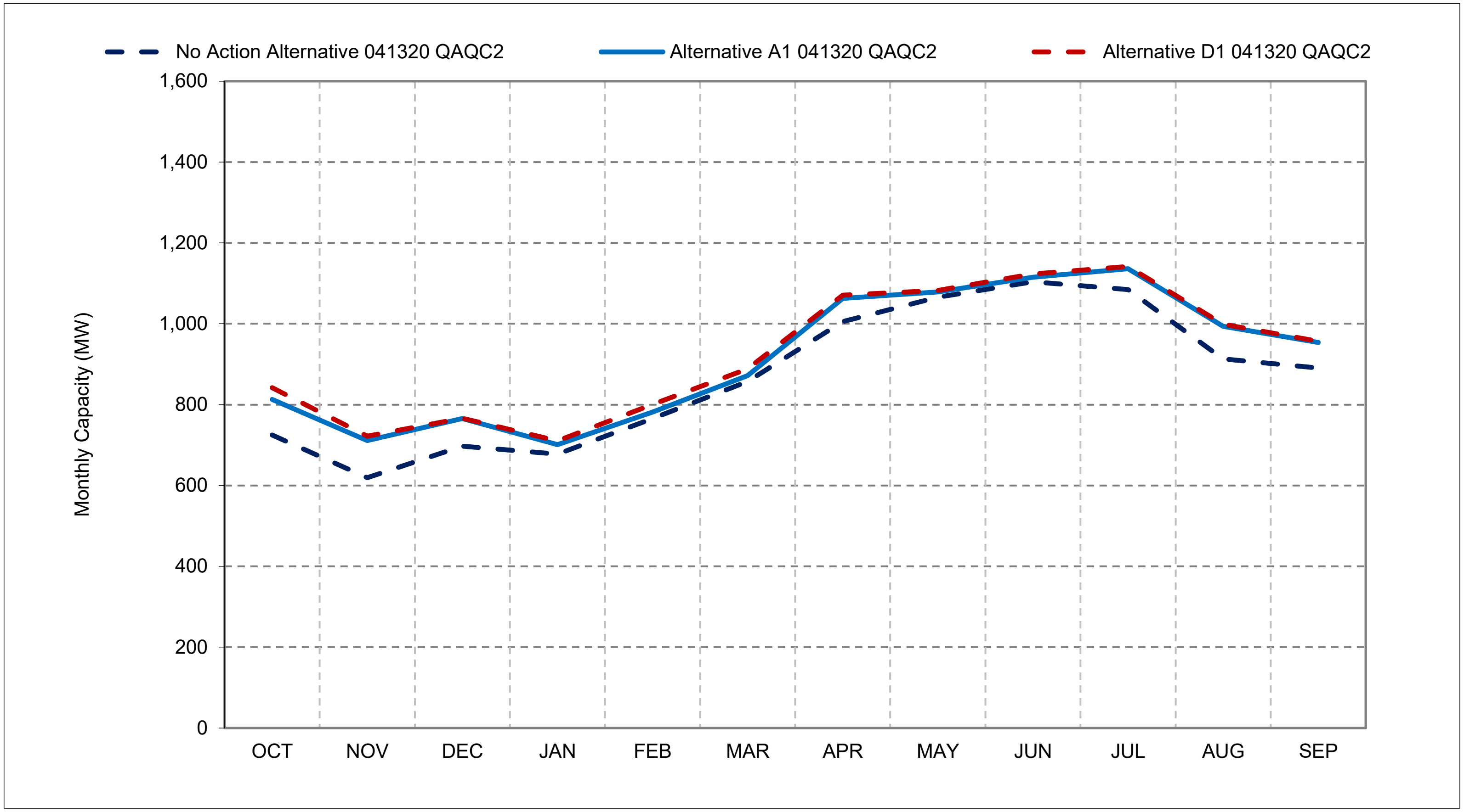


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-5. SWP Total Capacity, Dry Year Average Capacity

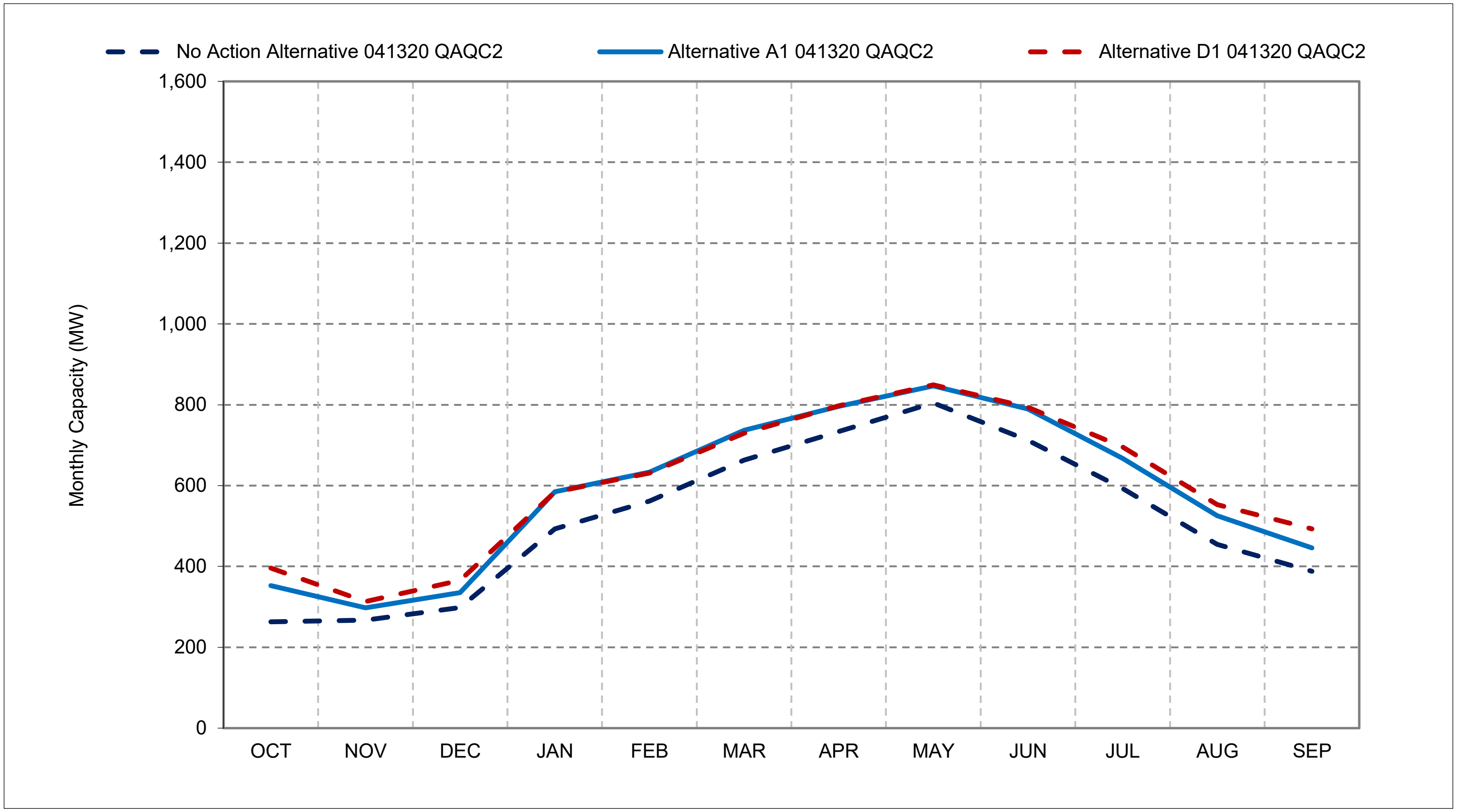


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

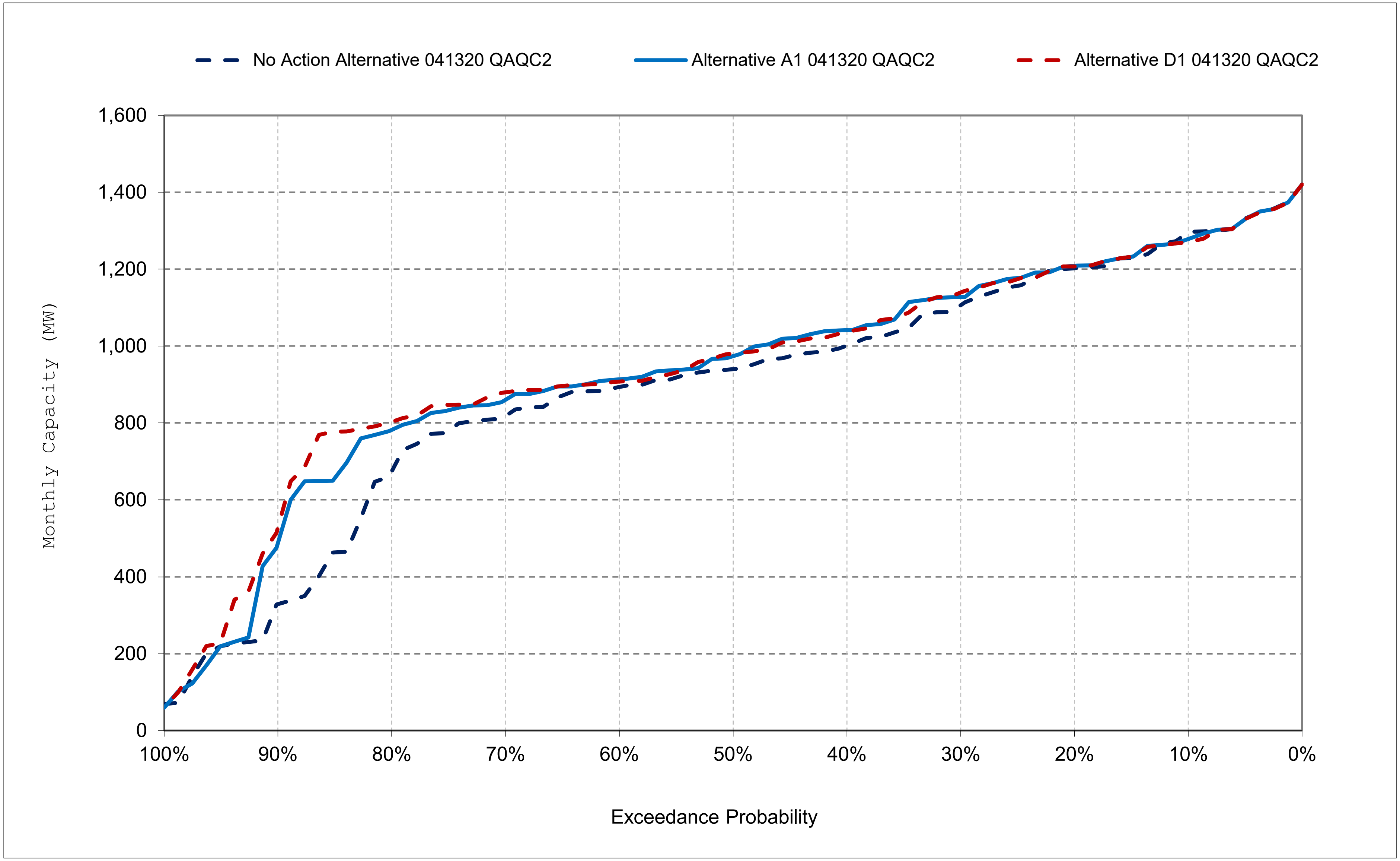
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-6. SWP Total Capacity, Critical Year Average Capacity



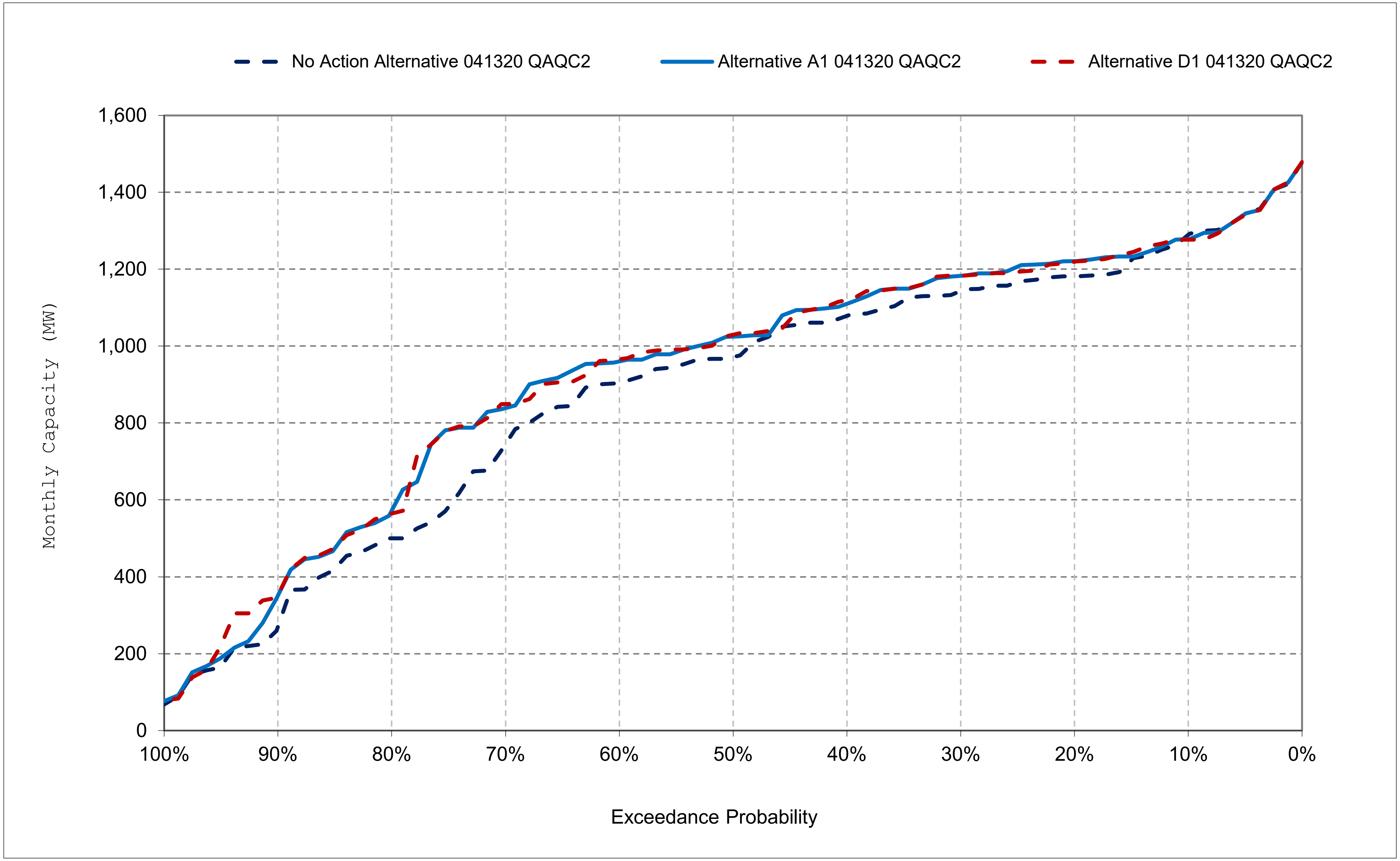
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-7. SWP Total Capacity, October



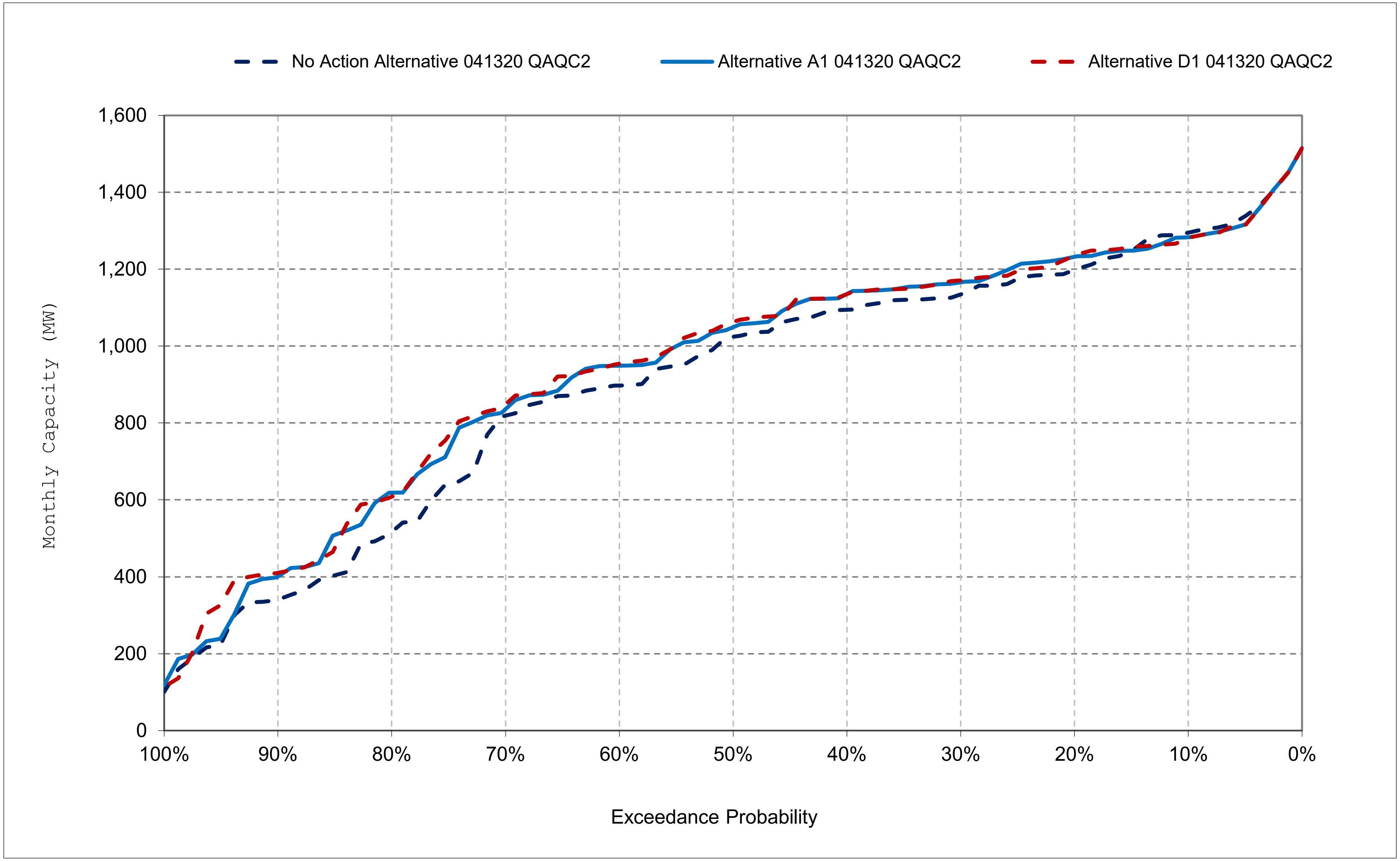
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-8. SWP Total Capacity, November



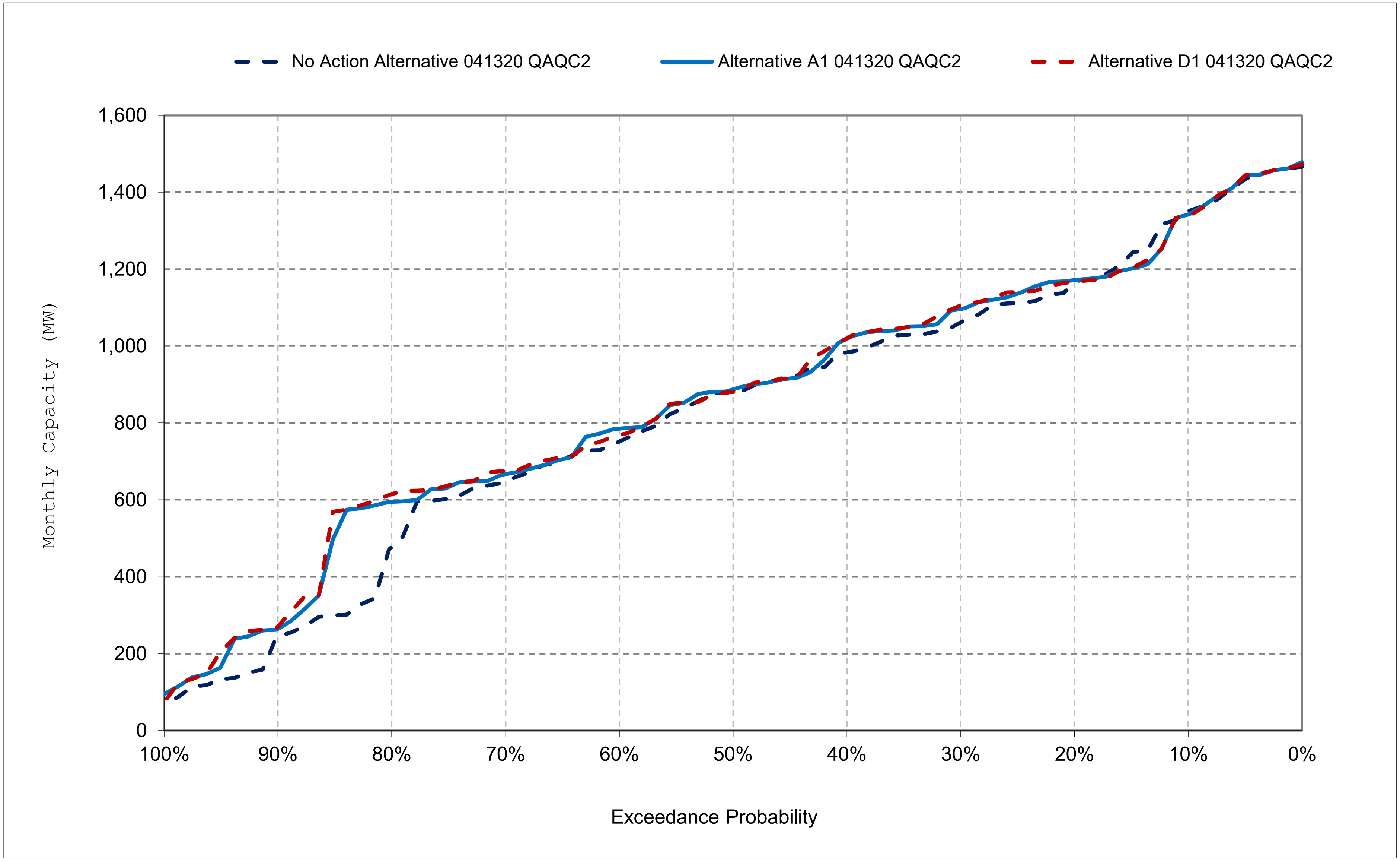
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-9. SWP Total Capacity, December



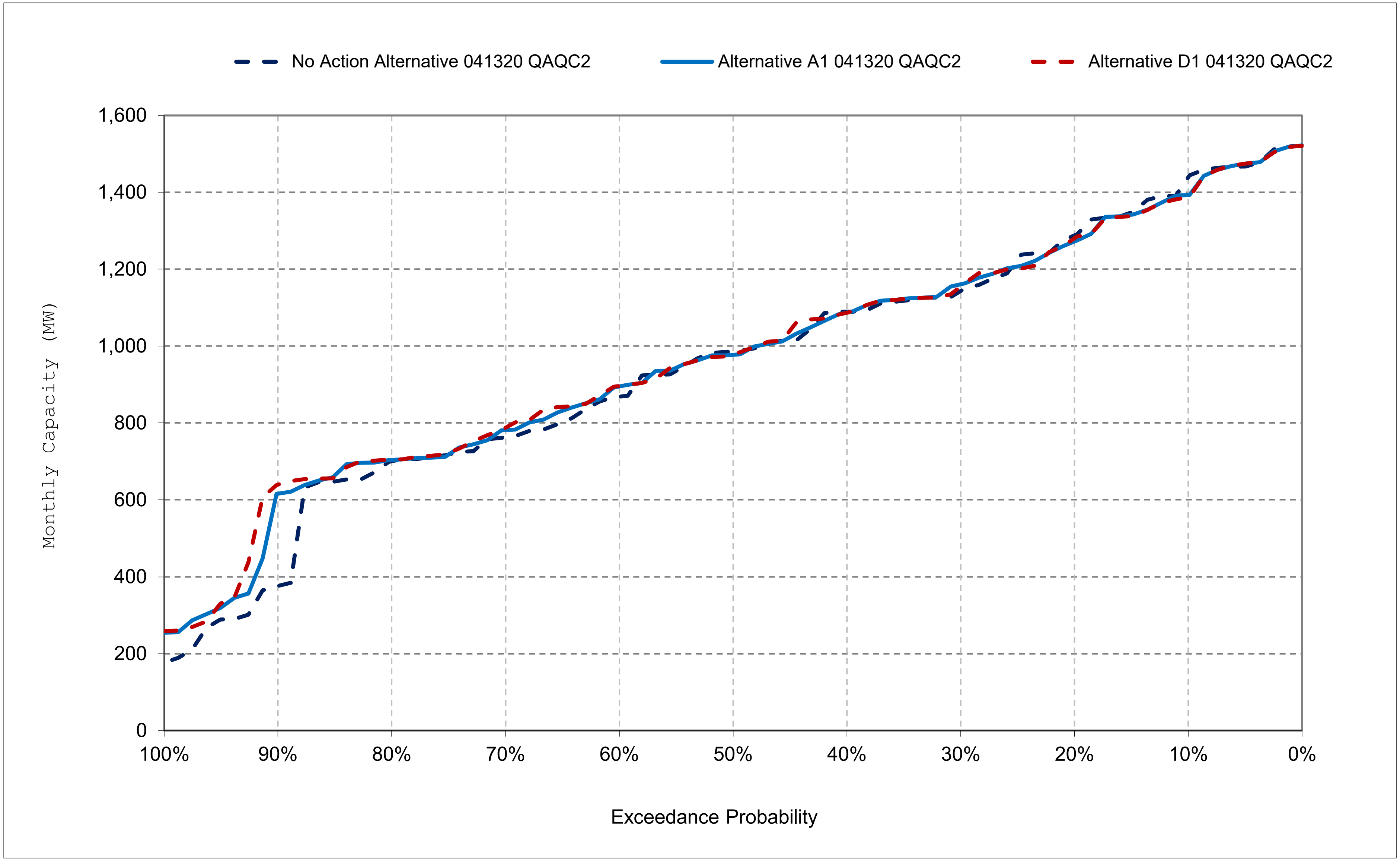
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-10. SWP Total Capacity, January



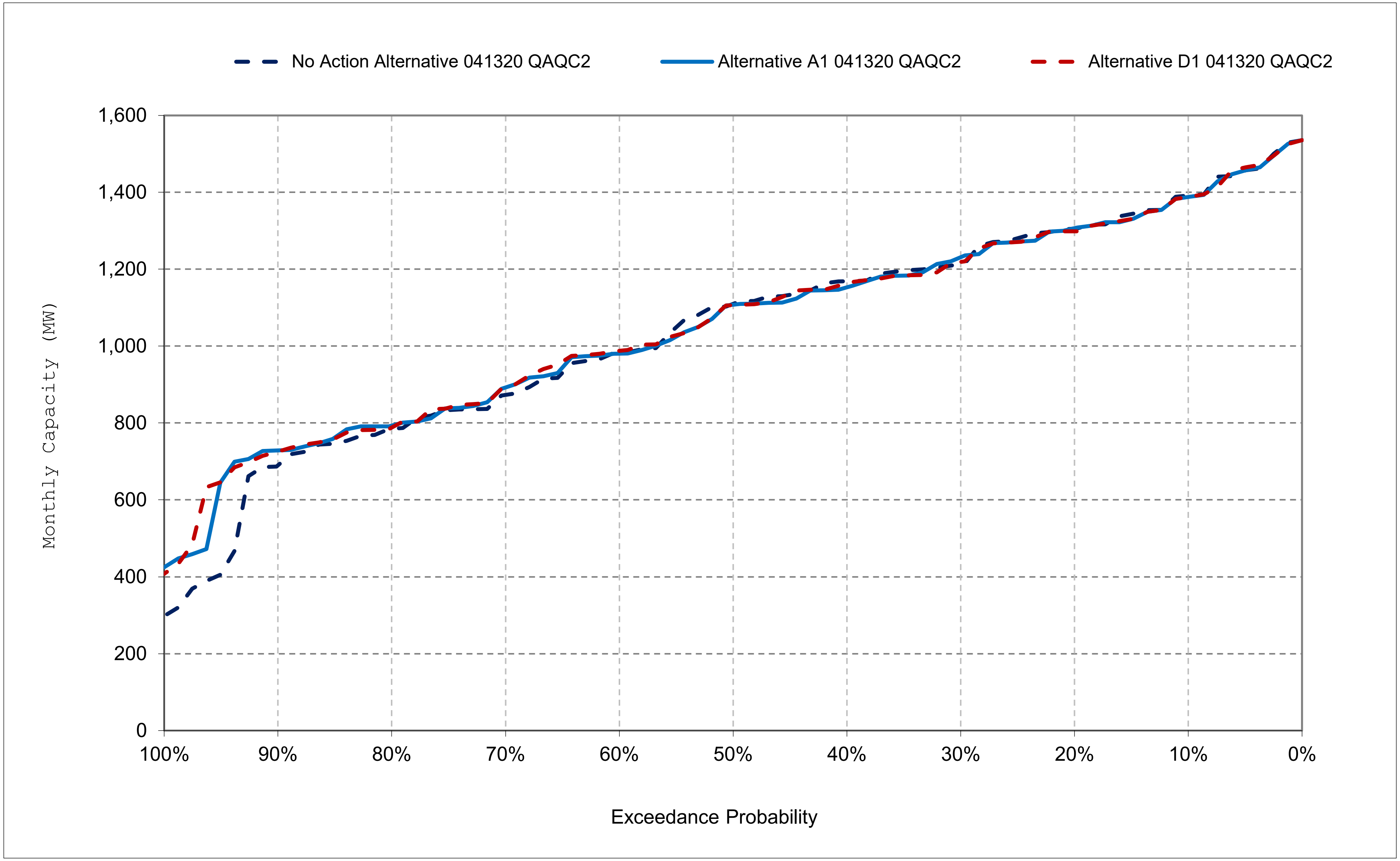
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-11. SWP Total Capacity, February



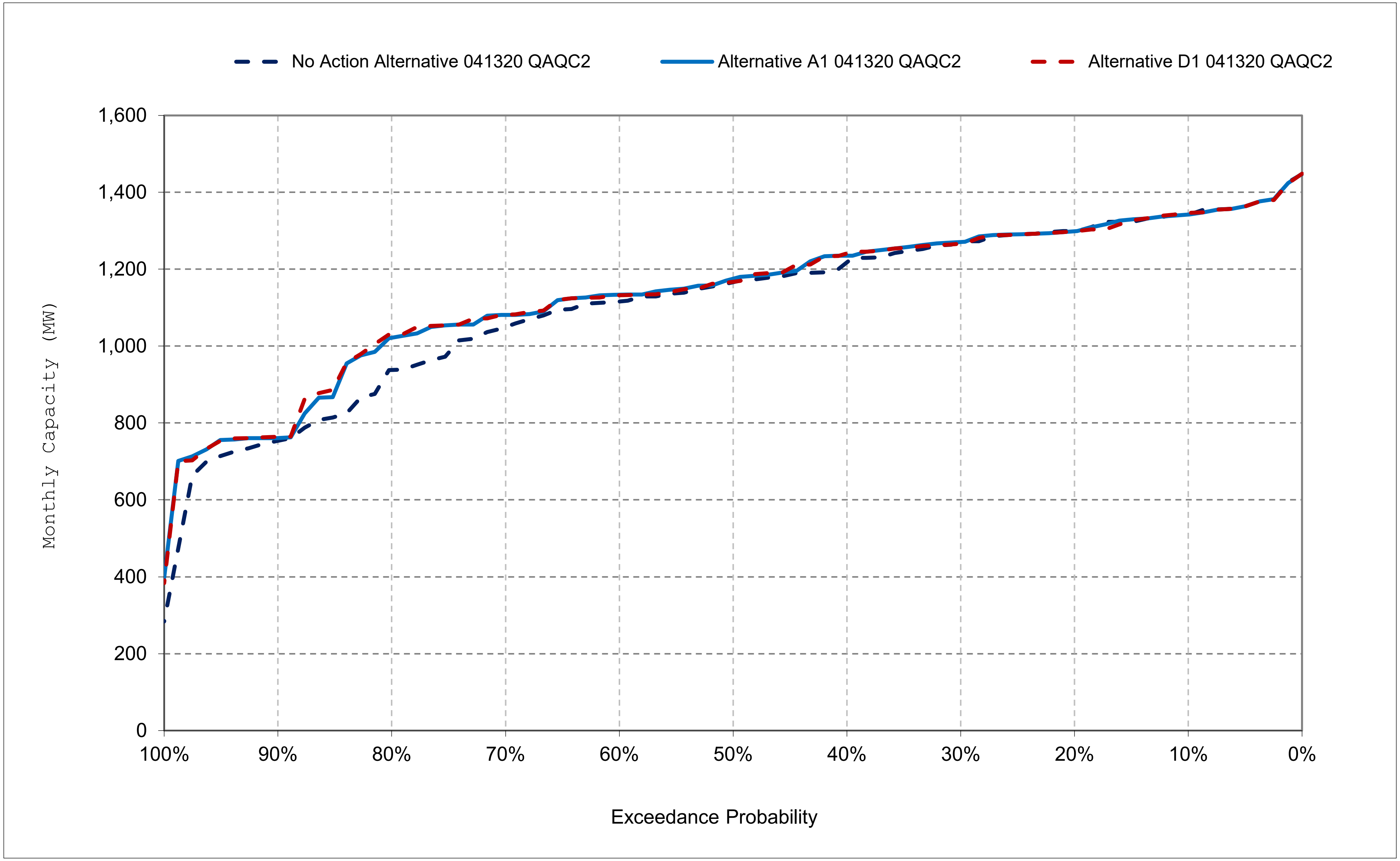
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-12. SWP Total Capacity, March



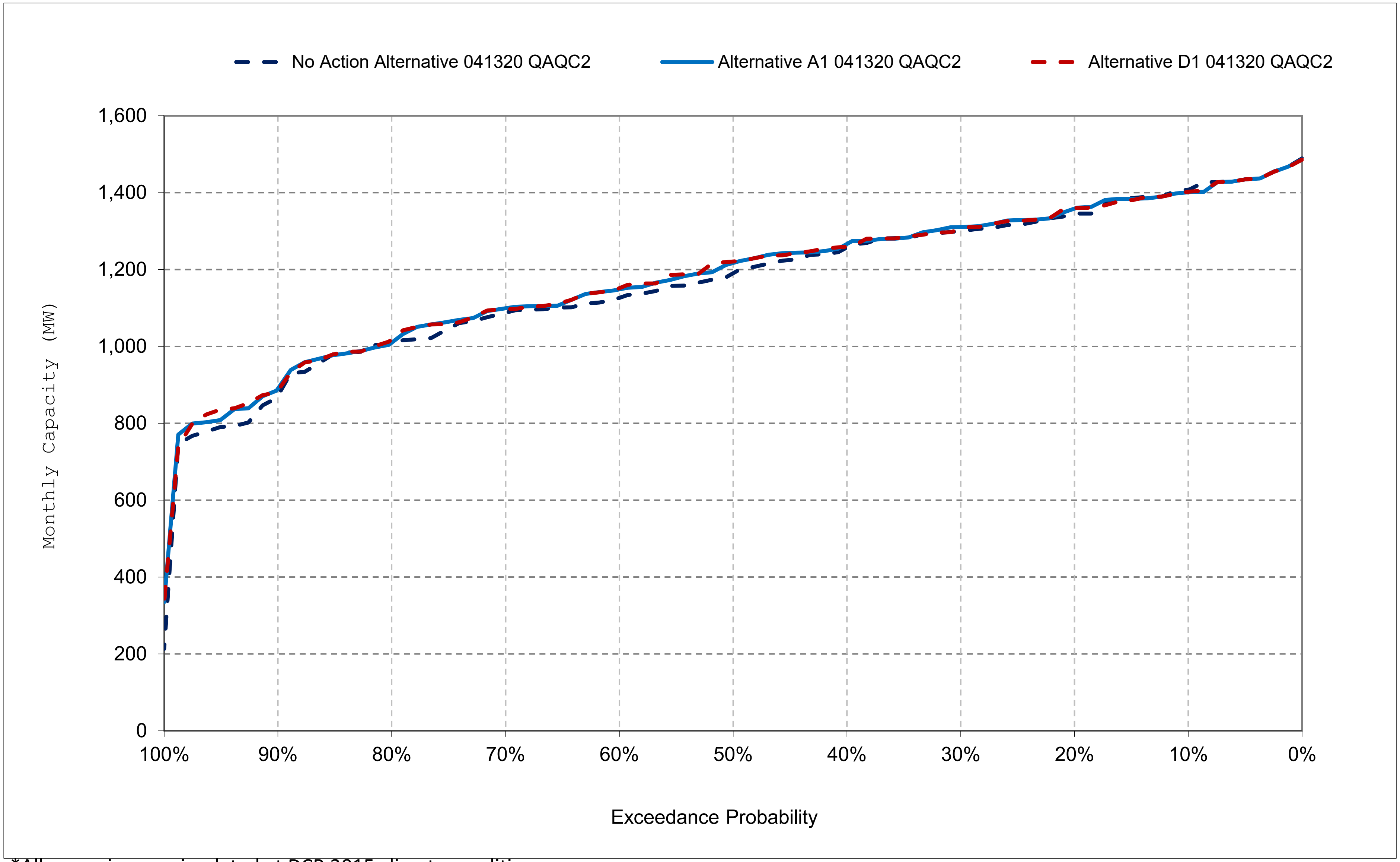
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-13. SWP Total Capacity, April



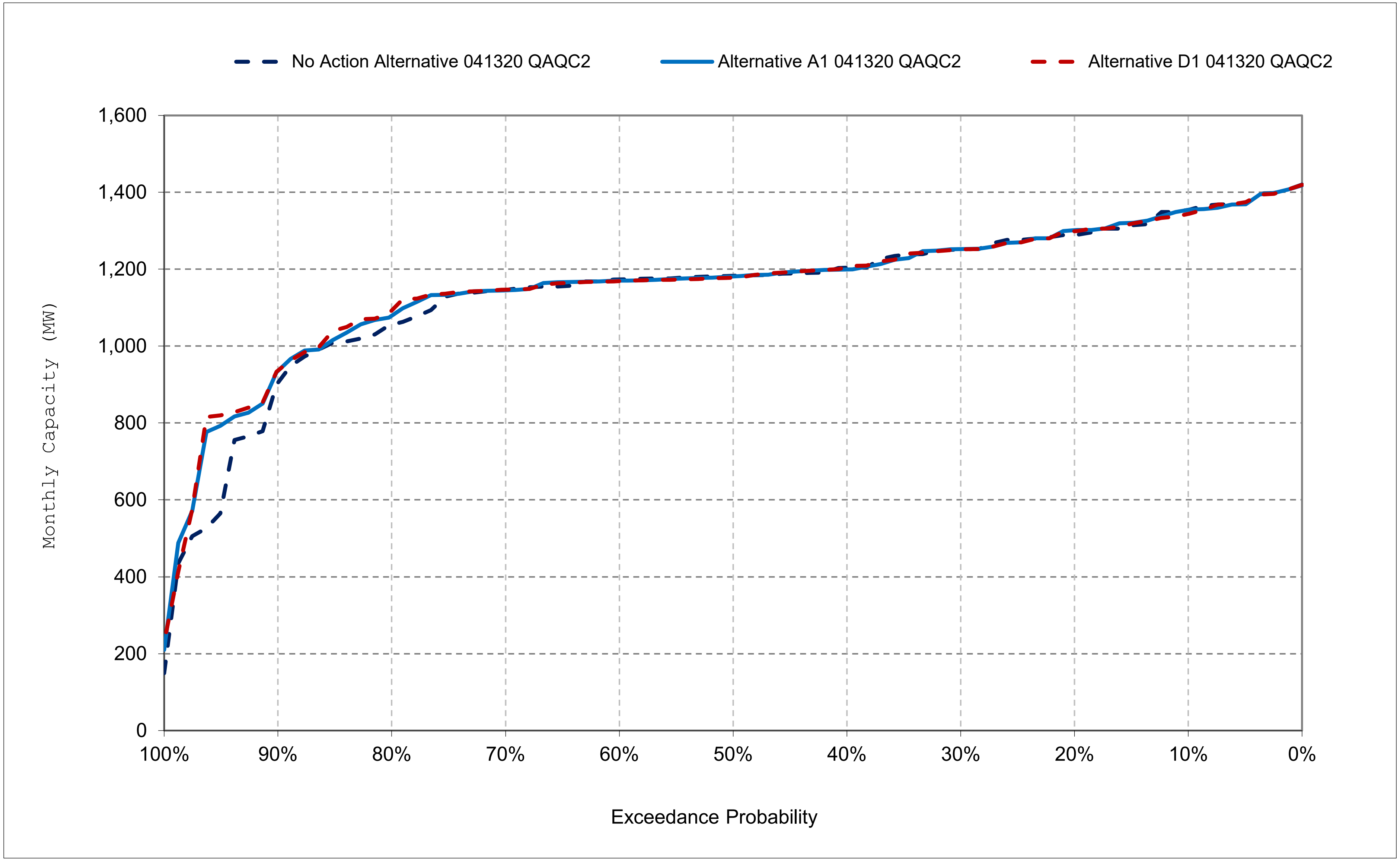
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-14. SWP Total Capacity, May



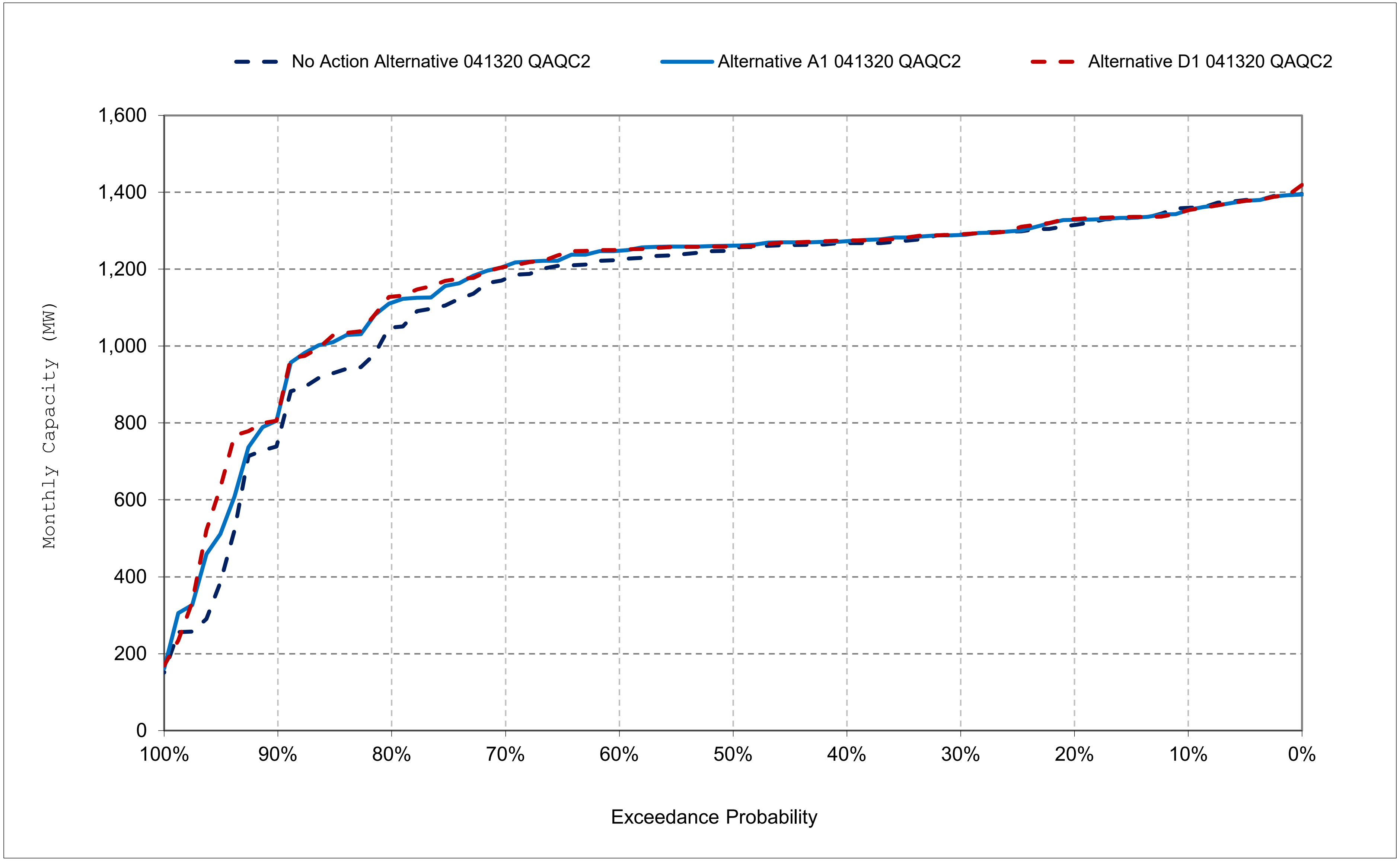
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-15. SWP Total Capacity, June



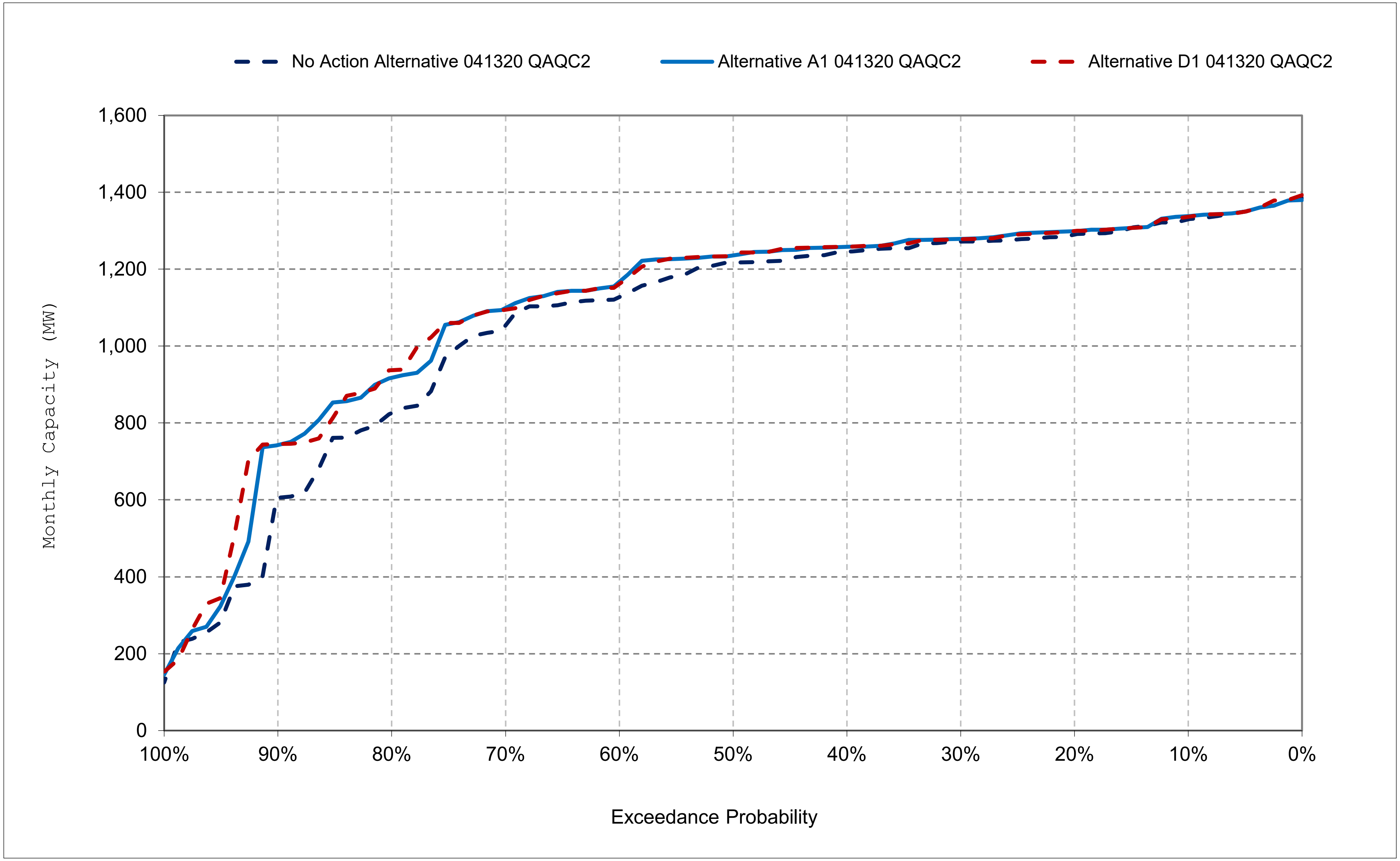
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-16. SWP Total Capacity, July



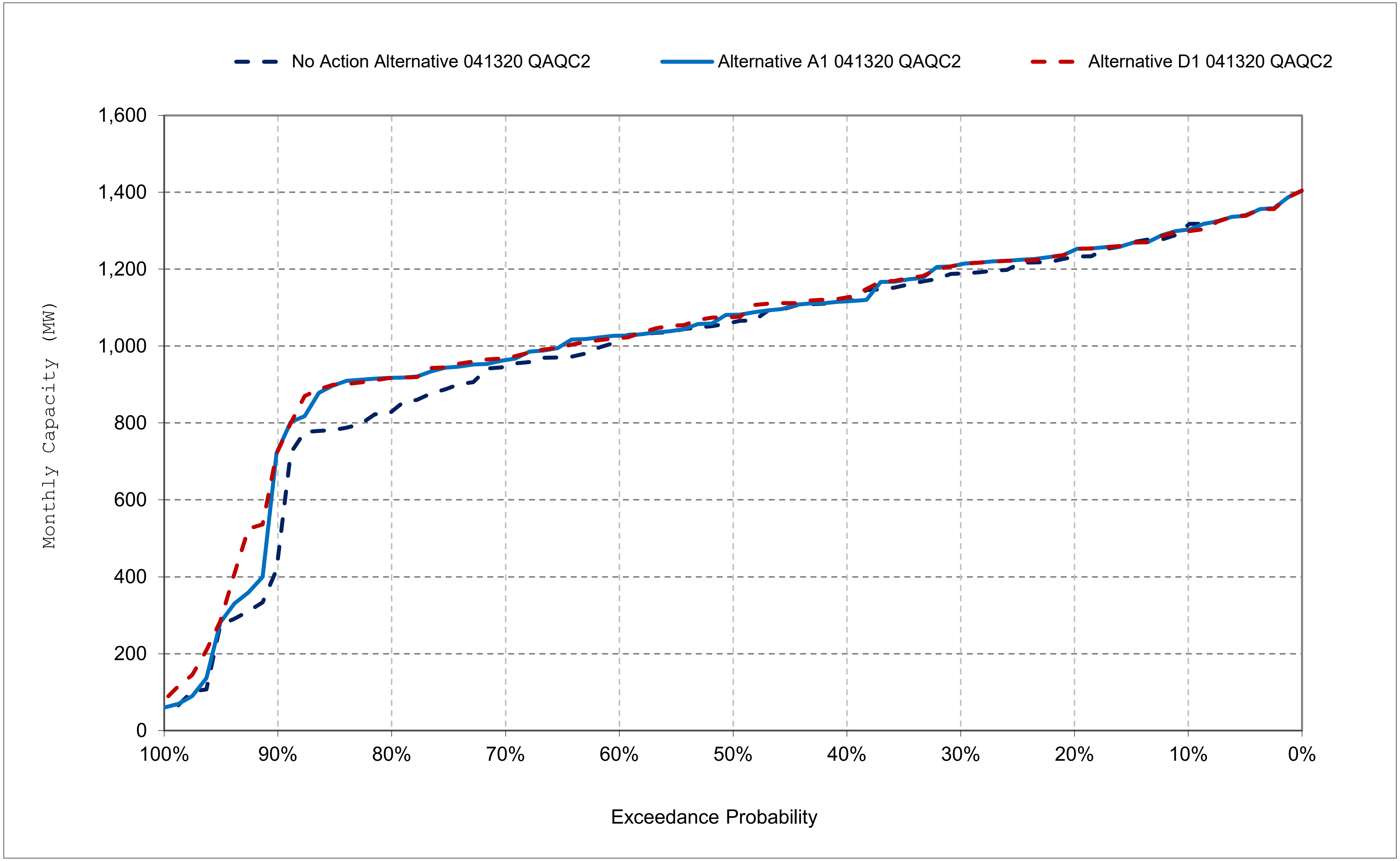
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-17. SWP Total Capacity, August



*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-6-18. SWP Total Capacity, September



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-7-1. SWP Total Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	484	415	492	739	641	676	529	732	561	697	634	444
20%	421	381	408	324	570	567	397	527	520	675	595	435
30%	385	366	370	229	393	444	335	438	493	668	575	418
40%	349	339	321	190	214	312	307	398	474	660	552	391
50%	326	322	296	133	149	232	287	380	461	639	506	369
60%	287	307	279	88	108	135	244	335	438	563	457	342
70%	255	260	246	66	71	96	222	297	417	515	418	309
80%	194	222	211	49	49	63	142	250	395	422	261	246
90%	133	112	158	38	37	47	105	224	333	309	176	188
Long Term												
Full Simulation Period[a]	309	303	323	231	266	310	302	413	456	555	455	340
Water Year Types[b,c]												
Wet (32%)	396	407	453	460	517	592	479	604	535	590	519	401
Above Normal (15%)	383	369	382	160	273	388	297	431	465	678	609	393
Below Normal (17%)	339	300	278	159	177	187	253	354	468	651	574	404
Dry (22%)	245	241	259	101	97	91	200	307	442	538	342	293
Critical (15%)	109	111	133	85	71	89	131	210	284	270	191	152

Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	482	423	490	741	633	679	520	734	565	689	633	471
20%	418	400	412	380	542	558	390	535	510	672	609	438
30%	397	385	377	252	403	439	348	437	478	652	587	412
40%	364	356	352	190	210	313	317	415	456	633	561	391
50%	328	334	313	125	168	231	303	389	439	624	526	375
60%	309	301	281	87	102	141	262	368	423	585	460	356
70%	253	278	259	67	66	97	238	293	395	532	435	312
80%	228	215	234	56	48	66	201	252	376	470	319	275
90%	147	148	162	39	37	50	118	234	320	375	225	178
Long Term												
Full Simulation Period[a]	321	317	334	237	267	310	316	421	443	561	475	348
Water Year Types[b,c]												
Wet (32%)	393	414	456	464	506	589	479	607	531	582	524	397
Above Normal (15%)	391	406	413	174	296	384	304	441	453	654	611	361
Below Normal (17%)	369	315	288	167	185	190	265	363	450	653	587	423
Dry (22%)	258	250	272	105	99	97	240	319	414	568	401	329
Critical (15%)	132	119	136	84	69	90	146	219	279	308	211	166

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	-2	8	-1	1	-8	3	-9	2	4	-7	0	27
20%	-3	19	4	56	-27	-9	-7	9	-10	-3	14	3
30%	13	19	8	23	10	-5	13	-1	-16	-16	12	-6
40%	14	17	31	-1	-4	1	10	17	-18	-27	9	1
50%	1	12	17	-8	19	-2	16	9	-22	-15	20	6
60%	22	-7	2	-1	-7	7	18	33	-15	22	3	14
70%	-2	18	12	1	-5	1	16	-4	-21	18	17	4
80%	35	-6	24	7	-2	3	59	2	-19	48	58	29
90%	14	36	4	1	0	3	13	11	-13	66	49	-10
Long Term												
Full Simulation Period[a]	12	14	11	5	1	0	14	8	-13	6	20	7
Water Year Types[b,c]												
Wet (32%)	-2	7	3	4	-11	-3	0	3	-4	-8	4	-4
Above Normal (15%)	8	38	30	14	22	-4	7	10	-11	-24	2	-32
Below Normal (17%)	30	15	10	8	7	3	12	9	-18	2	12	19
Dry (22%)	12	9	13	4	2	5	40	12	-28	30	58	36
Critical (15%)	24	8	3	-2	-2	0	15	9	-5	39	21	14

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-7-2. SWP Total Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	484	415	492	739	641	676	529	732	561	697	634	444
20%	421	381	408	324	570	567	397	527	520	675	595	435
30%	385	366	370	229	393	444	335	438	493	668	575	418
40%	349	339	321	190	214	312	307	398	474	660	552	391
50%	326	322	296	133	149	232	287	380	461	639	506	369
60%	287	307	279	88	108	135	244	335	438	563	457	342
70%	255	260	246	66	71	96	222	297	417	515	418	309
80%	194	222	211	49	49	63	142	250	395	422	261	246
90%	133	112	158	38	37	47	105	224	333	309	176	188
Long Term												
Full Simulation Period[a]	309	303	323	231	266	310	302	413	456	555	455	340
Water Year Types[b,c]												
Wet (32%)	396	407	453	460	517	592	479	604	535	590	519	401
Above Normal (15%)	383	369	382	160	273	388	297	431	465	678	609	393
Below Normal (17%)	339	300	278	159	177	187	253	354	468	651	574	404
Dry (22%)	245	241	259	101	97	91	200	307	442	538	342	293
Critical (15%)	109	111	133	85	71	89	131	210	284	270	191	152

Alternative D1 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	482	422	489	741	629	679	520	733	563	689	622	454
20%	417	404	408	377	546	561	391	536	504	672	607	430
30%	402	386	380	255	406	437	348	454	478	651	584	413
40%	355	357	347	186	211	312	318	414	451	636	560	391
50%	324	337	318	132	164	238	301	395	439	622	526	374
60%	310	308	282	88	101	146	260	367	423	591	464	358
70%	278	280	261	70	69	97	238	295	404	544	438	309
80%	233	222	236	56	48	65	202	254	376	470	339	282
90%	181	168	186	39	37	50	123	238	330	386	215	175
Long Term												
Full Simulation Period[a]	326	320	336	238	268	312	317	422	444	562	474	348
Water Year Types[b,c]												
Wet (32%)	391	413	454	466	507	591	478	608	530	580	524	400
Above Normal (15%)	384	407	415	179	298	385	306	440	451	654	608	358
Below Normal (17%)	367	321	293	170	187	195	264	362	449	653	583	420
Dry (22%)	276	256	269	106	98	98	246	323	418	575	408	328
Critical (15%)	154	126	151	83	70	89	148	222	282	308	204	173

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-2	7	-3	1	-12	3	-9	1	2	-7	-11	9
20%	-4	23	1	53	-24	-6	-6	9	-16	-3	12	-5
30%	18	20	10	25	14	-6	13	16	-16	-17	9	-5
40%	6	18	26	-4	-3	0	11	16	-23	-25	8	1
50%	-2	15	22	-1	16	6	14	16	-22	-17	20	5
60%	23	0	3	0	-7	11	16	32	-15	27	8	16
70%	23	19	15	4	-2	1	17	-2	-13	29	20	0
80%	40	0	25	7	-2	2	60	4	-19	48	78	36
90%	48	57	28	1	0	3	17	14	-3	77	40	-13
Long Term												
Full Simulation Period[a]	17	16	13	7	2	2	16	9	-12	7	19	8
Water Year Types[b,c]												
Wet (32%)	-5	6	1	6	-10	-1	0	4	-5	-10	4	-1
Above Normal (15%)	1	39	32	19	25	-3	10	9	-13	-25	-1	-35
Below Normal (17%)	28	21	15	11	10	8	11	8	-19	2	9	16
Dry (22%)	30	14	10	5	1	6	46	16	-24	37	66	35
Critical (15%)	45	15	19	-2	-1	0	18	12	-2	38	14	21

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-7-3. SWP Total Generation, Monthly Generation

Alternative A1 041320 QAQC2

Statistic	Monthly Generation (GWh) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	482	423	490	741	633	679	520	734	565	689	633	471
20%	418	400	412	380	542	558	390	535	510	672	609	438
30%	397	385	377	252	403	439	348	437	478	652	587	412
40%	364	356	352	190	210	313	317	415	456	633	561	391
50%	328	334	313	125	168	231	303	389	439	624	526	375
60%	309	301	281	87	102	141	262	368	423	585	460	356
70%	253	278	259	67	66	97	238	293	395	532	435	312
80%	228	215	234	56	48	66	201	252	376	470	319	275
90%	147	148	162	39	37	50	118	234	320	375	225	178
Long Term												
Full Simulation Period[a]	321	317	334	237	267	310	316	421	443	561	475	348
Water Year Types[b,c]												
Wet (32%)	393	414	456	464	506	589	479	607	531	582	524	397
Above Normal (15%)	391	406	413	174	296	384	304	441	453	654	611	361
Below Normal (17%)	369	315	288	167	185	190	265	363	450	653	587	423
Dry (22%)	258	250	272	105	99	97	240	319	414	568	401	329
Critical (15%)	132	119	136	84	69	90	146	219	279	308	211	166

Alternative D1 041320 QAQC2

Statistic	Monthly Generation (GWh) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	482	422	489	741	629	679	520	733	563	689	622	454
20%	417	404	408	377	546	561	391	536	504	672	607	430
30%	402	386	380	255	406	437	348	454	478	651	584	413
40%	355	357	347	186	211	312	318	414	451	636	560	391
50%	324	337	318	132	164	238	301	395	439	622	526	374
60%	310	308	282	88	101	146	260	367	423	591	464	358
70%	278	280	261	70	69	97	238	295	404	544	438	309
80%	233	222	236	56	48	65	202	254	376	470	339	282
90%	181	168	186	39	37	50	123	238	330	386	215	175
Long Term												
Full Simulation Period[a]	326	320	336	238	268	312	317	422	444	562	474	348
Water Year Types[b,c]												
Wet (32%)	391	413	454	466	507	591	478	608	530	580	524	400
Above Normal (15%)	384	407	415	179	298	385	306	440	451	654	608	358
Below Normal (17%)	367	321	293	170	187	195	264	362	449	653	583	420
Dry (22%)	276	256	269	106	98	98	246	323	418	575	408	328
Critical (15%)	154	126	151	83	70	89	148	222	282	308	204	173

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Monthly Generation (GWh) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	-1	-1	0	-4	1	0	-1	-2	0	-11	-18
20%	-1	3	-3	-3	4	2	0	1	-6	0	-2	-8
30%	5	1	2	2	4	-1	0	17	0	-1	-3	0
40%	-8	1	-5	-3	1	-1	0	-1	-5	2	-1	0
50%	-3	3	5	8	-4	8	-3	7	0	-2	0	-1
60%	1	7	2	1	-1	5	-2	-1	0	6	4	2
70%	24	2	2	2	3	0	1	2	8	11	3	-4
80%	5	7	2	0	0	-1	1	1	0	0	19	7
90%	33	20	24	0	1	0	4	4	10	11	-10	-3
Long Term												
Full Simulation Period[a]	5	3	2	2	1	2	2	1	1	1	-1	1
Water Year Types[b,c]												
Wet (32%)	-2	-1	-2	2	1	2	-1	2	-1	-1	0	3
Above Normal (15%)	-7	1	2	5	3	1	3	-1	-2	0	-3	-3
Below Normal (17%)	-2	6	5	3	2	5	-1	-1	-1	0	-4	-3
Dry (22%)	18	5	-3	1	-1	1	6	4	4	8	7	-1
Critical (15%)	21	7	15	0	1	-1	2	3	3	0	-7	7

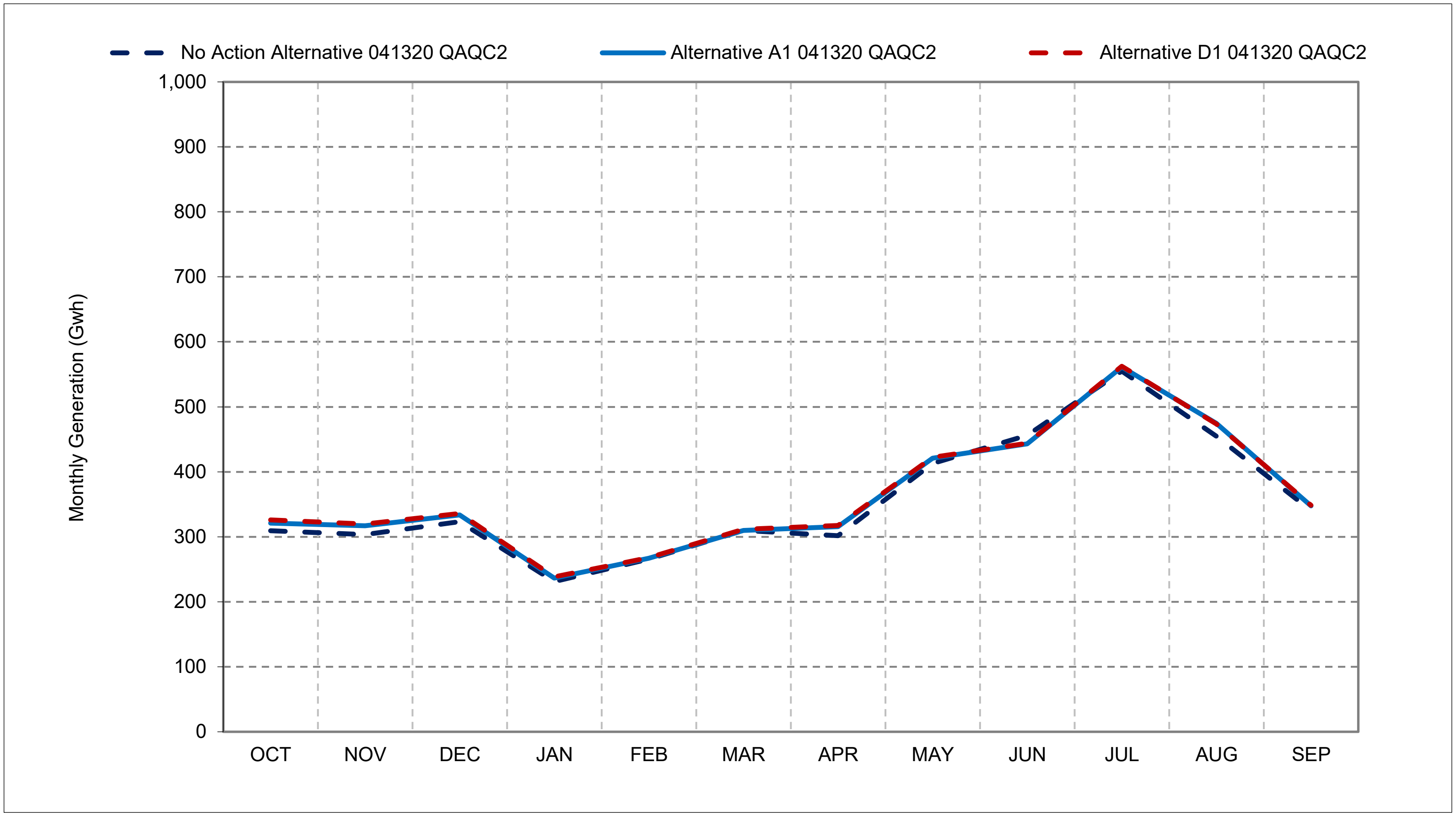
a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-1. SWP Total Generation, Long-Term Average Generation

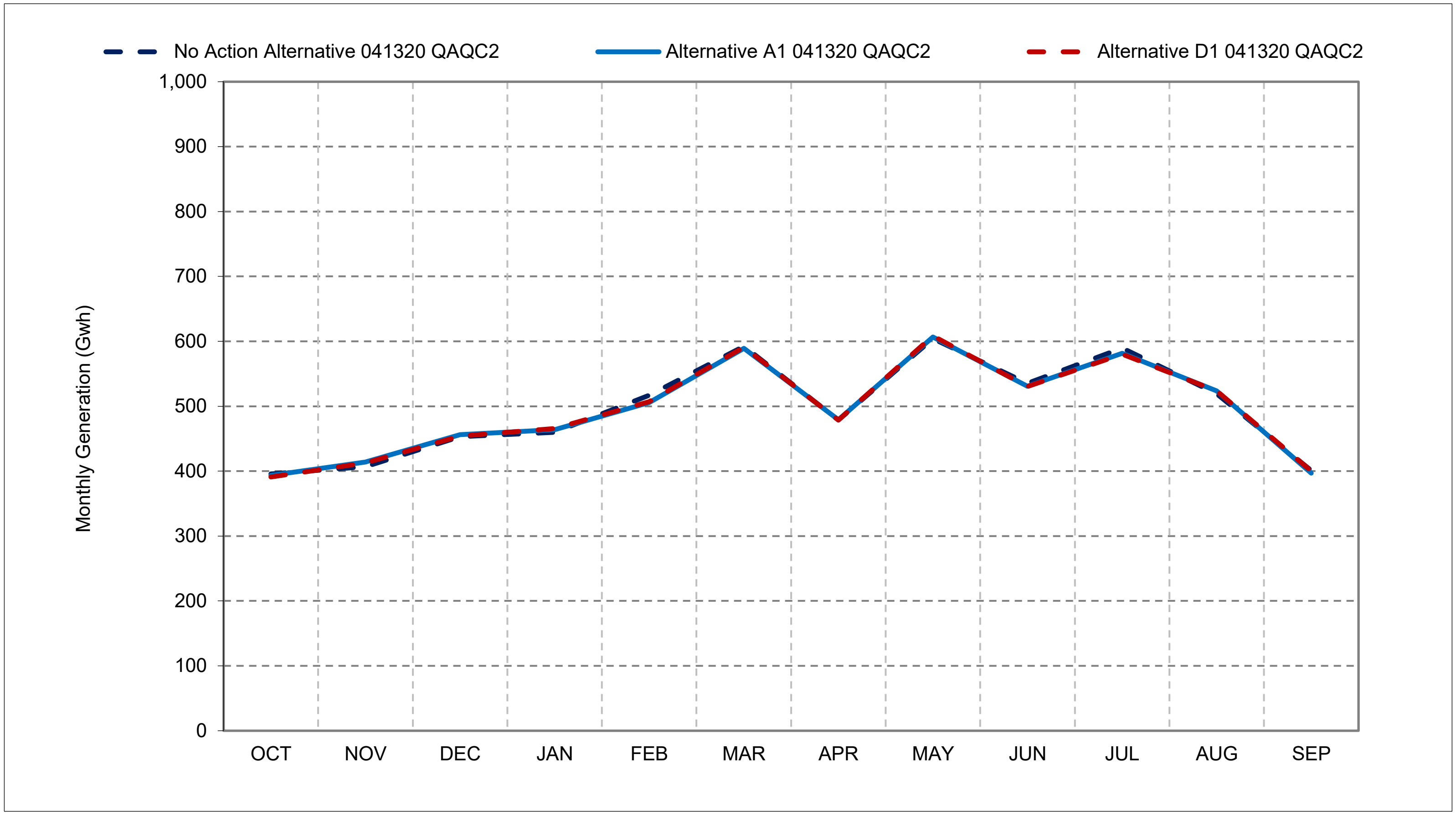


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-2. SWP Total Generation, Wet Year Average Generation

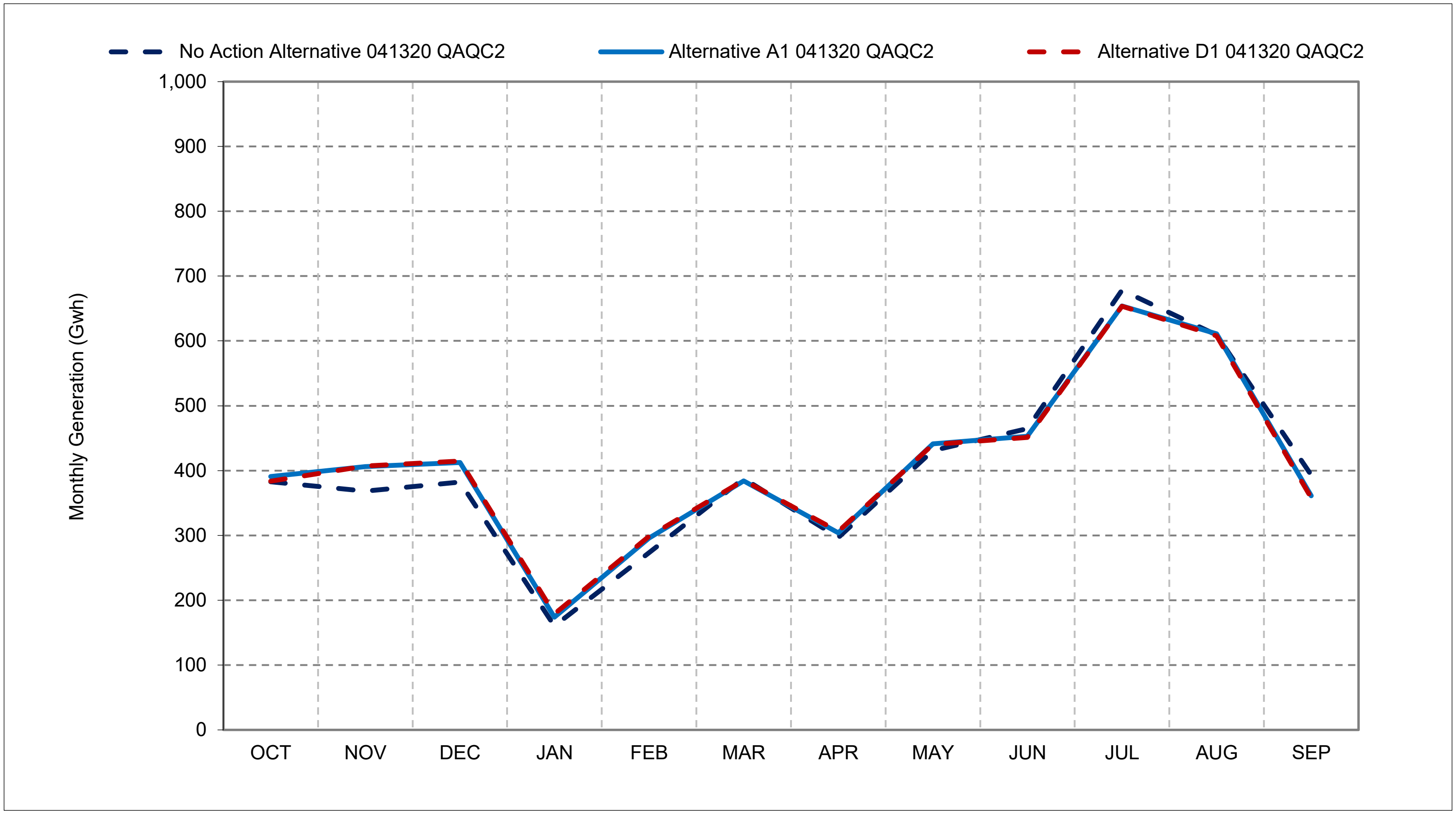


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-3. SWP Total Generation, Above Normal Year Average Generation

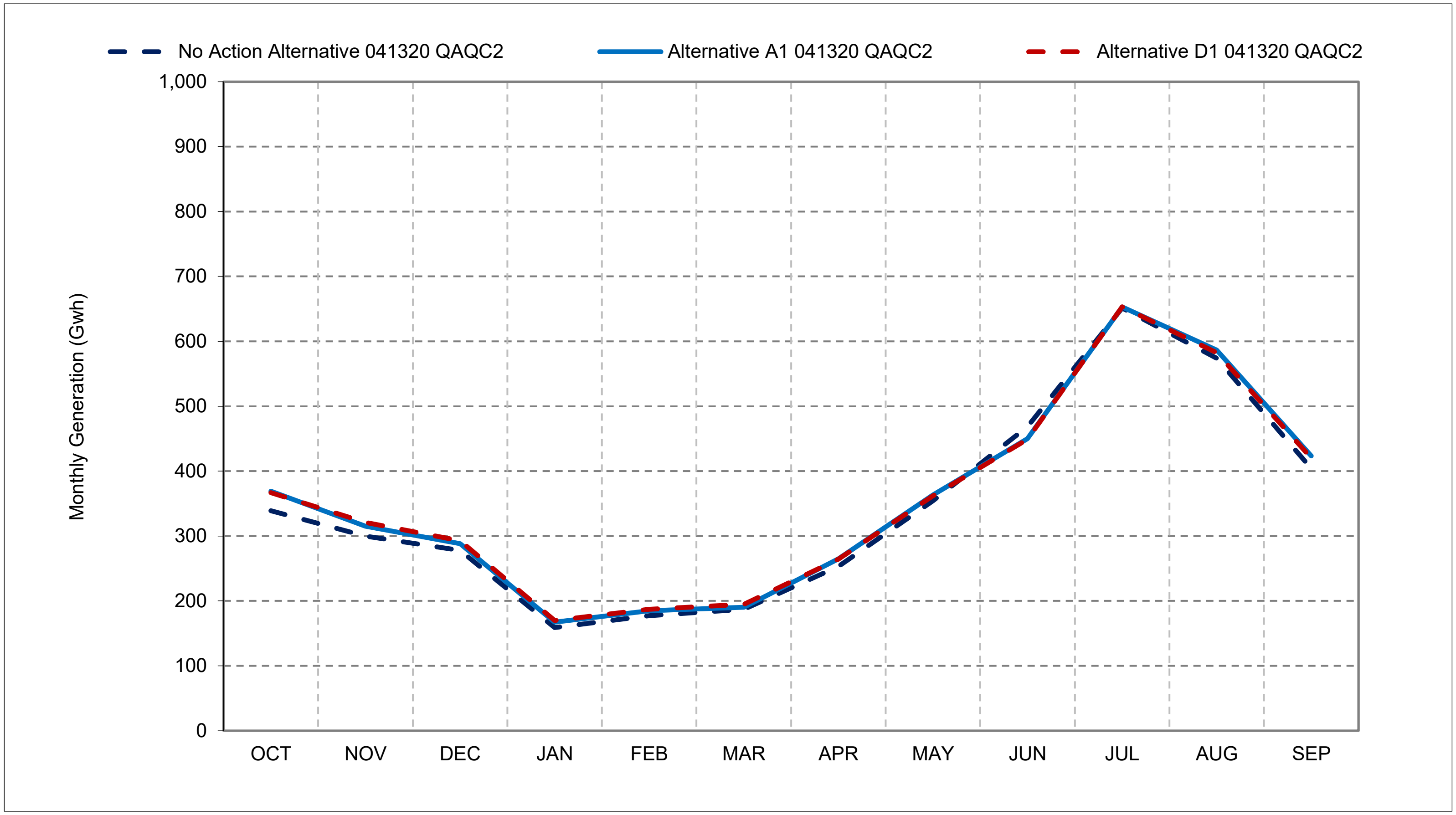


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-4. SWP Total Generation, Below Normal Year Average Generation

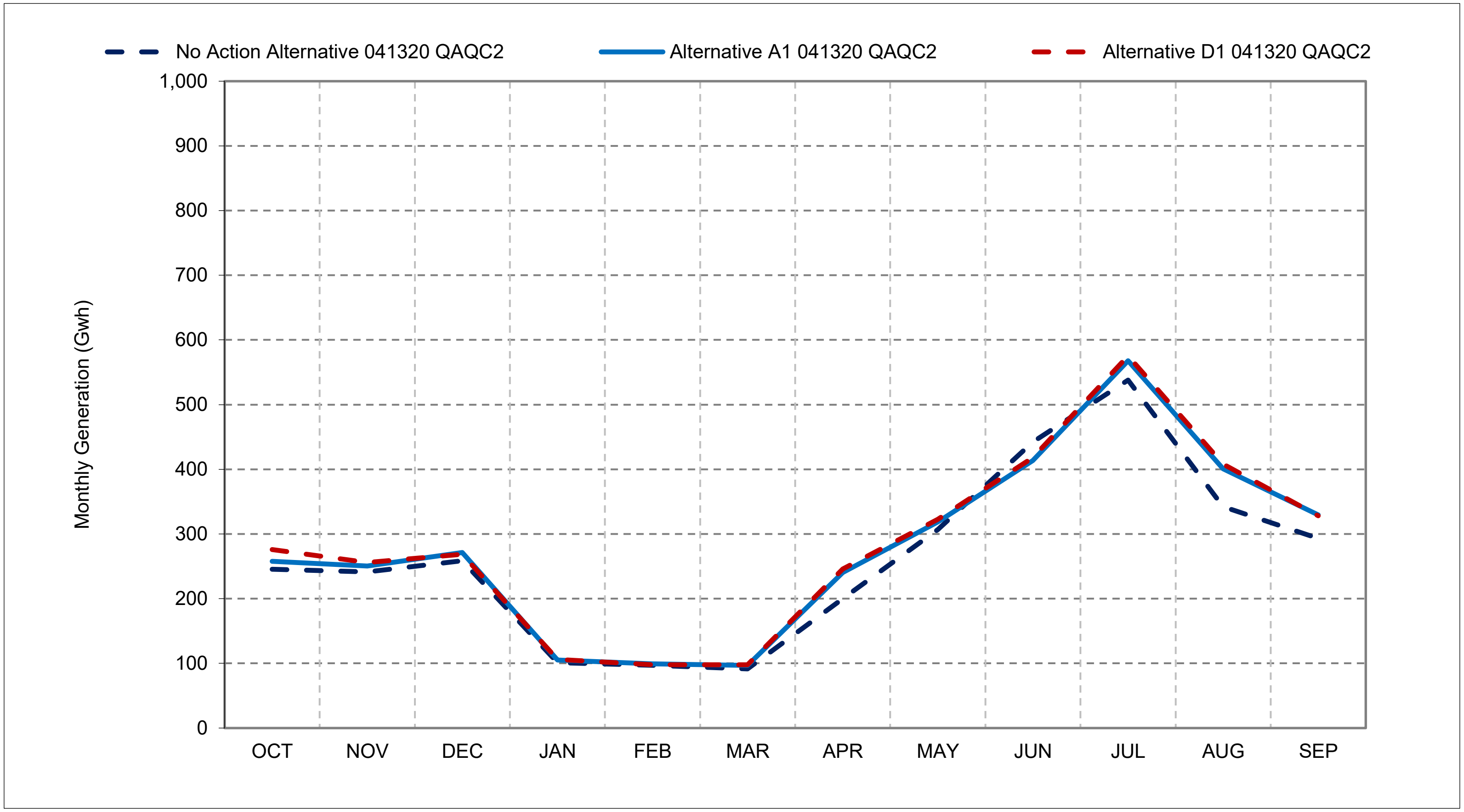


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-5. SWP Total Generation, Dry Year Average Generation

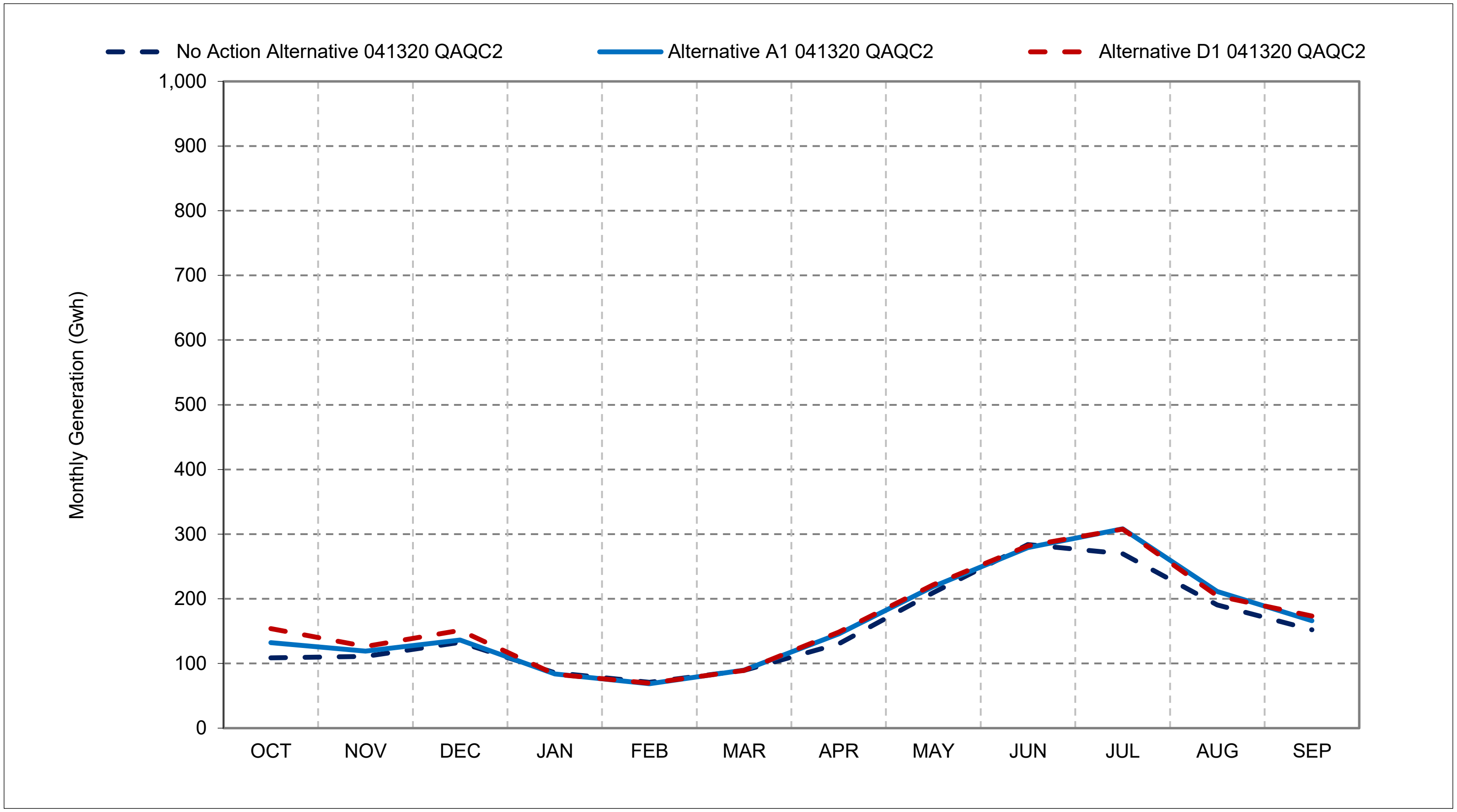


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-6. SWP Total Generation, Critical Year Average Generation

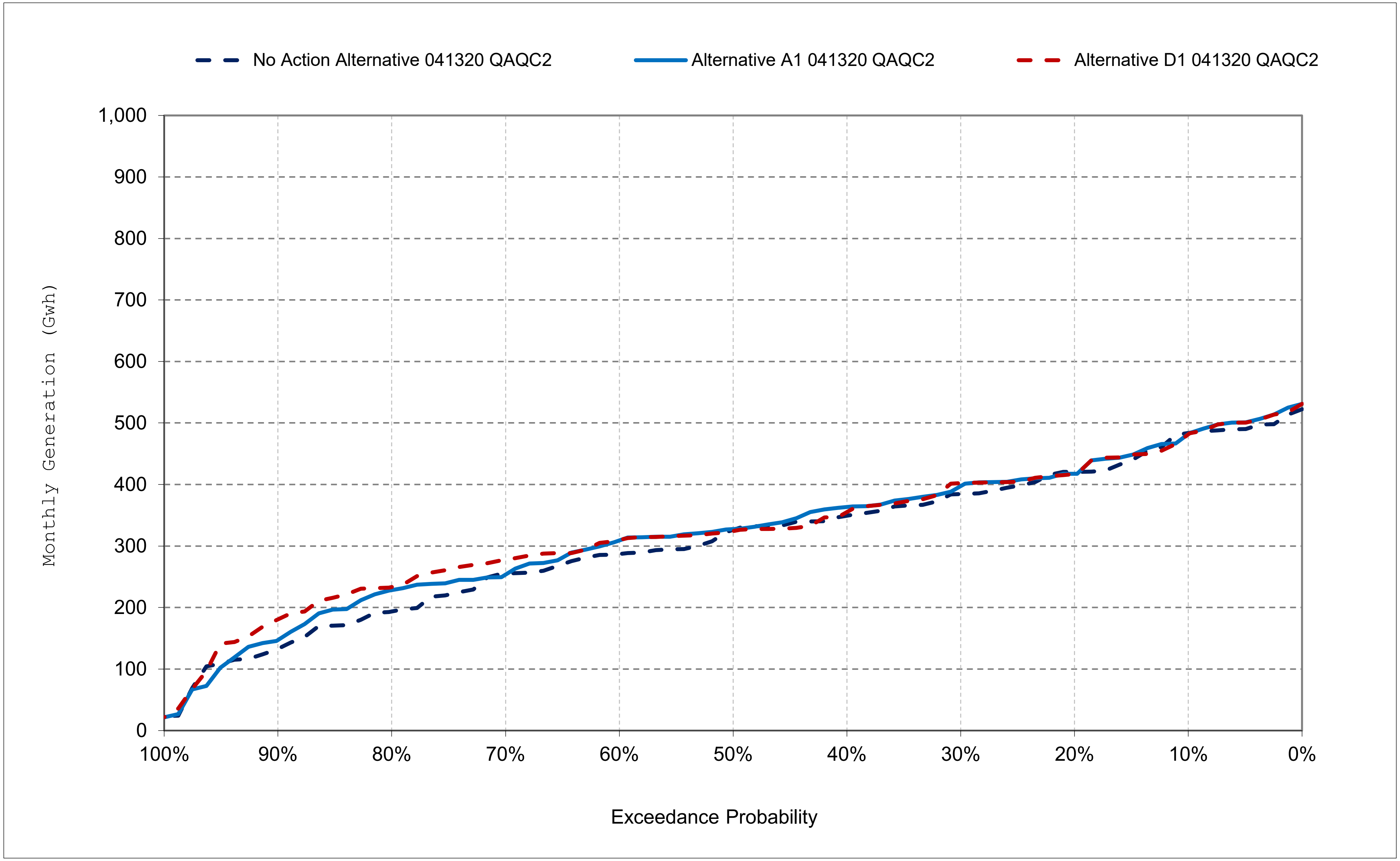


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

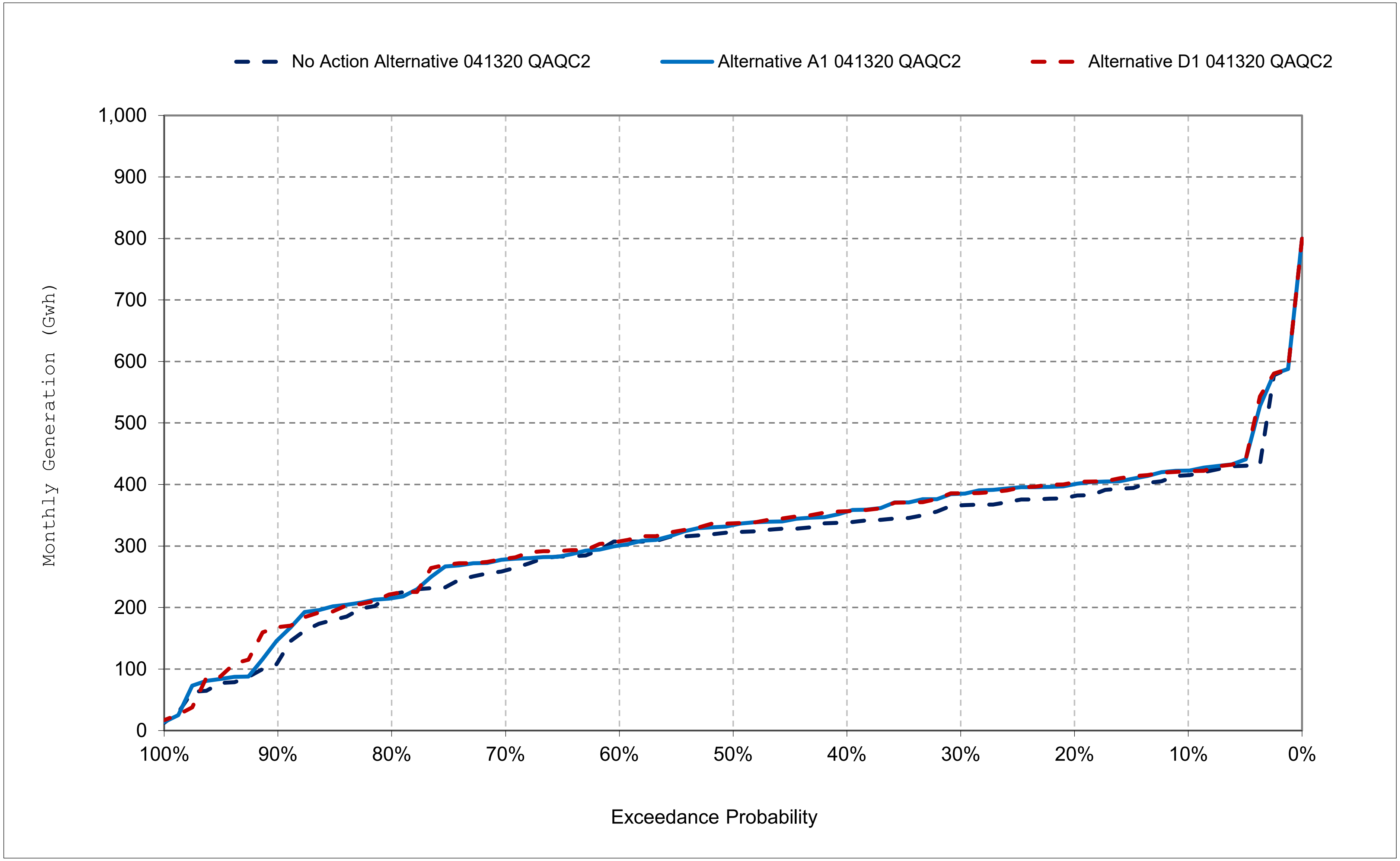
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-7. SWP Total Generation, October



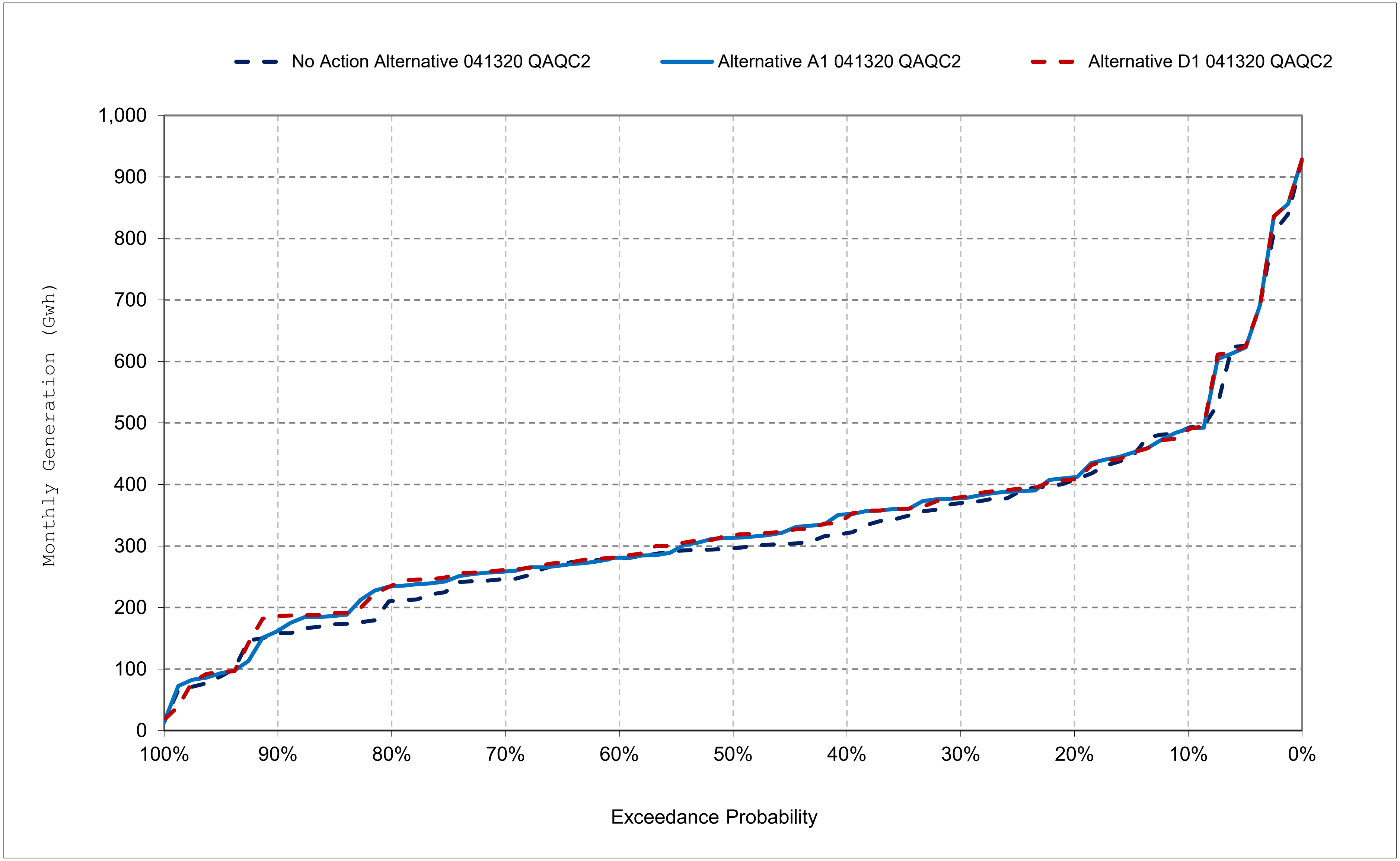
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-8. SWP Total Generation, November



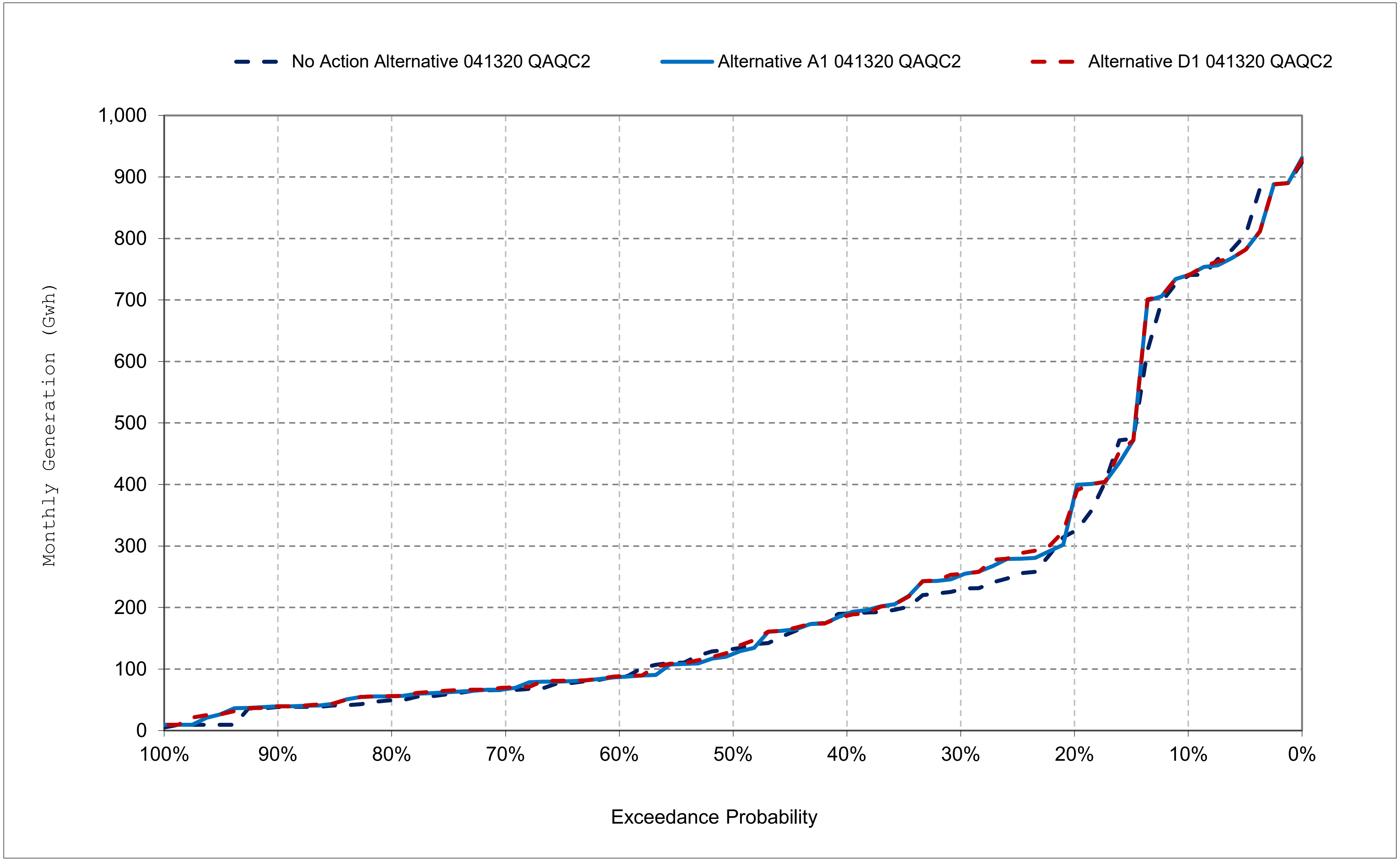
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-9. SWP Total Generation, December



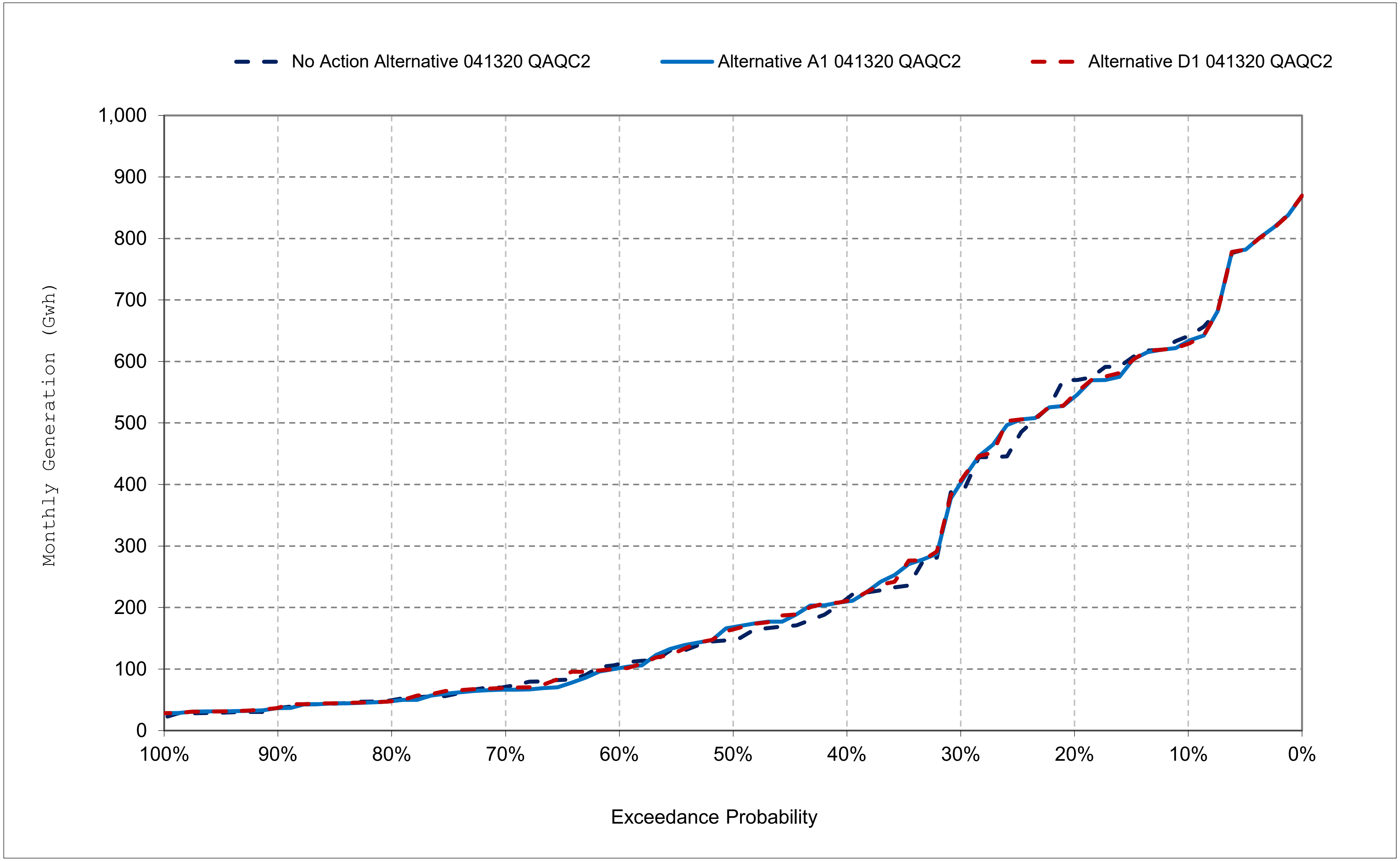
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-10. SWP Total Generation, January



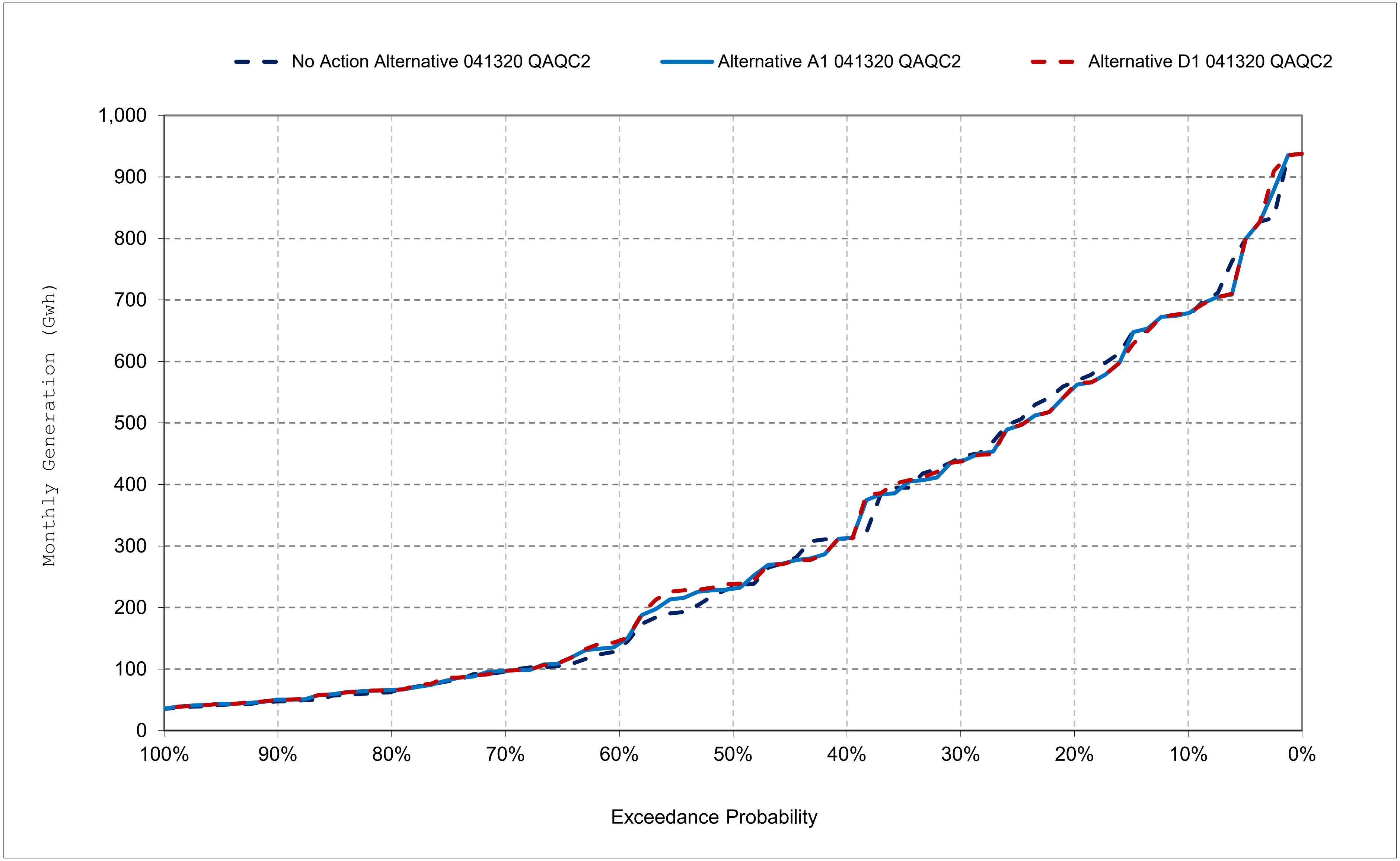
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-11. SWP Total Generation, February



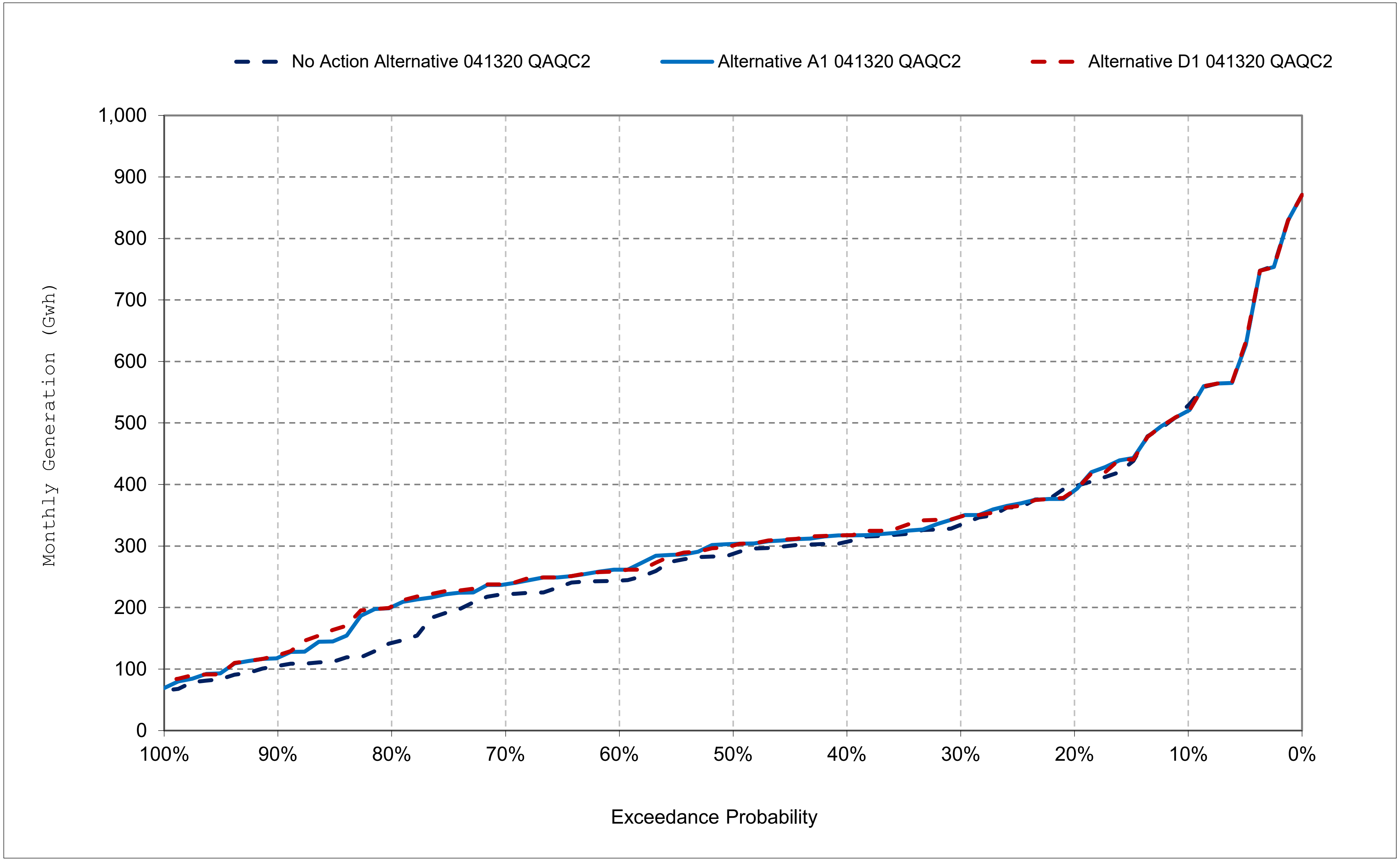
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-12. SWP Total Generation, March



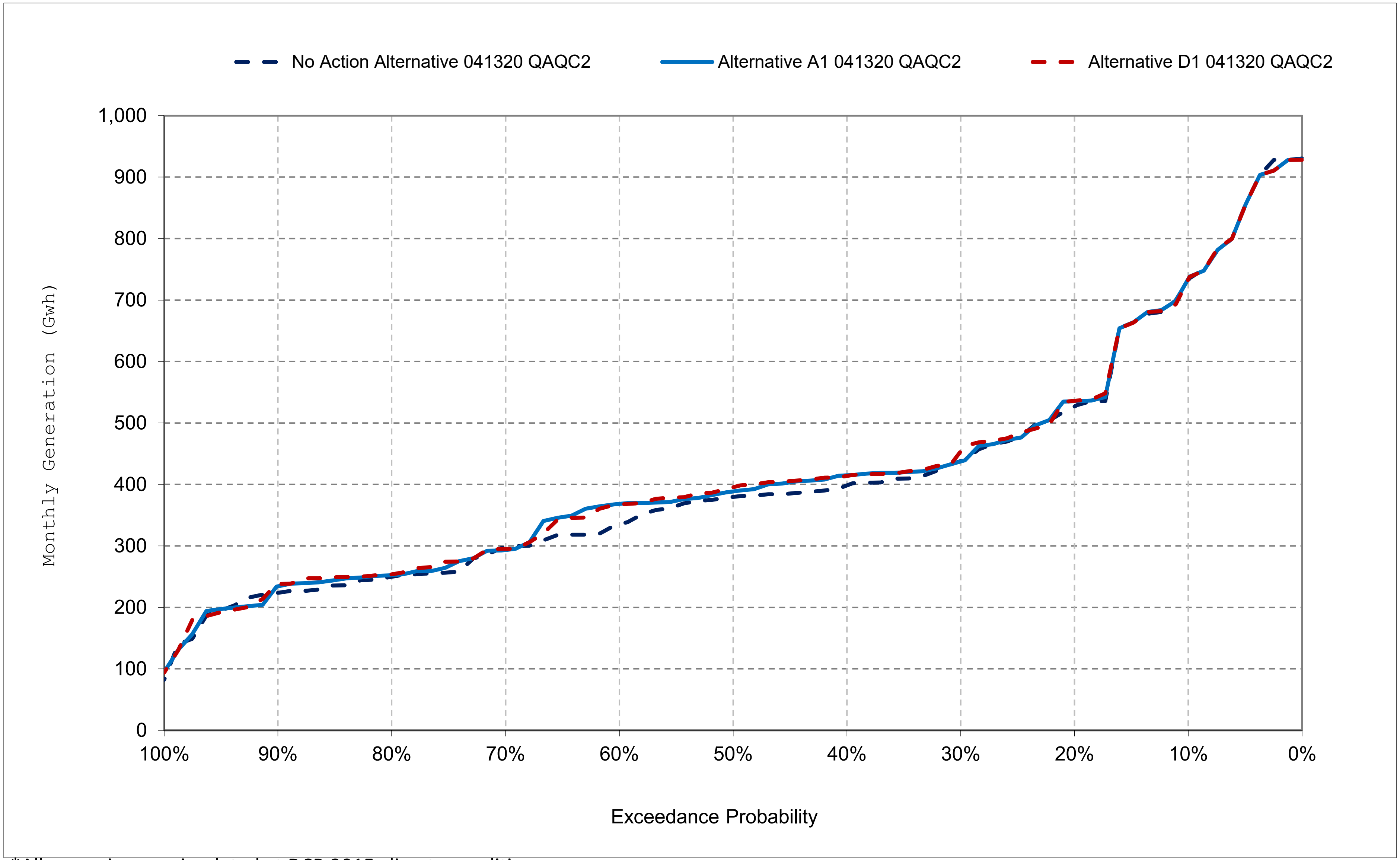
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-13. SWP Total Generation, April



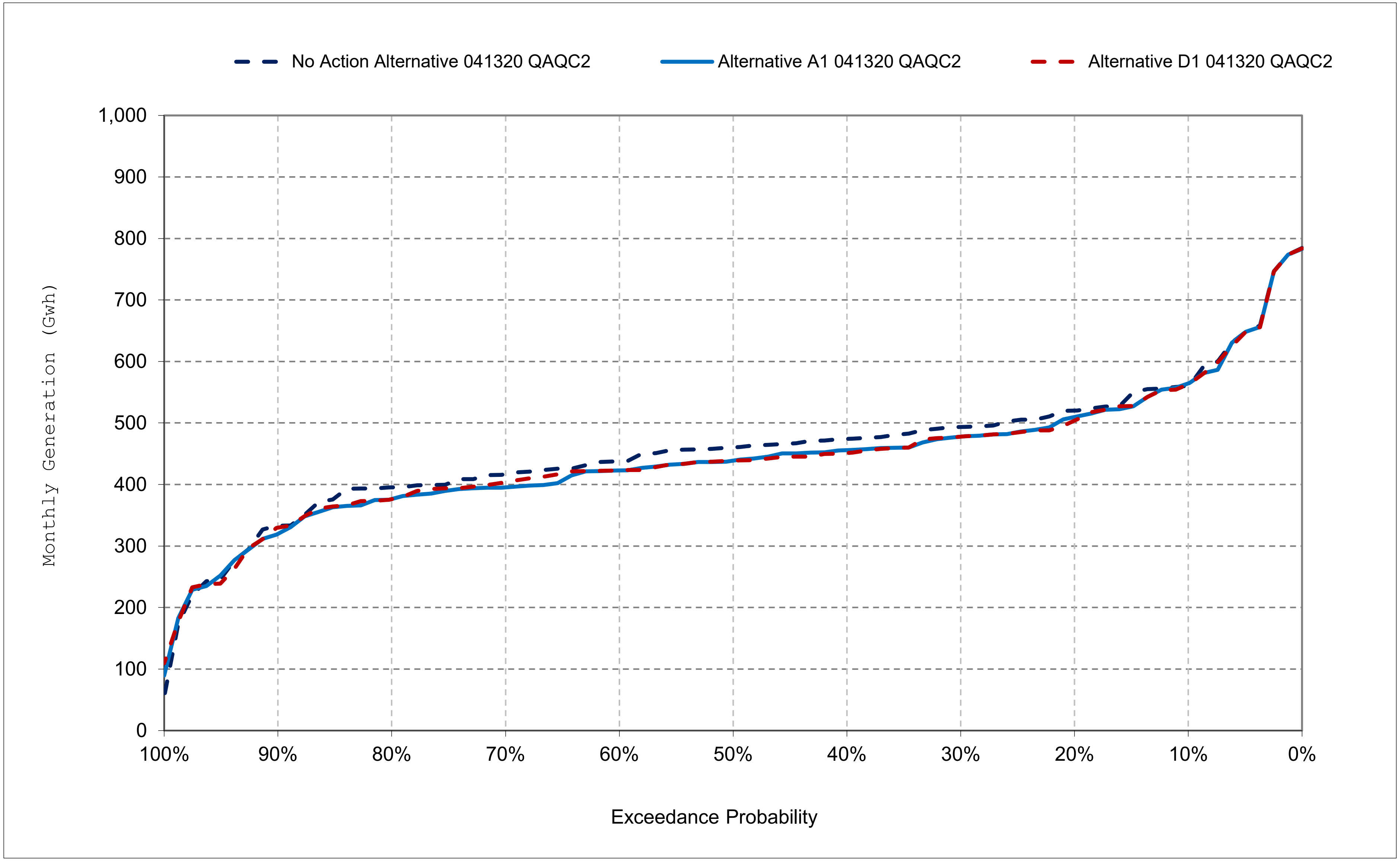
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-14. SWP Total Generation, May



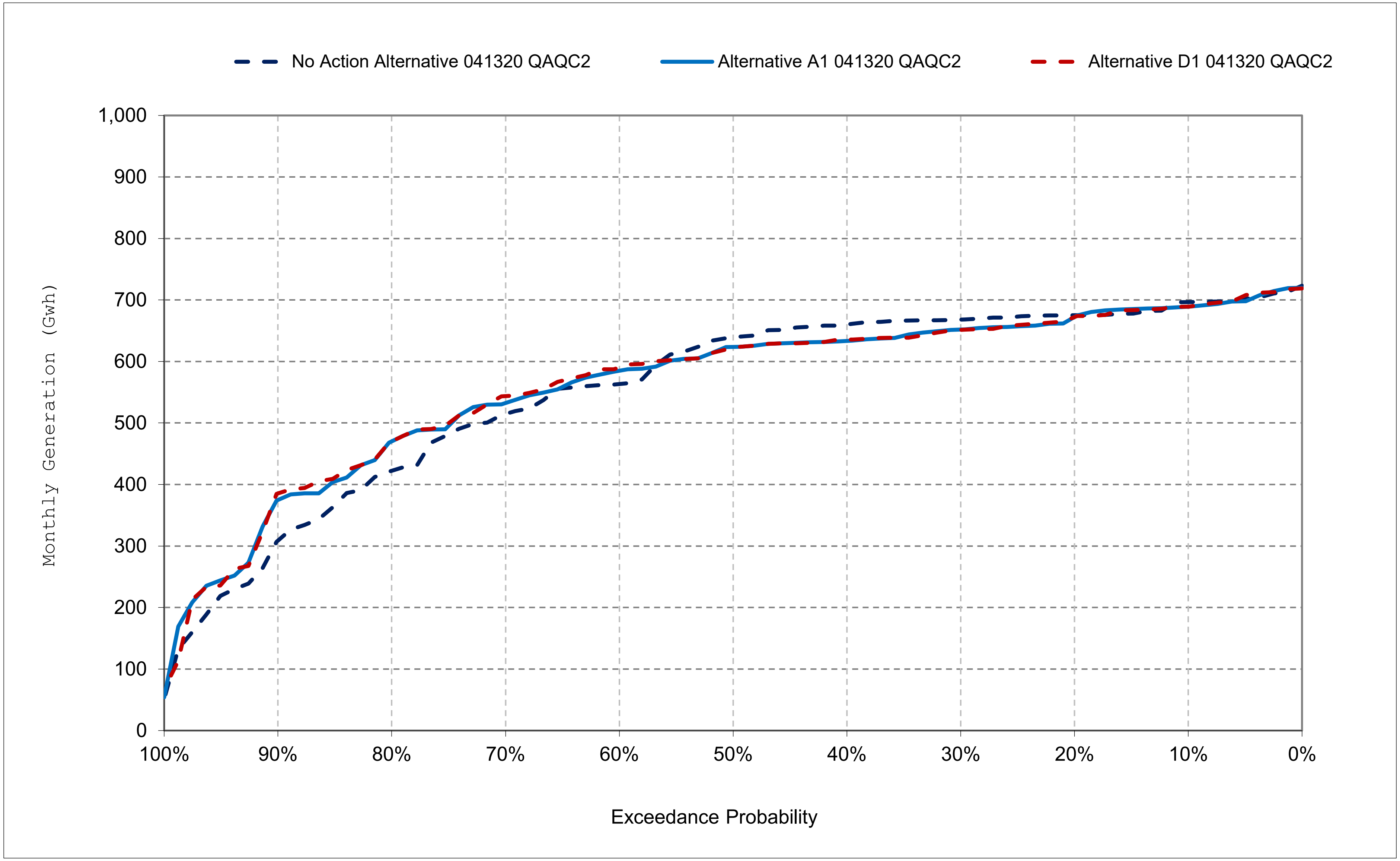
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-15. SWP Total Generation, June



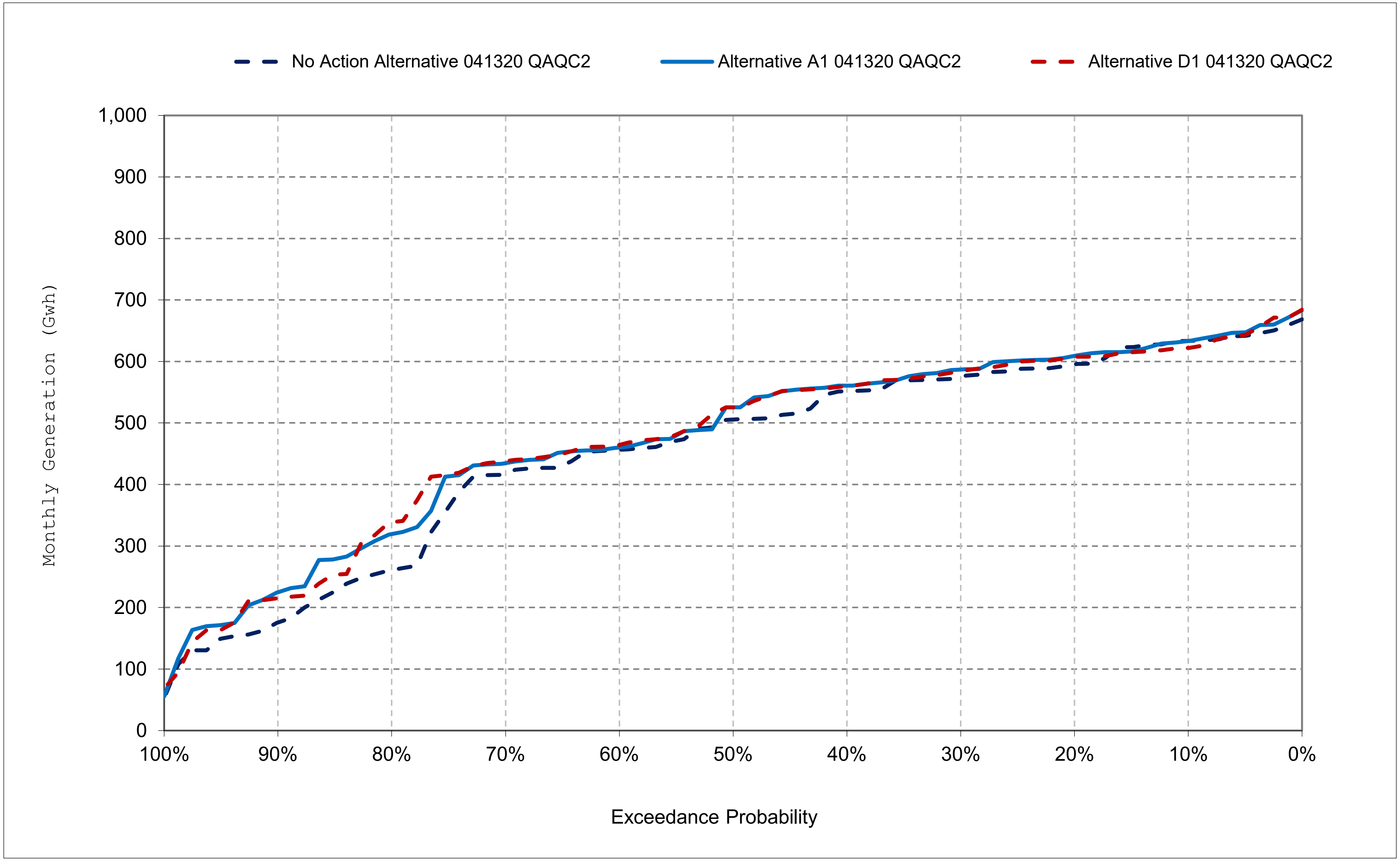
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-16. SWP Total Generation, July



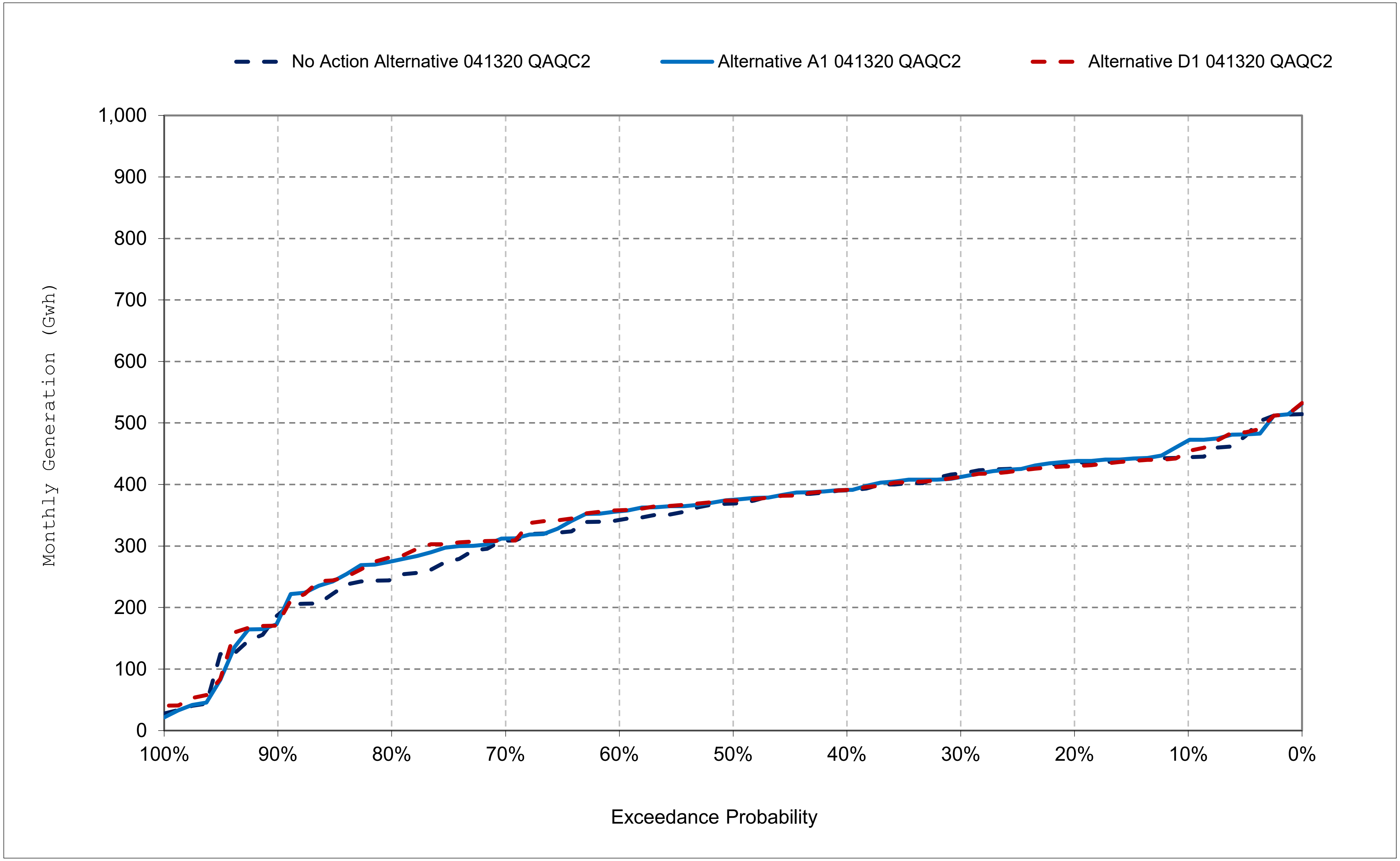
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-17. SWP Total Generation, August



*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-7-18. SWP Total Generation, September



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-8-1. SWP Total Energy Use, Monthly Energy Use

No Action Alternative 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,021	1,059	1,036	858	934	933	866	997	937	1,096	1,112	1,062
20%	973	981	963	600	711	757	820	919	854	1,056	1,089	1,001
30%	917	950	911	471	515	694	745	856	797	1,029	1,069	963
40%	823	884	831	413	435	598	635	793	754	1,006	1,054	917
50%	764	837	783	280	314	453	543	631	717	986	1,036	887
60%	706	756	745	161	231	231	490	564	699	953	1,006	845
70%	513	696	668	121	175	177	421	465	665	920	954	748
80%	405	487	566	109	128	149	198	411	574	751	542	586
90%	280	320	366	104	105	128	146	374	468	504	402	492
Long Term												
Full Simulation Period[a]	703	758	748	375	416	472	538	664	709	894	884	805
Water Year Types[b,c]												
Wet (32%)	864	969	919	599	673	764	750	878	843	1,023	1,062	924
Above Normal (15%)	812	942	928	327	422	573	665	771	794	1,022	1,077	846
Below Normal (17%)	868	788	765	344	374	454	579	714	748	990	1,055	970
Dry (22%)	569	618	606	234	229	200	362	488	636	844	687	753
Critical (15%)	256	291	387	187	184	170	169	299	394	448	402	390

Alternative A1 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,041	1,090	1,059	853	934	904	866	999	936	1,108	1,127	1,083
20%	995	1,035	955	671	698	736	802	927	874	1,064	1,103	1,030
30%	934	987	926	480	539	687	753	857	812	1,047	1,081	989
40%	881	912	895	424	424	585	693	809	768	1,033	1,067	953
50%	793	888	825	273	329	380	564	722	738	1,013	1,055	916
60%	739	817	795	149	225	229	496	594	715	976	1,034	873
70%	614	724	717	117	146	182	445	486	690	939	1,002	802
80%	451	514	643	106	128	142	378	449	626	908	731	623
90%	353	325	383	101	108	131	168	385	544	652	453	355
Long Term												
Full Simulation Period[a]	735	795	778	375	408	460	569	685	728	932	939	827
Water Year Types[b,c]												
Wet (32%)	853	995	936	588	639	736	746	884	849	1,030	1,071	920
Above Normal (15%)	815	1,016	986	325	428	546	659	775	799	1,028	1,094	743
Below Normal (17%)	937	849	802	376	395	455	611	737	762	1,018	1,082	1,002
Dry (22%)	633	639	646	238	232	208	464	527	675	946	852	880
Critical (15%)	314	311	398	171	168	161	206	344	432	502	460	427

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	20	30	23	-5	-1	-29	0	2	-1	12	15	20
20%	22	54	-8	72	-13	-21	-17	8	20	8	14	29
30%	17	36	15	9	24	-7	8	1	16	18	12	26
40%	58	28	64	11	-11	-13	58	16	14	27	13	35
50%	29	50	42	-7	15	-72	21	91	22	27	19	29
60%	33	60	50	-13	-6	-2	6	30	15	22	28	28
70%	101	29	49	-4	-28	5	24	21	25	19	48	55
80%	47	27	77	-3	0	-7	180	38	51	157	189	36
90%	73	5	17	-3	3	3	22	11	76	148	51	-136
Long Term												
Full Simulation Period[a]	31	37	30	0	-8	-12	31	21	19	38	54	23
Water Year Types[b,c]												
Wet (32%)	-12	26	16	-11	-35	-27	-5	6	6	7	9	-4
Above Normal (15%)	3	74	58	-3	6	-26	-6	4	5	6	17	-103
Below Normal (17%)	69	61	37	32	21	1	32	23	14	28	27	33
Dry (22%)	64	21	41	4	3	7	101	39	39	102	165	128
Critical (15%)	58	20	11	-16	-16	-8	37	44	38	54	57	37

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-8-2. SWP Total Energy Use, Monthly Energy Use

No Action Alternative 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,021	1,059	1,036	858	934	933	866	997	937	1,096	1,112	1,062
20%	973	981	963	600	711	757	820	919	854	1,056	1,089	1,001
30%	917	950	911	471	515	694	745	856	797	1,029	1,069	963
40%	823	884	831	413	435	598	635	793	754	1,006	1,054	917
50%	764	837	783	280	314	453	543	631	717	986	1,036	887
60%	706	756	745	161	231	231	490	564	699	953	1,006	845
70%	513	696	668	121	175	177	421	465	665	920	954	748
80%	405	487	566	109	128	149	198	411	574	751	542	586
90%	280	320	366	104	105	128	146	374	468	504	402	492
Long Term												
Full Simulation Period[a]	703	758	748	375	416	472	538	664	709	894	884	805
Water Year Types[b,c]												
Wet (32%)	864	969	919	599	673	764	750	878	843	1,023	1,062	924
Above Normal (15%)	812	942	928	327	422	573	665	771	794	1,022	1,077	846
Below Normal (17%)	868	788	765	344	374	454	579	714	748	990	1,055	970
Dry (22%)	569	618	606	234	229	200	362	488	636	844	687	753
Critical (15%)	256	291	387	187	184	170	169	299	394	448	402	390

Alternative D1 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,037	1,089	1,045	828	928	904	863	999	921	1,112	1,138	1,077
20%	987	1,029	978	672	699	745	809	932	876	1,063	1,101	1,032
30%	938	989	929	489	530	684	754	859	812	1,047	1,081	986
40%	868	912	904	419	422	585	683	812	768	1,029	1,067	955
50%	792	871	836	284	317	391	555	726	741	1,013	1,050	924
60%	747	837	788	158	232	232	498	604	715	973	1,034	884
70%	668	727	693	134	156	175	450	496	692	942	1,001	826
80%	496	529	639	108	121	142	390	447	644	906	778	659
90%	364	321	383	103	105	130	187	382	542	652	453	400
Long Term												
Full Simulation Period[a]	753	797	784	378	409	462	572	690	731	937	942	835
Water Year Types[b,c]												
Wet (32%)	849	991	932	592	641	739	747	889	849	1,027	1,068	927
Above Normal (15%)	807	1,009	987	326	434	544	654	775	796	1,031	1,098	737
Below Normal (17%)	933	840	817	382	398	468	609	732	761	1,019	1,083	1,009
Dry (22%)	697	664	642	238	230	205	477	536	681	952	873	890
Critical (15%)	365	312	433	170	166	159	211	356	448	526	449	450

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	15	30	9	-30	-7	-29	-3	2	-16	15	26	15
20%	14	48	15	72	-12	-12	-10	13	21	7	13	32
30%	21	39	18	17	15	-10	9	4	16	18	12	23
40%	45	28	73	6	-13	-13	49	19	14	22	13	37
50%	28	34	52	4	4	-62	12	96	24	27	14	36
60%	41	80	42	-3	2	1	8	40	16	20	28	39
70%	155	31	25	13	-19	-2	29	30	27	23	47	79
80%	91	43	73	-2	-7	-7	193	36	70	155	237	73
90%	83	2	17	0	1	2	42	8	74	148	52	-91
Long Term												
Full Simulation Period[a]	50	39	36	3	-7	-10	34	26	22	43	57	31
Water Year Types[b,c]												
Wet (32%)	-15	22	12	-6	-33	-25	-3	11	6	4	6	4
Above Normal (15%)	-5	67	59	-1	11	-29	-11	4	2	9	21	-110
Below Normal (17%)	65	51	52	38	24	14	30	18	13	29	28	40
Dry (22%)	128	47	36	5	1	5	115	48	45	108	186	137
Critical (15%)	109	21	46	-17	-18	-11	42	57	54	78	47	61

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-8-3. SWP Total Energy Use, Monthly Energy Use

Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Energy Use (GWh)											
Probability of Exceedance												
10%	1,041	1,090	1,059	853	934	904	866	999	936	1,108	1,127	1,083
20%	995	1,035	955	671	698	736	802	927	874	1,064	1,103	1,030
30%	934	987	926	480	539	687	753	857	812	1,047	1,081	989
40%	881	912	895	424	424	585	693	809	768	1,033	1,067	953
50%	793	888	825	273	329	380	564	722	738	1,013	1,055	916
60%	739	817	795	149	225	229	496	594	715	976	1,034	873
70%	614	724	717	117	146	182	445	486	690	939	1,002	802
80%	451	514	643	106	128	142	378	449	626	908	731	623
90%	353	325	383	101	108	131	168	385	544	652	453	355
Long Term												
Full Simulation Period[a]	735	795	778	375	408	460	569	685	728	932	939	827
Water Year Types[b,c]												
Wet (32%)	853	995	936	588	639	736	746	884	849	1,030	1,071	920
Above Normal (15%)	815	1,016	986	325	428	546	659	775	799	1,028	1,094	743
Below Normal (17%)	937	849	802	376	395	455	611	737	762	1,018	1,082	1,002
Dry (22%)	633	639	646	238	232	208	464	527	675	946	852	880
Critical (15%)	314	311	398	171	168	161	206	344	432	502	460	427

Alternative D1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Energy Use (GWh)											
Probability of Exceedance												
10%	1,037	1,089	1,045	828	928	904	863	999	921	1,112	1,138	1,077
20%	987	1,029	978	672	699	745	809	932	876	1,063	1,101	1,032
30%	938	989	929	489	530	684	754	859	812	1,047	1,081	986
40%	868	912	904	419	422	585	683	812	768	1,029	1,067	955
50%	792	871	836	284	317	391	555	726	741	1,013	1,050	924
60%	747	837	788	158	232	232	498	604	715	973	1,034	884
70%	668	727	693	134	156	175	450	496	692	942	1,001	826
80%	496	529	639	108	121	142	390	447	644	906	778	659
90%	364	321	383	103	105	130	187	382	542	652	453	400
Long Term												
Full Simulation Period[a]	753	797	784	378	409	462	572	690	731	937	942	835
Water Year Types[b,c]												
Wet (32%)	849	991	932	592	641	739	747	889	849	1,027	1,068	927
Above Normal (15%)	807	1,009	987	326	434	544	654	775	796	1,031	1,098	737
Below Normal (17%)	933	840	817	382	398	468	609	732	761	1,019	1,083	1,009
Dry (22%)	697	664	642	238	230	205	477	536	681	952	873	890
Critical (15%)	365	312	433	170	166	159	211	356	448	526	449	450

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Energy Use (GWh)											
Probability of Exceedance												
10%	-4	0	-13	-25	-6	0	-2	0	-16	3	11	-5
20%	-8	-6	24	0	1	9	7	5	2	-1	-2	3
30%	4	2	4	8	-8	-3	1	2	0	-1	0	-4
40%	-13	0	8	-5	-1	0	-10	2	0	-4	0	2
50%	-1	-17	11	11	-12	11	-9	5	3	0	-5	7
60%	8	20	-7	10	7	3	2	10	1	-3	0	11
70%	54	3	-24	17	9	-8	5	9	1	4	-2	24
80%	44	16	-4	1	-7	0	13	-2	19	-2	47	37
90%	11	-4	0	2	-3	-1	19	-3	-1	0	0	45
Long Term												
Full Simulation Period[a]	18	1	6	3	1	2	3	4	3	4	3	8
Water Year Types[b,c]												
Wet (32%)	-4	-5	-4	4	2	3	1	4	0	-3	-3	7
Above Normal (15%)	-8	-7	1	2	5	-3	-6	0	-3	3	3	-6
Below Normal (17%)	-4	-9	16	6	3	12	-3	-5	0	1	1	7
Dry (22%)	64	25	-4	1	-2	-2	14	9	6	6	21	9
Critical (15%)	51	0	35	0	-2	-3	5	12	16	24	-11	23

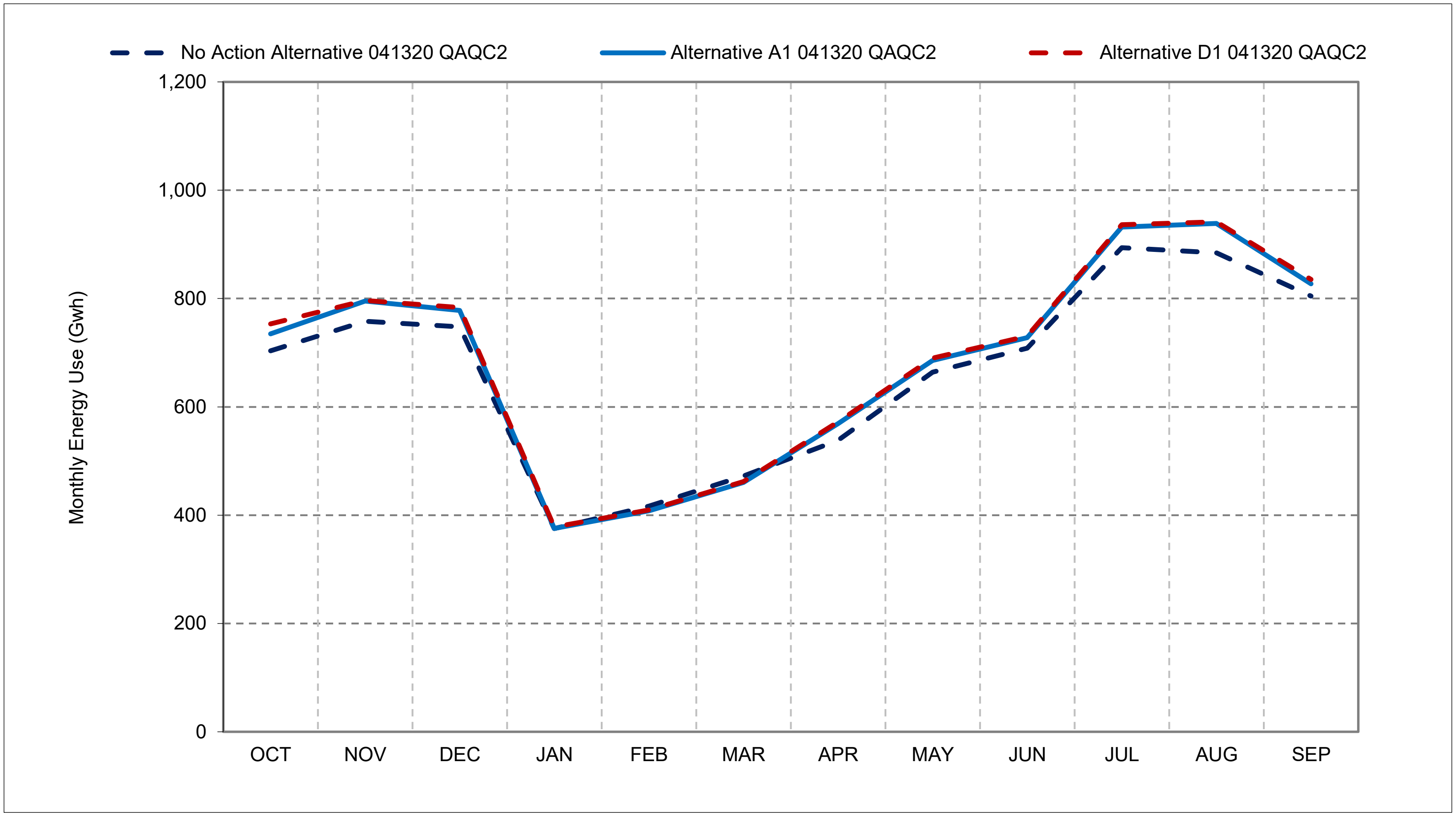
a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

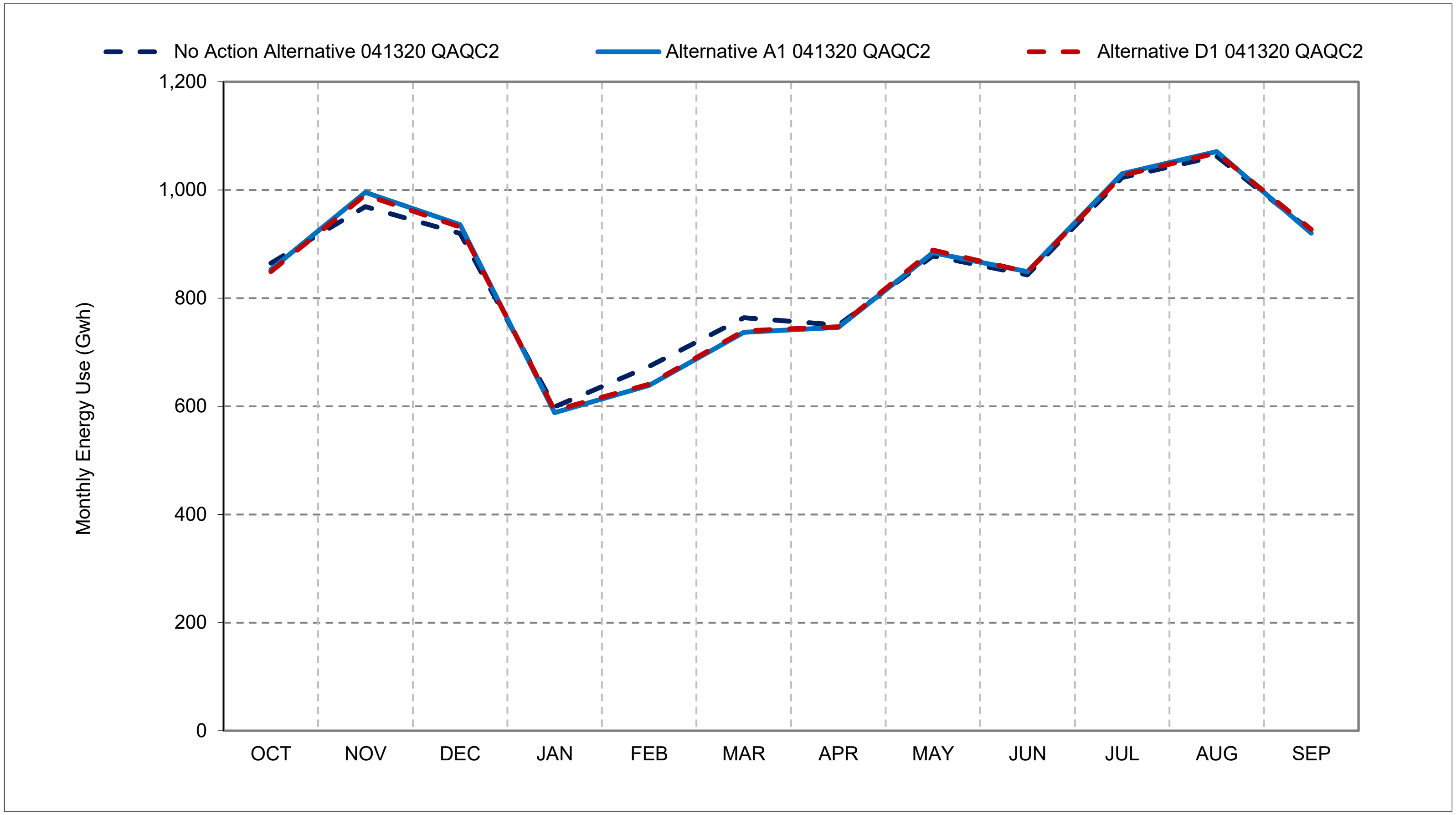
d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-1. SWP Total Energy Use, Long-Term Average Energy Use



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-2. SWP Total Energy Use, Wet Year Average Energy Use

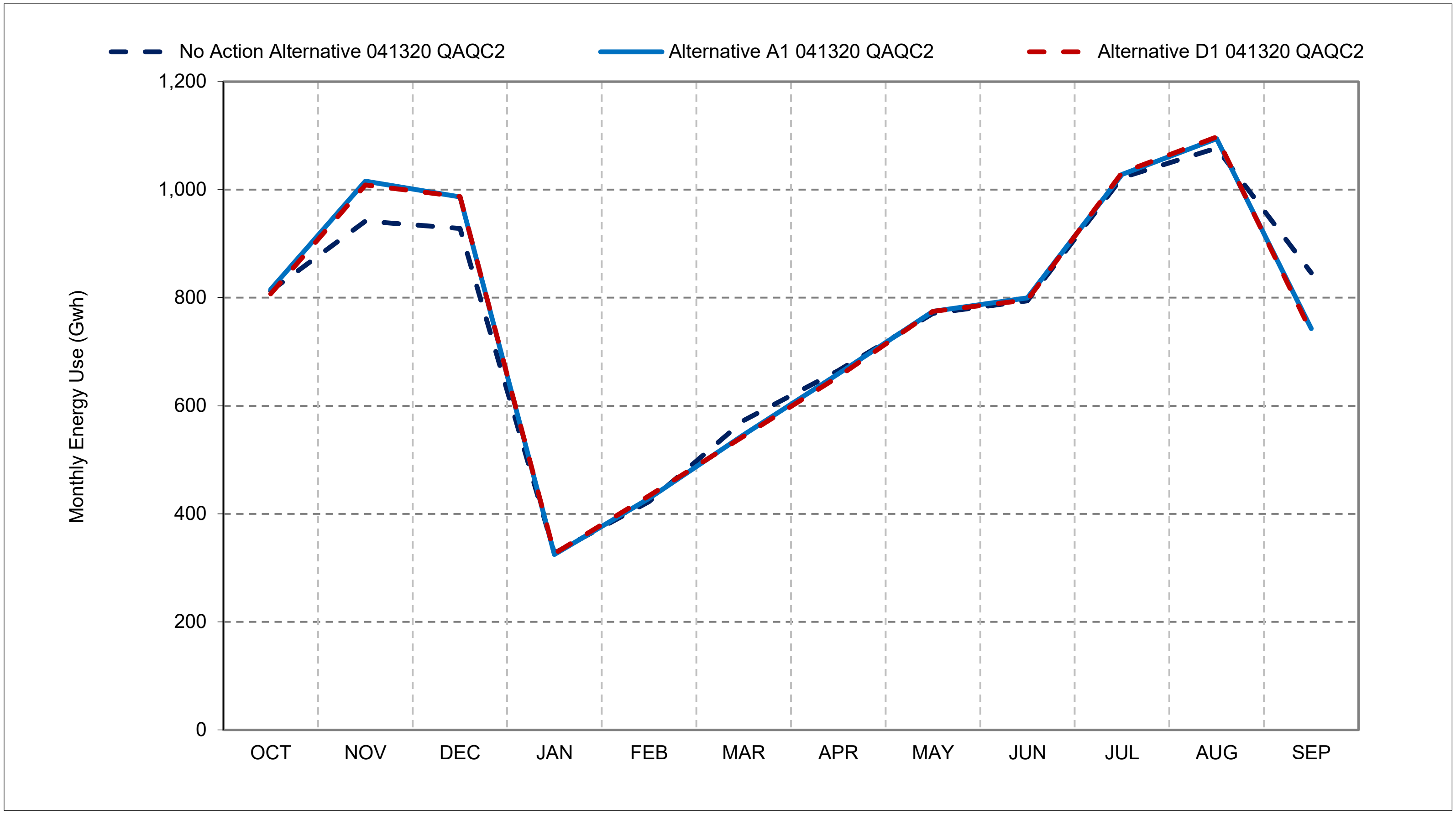


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-3. SWP Total Energy Use, Above Normal Year Average Energy Use

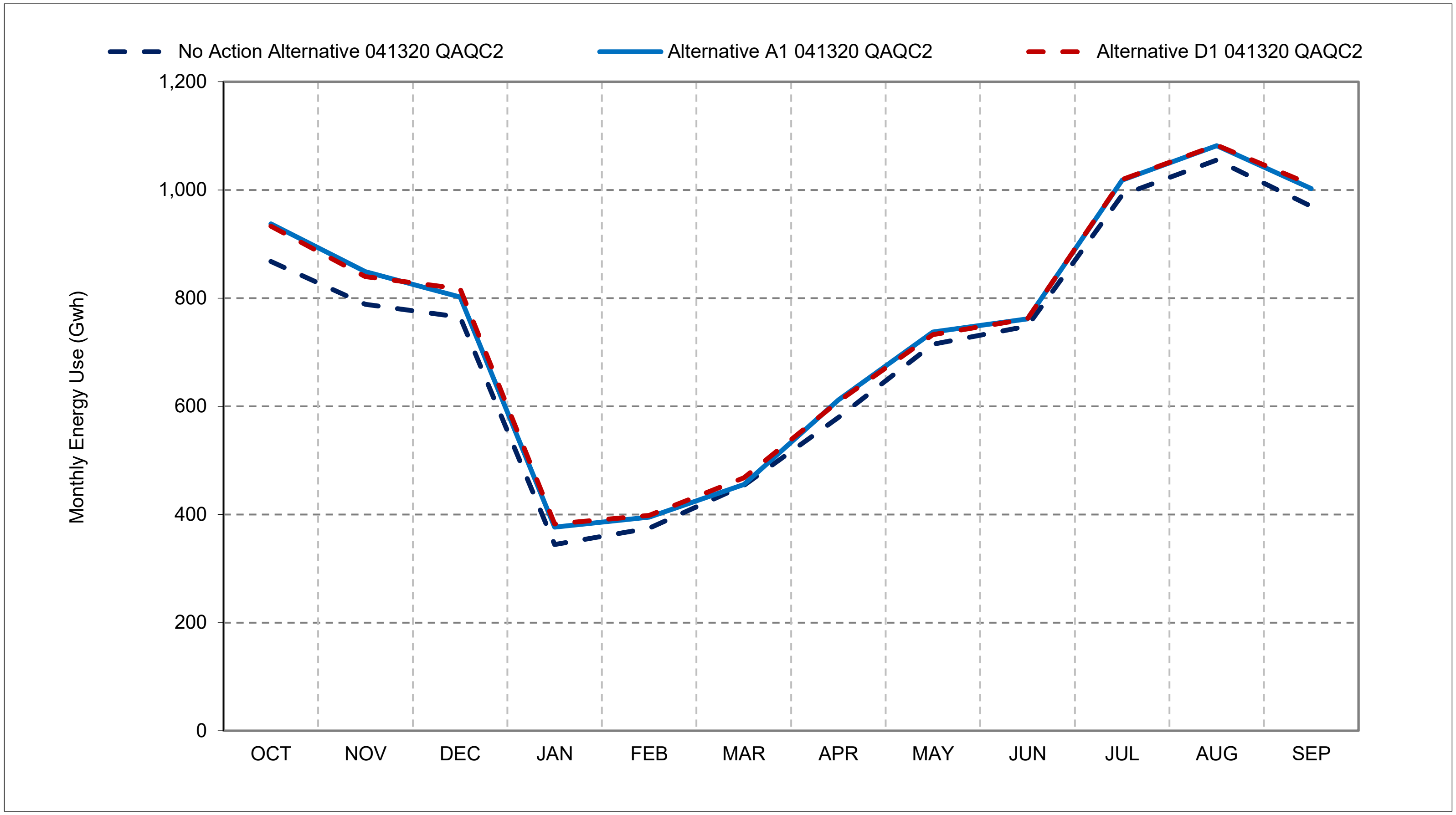


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-4. SWP Total Energy Use, Below Normal Year Average Energy Use

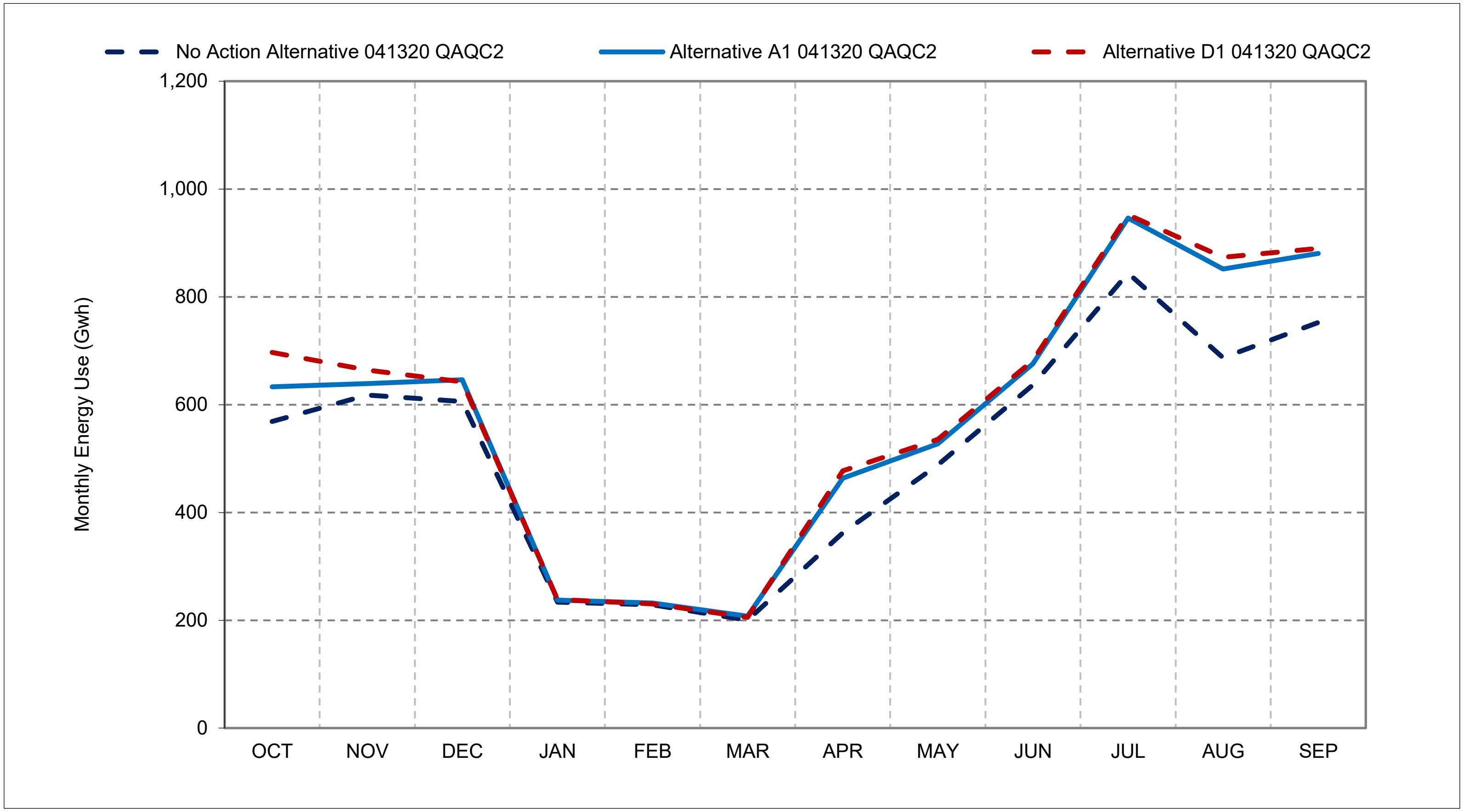


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-5. SWP Total Energy Use, Dry Year Average Energy Use

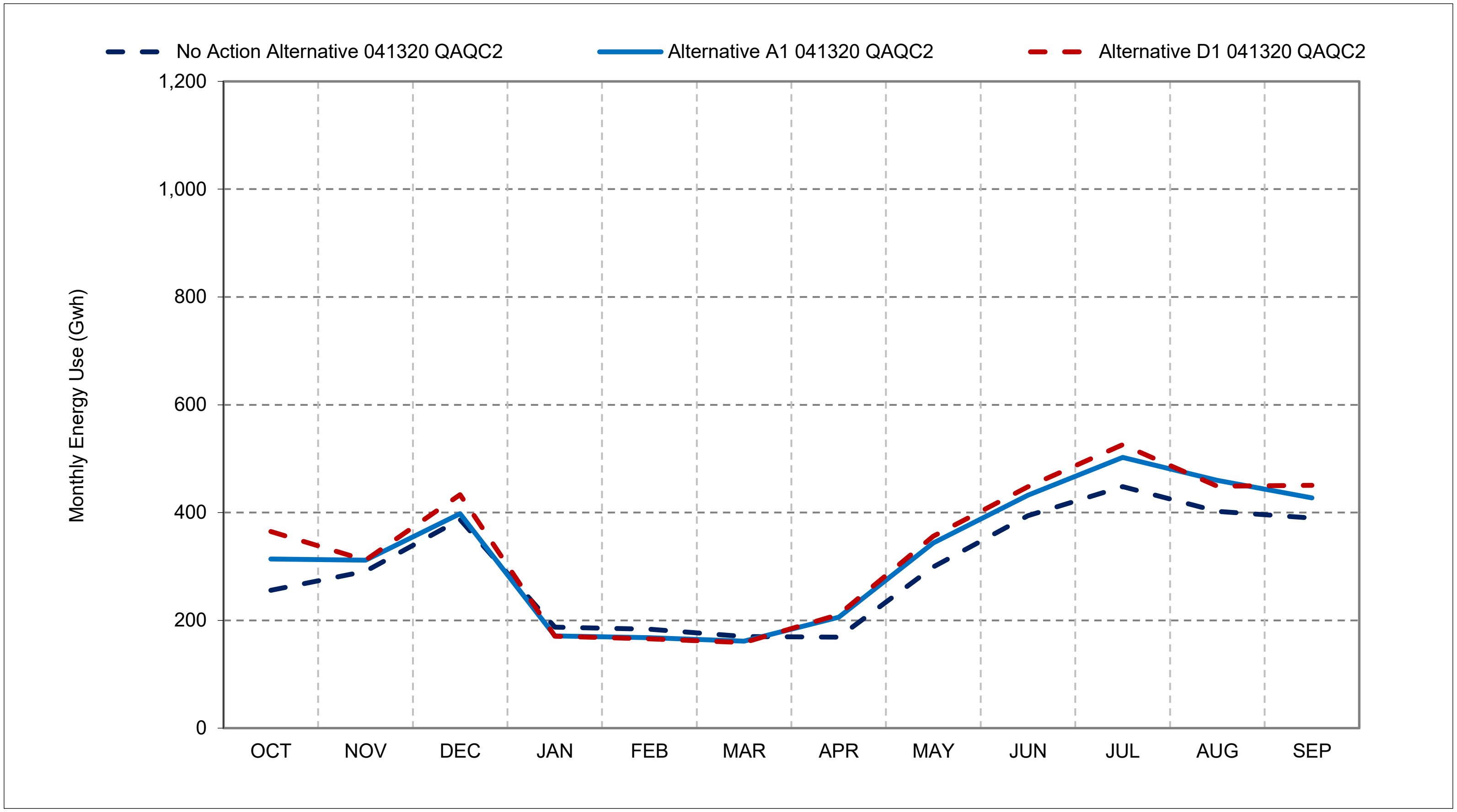


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-6. SWP Total Energy Use, Critical Year Average Energy Use

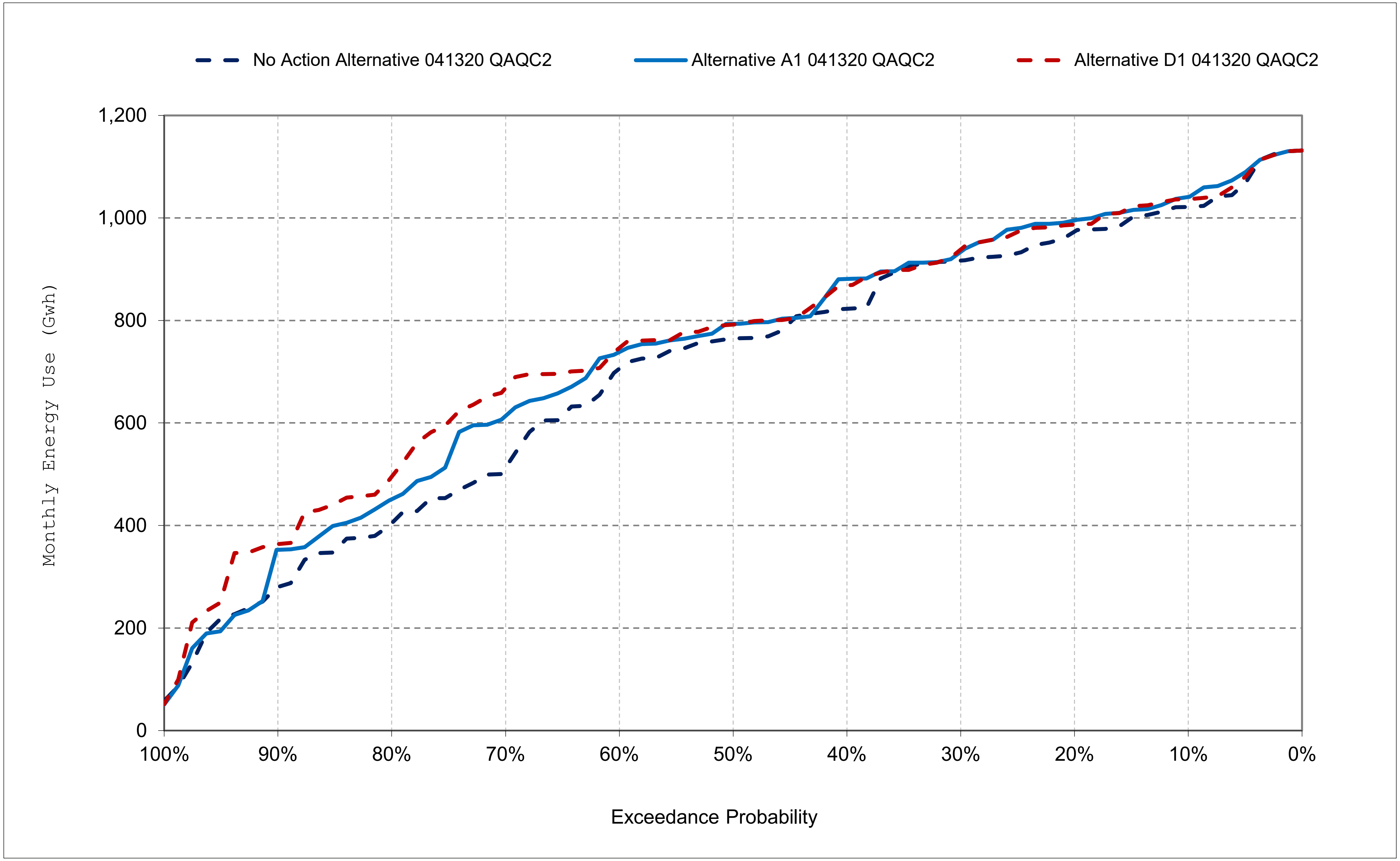


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

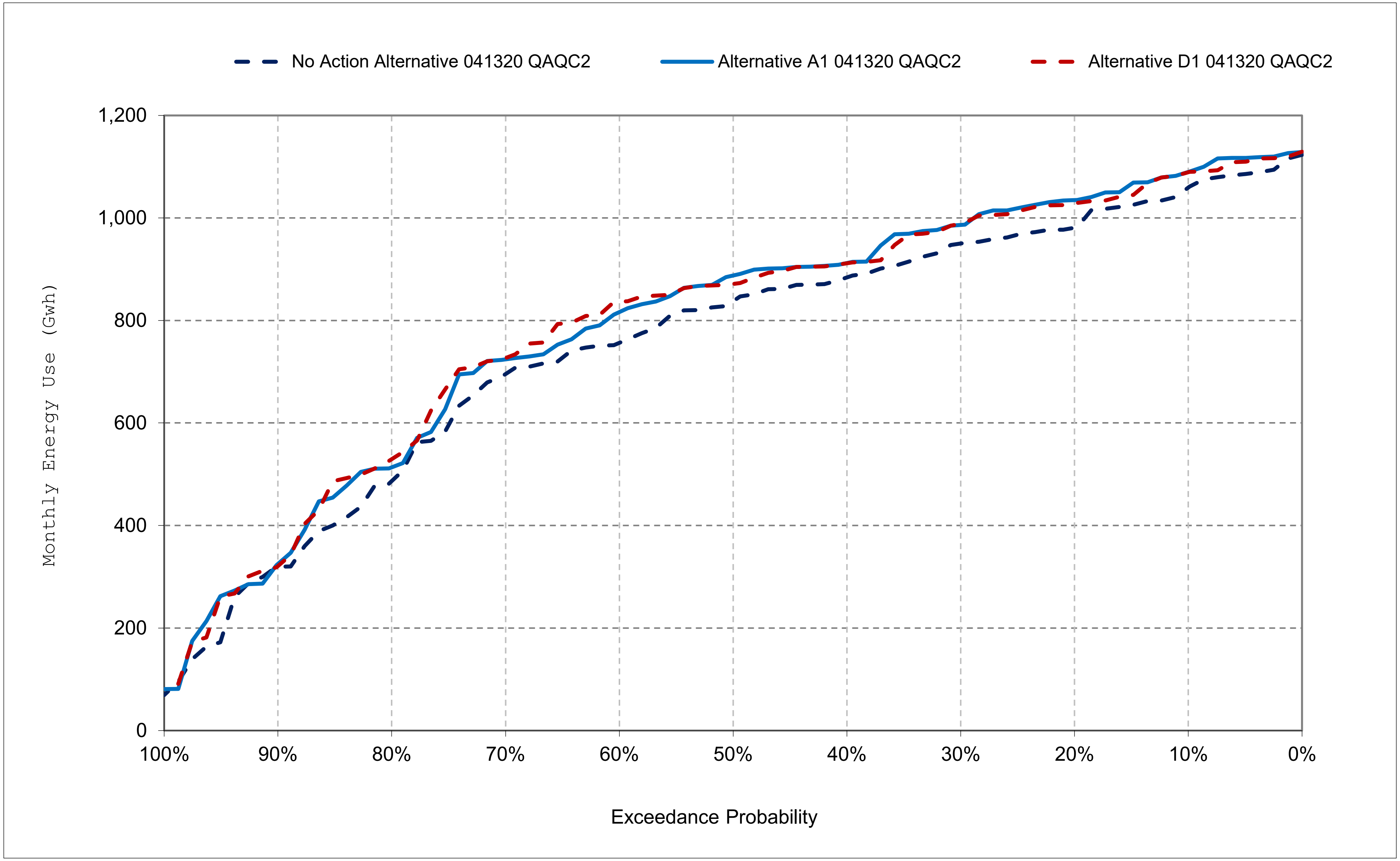
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-7. SWP Total Energy Use, October



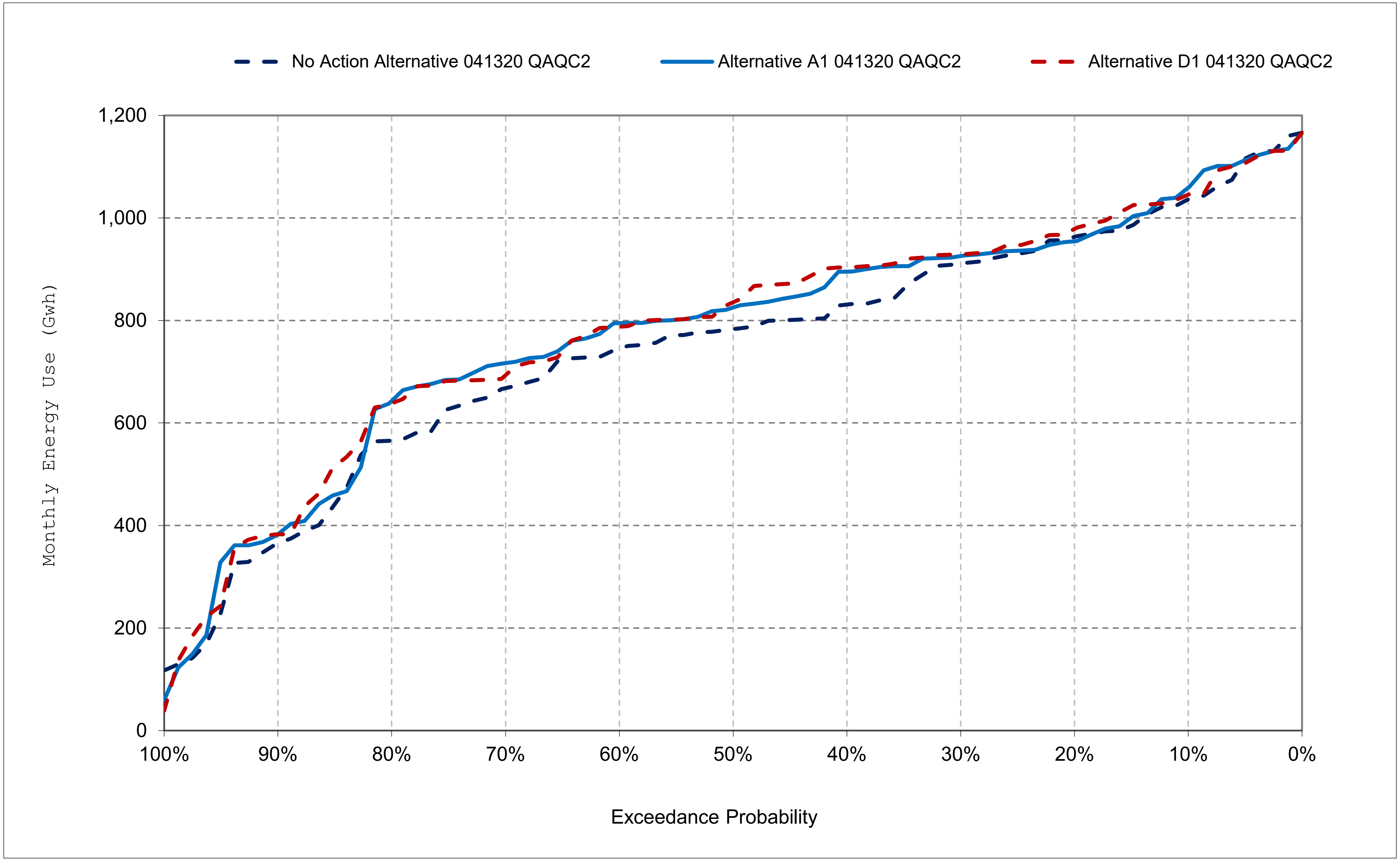
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-8. SWP Total Energy Use, November



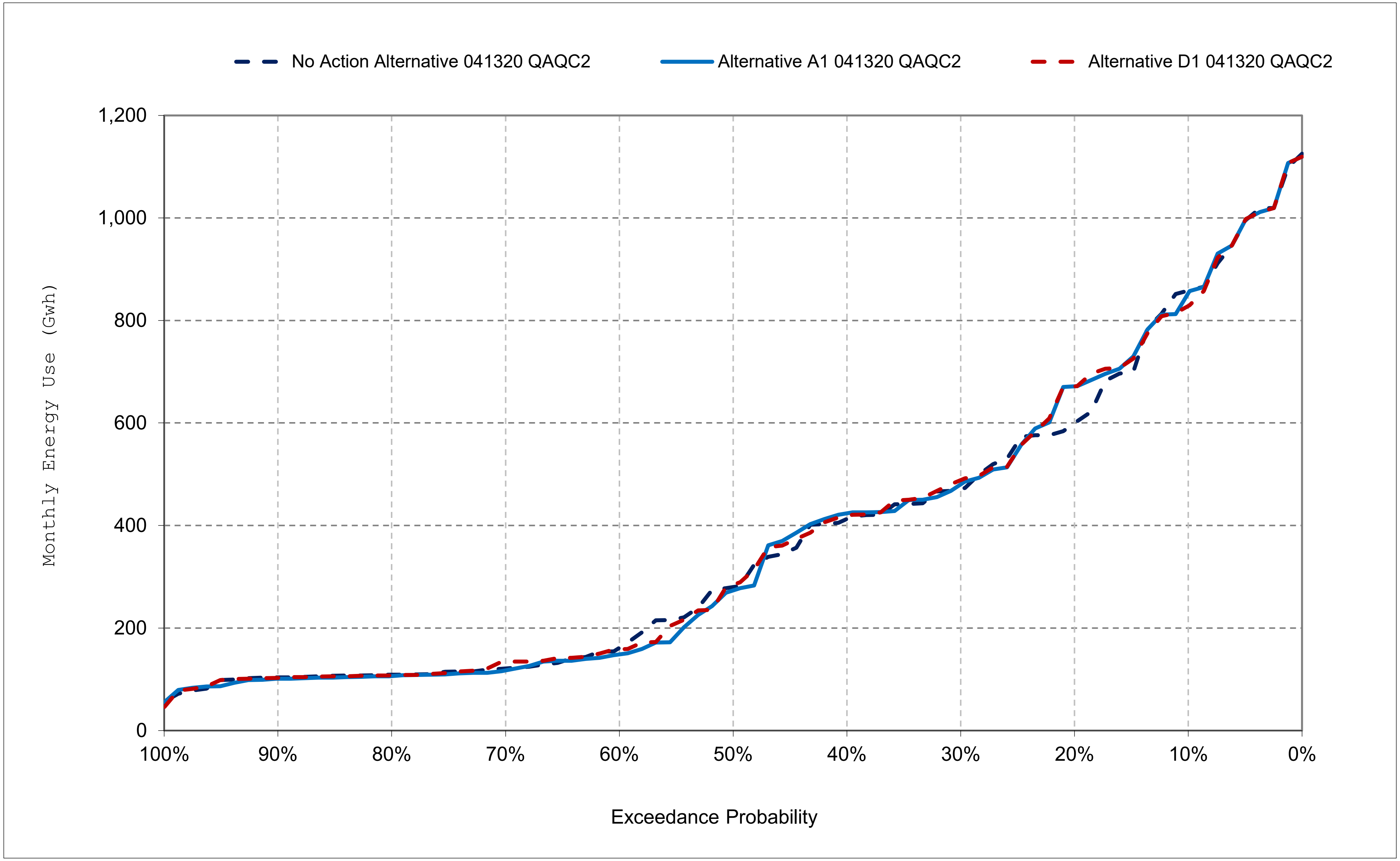
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-9. SWP Total Energy Use, December



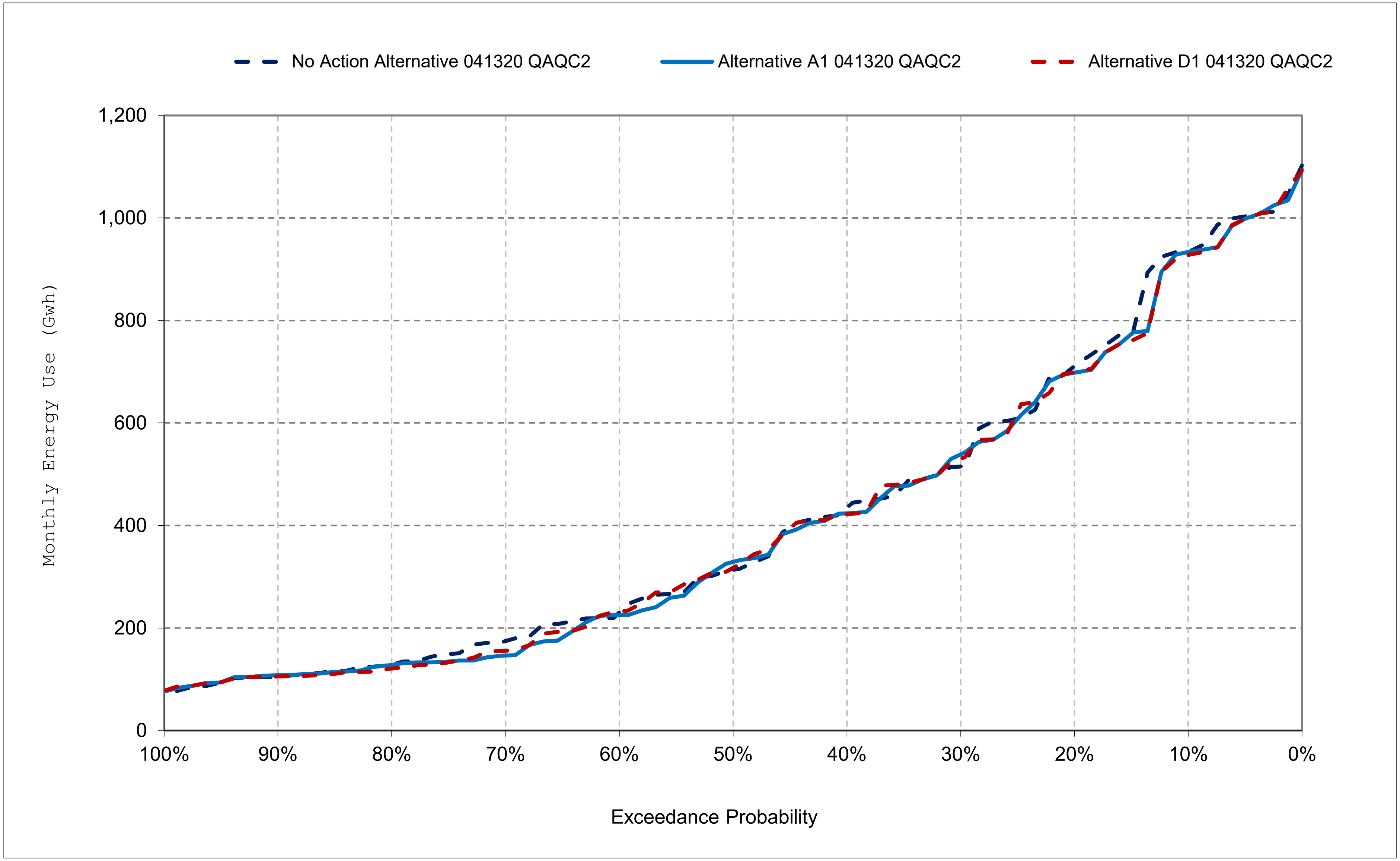
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-10. SWP Total Energy Use, January



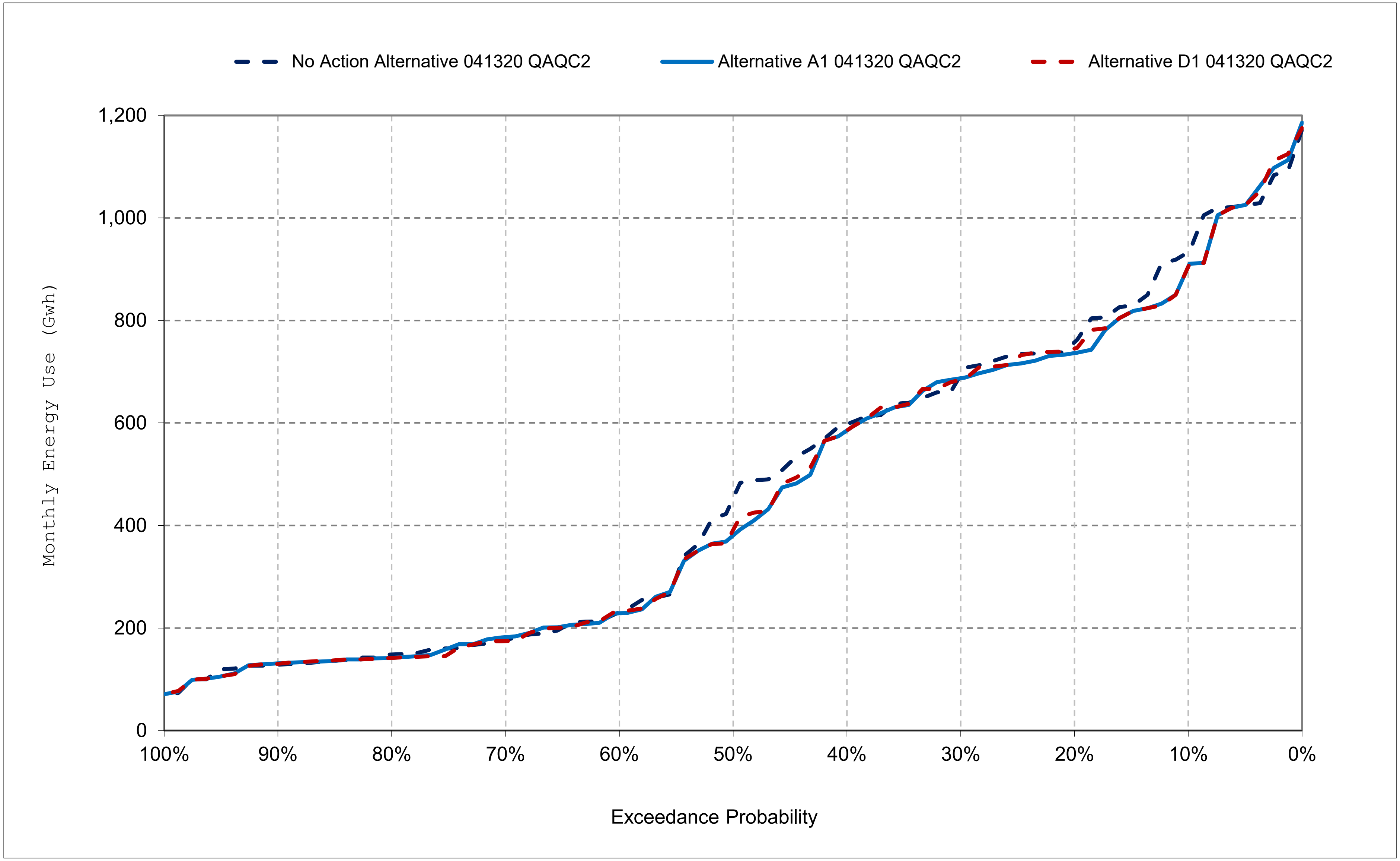
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-11. SWP Total Energy Use, February



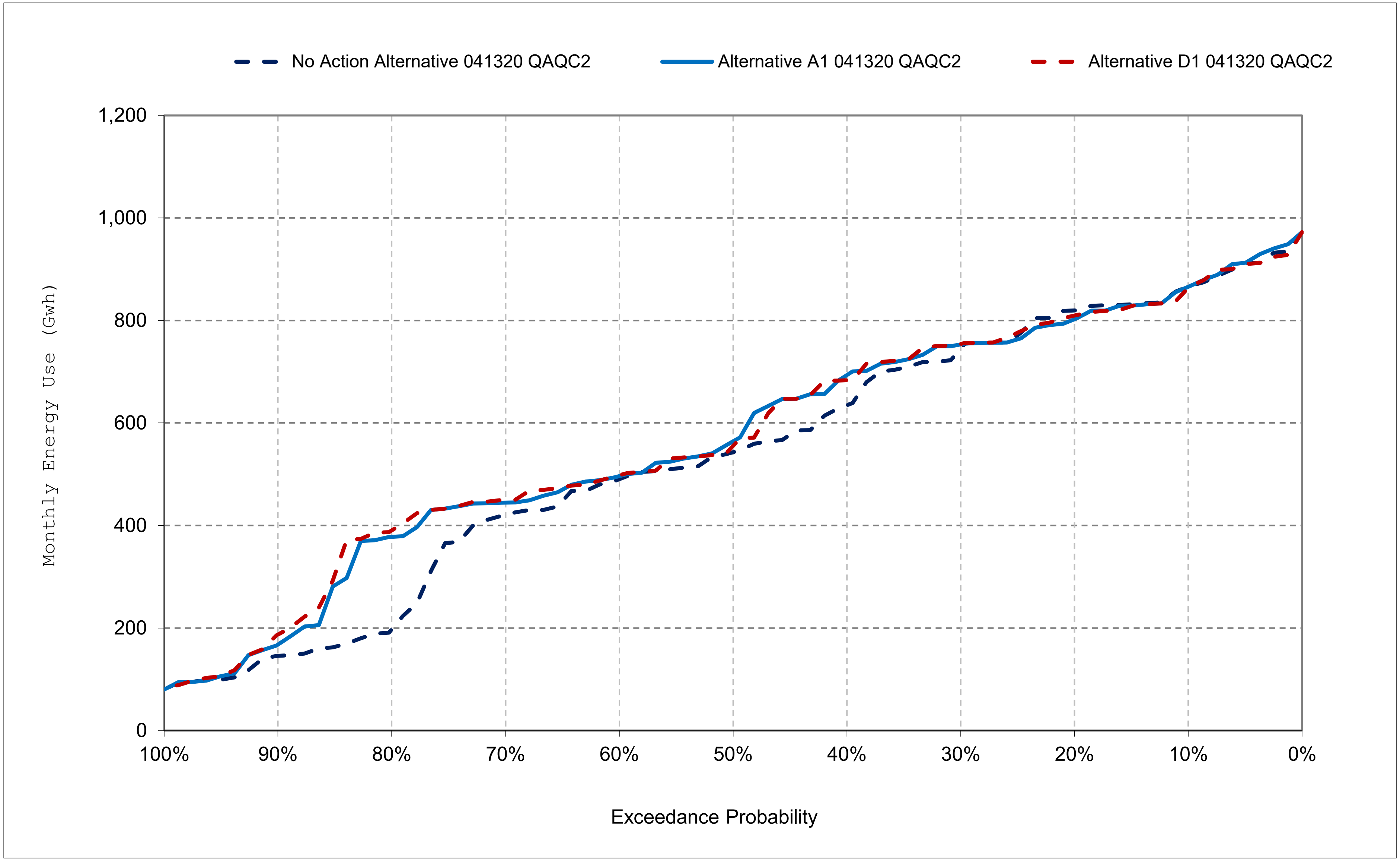
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-12. SWP Total Energy Use, March



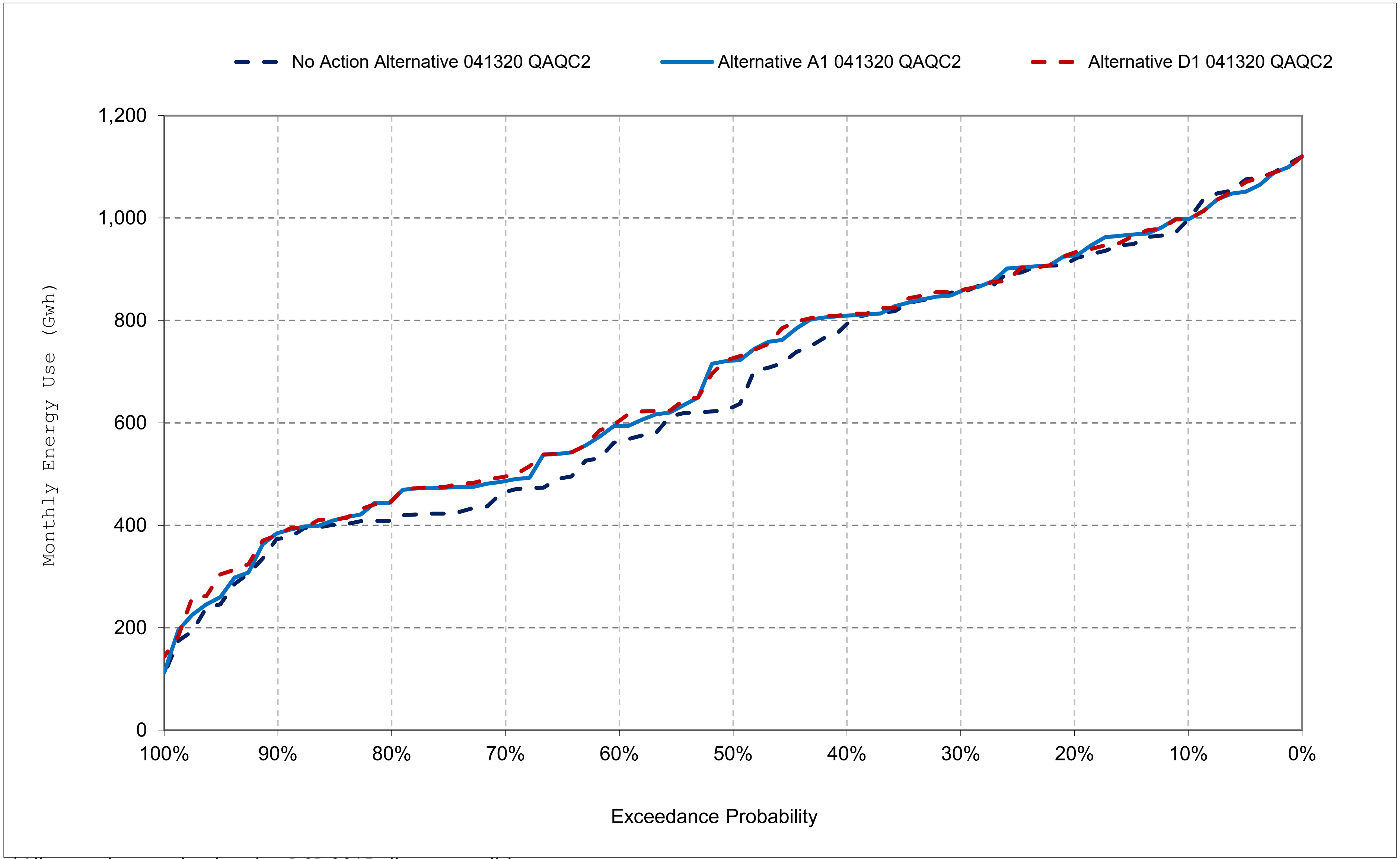
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-13. SWP Total Energy Use, April



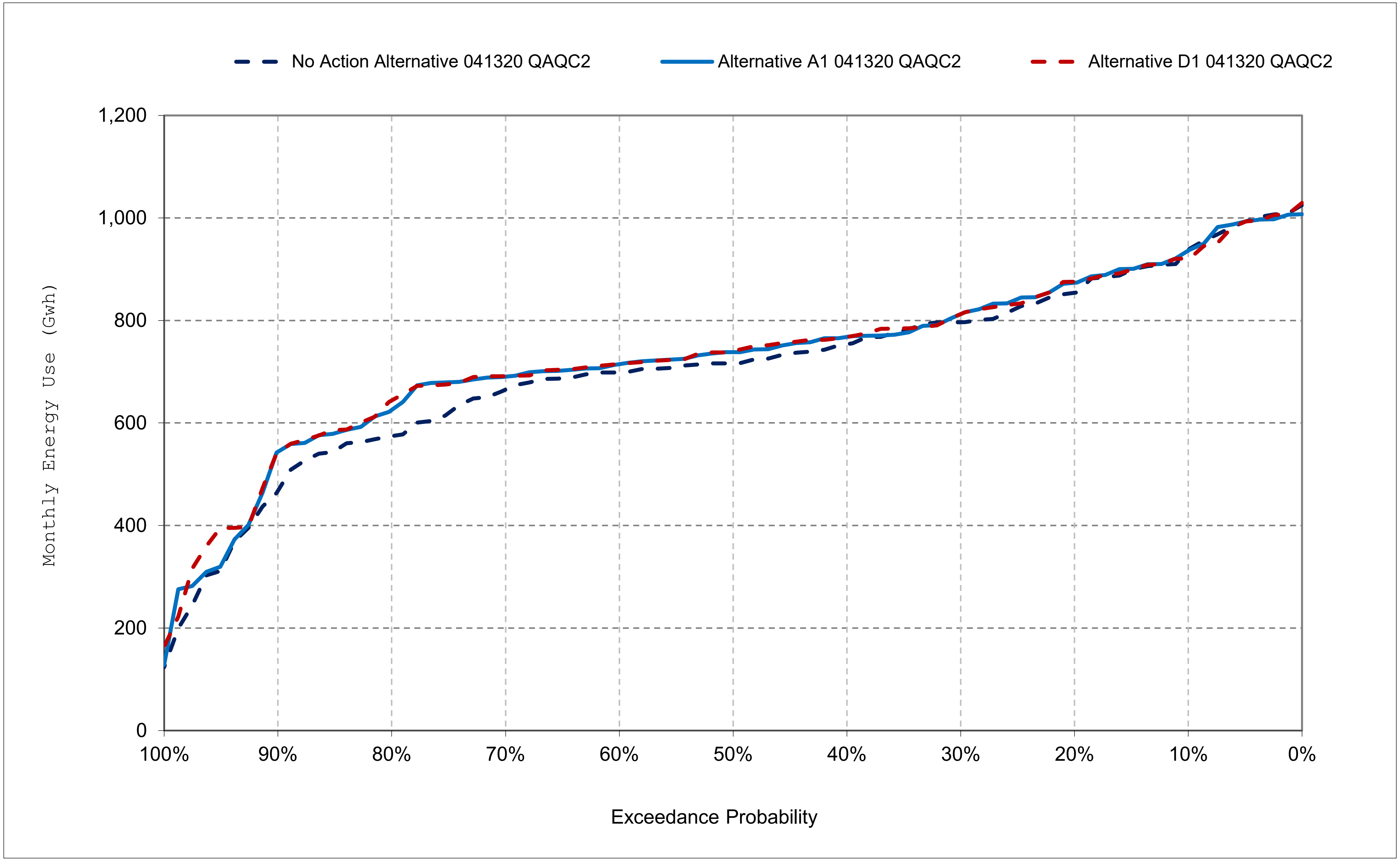
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-14. SWP Total Energy Use, May



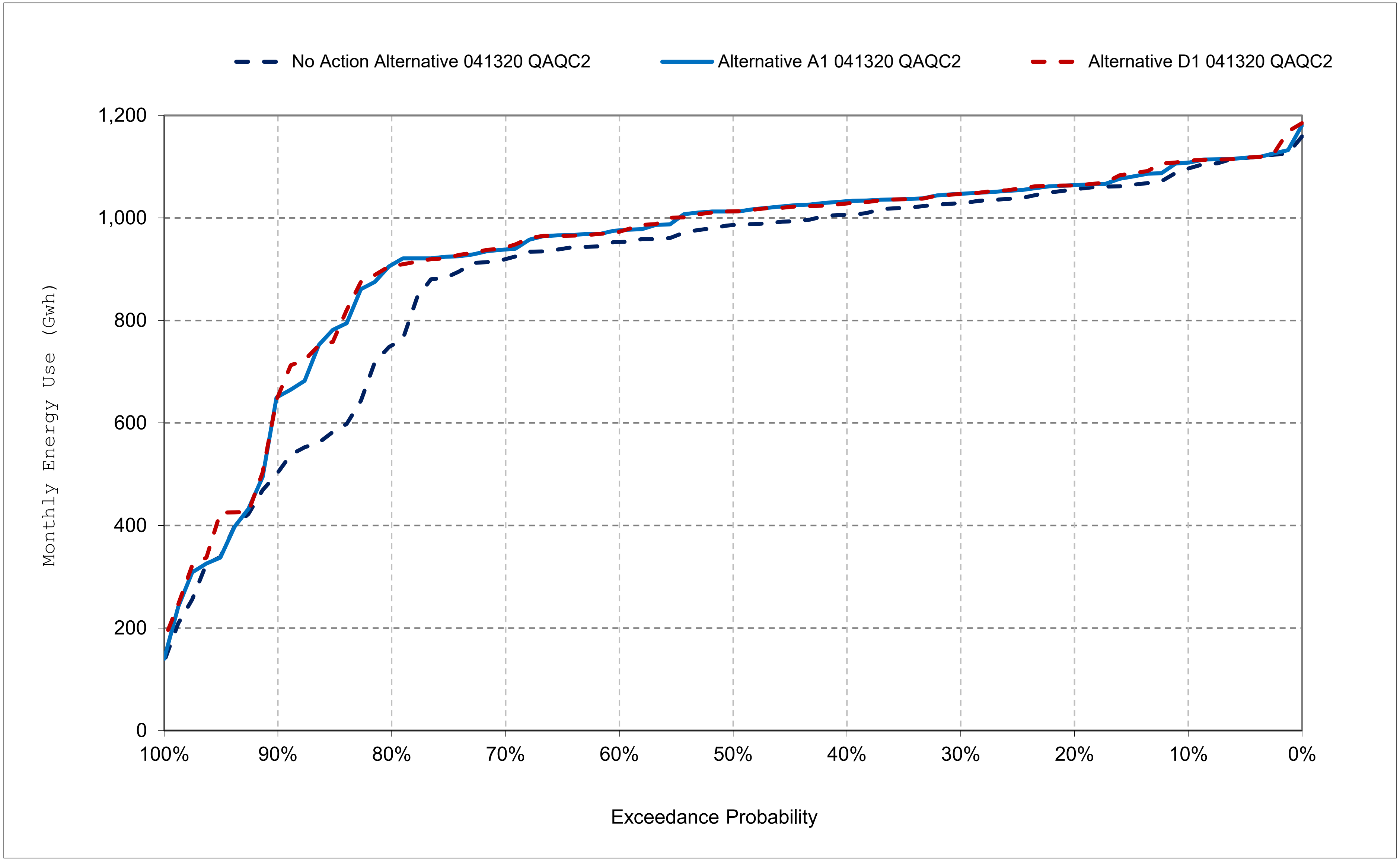
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-15. SWP Total Energy Use, June



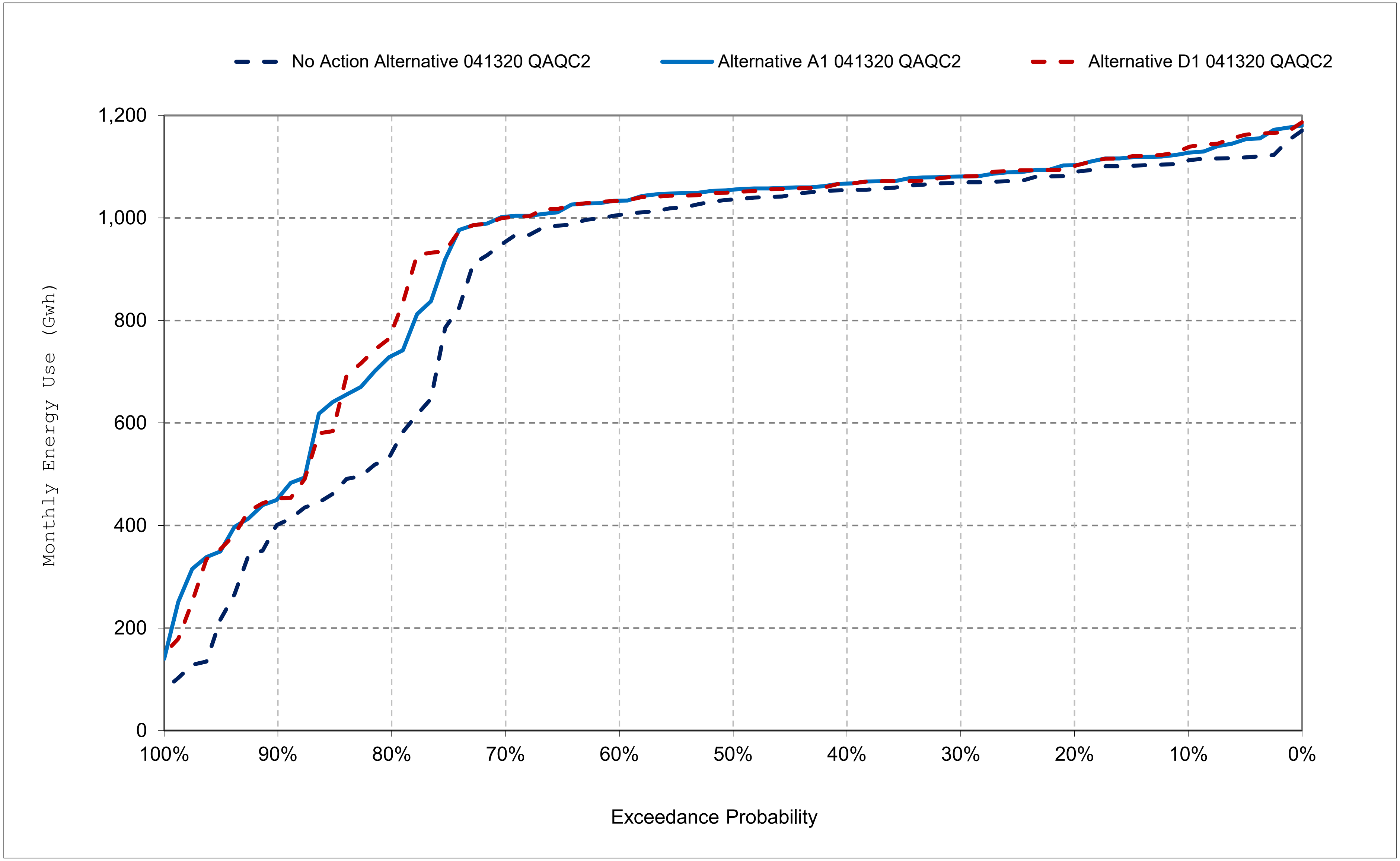
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-16. SWP Total Energy Use, July



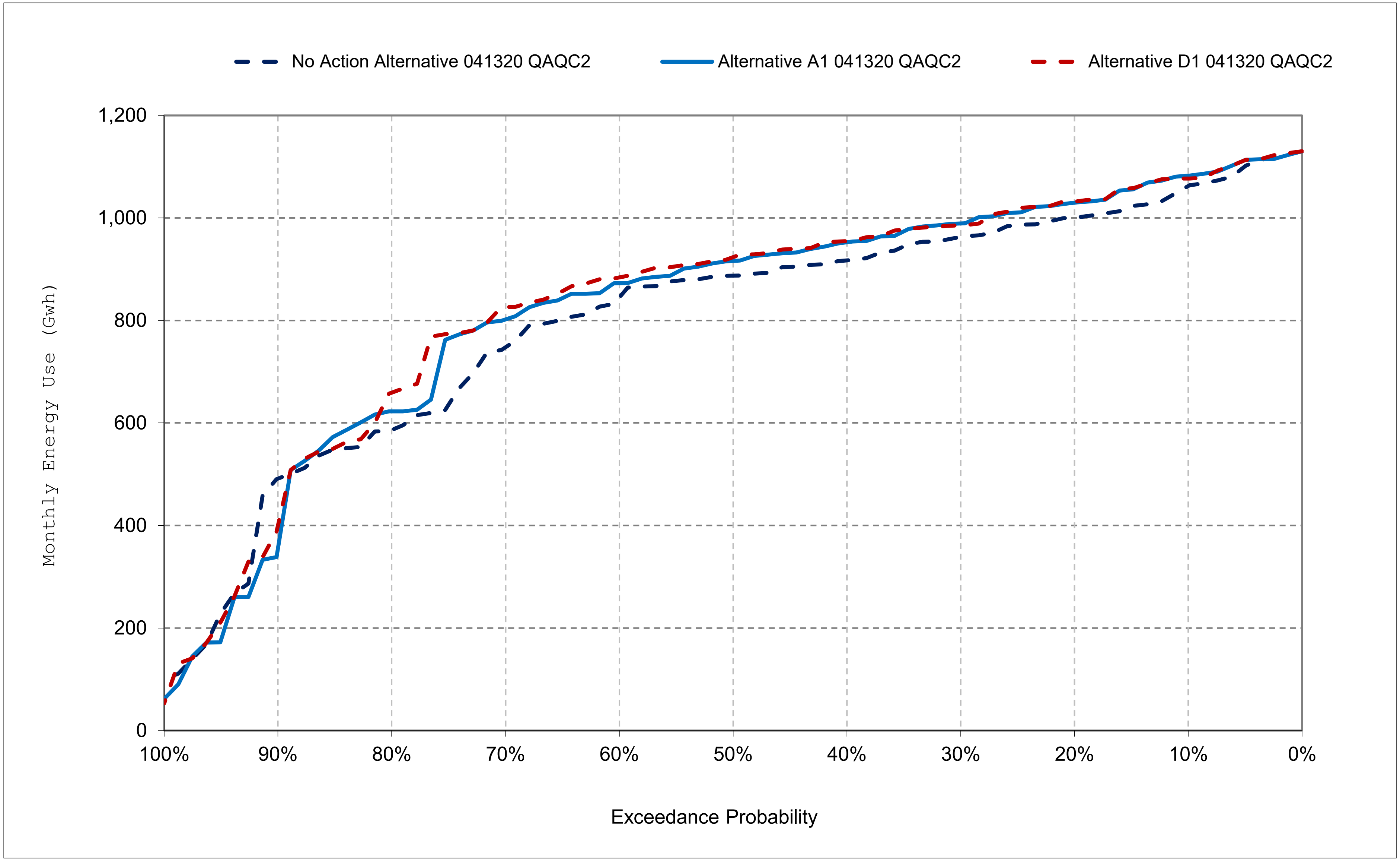
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-17. SWP Total Energy Use, August



*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-8-18. SWP Total Energy Use, September



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-9-1. SWP Net Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-152	-201	-180	-36	-1	-7	-19	-79	-119	-203	-198	-256
20%	-215	-276	-259	-46	-56	-63	-56	-136	-159	-258	-315	-352
30%	-280	-403	-353	-65	-80	-80	-108	-161	-207	-291	-424	-407
40%	-377	-460	-419	-89	-99	-91	-167	-178	-226	-306	-445	-470
50%	-436	-491	-458	-103	-135	-111	-226	-197	-241	-325	-465	-494
60%	-476	-538	-498	-143	-150	-141	-274	-245	-257	-353	-480	-527
70%	-499	-567	-521	-204	-177	-261	-327	-320	-297	-380	-501	-547
80%	-550	-612	-577	-243	-277	-315	-419	-417	-344	-403	-538	-589
90%	-605	-640	-604	-328	-376	-413	-475	-476	-382	-554	-601	-620
Long Term												
Full Simulation Period[a]	-394	-455	-424	-144	-151	-163	-237	-251	-252	-339	-429	-464
Water Year Types[b,c]												
Wet (32%)	-469	-562	-466	-139	-157	-171	-272	-274	-308	-433	-543	-523
Above Normal (15%)	-430	-573	-546	-167	-149	-185	-368	-340	-330	-344	-468	-453
Below Normal (17%)	-529	-489	-487	-185	-197	-267	-326	-360	-280	-339	-481	-565
Dry (22%)	-323	-376	-347	-132	-132	-109	-162	-181	-194	-306	-344	-459
Critical (15%)	-147	-180	-255	-102	-113	-80	-38	-90	-110	-179	-212	-238

Alternative A1 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-159	-206	-182	-18	7	35	-28	-71	-168	-233	-261	-181
20%	-237	-292	-280	-45	-57	-43	-78	-137	-212	-290	-401	-372
30%	-357	-433	-396	-57	-72	-70	-167	-168	-230	-323	-436	-463
40%	-396	-484	-440	-71	-81	-86	-192	-210	-254	-349	-460	-497
50%	-451	-524	-477	-92	-104	-108	-230	-232	-286	-374	-484	-522
60%	-485	-563	-520	-134	-135	-147	-298	-274	-308	-397	-511	-555
70%	-518	-589	-560	-211	-172	-257	-368	-356	-330	-412	-532	-583
80%	-558	-636	-585	-234	-250	-340	-432	-420	-370	-446	-567	-608
90%	-631	-693	-618	-332	-387	-432	-470	-471	-402	-562	-607	-646
Long Term												
Full Simulation Period[a]	-414	-478	-444	-139	-141	-150	-253	-265	-285	-371	-464	-480
Water Year Types[b,c]												
Wet (32%)	-459	-581	-480	-124	-133	-147	-267	-277	-318	-448	-547	-523
Above Normal (15%)	-424	-610	-574	-151	-133	-162	-356	-334	-346	-374	-483	-382
Below Normal (17%)	-568	-534	-514	-209	-210	-265	-346	-374	-312	-365	-495	-579
Dry (22%)	-375	-389	-375	-132	-133	-111	-223	-208	-262	-378	-451	-551
Critical (15%)	-182	-193	-262	-87	-99	-72	-60	-125	-153	-194	-248	-261

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-7	-5	-2	19	8	42	-9	8	-49	-30	-63	75
20%	-22	-16	-21	1	-1	20	-23	-1	-53	-32	-86	-21
30%	-78	-31	-43	8	8	10	-60	-7	-23	-32	-11	-55
40%	-19	-24	-20	17	18	5	-25	-32	-28	-43	-15	-27
50%	-15	-33	-19	10	31	3	-4	-34	-45	-48	-20	-29
60%	-10	-25	-22	9	14	-6	-24	-29	-51	-44	-31	-28
70%	-18	-23	-40	-7	5	4	-42	-37	-33	-31	-31	-36
80%	-8	-24	-9	9	28	-25	-14	-4	-26	-43	-28	-20
90%	-26	-54	-14	-4	-11	-19	5	5	-20	-9	-6	-26
Long Term												
Full Simulation Period[a]	-19	-24	-20	5	10	12	-17	-14	-32	-32	-35	-16
Water Year Types[b,c]												
Wet (32%)	9	-19	-13	15	24	24	5	-4	-10	-15	-4	0
Above Normal (15%)	5	-36	-28	16	16	23	13	7	-17	-30	-15	71
Below Normal (17%)	-39	-45	-27	-24	-13	2	-21	-14	-32	-26	-14	-14
Dry (22%)	-52	-12	-28	0	-1	-2	-61	-27	-67	-72	-107	-91
Critical (15%)	-35	-13	-7	15	14	9	-22	-35	-43	-16	-37	-24

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-9-2. SWP Net Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	-152	-201	-180	-36	-1	-7	-19	-79	-119	-203	-198	-256
20%	-215	-276	-259	-46	-56	-63	-56	-136	-159	-258	-315	-352
30%	-280	-403	-353	-65	-80	-80	-108	-161	-207	-291	-424	-407
40%	-377	-460	-419	-89	-99	-91	-167	-178	-226	-306	-445	-470
50%	-436	-491	-458	-103	-135	-111	-226	-197	-241	-325	-465	-494
60%	-476	-538	-498	-143	-150	-141	-274	-245	-257	-353	-480	-527
70%	-499	-567	-521	-204	-177	-261	-327	-320	-297	-380	-501	-547
80%	-550	-612	-577	-243	-277	-315	-419	-417	-344	-403	-538	-589
90%	-605	-640	-604	-328	-376	-413	-475	-476	-382	-554	-601	-620
Long Term												
Full Simulation Period[a]	-394	-455	-424	-144	-151	-163	-237	-251	-252	-339	-429	-464
Water Year Types[b,c]												
Wet (32%)	-469	-562	-466	-139	-157	-171	-272	-274	-308	-433	-543	-523
Above Normal (15%)	-430	-573	-546	-167	-149	-185	-368	-340	-330	-344	-468	-453
Below Normal (17%)	-529	-489	-487	-185	-197	-267	-326	-360	-280	-339	-481	-565
Dry (22%)	-323	-376	-347	-132	-132	-109	-162	-181	-194	-306	-344	-459
Critical (15%)	-147	-180	-255	-102	-113	-80	-38	-90	-110	-179	-212	-238

Alternative D1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	-173	-178	-193	-34	10	15	-37	-86	-169	-245	-245	-220
20%	-293	-304	-278	-52	-58	-33	-75	-137	-211	-298	-423	-371
30%	-374	-414	-398	-62	-72	-67	-169	-171	-227	-322	-438	-466
40%	-420	-498	-438	-74	-81	-89	-203	-215	-259	-346	-459	-498
50%	-458	-520	-479	-94	-101	-108	-229	-237	-289	-367	-494	-529
60%	-484	-559	-522	-139	-133	-150	-294	-278	-309	-397	-513	-563
70%	-519	-582	-558	-206	-176	-235	-369	-349	-329	-419	-539	-584
80%	-569	-626	-594	-232	-249	-340	-437	-420	-373	-444	-563	-613
90%	-628	-676	-647	-313	-386	-418	-479	-476	-404	-562	-604	-649
Long Term												
Full Simulation Period[a]	-427	-477	-448	-140	-141	-151	-255	-267	-287	-374	-468	-487
Water Year Types[b,c]												
Wet (32%)	-458	-578	-477	-127	-134	-148	-269	-280	-318	-447	-545	-527
Above Normal (15%)	-423	-602	-572	-147	-135	-159	-347	-335	-345	-378	-490	-379
Below Normal (17%)	-566	-519	-525	-213	-211	-273	-344	-370	-312	-366	-500	-589
Dry (22%)	-421	-408	-373	-132	-132	-108	-231	-213	-263	-377	-465	-561
Critical (15%)	-211	-186	-282	-87	-96	-70	-62	-134	-166	-218	-245	-277

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	-22	23	-13	2	11	23	-19	-7	-49	-43	-47	36
20%	-78	-29	-19	-6	-1	29	-19	-1	-52	-39	-108	-20
30%	-95	-11	-45	3	8	13	-61	-10	-20	-31	-13	-59
40%	-43	-37	-19	15	19	3	-36	-37	-34	-40	-14	-28
50%	-22	-29	-21	9	34	3	-4	-40	-48	-41	-29	-35
60%	-8	-21	-24	4	17	-9	-21	-32	-52	-44	-32	-35
70%	-20	-16	-37	-2	1	26	-43	-29	-32	-39	-38	-38
80%	-19	-14	-18	11	28	-25	-18	-4	-29	-41	-24	-24
90%	-23	-36	-43	14	-10	-5	-4	0	-22	-8	-3	-28
Long Term												
Full Simulation Period[a]	-33	-22	-23	4	9	12	-18	-16	-34	-35	-38	-23
Water Year Types[b,c]												
Wet (32%)	11	-16	-11	12	23	23	3	-6	-10	-14	-2	-5
Above Normal (15%)	6	-29	-27	19	14	26	21	5	-15	-34	-22	74
Below Normal (17%)	-37	-30	-37	-27	-14	-6	-18	-10	-33	-27	-19	-24
Dry (22%)	-98	-32	-26	0	0	1	-69	-32	-69	-71	-121	-102
Critical (15%)	-64	-6	-27	15	17	11	-24	-45	-56	-40	-33	-39

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-9-3. SWP Net Generation, Monthly Generation

Alternative A1 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-159	-206	-182	-18	7	35	-28	-71	-168	-233	-261	-181
20%	-237	-292	-280	-45	-57	-43	-78	-137	-212	-290	-401	-372
30%	-357	-433	-396	-57	-72	-70	-167	-168	-230	-323	-436	-463
40%	-396	-484	-440	-71	-81	-86	-192	-210	-254	-349	-460	-497
50%	-451	-524	-477	-92	-104	-108	-230	-232	-286	-374	-484	-522
60%	-485	-563	-520	-134	-135	-147	-298	-274	-308	-397	-511	-555
70%	-518	-589	-560	-211	-172	-257	-368	-356	-330	-412	-532	-583
80%	-558	-636	-585	-234	-250	-340	-432	-420	-370	-446	-567	-608
90%	-631	-693	-618	-332	-387	-432	-470	-471	-402	-562	-607	-646
Long Term												
Full Simulation Period[a]	-414	-478	-444	-139	-141	-150	-253	-265	-285	-371	-464	-480
Water Year Types[b,c]												
Wet (32%)	-459	-581	-480	-124	-133	-147	-267	-277	-318	-448	-547	-523
Above Normal (15%)	-424	-610	-574	-151	-133	-162	-356	-334	-346	-374	-483	-382
Below Normal (17%)	-568	-534	-514	-209	-210	-265	-346	-374	-312	-365	-495	-579
Dry (22%)	-375	-389	-375	-132	-133	-111	-223	-208	-262	-378	-451	-551
Critical (15%)	-182	-193	-262	-87	-99	-72	-60	-125	-153	-194	-248	-261

Alternative D1 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-173	-178	-193	-34	10	15	-37	-86	-169	-245	-245	-220
20%	-293	-304	-278	-52	-58	-33	-75	-137	-211	-298	-423	-371
30%	-374	-414	-398	-62	-72	-67	-169	-171	-227	-322	-438	-466
40%	-420	-498	-438	-74	-81	-89	-203	-215	-259	-346	-459	-498
50%	-458	-520	-479	-94	-101	-108	-229	-237	-289	-367	-494	-529
60%	-484	-559	-522	-139	-133	-150	-294	-278	-309	-397	-513	-563
70%	-519	-582	-558	-206	-176	-235	-369	-349	-329	-419	-539	-584
80%	-569	-626	-594	-232	-249	-340	-437	-420	-373	-444	-563	-613
90%	-628	-676	-647	-313	-386	-418	-479	-476	-404	-562	-604	-649
Long Term												
Full Simulation Period[a]	-427	-477	-448	-140	-141	-151	-255	-267	-287	-374	-468	-487
Water Year Types[b,c]												
Wet (32%)	-458	-578	-477	-127	-134	-148	-269	-280	-318	-447	-545	-527
Above Normal (15%)	-423	-602	-572	-147	-135	-159	-347	-335	-345	-378	-490	-379
Below Normal (17%)	-566	-519	-525	-213	-211	-273	-344	-370	-312	-366	-500	-589
Dry (22%)	-421	-408	-373	-132	-132	-108	-231	-213	-263	-377	-465	-561
Critical (15%)	-211	-186	-282	-87	-96	-70	-62	-134	-166	-218	-245	-277

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-15	28	-11	-17	3	-19	-10	-16	-1	-13	16	-39
20%	-56	-12	2	-7	0	10	4	0	1	-7	-22	1
30%	-17	19	-2	-5	0	3	-1	-2	3	1	-2	-4
40%	-24	-14	2	-2	1	-2	-11	-5	-6	3	1	-1
50%	-7	4	-2	-1	3	0	0	-5	-3	7	-10	-6
60%	2	4	-2	-5	3	-3	3	-3	-1	0	-1	-7
70%	-1	7	2	5	-4	22	-1	8	1	-8	-7	-2
80%	-11	10	-9	2	0	0	-5	0	-2	2	4	-5
90%	3	17	-29	18	0	13	-9	-6	-1	0	3	-3
Long Term												
Full Simulation Period[a]	-13	1	-4	-1	0	0	-1	-3	-2	-3	-4	-7
Water Year Types[b,c]												
Wet (32%)	1	3	2	-3	-1	-1	-2	-3	0	2	3	-4
Above Normal (15%)	1	8	1	3	-3	4	8	-1	2	-4	-7	3
Below Normal (17%)	2	15	-11	-3	-1	-8	2	3	-1	-1	-5	-10
Dry (22%)	-46	-20	1	0	1	3	-8	-5	-1	1	-14	-11
Critical (15%)	-29	7	-20	0	3	2	-3	-10	-13	-24	4	-16

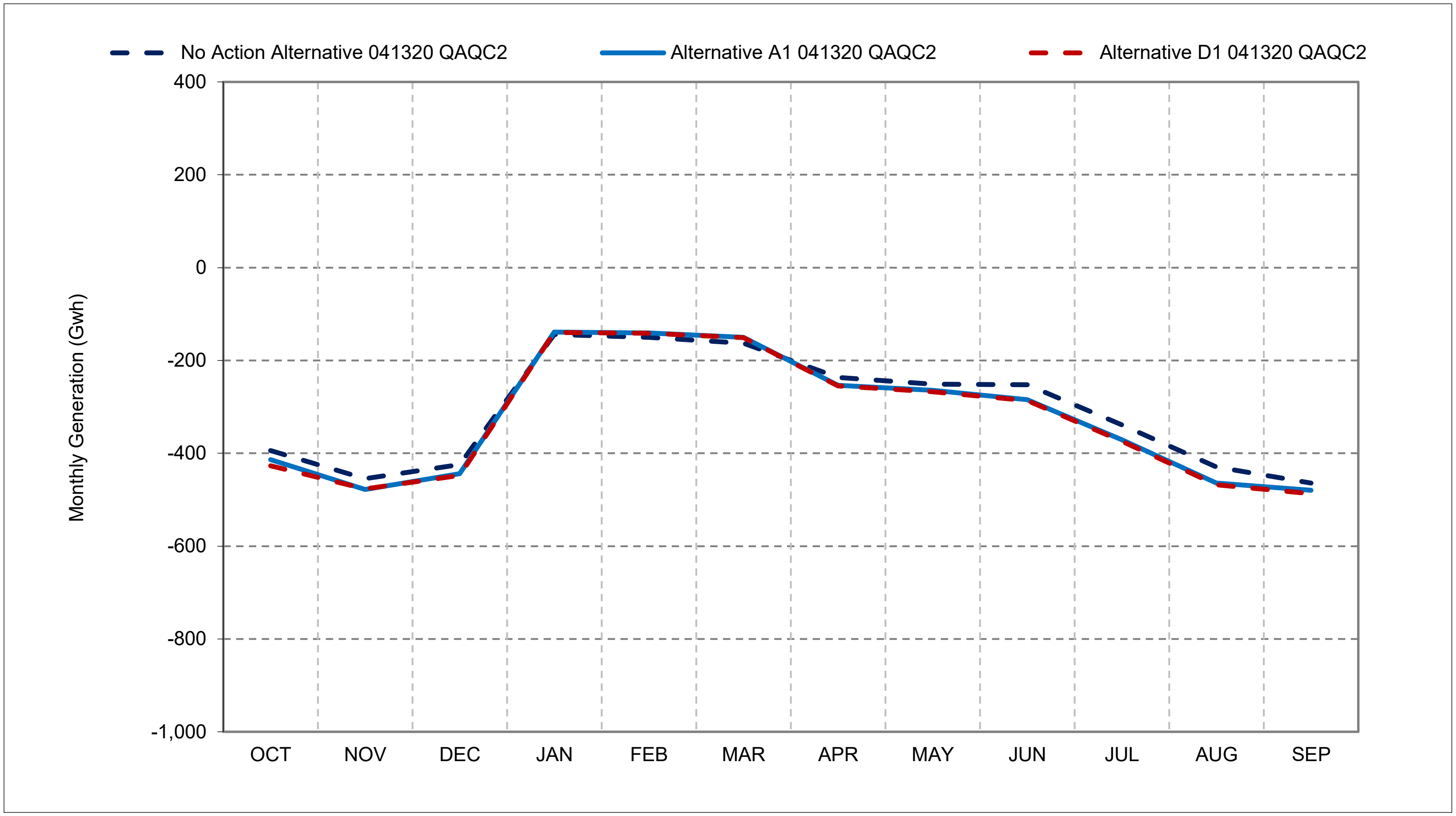
a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-1. SWP Net Generation, Long-Term Average Generation

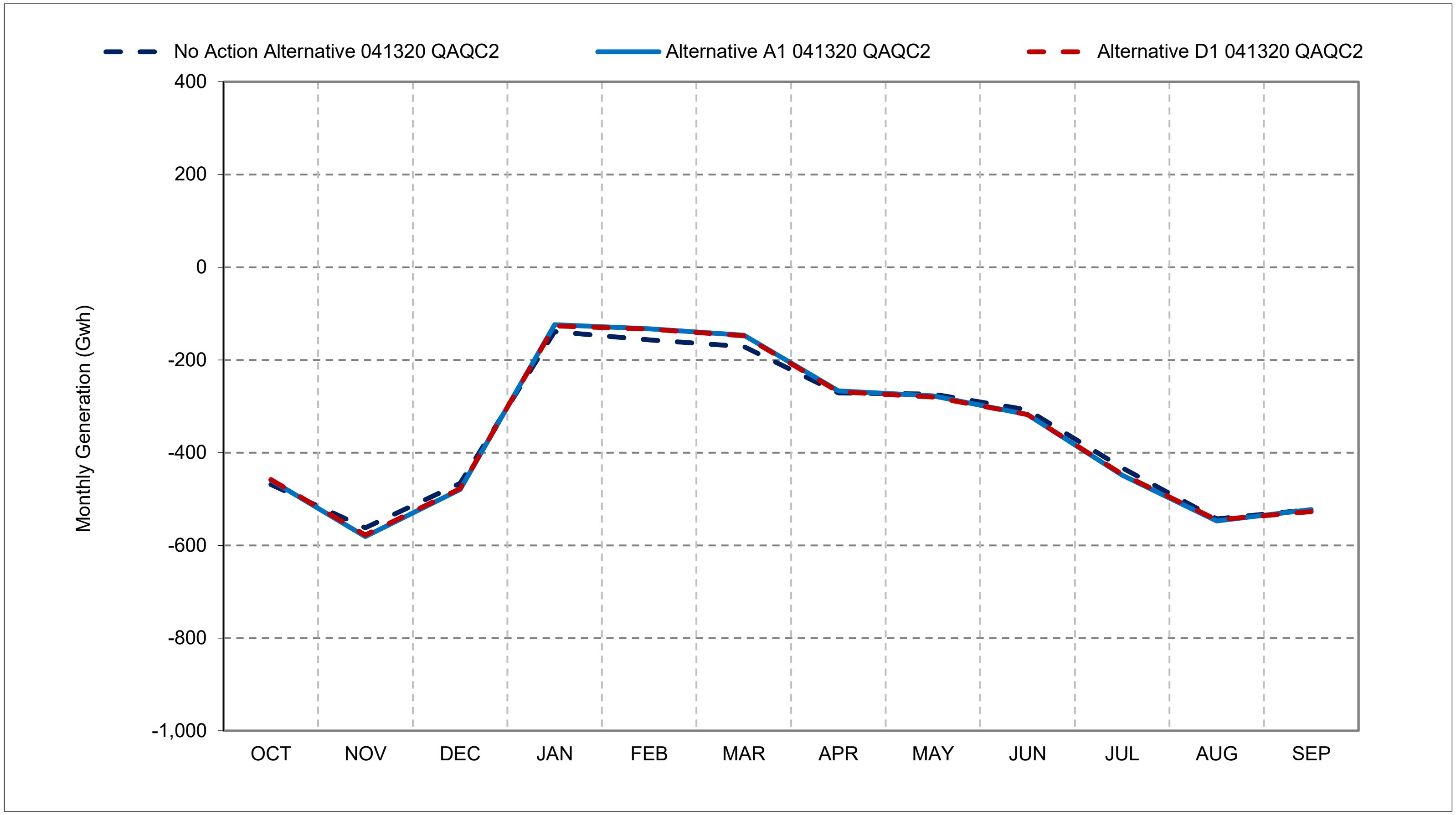


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-2. SWP Net Generation, Wet Year Average Generation

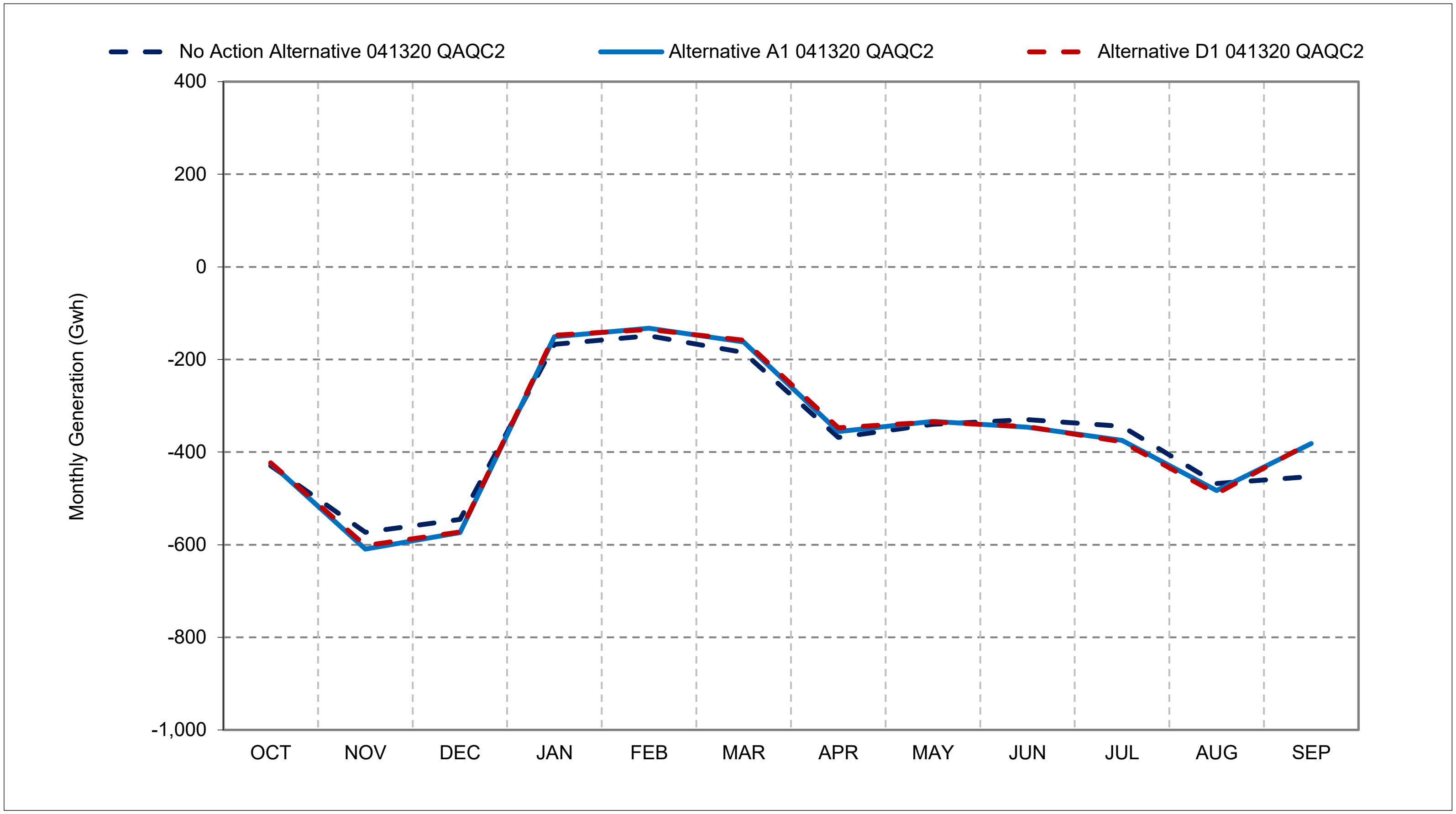


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-3. SWP Net Generation, Above Normal Year Average Generation

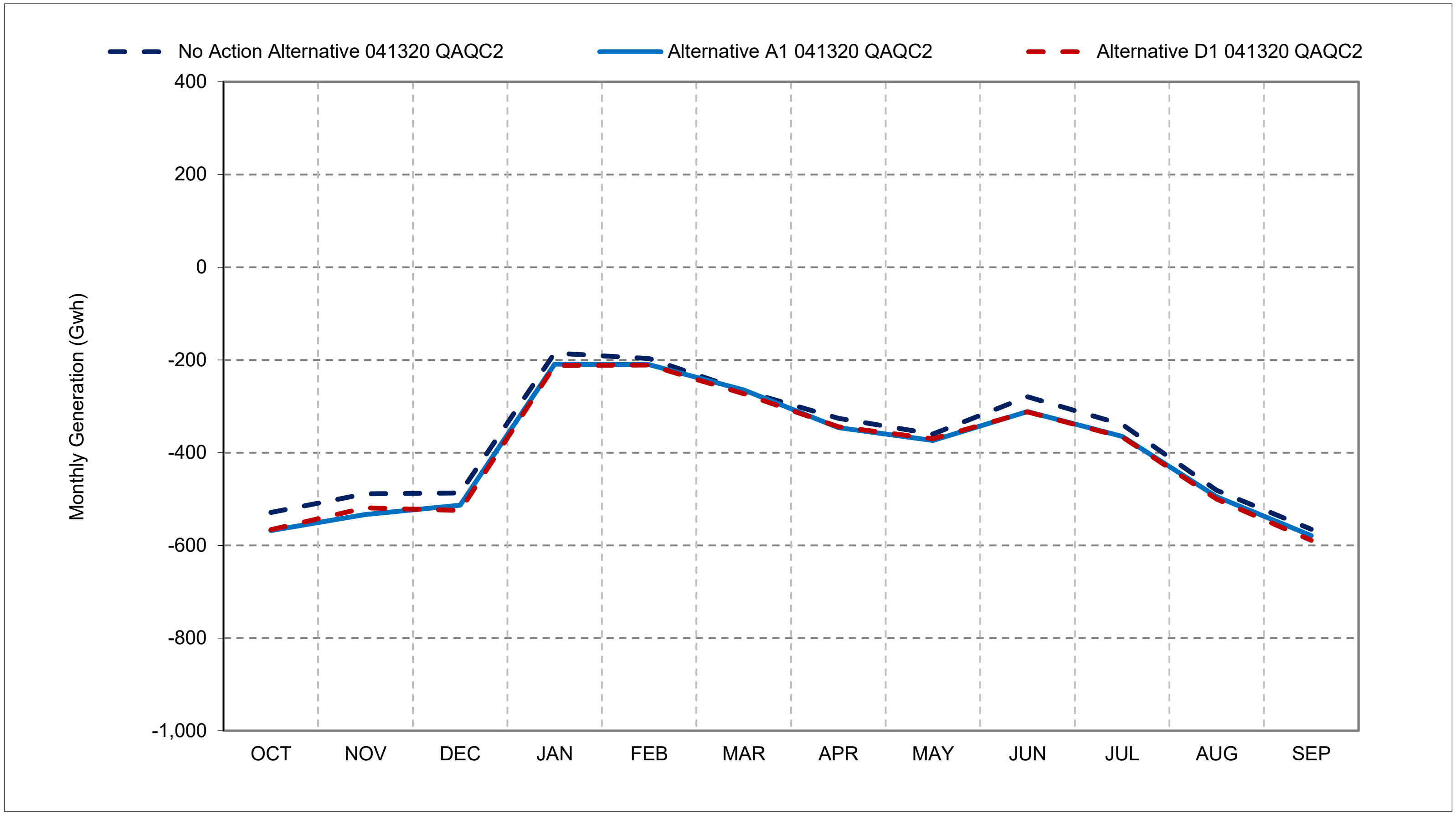


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-4. SWP Net Generation, Below Normal Year Average Generation

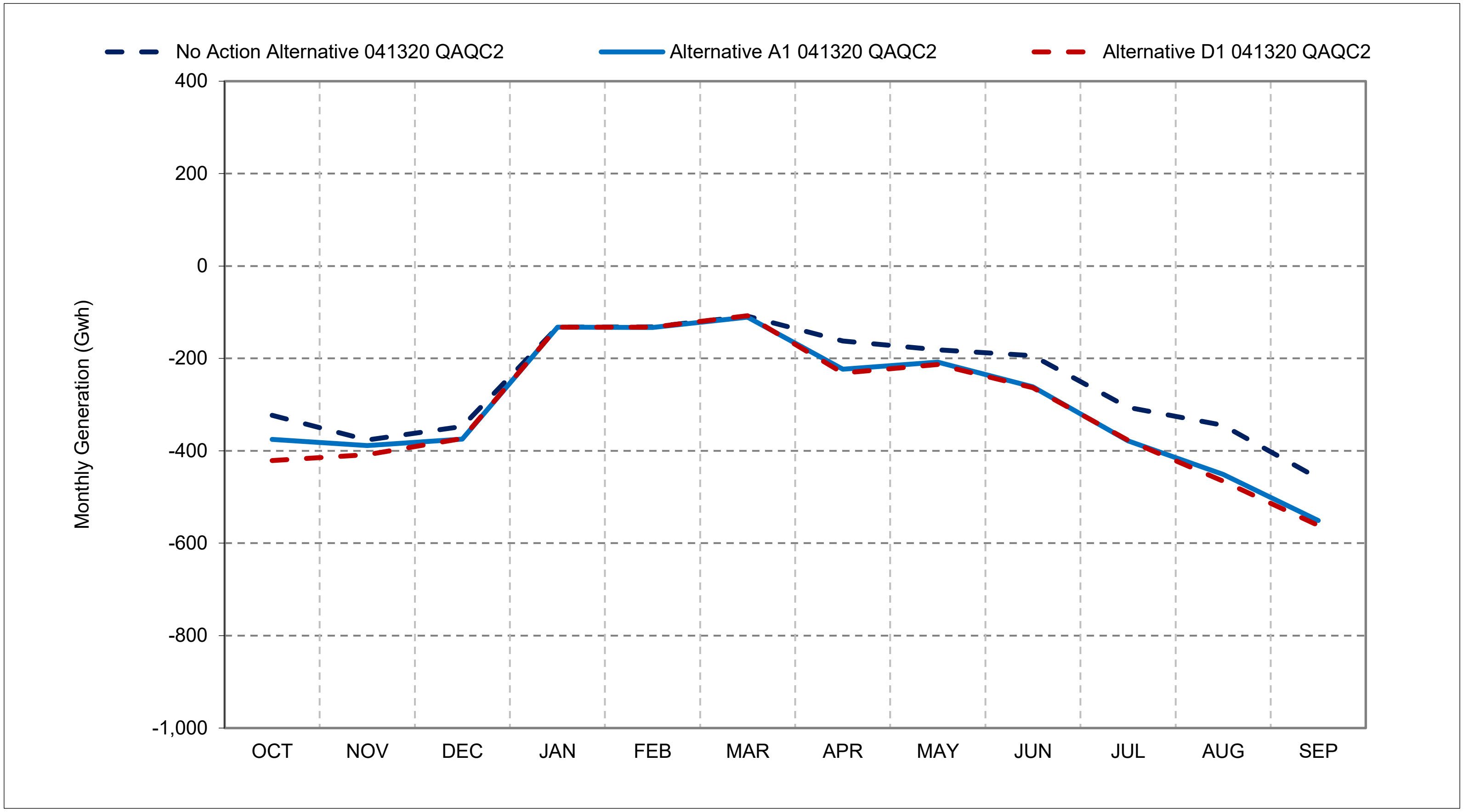


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-5. SWP Net Generation, Dry Year Average Generation

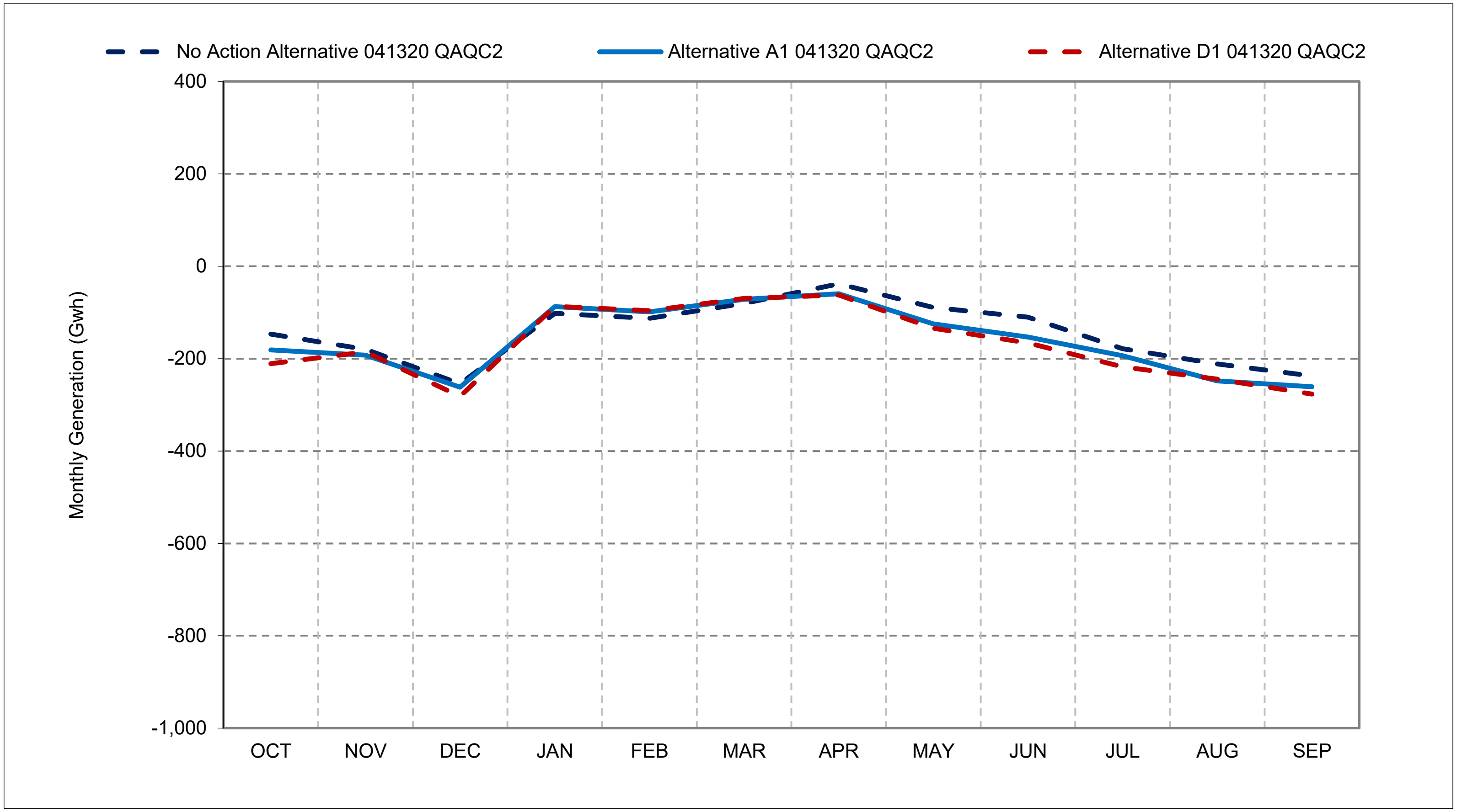


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-6. SWP Net Generation, Critical Year Average Generation

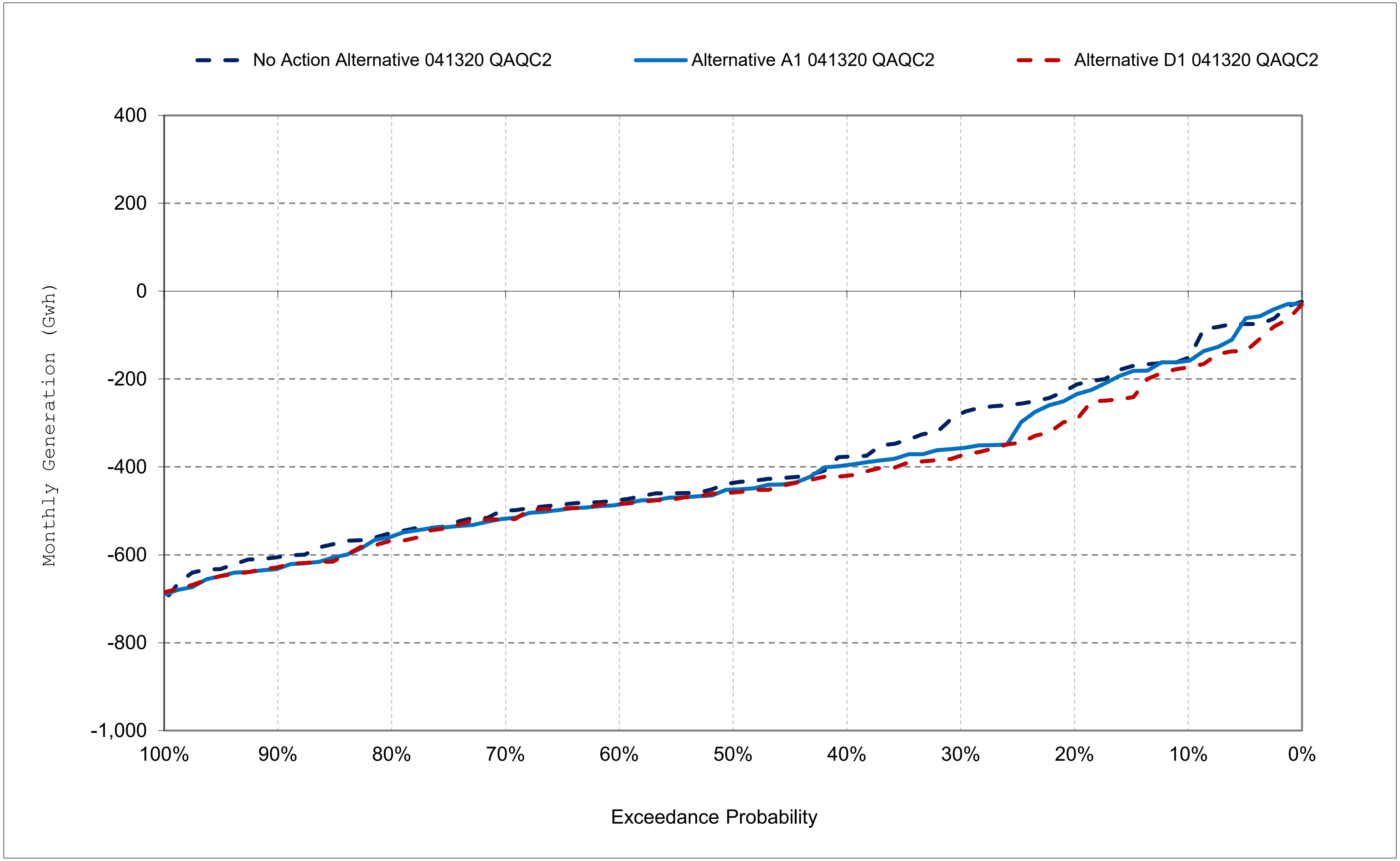


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

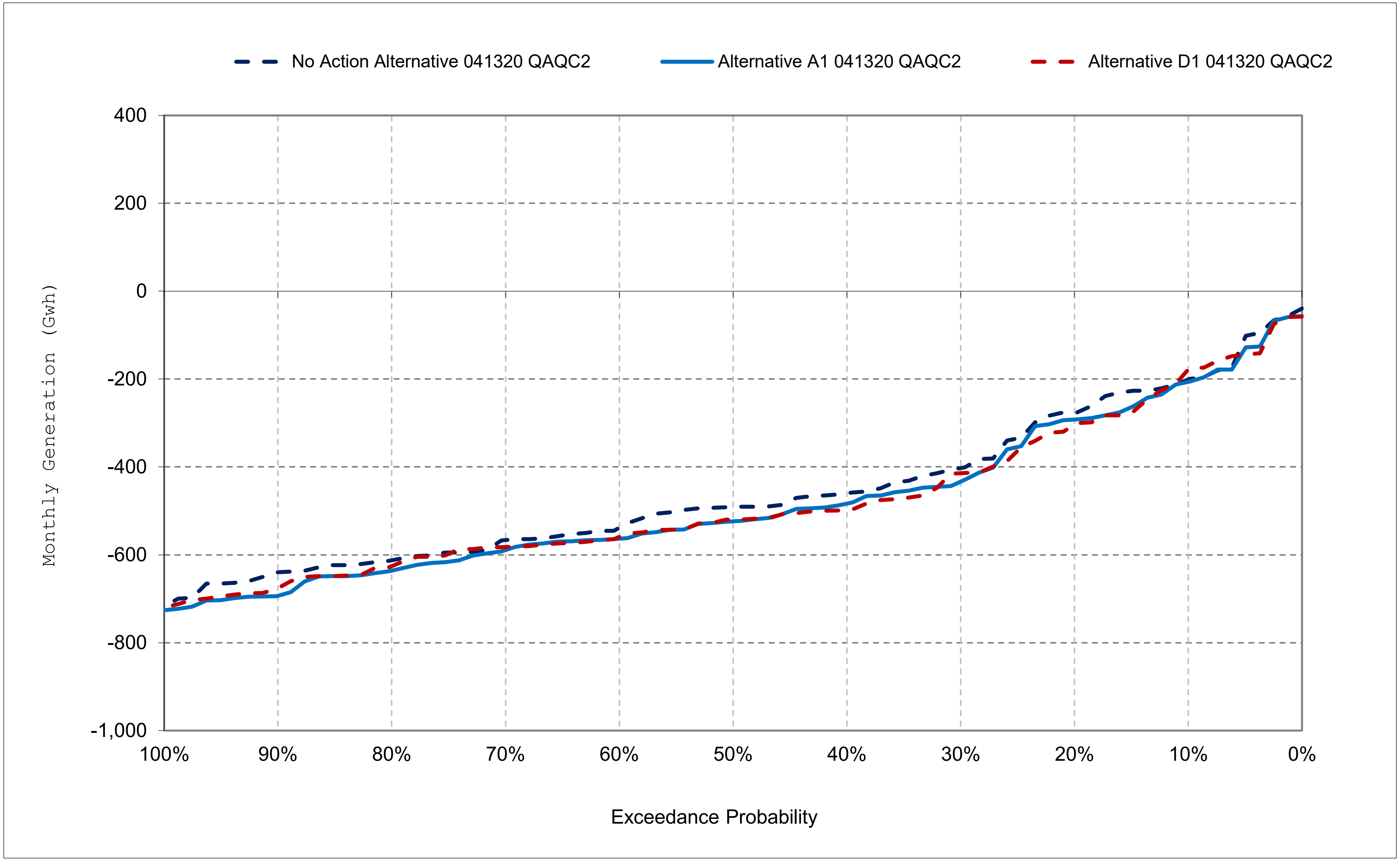
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-7. SWP Net Generation, October



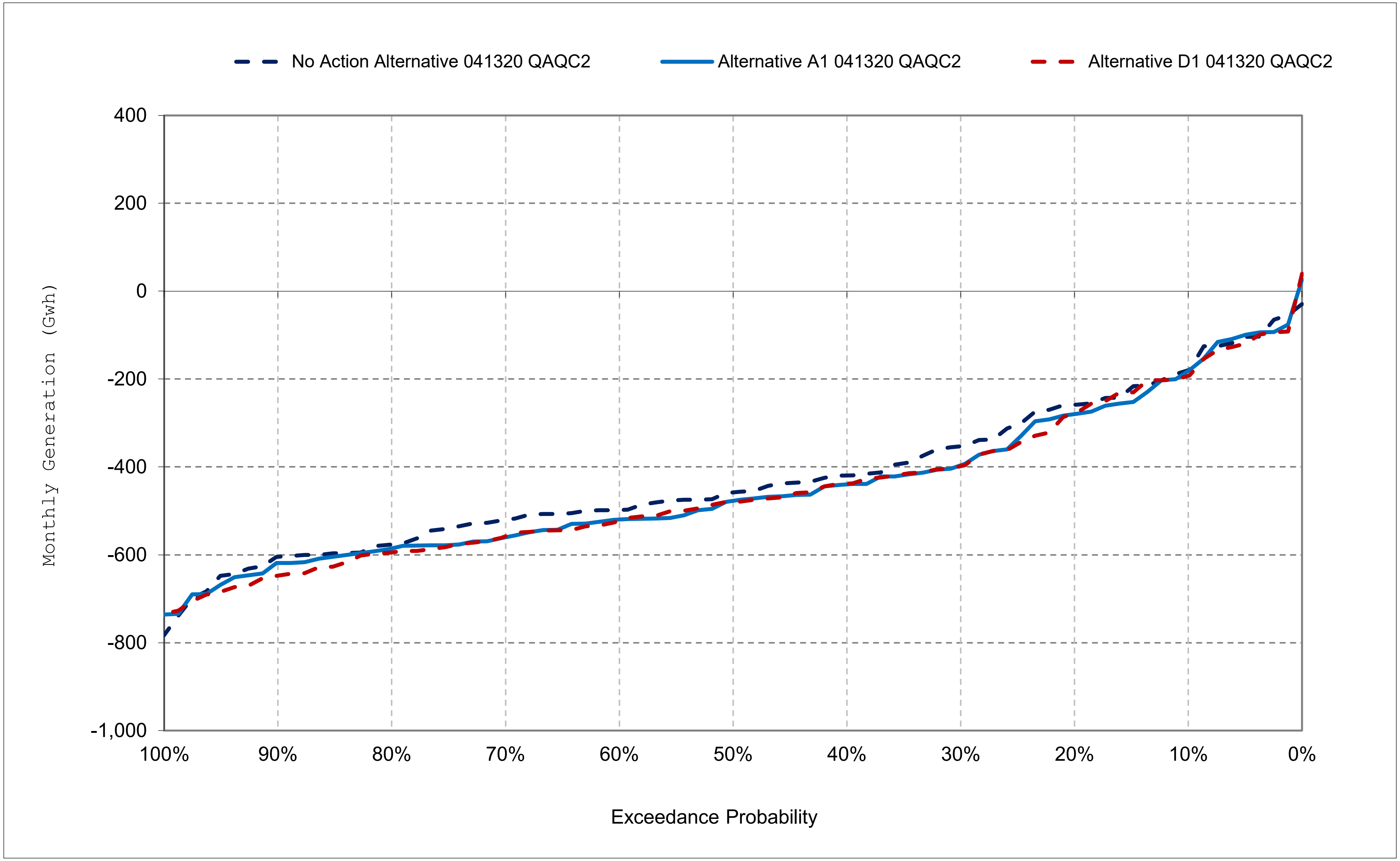
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-8. SWP Net Generation, November



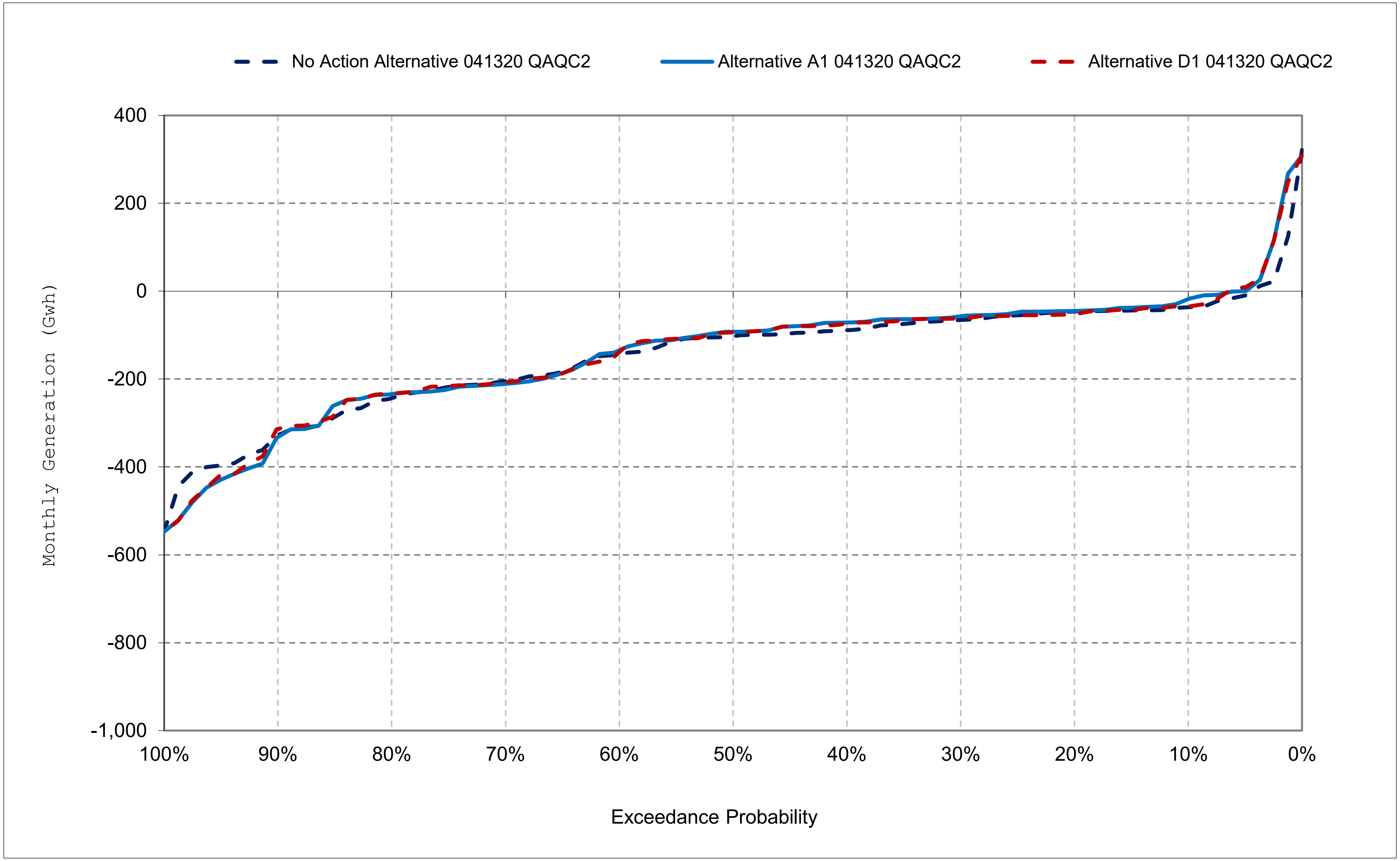
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-9. SWP Net Generation, December



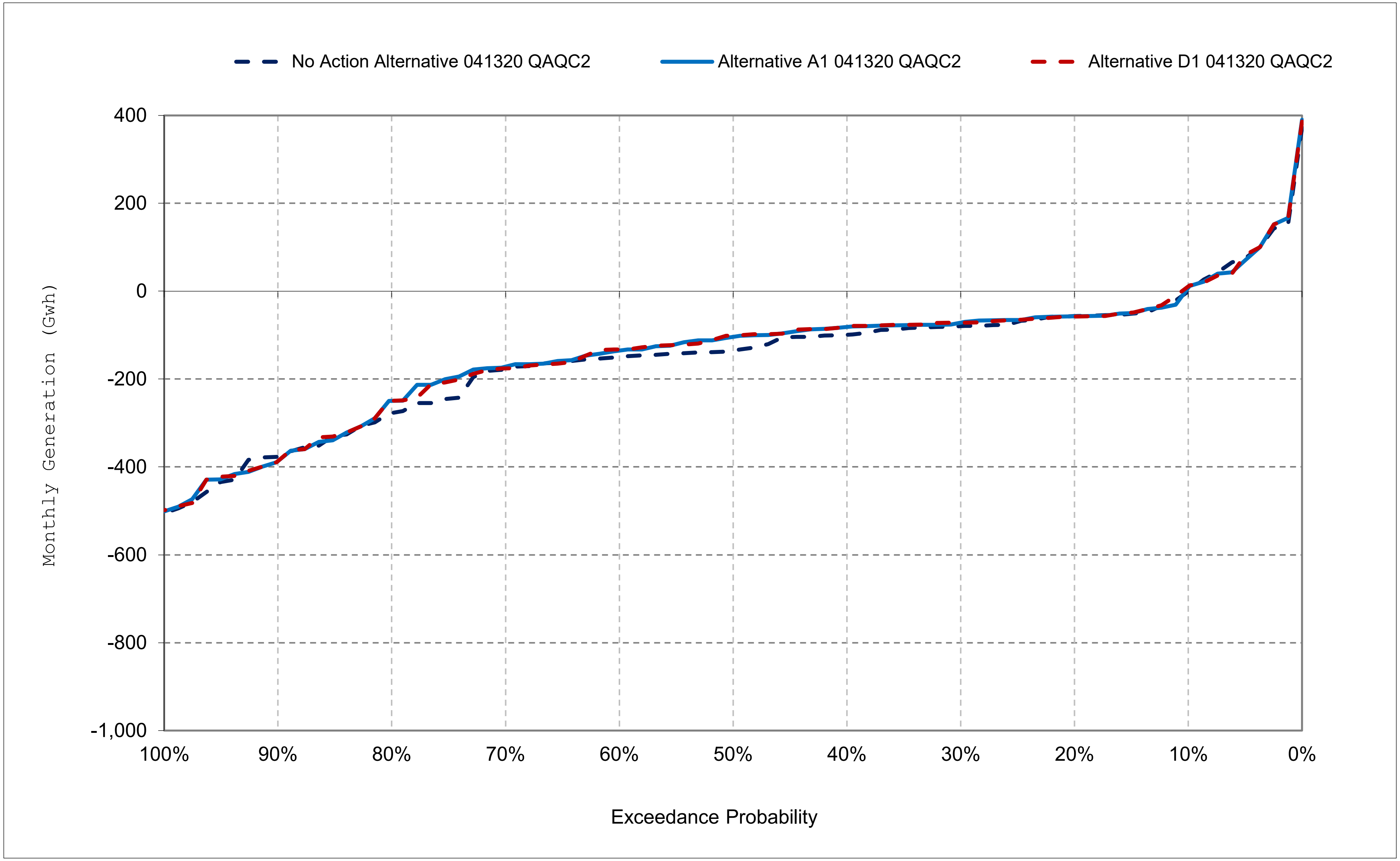
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-10. SWP Net Generation, January



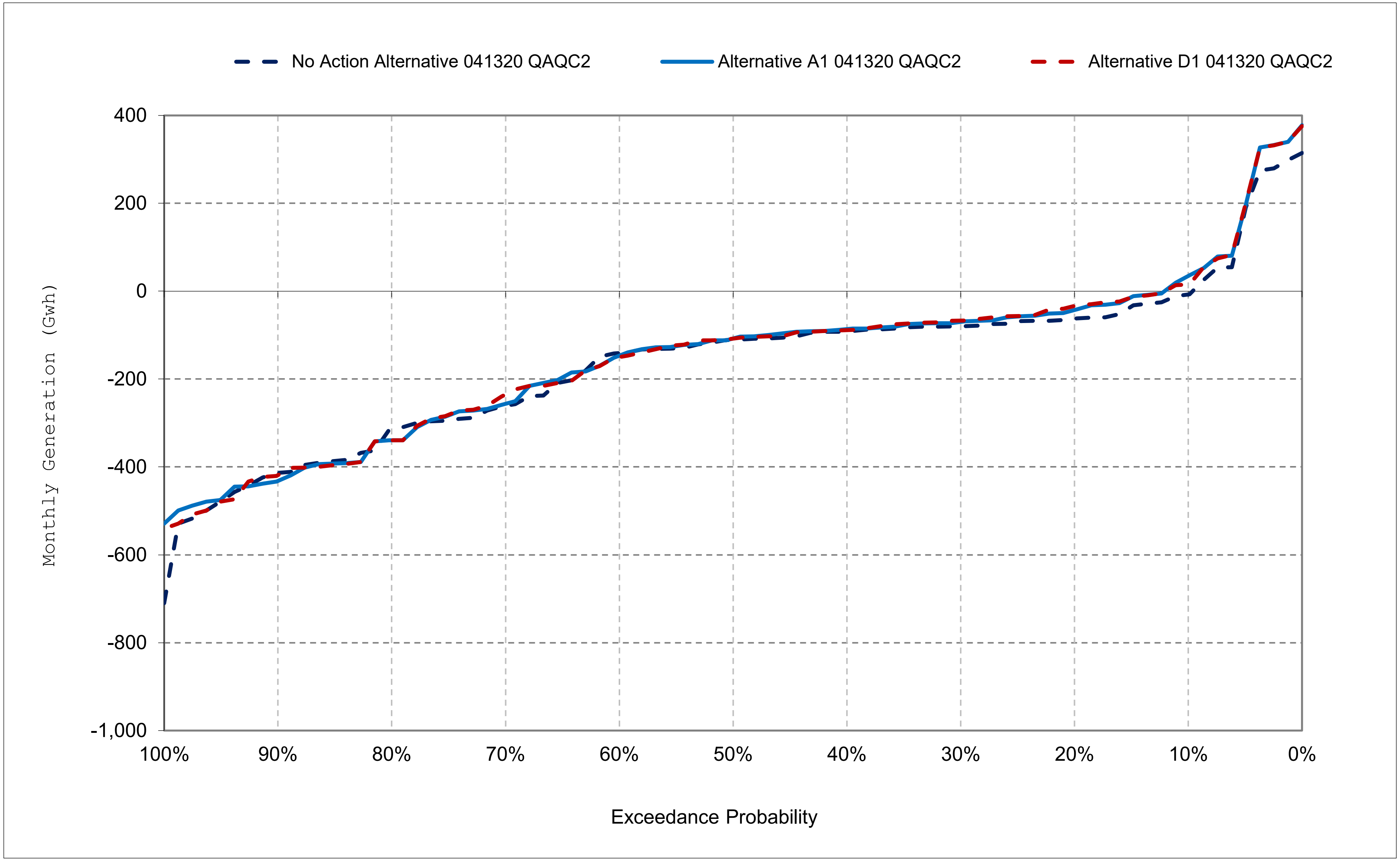
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-11. SWP Net Generation, February



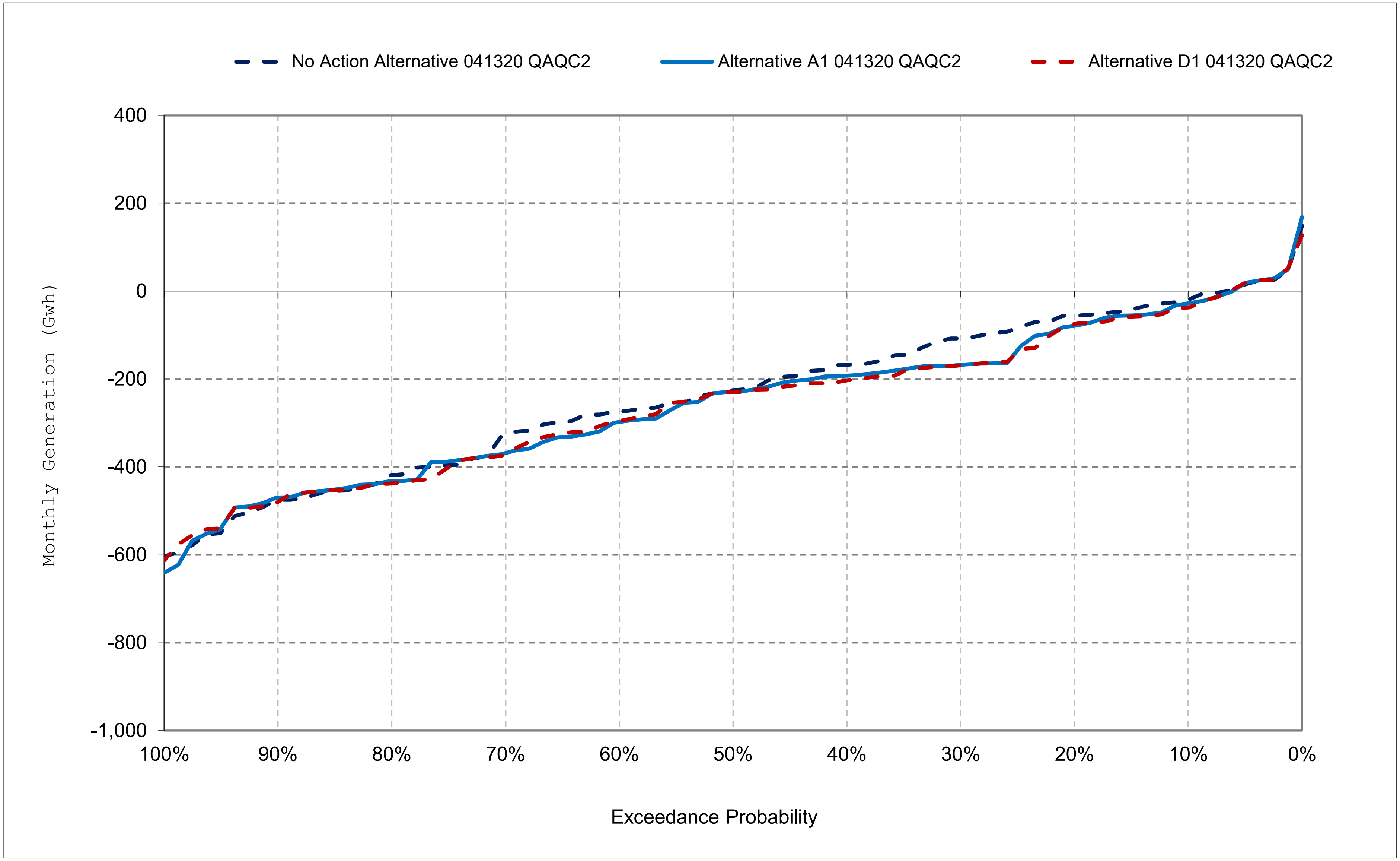
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-12. SWP Net Generation, March



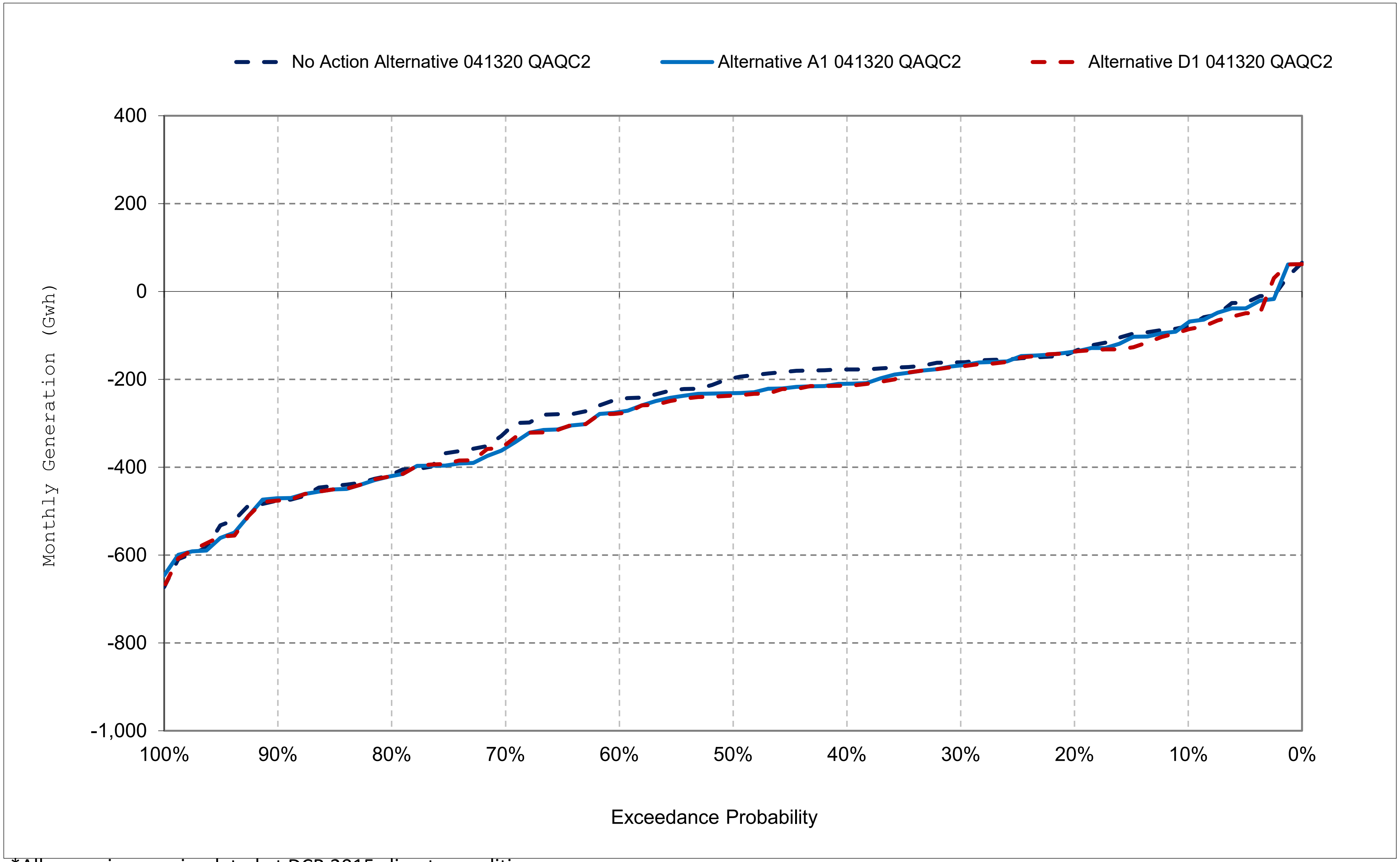
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-13. SWP Net Generation, April



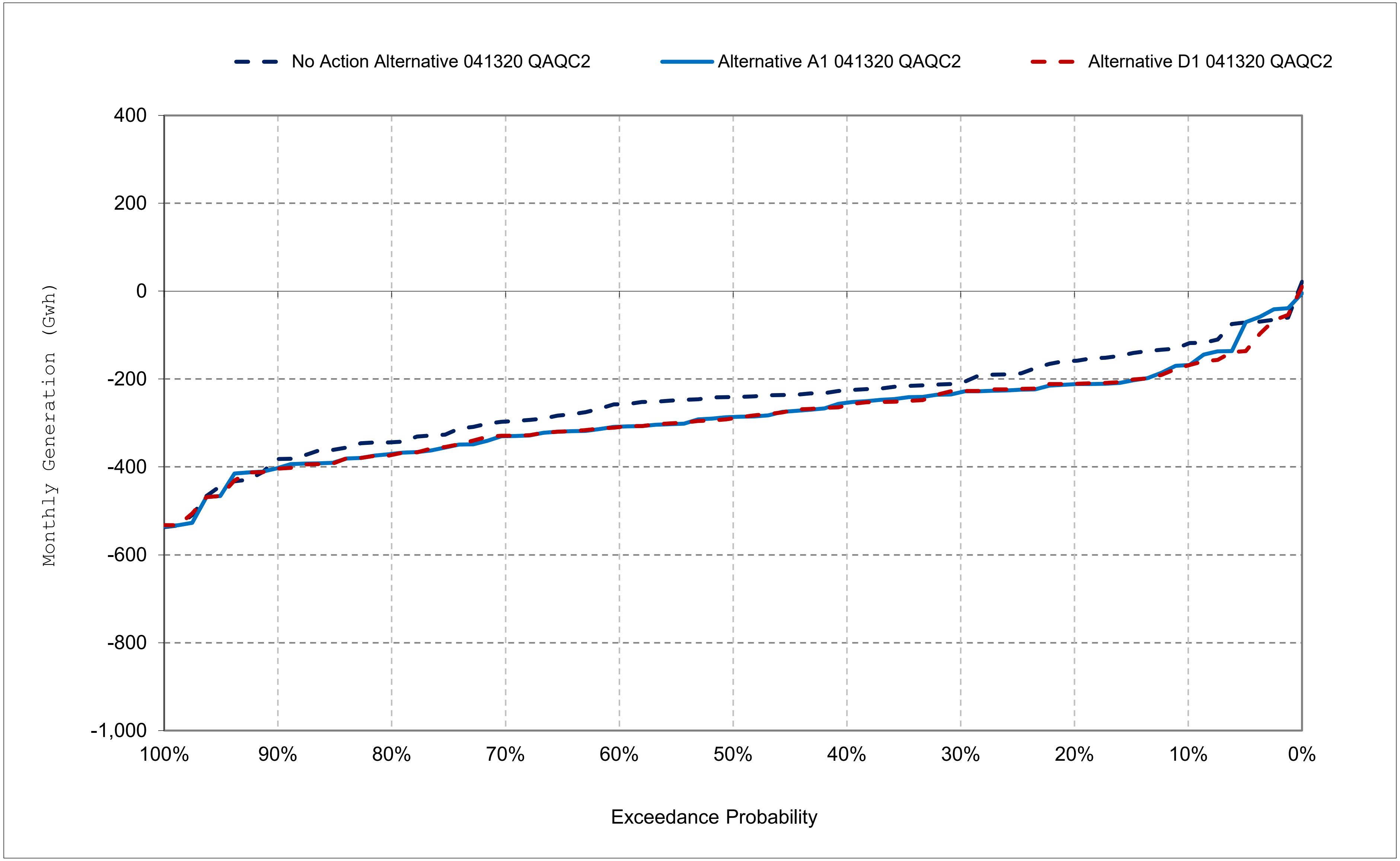
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-14. SWP Net Generation, May



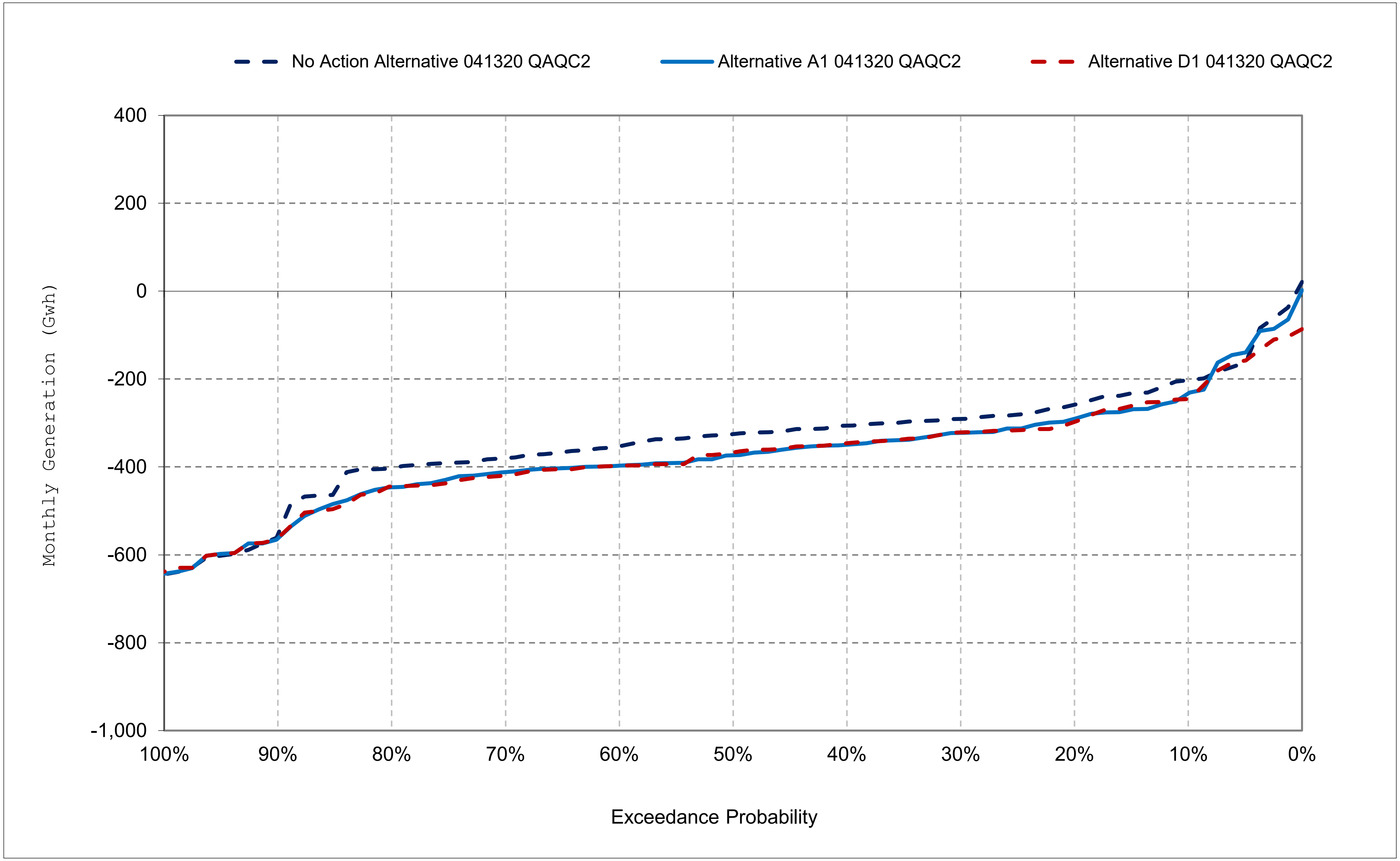
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-15. SWP Net Generation, June



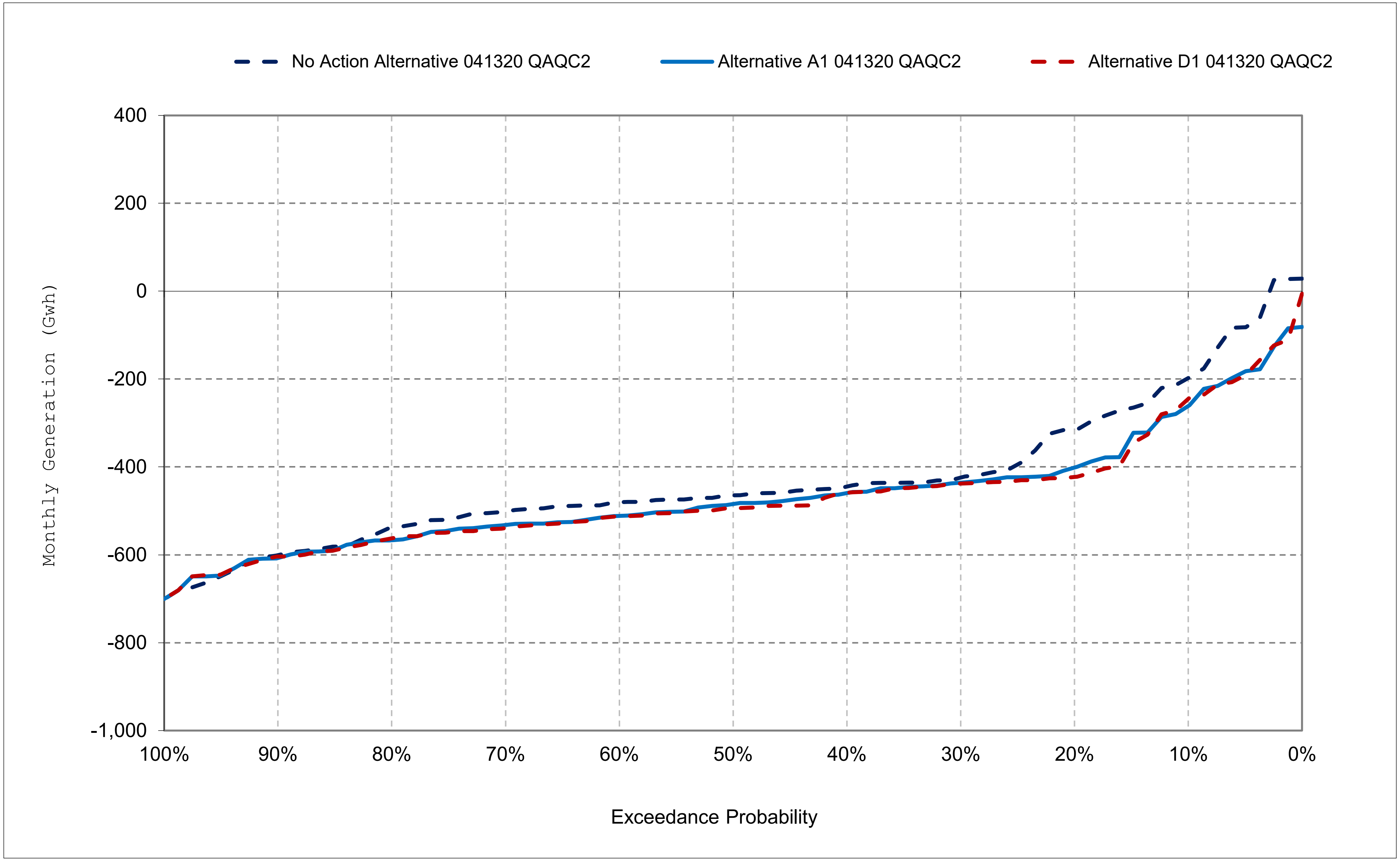
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-16. SWP Net Generation, July



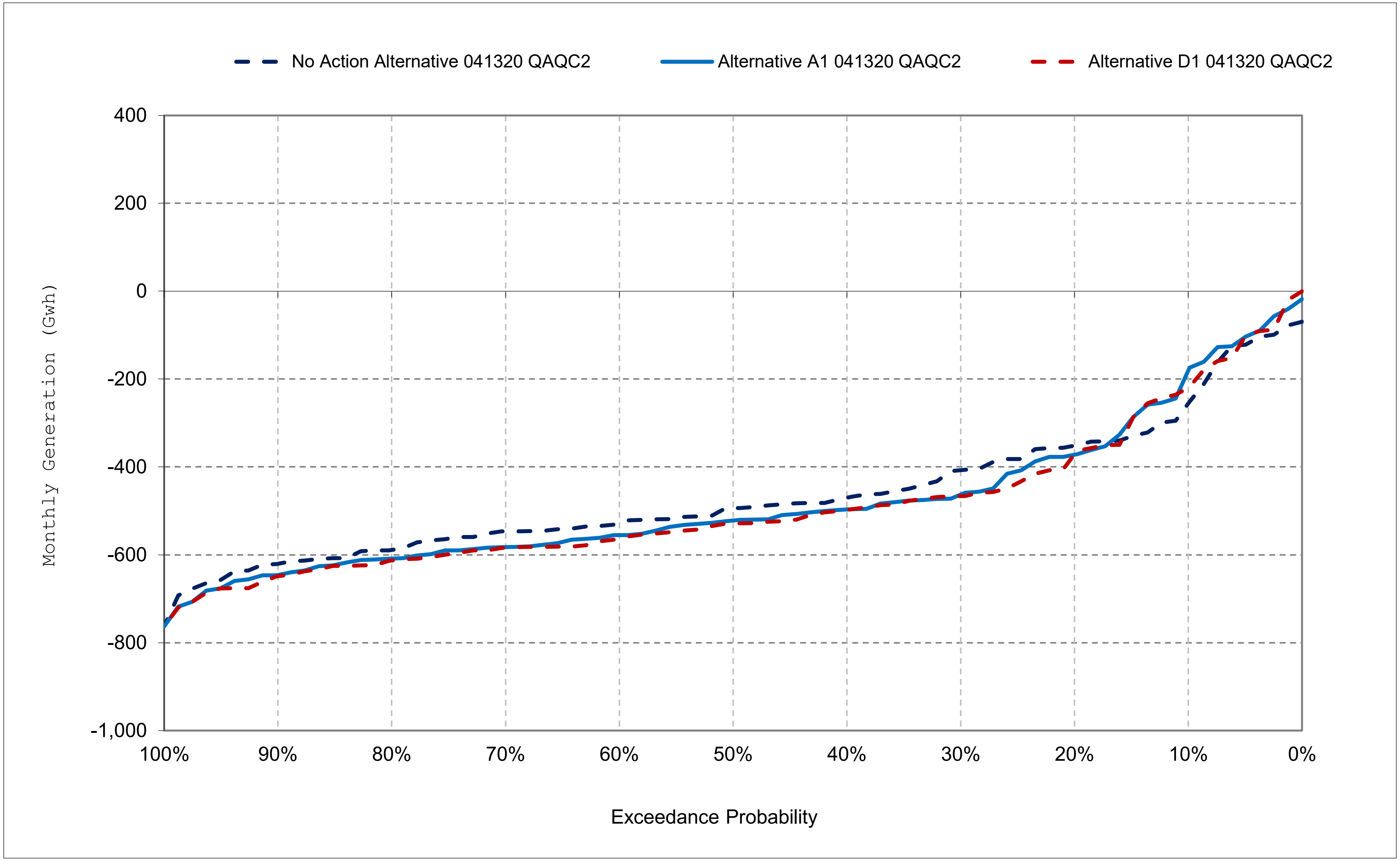
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-17. SWP Net Generation, August



*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-9-18. SWP Net Generation, September



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-10-1. SWP Net Revenue, Monthly Revenue

No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Revenue (1000)											
Probability of Exceedance												
10%	-7,417	-10,559	-9,921	-2,135	-150	-421	-1,346	-4,305	-6,486	-11,438	-11,654	-14,170
20%	-10,598	-14,230	-14,268	-2,724	-3,256	-3,514	-3,270	-7,660	-8,388	-14,592	-18,562	-19,531
30%	-13,918	-21,043	-19,577	-3,860	-4,470	-4,216	-5,634	-8,476	-10,836	-16,389	-24,599	-22,614
40%	-18,770	-24,045	-23,181	-5,264	-5,573	-4,849	-8,950	-9,288	-11,916	-17,170	-25,966	-26,185
50%	-21,852	-25,674	-25,477	-6,109	-7,720	-6,059	-11,589	-10,010	-12,615	-18,313	-27,110	-27,267
60%	-23,759	-27,734	-27,703	-8,434	-8,475	-7,675	-13,993	-12,524	-13,367	-19,857	-28,059	-29,072
70%	-24,847	-29,567	-28,975	-11,859	-9,888	-14,110	-16,867	-16,281	-15,187	-21,456	-29,416	-30,457
80%	-27,439	-32,042	-31,962	-14,374	-15,519	-16,585	-21,385	-20,894	-17,486	-22,493	-31,679	-32,410
90%	-30,455	-33,484	-33,547	-19,474	-21,047	-21,786	-24,312	-23,625	-19,368	-30,941	-35,422	-34,388
Long Term												
Full Simulation Period[a]	-19,690	-23,734	-23,481	-8,470	-8,466	-8,729	-12,230	-12,811	-13,045	-19,043	-25,171	-25,678
Water Year Types[b,c]												
Wet (32%)	-23,365	-29,311	-25,693	-8,005	-8,850	-9,449	-14,154	-14,226	-15,807	-24,280	-31,830	-28,846
Above Normal (15%)	-21,377	-29,961	-30,245	-9,887	-8,378	-9,975	-18,855	-17,122	-16,878	-19,309	-27,219	-24,872
Below Normal (17%)	-26,521	-25,550	-27,034	-10,999	-11,052	-14,018	-16,657	-17,948	-14,444	-19,067	-28,132	-31,236
Dry (22%)	-16,174	-19,667	-19,240	-7,849	-7,388	-5,726	-8,378	-9,297	-10,216	-17,258	-20,305	-25,604
Critical (15%)	-7,348	-9,403	-14,144	-6,043	-6,324	-4,254	-2,050	-4,712	-5,838	-10,082	-12,537	-13,248

Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Revenue (1000)											
Probability of Exceedance												
10%	-7,872	-10,838	-9,958	-815	381	1,451	-1,703	-4,198	-8,845	-13,122	-15,330	-9,917
20%	-11,869	-15,236	-15,578	-2,636	-3,225	-2,293	-4,125	-7,244	-11,135	-16,261	-23,340	-20,735
30%	-17,790	-22,679	-21,997	-3,386	-4,114	-3,839	-8,689	-9,596	-12,108	-18,178	-25,312	-25,387
40%	-19,829	-25,238	-24,444	-4,251	-4,557	-4,553	-9,982	-10,774	-13,189	-19,532	-26,760	-27,301
50%	-22,499	-27,257	-26,307	-5,503	-5,828	-5,669	-11,833	-11,674	-14,794	-21,059	-28,641	-28,890
60%	-24,343	-29,425	-28,907	-7,957	-7,699	-7,908	-15,222	-14,342	-15,820	-22,354	-29,983	-31,019
70%	-25,851	-30,827	-31,103	-12,274	-9,663	-13,553	-18,869	-18,020	-16,918	-23,236	-31,109	-32,152
80%	-27,954	-33,284	-32,550	-13,882	-13,986	-17,869	-22,097	-21,027	-18,772	-25,168	-33,388	-33,646
90%	-31,255	-36,299	-34,365	-19,684	-21,448	-22,617	-24,061	-23,361	-20,346	-31,433	-35,847	-35,747
Long Term												
Full Simulation Period[a]	-20,666	-24,970	-24,594	-8,158	-7,941	-8,096	-13,077	-13,482	-14,628	-20,839	-27,232	-26,546
Water Year Types[b,c]												
Wet (32%)	-22,899	-30,306	-26,427	-7,108	-7,537	-8,180	-13,910	-14,404	-16,316	-25,149	-32,080	-28,874
Above Normal (15%)	-21,096	-31,851	-31,800	-8,918	-7,475	-8,781	-18,214	-16,819	-17,702	-21,017	-28,143	-20,893
Below Normal (17%)	-28,467	-27,920	-28,521	-12,420	-11,786	-13,942	-17,705	-18,638	-15,985	-20,528	-28,953	-31,964
Dry (22%)	-18,809	-20,317	-20,775	-7,841	-7,441	-5,840	-11,469	-10,630	-13,532	-21,328	-26,625	-30,734
Critical (15%)	-9,086	-10,062	-14,562	-5,175	-5,545	-3,794	-3,150	-6,408	-7,960	-10,955	-14,716	-14,554

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Revenue (1000)											
Probability of Exceedance												
10%	-456	-279	-37	1,320	532	1,872	-357	107	-2,359	-1,684	-3,676	4,253
20%	-1,271	-1,006	-1,309	88	31	1,221	-855	416	-2,746	-1,669	-4,778	-1,204
30%	-3,872	-1,636	-2,420	474	356	377	-3,055	-1,120	-1,273	-1,789	-713	-2,774
40%	-1,059	-1,193	-1,263	1,013	1,016	296	-1,032	-1,485	-1,273	-2,362	-793	-1,116
50%	-647	-1,583	-830	606	1,891	390	-245	-1,664	-2,179	-2,746	-1,531	-1,623
60%	-584	-1,690	-1,204	477	776	-233	-1,228	-1,818	-2,453	-2,497	-1,924	-1,948
70%	-1,005	-1,260	-2,128	-416	224	557	-2,002	-1,739	-1,731	-1,780	-1,693	-1,696
80%	-515	-1,242	-588	492	1,533	-1,284	-712	-133	-1,285	-2,675	-1,708	-1,236
90%	-800	-2,816	-818	-210	-402	-831	251	264	-977	-492	-425	-1,360
Long Term												
Full Simulation Period[a]	-976	-1,236	-1,112	312	526	632	-847	-671	-1,583	-1,796	-2,061	-868
Water Year Types[b,c]												
Wet (32%)	466	-995	-734	897	1,313	1,269	244	-177	-509	-869	-250	-28
Above Normal (15%)	281	-1,890	-1,555	970	904	1,193	641	303	-824	-1,708	-924	3,980
Below Normal (17%)	-1,946	-2,370	-1,487	-1,421	-734	75	-1,048	-690	-1,541	-1,461	-821	-728
Dry (22%)	-2,635	-651	-1,535	8	-53	-114	-3,092	-1,334	-3,316	-4,070	-6,320	-5,130
Critical (15%)	-1,738	-659	-418	867	780	460	-1,100	-1,696	-2,122	-873	-2,179	-1,306

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

f Net revenue is based on 2030 pricing forecasts developed by DWR.

Table G.2.1-10-2. SWP Net Revenue, Monthly Revenue

No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Revenue (1000)											
Probability of Exceedance												
10%	-7,417	-10,559	-9,921	-2,135	-150	-421	-1,346	-4,305	-6,486	-11,438	-11,654	-14,170
20%	-10,598	-14,230	-14,268	-2,724	-3,256	-3,514	-3,270	-7,660	-8,388	-14,592	-18,562	-19,531
30%	-13,918	-21,043	-19,577	-3,860	-4,470	-4,216	-5,634	-8,476	-10,836	-16,389	-24,599	-22,614
40%	-18,770	-24,045	-23,181	-5,264	-5,573	-4,849	-8,950	-9,288	-11,916	-17,170	-25,966	-26,185
50%	-21,852	-25,674	-25,477	-6,109	-7,720	-6,059	-11,589	-10,010	-12,615	-18,313	-27,110	-27,267
60%	-23,759	-27,734	-27,703	-8,434	-8,475	-7,675	-13,993	-12,524	-13,367	-19,857	-28,059	-29,072
70%	-24,847	-29,567	-28,975	-11,859	-9,888	-14,110	-16,867	-16,281	-15,187	-21,456	-29,416	-30,457
80%	-27,439	-32,042	-31,962	-14,374	-15,519	-16,585	-21,385	-20,894	-17,486	-22,493	-31,679	-32,410
90%	-30,455	-33,484	-33,547	-19,474	-21,047	-21,786	-24,312	-23,625	-19,368	-30,941	-35,422	-34,388
Long Term												
Full Simulation Period[a]	-19,690	-23,734	-23,481	-8,470	-8,466	-8,729	-12,230	-12,811	-13,045	-19,043	-25,171	-25,678
Water Year Types[b,c]												
Wet (32%)	-23,365	-29,311	-25,693	-8,005	-8,850	-9,449	-14,154	-14,226	-15,807	-24,280	-31,830	-28,846
Above Normal (15%)	-21,377	-29,961	-30,245	-9,887	-8,378	-9,975	-18,855	-17,122	-16,878	-19,309	-27,219	-24,872
Below Normal (17%)	-26,521	-25,550	-27,034	-10,999	-11,052	-14,018	-16,657	-17,948	-14,444	-19,067	-28,132	-31,236
Dry (22%)	-16,174	-19,667	-19,240	-7,849	-7,388	-5,726	-8,378	-9,297	-10,216	-17,258	-20,305	-25,604
Critical (15%)	-7,348	-9,403	-14,144	-6,043	-6,324	-4,254	-2,050	-4,712	-5,838	-10,082	-12,537	-13,248

Alternative D1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Revenue (1000)											
Probability of Exceedance												
10%	-8,560	-9,312	-10,383	-2,035	547	588	-1,994	-4,811	-9,015	-13,793	-14,520	-12,160
20%	-14,578	-15,890	-15,444	-3,044	-3,298	-1,798	-3,930	-7,319	-11,059	-16,784	-24,669	-20,815
30%	-18,689	-21,629	-22,098	-3,695	-4,009	-3,761	-8,747	-9,414	-11,875	-18,136	-25,594	-25,737
40%	-20,992	-25,926	-24,269	-4,379	-4,523	-4,661	-10,462	-10,870	-13,447	-19,458	-26,751	-27,619
50%	-22,985	-27,167	-26,536	-5,563	-5,670	-5,676	-11,827	-11,887	-14,938	-20,694	-28,920	-29,184
60%	-24,257	-29,197	-29,012	-8,224	-7,460	-7,915	-15,057	-14,355	-15,928	-22,379	-30,099	-31,018
70%	-25,866	-30,403	-30,990	-12,112	-9,844	-12,660	-18,957	-17,648	-16,864	-23,570	-31,581	-32,294
80%	-28,474	-32,709	-32,953	-13,753	-13,969	-17,866	-22,326	-21,021	-18,857	-24,953	-33,164	-34,111
90%	-31,251	-35,346	-36,010	-18,612	-21,433	-22,050	-24,463	-23,630	-20,482	-31,408	-35,826	-36,096
Long Term												
Full Simulation Period[a]	-21,345	-24,893	-24,794	-8,208	-7,953	-8,105	-13,143	-13,624	-14,734	-21,028	-27,446	-26,958
Water Year Types[b,c]												
Wet (32%)	-22,834	-30,136	-26,306	-7,259	-7,572	-8,227	-14,011	-14,542	-16,321	-25,040	-31,933	-29,108
Above Normal (15%)	-21,057	-31,441	-31,718	-8,709	-7,623	-8,599	-17,804	-16,880	-17,617	-21,224	-28,549	-20,735
Below Normal (17%)	-28,367	-27,128	-29,134	-12,619	-11,835	-14,353	-17,599	-18,467	-16,023	-20,589	-29,259	-32,547
Dry (22%)	-21,111	-21,352	-20,705	-7,839	-7,410	-5,677	-11,890	-10,858	-13,605	-21,252	-27,461	-31,336
Critical (15%)	-10,563	-9,686	-15,664	-5,168	-5,391	-3,698	-3,285	-6,877	-8,601	-12,319	-14,487	-15,432

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Revenue (1000)											
Probability of Exceedance												
10%	-1,144	1,247	-462	100	697	1,008	-648	-506	-2,529	-2,355	-2,866	2,009
20%	-3,980	-1,660	-1,176	-319	-42	1,716	-660	341	-2,670	-2,192	-6,107	-1,284
30%	-4,771	-586	-2,521	165	461	454	-3,113	-939	-1,039	-1,747	-995	-3,123
40%	-2,222	-1,881	-1,088	885	1,050	188	-1,512	-1,581	-1,531	-2,288	-785	-1,434
50%	-1,133	-1,492	-1,059	546	2,049	383	-239	-1,877	-2,323	-2,381	-1,810	-1,917
60%	-497	-1,463	-1,309	210	1,014	-240	-1,064	-1,831	-2,561	-2,522	-2,040	-1,947
70%	-1,019	-836	-2,015	-253	44	1,450	-2,090	-1,367	-1,677	-2,114	-2,165	-1,838
80%	-1,035	-667	-992	621	1,550	-1,281	-940	-127	-1,371	-2,459	-1,484	-1,701
90%	-796	-1,863	-2,464	862	-387	-264	-151	-5	-1,114	-467	-404	-1,708
Long Term												
Full Simulation Period[a]	-1,654	-1,159	-1,313	262	514	624	-913	-813	-1,689	-1,985	-2,276	-1,279
Water Year Types[b,c]												
Wet (32%)	531	-825	-614	745	1,278	1,222	144	-315	-513	-760	-102	-262
Above Normal (15%)	319	-1,480	-1,473	1,178	755	1,376	1,052	242	-740	-1,915	-1,329	4,138
Below Normal (17%)	-1,846	-1,578	-2,100	-1,620	-783	-335	-942	-519	-1,579	-1,522	-1,127	-1,312
Dry (22%)	-4,937	-1,685	-1,465	10	-23	49	-3,513	-1,562	-3,389	-3,993	-7,156	-5,732
Critical (15%)	-3,215	-283	-1,520	874	933	557	-1,236	-2,166	-2,763	-2,237	-1,950	-2,184

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

f Net revenue is based on 2030 pricing forecasts developed by DWR.

Table G.2.1-10-3. SWP Net Revenue, Monthly Revenue

Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Revenue (1000)											
Probability of Exceedance												
10%	-7,872	-10,838	-9,958	-815	381	1,451	-1,703	-4,198	-8,845	-13,122	-15,330	-9,917
20%	-11,869	-15,236	-15,578	-2,636	-3,225	-2,293	-4,125	-7,244	-11,135	-16,261	-23,340	-20,735
30%	-17,790	-22,679	-21,997	-3,386	-4,114	-3,839	-8,689	-9,596	-12,108	-18,178	-25,312	-25,387
40%	-19,829	-25,238	-24,444	-4,251	-4,557	-4,553	-9,982	-10,774	-13,189	-19,532	-26,760	-27,301
50%	-22,499	-27,257	-26,307	-5,503	-5,828	-5,669	-11,833	-11,674	-14,794	-21,059	-28,641	-28,890
60%	-24,343	-29,425	-28,907	-7,957	-7,699	-7,908	-15,222	-14,342	-15,820	-22,354	-29,983	-31,019
70%	-25,851	-30,827	-31,103	-12,274	-9,663	-13,553	-18,869	-18,020	-16,918	-23,236	-31,109	-32,152
80%	-27,954	-33,284	-32,550	-13,882	-13,986	-17,869	-22,097	-21,027	-18,772	-25,168	-33,388	-33,646
90%	-31,255	-36,299	-34,365	-19,684	-21,448	-22,617	-24,061	-23,361	-20,346	-31,433	-35,847	-35,747
Long Term												
Full Simulation Period[a]	-20,666	-24,970	-24,594	-8,158	-7,941	-8,096	-13,077	-13,482	-14,628	-20,839	-27,232	-26,546
Water Year Types[b,c]												
Wet (32%)	-22,899	-30,306	-26,427	-7,108	-7,537	-8,180	-13,910	-14,404	-16,316	-25,149	-32,080	-28,874
Above Normal (15%)	-21,096	-31,851	-31,800	-8,918	-7,475	-8,781	-18,214	-16,819	-17,702	-21,017	-28,143	-20,893
Below Normal (17%)	-28,467	-27,920	-28,521	-12,420	-11,786	-13,942	-17,705	-18,638	-15,985	-20,528	-28,953	-31,964
Dry (22%)	-18,809	-20,317	-20,775	-7,841	-7,441	-5,840	-11,469	-10,630	-13,532	-21,328	-26,625	-30,734
Critical (15%)	-9,086	-10,062	-14,562	-5,175	-5,545	-3,794	-3,150	-6,408	-7,960	-10,955	-14,716	-14,554

Alternative D1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Revenue (1000)											
Probability of Exceedance												
10%	-8,560	-9,312	-10,383	-2,035	547	588	-1,994	-4,811	-9,015	-13,793	-14,520	-12,160
20%	-14,578	-15,890	-15,444	-3,044	-3,298	-1,798	-3,930	-7,319	-11,059	-16,784	-24,669	-20,815
30%	-18,689	-21,629	-22,098	-3,695	-4,009	-3,761	-8,747	-9,414	-11,875	-18,136	-25,594	-25,737
40%	-20,992	-25,926	-24,269	-4,379	-4,523	-4,661	-10,462	-10,870	-13,447	-19,458	-26,751	-27,619
50%	-22,985	-27,167	-26,536	-5,563	-5,670	-5,676	-11,827	-11,887	-14,938	-20,694	-28,920	-29,184
60%	-24,257	-29,197	-29,012	-8,224	-7,460	-7,915	-15,057	-14,355	-15,928	-22,379	-30,099	-31,018
70%	-25,866	-30,403	-30,990	-12,112	-9,844	-12,660	-18,957	-17,648	-16,864	-23,570	-31,581	-32,294
80%	-28,474	-32,709	-32,953	-13,753	-13,969	-17,866	-22,326	-21,021	-18,857	-24,953	-33,164	-34,111
90%	-31,251	-35,346	-36,010	-18,612	-21,433	-22,050	-24,463	-23,630	-20,482	-31,408	-35,826	-36,096
Long Term												
Full Simulation Period[a]	-21,345	-24,893	-24,794	-8,208	-7,953	-8,105	-13,143	-13,624	-14,734	-21,028	-27,446	-26,958
Water Year Types[b,c]												
Wet (32%)	-22,834	-30,136	-26,306	-7,259	-7,572	-8,227	-14,011	-14,542	-16,321	-25,040	-31,933	-29,108
Above Normal (15%)	-21,057	-31,441	-31,718	-8,709	-7,623	-8,599	-17,804	-16,880	-17,617	-21,224	-28,549	-20,735
Below Normal (17%)	-28,367	-27,128	-29,134	-12,619	-11,835	-14,353	-17,599	-18,467	-16,023	-20,589	-29,259	-32,547
Dry (22%)	-21,111	-21,352	-20,705	-7,839	-7,410	-5,677	-11,890	-10,858	-13,605	-21,252	-27,461	-31,336
Critical (15%)	-10,563	-9,686	-15,664	-5,168	-5,391	-3,698	-3,285	-6,877	-8,601	-12,319	-14,487	-15,432

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Revenue (1000)											
Probability of Exceedance												
10%	-688	1,526	-425	-1,220	166	-864	-291	-613	-170	-671	811	-2,244
20%	-2,709	-655	134	-407	-73	495	195	-75	76	-523	-1,328	-80
30%	-898	1,050	-101	-309	105	78	-58	181	234	42	-282	-350
40%	-1,163	-688	175	-128	34	-108	-480	-96	-258	74	9	-318
50%	-486	90	-229	-59	158	-6	6	-213	-144	365	-279	-294
60%	87	228	-105	-267	238	-7	165	-13	-108	-26	-116	1
70%	-15	424	113	163	-180	893	-88	372	54	-334	-471	-142
80%	-520	575	-403	129	17	3	-228	6	-86	216	224	-465
90%	4	953	-1,646	1,072	15	567	-402	-269	-136	24	21	-349
Long Term												
Full Simulation Period[a]	-678	77	-200	-50	-12	-8	-66	-142	-105	-189	-215	-411
Water Year Types[b,c]												
Wet (32%)	65	170	120	-151	-35	-47	-100	-138	-5	109	148	-234
Above Normal (15%)	39	410	82	208	-149	182	410	-61	84	-206	-406	158
Below Normal (17%)	100	793	-613	-199	-49	-411	106	171	-38	-61	-306	-584
Dry (22%)	-2,302	-1,035	70	1	30	163	-421	-228	-73	76	-836	-602
Critical (15%)	-1,477	376	-1,102	7	154	97	-135	-469	-641	-1,364	229	-878

a Based on the 82-year simulation period.

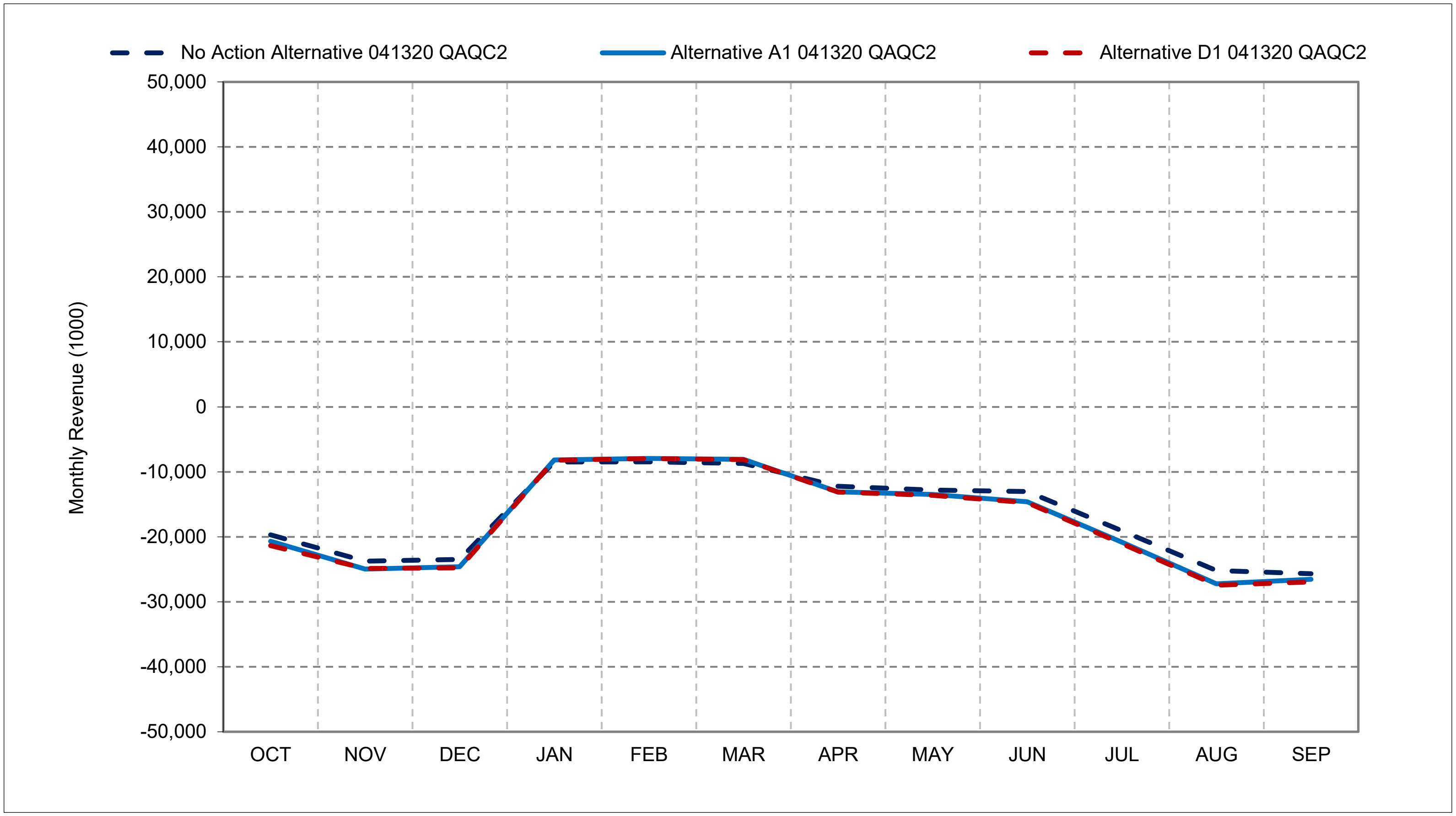
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

f Net revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-10-1. SWP Net Revenue, Long-Term Average Revenue



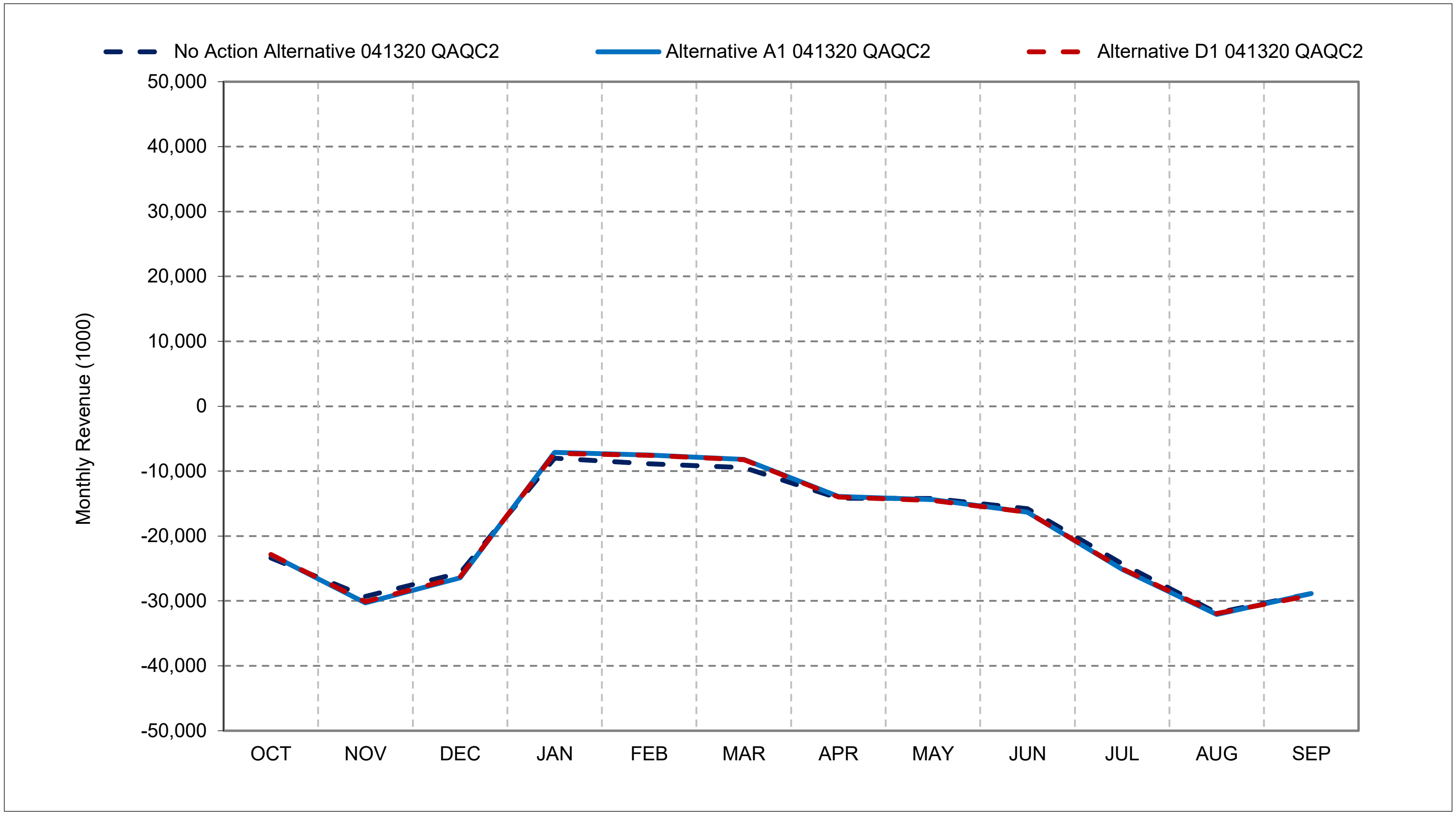
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

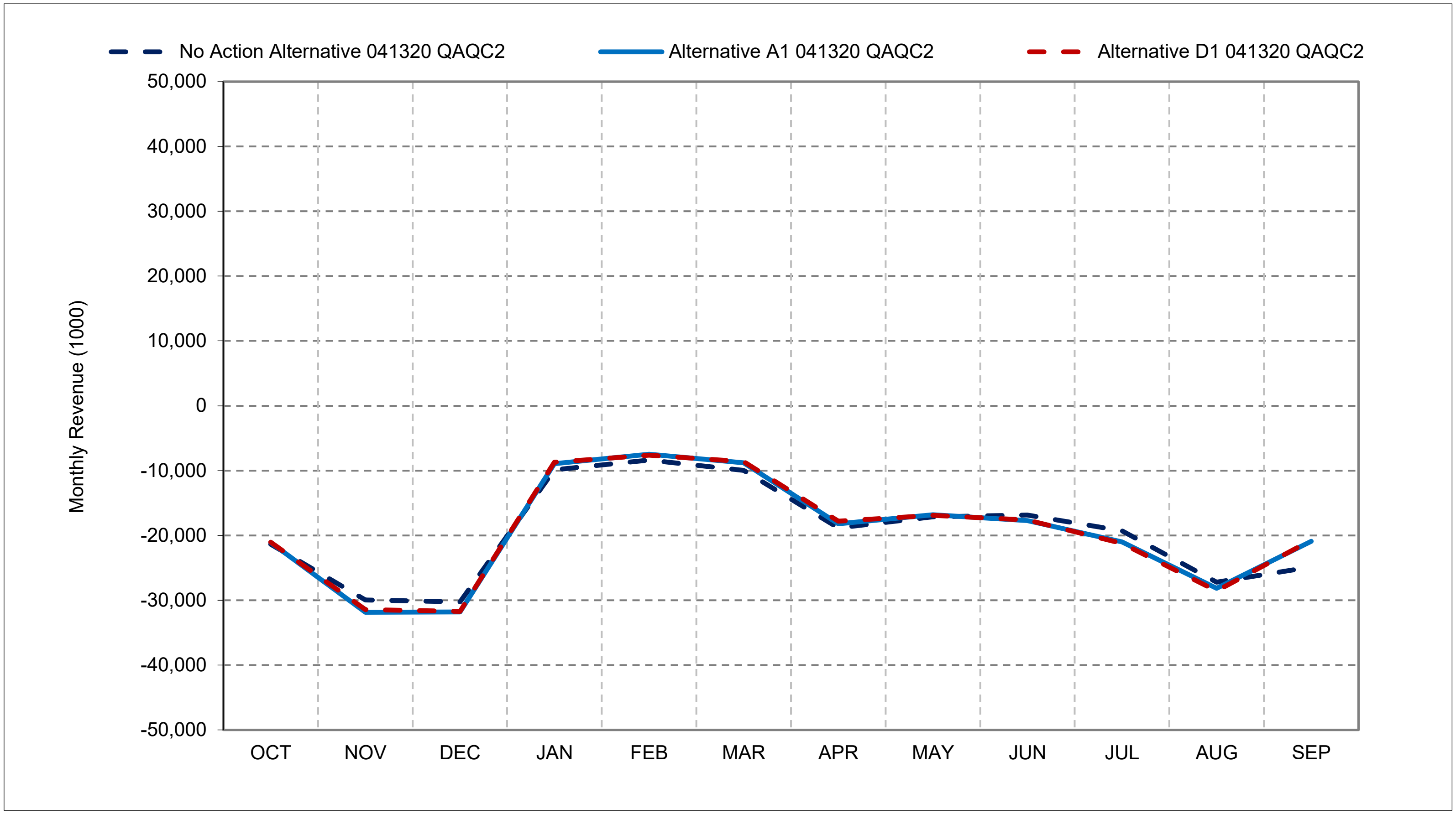
*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-10-2. SWP Net Revenue, Wet Year Average Revenue



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.
*All scenarios are simulated at DCR 2015 climate conditions.
*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-10-3. SWP Net Revenue, Above Normal Year Average Revenue



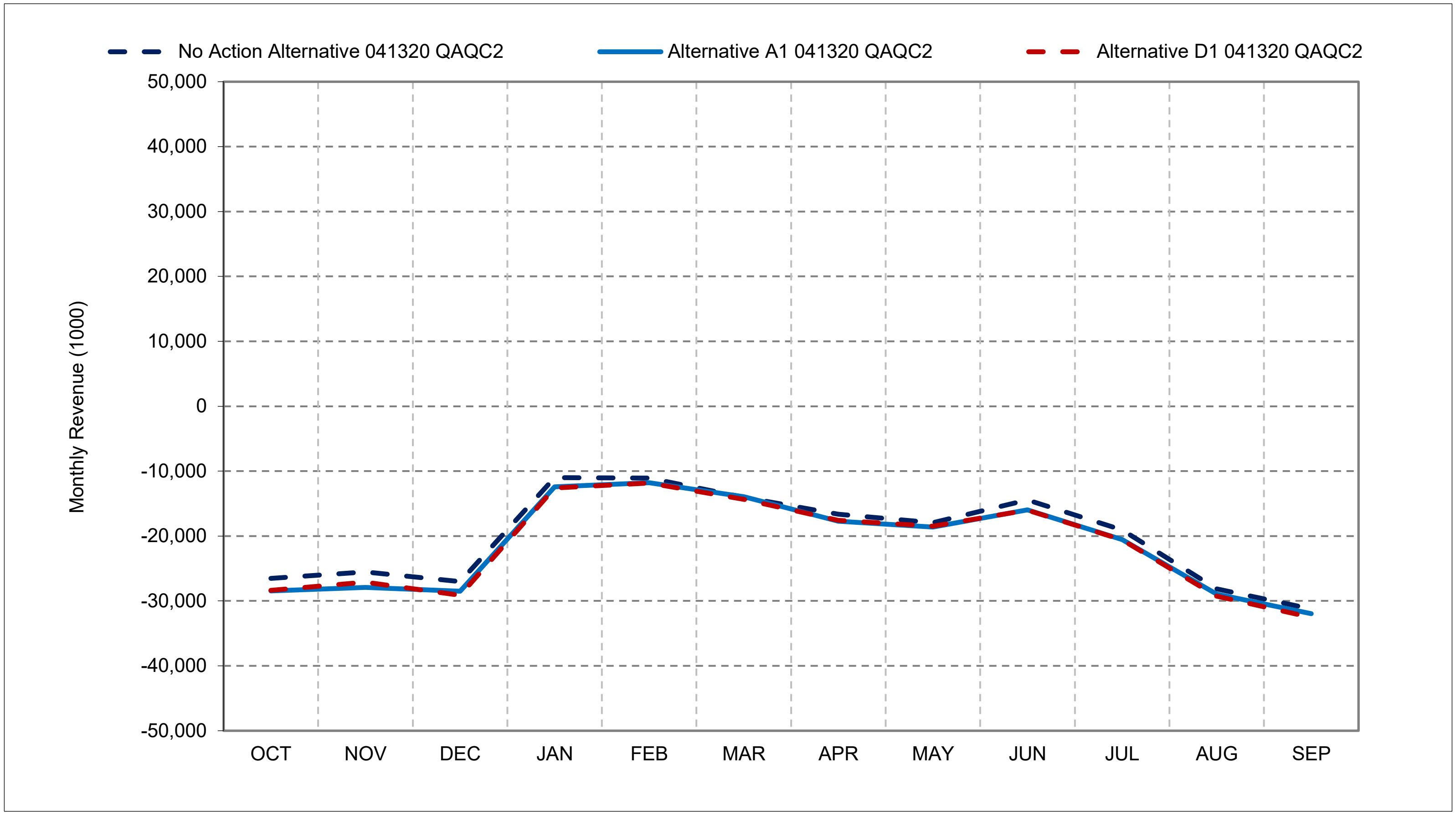
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-10-4. SWP Net Revenue, Below Normal Year Average Revenue



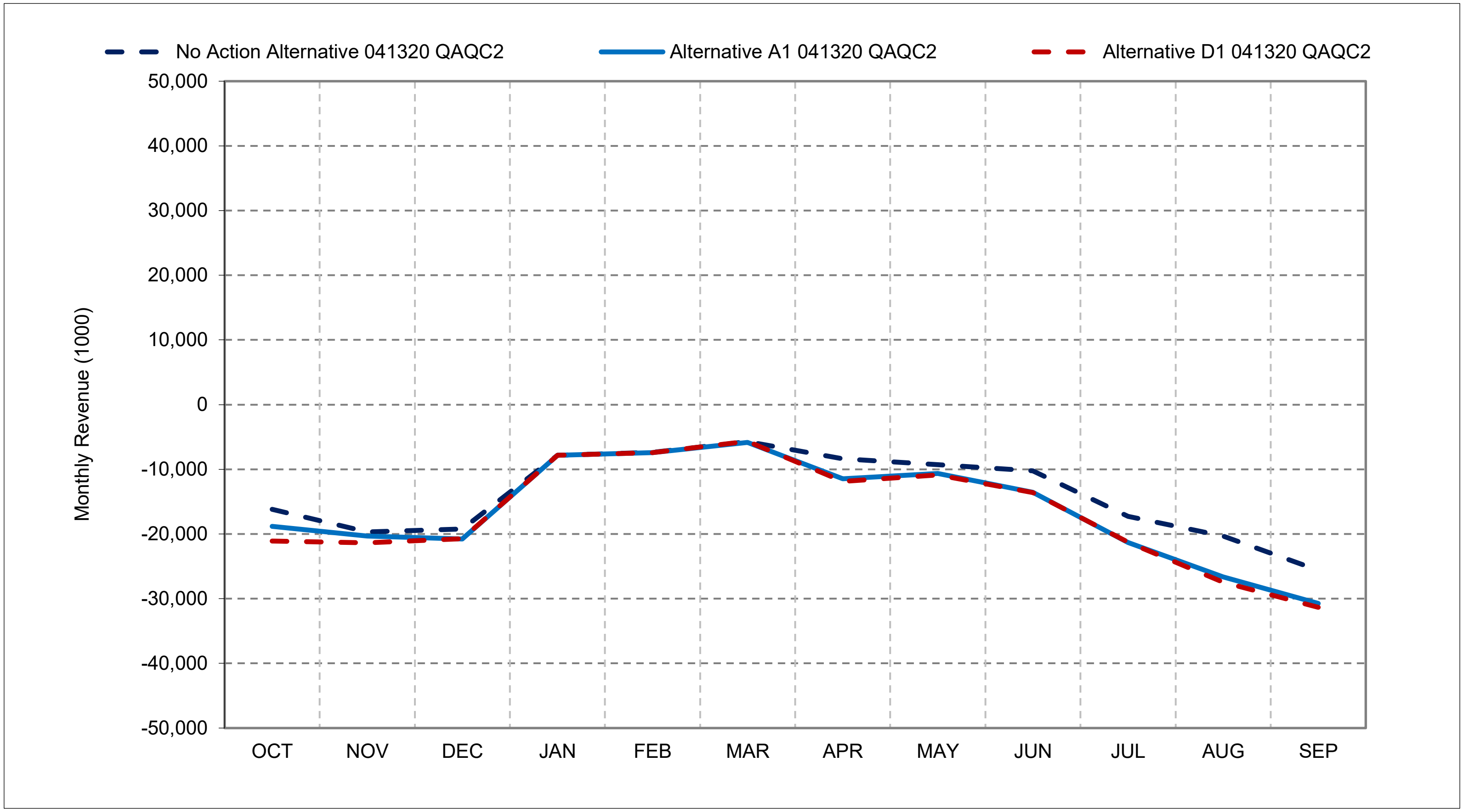
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-10-5. SWP Net Revenue, Dry Year Average Revenue



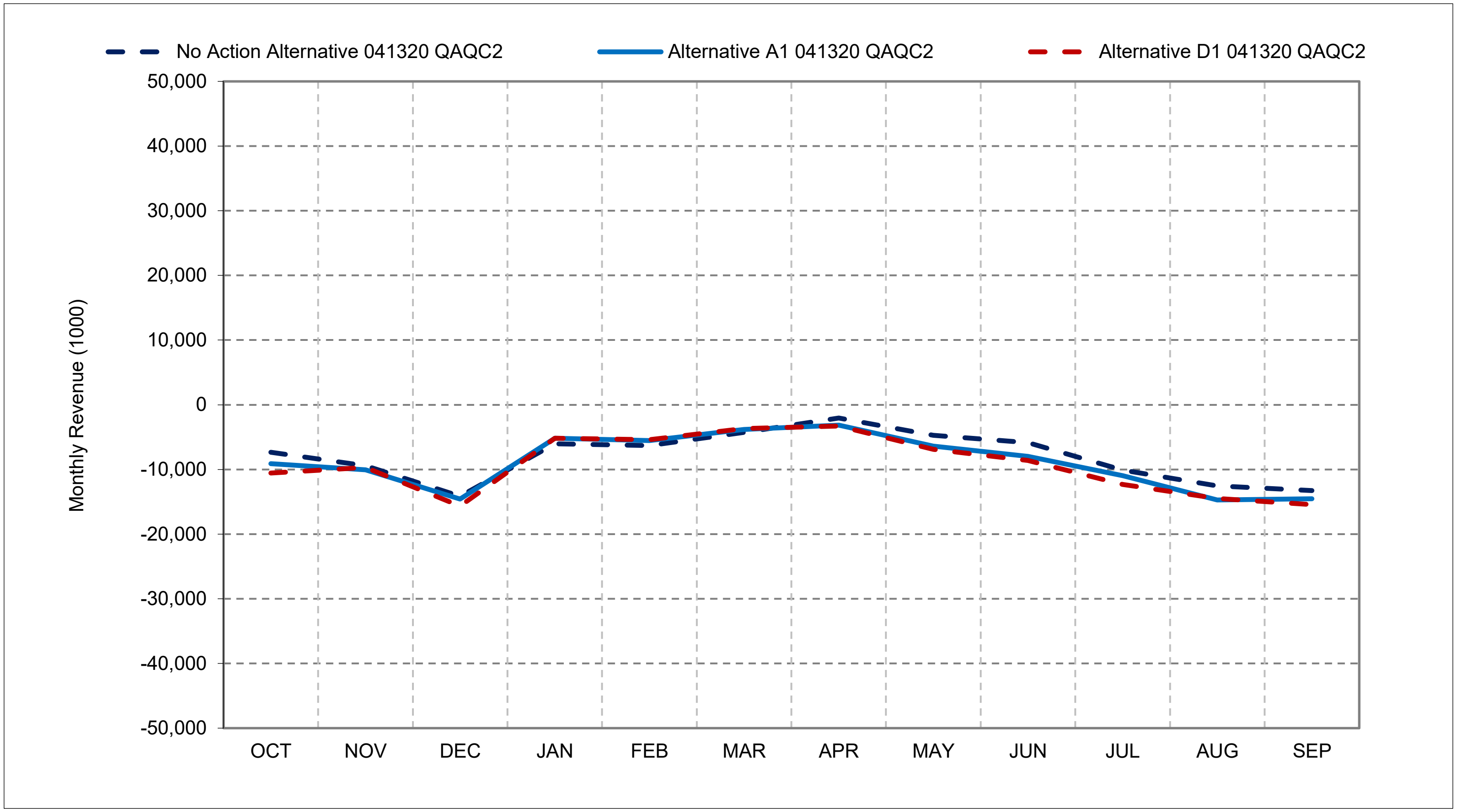
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-10-6. SWP Net Revenue, Critical Year Average Revenue



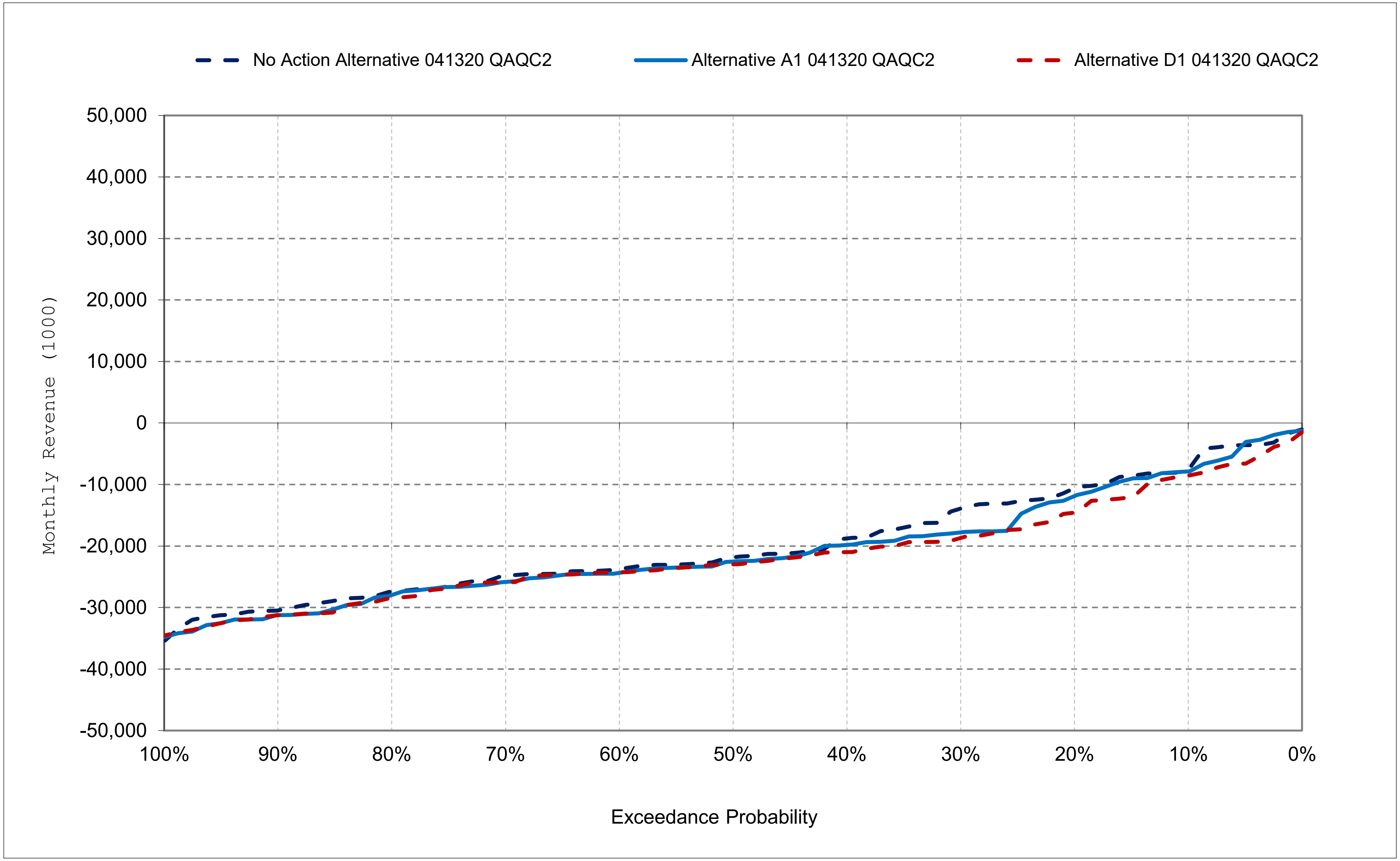
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

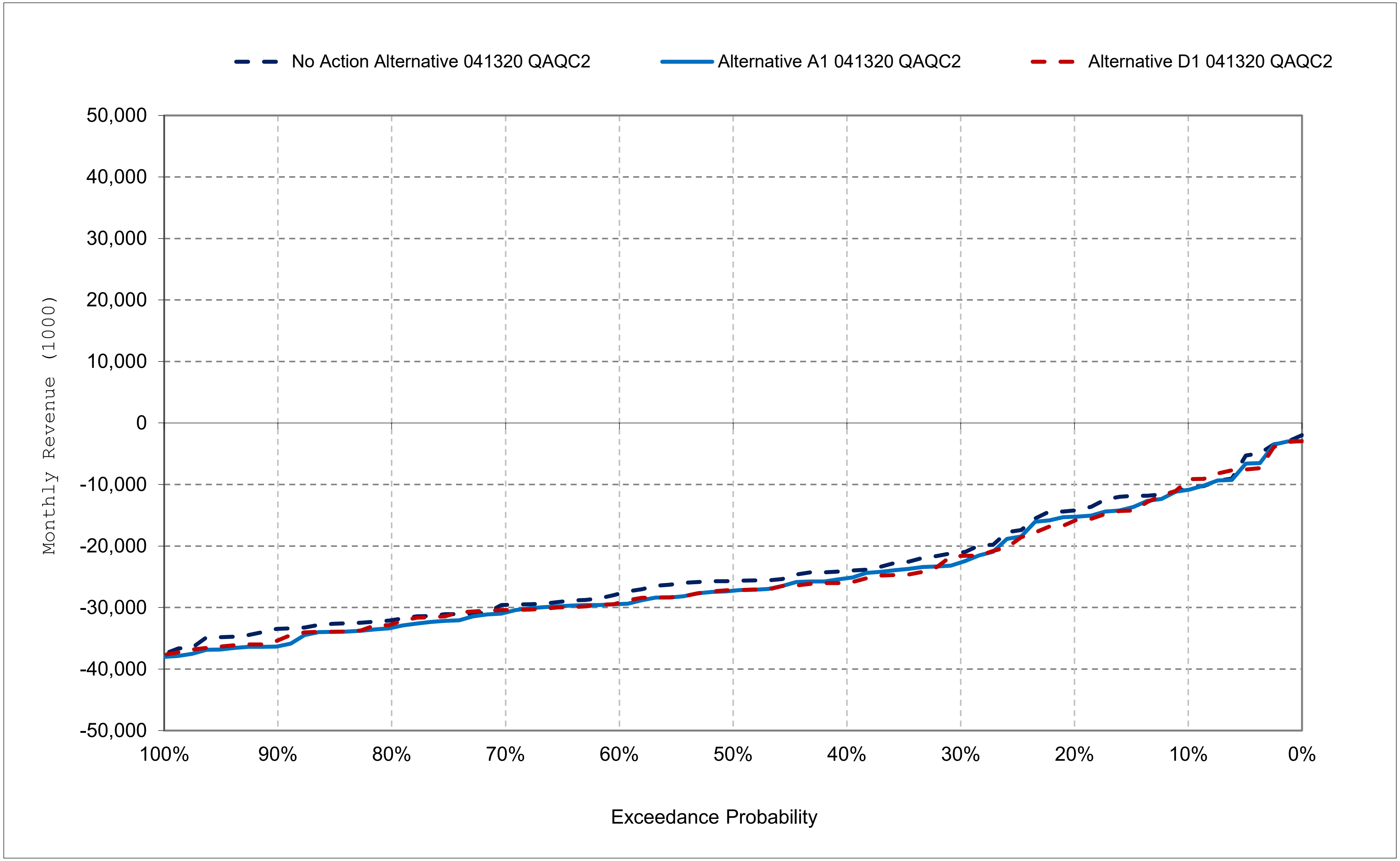
*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-10-7. SWP Net Revenue, October



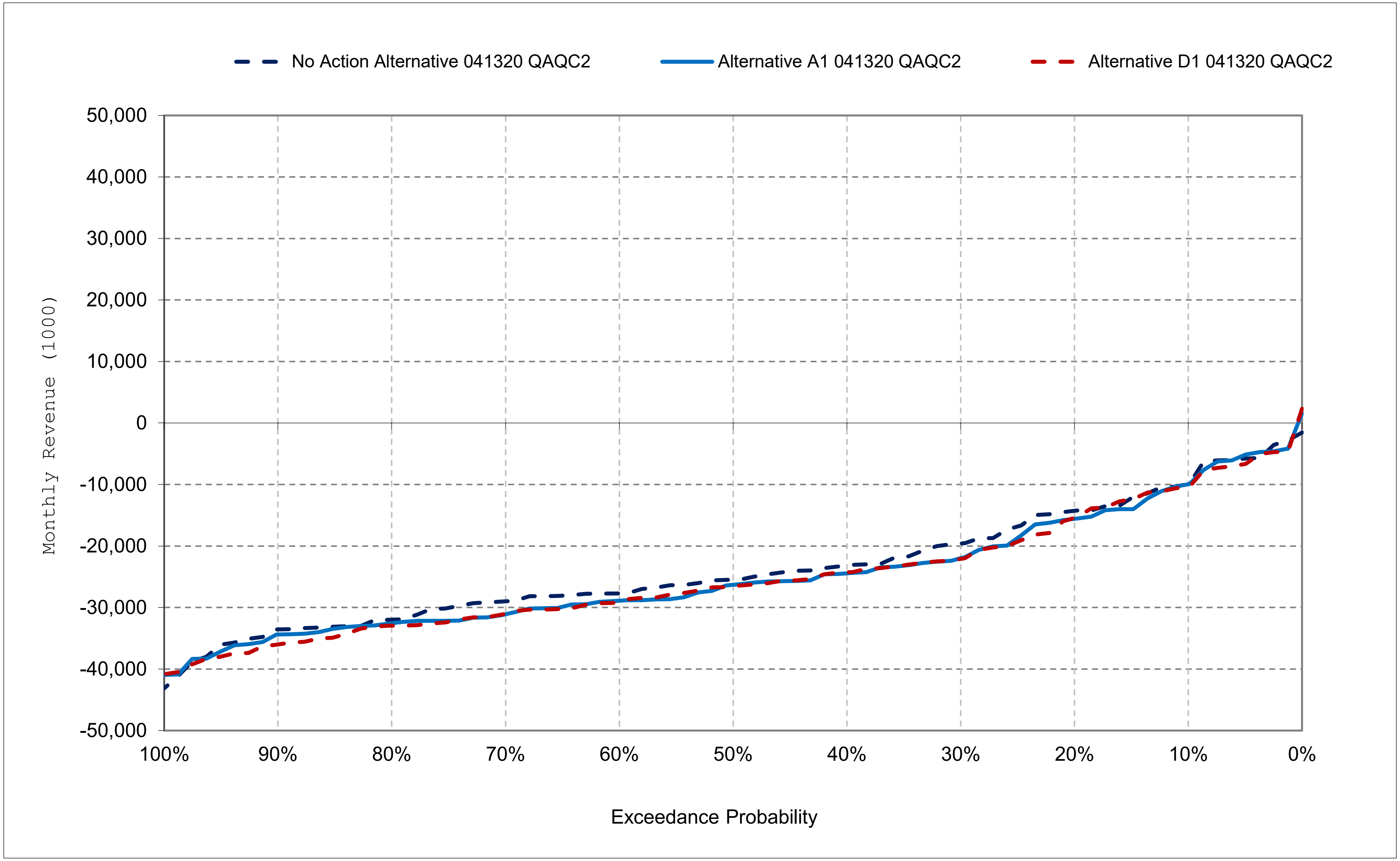
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-10-8. SWP Net Revenue, November



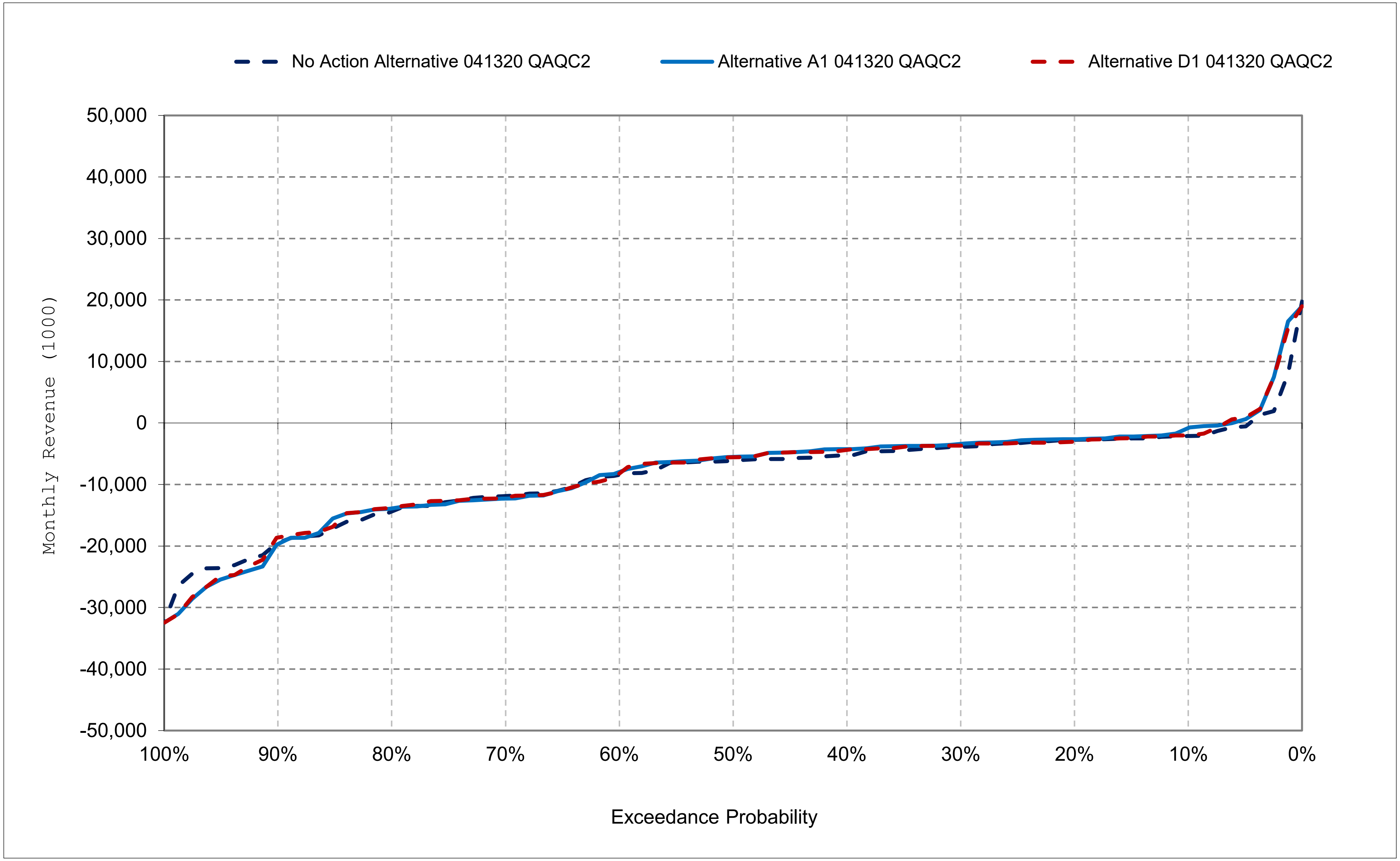
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-10-9. SWP Net Revenue, December



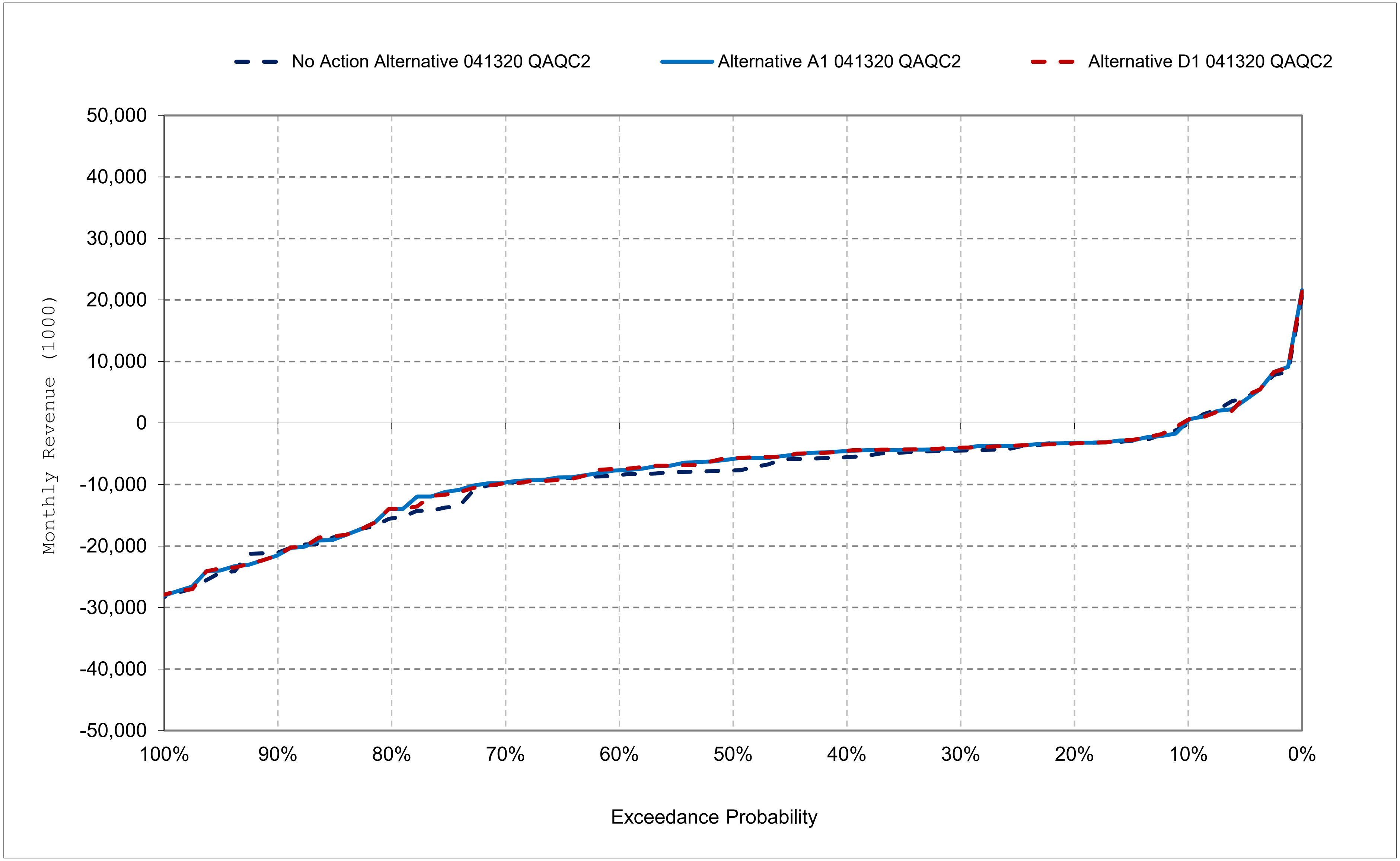
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-10-10. SWP Net Revenue, January



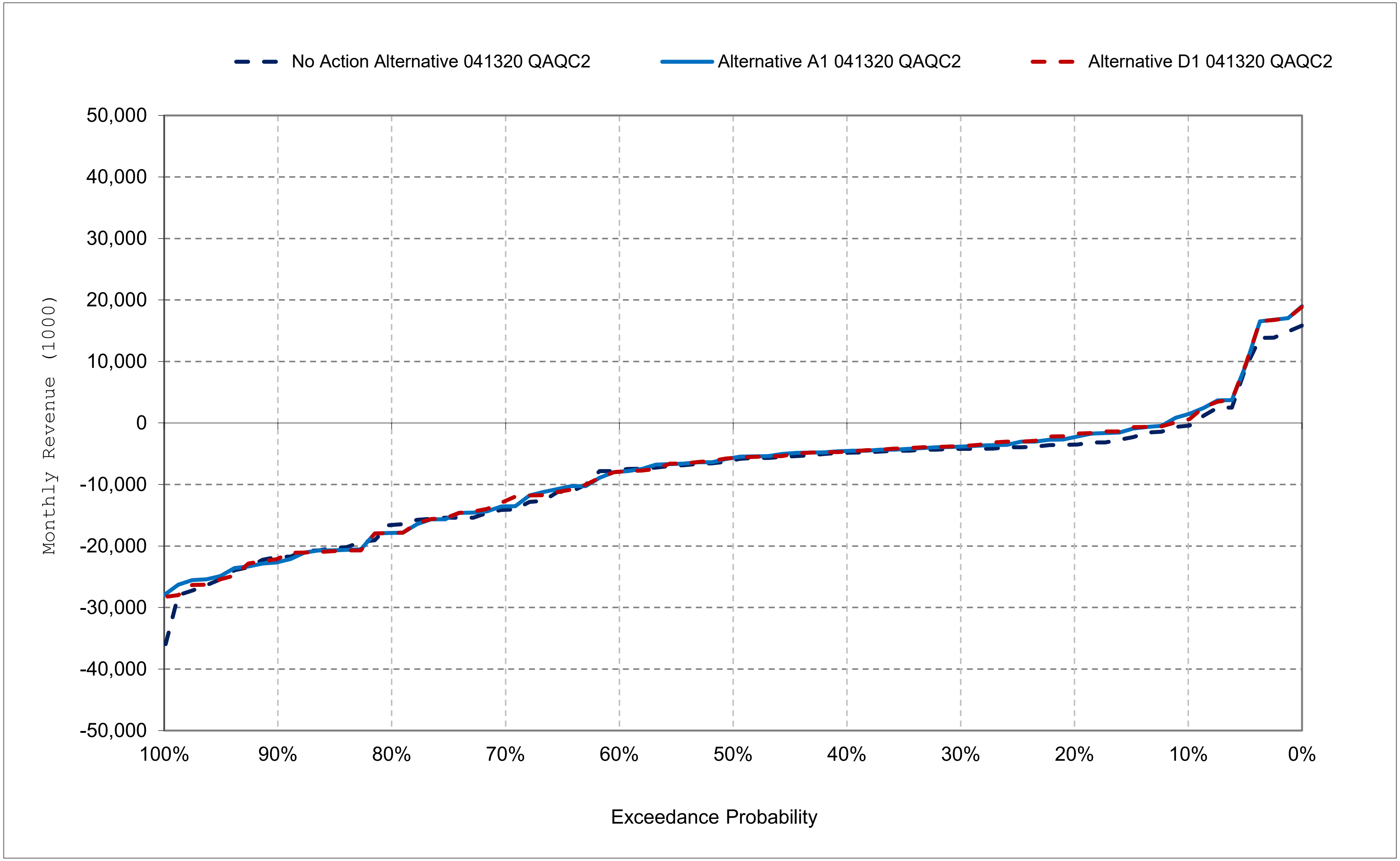
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-10-11. SWP Net Revenue, February



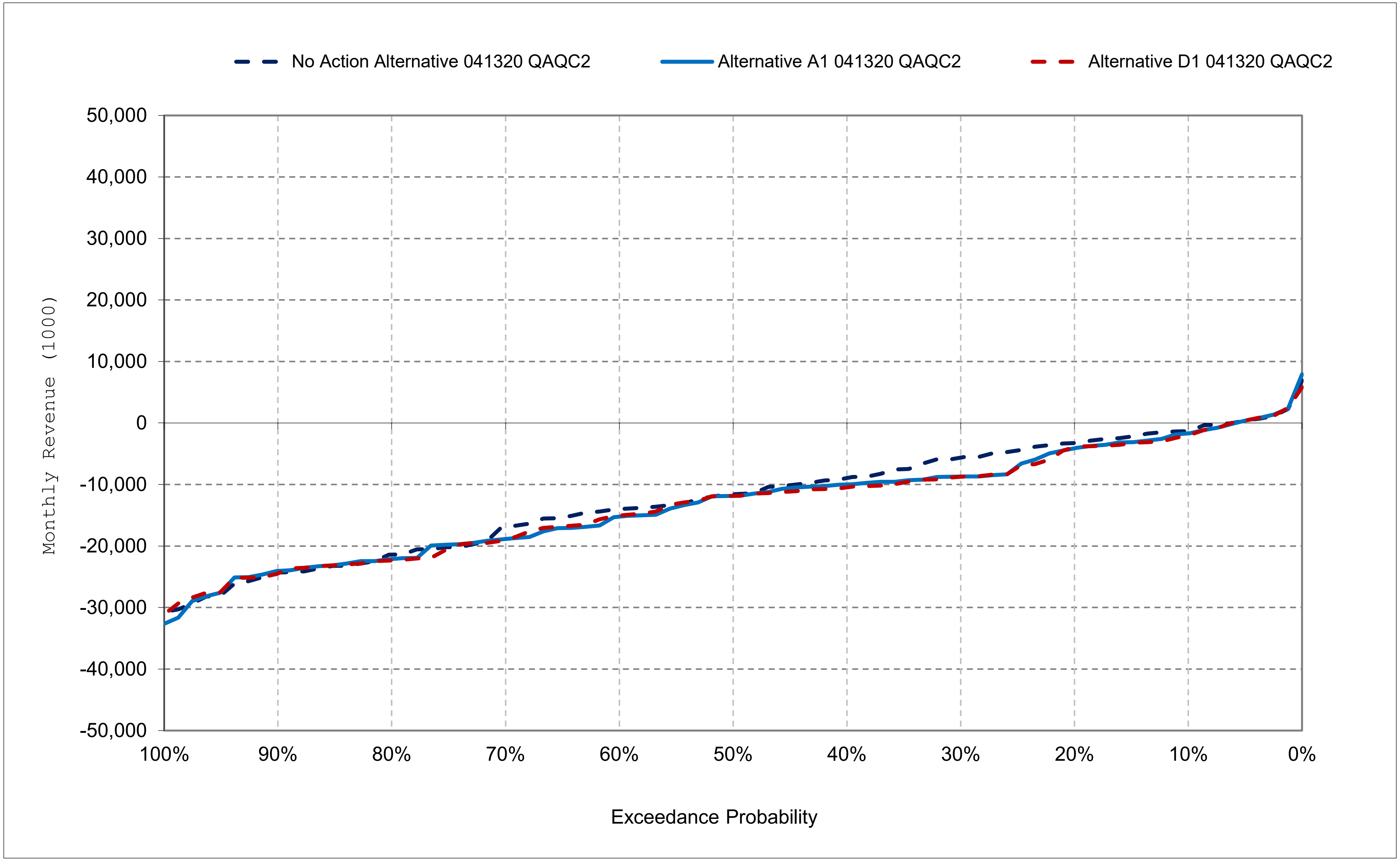
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-10-12. SWP Net Revenue, March



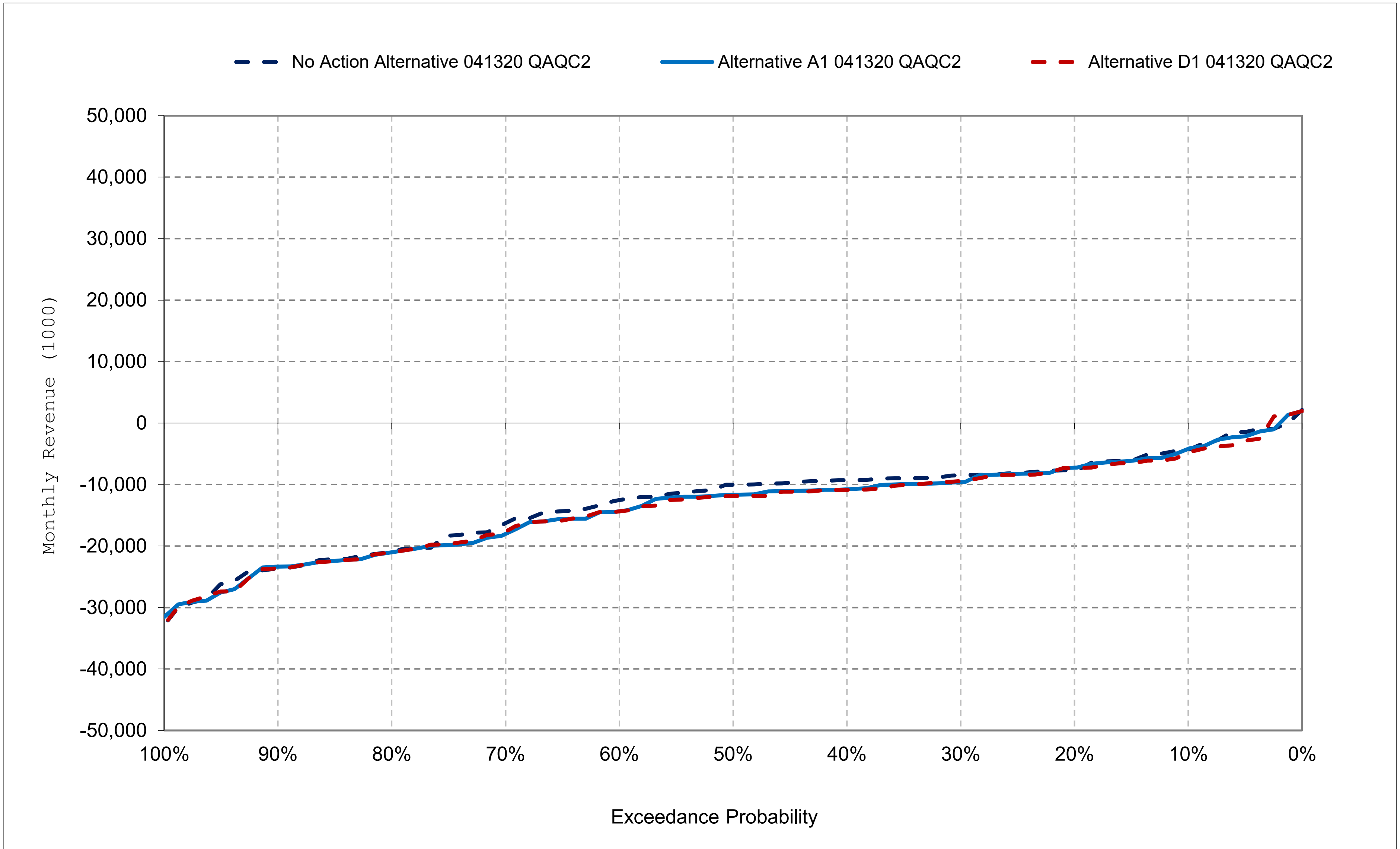
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-10-13. SWP Net Revenue, April



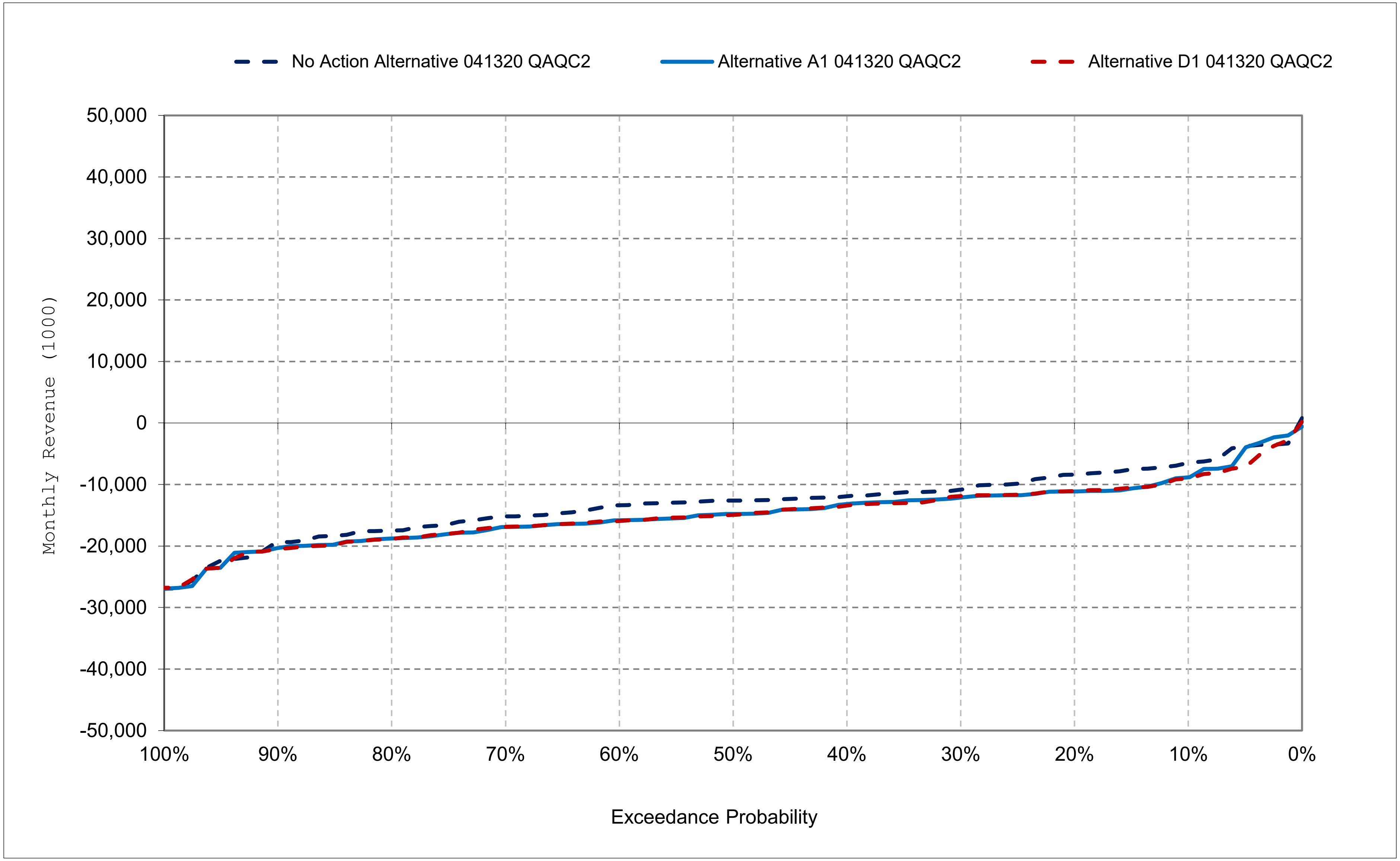
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-10-14. SWP Net Revenue, May



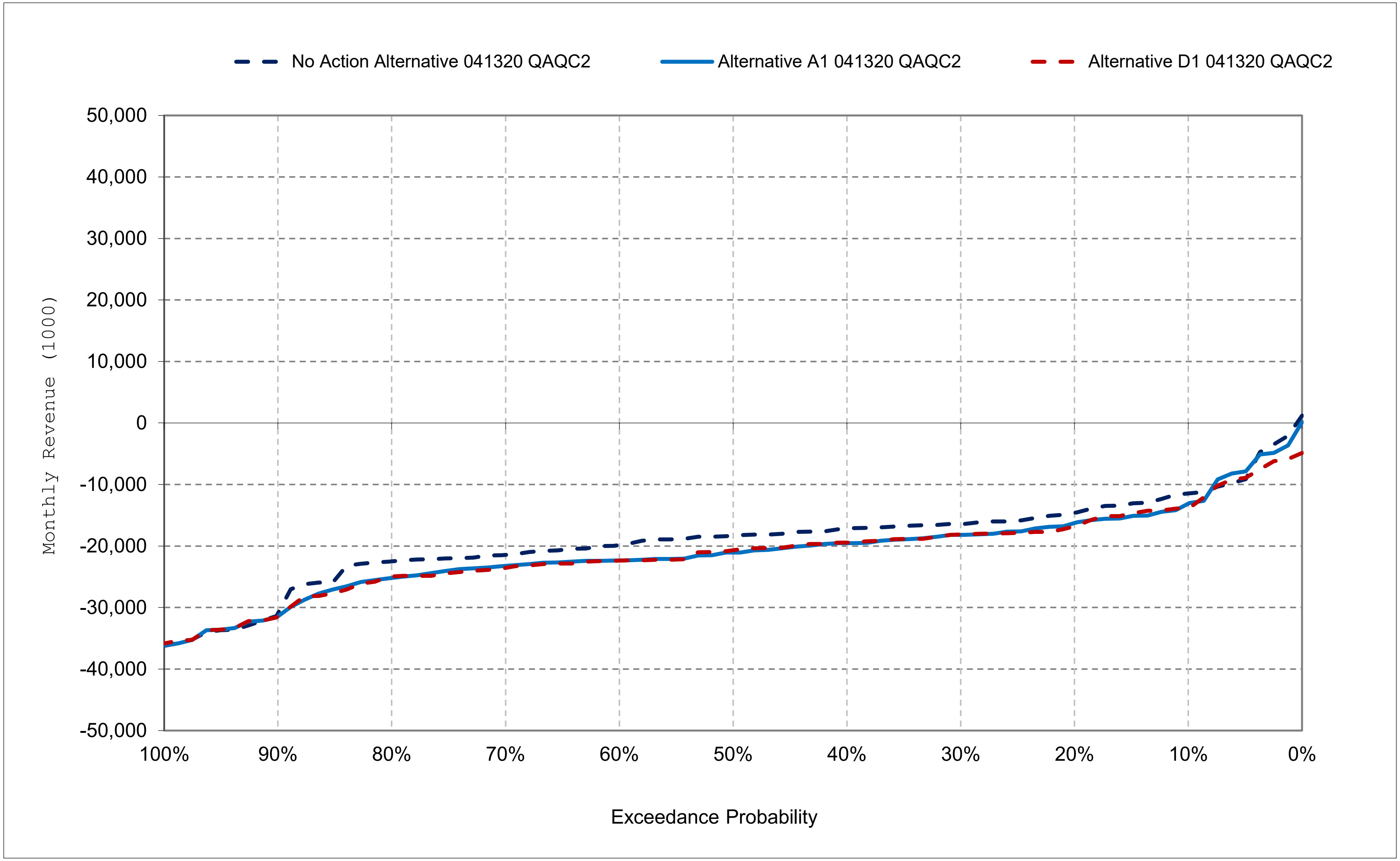
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-10-15. SWP Net Revenue, June



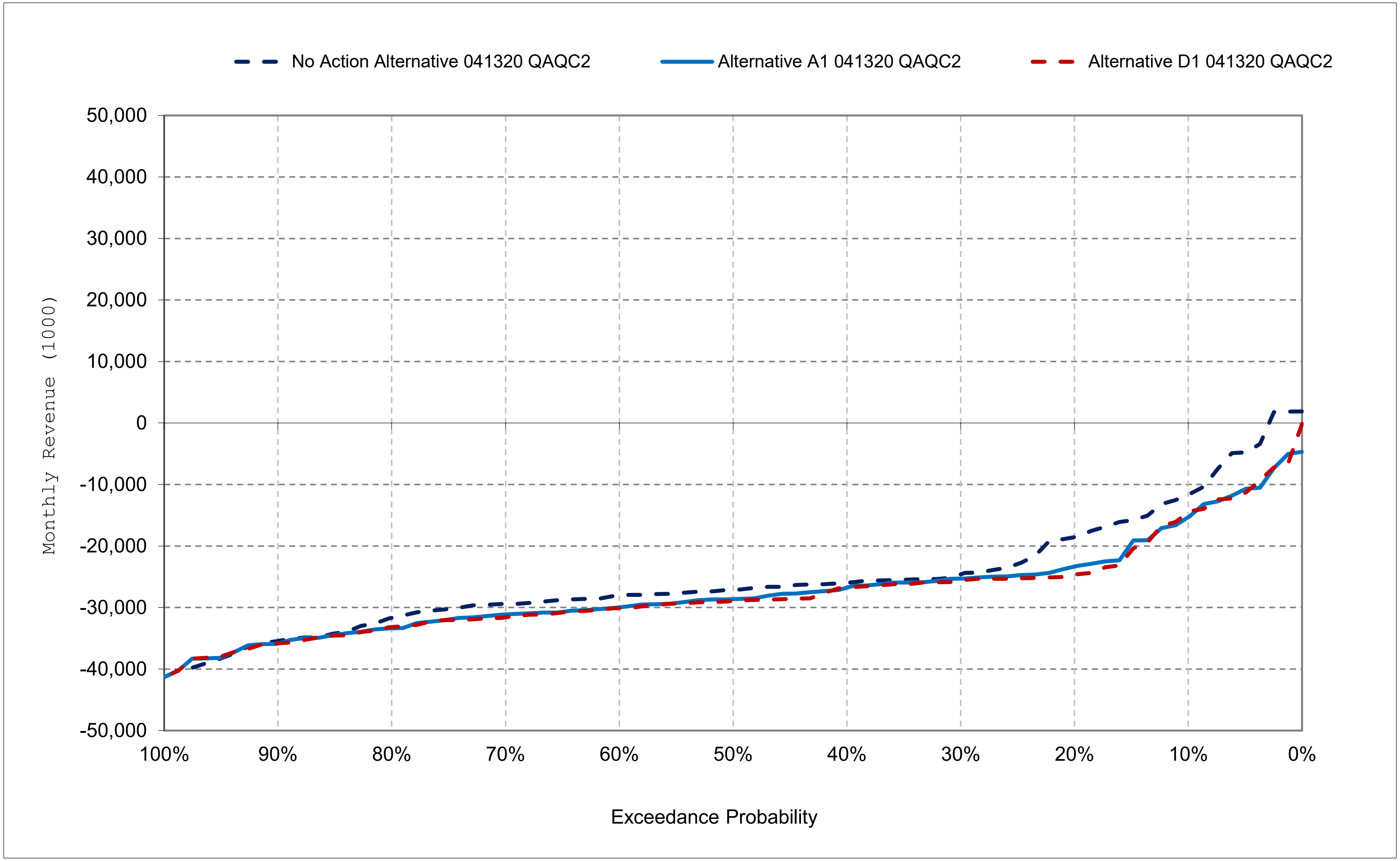
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-10-16. SWP Net Revenue, July



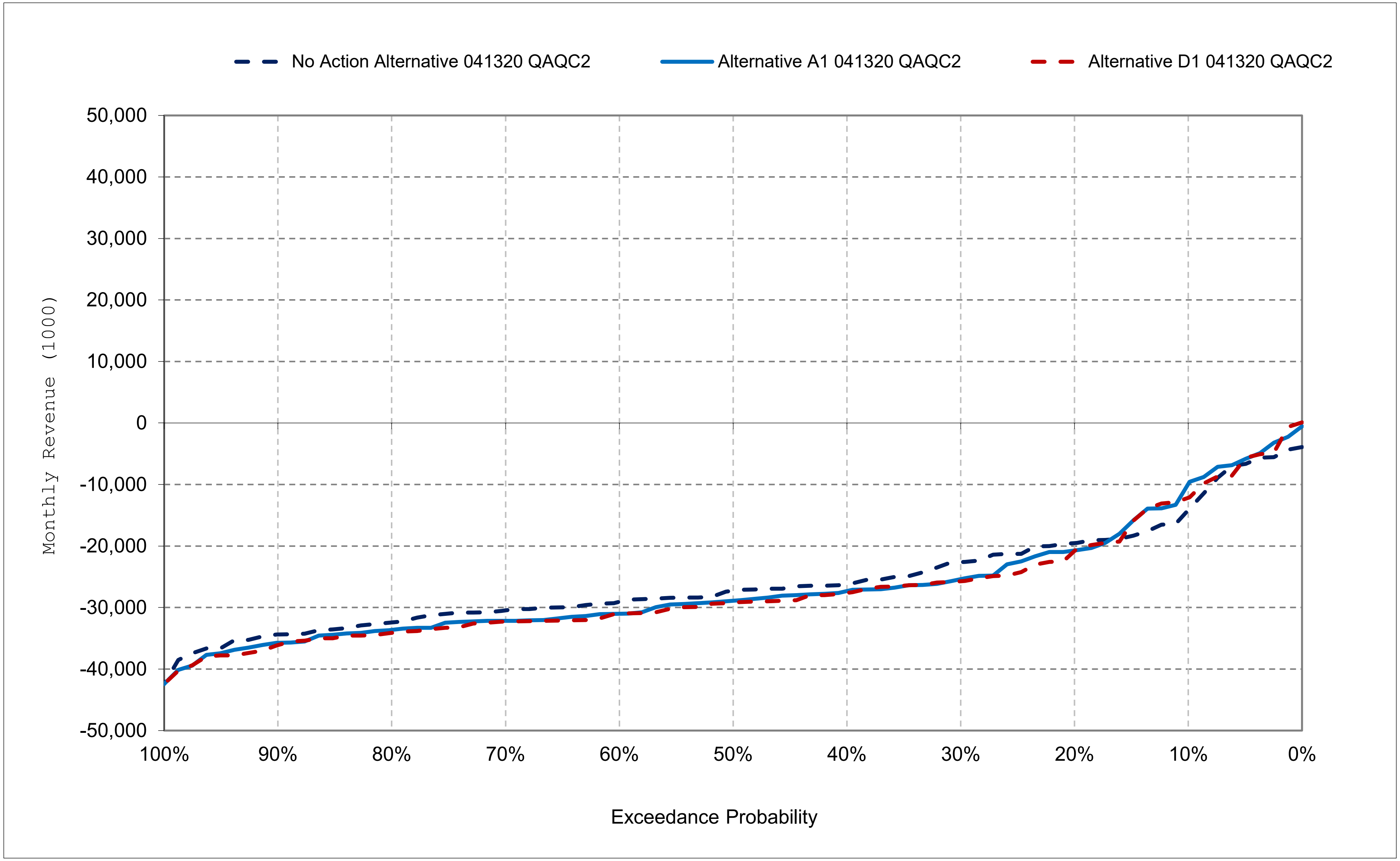
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-10-17. SWP Net Revenue, August



*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-10-18. SWP Net Revenue, September



*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Table G.2.1-11-1. CVP and SWP Net Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	35	-75	145	480	474	558	242	387	291	332	126	18
20%	-24	-152	-91	225	309	333	182	297	260	299	16	-71
30%	-118	-227	-169	81	97	108	89	261	215	258	-15	-103
40%	-159	-302	-271	10	20	30	73	213	179	206	-45	-133
50%	-211	-368	-338	-43	-39	-6	1	167	153	173	-62	-167
60%	-248	-391	-429	-81	-78	-35	-66	134	130	141	-94	-223
70%	-289	-470	-481	-109	-105	-101	-147	85	108	99	-123	-295
80%	-316	-510	-537	-144	-157	-194	-240	5	78	51	-147	-345
90%	-433	-557	-592	-237	-262	-290	-275	-107	-19	18	-166	-434
Long Term												
Full Simulation Period[a]	-189	-333	-285	39	47	71	-3	152	157	167	-49	-196
Water Year Types[b,c]												
Wet (32%)	-185	-415	-279	275	234	257	45	226	129	112	-93	-122
Above Normal (15%)	-204	-441	-418	21	144	109	-134	83	91	226	-53	-107
Below Normal (17%)	-367	-369	-333	-118	-64	-130	-136	7	132	184	-120	-378
Dry (22%)	-149	-265	-207	-103	-103	-11	22	179	219	175	7	-283
Critical (15%)	-32	-110	-225	-58	-99	-11	143	191	220	192	48	-101

Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	40	-94	106	470	461	562	248	389	240	268	40	53
20%	-88	-163	-98	198	341	330	148	296	179	231	7	-39
30%	-136	-231	-192	85	105	126	75	233	150	188	-27	-99
40%	-172	-354	-257	33	18	30	39	182	121	149	-62	-135
50%	-208	-403	-351	-35	-36	-2	-37	152	108	111	-105	-210
60%	-259	-426	-425	-64	-60	-25	-107	106	75	71	-130	-292
70%	-294	-477	-506	-100	-97	-102	-161	53	45	39	-159	-331
80%	-315	-522	-548	-156	-149	-151	-240	-39	4	17	-181	-398
90%	-420	-581	-598	-268	-279	-303	-298	-113	-43	-61	-205	-459
Long Term												
Full Simulation Period[a]	-201	-350	-291	40	51	80	-20	136	105	109	-90	-205
Water Year Types[b,c]												
Wet (32%)	-175	-430	-294	287	250	278	48	219	112	76	-96	-116
Above Normal (15%)	-193	-476	-419	26	148	132	-114	95	42	145	-80	-28
Below Normal (17%)	-388	-407	-350	-146	-67	-137	-160	-9	64	120	-147	-383
Dry (22%)	-195	-263	-199	-103	-110	-14	-41	149	122	80	-111	-369
Critical (15%)	-57	-117	-224	-46	-96	-10	122	148	173	177	13	-123

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	5	-19	-39	-10	-13	4	6	2	-51	-64	-86	35
20%	-65	-10	-7	-27	32	-3	-34	-1	-81	-69	-9	33
30%	-18	-4	-22	5	8	18	-14	-28	-66	-70	-12	3
40%	-13	-52	14	23	-2	1	-34	-32	-58	-56	-17	-2
50%	3	-35	-13	8	3	4	-39	-15	-45	-62	-43	-42
60%	-11	-35	4	16	19	10	-42	-28	-55	-71	-36	-69
70%	-5	-7	-25	9	8	-1	-13	-32	-62	-60	-35	-36
80%	1	-12	-11	-12	9	43	0	-44	-75	-34	-34	-53
90%	13	-24	-6	-31	-17	-13	-23	-6	-23	-79	-39	-25
Long Term												
Full Simulation Period[a]	-13	-17	-6	1	4	9	-17	-16	-52	-58	-41	-10
Water Year Types[b,c]												
Wet (32%)	10	-15	-15	12	16	21	4	-7	-17	-36	-2	6
Above Normal (15%)	11	-35	-1	5	5	23	20	11	-49	-81	-27	79
Below Normal (17%)	-21	-38	-16	-28	-4	-6	-25	-16	-68	-64	-28	-5
Dry (22%)	-46	2	8	0	-7	-2	-63	-30	-97	-95	-119	-86
Critical (15%)	-25	-7	1	11	3	1	-21	-43	-47	-15	-35	-21

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-11-2. CVP and SWP Net Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	35	-75	145	480	474	558	242	387	291	332	126	18
20%	-24	-152	-91	225	309	333	182	297	260	299	16	-71
30%	-118	-227	-169	81	97	108	89	261	215	258	-15	-103
40%	-159	-302	-271	10	20	30	73	213	179	206	-45	-133
50%	-211	-368	-338	-43	-39	-6	1	167	153	173	-62	-167
60%	-248	-391	-429	-81	-78	-35	-66	134	130	141	-94	-223
70%	-289	-470	-481	-109	-105	-101	-147	85	108	99	-123	-295
80%	-316	-510	-537	-144	-157	-194	-240	5	78	51	-147	-345
90%	-433	-557	-592	-237	-262	-290	-275	-107	-19	18	-166	-434
Long Term												
Full Simulation Period[a]	-189	-333	-285	39	47	71	-3	152	157	167	-49	-196
Water Year Types[b,c]												
Wet (32%)	-185	-415	-279	275	234	257	45	226	129	112	-93	-122
Above Normal (15%)	-204	-441	-418	21	144	109	-134	83	91	226	-53	-107
Below Normal (17%)	-367	-369	-333	-118	-64	-130	-136	7	132	184	-120	-378
Dry (22%)	-149	-265	-207	-103	-103	-11	22	179	219	175	7	-283
Critical (15%)	-32	-110	-225	-58	-99	-11	143	191	220	192	48	-101

Alternative D1 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	31	-80	100	469	459	558	248	388	246	275	36	43
20%	-124	-178	-101	198	340	333	135	305	180	218	-14	-43
30%	-151	-230	-168	88	94	134	75	223	146	185	-46	-92
40%	-171	-343	-229	20	14	30	35	172	117	148	-81	-139
50%	-219	-398	-358	-52	-41	-5	-38	132	101	109	-115	-213
60%	-260	-422	-435	-61	-64	-27	-105	100	72	81	-144	-292
70%	-285	-474	-503	-101	-97	-88	-161	54	43	34	-165	-338
80%	-320	-515	-557	-160	-157	-149	-243	-37	3	1	-190	-404
90%	-437	-578	-625	-271	-279	-308	-288	-113	-41	-73	-223	-472
Long Term												
Full Simulation Period[a]	-212	-345	-291	39	51	80	-20	133	103	106	-100	-212
Water Year Types[b,c]												
Wet (32%)	-174	-427	-290	285	249	276	49	216	112	77	-96	-121
Above Normal (15%)	-193	-468	-411	30	151	134	-106	93	46	141	-101	-27
Below Normal (17%)	-379	-378	-362	-150	-72	-144	-156	-6	63	121	-160	-389
Dry (22%)	-241	-280	-192	-107	-109	-5	-48	146	122	80	-135	-380
Critical (15%)	-78	-104	-241	-47	-96	-12	118	138	159	155	17	-133

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-4	-5	-45	-11	-15	0	5	2	-45	-57	-90	25
20%	-101	-26	-10	-27	31	0	-47	8	-79	-82	-29	28
30%	-32	-4	1	7	-3	26	-14	-37	-70	-73	-32	11
40%	-12	-41	42	10	-5	1	-38	-41	-62	-58	-36	-6
50%	-8	-30	-20	-9	-1	1	-39	-35	-52	-64	-53	-45
60%	-12	-30	-7	20	14	8	-40	-34	-58	-60	-50	-69
70%	4	-4	-22	7	8	12	-14	-31	-64	-65	-42	-43
80%	-4	-5	-20	-17	0	45	-2	-42	-75	-50	-43	-59
90%	-4	-20	-33	-33	-17	-18	-13	-6	-22	-91	-57	-38
Long Term												
Full Simulation Period[a]	-24	-12	-6	0	3	9	-17	-19	-54	-61	-51	-16
Water Year Types[b,c]												
Wet (32%)	11	-12	-11	10	15	19	4	-10	-17	-34	-3	1
Above Normal (15%)	12	-27	7	8	7	25	28	10	-45	-85	-48	80
Below Normal (17%)	-13	-10	-28	-32	-9	-14	-20	-13	-69	-63	-41	-12
Dry (22%)	-92	-15	15	-4	-7	7	-71	-33	-97	-96	-142	-97
Critical (15%)	-46	6	-16	11	2	-1	-25	-53	-62	-37	-31	-31

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-11-3. CVP and SWP Net Generation, Monthly Generation

Alternative A1 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	40	-94	106	470	461	562	248	389	240	268	40	53
20%	-88	-163	-98	198	341	330	148	296	179	231	7	-39
30%	-136	-231	-192	85	105	126	75	233	150	188	-27	-99
40%	-172	-354	-257	33	18	30	39	182	121	149	-62	-135
50%	-208	-403	-351	-35	-36	-2	-37	152	108	111	-105	-210
60%	-259	-426	-425	-64	-60	-25	-107	106	75	71	-130	-292
70%	-294	-477	-506	-100	-97	-102	-161	53	45	39	-159	-331
80%	-315	-522	-548	-156	-149	-151	-240	-39	4	17	-181	-398
90%	-420	-581	-598	-268	-279	-303	-298	-113	-43	-61	-205	-459
Long Term												
Full Simulation Period[a]	-201	-350	-291	40	51	80	-20	136	105	109	-90	-205
Water Year Types[b,c]												
Wet (32%)	-175	-430	-294	287	250	278	48	219	112	76	-96	-116
Above Normal (15%)	-193	-476	-419	26	148	132	-114	95	42	145	-80	-28
Below Normal (17%)	-388	-407	-350	-146	-67	-137	-160	-9	64	120	-147	-383
Dry (22%)	-195	-263	-199	-103	-110	-14	-41	149	122	80	-111	-369
Critical (15%)	-57	-117	-224	-46	-96	-10	122	148	173	177	13	-123

Alternative D1 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	31	-80	100	469	459	558	248	388	246	275	36	43
20%	-124	-178	-101	198	340	333	135	305	180	218	-14	-43
30%	-151	-230	-168	88	94	134	75	223	146	185	-46	-92
40%	-171	-343	-229	20	14	30	35	172	117	148	-81	-139
50%	-219	-398	-358	-52	-41	-5	-38	132	101	109	-115	-213
60%	-260	-422	-435	-61	-64	-27	-105	100	72	81	-144	-292
70%	-285	-474	-503	-101	-97	-88	-161	54	43	34	-165	-338
80%	-320	-515	-557	-160	-157	-149	-243	-37	3	1	-190	-404
90%	-437	-578	-625	-271	-279	-308	-288	-113	-41	-73	-223	-472
Long Term												
Full Simulation Period[a]	-212	-345	-291	39	51	80	-20	133	103	106	-100	-212
Water Year Types[b,c]												
Wet (32%)	-174	-427	-290	285	249	276	49	216	112	77	-96	-121
Above Normal (15%)	-193	-468	-411	30	151	134	-106	93	46	141	-101	-27
Below Normal (17%)	-379	-378	-362	-150	-72	-144	-156	-6	63	121	-160	-389
Dry (22%)	-241	-280	-192	-107	-109	-5	-48	146	122	80	-135	-380
Critical (15%)	-78	-104	-241	-47	-96	-12	118	138	159	155	17	-133

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-9	14	-6	0	-2	-4	0	0	6	7	-3	-10
20%	-36	-16	-3	0	0	4	-13	9	2	-13	-20	-5
30%	-14	0	24	3	-11	8	0	-10	-4	-3	-20	7
40%	1	11	28	-13	-3	0	-4	-9	-4	-1	-19	-4
50%	-11	4	-7	-17	-4	-3	0	-20	-7	-2	-10	-3
60%	-2	4	-10	3	-4	-2	2	-6	-3	11	-14	0
70%	8	3	4	-1	0	13	-1	1	-2	-5	-6	-7
80%	-5	7	-9	-4	-9	2	-2	2	-1	-17	-8	-6
90%	-17	4	-27	-3	0	-5	10	0	1	-11	-18	-12
Long Term												
Full Simulation Period[a]	-11	5	0	-2	-1	0	0	-3	-2	-3	-10	-6
Water Year Types[b,c]												
Wet (32%)	1	3	4	-2	-1	-2	1	-3	0	2	0	-5
Above Normal (15%)	0	8	8	4	3	2	8	-1	4	-4	-21	1
Below Normal (17%)	8	28	-12	-4	-5	-7	4	3	-1	1	-13	-6
Dry (22%)	-46	-17	7	-3	0	9	-7	-4	0	0	-24	-11
Critical (15%)	-21	13	-17	-1	0	-2	-5	-10	-15	-22	4	-10

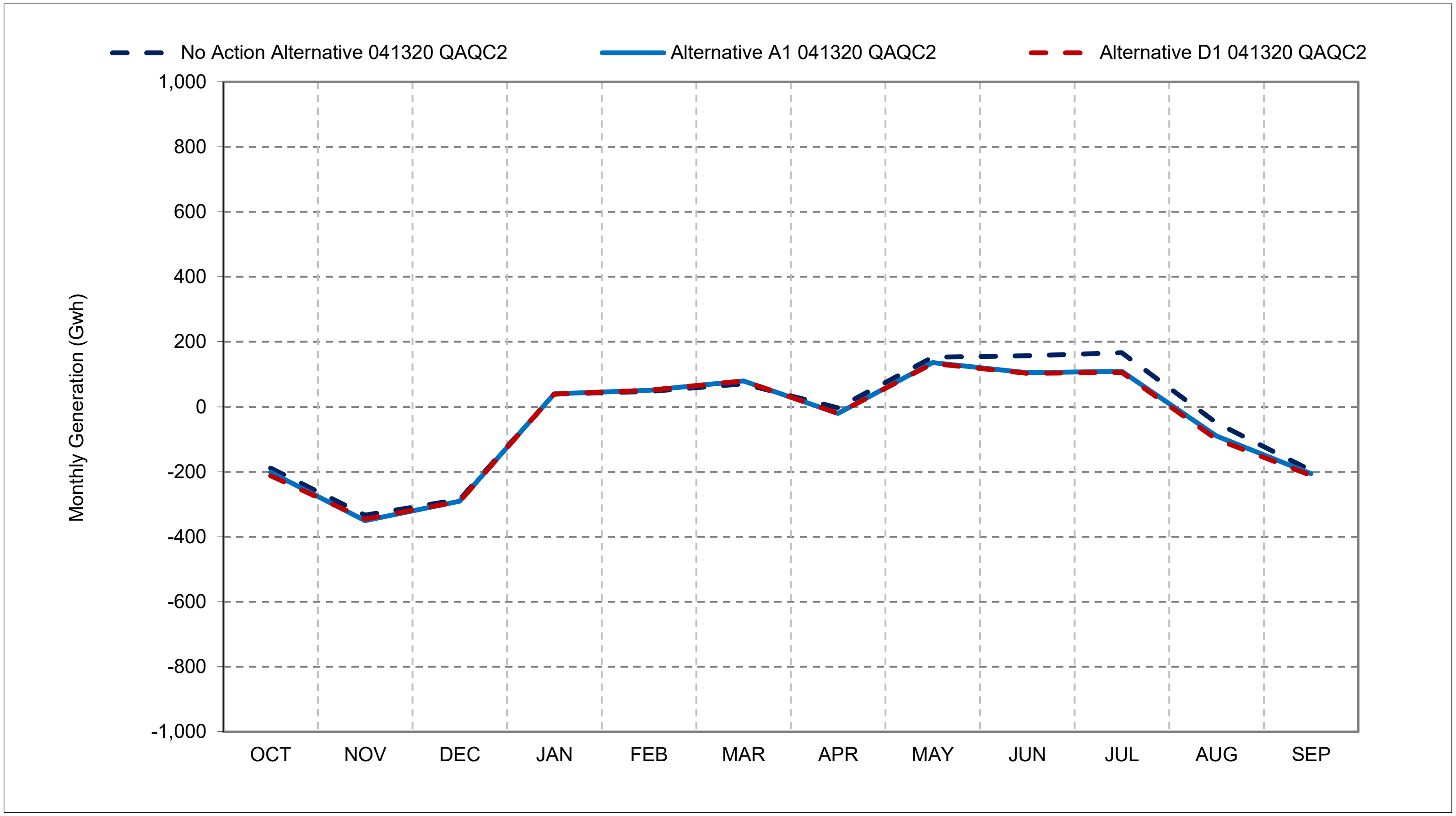
a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-1. CVP and SWP Net Generation, Long-Term Average Generation

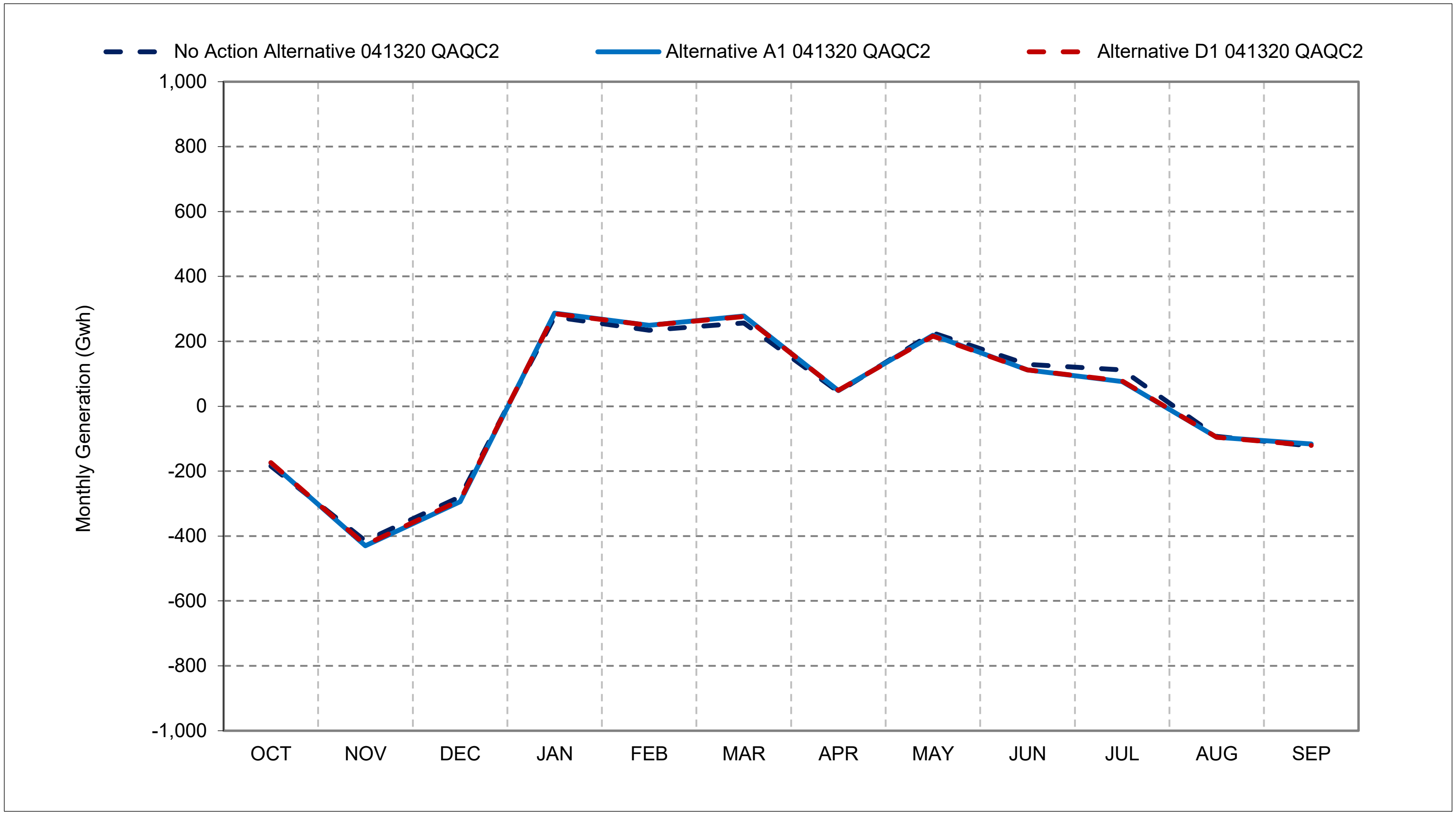


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-2. CVP and SWP Net Generation, Wet Year Average Generation

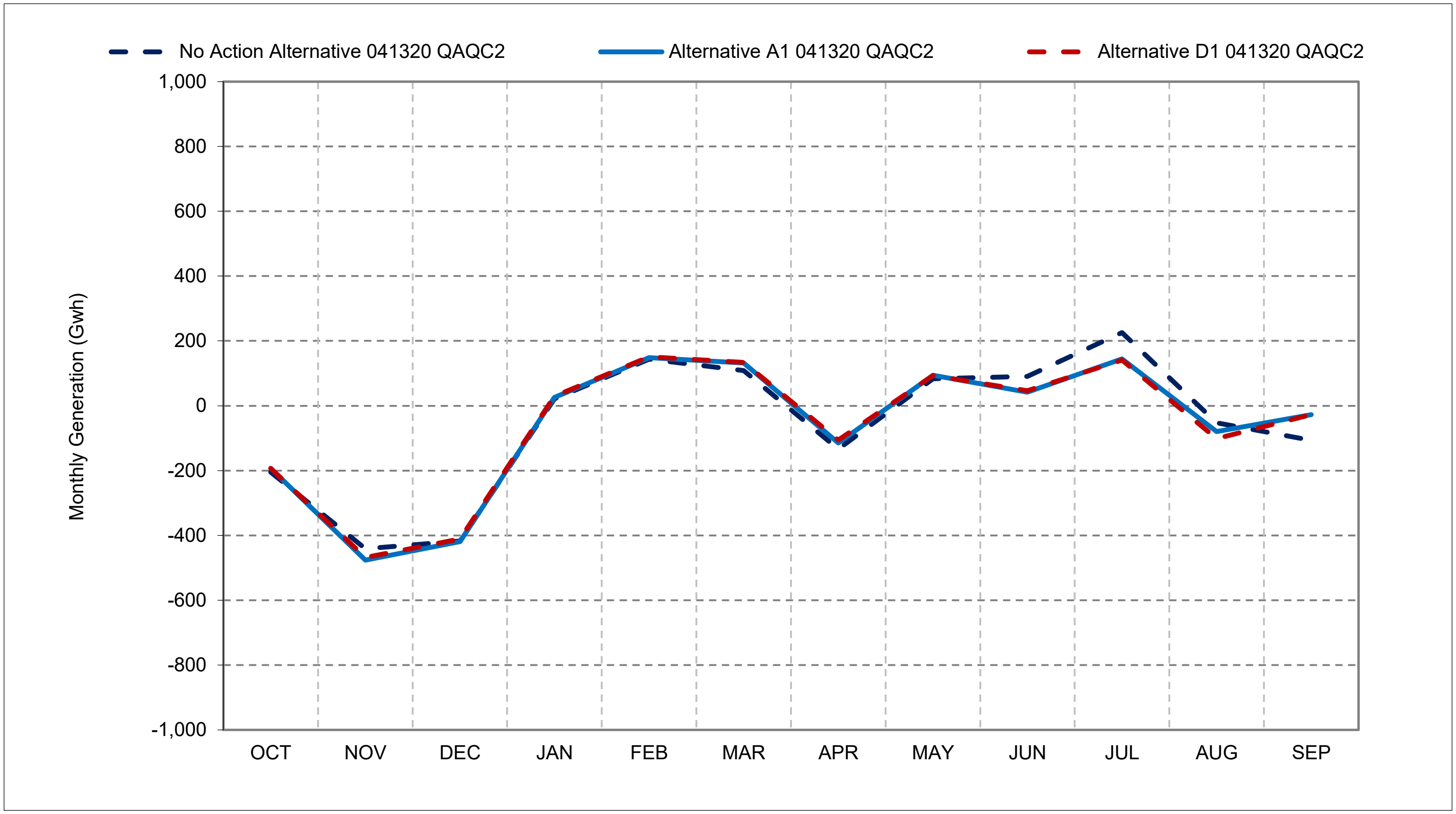


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-3. CVP and SWP Net Generation, Above Normal Year Average Generation

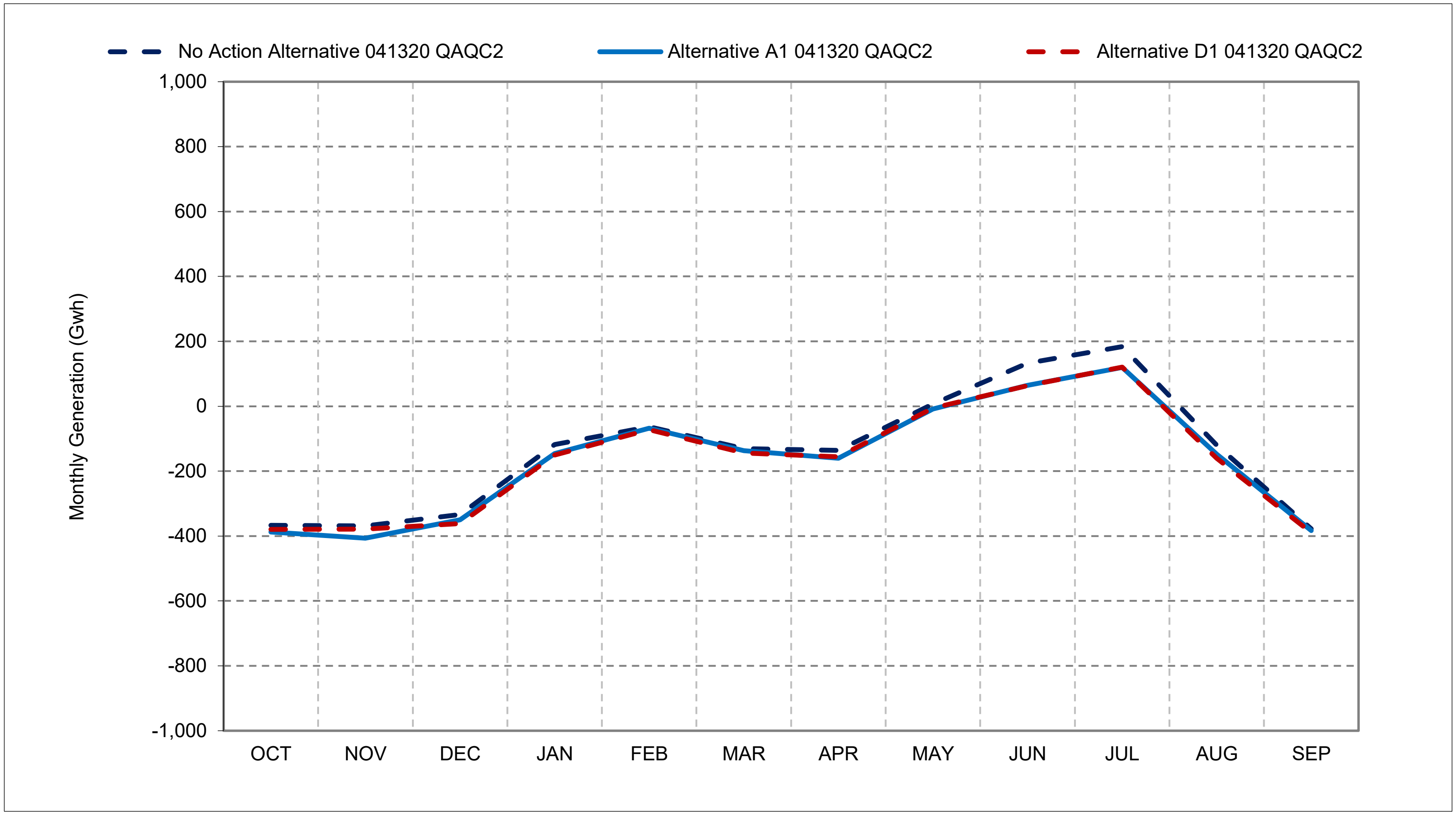


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-4. CVP and SWP Net Generation, Below Normal Year Average Generation

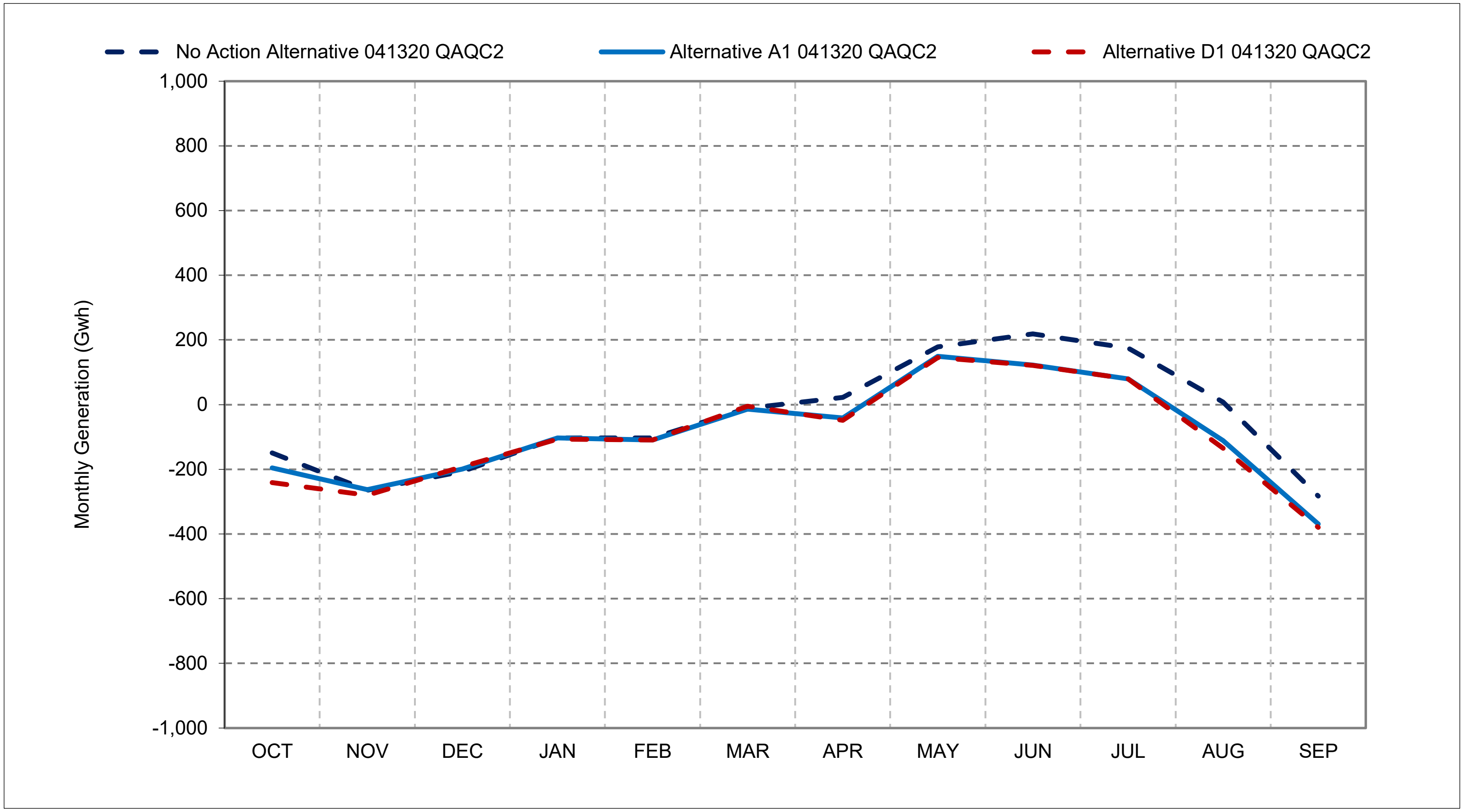


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-5. CVP and SWP Net Generation, Dry Year Average Generation

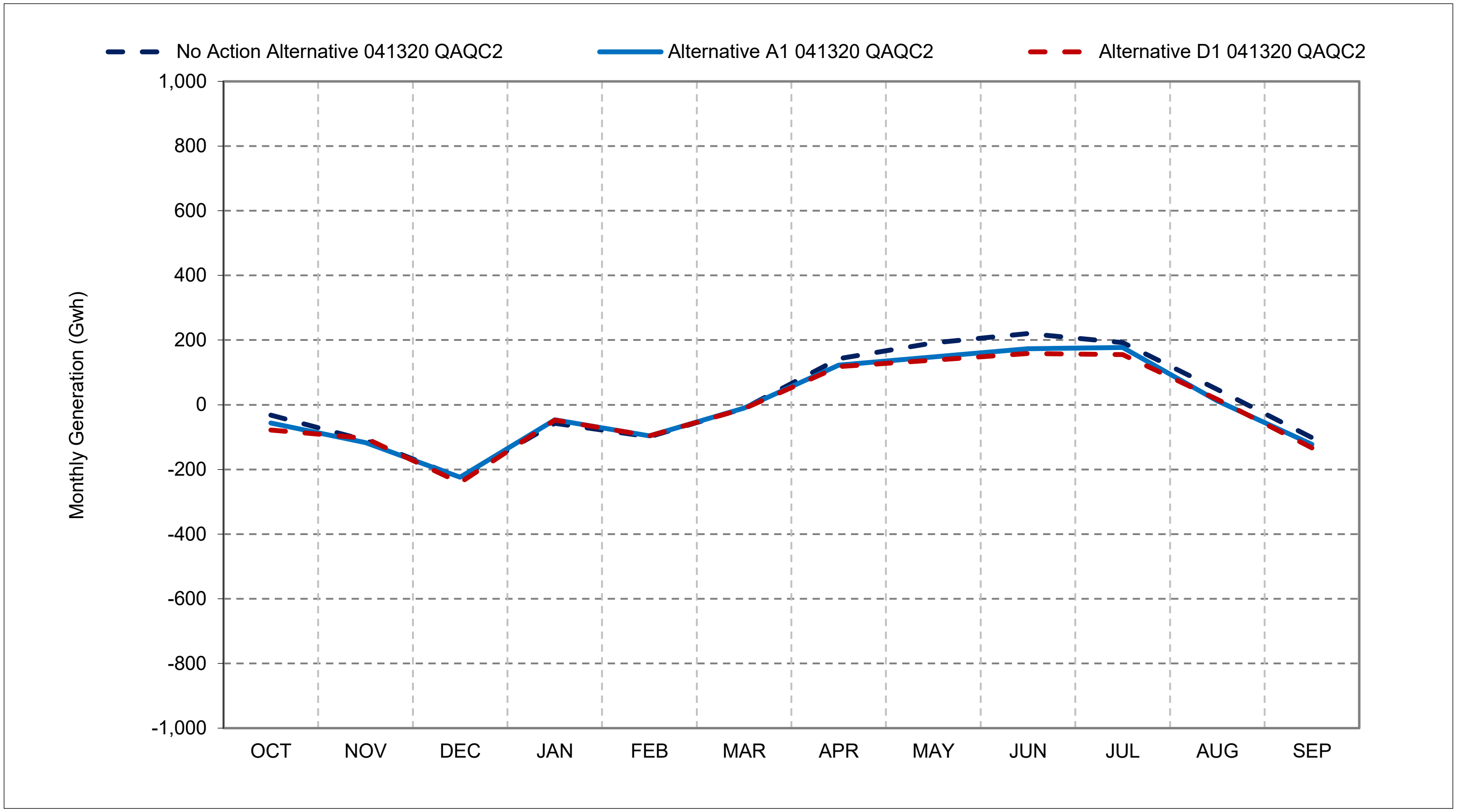


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-6. CVP and SWP Net Generation, Critical Year Average Generation

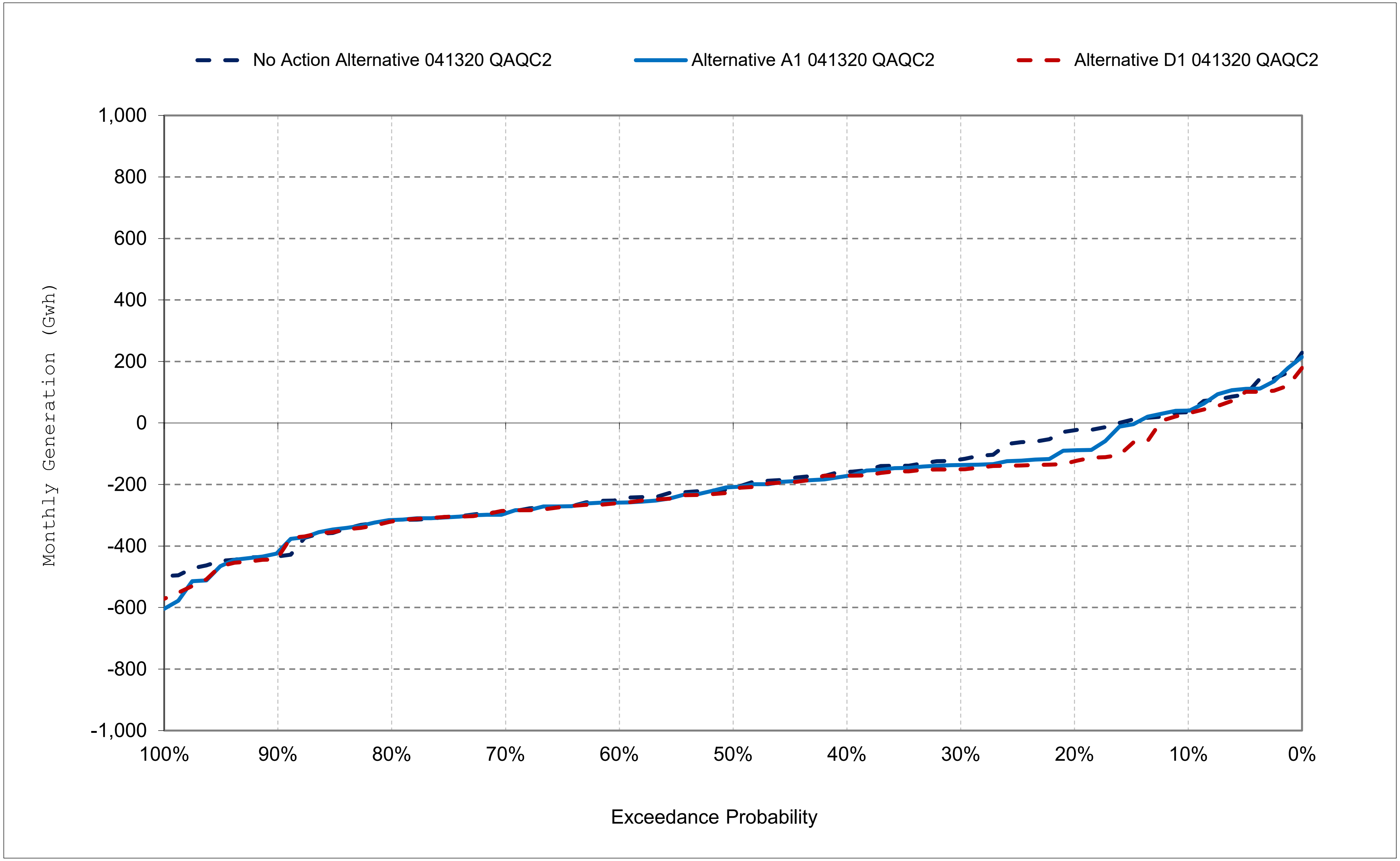


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

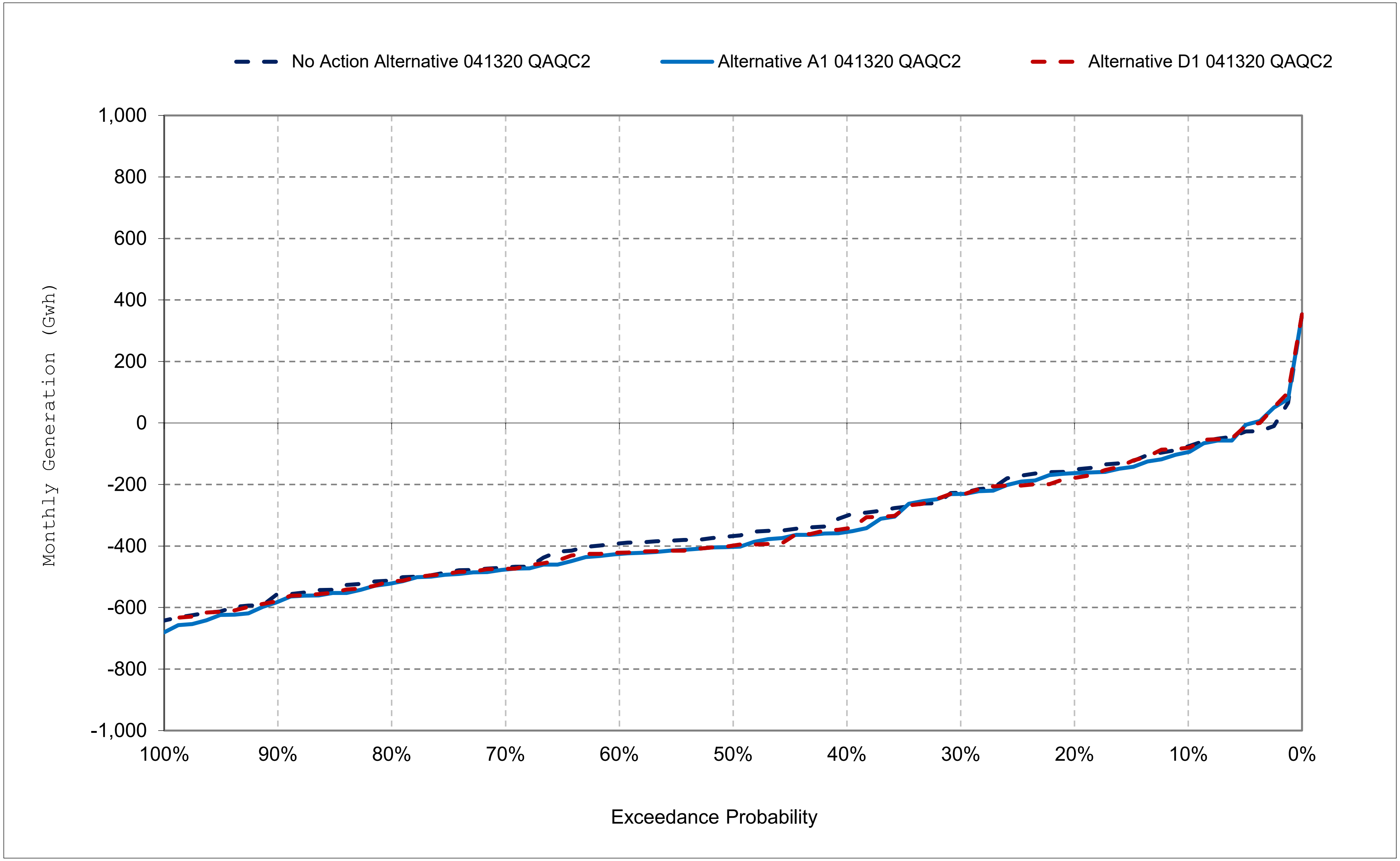
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-7. CVP and SWP Net Generation, October



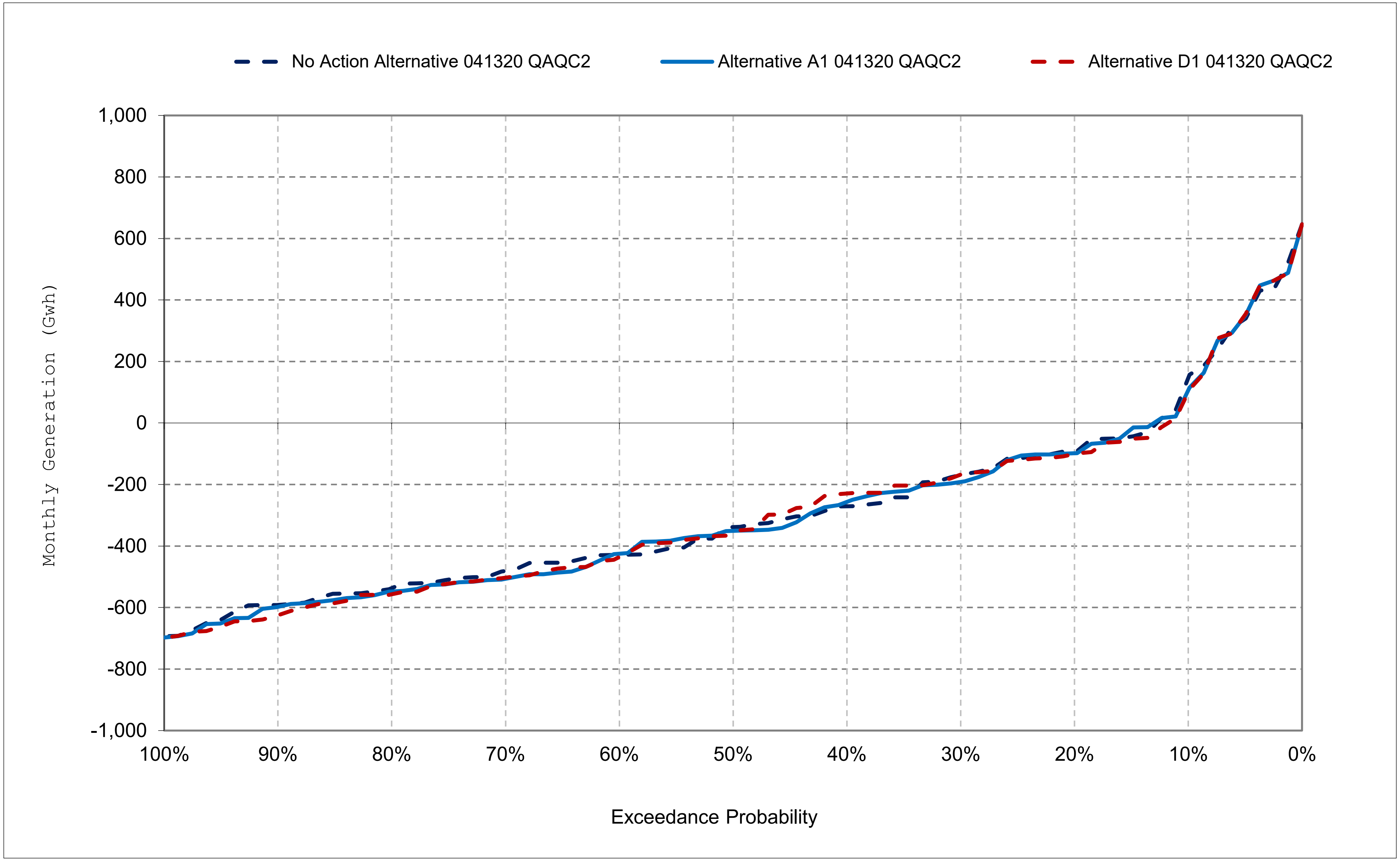
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-8. CVP and SWP Net Generation, November



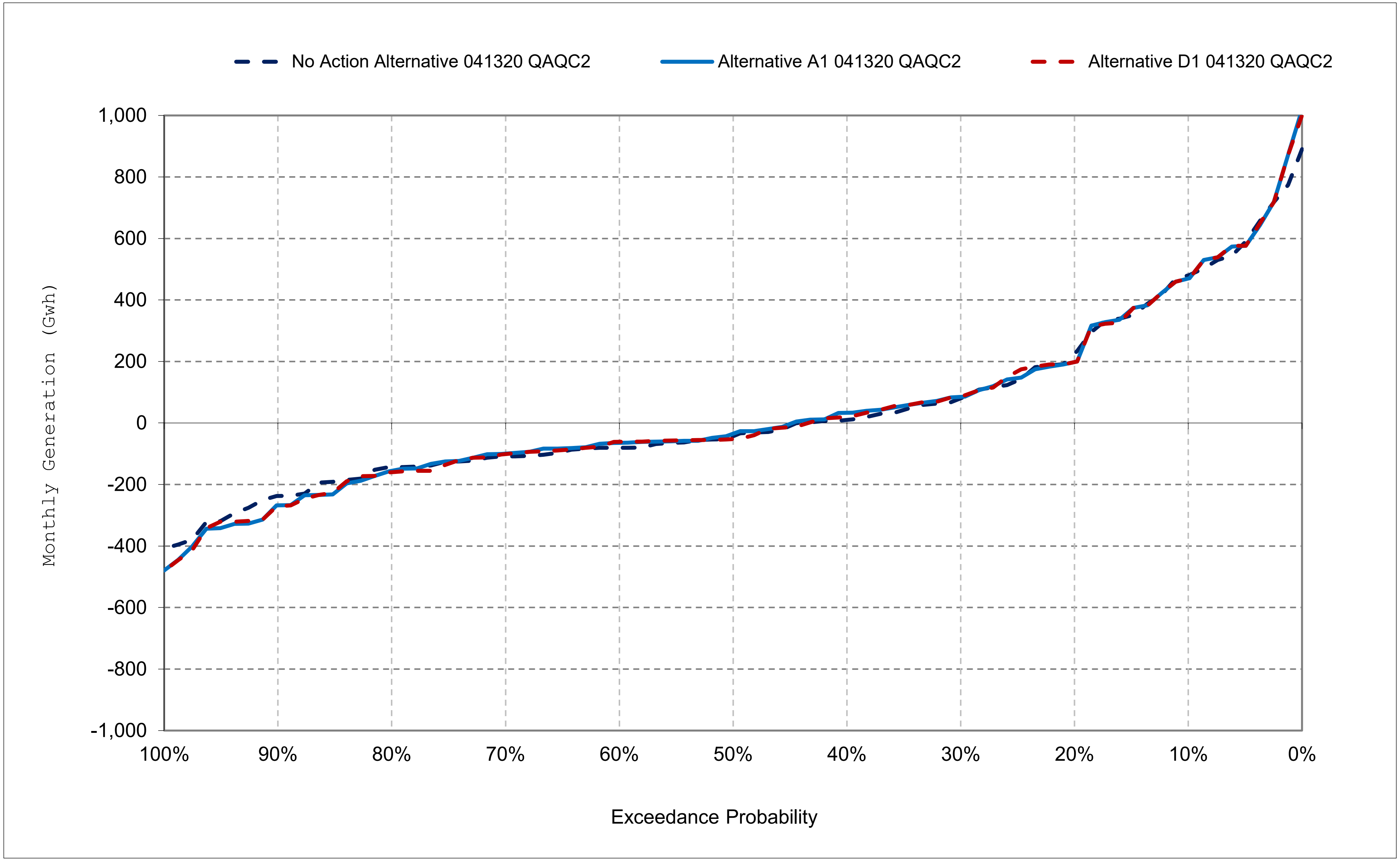
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-9. CVP and SWP Net Generation, December



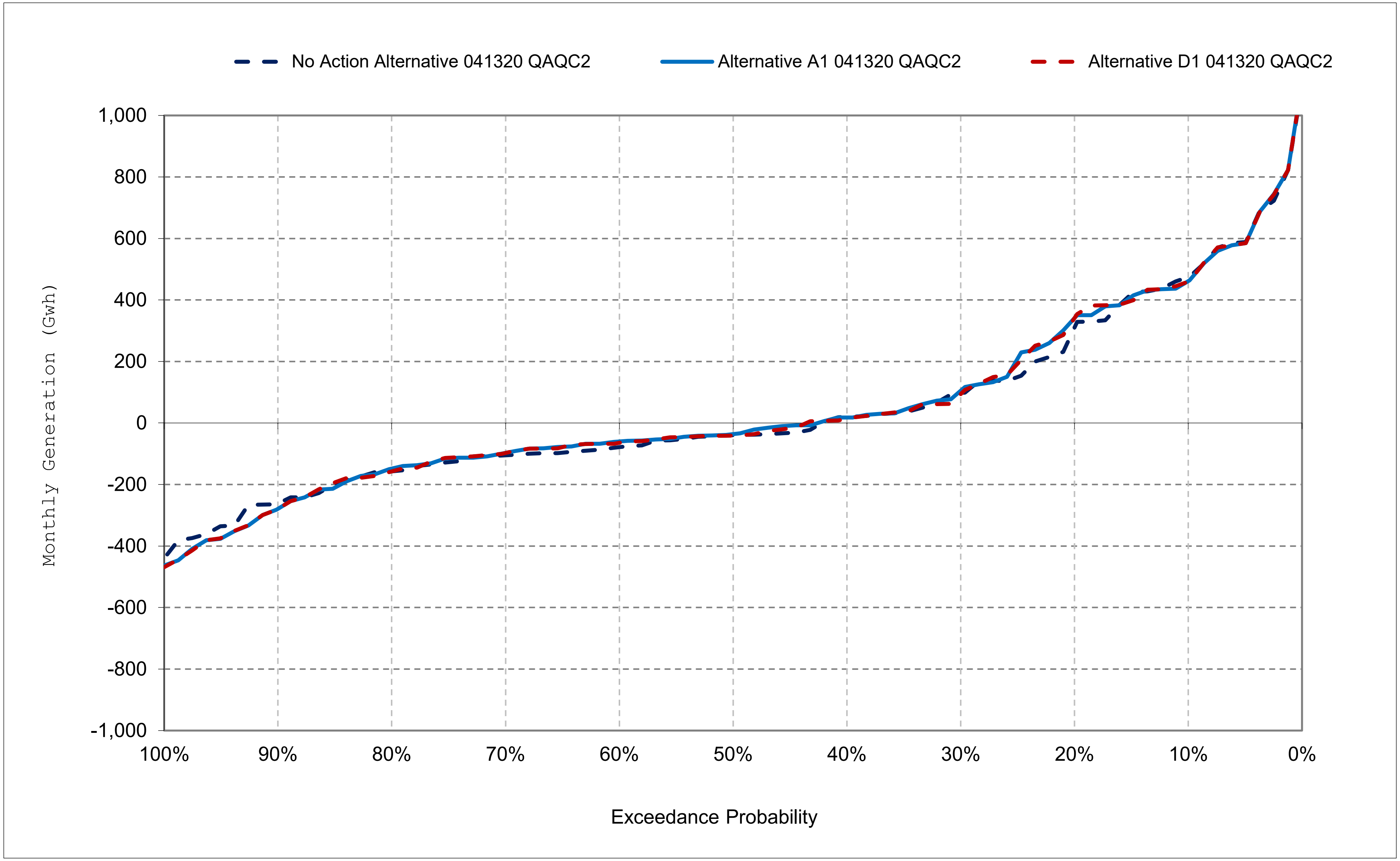
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-10. CVP and SWP Net Generation, January



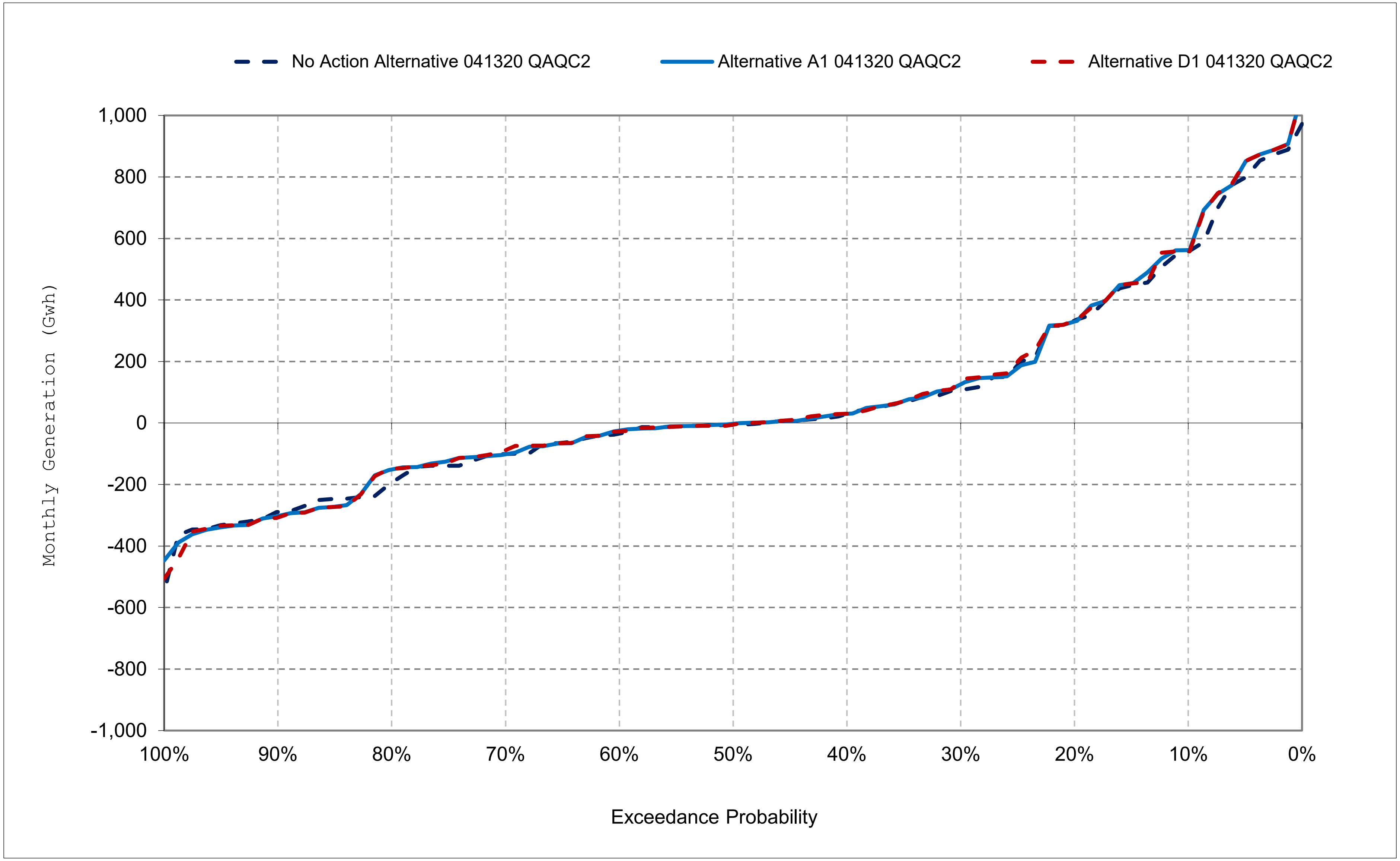
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-11. CVP and SWP Net Generation, February



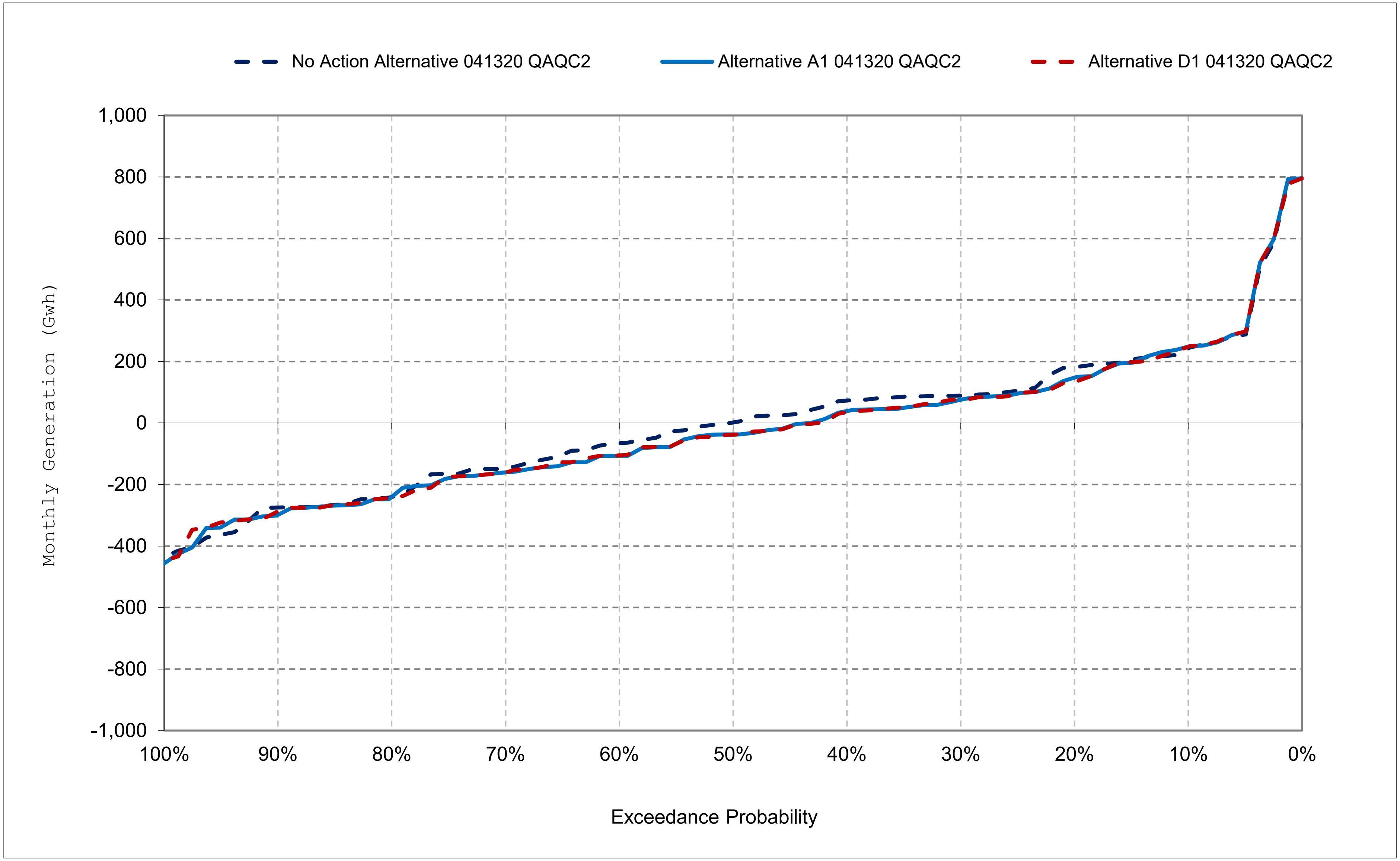
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-12. CVP and SWP Net Generation, March



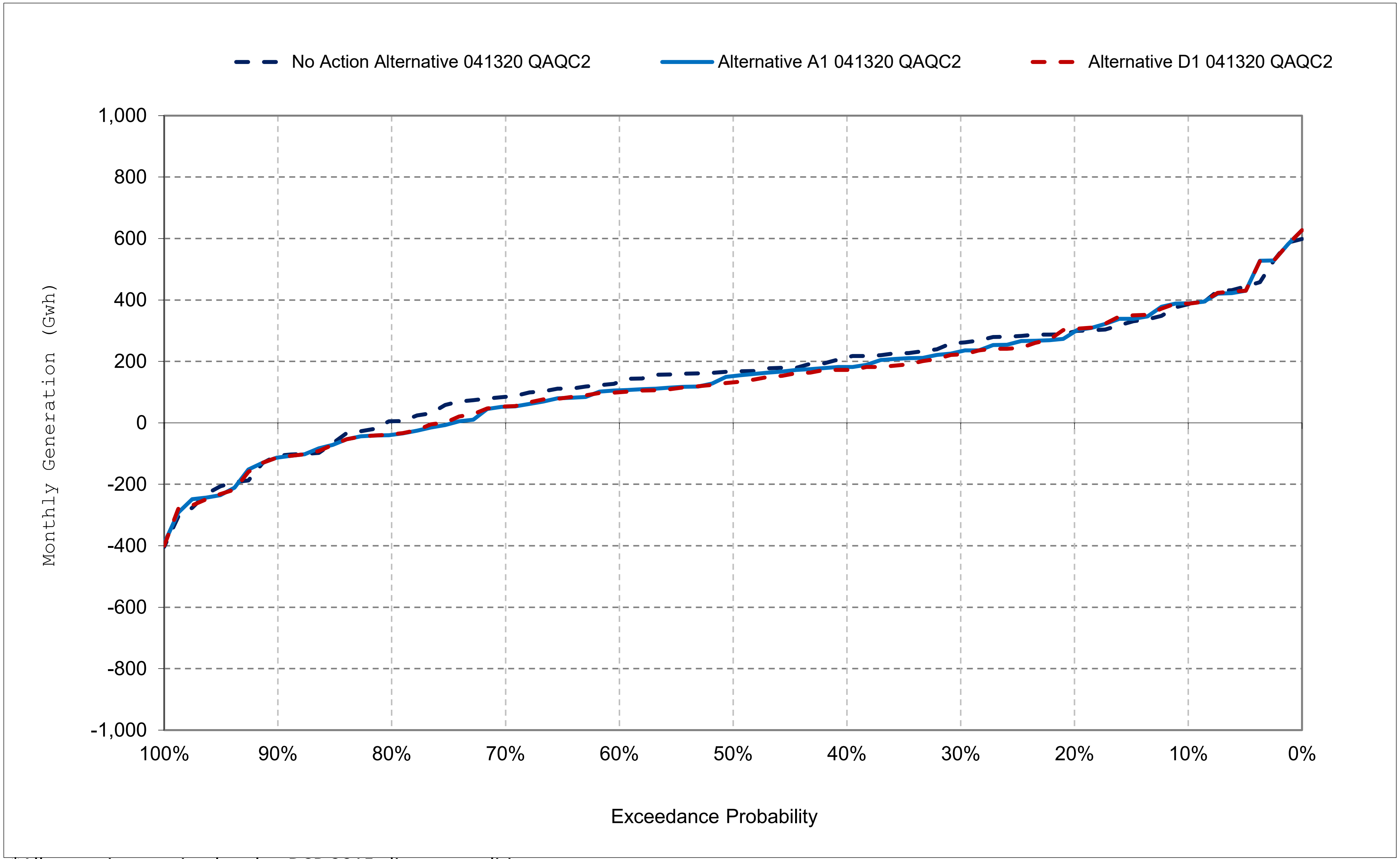
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-13. CVP and SWP Net Generation, April



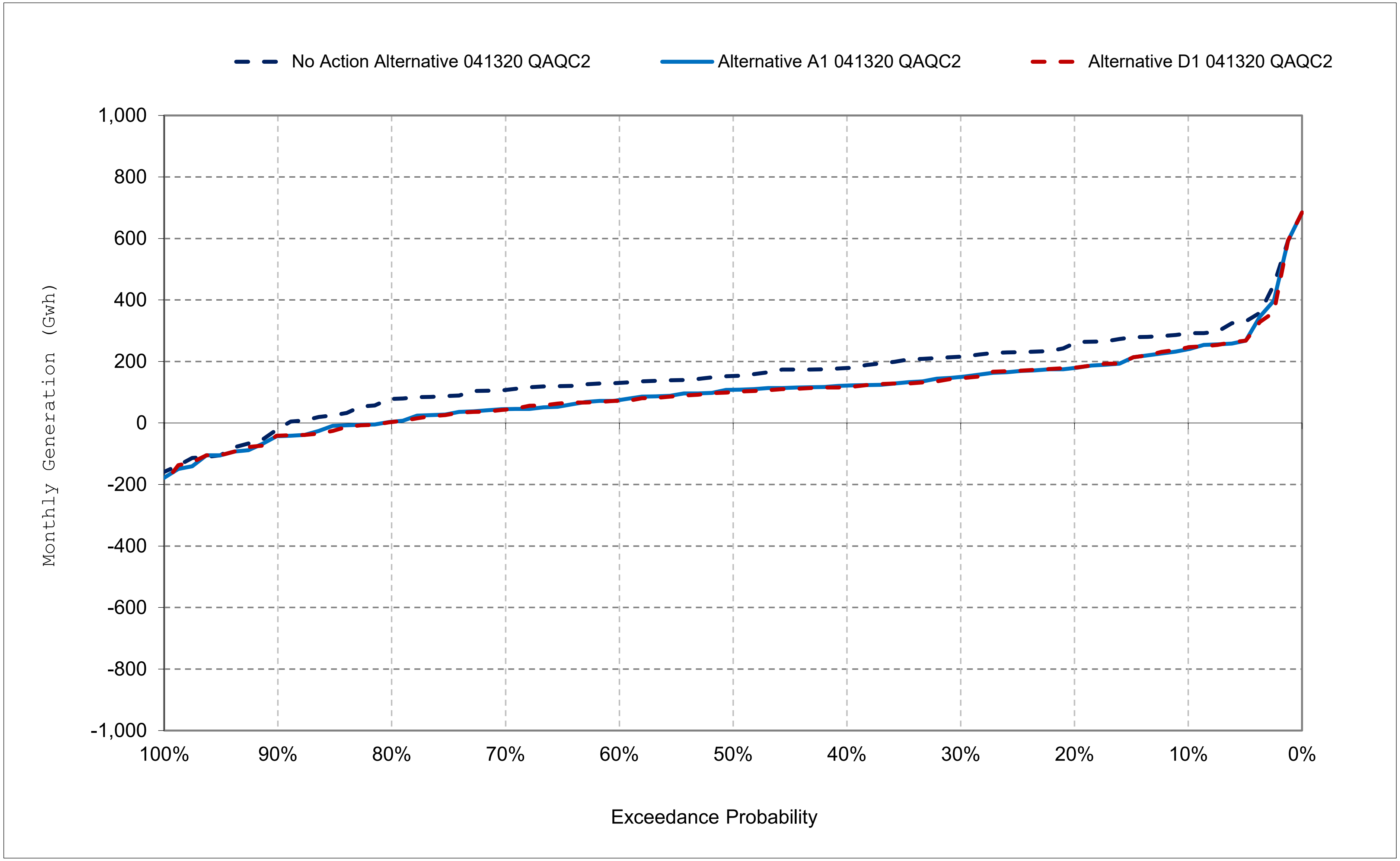
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-14. CVP and SWP Net Generation, May



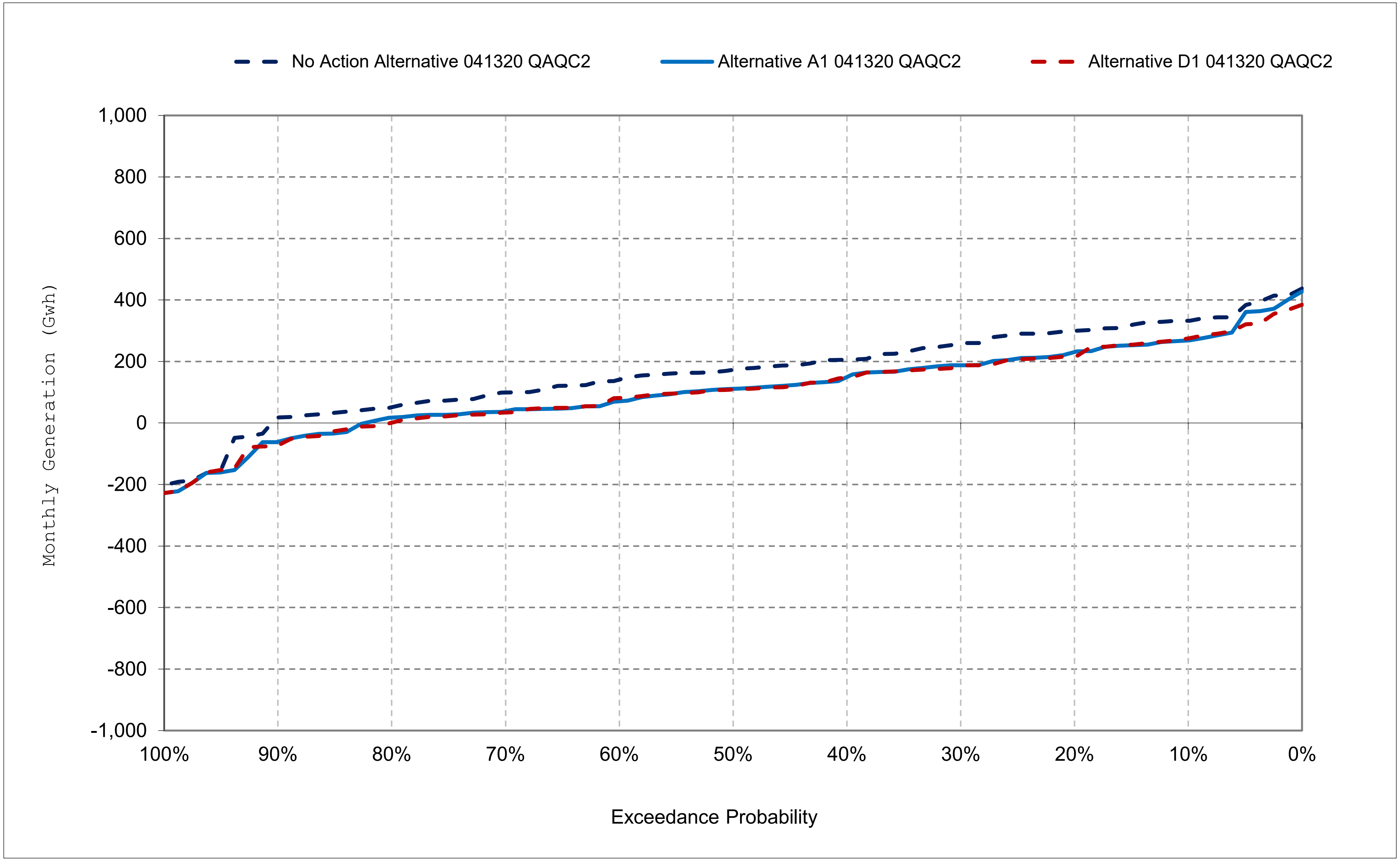
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-15. CVP and SWP Net Generation, June



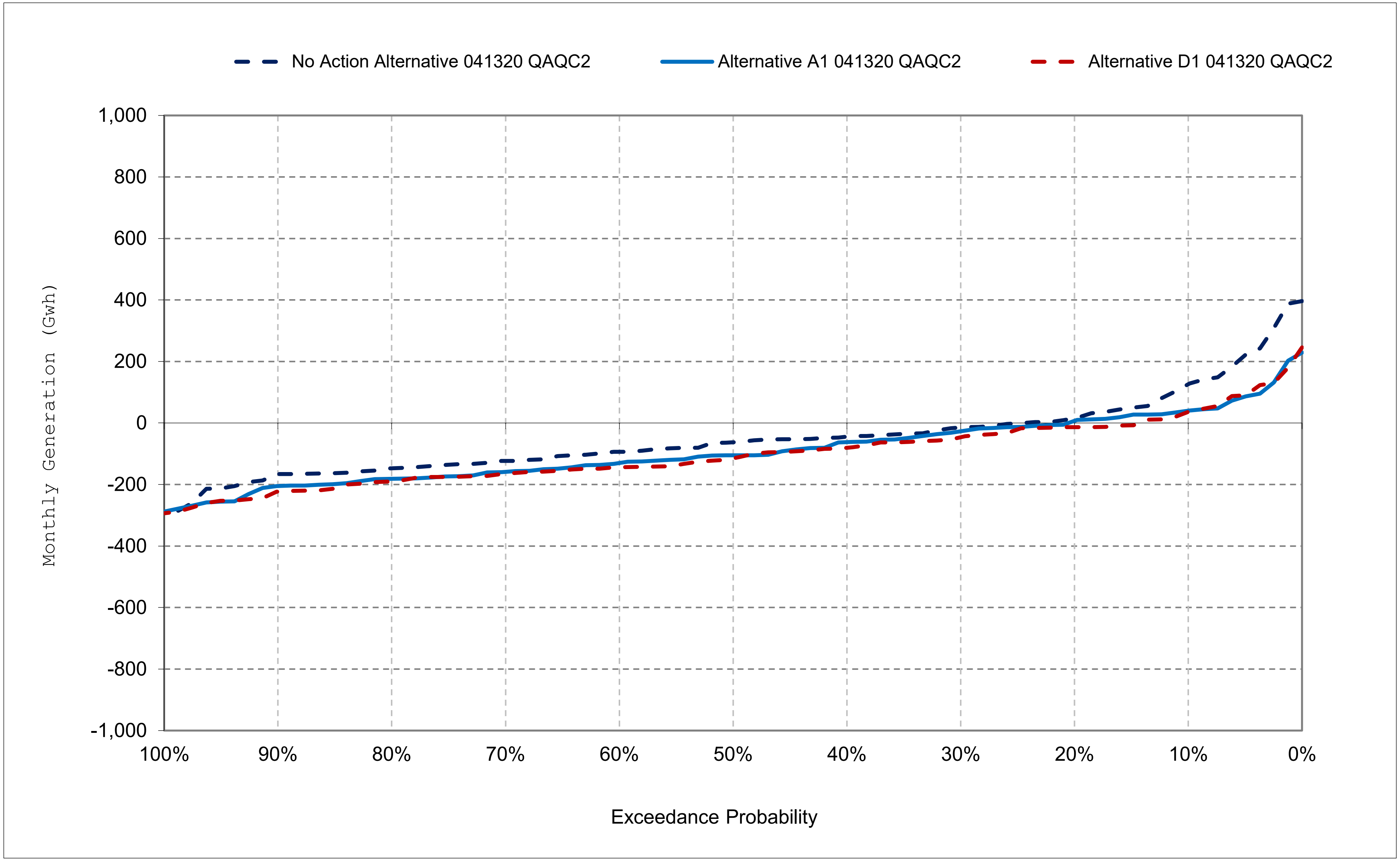
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-16. CVP and SWP Net Generation, July



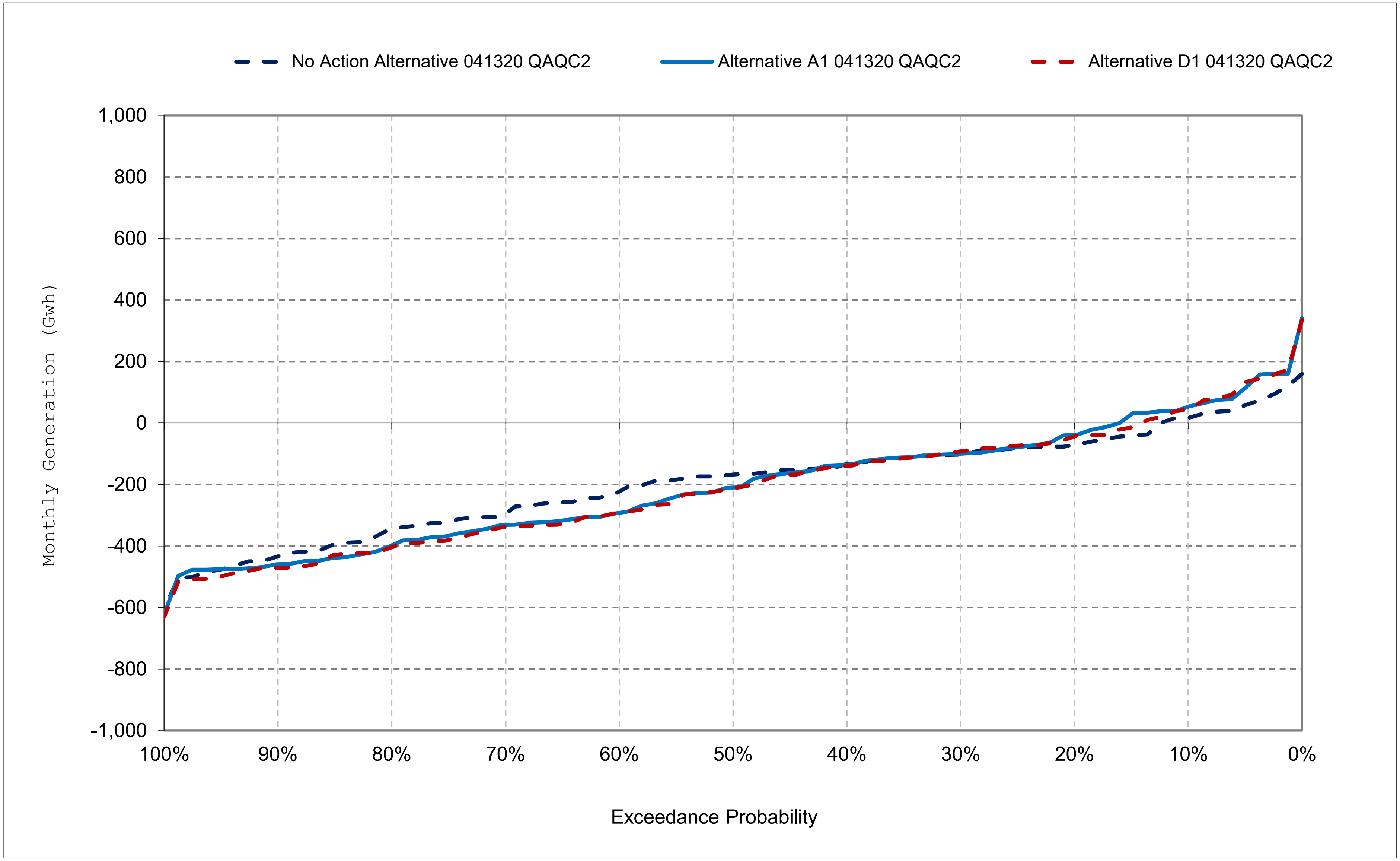
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-17. CVP and SWP Net Generation, August



*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-11-18. CVP and SWP Net Generation, September



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-12-1. NODOS Total Capacity, Monthly Capacity

No Action Alternative 041320 QAQC2

Statistic	Monthly Capacity (MW) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	0	0	0	0	0	0	0	0	0	0
20%	0	0	0	0	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	0	0	0	0	0	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal (15%)	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal (17%)	0	0	0	0	0	0	0	0	0	0	0	0
Dry (22%)	0	0	0	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Alternative A1 041320 QAQC2

Statistic	Monthly Capacity (MW) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	38	18	14	0	0	3	4	34	80	81	64	42
20%	26	14	6	0	0	0	2	14	77	74	51	30
30%	24	9	0	0	0	0	1	4	71	67	43	23
40%	23	4	0	0	0	0	1	2	49	46	33	20
50%	15	0	0	0	0	0	0	0	43	44	22	14
60%	13	0	0	0	0	0	0	0	5	42	16	14
70%	13	0	0	0	0	0	0	0	1	35	14	13
80%	12	0	0	0	0	0	0	0	1	5	13	13
90%	2	0	0	0	0	0	0	0	0	0	12	10
Long Term												
Full Simulation Period[a]	19	6	3	1	1	2	2	8	38	43	31	21
Water Year Types[b,c]												
Wet (32%)	16	6	5	0	0	0	0	1	12	30	20	16
Above Normal (15%)	24	9	3	0	0	0	0	4	42	65	34	31
Below Normal (17%)	20	11	4	1	3	0	1	9	52	53	38	16
Dry (22%)	26	5	1	0	1	2	4	11	66	55	45	29
Critical (15%)	9	2	1	2	0	9	5	21	32	21	20	16

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Capacity (MW) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	38	18	14	0	0	3	4	34	80	81	64	42
20%	26	14	6	0	0	0	2	14	77	74	51	30
30%	24	9	0	0	0	0	1	4	71	67	43	23
40%	23	4	0	0	0	0	1	2	49	46	33	20
50%	15	0	0	0	0	0	0	0	43	44	22	14
60%	13	0	0	0	0	0	0	0	5	42	16	14
70%	13	0	0	0	0	0	0	0	1	35	14	13
80%	12	0	0	0	0	0	0	0	1	5	13	13
90%	2	0	0	0	0	0	0	0	0	0	12	10
Long Term												
Full Simulation Period[a]	19	6	3	1	1	2	2	8	38	43	31	21
Water Year Types[b,c]												
Wet (32%)	16	6	5	0	0	0	0	1	12	30	20	16
Above Normal (15%)	24	9	3	0	0	0	0	4	42	65	34	31
Below Normal (17%)	20	11	4	1	3	0	1	9	52	53	38	16
Dry (22%)	26	5	1	0	1	2	4	11	66	55	45	29
Critical (15%)	9	2	1	2	0	9	5	21	32	21	20	16

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-12-2. NODOS Total Capacity, Monthly Capacity

No Action Alternative 041320 QAQC2

Statistic	Monthly Capacity (MW) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	0	0	0	0	0	0	0	0	0	0
20%	0	0	0	0	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	0	0	0	0	0	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal (15%)	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal (17%)	0	0	0	0	0	0	0	0	0	0	0	0
Dry (22%)	0	0	0	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Alternative D1 041320 QAQC2

Statistic	Monthly Capacity (MW) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	42	25	16	0	0	8	5	39	87	88	77	49
20%	33	17	13	0	0	0	2	22	84	83	67	43
30%	28	16	0	0	0	0	1	3	78	77	59	31
40%	27	10	0	0	0	0	1	2	56	57	55	26
50%	23	1	0	0	0	0	0	0	47	52	50	21
60%	15	0	0	0	0	0	0	0	33	49	37	15
70%	15	0	0	0	0	0	0	0	1	41	16	15
80%	14	0	0	0	0	0	0	0	1	10	15	14
90%	5	0	0	0	0	0	0	0	0	0	13	7
Long Term												
Full Simulation Period[a]	23	10	4	1	1	2	2	9	42	50	43	25
Water Year Types[b,c]												
Wet (32%)	19	8	5	0	0	0	0	2	13	34	25	18
Above Normal (15%)	24	13	5	0	0	0	0	4	43	75	54	36
Below Normal (17%)	23	15	6	1	4	1	1	11	58	58	54	19
Dry (22%)	34	10	1	1	1	2	4	11	73	66	61	37
Critical (15%)	14	2	1	4	3	10	8	25	40	30	28	20

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Capacity (MW) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	42	25	16	0	0	8	5	39	87	88	77	49
20%	33	17	13	0	0	0	2	22	84	83	67	43
30%	28	16	0	0	0	0	1	3	78	77	59	31
40%	27	10	0	0	0	0	1	2	56	57	55	26
50%	23	1	0	0	0	0	0	0	47	52	50	21
60%	15	0	0	0	0	0	0	0	33	49	37	15
70%	15	0	0	0	0	0	0	0	1	41	16	15
80%	14	0	0	0	0	0	0	0	1	10	15	14
90%	5	0	0	0	0	0	0	0	0	0	13	7
Long Term												
Full Simulation Period[a]	23	10	4	1	1	2	2	9	42	50	43	25
Water Year Types[b,c]												
Wet (32%)	19	8	5	0	0	0	0	2	13	34	25	18
Above Normal (15%)	24	13	5	0	0	0	0	4	43	75	54	36
Below Normal (17%)	23	15	6	1	4	1	1	11	58	58	54	19
Dry (22%)	34	10	1	1	1	2	4	11	73	66	61	37
Critical (15%)	14	2	1	4	3	10	8	25	40	30	28	20

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-12-3. NODOS Total Capacity, Monthly Capacity

Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Capacity (MW)											
Probability of Exceedance												
10%	38	18	14	0	0	3	4	34	80	81	64	42
20%	26	14	6	0	0	0	2	14	77	74	51	30
30%	24	9	0	0	0	0	1	4	71	67	43	23
40%	23	4	0	0	0	0	1	2	49	46	33	20
50%	15	0	0	0	0	0	0	0	43	44	22	14
60%	13	0	0	0	0	0	0	0	5	42	16	14
70%	13	0	0	0	0	0	0	0	1	35	14	13
80%	12	0	0	0	0	0	0	0	1	5	13	13
90%	2	0	0	0	0	0	0	0	0	0	12	10
Long Term												
Full Simulation Period[a]	19	6	3	1	1	2	2	8	38	43	31	21
Water Year Types[b,c]												
Wet (32%)	16	6	5	0	0	0	0	1	12	30	20	16
Above Normal (15%)	24	9	3	0	0	0	0	4	42	65	34	31
Below Normal (17%)	20	11	4	1	3	0	1	9	52	53	38	16
Dry (22%)	26	5	1	0	1	2	4	11	66	55	45	29
Critical (15%)	9	2	1	2	0	9	5	21	32	21	20	16

Alternative D1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Capacity (MW)											
Probability of Exceedance												
10%	42	25	16	0	0	8	5	39	87	88	77	49
20%	33	17	13	0	0	0	2	22	84	83	67	43
30%	28	16	0	0	0	0	1	3	78	77	59	31
40%	27	10	0	0	0	0	1	2	56	57	55	26
50%	23	1	0	0	0	0	0	0	47	52	50	21
60%	15	0	0	0	0	0	0	0	33	49	37	15
70%	15	0	0	0	0	0	0	0	1	41	16	15
80%	14	0	0	0	0	0	0	0	1	10	15	14
90%	5	0	0	0	0	0	0	0	0	0	13	7
Long Term												
Full Simulation Period[a]	23	10	4	1	1	2	2	9	42	50	43	25
Water Year Types[b,c]												
Wet (32%)	19	8	5	0	0	0	0	2	13	34	25	18
Above Normal (15%)	24	13	5	0	0	0	0	4	43	75	54	36
Below Normal (17%)	23	15	6	1	4	1	1	11	58	58	54	19
Dry (22%)	34	10	1	1	1	2	4	11	73	66	61	37
Critical (15%)	14	2	1	4	3	10	8	25	40	30	28	20

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Capacity (MW)											
Probability of Exceedance												
10%	4	8	2	0	0	5	1	4	8	7	13	7
20%	7	3	7	0	0	0	0	8	7	9	16	12
30%	4	6	0	0	0	0	0	-1	7	10	15	9
40%	5	6	0	0	0	0	0	0	8	12	22	6
50%	8	1	0	0	0	0	0	0	5	8	29	7
60%	2	0	0	0	0	0	0	0	28	7	21	2
70%	1	0	0	0	0	0	0	0	0	7	2	2
80%	2	0	0	0	0	0	0	0	0	5	1	1
90%	2	0	0	0	0	0	0	0	0	0	0	-4
Long Term												
Full Simulation Period[a]	4	3	1	0	1	0	0	1	5	7	12	4
Water Year Types[b,c]												
Wet (32%)	3	2	0	0	0	0	0	0	2	4	5	2
Above Normal (15%)	0	4	1	0	0	0	0	0	1	10	20	5
Below Normal (17%)	3	4	2	0	1	1	0	1	6	5	16	3
Dry (22%)	8	6	0	1	0	0	0	1	7	11	16	7
Critical (15%)	5	0	0	1	3	2	3	4	8	9	8	4

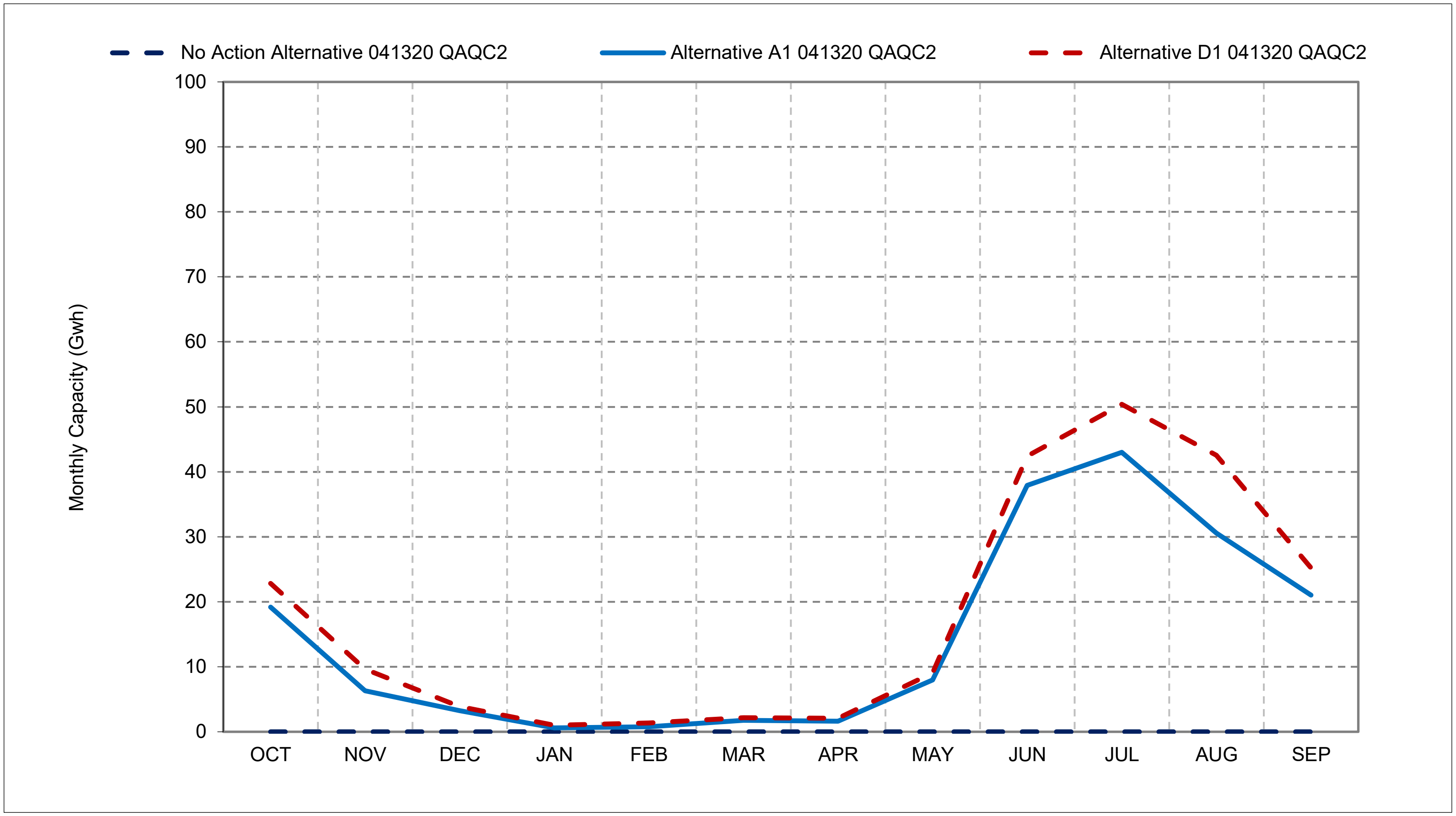
a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-1. NODOS Total Capacity, Long-Term Average Capacity

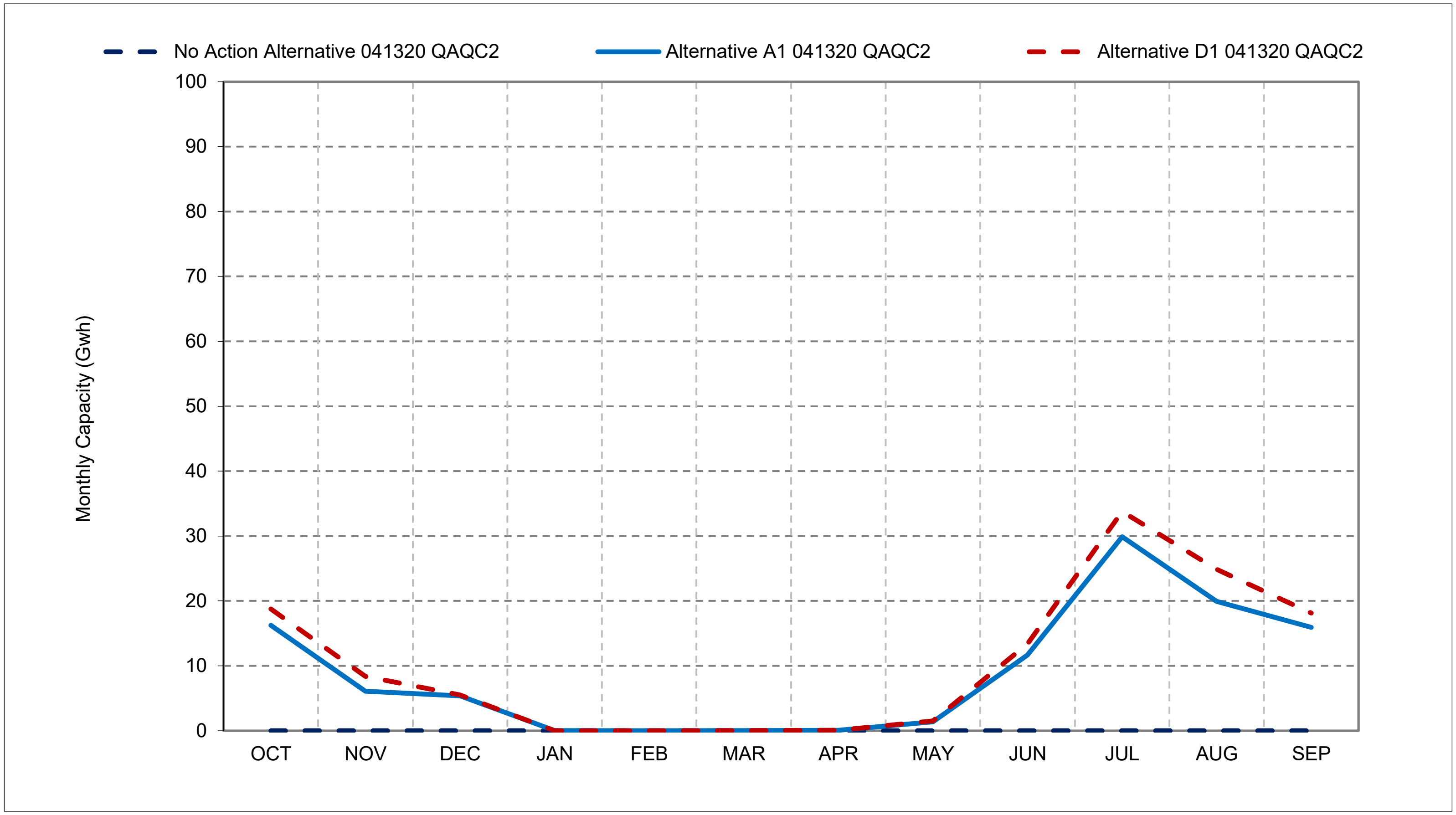


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-2. NODOS Total Capacity, Wet Year Average Capacity

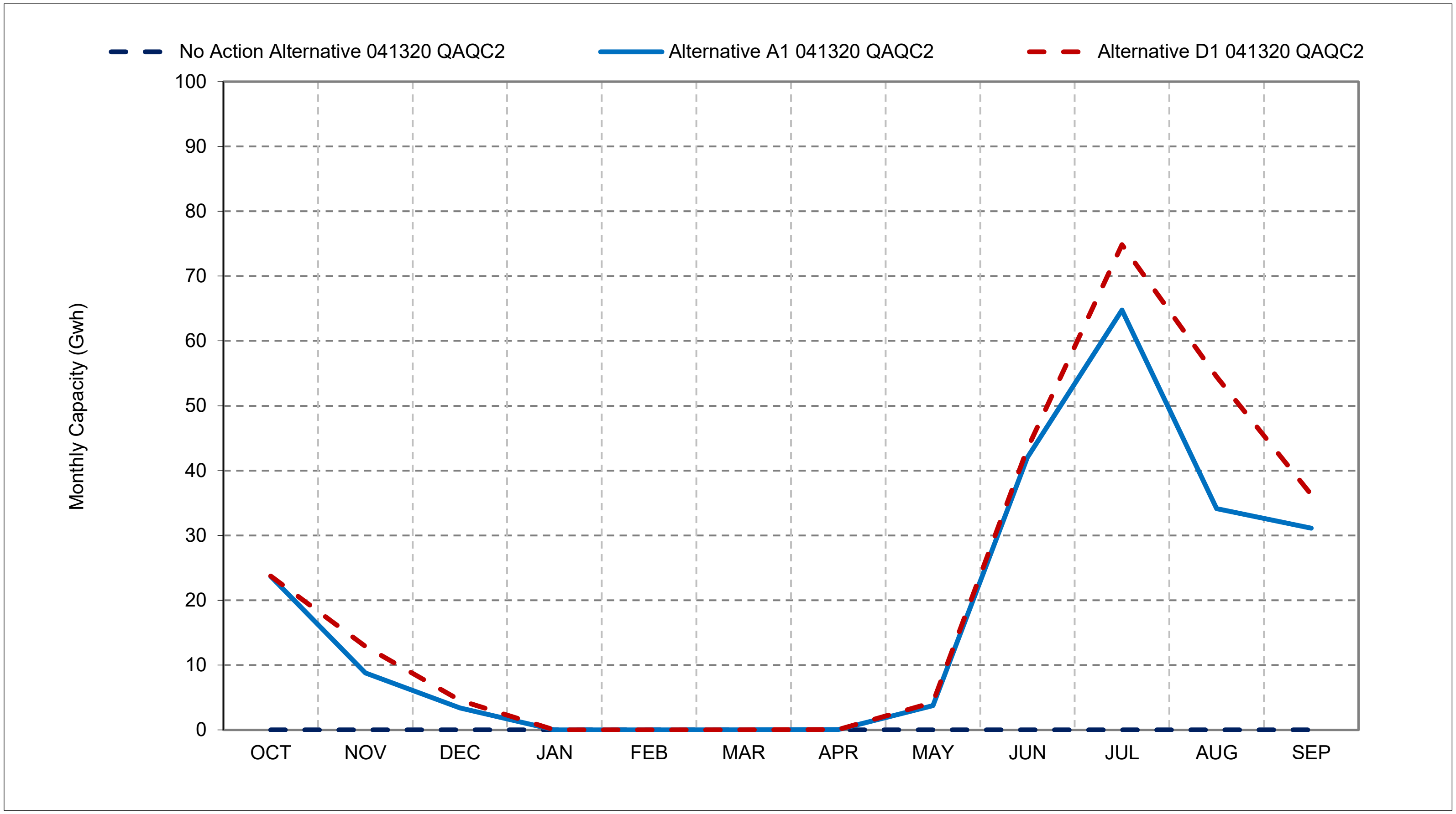


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-3. NODOS Total Capacity, Above Normal Year Average Capacity

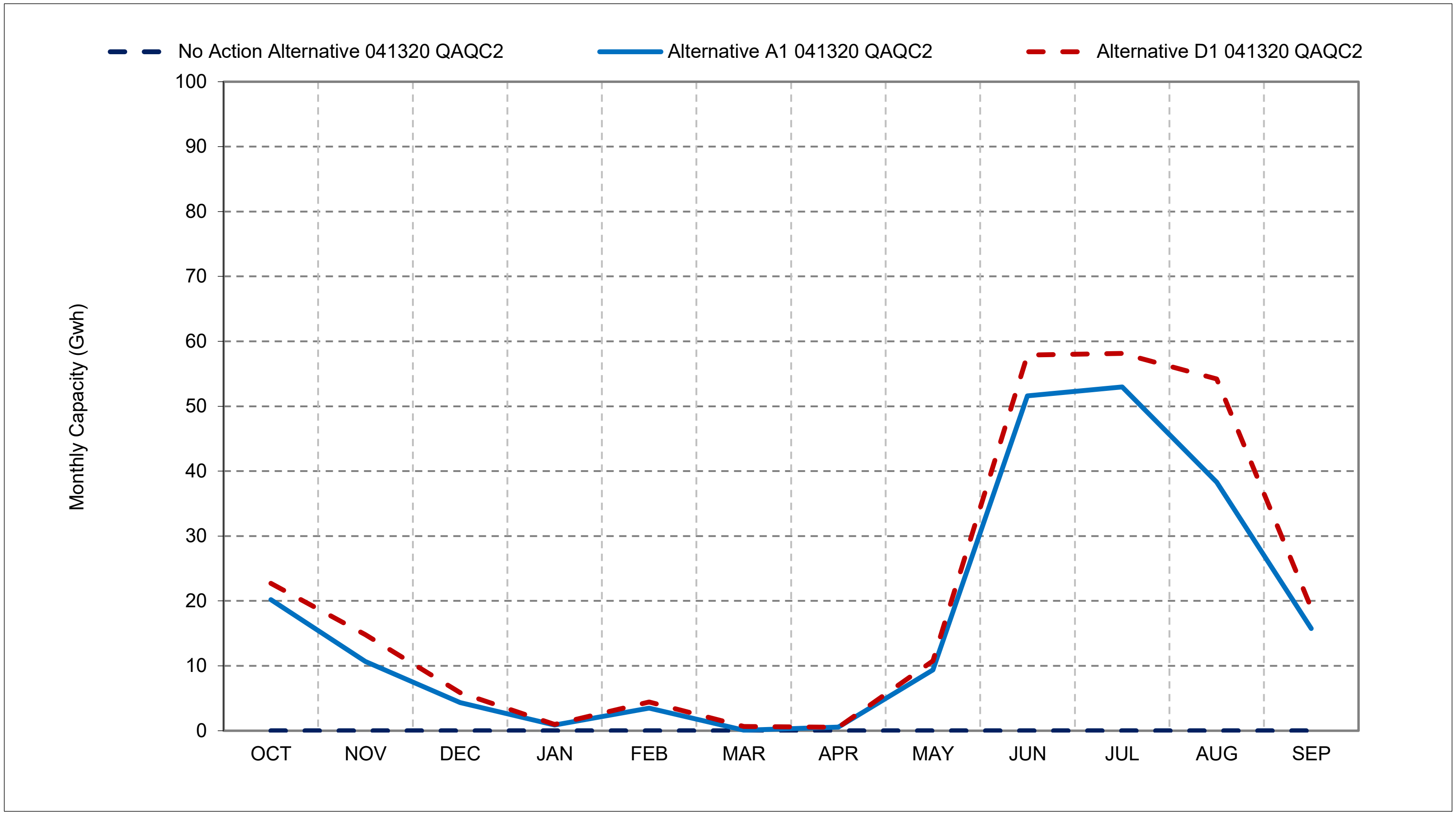


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-4. NODOS Total Capacity, Below Normal Year Average Capacity

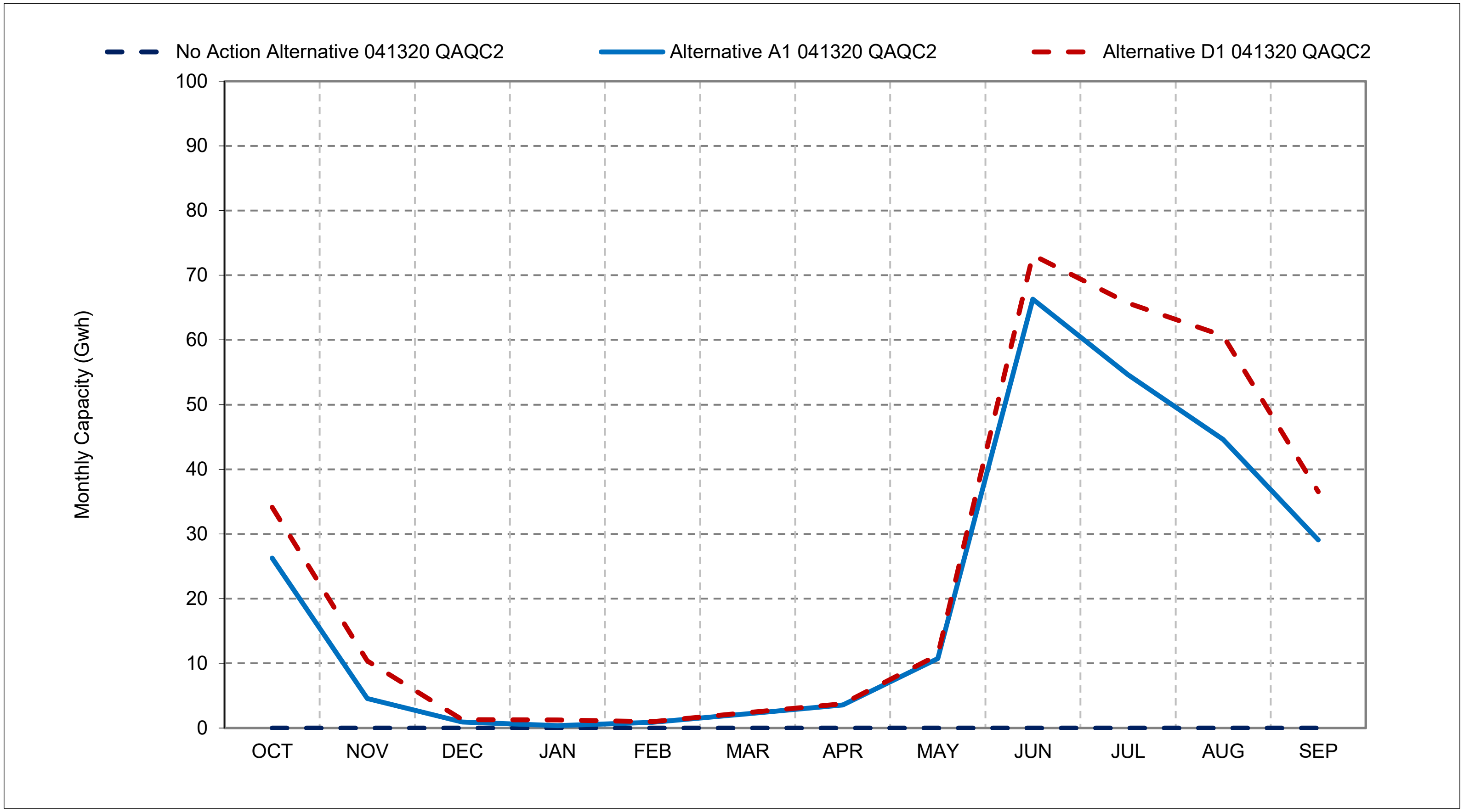


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-5. NODOS Total Capacity, Dry Year Average Capacity

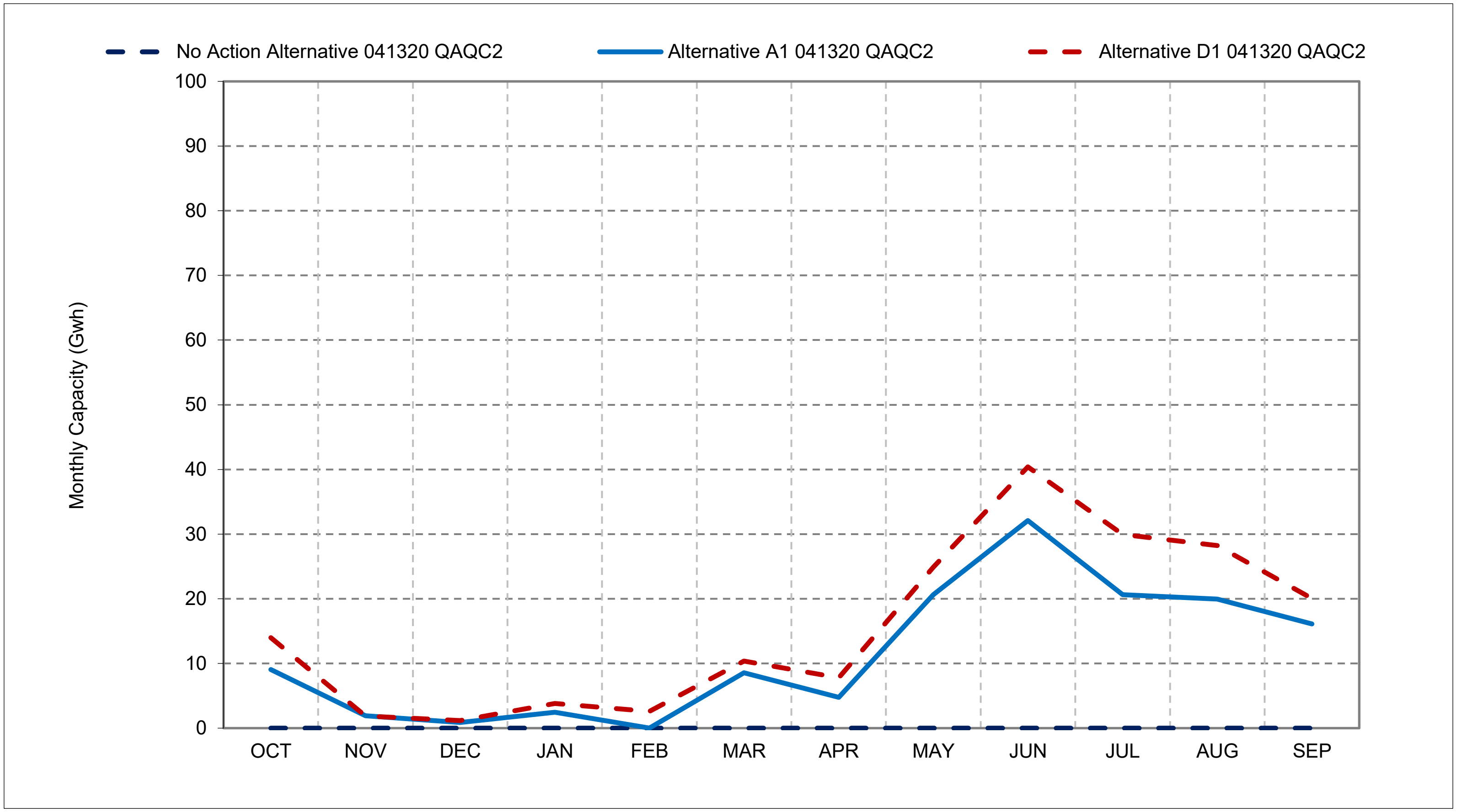


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-6. NODOS Total Capacity, Critical Year Average Capacity

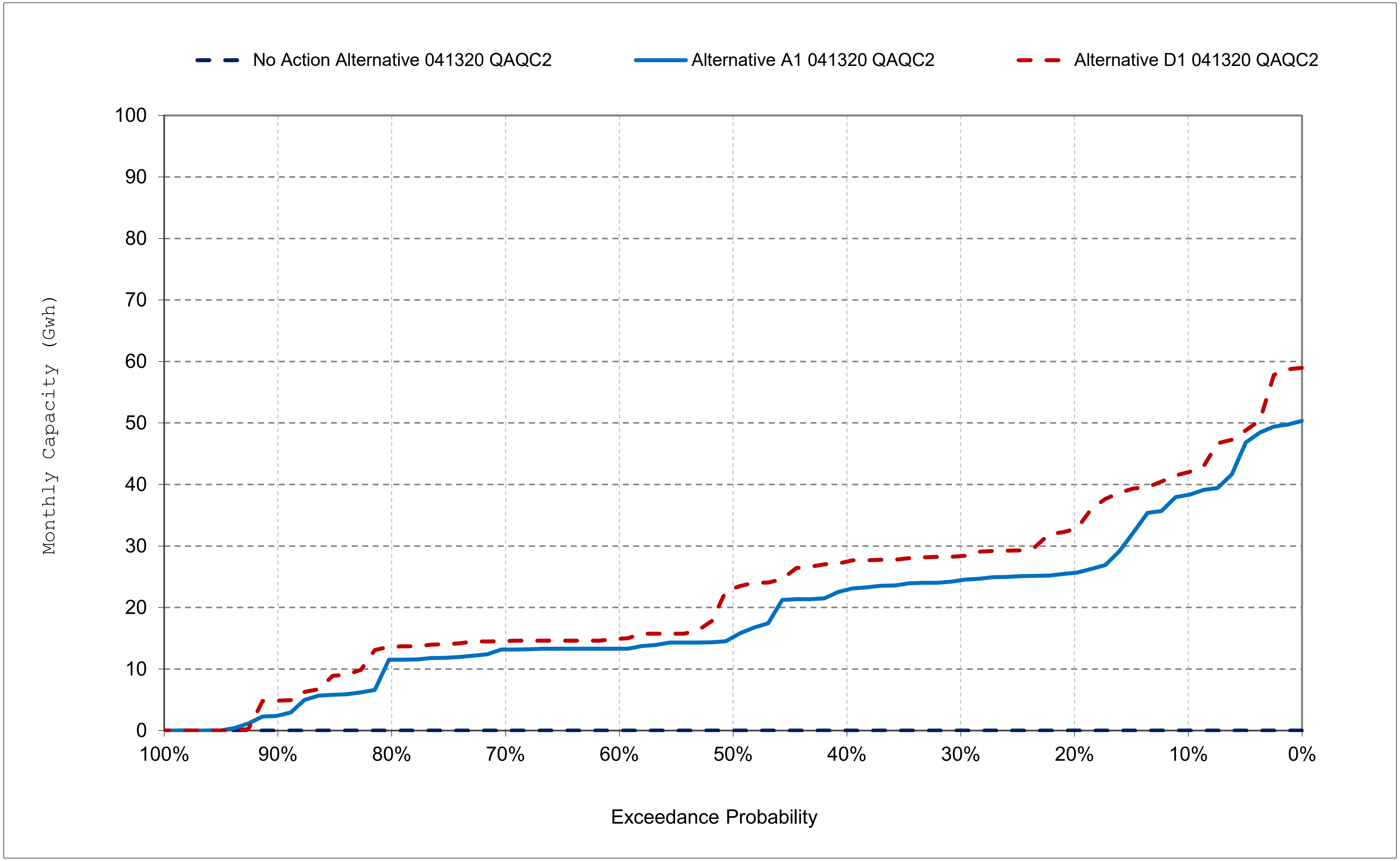


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

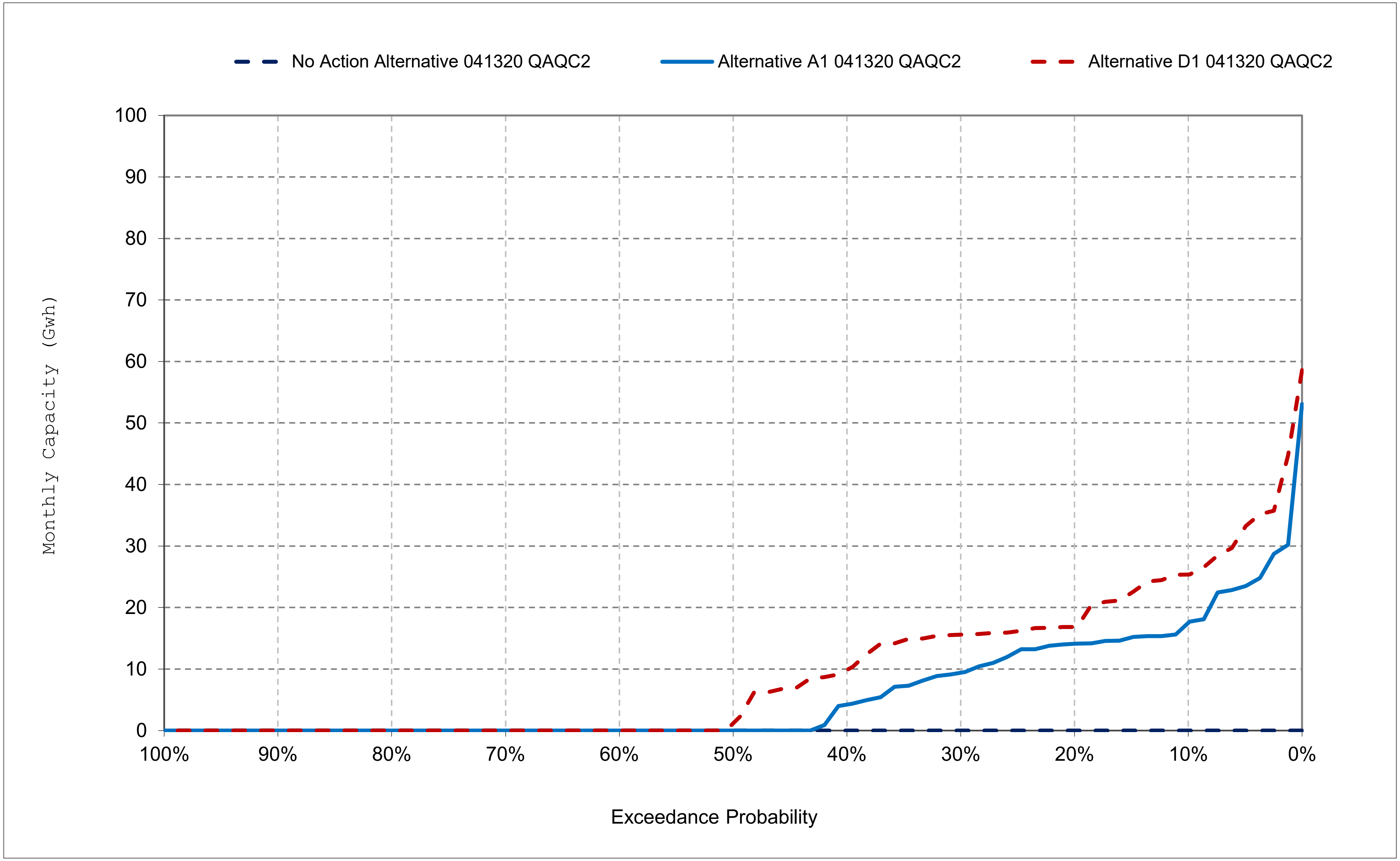
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-7. NODOS Total Capacity, October



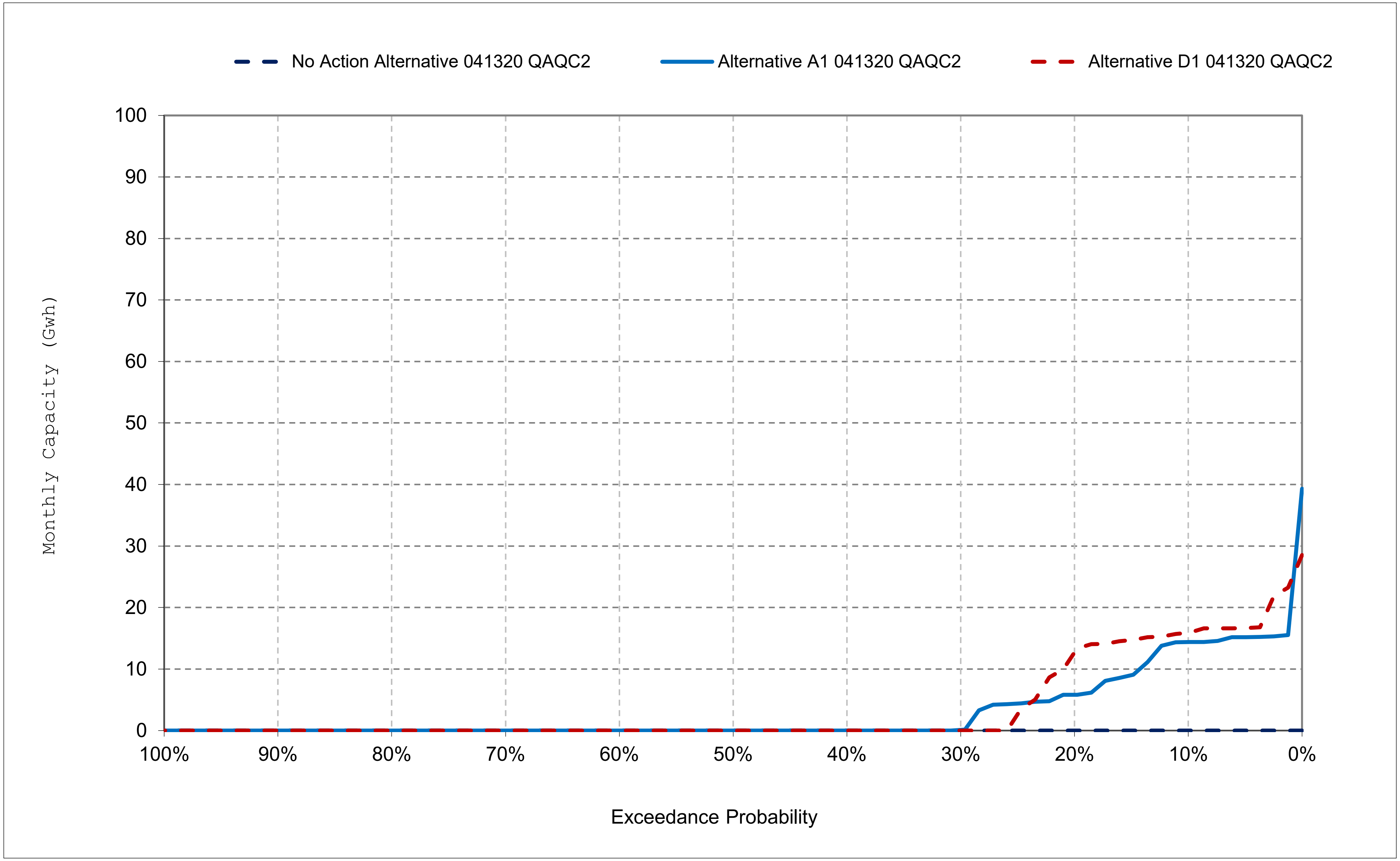
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-8. NODOS Total Capacity, November



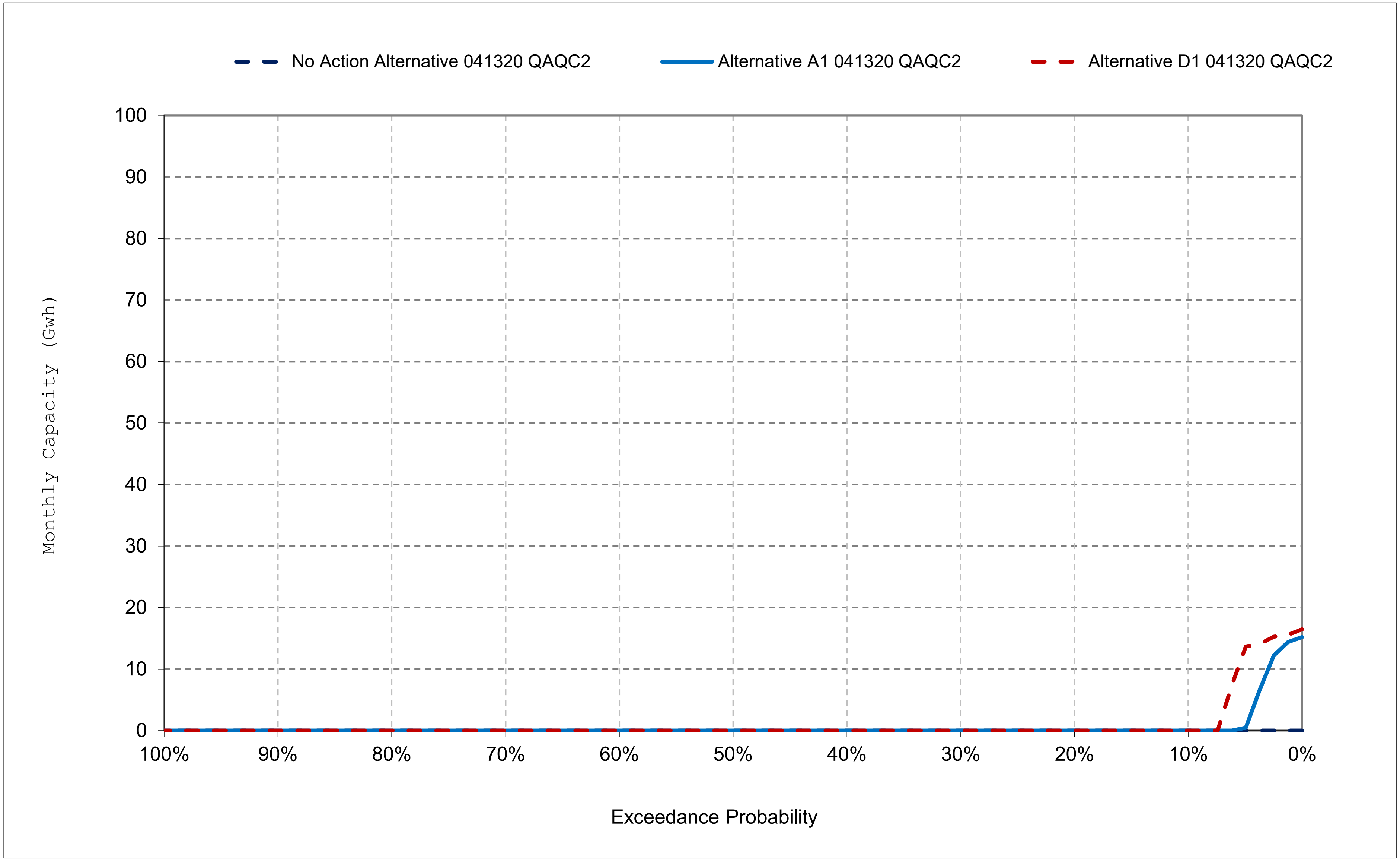
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-9. NODOS Total Capacity, December



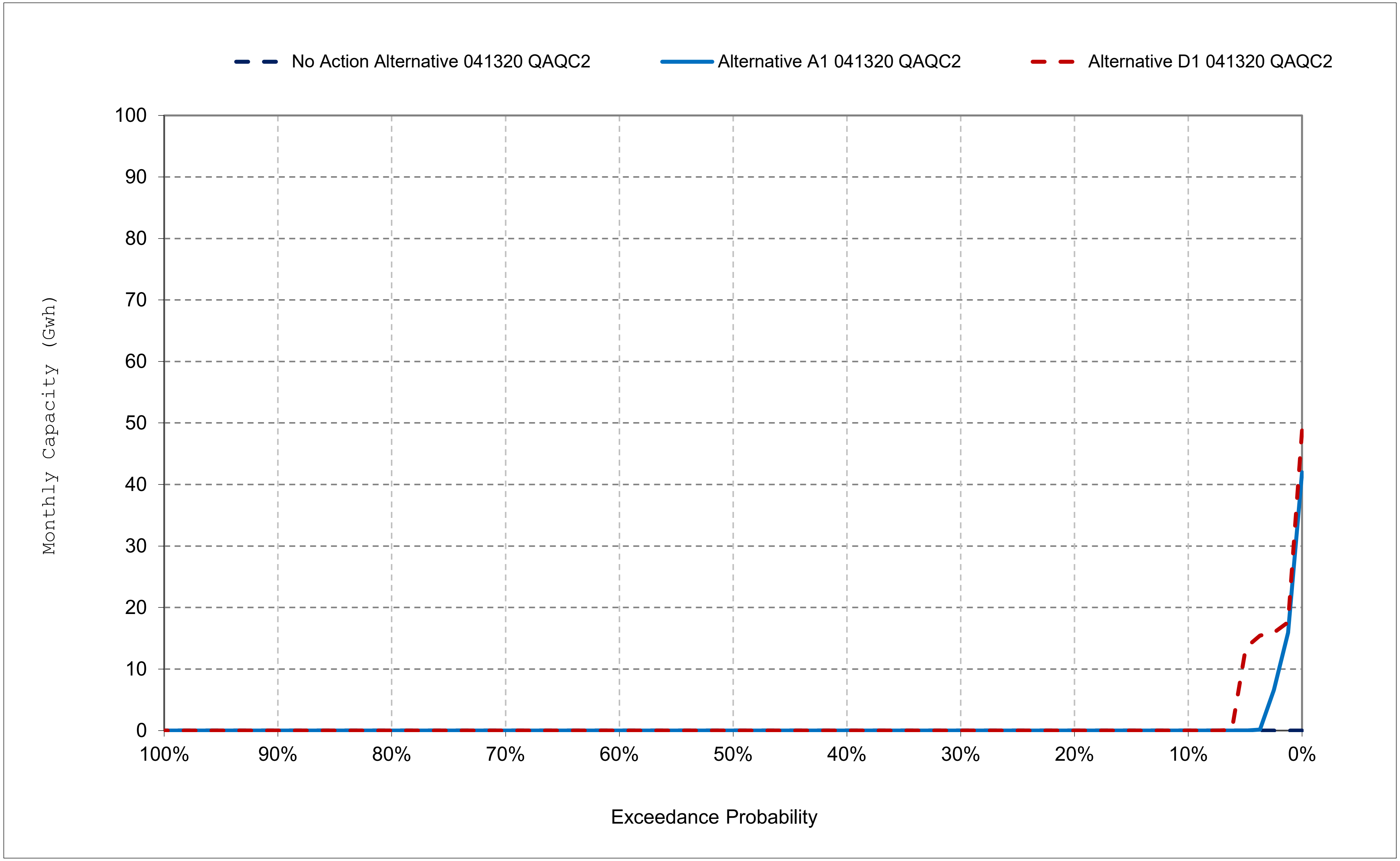
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-10. NODOS Total Capacity, January



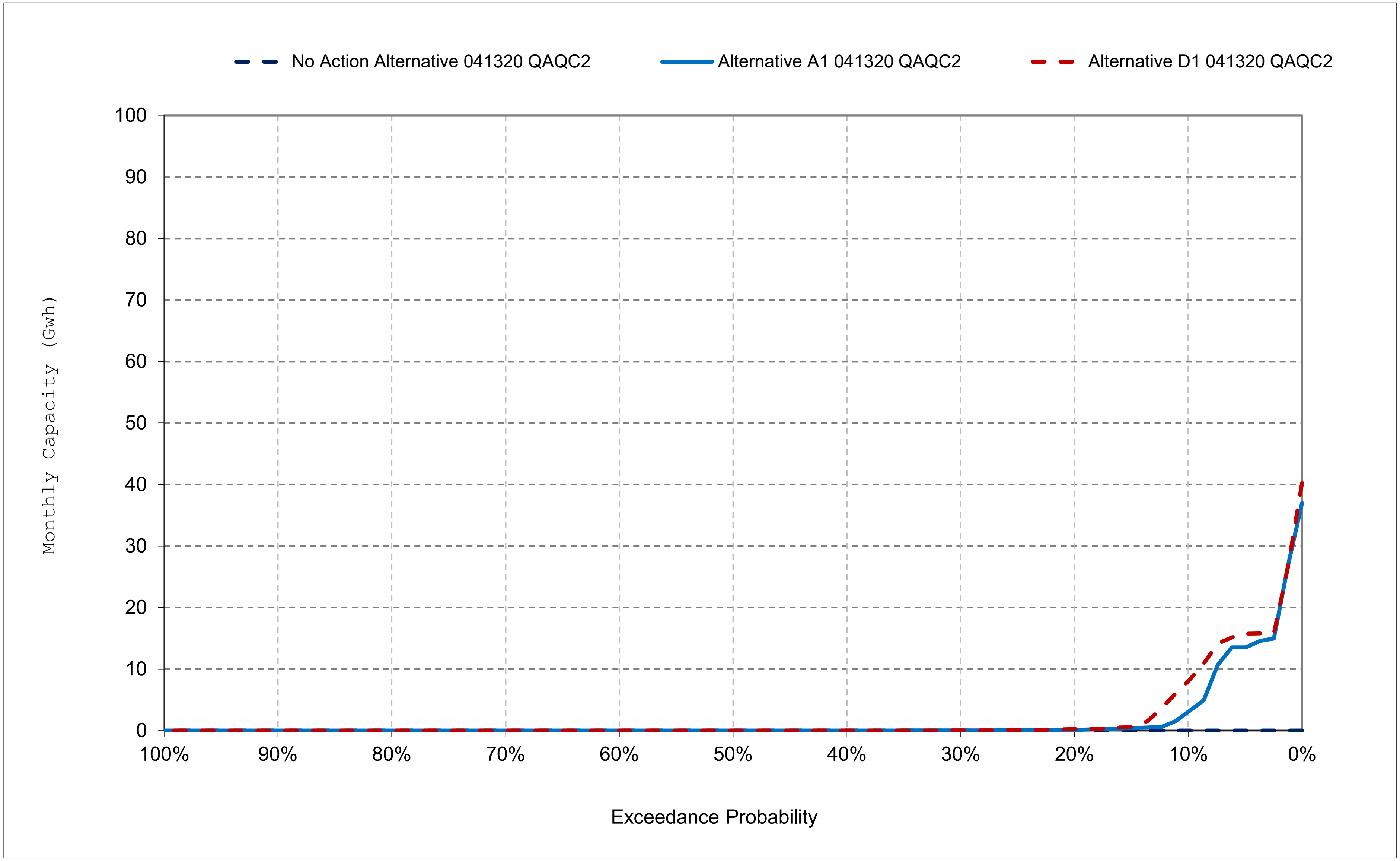
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-11. NODOS Total Capacity, February



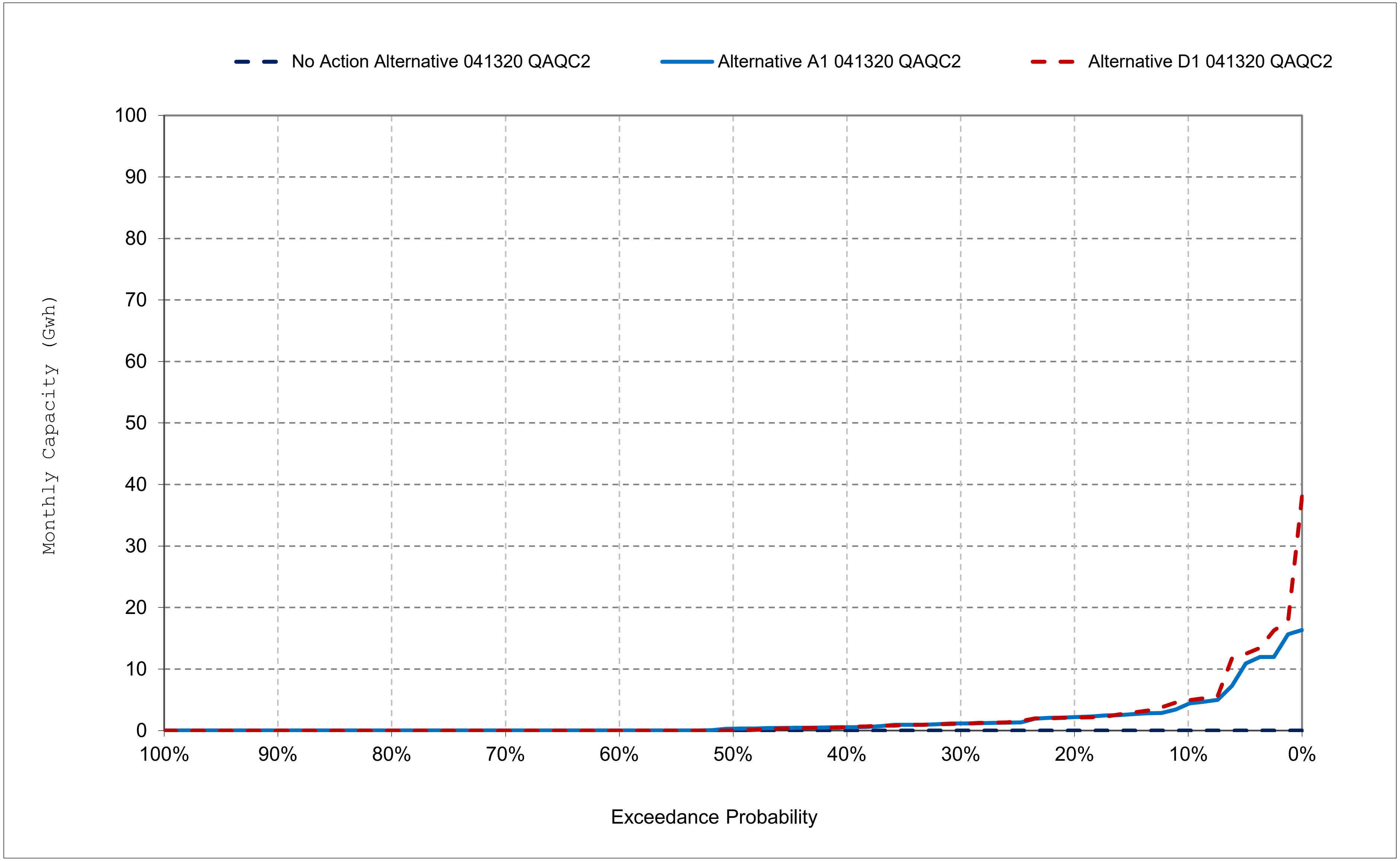
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-12. NODOS Total Capacity, March



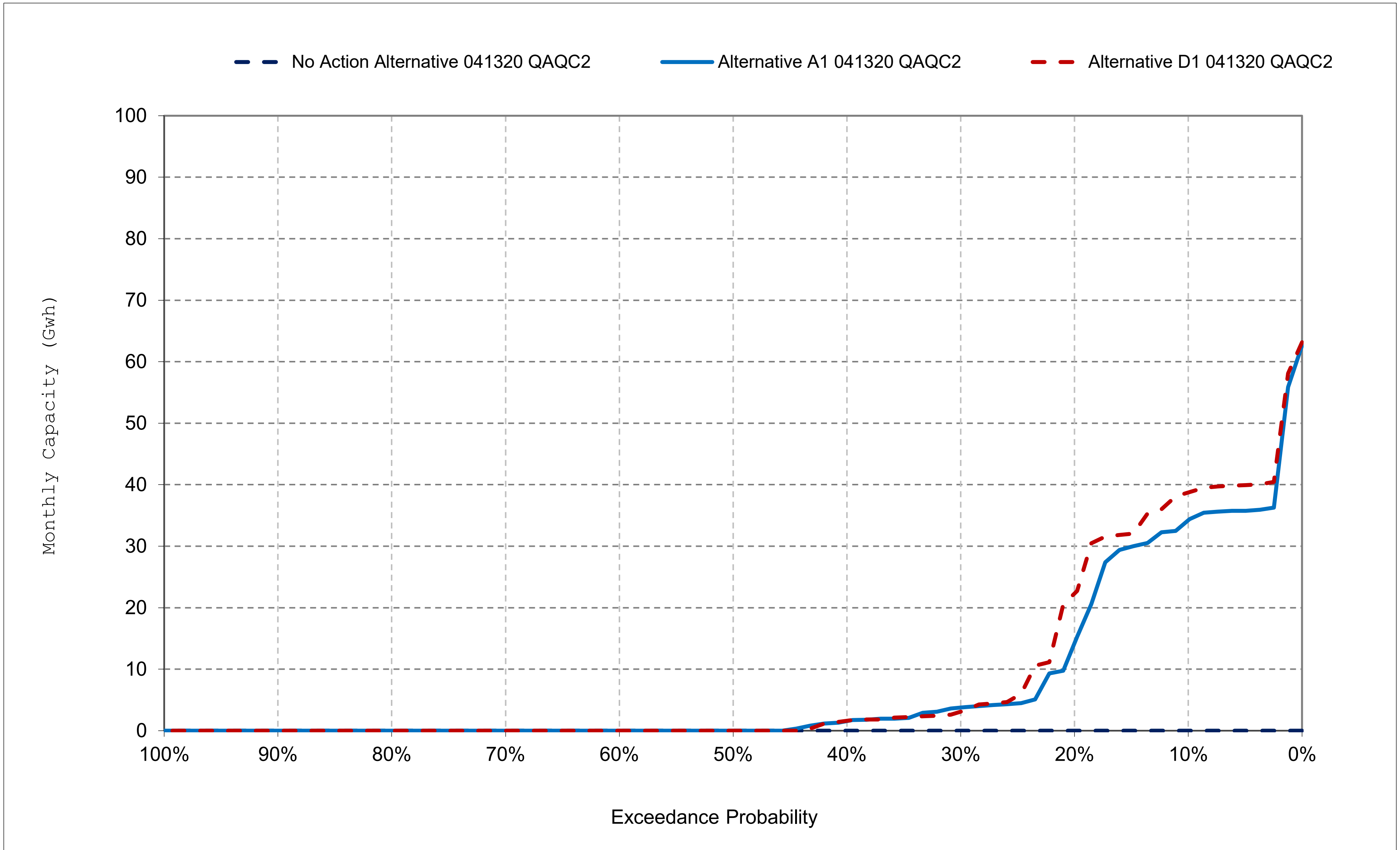
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-13. NODOS Total Capacity, April



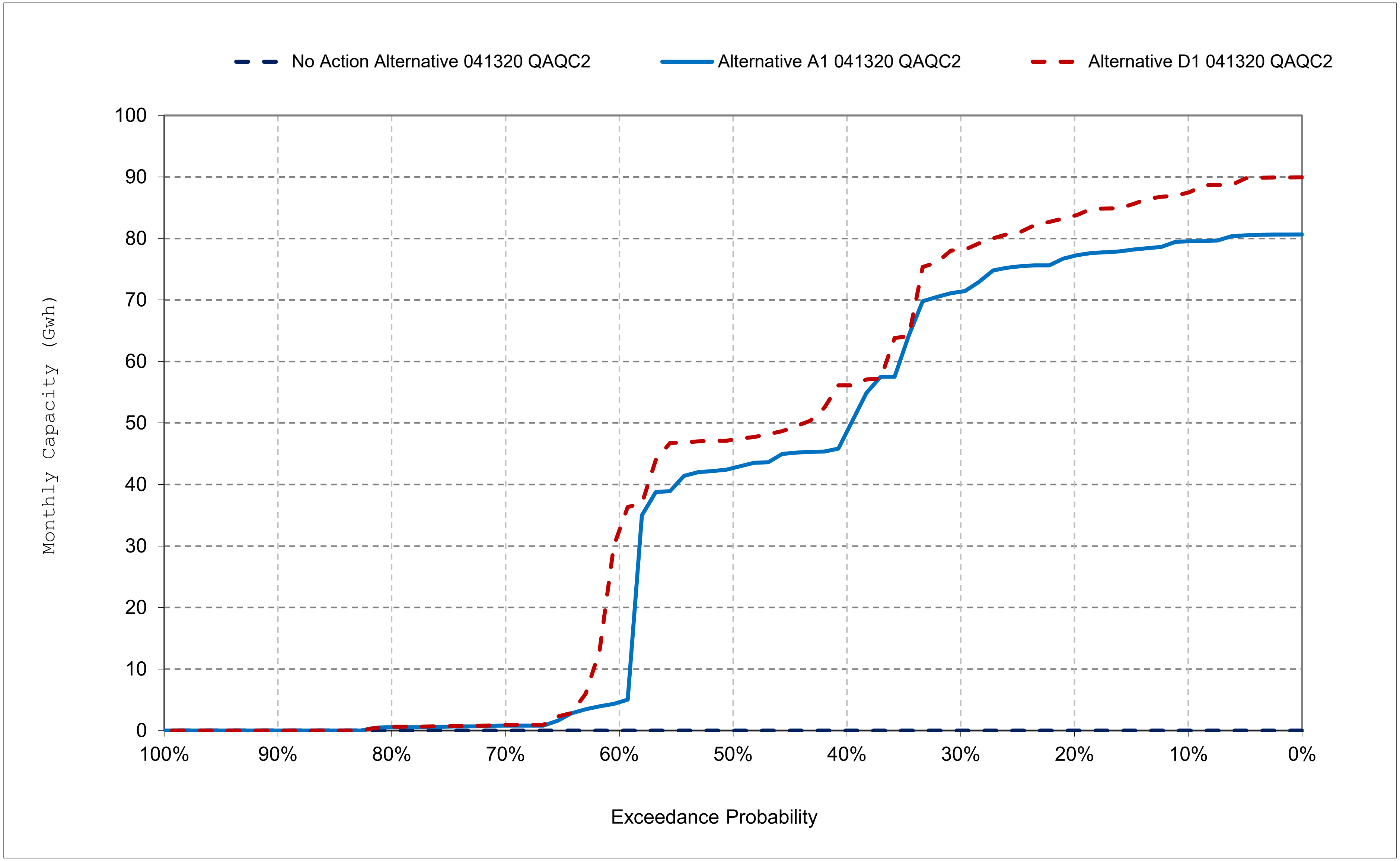
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-14. NODOS Total Capacity, May



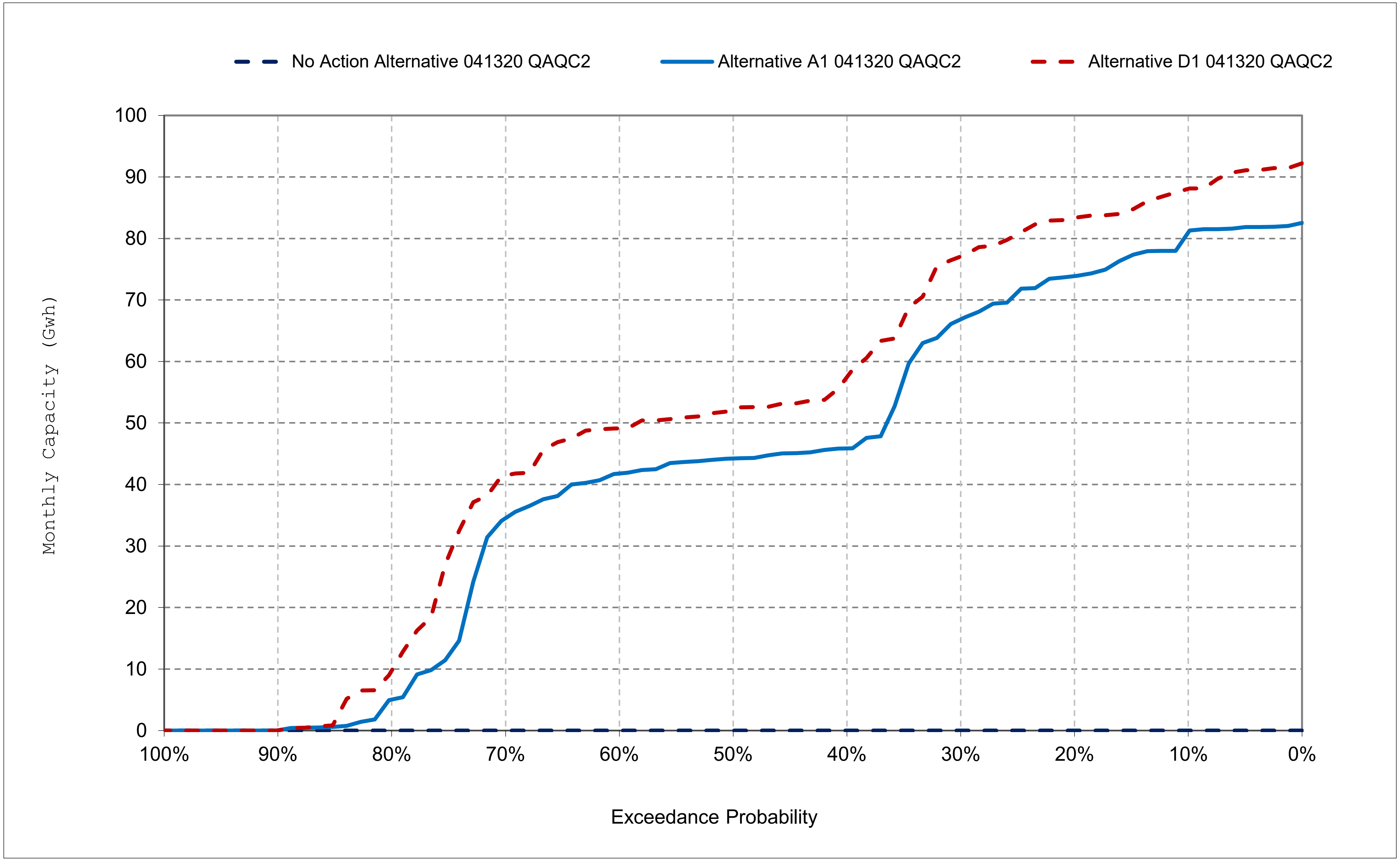
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-15. NODOS Total Capacity, June



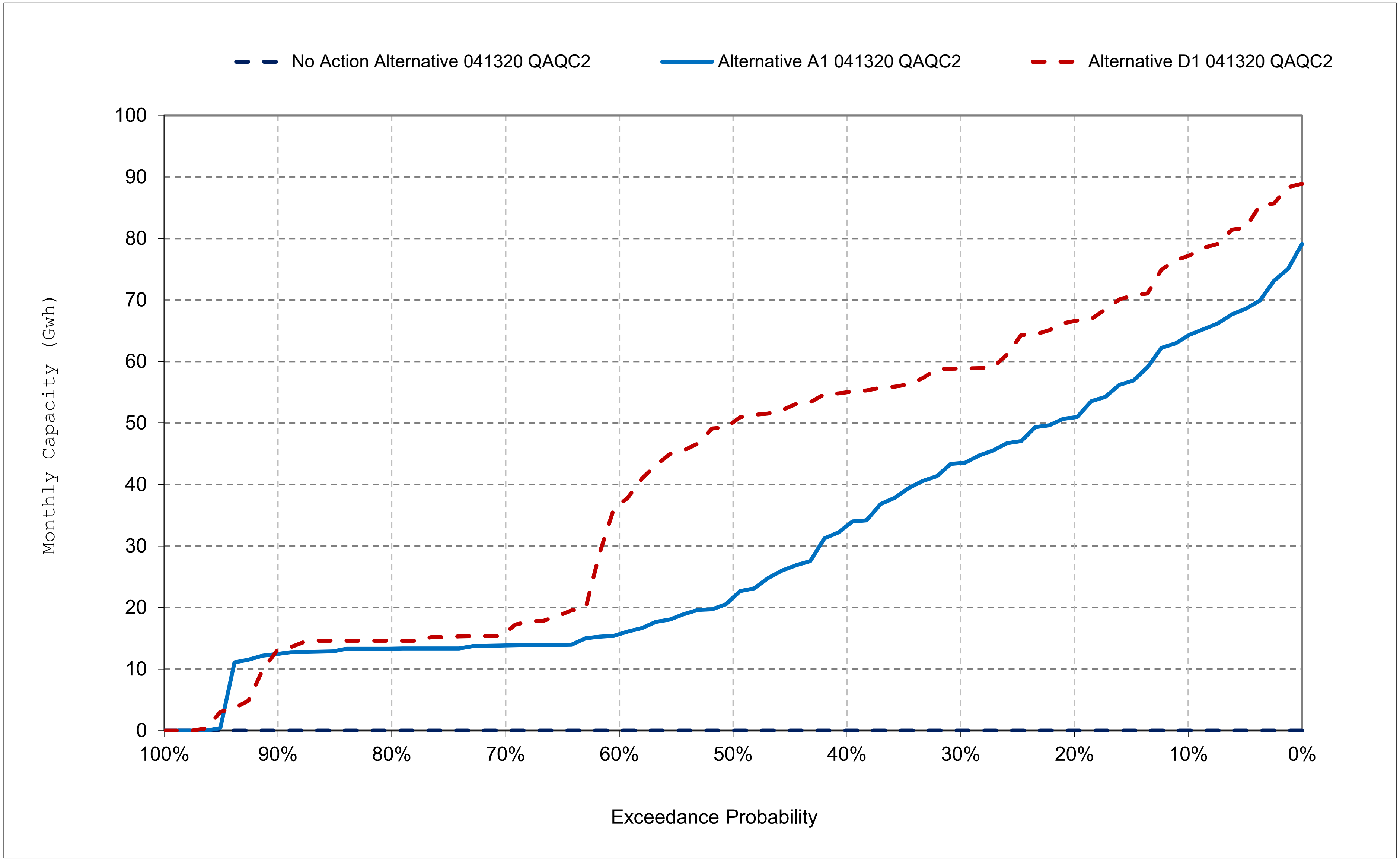
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-16. NODOS Total Capacity, July



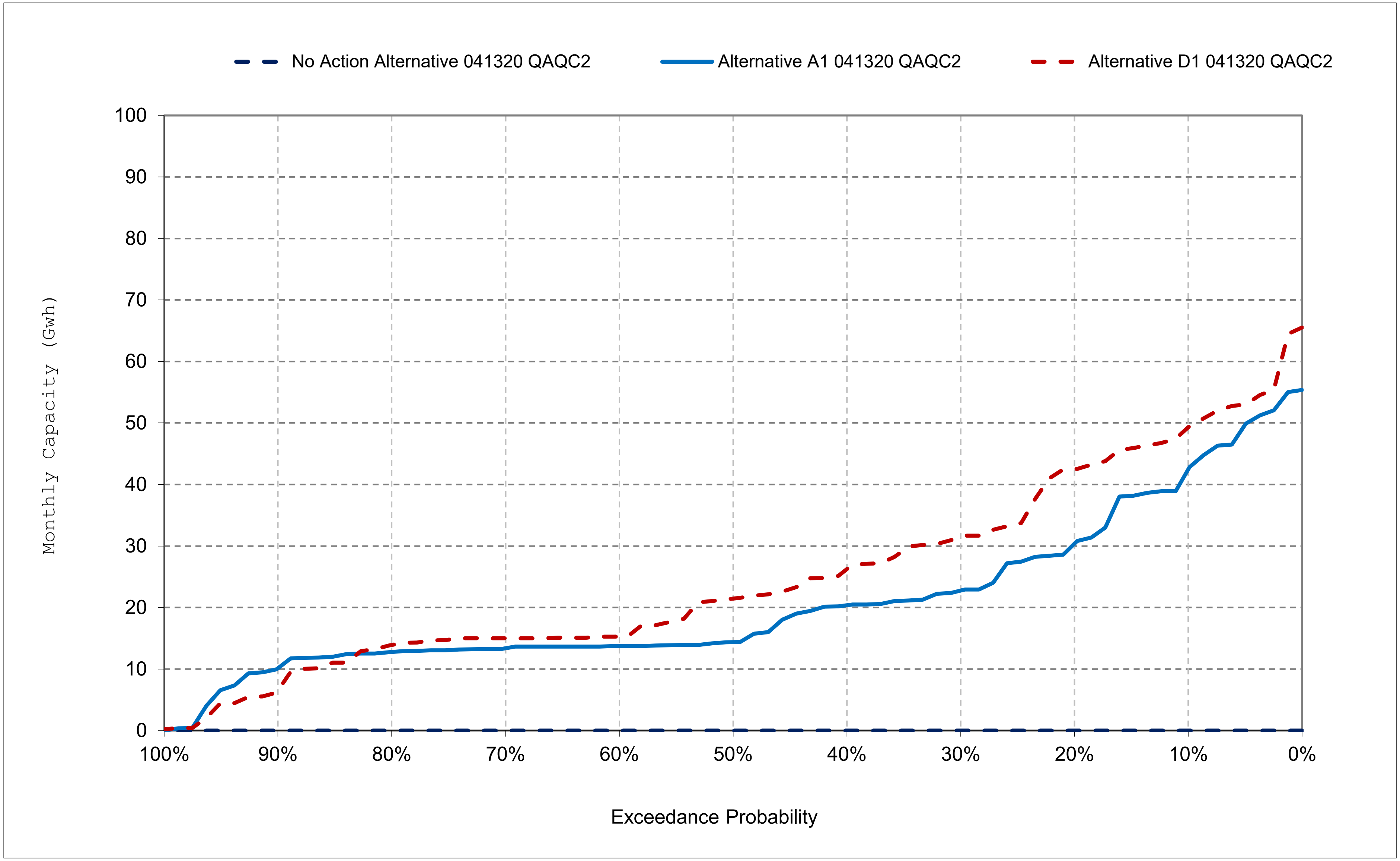
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-17. NODOS Total Capacity, August



*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-12-18. NODOS Total Capacity, September



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-13-1. NODOS Total Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	0	0	0	0	0	0	0	0	0	0
20%	0	0	0	0	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	0	0	0	0	0	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal (15%)	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal (17%)	0	0	0	0	0	0	0	0	0	0	0	0
Dry (22%)	0	0	0	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Alternative A1 041320 QAQC2

Statistic	Monthly Generation (GWh) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	29	13	11	0	0	2	3	25	57	60	48	31
20%	19	10	4	0	0	0	2	11	56	55	38	22
30%	18	7	0	0	0	0	1	3	51	50	32	16
40%	17	3	0	0	0	0	0	1	35	34	25	15
50%	11	0	0	0	0	0	0	0	31	33	16	10
60%	10	0	0	0	0	0	0	0	3	31	12	10
70%	10	0	0	0	0	0	0	0	1	26	10	10
80%	9	0	0	0	0	0	0	0	0	4	10	9
90%	2	0	0	0	0	0	0	0	0	0	9	7
Long Term												
Full Simulation Period[a]	14	5	2	0	1	1	1	6	27	32	23	15
Water Year Types[b,c]												
Wet (32%)	12	4	4	0	0	0	0	1	8	22	15	11
Above Normal (15%)	18	6	3	0	0	0	0	3	30	48	25	22
Below Normal (17%)	15	8	3	1	2	0	0	7	37	39	28	11
Dry (22%)	20	3	1	0	1	2	3	8	48	41	33	21
Critical (15%)	7	1	1	2	0	6	3	15	23	15	15	12

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	29	13	11	0	0	2	3	25	57	60	48	31
20%	19	10	4	0	0	0	2	11	56	55	38	22
30%	18	7	0	0	0	0	1	3	51	50	32	16
40%	17	3	0	0	0	0	0	1	35	34	25	15
50%	11	0	0	0	0	0	0	0	31	33	16	10
60%	10	0	0	0	0	0	0	0	3	31	12	10
70%	10	0	0	0	0	0	0	0	1	26	10	10
80%	9	0	0	0	0	0	0	0	0	4	10	9
90%	2	0	0	0	0	0	0	0	0	0	9	7
Long Term												
Full Simulation Period[a]	14	5	2	0	1	1	1	6	27	32	23	15
Water Year Types[b,c]												
Wet (32%)	12	4	4	0	0	0	0	1	8	22	15	11
Above Normal (15%)	18	6	3	0	0	0	0	3	30	48	25	22
Below Normal (17%)	15	8	3	1	2	0	0	7	37	39	28	11
Dry (22%)	20	3	1	0	1	2	3	8	48	41	33	21
Critical (15%)	7	1	1	2	0	6	3	15	23	15	15	12

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-13-2. NODOS Total Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	0	0	0	0	0	0	0	0	0	0
20%	0	0	0	0	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	0	0	0	0	0	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal (15%)	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal (17%)	0	0	0	0	0	0	0	0	0	0	0	0
Dry (22%)	0	0	0	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Alternative D1 041320 QAQC2

Statistic	Monthly Generation (GWh) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	31	18	12	0	0	6	4	29	63	66	57	35
20%	24	12	9	0	0	0	2	17	60	62	50	31
30%	21	11	0	0	0	0	1	2	56	57	44	23
40%	20	7	0	0	0	0	0	1	40	43	41	19
50%	17	1	0	0	0	0	0	0	34	39	37	15
60%	11	0	0	0	0	0	0	0	23	37	27	11
70%	11	0	0	0	0	0	0	0	1	31	12	11
80%	10	0	0	0	0	0	0	0	0	7	11	10
90%	4	0	0	0	0	0	0	0	0	0	10	5
Long Term												
Full Simulation Period[a]	17	7	3	1	1	2	2	7	31	37	32	18
Water Year Types[b,c]												
Wet (32%)	14	6	4	0	0	0	0	1	10	25	19	13
Above Normal (15%)	18	9	3	0	0	0	0	3	31	56	41	26
Below Normal (17%)	17	11	4	1	3	0	0	8	42	43	40	14
Dry (22%)	25	7	1	1	1	2	3	8	53	49	45	26
Critical (15%)	10	1	1	3	2	8	6	19	29	22	21	14

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	31	18	12	0	0	6	4	29	63	66	57	35
20%	24	12	9	0	0	0	2	17	60	62	50	31
30%	21	11	0	0	0	0	1	2	56	57	44	23
40%	20	7	0	0	0	0	0	1	40	43	41	19
50%	17	1	0	0	0	0	0	0	34	39	37	15
60%	11	0	0	0	0	0	0	0	23	37	27	11
70%	11	0	0	0	0	0	0	0	1	31	12	11
80%	10	0	0	0	0	0	0	0	0	7	11	10
90%	4	0	0	0	0	0	0	0	0	0	10	5
Long Term												
Full Simulation Period[a]	17	7	3	1	1	2	2	7	31	37	32	18
Water Year Types[b,c]												
Wet (32%)	14	6	4	0	0	0	0	1	10	25	19	13
Above Normal (15%)	18	9	3	0	0	0	0	3	31	56	41	26
Below Normal (17%)	17	11	4	1	3	0	0	8	42	43	40	14
Dry (22%)	25	7	1	1	1	2	3	8	53	49	45	26
Critical (15%)	10	1	1	3	2	8	6	19	29	22	21	14

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-13-3. NODOS Total Generation, Monthly Generation

Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	29	13	11	0	0	2	3	25	57	60	48	31
20%	19	10	4	0	0	0	2	11	56	55	38	22
30%	18	7	0	0	0	0	1	3	51	50	32	16
40%	17	3	0	0	0	0	0	1	35	34	25	15
50%	11	0	0	0	0	0	0	0	31	33	16	10
60%	10	0	0	0	0	0	0	0	3	31	12	10
70%	10	0	0	0	0	0	0	0	1	26	10	10
80%	9	0	0	0	0	0	0	0	0	4	10	9
90%	2	0	0	0	0	0	0	0	0	0	9	7
Long Term												
Full Simulation Period[a]	14	5	2	0	1	1	1	6	27	32	23	15
Water Year Types[b,c]												
Wet (32%)	12	4	4	0	0	0	0	1	8	22	15	11
Above Normal (15%)	18	6	3	0	0	0	0	3	30	48	25	22
Below Normal (17%)	15	8	3	1	2	0	0	7	37	39	28	11
Dry (22%)	20	3	1	0	1	2	3	8	48	41	33	21
Critical (15%)	7	1	1	2	0	6	3	15	23	15	15	12

Alternative D1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	31	18	12	0	0	6	4	29	63	66	57	35
20%	24	12	9	0	0	0	2	17	60	62	50	31
30%	21	11	0	0	0	0	1	2	56	57	44	23
40%	20	7	0	0	0	0	0	1	40	43	41	19
50%	17	1	0	0	0	0	0	0	34	39	37	15
60%	11	0	0	0	0	0	0	0	23	37	27	11
70%	11	0	0	0	0	0	0	0	1	31	12	11
80%	10	0	0	0	0	0	0	0	0	7	11	10
90%	4	0	0	0	0	0	0	0	0	0	10	5
Long Term												
Full Simulation Period[a]	17	7	3	1	1	2	2	7	31	37	32	18
Water Year Types[b,c]												
Wet (32%)	14	6	4	0	0	0	0	1	10	25	19	13
Above Normal (15%)	18	9	3	0	0	0	0	3	31	56	41	26
Below Normal (17%)	17	11	4	1	3	0	0	8	42	43	40	14
Dry (22%)	25	7	1	1	1	2	3	8	53	49	45	26
Critical (15%)	10	1	1	3	2	8	6	19	29	22	21	14

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	3	6	1	0	0	4	0	3	6	5	10	5
20%	5	2	5	0	0	0	0	6	5	7	12	9
30%	3	4	0	0	0	0	0	0	5	8	11	6
40%	3	4	0	0	0	0	0	0	5	9	16	4
50%	6	1	0	0	0	0	0	0	3	6	21	5
60%	1	0	0	0	0	0	0	0	20	5	16	1
70%	1	0	0	0	0	0	0	0	0	5	2	1
80%	2	0	0	0	0	0	0	0	0	4	1	1
90%	2	0	0	0	0	0	0	0	0	0	0	-3
Long Term												
Full Simulation Period[a]	3	2	0	0	0	0	0	1	3	5	9	3
Water Year Types[b,c]												
Wet (32%)	2	2	0	0	0	0	0	0	1	3	4	2
Above Normal (15%)	0	3	1	0	0	0	0	0	1	8	15	4
Below Normal (17%)	2	3	1	0	1	0	0	1	5	4	12	2
Dry (22%)	6	4	0	1	0	0	0	0	5	8	12	5
Critical (15%)	4	0	0	1	2	1	2	3	6	7	6	3

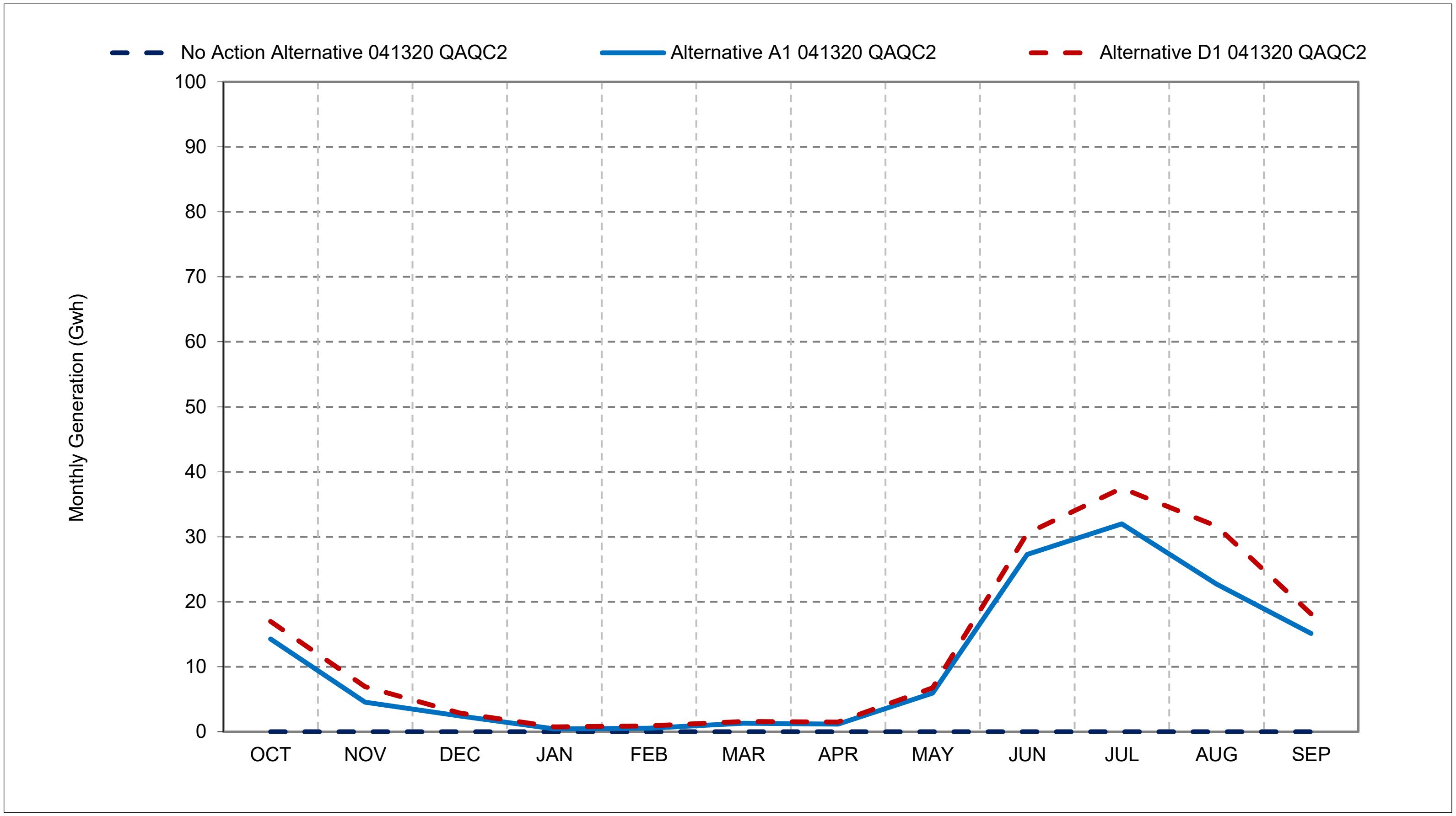
a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-1. NODOS Total Generation, Long-Term Average Generation

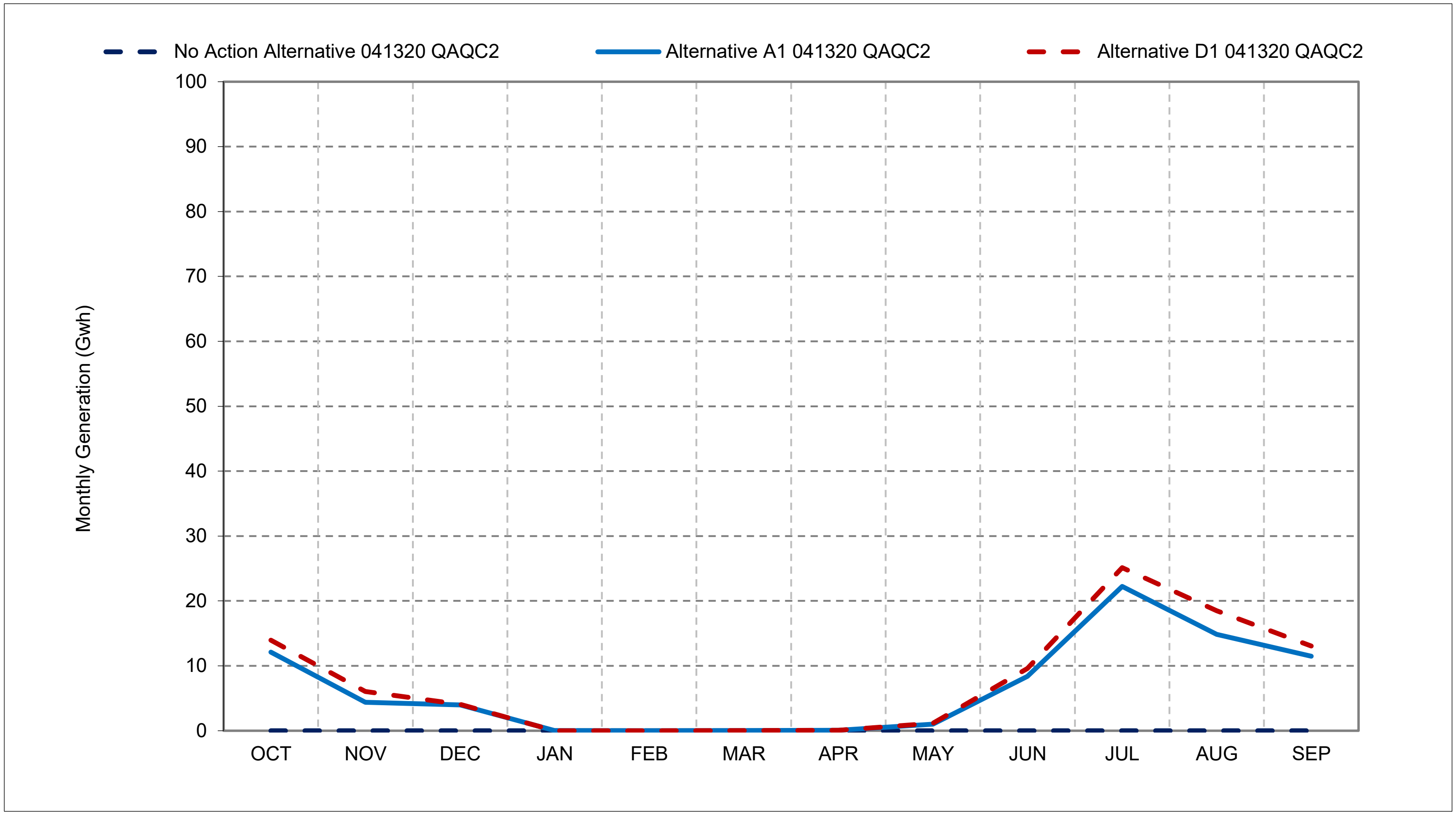


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-2. NODOS Total Generation, Wet Year Average Generation

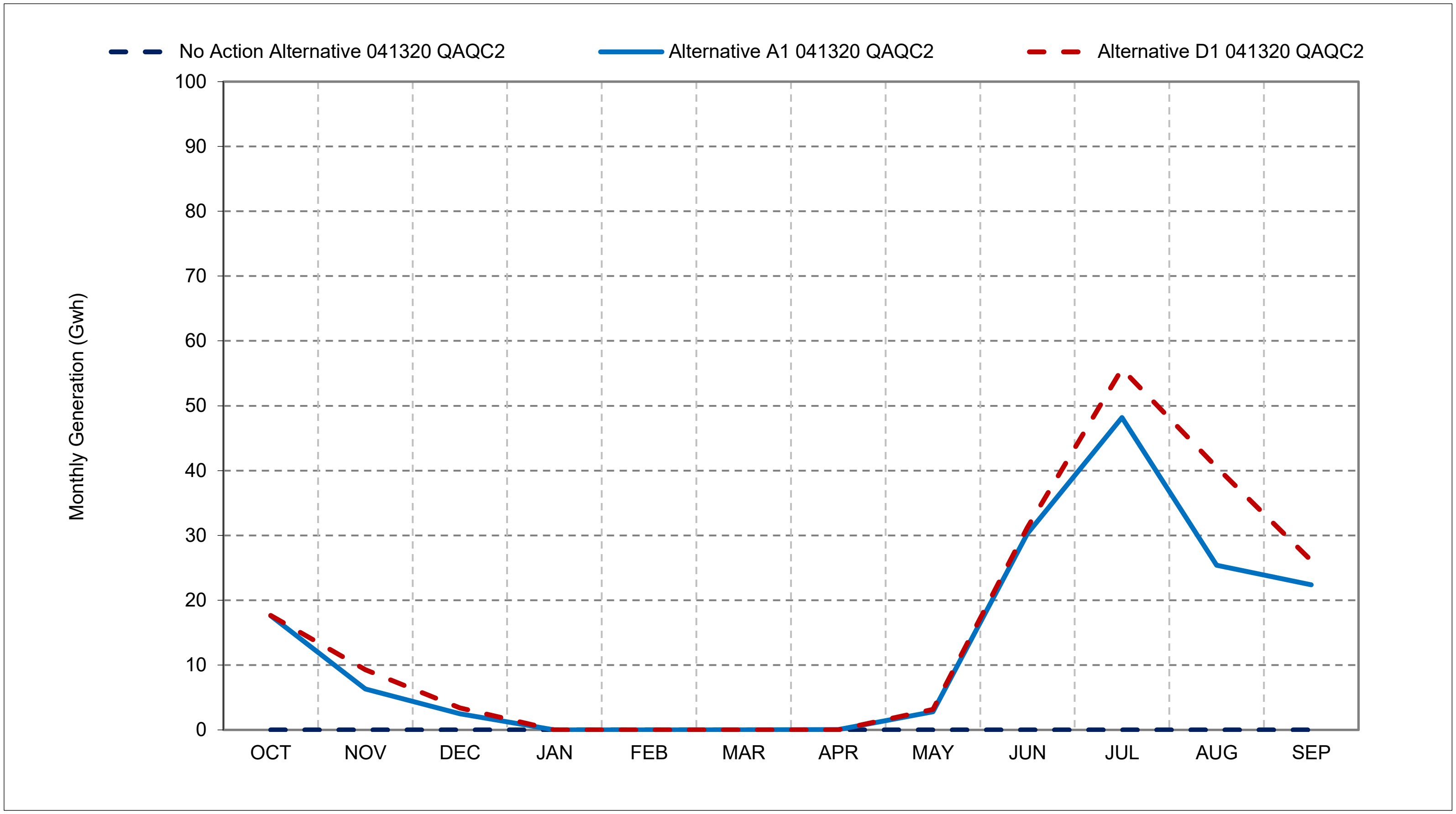


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-3. NODOS Total Generation, Above Normal Year Average Generation

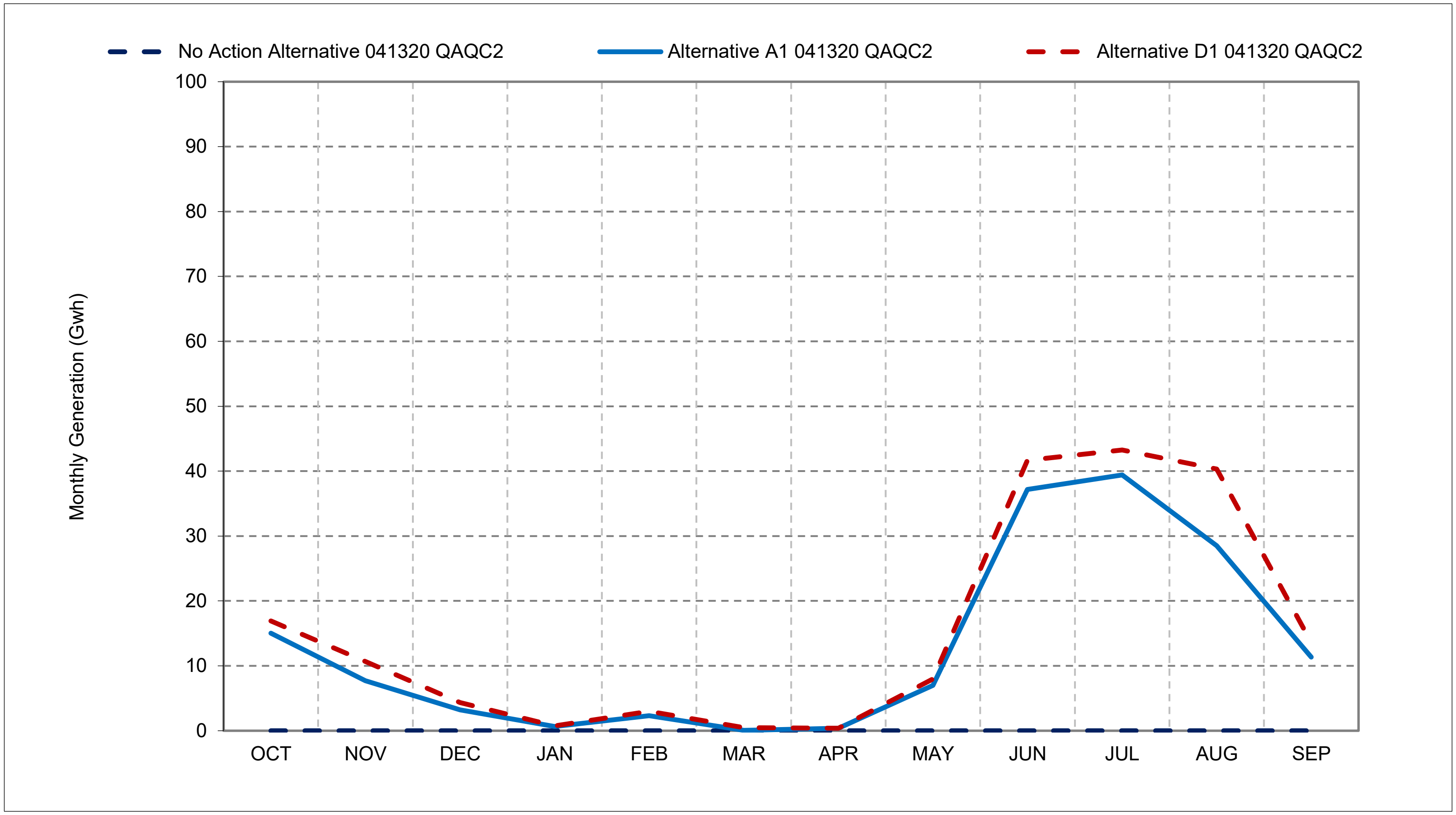


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-4. NODOS Total Generation, Below Normal Year Average Generation

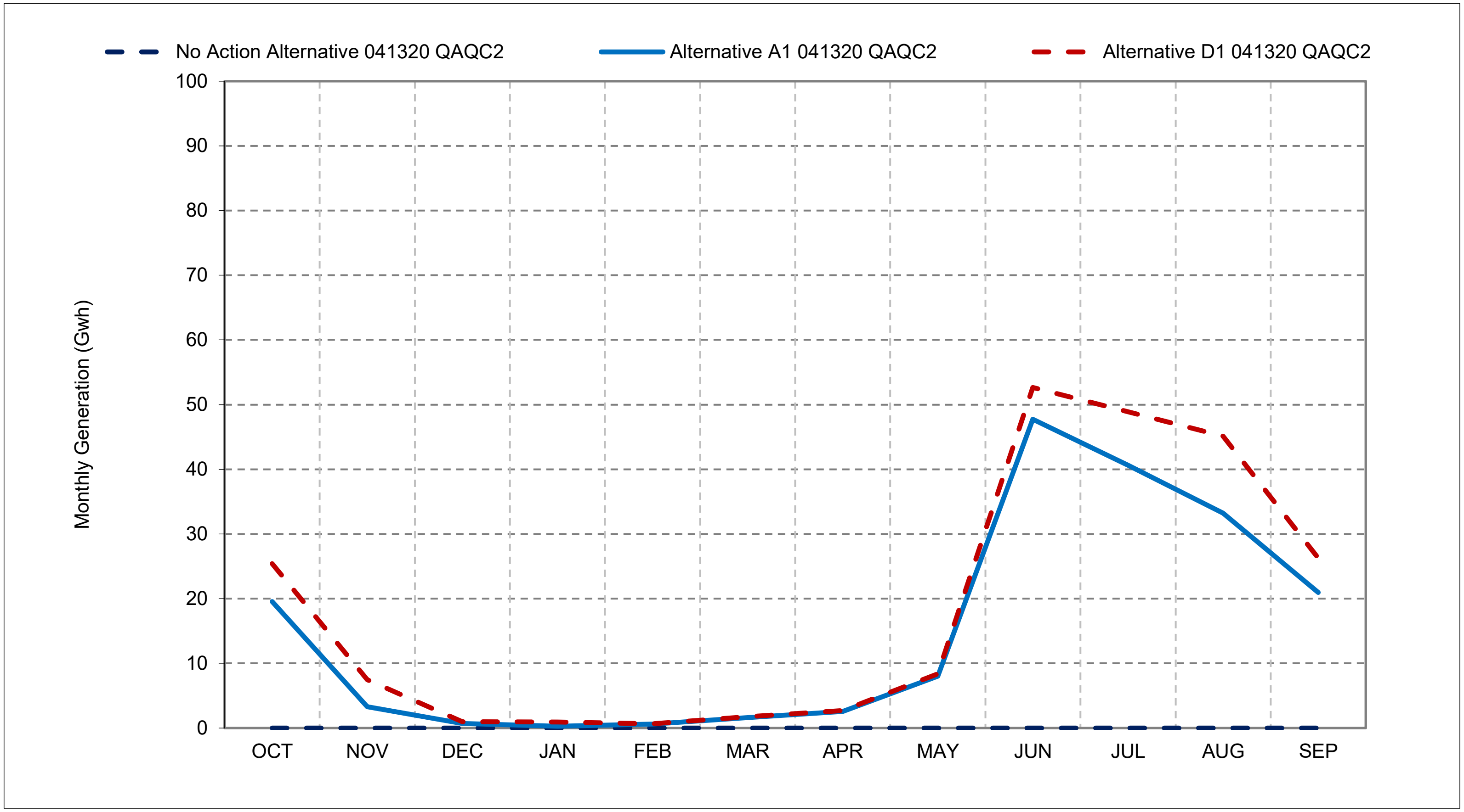


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-5. NODOS Total Generation, Dry Year Average Generation

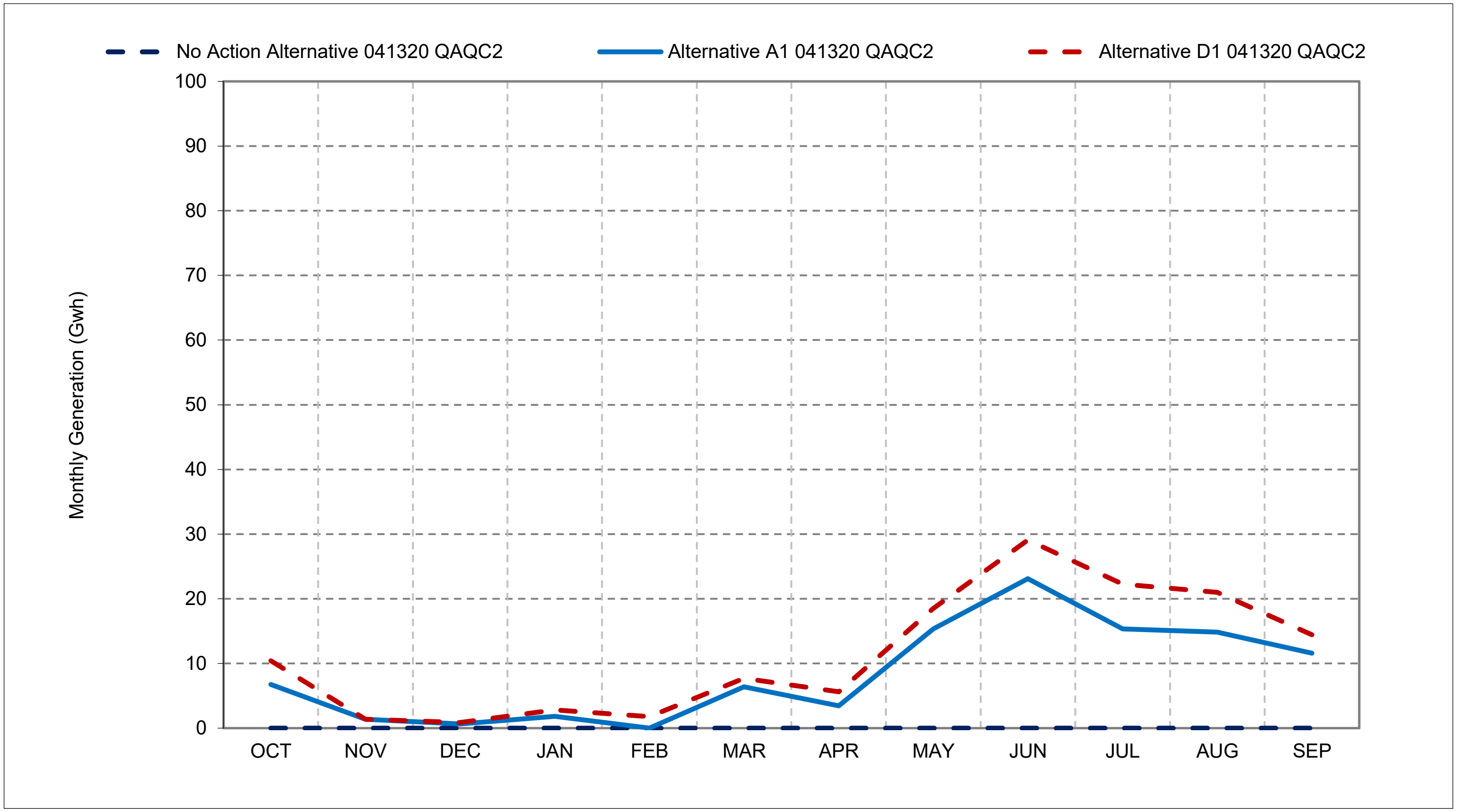


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-6. NODOS Total Generation, Critical Year Average Generation

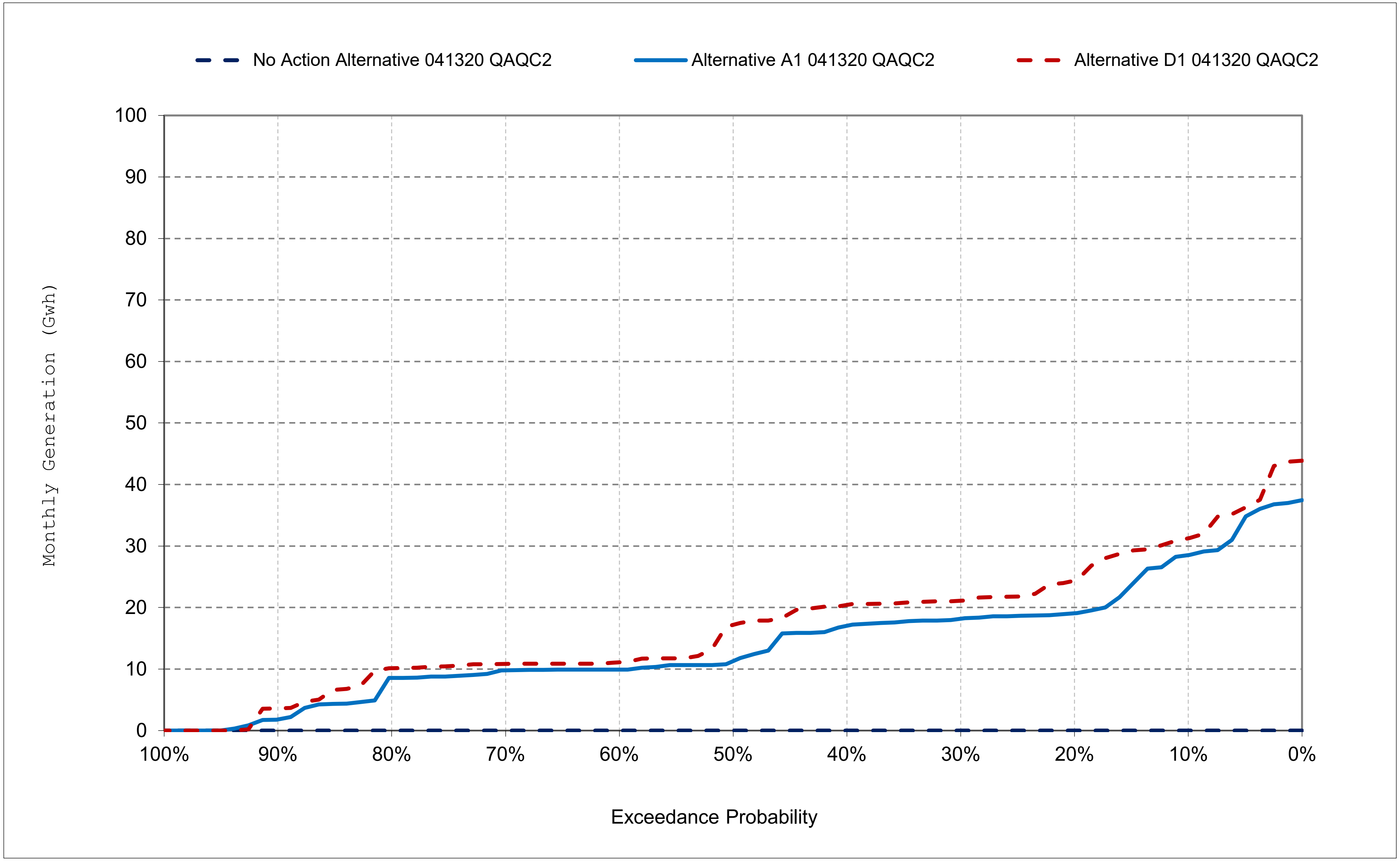


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

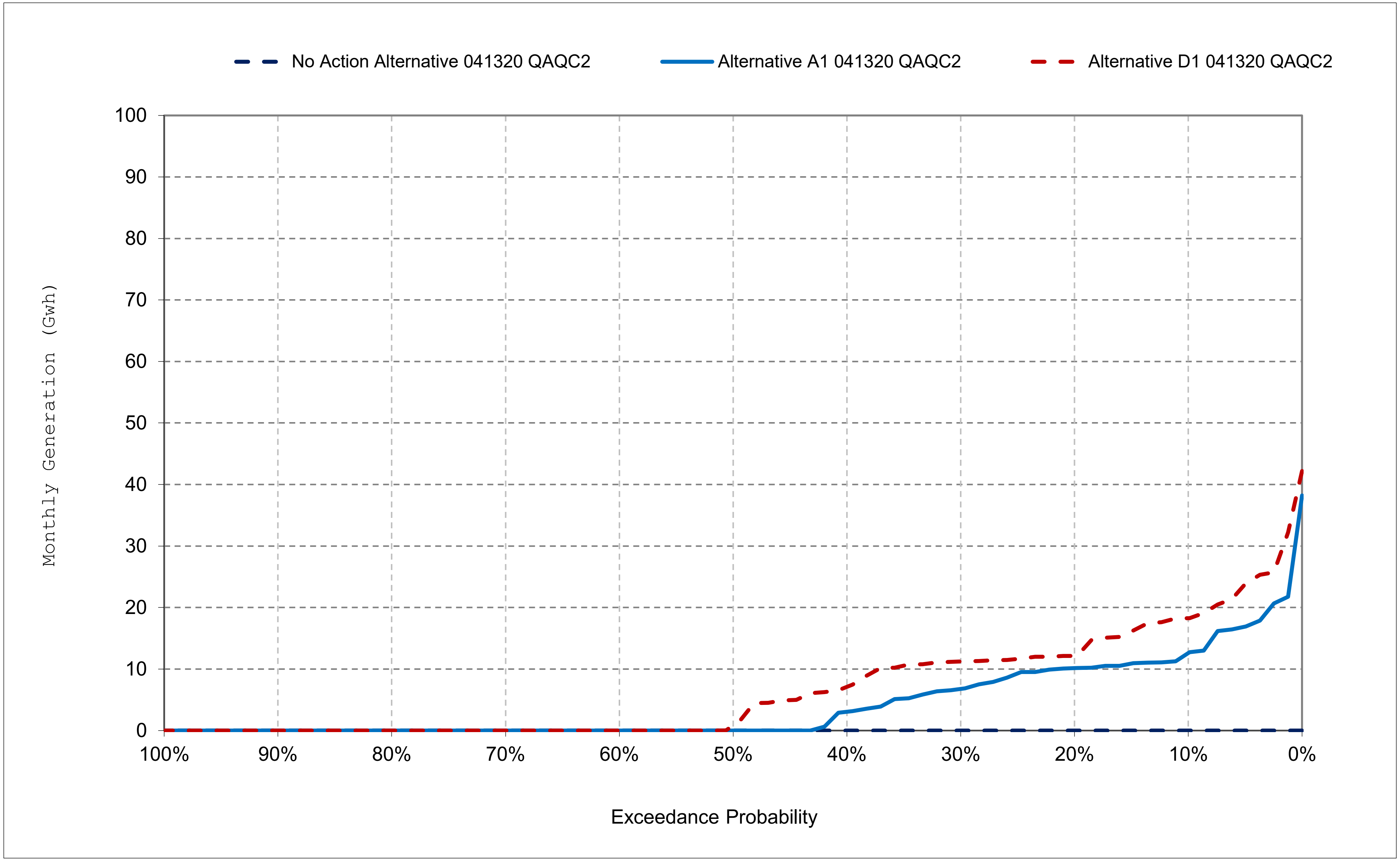
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-7. NODOS Total Generation, October



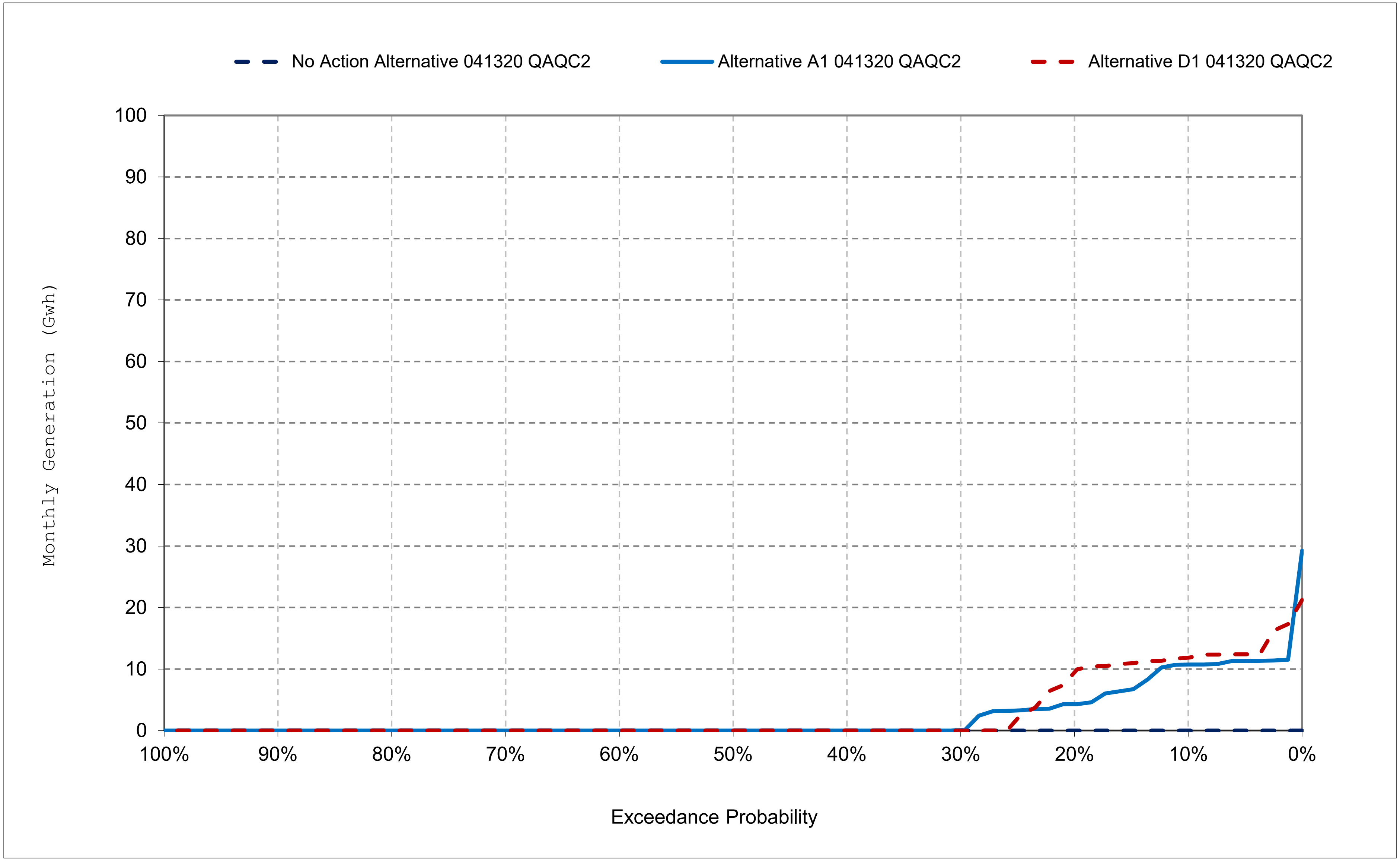
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-8. NODOS Total Generation, November



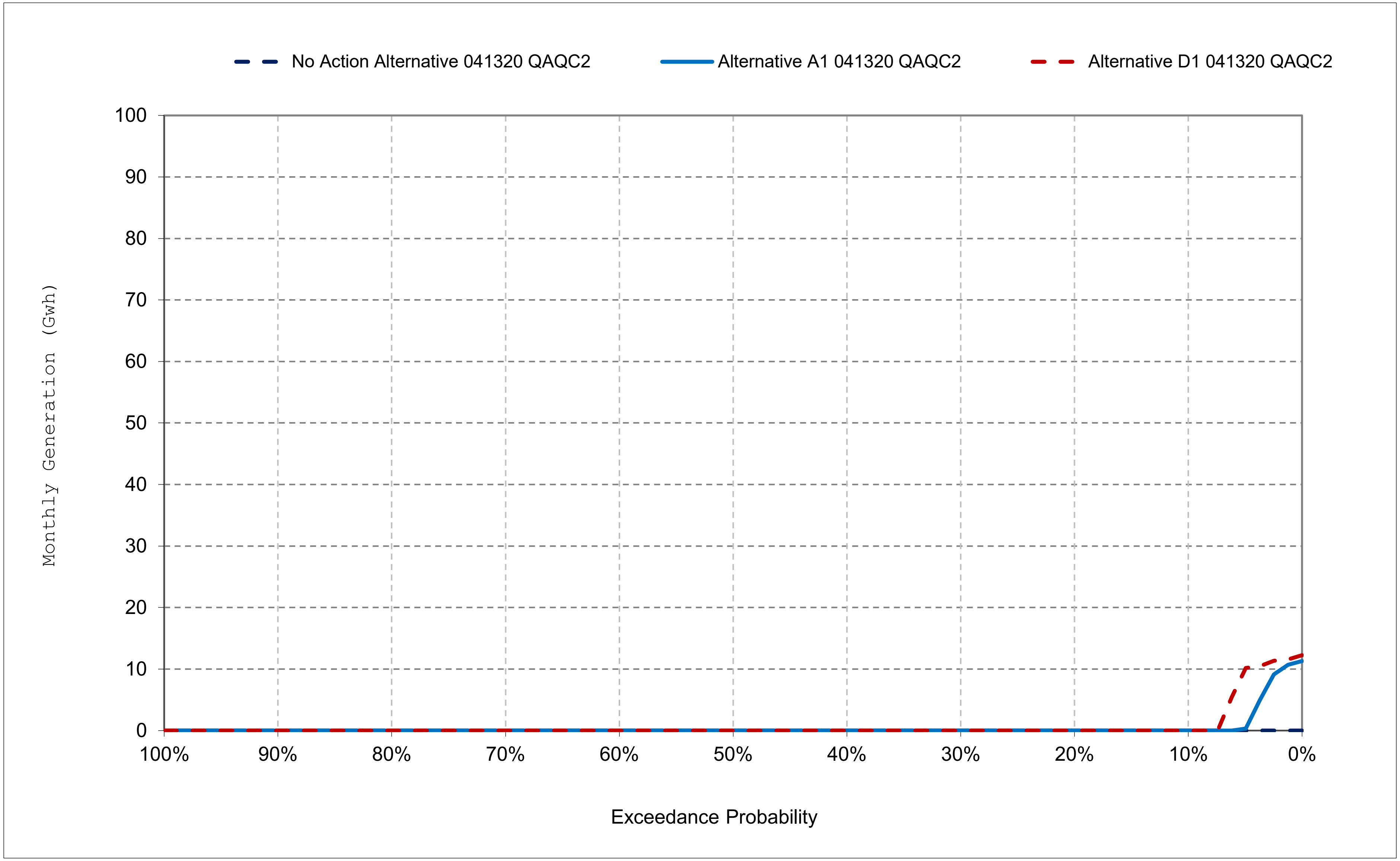
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-9. NODOS Total Generation, December



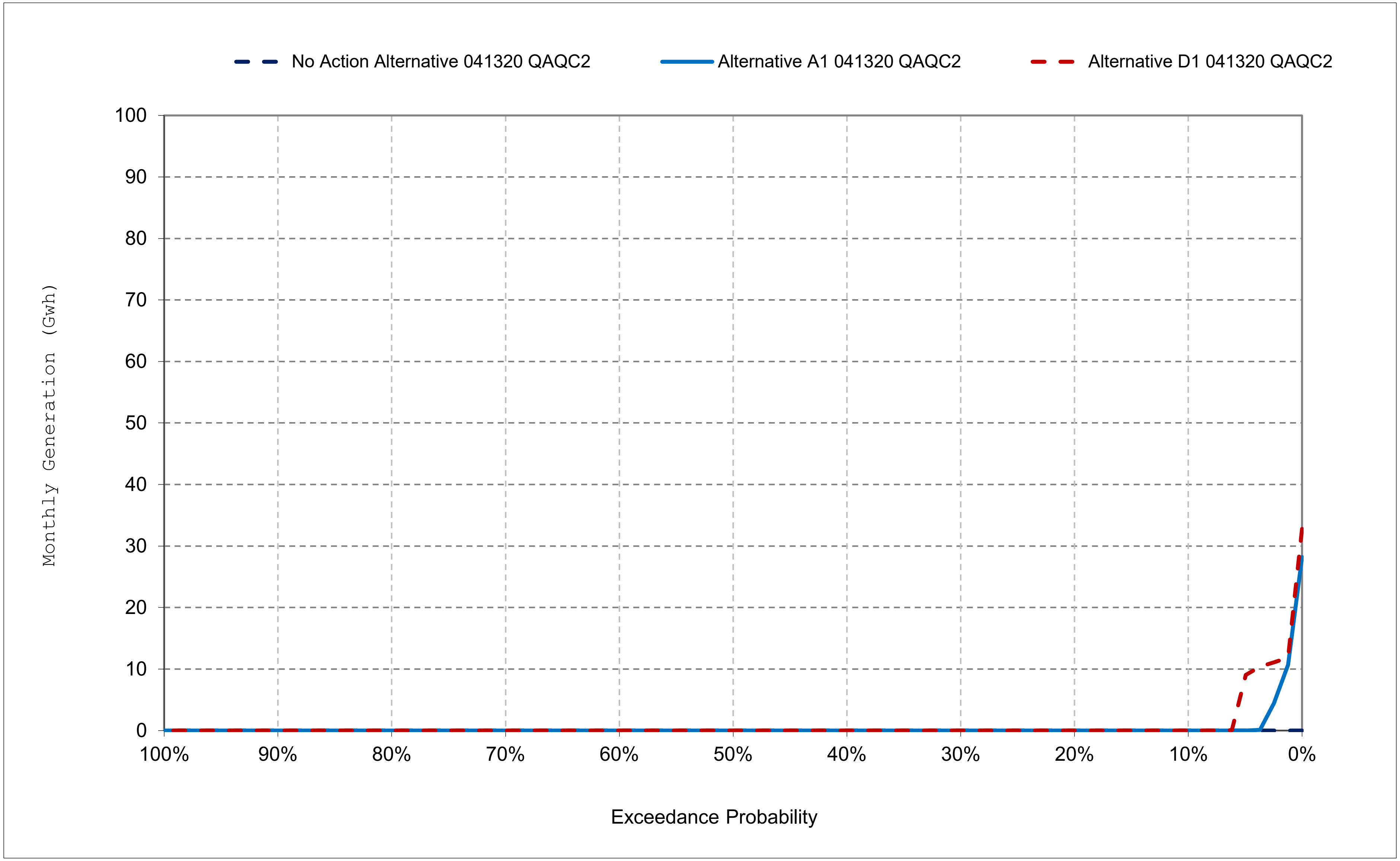
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-10. NODOS Total Generation, January



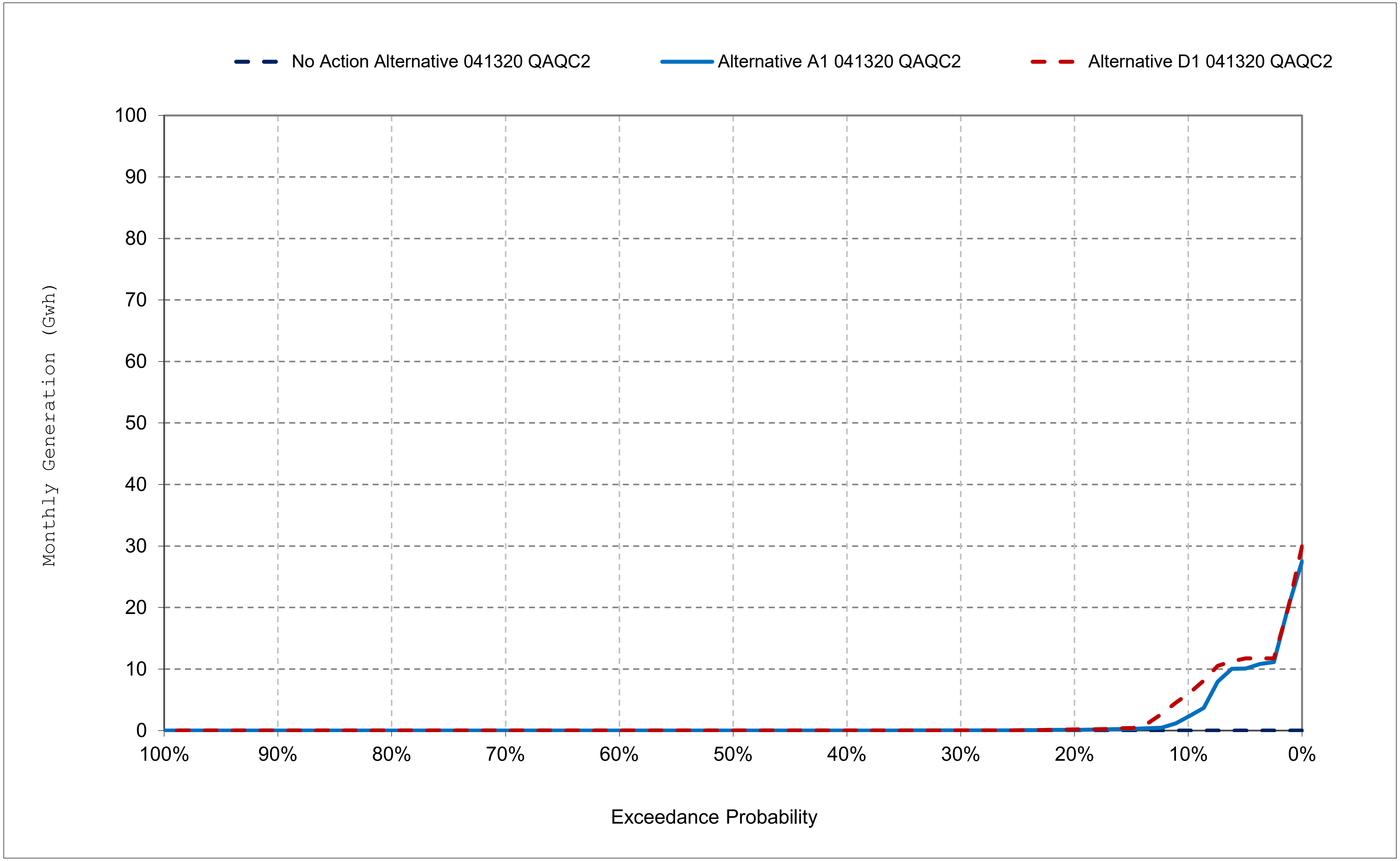
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-11. NODOS Total Generation, February



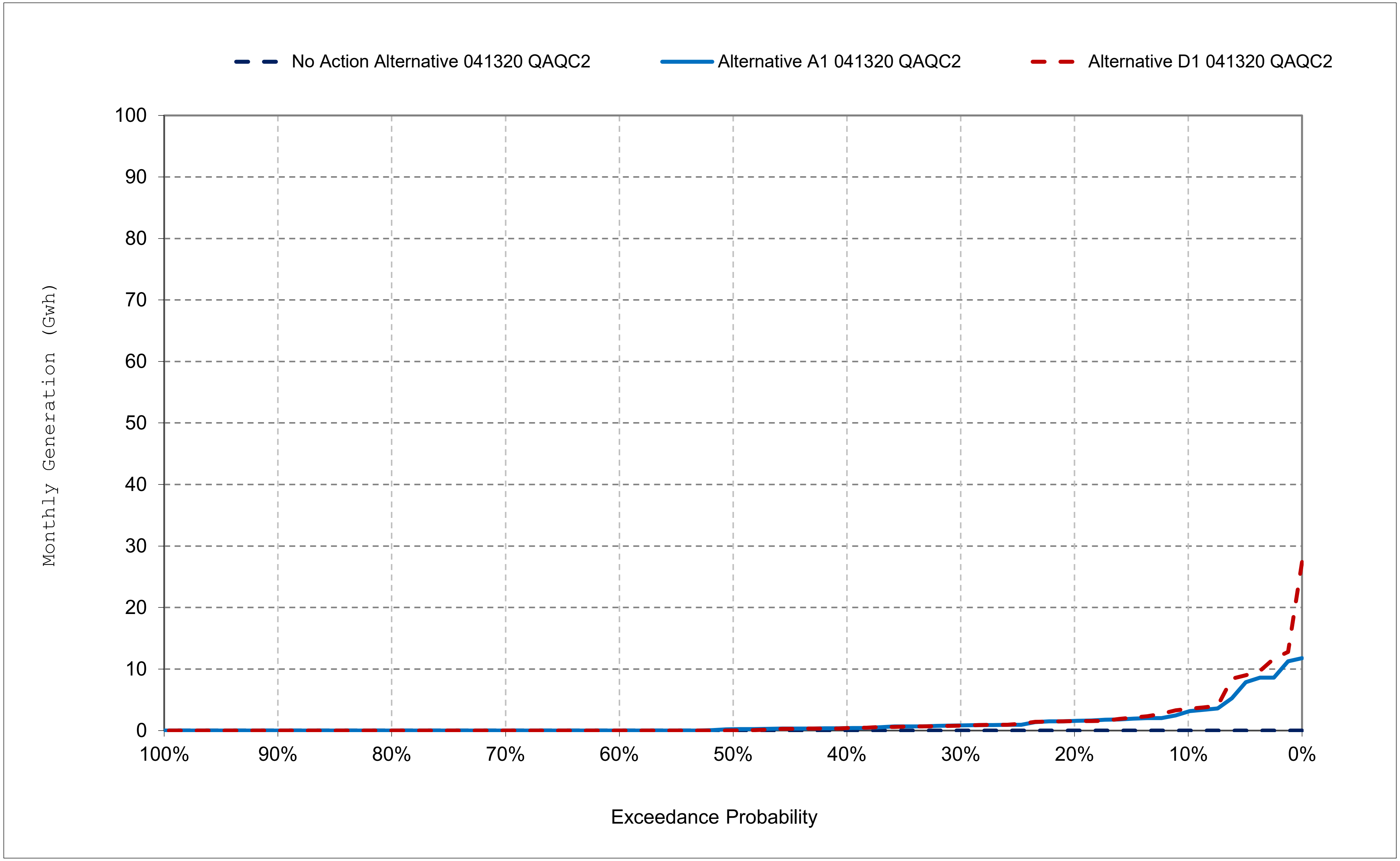
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-12. NODOS Total Generation, March



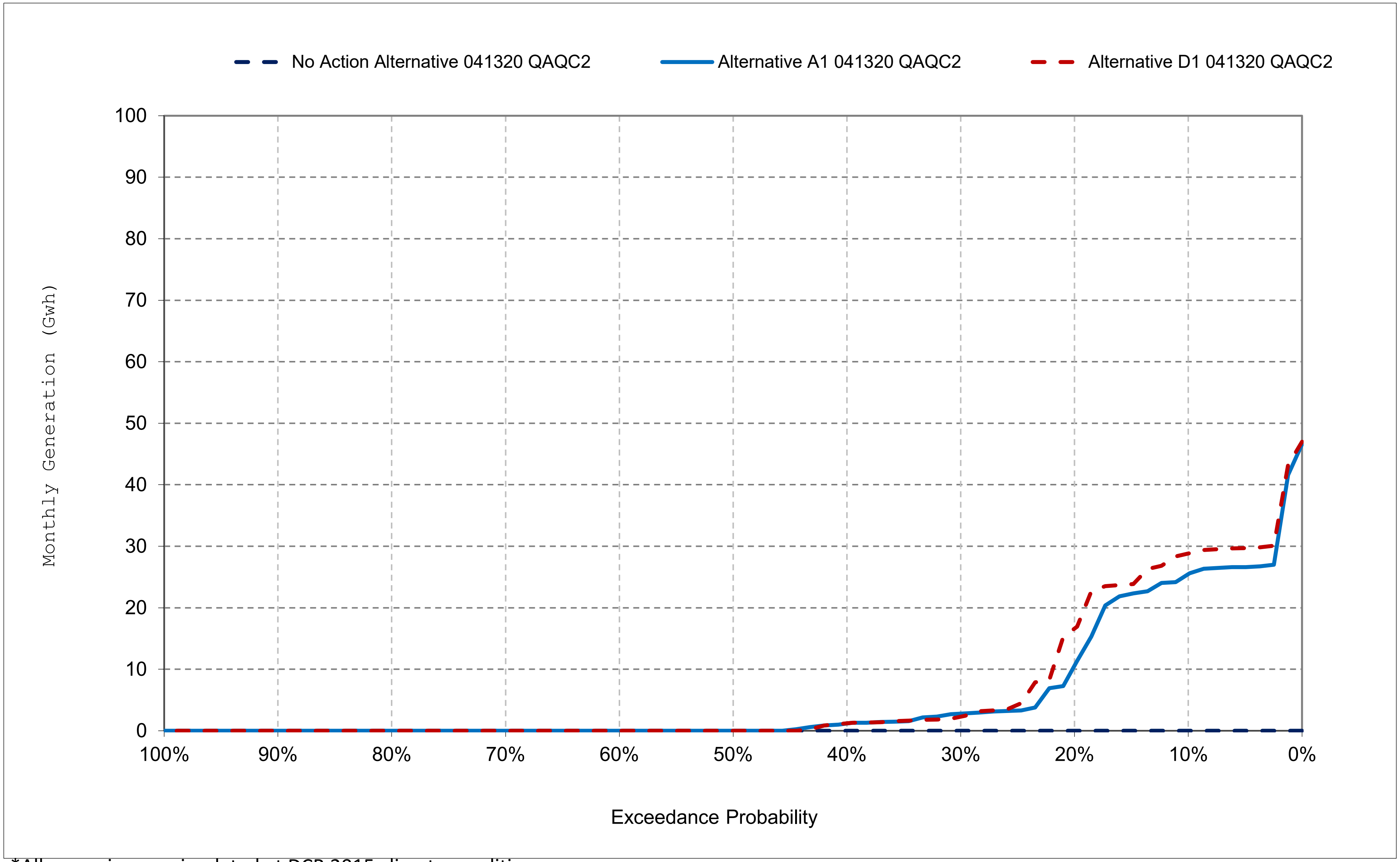
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-13. NODOS Total Generation, April



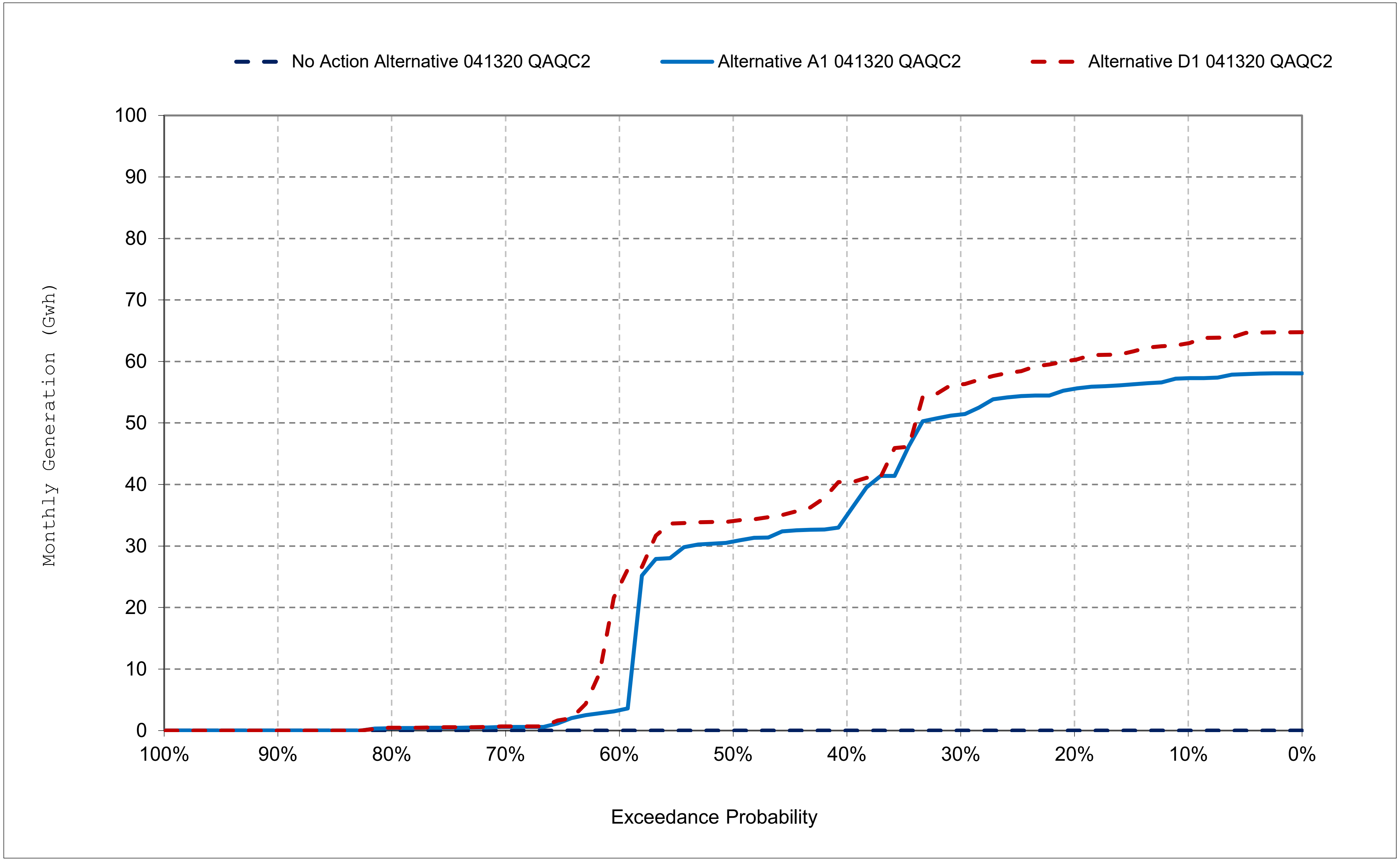
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-14. NODOS Total Generation, May



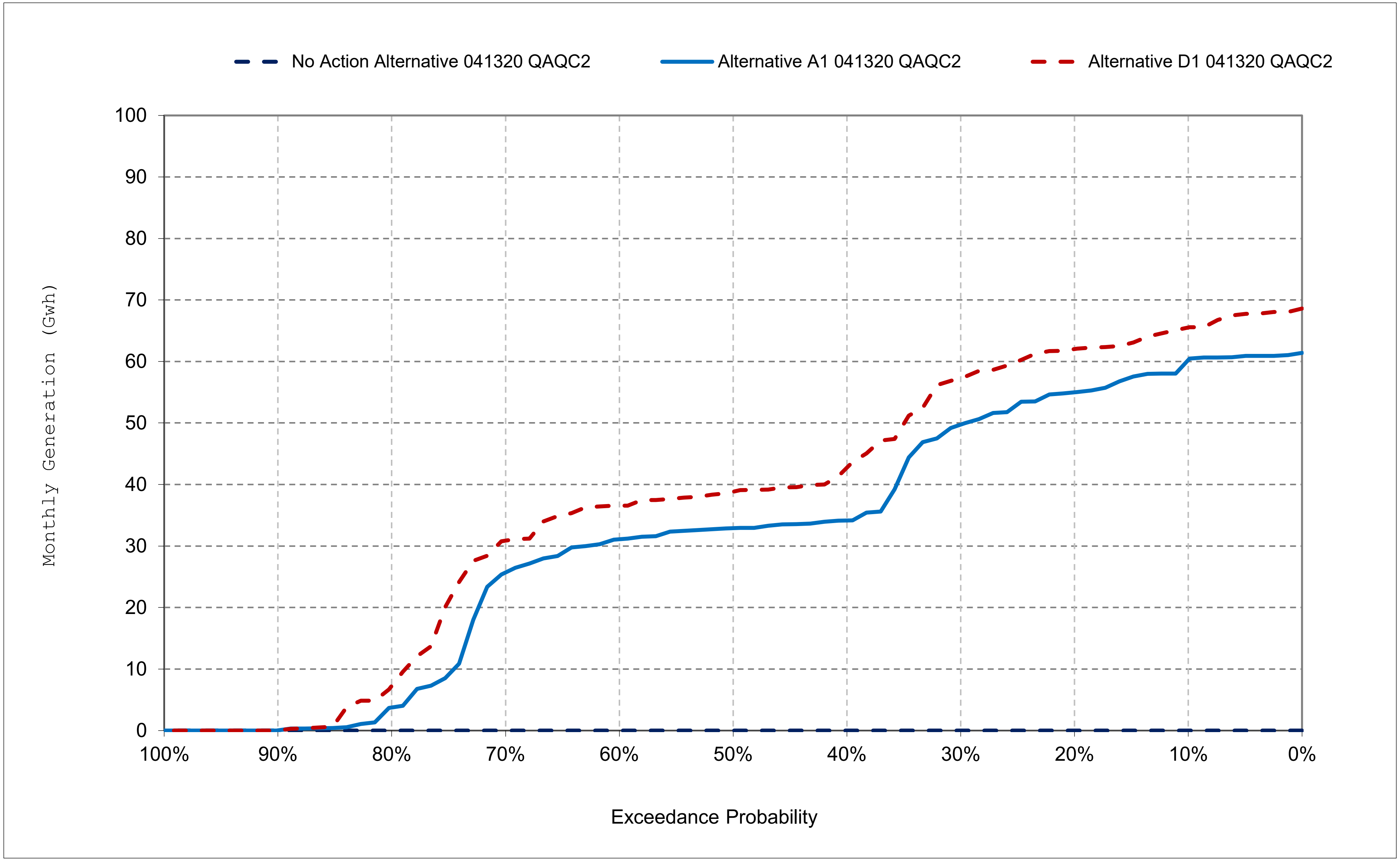
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-15. NODOS Total Generation, June



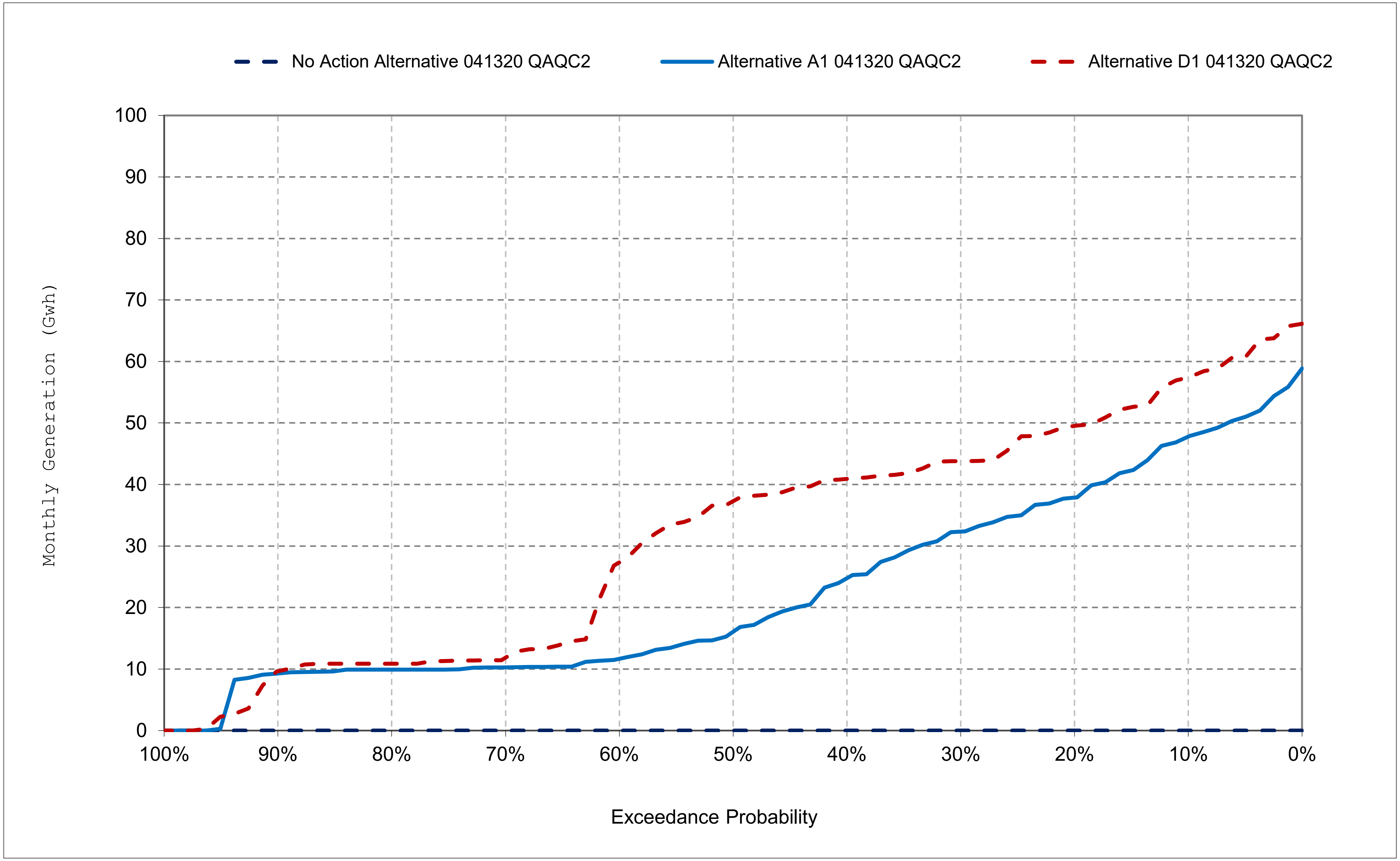
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-16. NODOS Total Generation, July



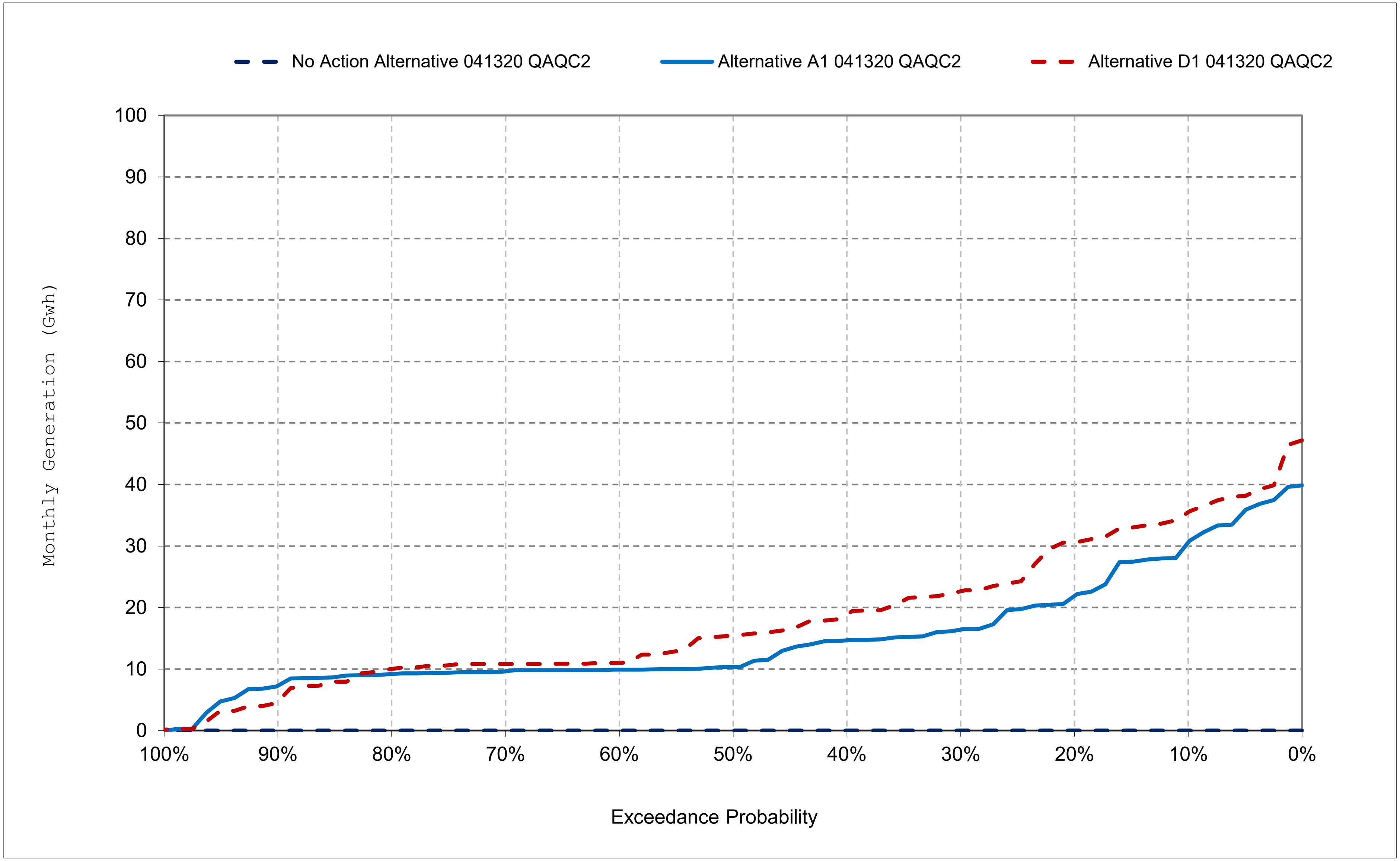
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-17. NODOS Total Generation, August



*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-13-18. NODOS Total Generation, September



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-14-1. NODOS Total Energy Use, Monthly Energy Use

No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Energy Use (GWh)											
Probability of Exceedance												
10%	1	1	0	0	0	0	1	2	3	3	3	1
20%	1	1	0	0	0	0	1	2	3	3	3	1
30%	1	1	0	0	0	0	1	2	3	3	2	1
40%	1	1	0	0	0	0	1	2	3	3	2	1
50%	1	1	0	0	0	0	1	2	3	3	2	1
60%	1	0	0	0	0	0	0	2	2	3	2	1
70%	0	0	0	0	0	0	0	2	2	3	2	1
80%	0	0	0	0	0	0	0	2	2	2	2	0
90%	0	0	0	0	0	0	0	2	2	2	2	0
Long Term												
Full Simulation Period[a]	1	1	0	0	0	0	1	2	2	3	2	1
Water Year Types[b,c]												
Wet (32%)	1	1	0	0	0	0	0	2	3	3	2	1
Above Normal (15%)	1	1	0	0	0	0	1	2	3	3	2	1
Below Normal (17%)	1	1	0	0	0	0	1	2	3	3	2	1
Dry (22%)	1	0	0	0	0	0	1	2	3	3	2	1
Critical (15%)	0	0	0	0	0	0	1	2	2	2	2	0

Alternative A1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Energy Use (GWh)											
Probability of Exceedance												
10%	11	42	74	173	150	150	34	6	7	7	7	1
20%	1	8	0	159	129	101	3	5	3	2	4	1
30%	1	1	0	106	118	58	2	2	2	2	2	1
40%	0	1	0	79	91	8	1	2	2	2	2	1
50%	0	0	0	56	54	1	1	2	2	2	2	1
60%	0	0	0	24	27	0	1	2	2	2	2	0
70%	0	0	0	0	4	0	1	2	1	2	2	0
80%	0	0	0	0	0	0	0	1	1	2	1	0
90%	0	0	0	0	0	0	0	1	1	1	1	0
Long Term												
Full Simulation Period[a]	4	15	19	69	66	44	9	4	3	3	4	1
Water Year Types[b,c]												
Wet (32%)	8	33	4	94	58	18	5	4	4	5	9	1
Above Normal (15%)	8	20	21	114	107	54	12	9	2	2	4	0
Below Normal (17%)	0	2	36	65	63	59	21	5	7	2	2	1
Dry (22%)	0	6	27	35	74	74	11	2	2	2	2	0
Critical (15%)	0	1	17	26	36	28	1	1	2	2	2	0

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Energy Use (GWh)											
Probability of Exceedance												
10%	11	41	74	173	150	150	33	4	4	4	5	0
20%	0	7	0	159	129	101	2	2	0	-1	2	0
30%	0	0	0	106	118	58	1	0	0	-1	0	0
40%	0	0	0	79	91	8	1	0	0	-1	0	0
50%	0	0	0	56	54	1	0	0	-1	-1	0	0
60%	0	0	0	24	27	0	0	0	-1	-1	0	0
70%	0	0	0	0	4	0	0	0	-1	-1	0	0
80%	0	0	0	0	0	0	0	0	-1	-1	0	0
90%	0	0	0	0	0	0	0	-1	-1	-1	0	0
Long Term												
Full Simulation Period[a]	3	15	19	69	66	44	9	2	1	0	2	0
Water Year Types[b,c]												
Wet (32%)	7	33	3	93	58	18	4	2	2	2	7	0
Above Normal (15%)	8	19	21	114	107	54	11	6	0	-1	1	0
Below Normal (17%)	0	2	35	65	63	59	20	3	4	-1	0	0
Dry (22%)	0	5	27	35	74	73	11	0	-1	-1	0	0
Critical (15%)	0	0	17	26	36	28	0	0	0	0	0	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-14-2. NODOS Total Energy Use, Monthly Energy Use

No Action Alternative 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1	1	0	0	0	0	1	2	3	3	3	1
20%	1	1	0	0	0	0	1	2	3	3	3	1
30%	1	1	0	0	0	0	1	2	3	3	2	1
40%	1	1	0	0	0	0	1	2	3	3	2	1
50%	1	1	0	0	0	0	1	2	3	3	2	1
60%	1	0	0	0	0	0	0	2	2	3	2	1
70%	0	0	0	0	0	0	0	2	2	3	2	1
80%	0	0	0	0	0	0	0	2	2	2	2	0
90%	0	0	0	0	0	0	0	2	2	2	2	0
Long Term												
Full Simulation Period[a]	1	1	0	0	0	0	1	2	2	3	2	1
Water Year Types[b,c]												
Wet (32%)	1	1	0	0	0	0	0	2	3	3	2	1
Above Normal (15%)	1	1	0	0	0	0	1	2	3	3	2	1
Below Normal (17%)	1	1	0	0	0	0	1	2	3	3	2	1
Dry (22%)	1	0	0	0	0	0	1	2	3	3	2	1
Critical (15%)	0	0	0	0	0	0	1	2	2	2	2	0

Alternative D1 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	12	47	138	190	177	180	66	8	8	9	9	1
20%	1	9	0	174	154	143	5	6	3	2	5	1
30%	0	1	0	130	138	97	3	2	2	2	2	1
40%	0	1	0	89	122	32	2	2	2	2	2	1
50%	0	0	0	60	71	6	1	2	2	2	2	0
60%	0	0	0	32	30	1	1	2	2	2	1	0
70%	0	0	0	0	2	0	1	2	1	2	1	0
80%	0	0	0	0	0	0	0	1	1	2	1	0
90%	0	0	0	0	0	0	0	1	1	1	1	0
Long Term												
Full Simulation Period[a]	4	17	24	77	80	57	15	6	5	3	4	1
Water Year Types[b,c]												
Wet (32%)	8	38	4	106	84	32	13	8	5	5	10	1
Above Normal (15%)	10	24	24	124	120	89	27	11	15	2	3	0
Below Normal (17%)	0	3	50	72	70	66	22	5	7	2	2	0
Dry (22%)	0	6	35	40	82	84	12	2	2	2	1	0
Critical (15%)	0	1	18	28	37	28	1	1	2	2	2	0

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	11	46	138	190	177	180	65	5	5	6	6	0
20%	0	8	0	174	154	142	4	3	0	-1	2	0
30%	0	0	0	130	138	97	2	0	0	-1	0	0
40%	0	0	0	89	122	32	1	0	0	-1	-1	0
50%	0	0	0	60	71	6	0	0	-1	-1	-1	0
60%	0	0	0	32	30	1	0	0	-1	-1	-1	0
70%	0	0	0	0	1	0	0	0	-1	-1	-1	0
80%	0	0	0	0	0	0	0	0	-1	-1	-1	0
90%	0	0	0	0	0	0	0	-1	-1	-1	-1	0
Long Term												
Full Simulation Period[a]	4	17	23	77	80	57	14	3	3	0	2	0
Water Year Types[b,c]												
Wet (32%)	8	37	4	106	84	32	13	5	2	2	7	0
Above Normal (15%)	9	23	24	124	120	89	26	9	13	-1	1	0
Below Normal (17%)	0	2	50	72	70	66	21	3	4	-1	-1	0
Dry (22%)	0	6	35	40	82	84	12	0	-1	-1	-1	0
Critical (15%)	0	0	17	27	37	28	0	0	0	0	0	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-14-3. NODOS Total Energy Use, Monthly Energy Use

Alternative A1 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	11	42	74	173	150	150	34	6	7	7	7	1
20%	1	8	0	159	129	101	3	5	3	2	4	1
30%	1	1	0	106	118	58	2	2	2	2	2	1
40%	0	1	0	79	91	8	1	2	2	2	2	1
50%	0	0	0	56	54	1	1	2	2	2	2	1
60%	0	0	0	24	27	0	1	2	2	2	2	0
70%	0	0	0	0	4	0	1	2	1	2	2	0
80%	0	0	0	0	0	0	0	1	1	2	1	0
90%	0	0	0	0	0	0	0	1	1	1	1	0
Long Term												
Full Simulation Period[a]	4	15	19	69	66	44	9	4	3	3	4	1
Water Year Types[b,c]												
Wet (32%)	8	33	4	94	58	18	5	4	4	5	9	1
Above Normal (15%)	8	20	21	114	107	54	12	9	2	2	4	0
Below Normal (17%)	0	2	36	65	63	59	21	5	7	2	2	1
Dry (22%)	0	6	27	35	74	74	11	2	2	2	2	0
Critical (15%)	0	1	17	26	36	28	1	1	2	2	2	0

Alternative D1 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	12	47	138	190	177	180	66	8	8	9	9	1
20%	1	9	0	174	154	143	5	6	3	2	5	1
30%	0	1	0	130	138	97	3	2	2	2	2	1
40%	0	1	0	89	122	32	2	2	2	2	2	1
50%	0	0	0	60	71	6	1	2	2	2	2	0
60%	0	0	0	32	30	1	1	2	2	2	1	0
70%	0	0	0	0	2	0	1	2	1	2	1	0
80%	0	0	0	0	0	0	0	1	1	2	1	0
90%	0	0	0	0	0	0	0	1	1	1	1	0
Long Term												
Full Simulation Period[a]	4	17	24	77	80	57	15	6	5	3	4	1
Water Year Types[b,c]												
Wet (32%)	8	38	4	106	84	32	13	8	5	5	10	1
Above Normal (15%)	10	24	24	124	120	89	27	11	15	2	3	0
Below Normal (17%)	0	3	50	72	70	66	22	5	7	2	2	0
Dry (22%)	0	6	35	40	82	84	12	2	2	2	1	0
Critical (15%)	0	1	18	28	37	28	1	1	2	2	2	0

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	5	64	17	27	30	32	2	1	1	1	0
20%	0	1	0	15	25	41	2	1	0	0	0	0
30%	0	0	0	24	20	39	1	0	0	0	0	0
40%	0	0	0	10	31	24	1	0	0	0	0	0
50%	0	0	0	4	16	5	0	0	0	0	0	0
60%	0	0	0	8	3	1	0	0	0	0	0	0
70%	0	0	0	0	-2	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	2	5	8	13	13	5	2	2	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	5	1	13	26	15	9	4	0	1	1	0
Above Normal (15%)	1	4	3	10	13	34	15	2	13	0	0	0
Below Normal (17%)	0	0	14	7	7	7	1	0	0	0	0	0
Dry (22%)	0	0	8	5	8	11	1	0	0	0	0	0
Critical (15%)	0	0	1	2	2	0	0	0	0	0	0	0

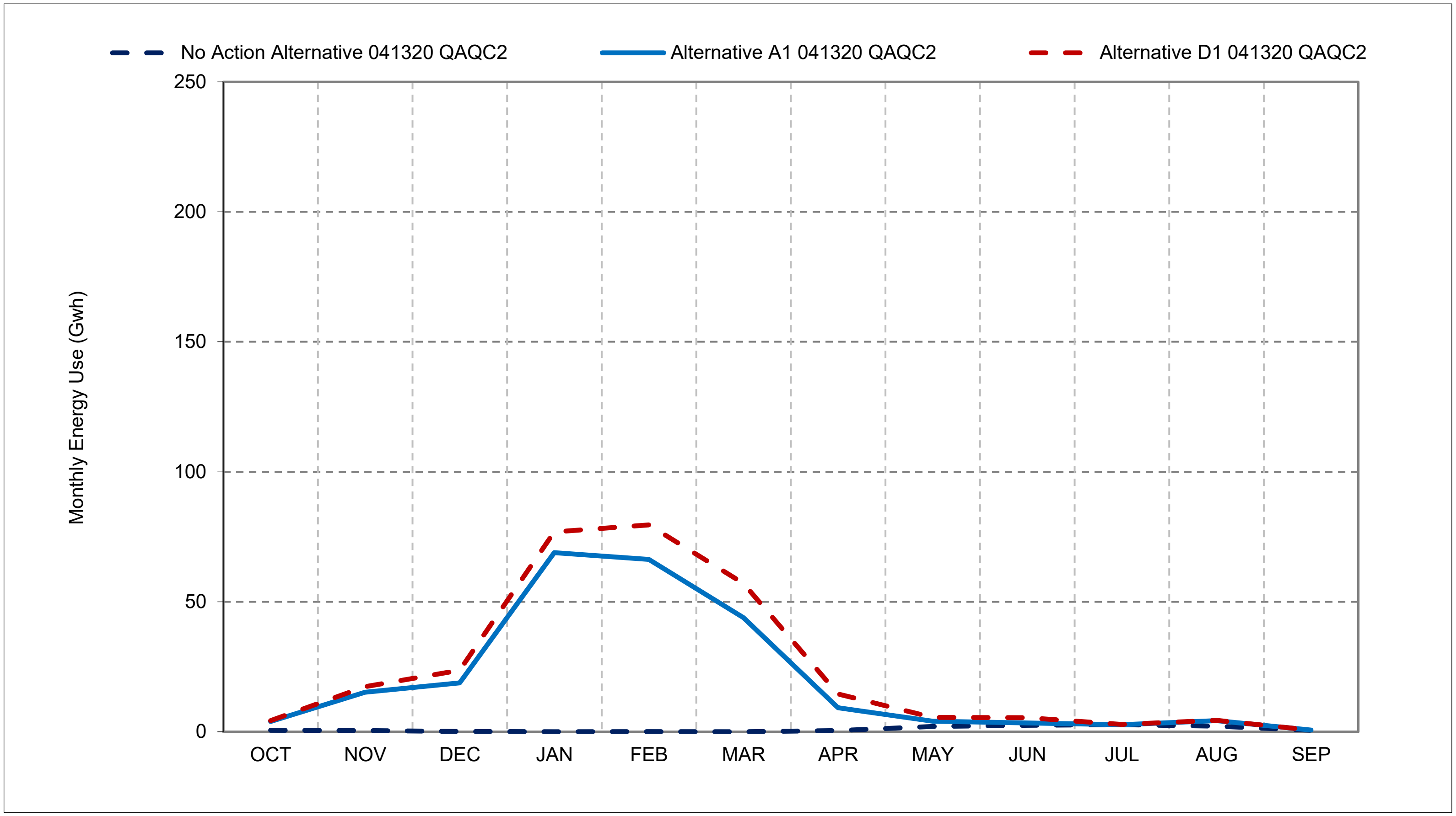
a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-1. NODOS Total Energy Use, Long-Term Average Energy Use

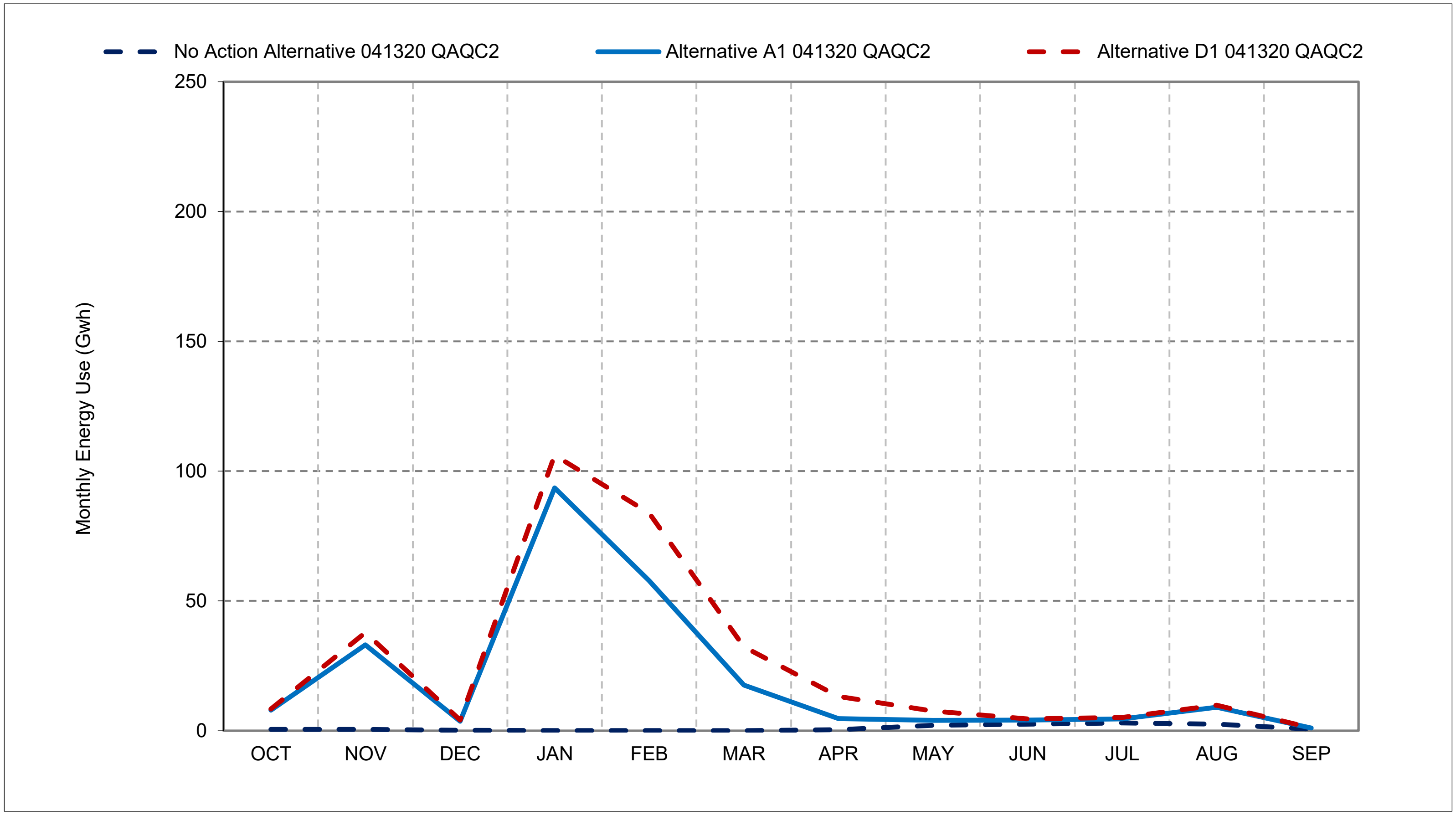


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-2. NODOS Total Energy Use, Wet Year Average Energy Use

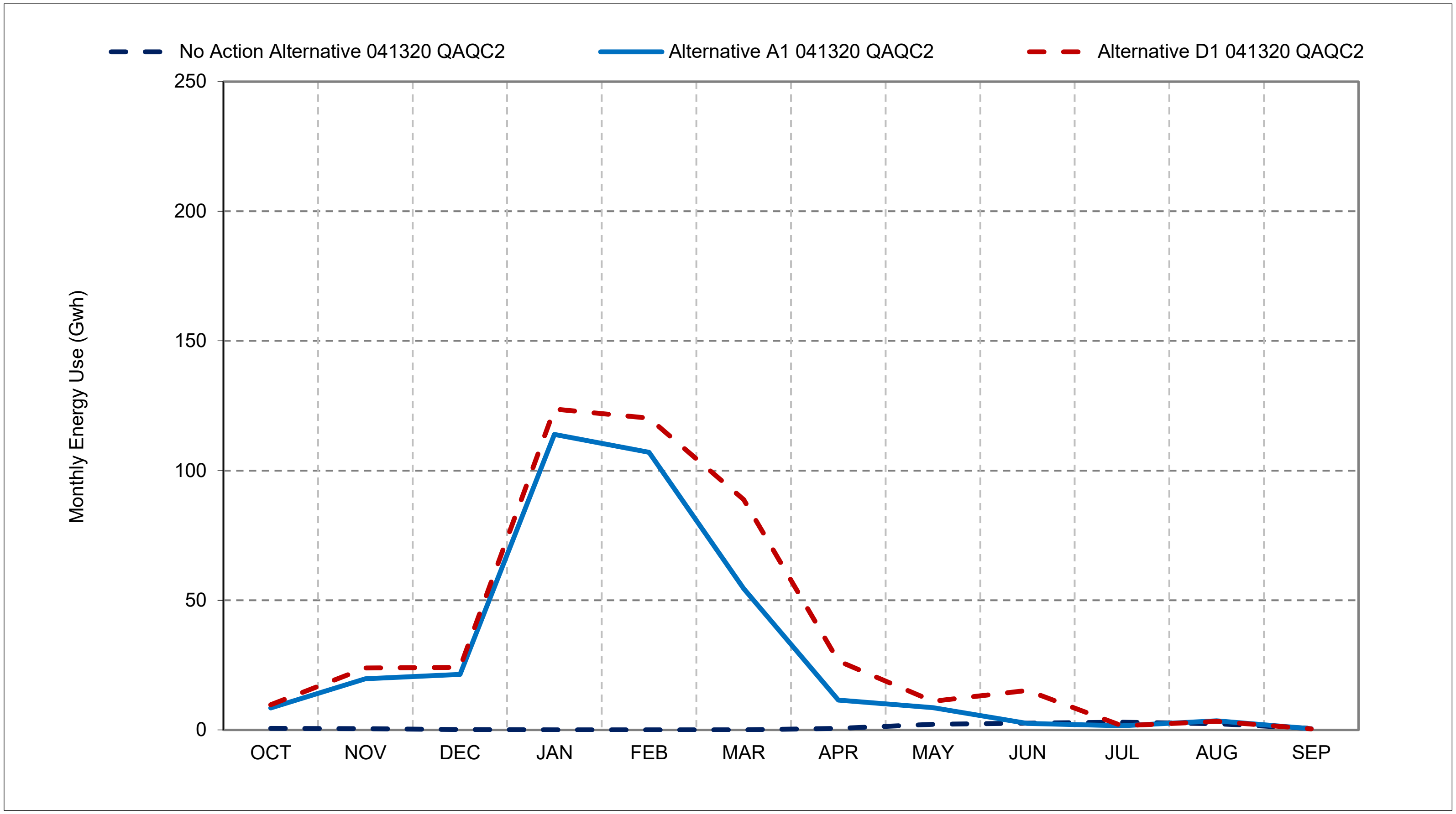


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-3. NODOS Total Energy Use, Above Normal Year Average Energy Use

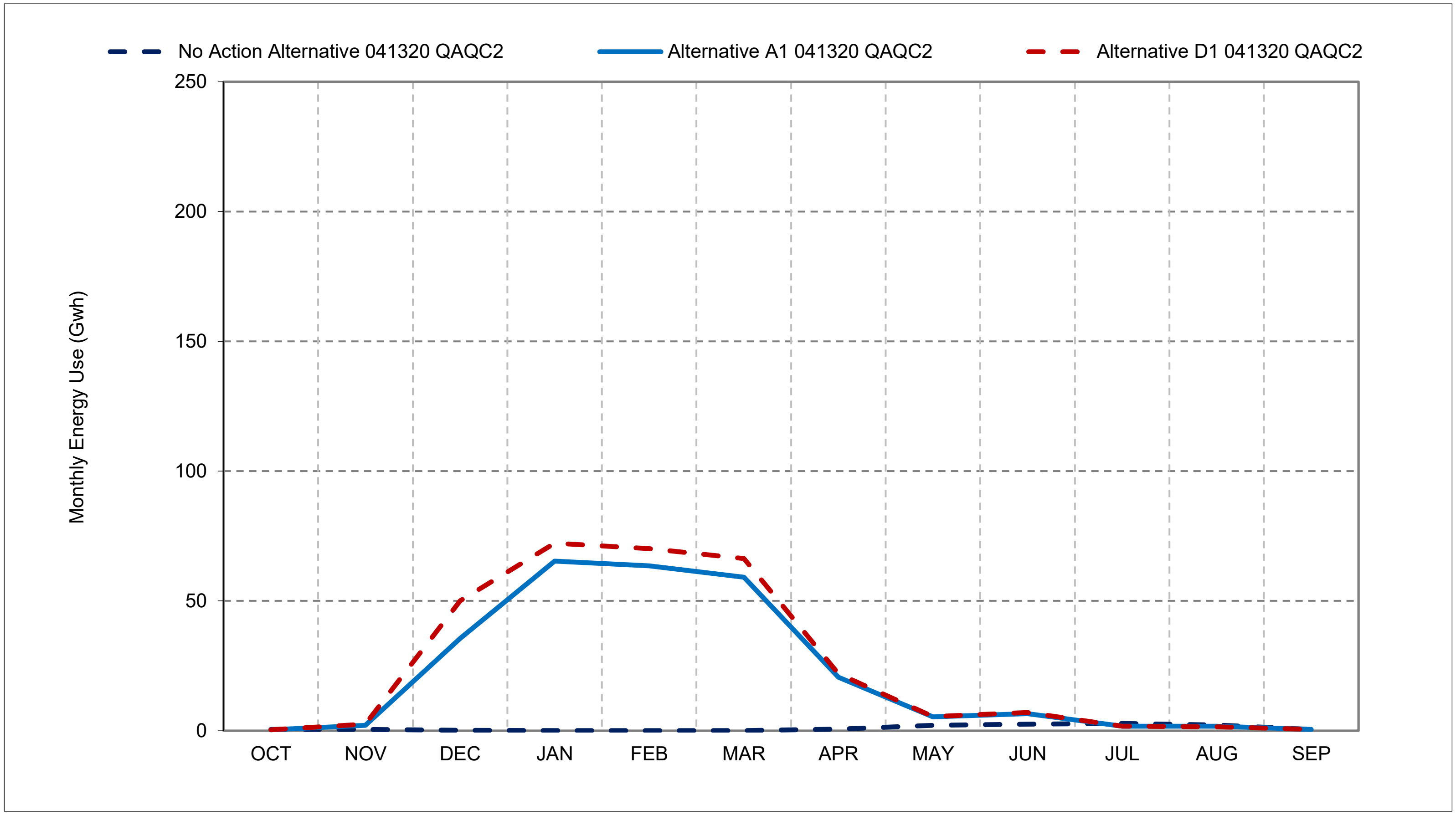


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-4. NODOS Total Energy Use, Below Normal Year Average Energy Use

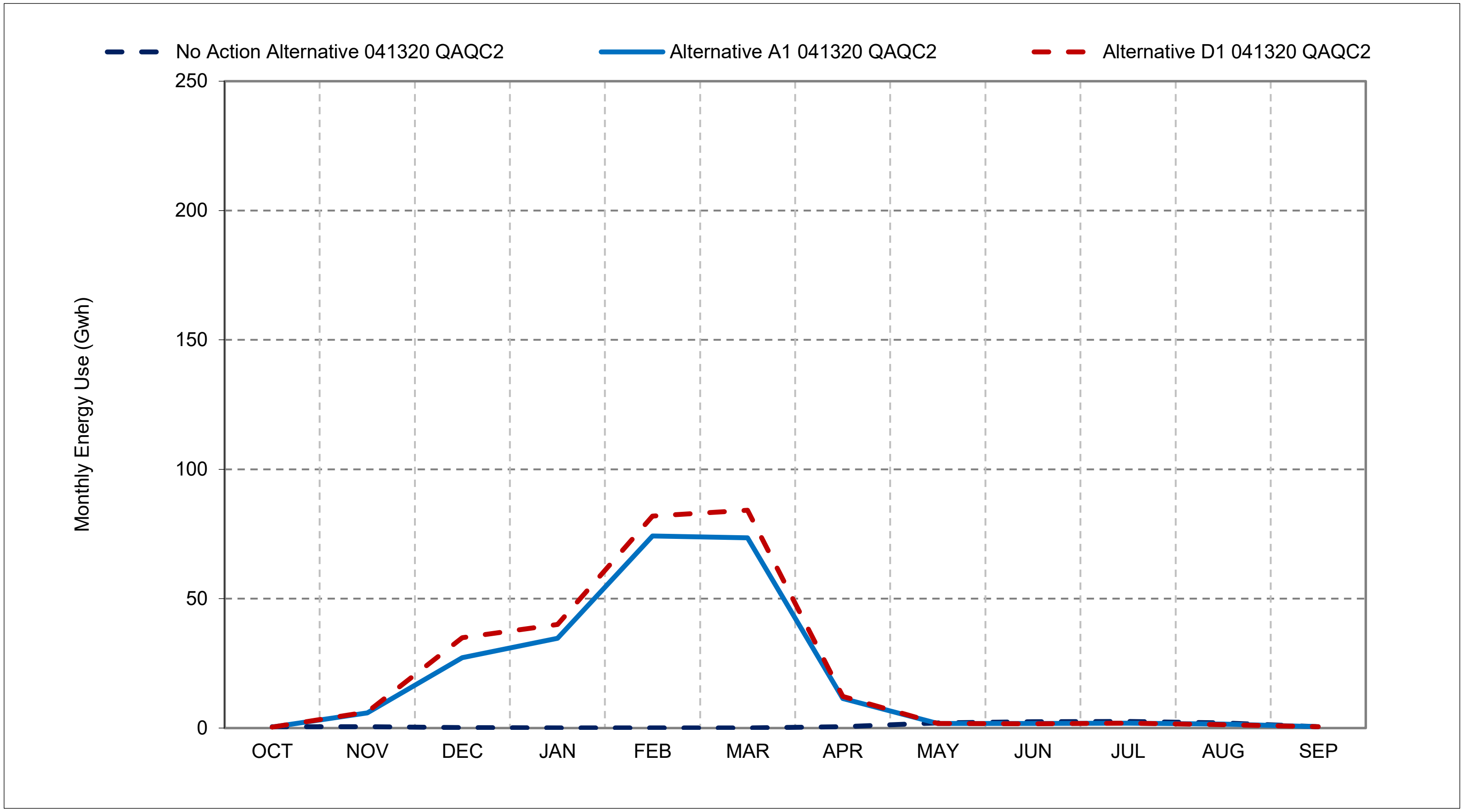


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-5. NODOS Total Energy Use, Dry Year Average Energy Use

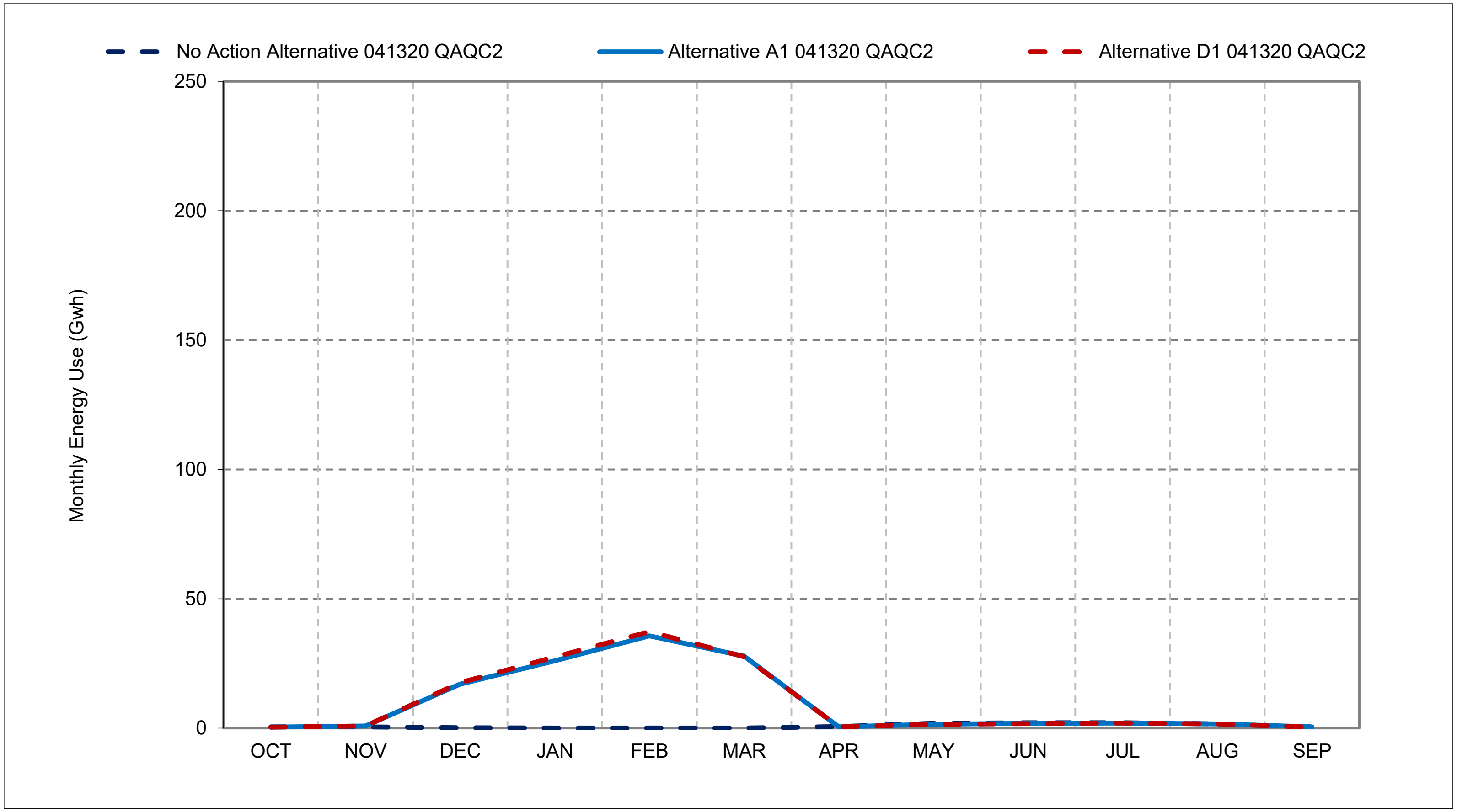


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

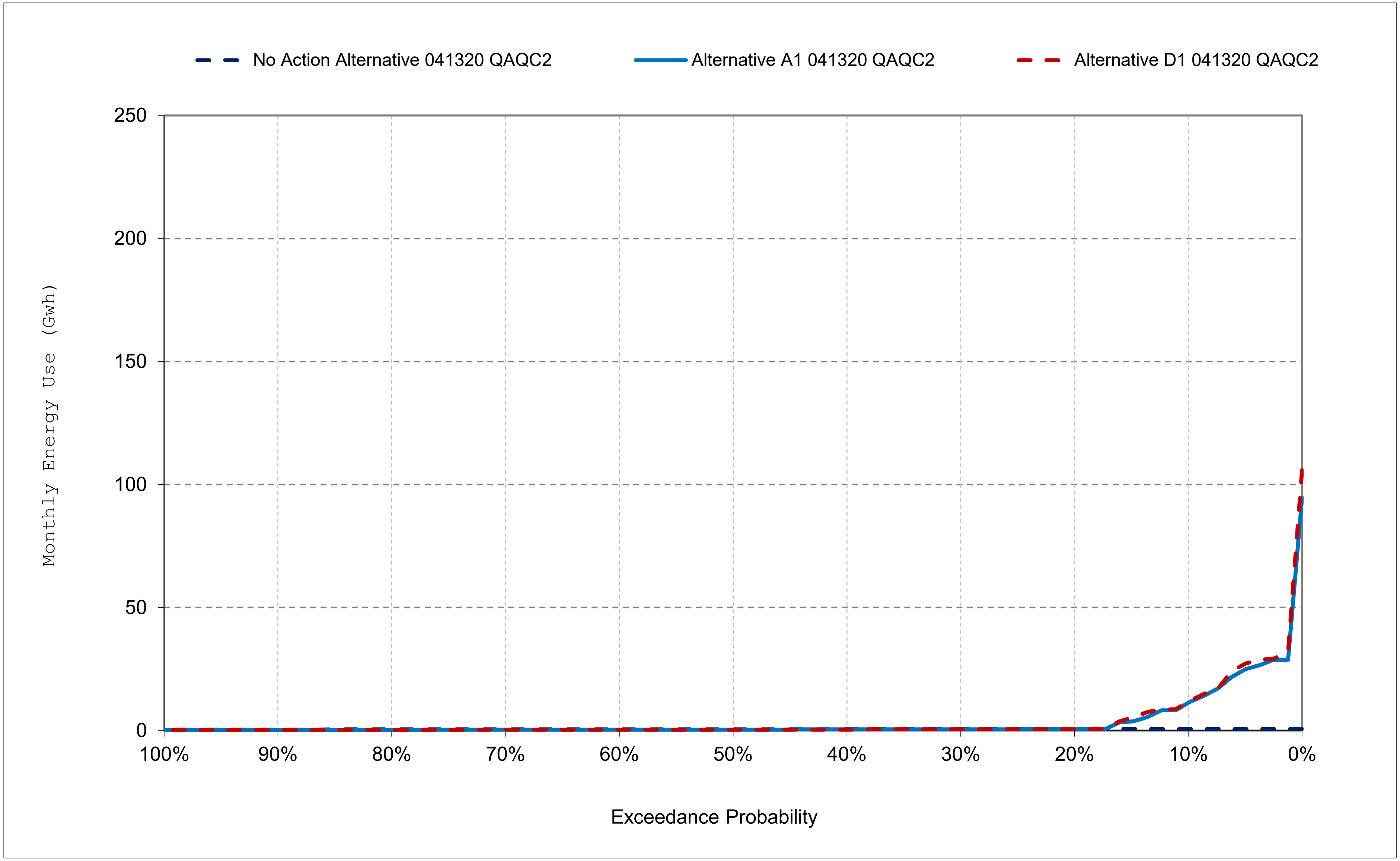
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-6. NODOS Total Energy Use, Critical Year Average Energy Use



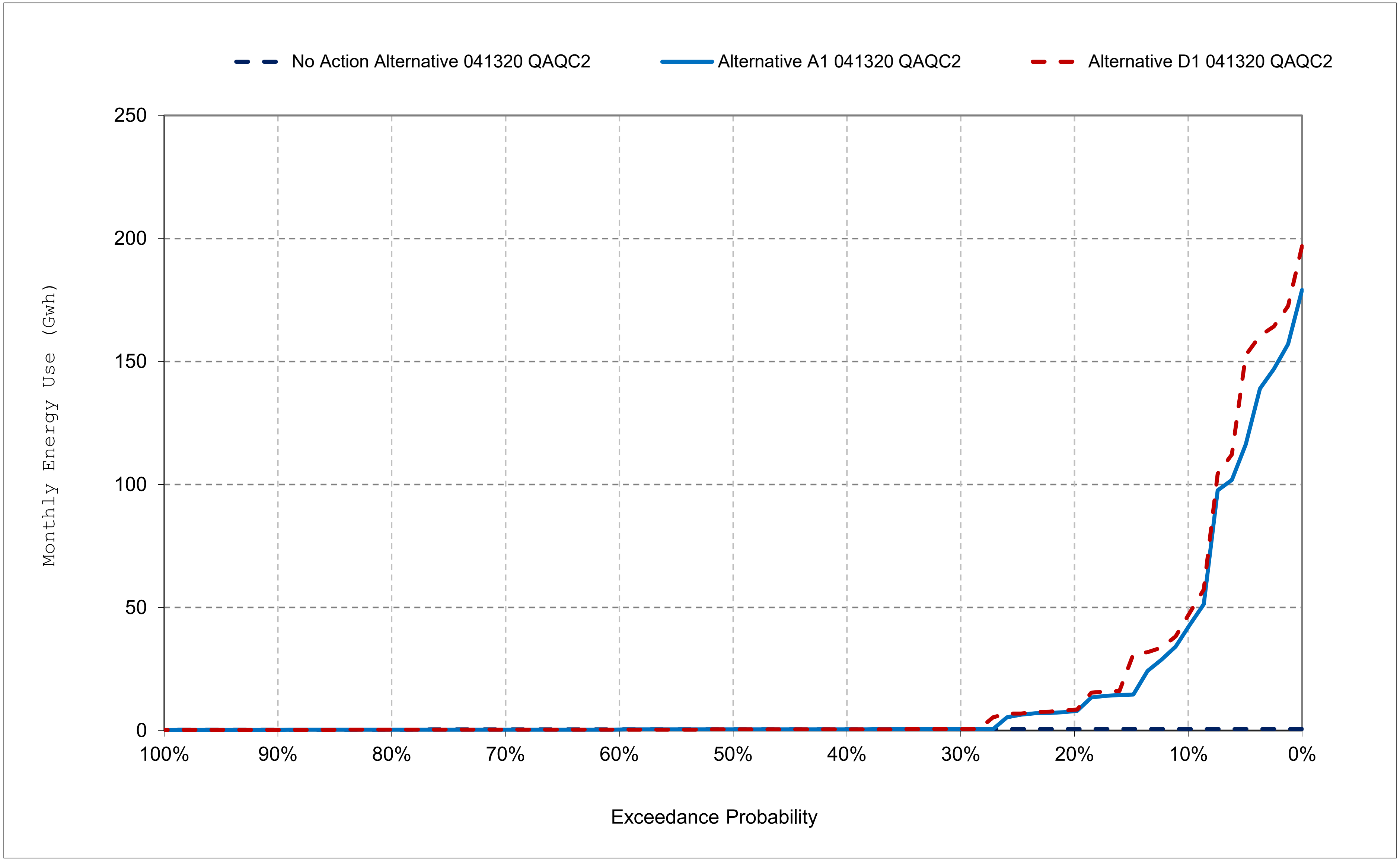
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-7. NODOS Total Energy Use, October



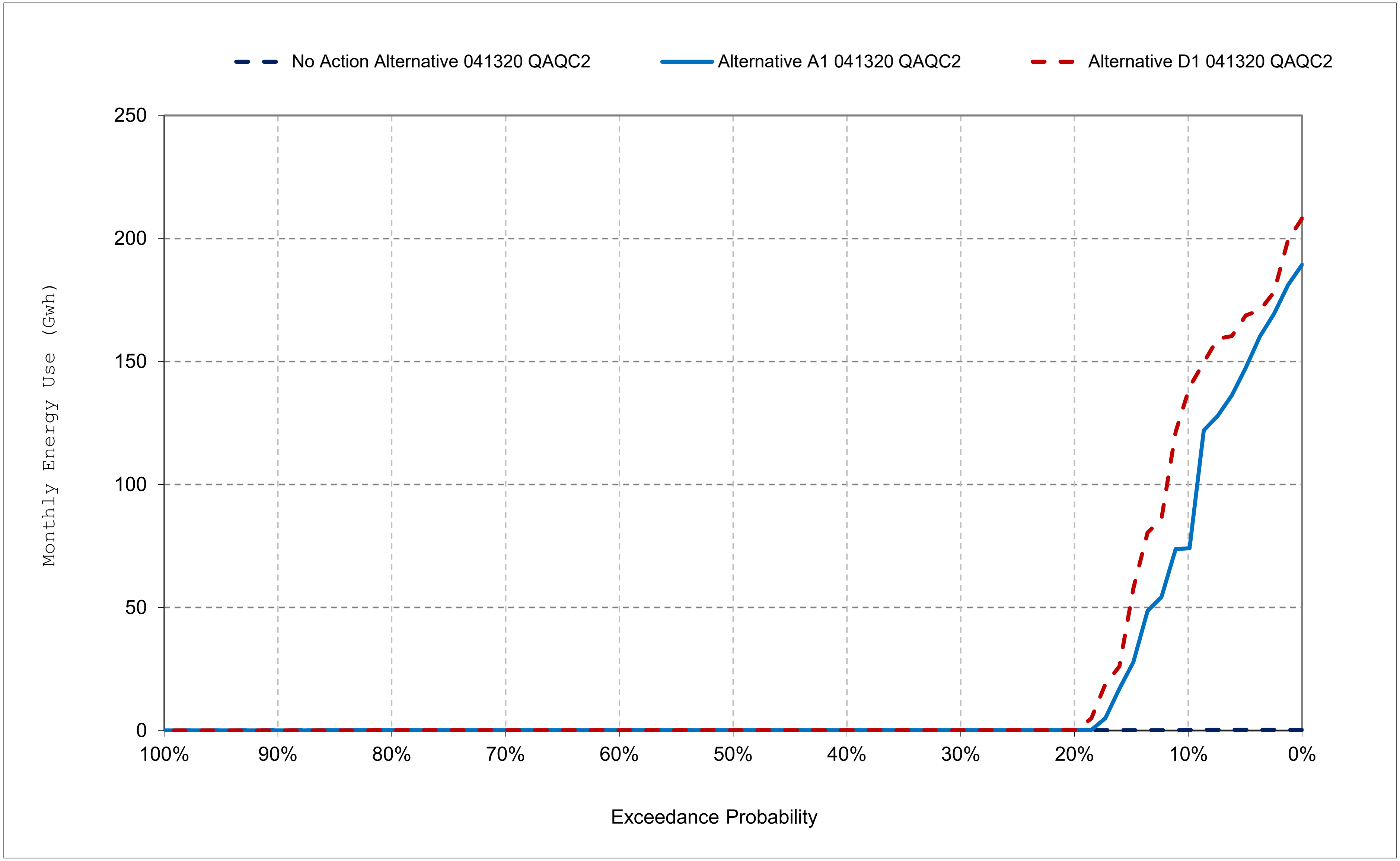
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-8. NODOS Total Energy Use, November



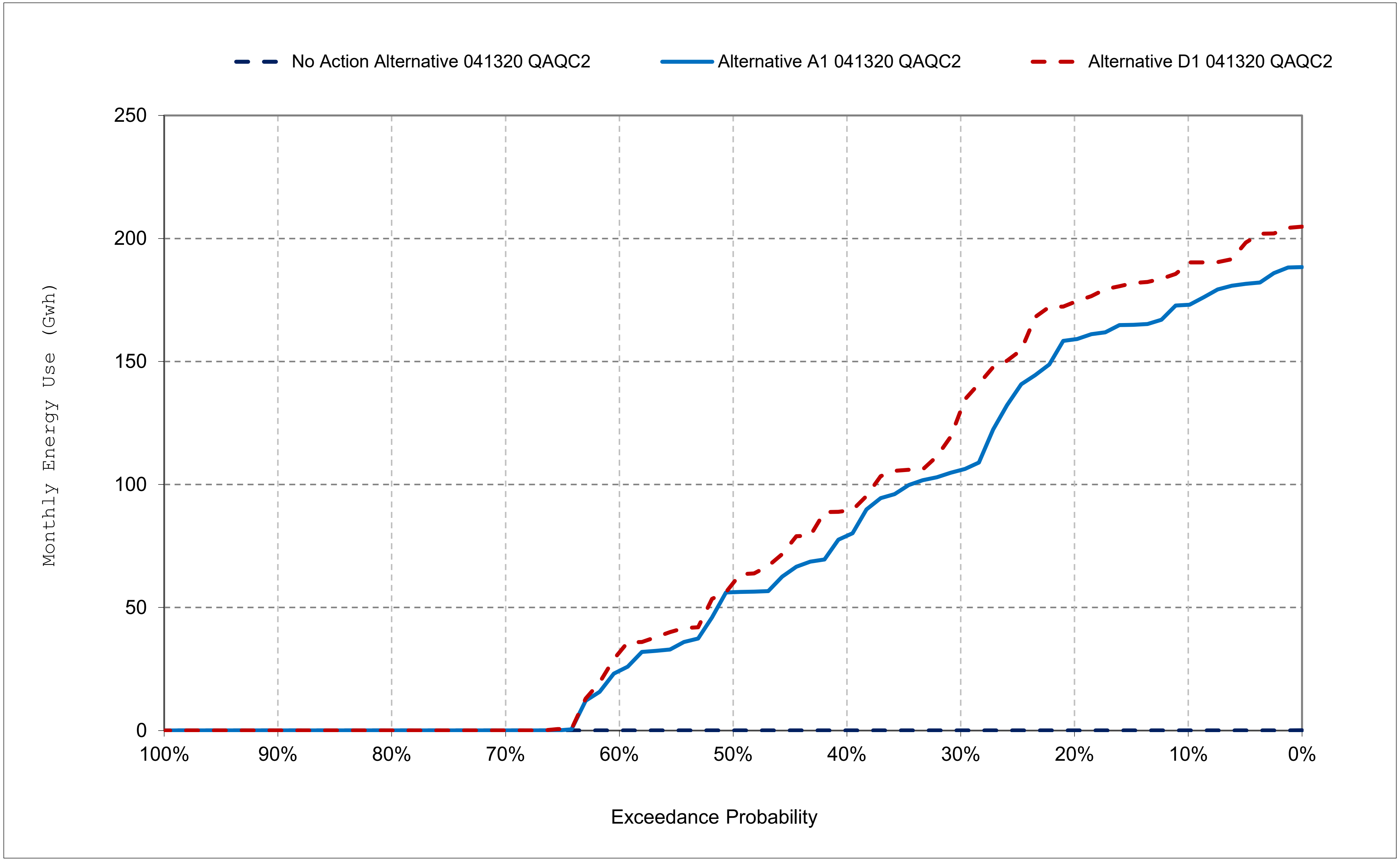
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-9. NODOS Total Energy Use, December



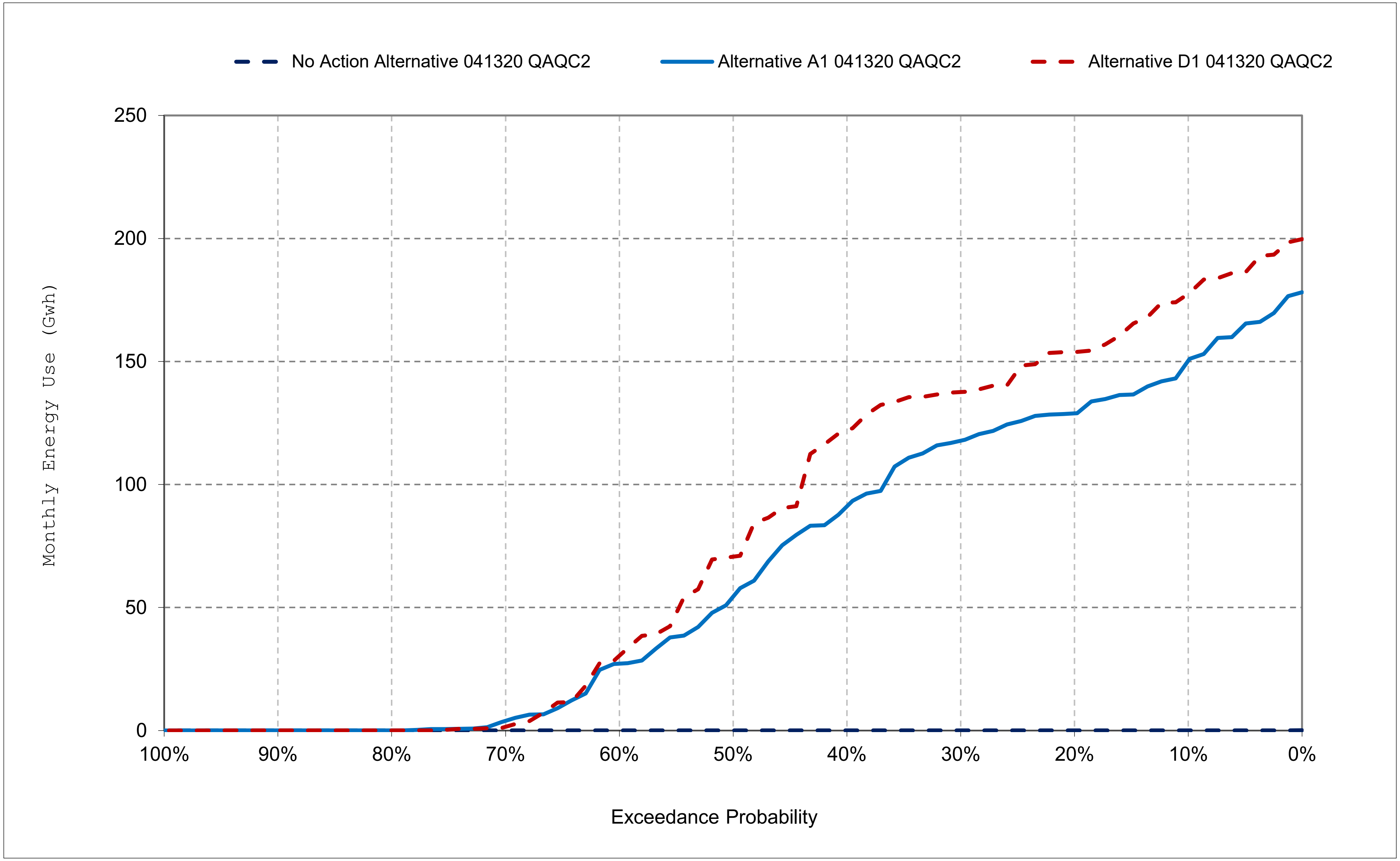
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-10. NODOS Total Energy Use, January



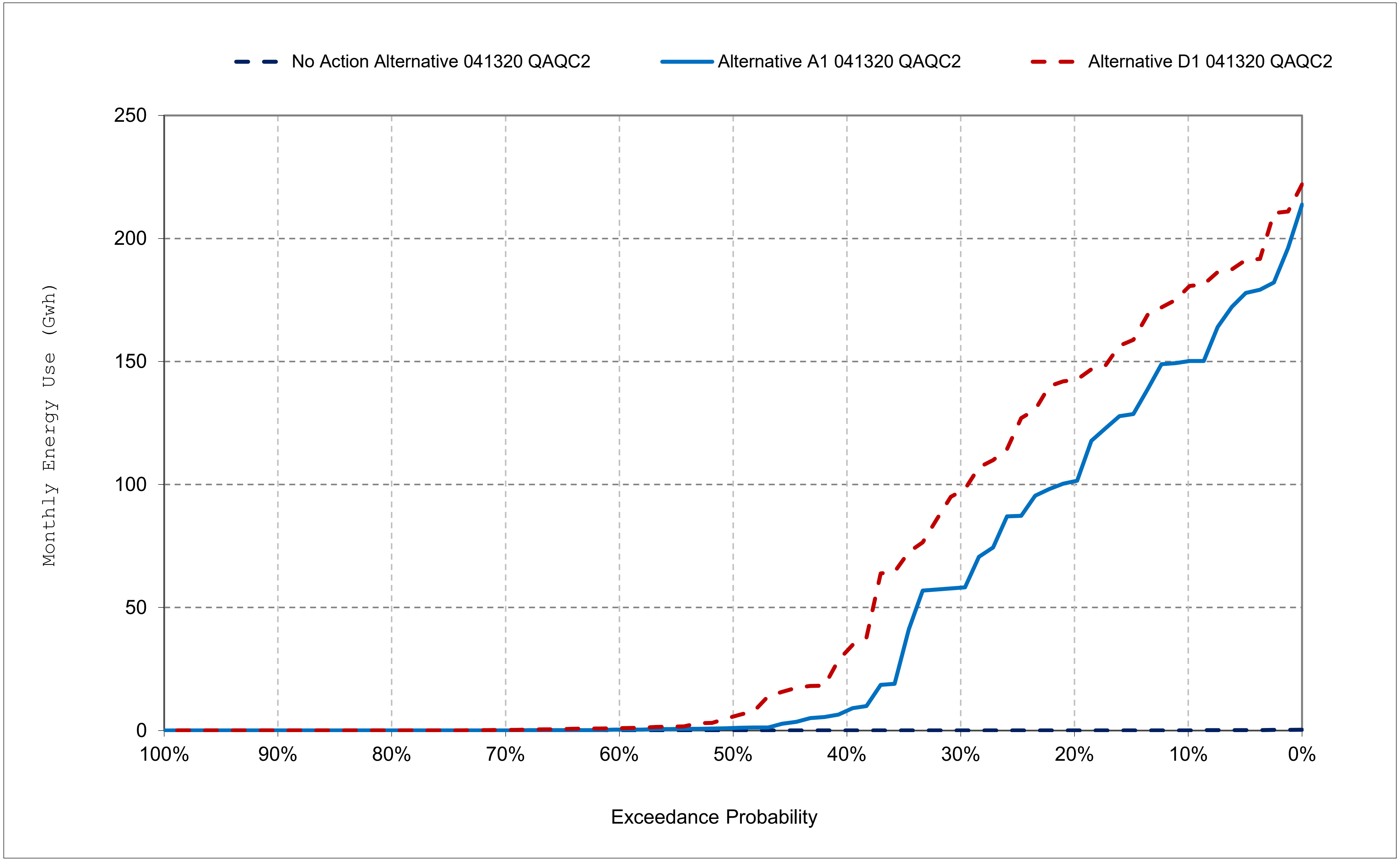
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-11. NODOS Total Energy Use, February



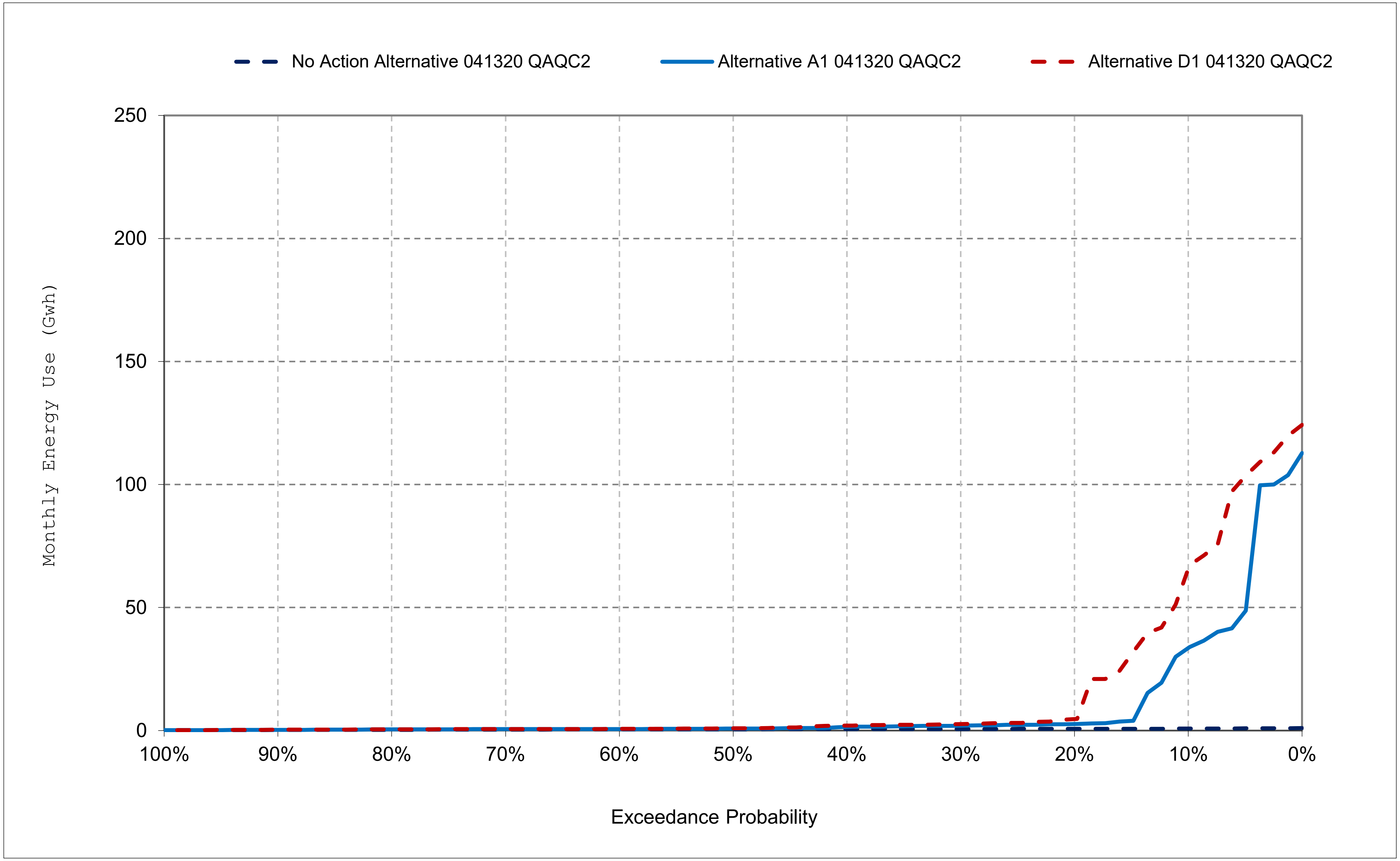
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-12. NODOS Total Energy Use, March



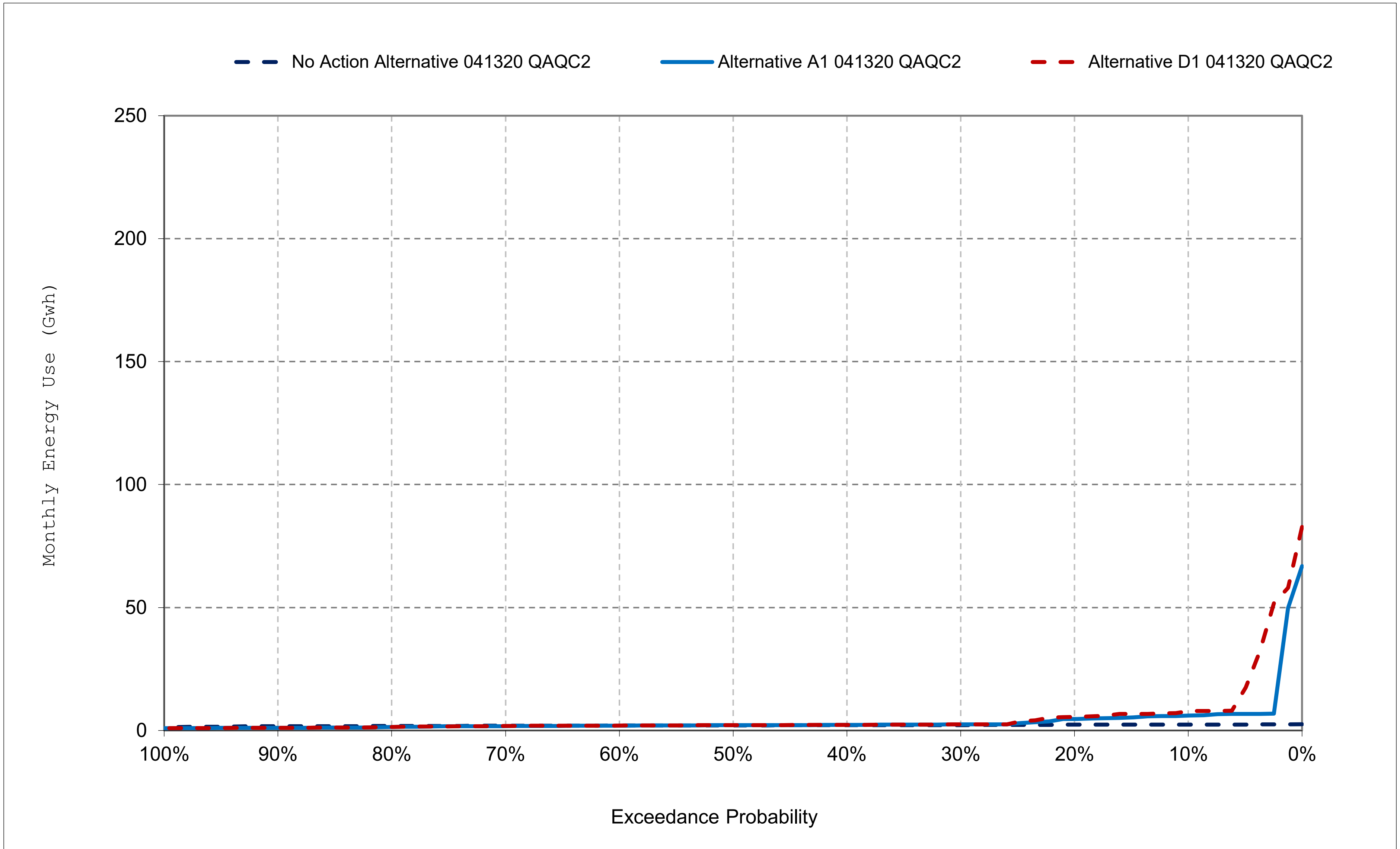
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-13. NODOS Total Energy Use, April



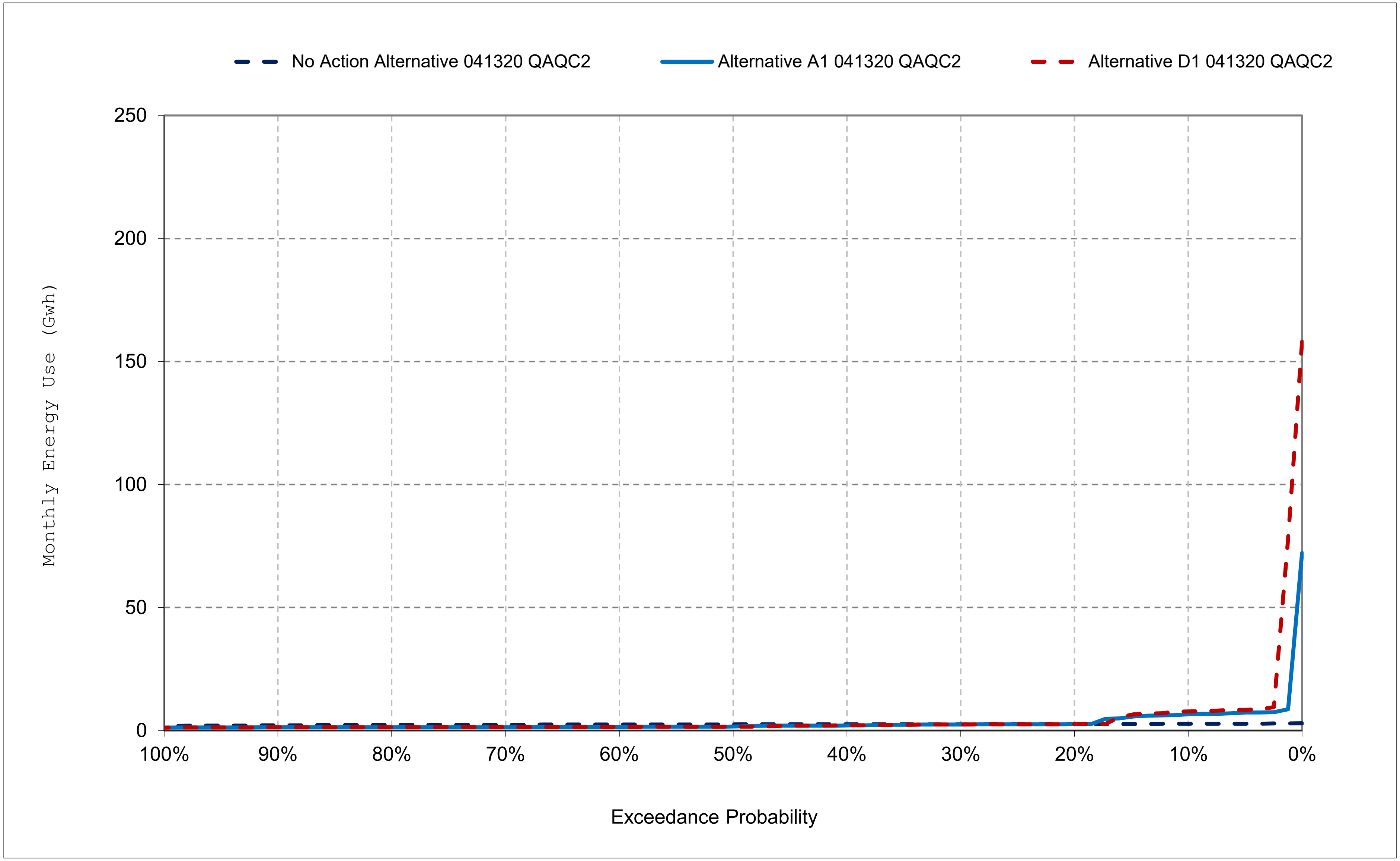
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-14. NODOS Total Energy Use, May



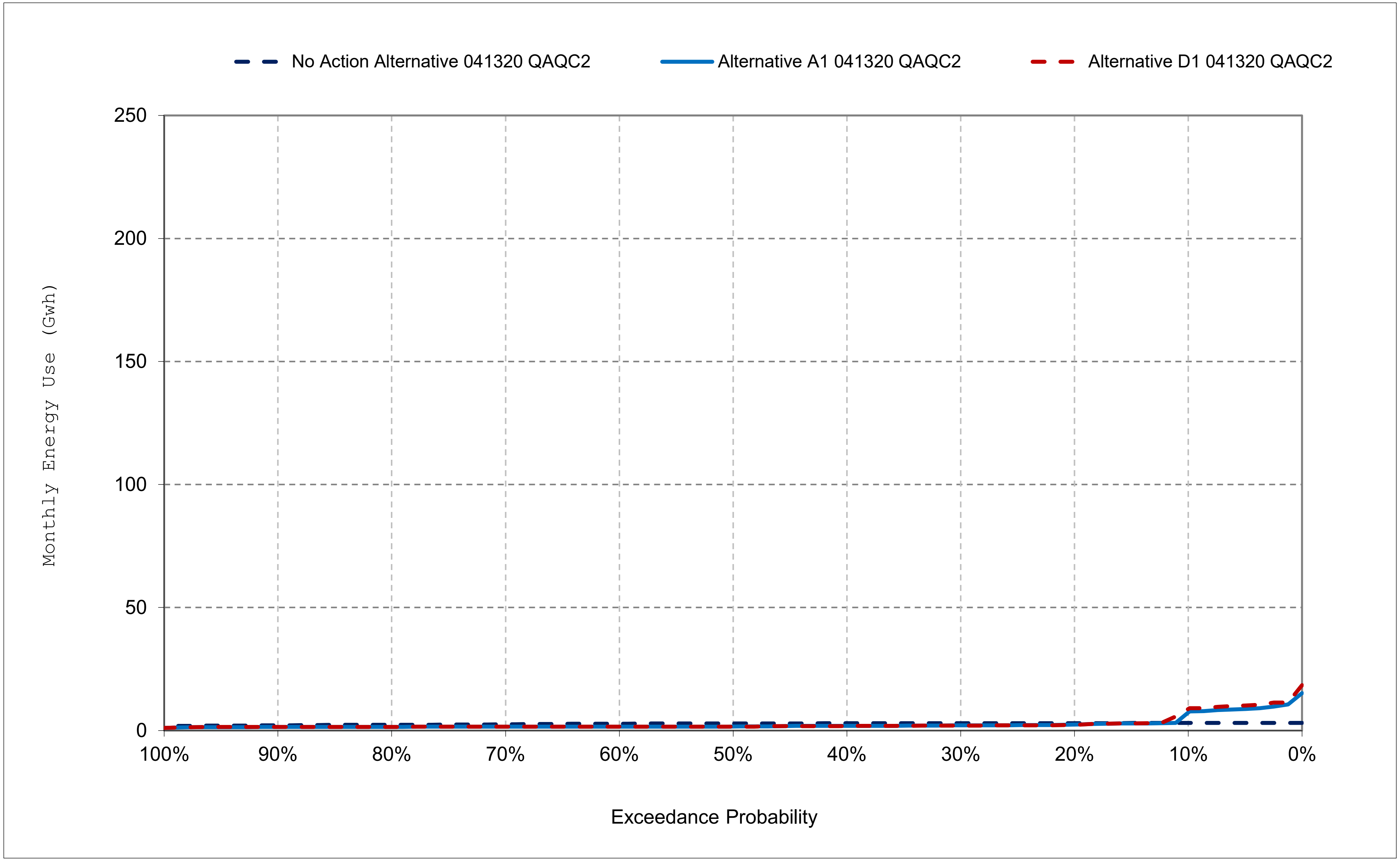
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-15. NODOS Total Energy Use, June



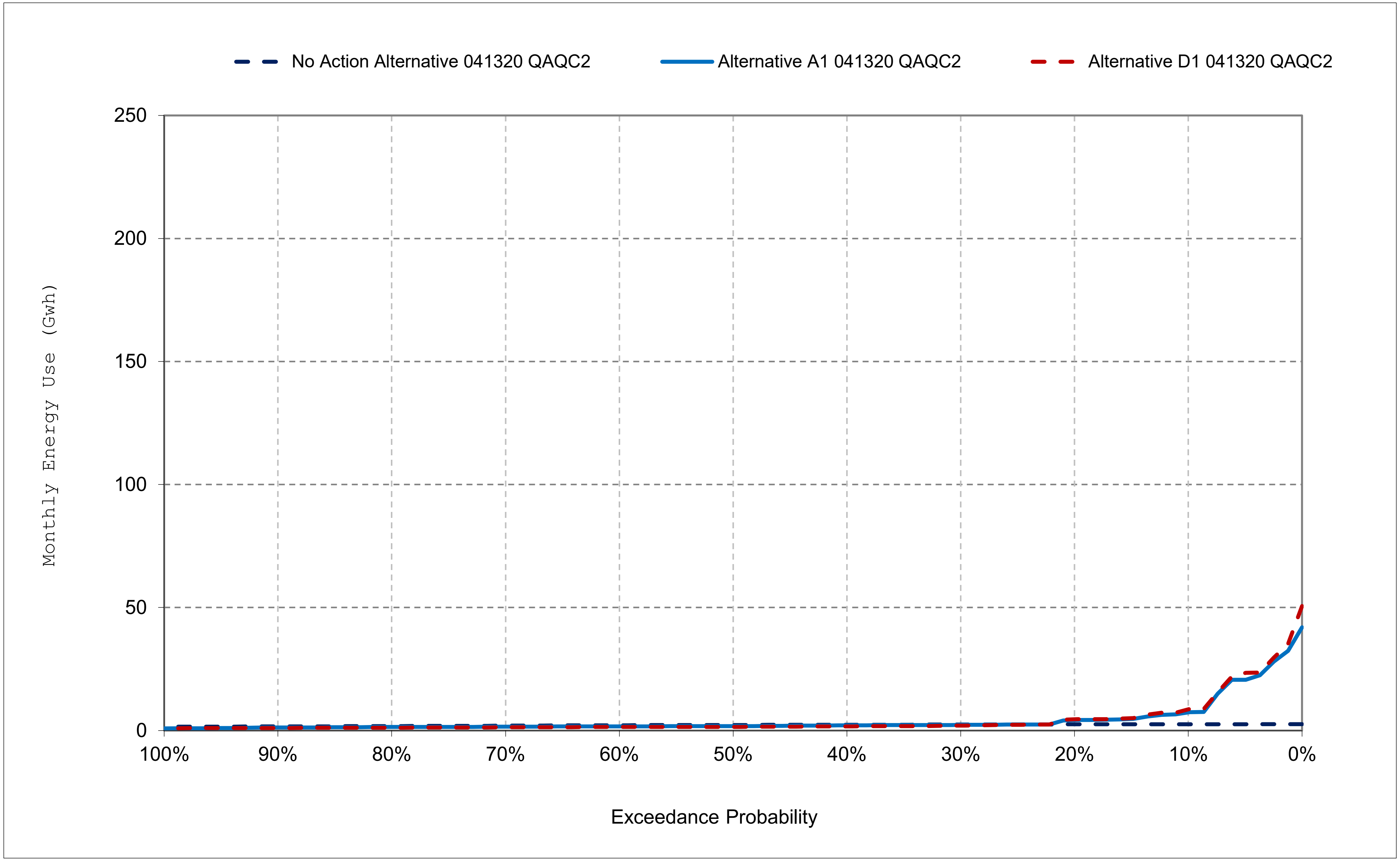
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-16. NODOS Total Energy Use, July



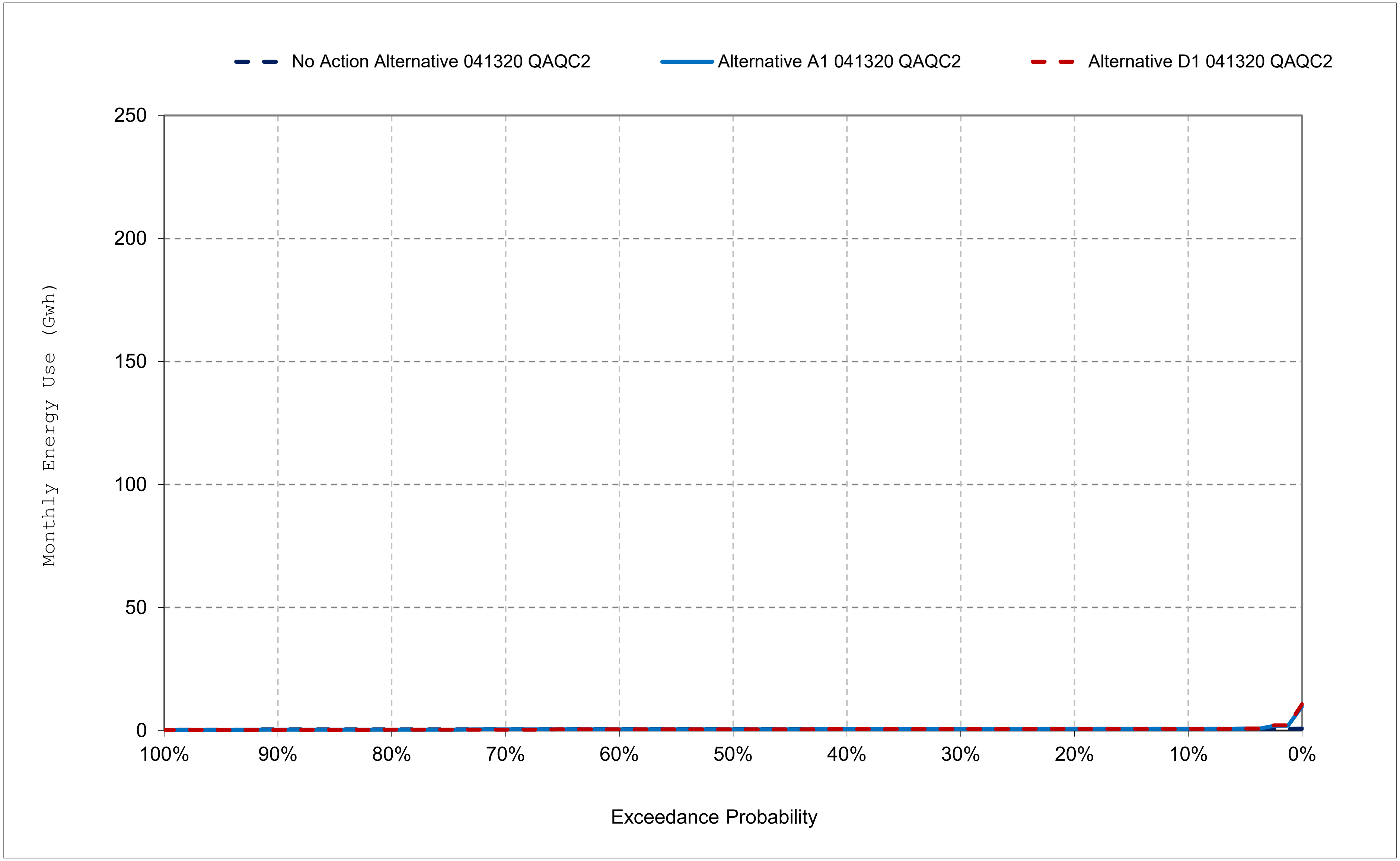
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-17. NODOS Total Energy Use, August



*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-14-18. NODOS Total Energy Use, September



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-15-1. NODOS Net Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	0	0	0	0	0	-2	-2	-2	-2	0
20%	0	0	0	0	0	0	0	-2	-2	-2	-2	0
30%	0	0	0	0	0	0	0	-2	-2	-3	-2	-1
40%	-1	0	0	0	0	0	0	-2	-2	-3	-2	-1
50%	-1	-1	0	0	0	0	-1	-2	-3	-3	-2	-1
60%	-1	-1	0	0	0	0	-1	-2	-3	-3	-2	-1
70%	-1	-1	0	0	0	0	-1	-2	-3	-3	-2	-1
80%	-1	-1	0	0	0	0	-1	-2	-3	-3	-3	-1
90%	-1	-1	0	0	0	0	-1	-2	-3	-3	-3	-1
Long Term												
Full Simulation Period[a]	-1	-1	0	0	0	0	-1	-2	-2	-3	-2	-1
Water Year Types[b,c]												
Wet (32%)	-1	-1	0	0	0	0	0	-2	-3	-3	-2	-1
Above Normal (15%)	-1	-1	0	0	0	0	-1	-2	-3	-3	-2	-1
Below Normal (17%)	-1	-1	0	0	0	0	-1	-2	-3	-3	-2	-1
Dry (22%)	-1	0	0	0	0	0	-1	-2	-3	-3	-2	-1
Critical (15%)	0	0	0	0	0	0	-1	-2	-2	-2	-2	0

Alternative A1 041320 QAQC2

Statistic	Monthly Generation (GWh) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	28	12	11	0	0	1	3	24	56	59	46	30
20%	19	10	4	0	0	0	1	9	54	53	37	21
30%	18	6	0	0	-4	0	0	1	50	48	31	16
40%	17	3	0	-24	-27	0	0	-1	33	32	23	14
50%	11	0	0	-56	-54	-1	-1	-2	29	31	14	10
60%	8	-1	0	-79	-91	-8	-1	-2	1	29	10	9
70%	4	-1	0	-106	-118	-58	-2	-2	-2	24	7	9
80%	1	-8	0	-159	-129	-101	-3	-5	-3	2	6	9
90%	-2	-42	-74	-173	-150	-150	-33	-6	-6	-7	-4	6
Long Term												
Full Simulation Period[a]	10	-11	-16	-68	-66	-43	-8	2	24	29	18	14
Water Year Types[b,c]												
Wet (32%)	4	-29	0	-94	-58	-18	-5	-3	4	18	6	10
Above Normal (15%)	9	-13	-19	-114	-107	-54	-12	-6	28	47	22	22
Below Normal (17%)	15	6	-32	-65	-61	-59	-20	2	31	38	27	11
Dry (22%)	19	-3	-27	-34	-74	-72	-9	6	46	39	32	20
Critical (15%)	6	1	-16	-24	-36	-22	3	14	21	13	13	11

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	29	13	11	0	0	1	3	26	58	61	48	31
20%	19	10	4	0	0	0	1	11	56	56	38	22
30%	18	7	0	0	-4	0	1	3	52	51	33	16
40%	17	3	0	-24	-27	0	0	1	36	35	25	15
50%	11	0	0	-56	-54	-1	0	0	32	34	16	11
60%	9	0	0	-79	-91	-8	-1	0	4	32	12	10
70%	5	0	0	-106	-118	-58	-1	0	1	27	10	10
80%	2	-7	0	-159	-129	-101	-2	-2	0	5	8	9
90%	-1	-41	-74	-173	-150	-150	-32	-4	-4	-4	-2	7
Long Term												
Full Simulation Period[a]	11	-10	-16	-68	-66	-43	-8	4	26	32	21	15
Water Year Types[b,c]												
Wet (32%)	5	-28	1	-93	-58	-18	-4	-1	7	21	8	11
Above Normal (15%)	10	-13	-19	-114	-107	-54	-11	-4	30	50	24	23
Below Normal (17%)	15	6	-32	-65	-61	-59	-20	4	33	40	29	11
Dry (22%)	20	-2	-26	-34	-74	-72	-8	8	49	41	34	21
Critical (15%)	7	1	-16	-24	-36	-21	3	16	23	16	15	12

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-15-2. NODOS Net Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	0	0	0	0	0	0	0	-2	-2	-2	-2	0
20%	0	0	0	0	0	0	0	-2	-2	-2	-2	0
30%	0	0	0	0	0	0	0	-2	-2	-3	-2	-1
40%	-1	0	0	0	0	0	0	-2	-2	-3	-2	-1
50%	-1	-1	0	0	0	0	-1	-2	-3	-3	-2	-1
60%	-1	-1	0	0	0	0	-1	-2	-3	-3	-2	-1
70%	-1	-1	0	0	0	0	-1	-2	-3	-3	-2	-1
80%	-1	-1	0	0	0	0	-1	-2	-3	-3	-3	-1
90%	-1	-1	0	0	0	0	-1	-2	-3	-3	-3	-1
Long Term												
Full Simulation Period[a]	-1	-1	0	0	0	0	-1	-2	-2	-3	-2	-1
Water Year Types[b,c]												
Wet (32%)	-1	-1	0	0	0	0	0	-2	-3	-3	-2	-1
Above Normal (15%)	-1	-1	0	0	0	0	-1	-2	-3	-3	-2	-1
Below Normal (17%)	-1	-1	0	0	0	0	-1	-2	-3	-3	-2	-1
Dry (22%)	-1	0	0	0	0	0	-1	-2	-3	-3	-2	-1
Critical (15%)	0	0	0	0	0	0	-1	-2	-2	-2	-2	0

Alternative D1 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	31	18	12	0	0	6	3	28	62	64	56	35
20%	24	12	9	0	0	0	1	15	59	61	48	30
30%	21	11	0	0	-2	0	0	0	55	56	42	22
40%	20	7	0	-32	-30	-1	-1	-1	39	41	39	19
50%	17	0	0	-60	-71	-5	-1	-2	33	37	36	15
60%	11	0	0	-89	-122	-32	-2	-2	21	35	26	10
70%	6	-1	0	-130	-138	-97	-3	-2	-2	28	10	10
80%	2	-9	0	-174	-154	-143	-5	-6	-3	5	6	9
90%	-1	-47	-138	-190	-177	-180	-66	-8	-8	-8	-4	3
Long Term												
Full Simulation Period[a]	13	-10	-21	-76	-79	-55	-13	1	25	35	27	18
Water Year Types[b,c]												
Wet (32%)	6	-32	0	-106	-84	-32	-13	-6	5	20	9	12
Above Normal (15%)	8	-15	-21	-124	-120	-89	-27	-8	16	54	37	26
Below Normal (17%)	17	8	-46	-72	-67	-66	-22	3	35	41	39	13
Dry (22%)	25	1	-34	-39	-81	-82	-9	7	51	47	44	26
Critical (15%)	10	0	-17	-25	-36	-20	5	17	27	20	19	14

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Monthly Generation (GWh)											
Probability of Exceedance												
10%	31	18	12	0	0	6	3	29	64	66	58	36
20%	24	12	9	0	0	0	1	17	61	63	50	31
30%	21	11	0	0	-1	0	1	2	57	58	44	23
40%	21	7	0	-32	-30	-1	0	1	42	44	41	19
50%	17	1	0	-60	-71	-5	0	0	35	40	39	15
60%	11	0	0	-89	-122	-32	-1	0	24	38	28	11
70%	7	0	0	-130	-138	-97	-2	0	1	31	12	11
80%	3	-8	0	-174	-154	-142	-4	-3	0	8	8	9
90%	0	-46	-138	-190	-177	-180	-65	-5	-5	-5	-1	4
Long Term												
Full Simulation Period[a]	13	-10	-21	-76	-79	-55	-13	3	28	37	29	18
Water Year Types[b,c]												
Wet (32%)	6	-31	0	-106	-84	-32	-13	-4	8	23	11	13
Above Normal (15%)	8	-14	-21	-124	-120	-89	-26	-6	19	57	40	26
Below Normal (17%)	17	9	-46	-71	-67	-66	-21	5	37	44	41	14
Dry (22%)	26	2	-34	-39	-81	-82	-9	9	54	50	46	26
Critical (15%)	10	1	-17	-25	-35	-20	6	19	29	22	21	15

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-15-3. NODOS Net Generation, Monthly Generation

Alternative A1 041320 QAQC2

	Monthly Generation (GWh)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	28	12	11	0	0	1	3	24	56	59	46	30
20%	19	10	4	0	0	0	1	9	54	53	37	21
30%	18	6	0	0	-4	0	0	1	50	48	31	16
40%	17	3	0	-24	-27	0	0	-1	33	32	23	14
50%	11	0	0	-56	-54	-1	-1	-2	29	31	14	10
60%	8	-1	0	-79	-91	-8	-1	-2	1	29	10	9
70%	4	-1	0	-106	-118	-58	-2	-2	-2	24	7	9
80%	1	-8	0	-159	-129	-101	-3	-5	-3	2	6	9
90%	-2	-42	-74	-173	-150	-150	-33	-6	-6	-7	-4	6
Long Term												
Full Simulation Period[a]	10	-11	-16	-68	-66	-43	-8	2	24	29	18	14
Water Year Types[b,c]												
Wet (32%)	4	-29	0	-94	-58	-18	-5	-3	4	18	6	10
Above Normal (15%)	9	-13	-19	-114	-107	-54	-12	-6	28	47	22	22
Below Normal (17%)	15	6	-32	-65	-61	-59	-20	2	31	38	27	11
Dry (22%)	19	-3	-27	-34	-74	-72	-9	6	46	39	32	20
Critical (15%)	6	1	-16	-24	-36	-22	3	14	21	13	13	11

Alternative D1 041320 QAQC2

	Monthly Generation (GWh)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	31	18	12	0	0	6	3	28	62	64	56	35
20%	24	12	9	0	0	0	1	15	59	61	48	30
30%	21	11	0	0	-2	0	0	0	55	56	42	22
40%	20	7	0	-32	-30	-1	-1	-1	39	41	39	19
50%	17	0	0	-60	-71	-5	-1	-2	33	37	36	15
60%	11	0	0	-89	-122	-32	-2	-2	21	35	26	10
70%	6	-1	0	-130	-138	-97	-3	-2	-2	28	10	10
80%	2	-9	0	-174	-154	-143	-5	-6	-3	5	6	9
90%	-1	-47	-138	-190	-177	-180	-66	-8	-8	-8	-4	3
Long Term												
Full Simulation Period[a]	13	-10	-21	-76	-79	-55	-13	1	25	35	27	18
Water Year Types[b,c]												
Wet (32%)	6	-32	0	-106	-84	-32	-13	-6	5	20	9	12
Above Normal (15%)	8	-15	-21	-124	-120	-89	-27	-8	16	54	37	26
Below Normal (17%)	17	8	-46	-72	-67	-66	-22	3	35	41	39	13
Dry (22%)	25	1	-34	-39	-81	-82	-9	7	51	47	44	26
Critical (15%)	10	0	-17	-25	-36	-20	5	17	27	20	19	14

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

	Monthly Generation (GWh)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	3	6	1	0	0	5	0	3	6	5	10	5
20%	5	2	5	0	0	0	0	6	5	7	12	9
30%	3	5	0	0	2	0	0	-1	5	7	11	6
40%	4	4	0	-8	-3	-1	0	0	6	9	16	4
50%	6	1	0	-4	-16	-4	0	0	3	6	22	5
60%	2	0	0	-10	-31	-24	-1	0	20	6	16	1
70%	2	0	0	-24	-20	-39	-1	0	0	4	2	1
80%	1	-1	0	-15	-25	-41	-2	-1	0	3	0	0
90%	0	-5	-64	-17	-27	-30	-33	-2	-1	-1	0	-3
Long Term												
Full Simulation Period[a]	2	0	-4	-8	-13	-13	-5	-1	1	5	9	3
Water Year Types[b,c]												
Wet (32%)	1	-3	0	-13	-26	-15	-9	-3	1	2	3	2
Above Normal (15%)	-1	-1	-2	-10	-13	-34	-15	-2	-12	8	15	4
Below Normal (17%)	2	3	-13	-7	-6	-7	-1	1	4	4	12	2
Dry (22%)	6	4	-7	-5	-8	-11	-1	0	5	8	12	5
Critical (15%)	4	0	0	-1	0	2	2	3	6	7	6	3

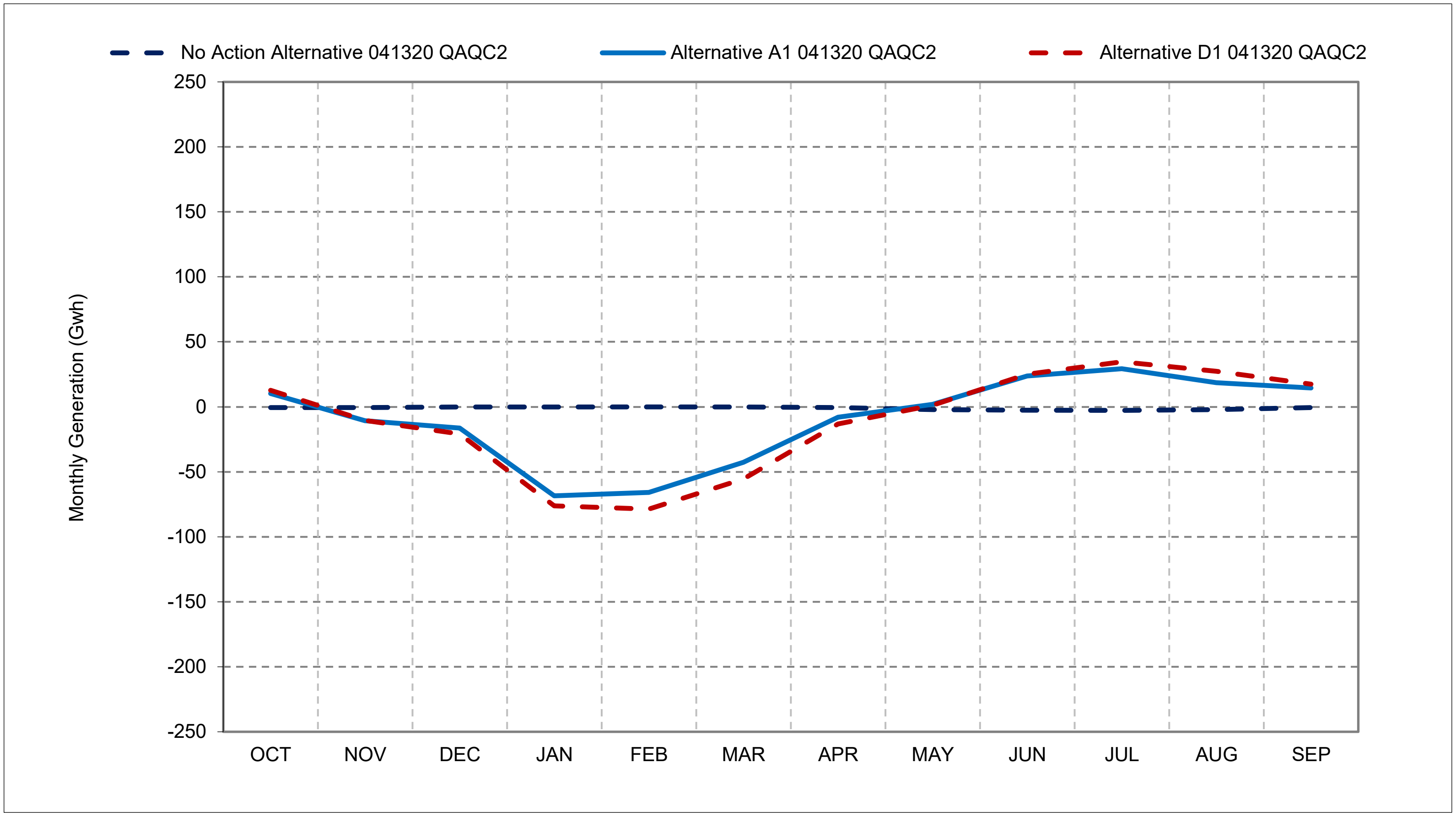
a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-1. NODOS Net Generation, Long-Term Average Generation

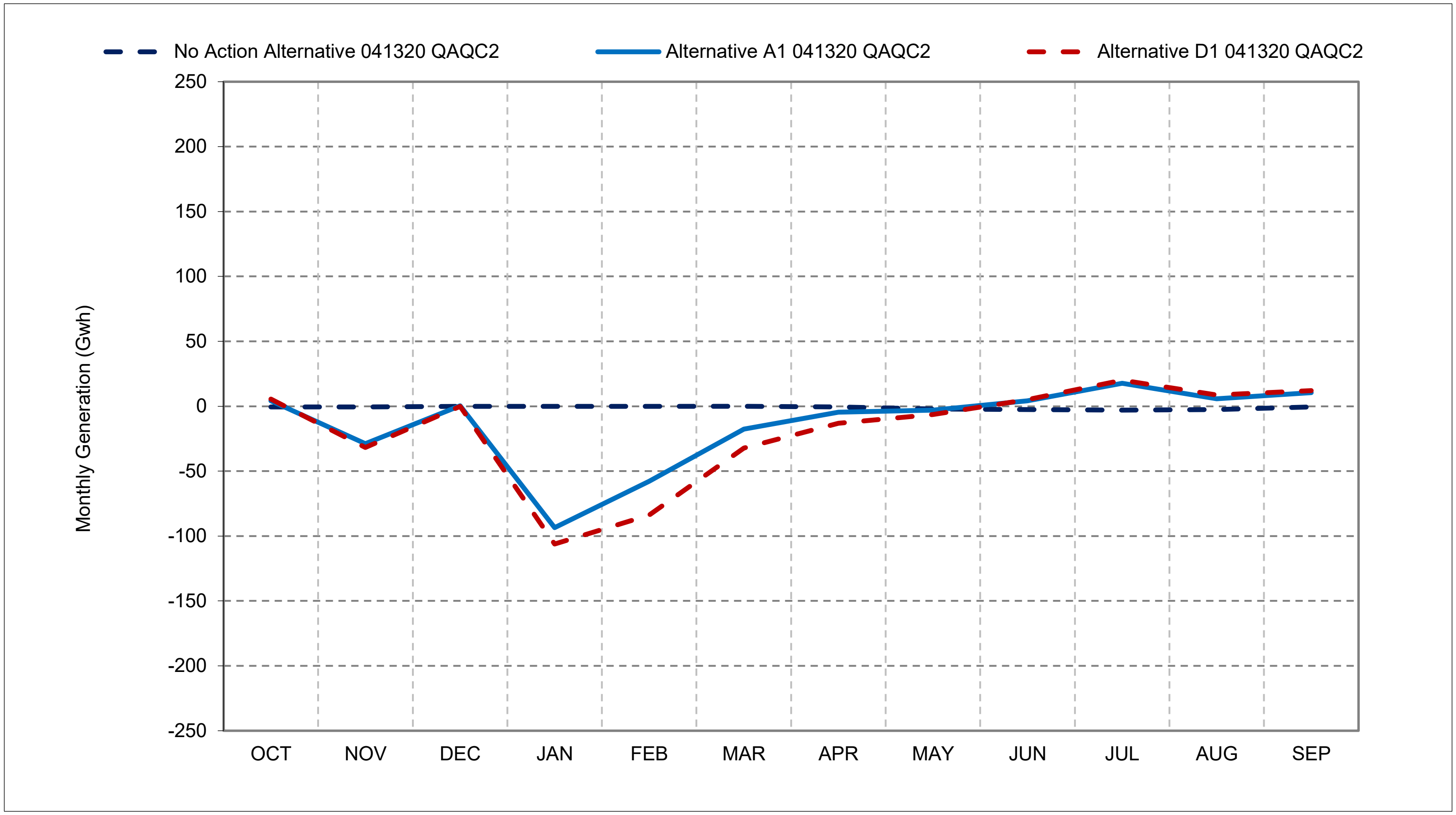


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-2. NODOS Net Generation, Wet Year Average Generation

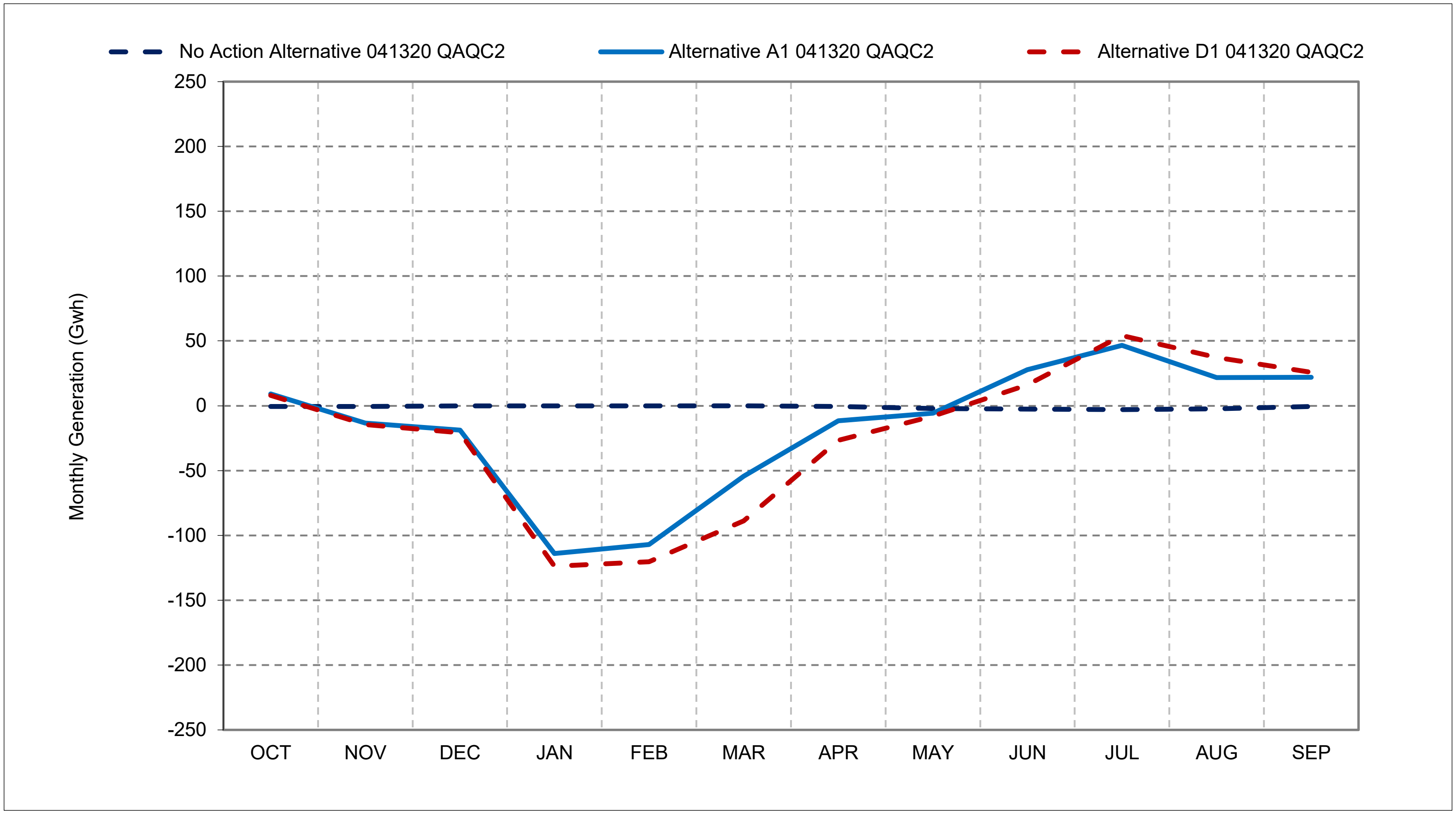


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-3. NODOS Net Generation, Above Normal Year Average Generation

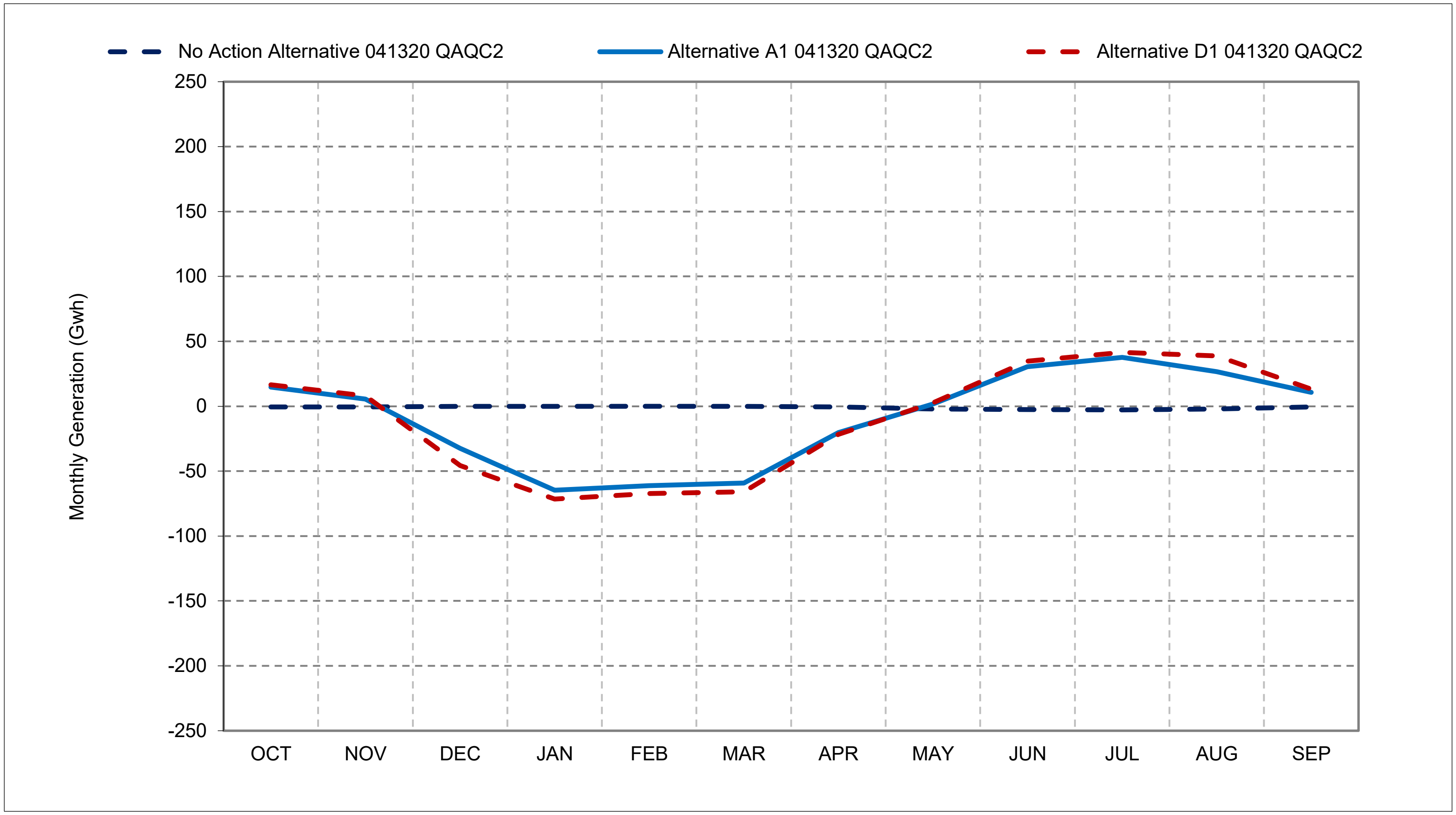


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-4. NODOS Net Generation, Below Normal Year Average Generation

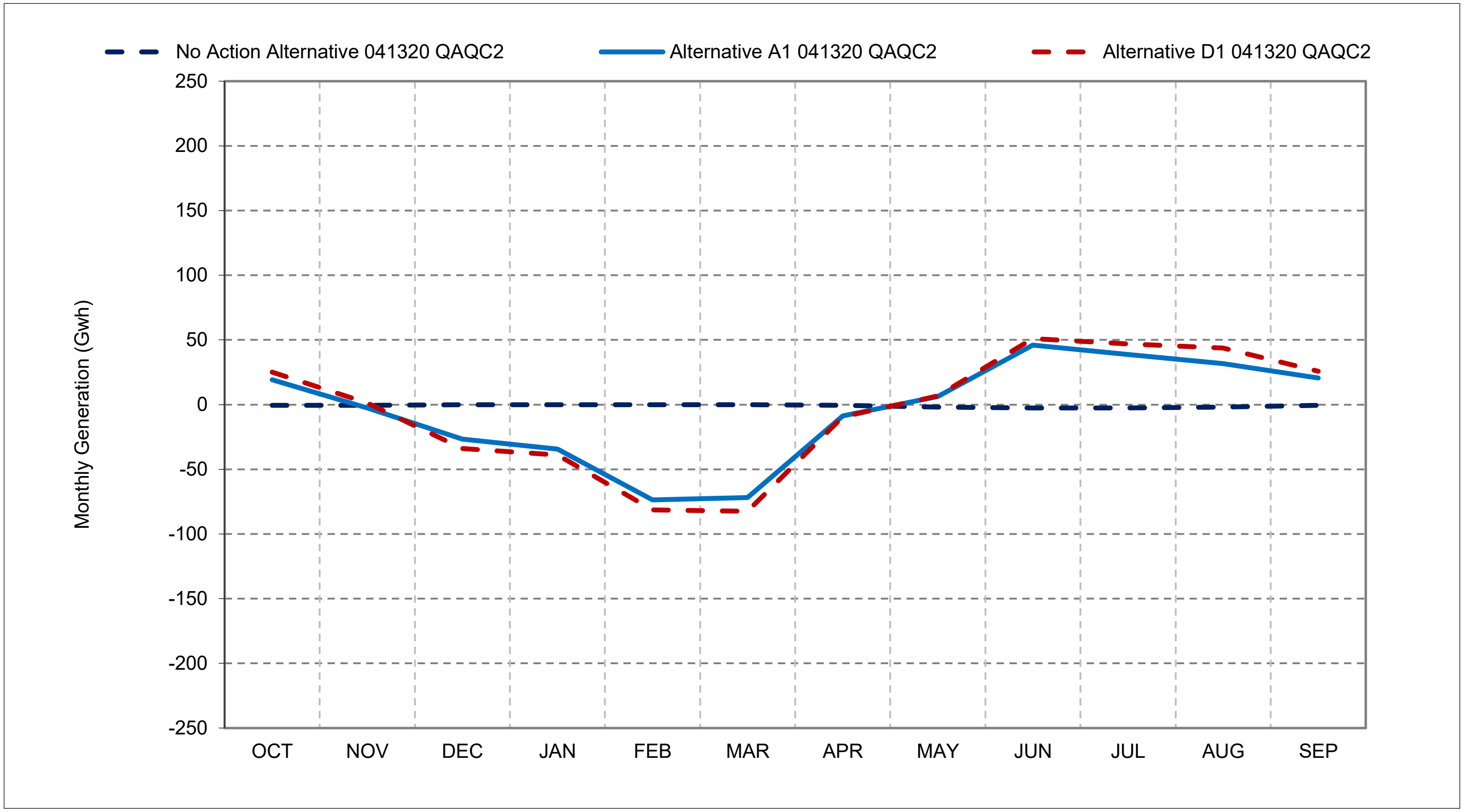


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-5. NODOS Net Generation, Dry Year Average Generation

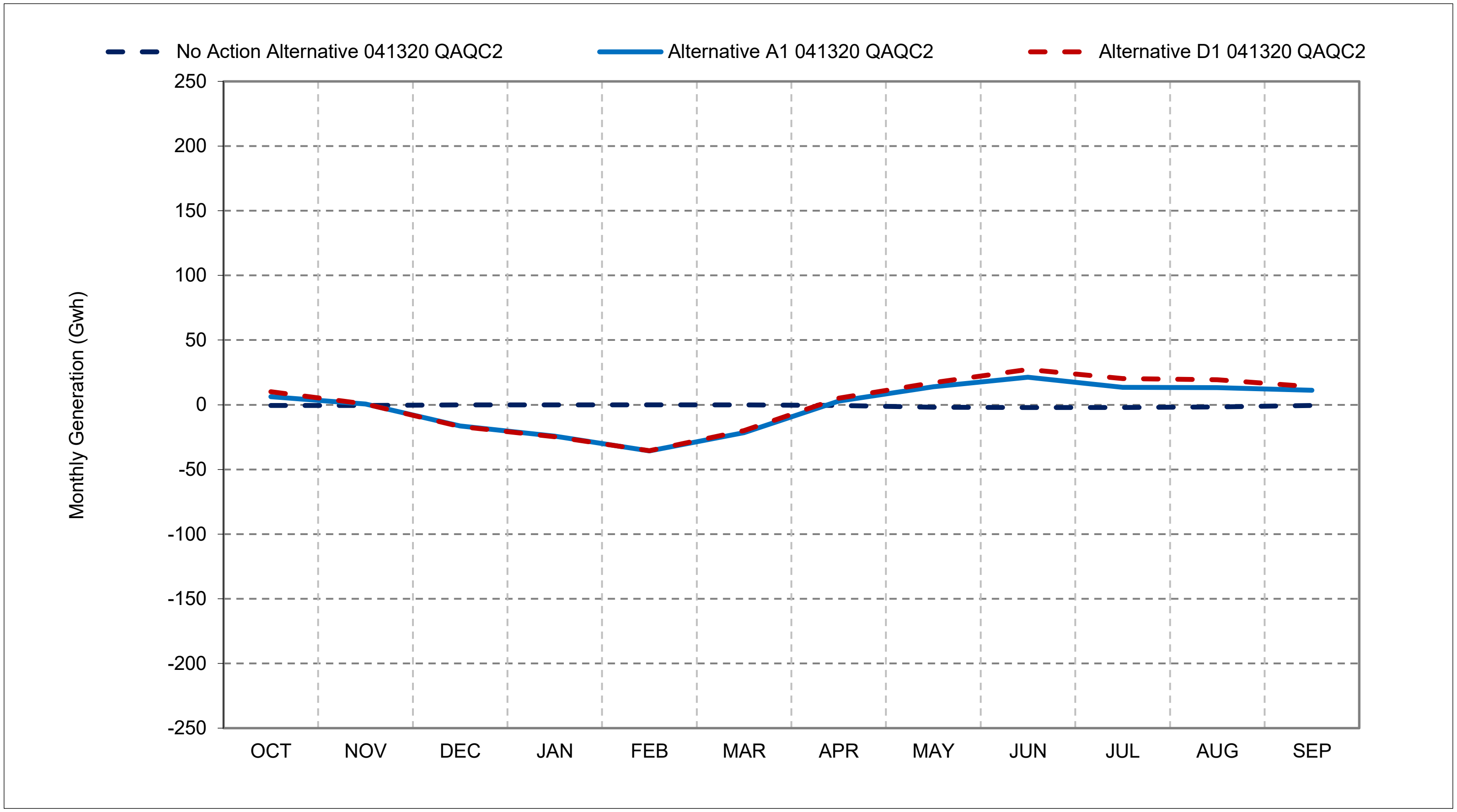


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-6. NODOS Net Generation, Critical Year Average Generation

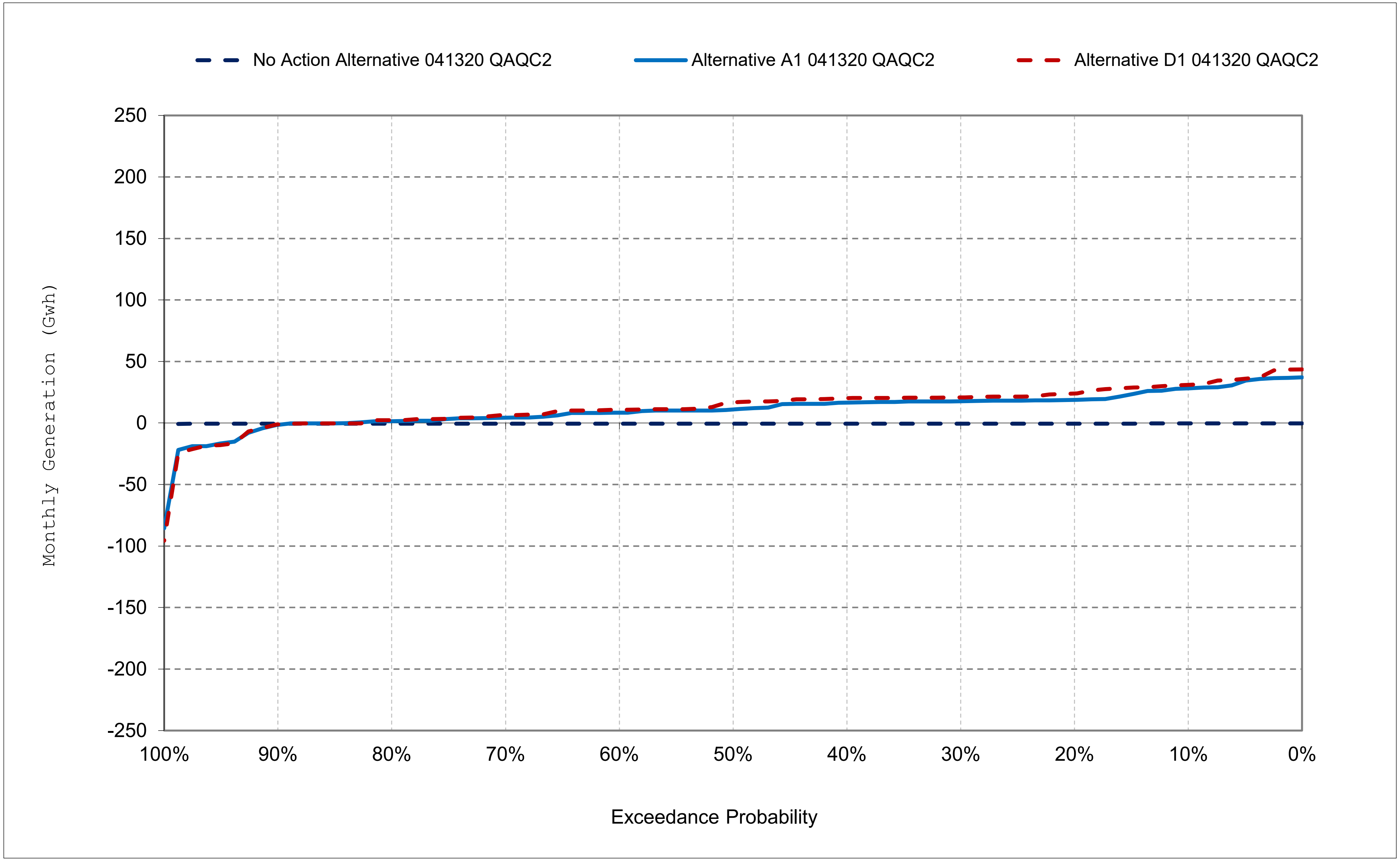


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

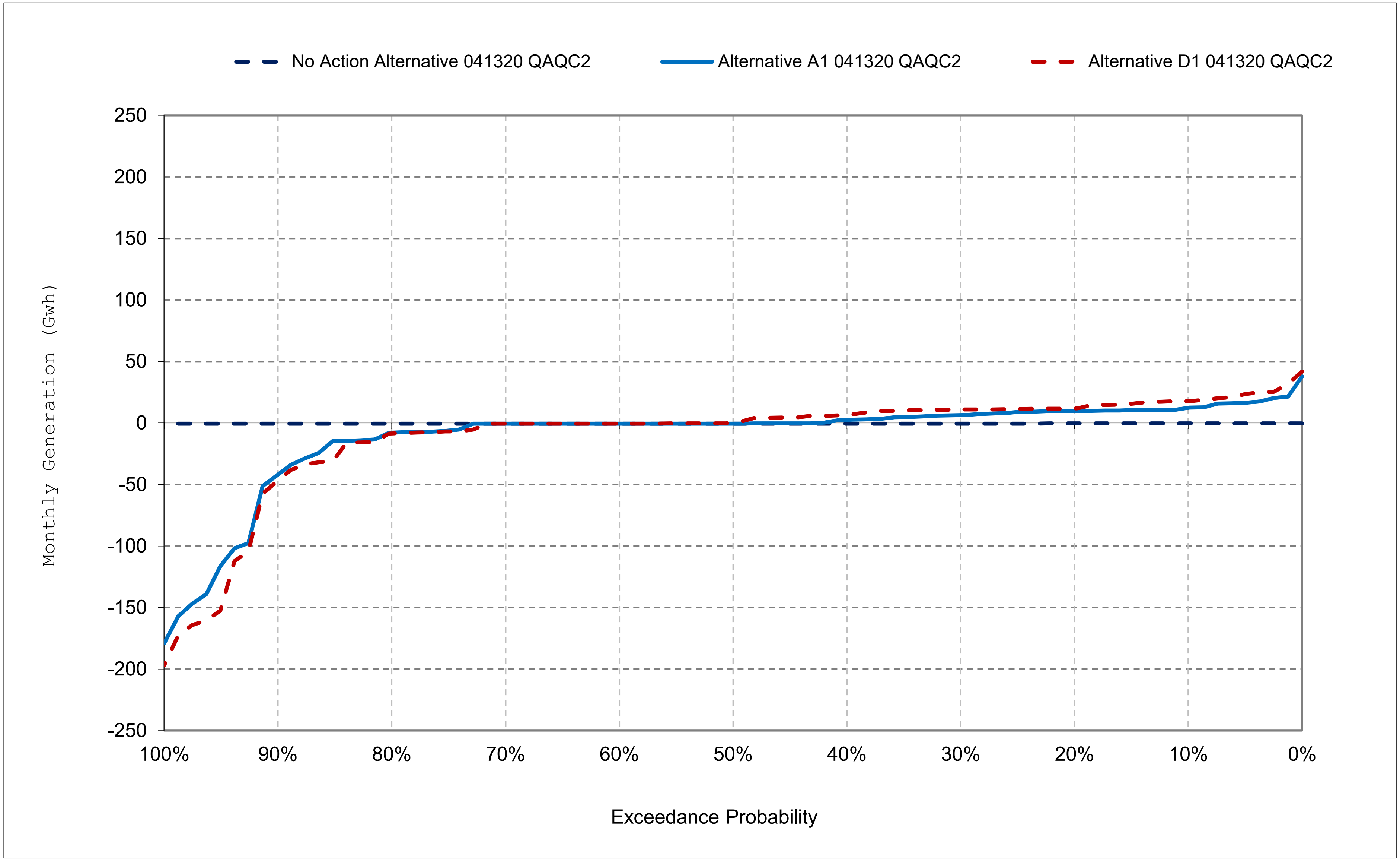
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-7. NODOS Net Generation, October



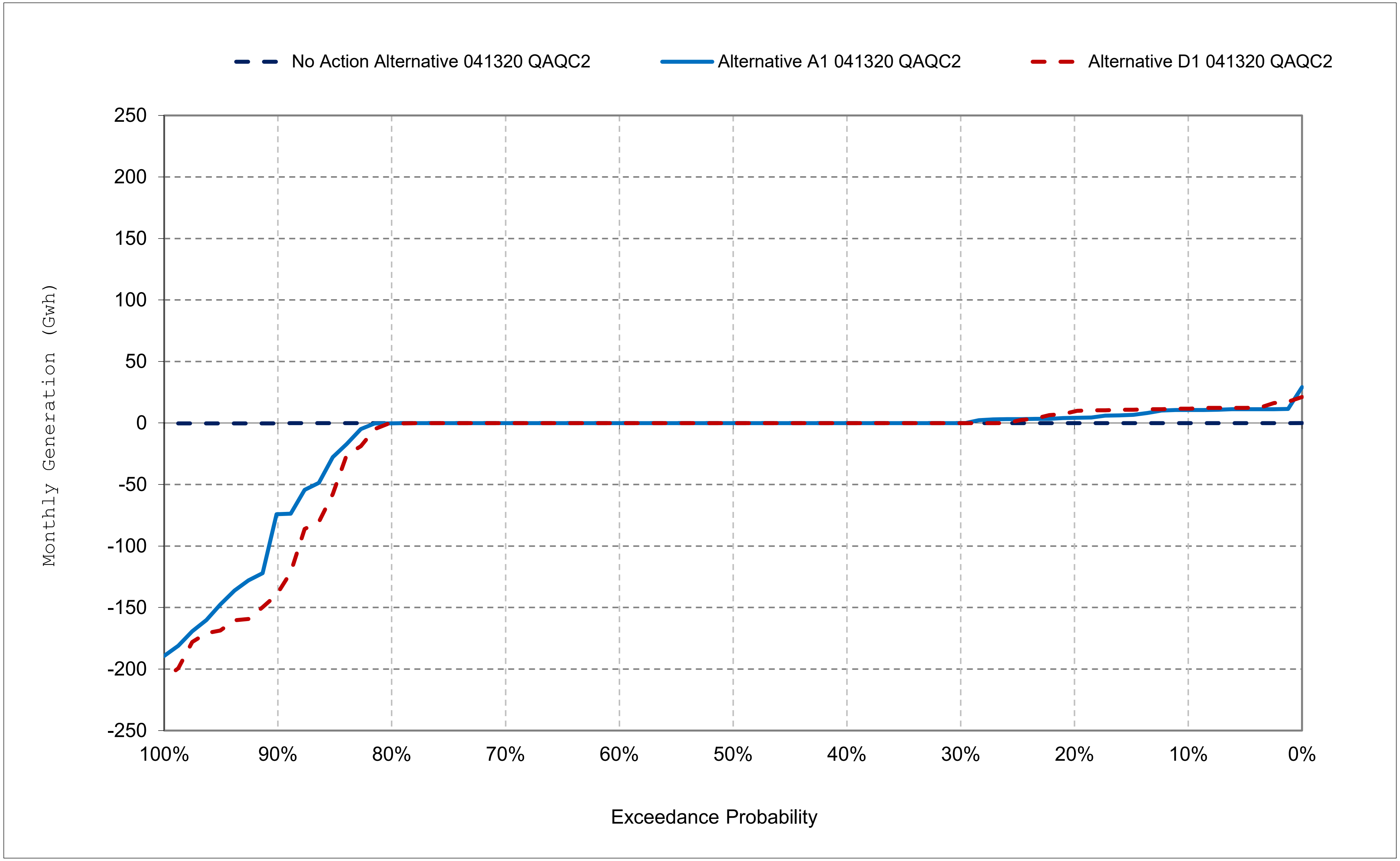
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-8. NODOS Net Generation, November



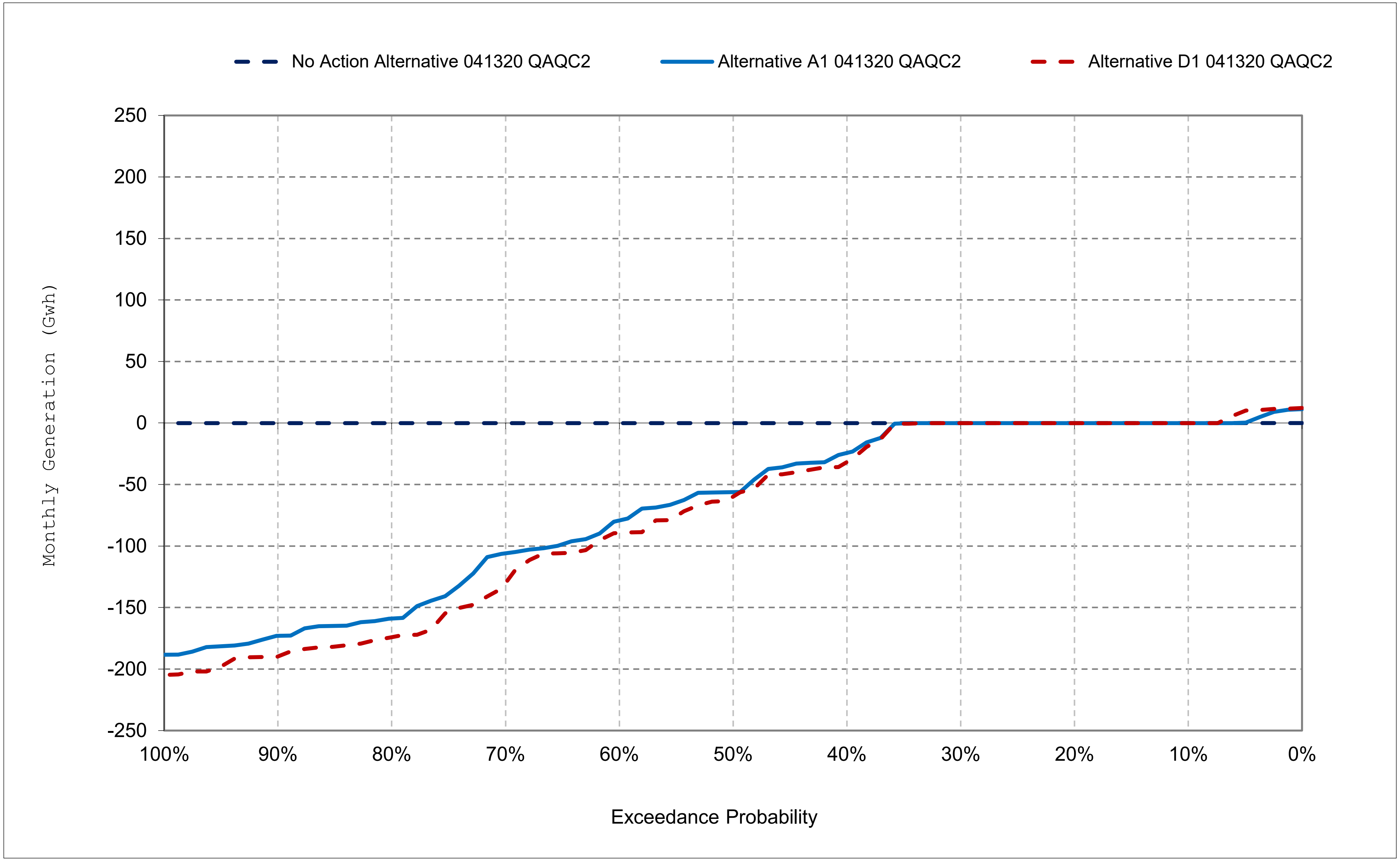
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-9. NODOS Net Generation, December



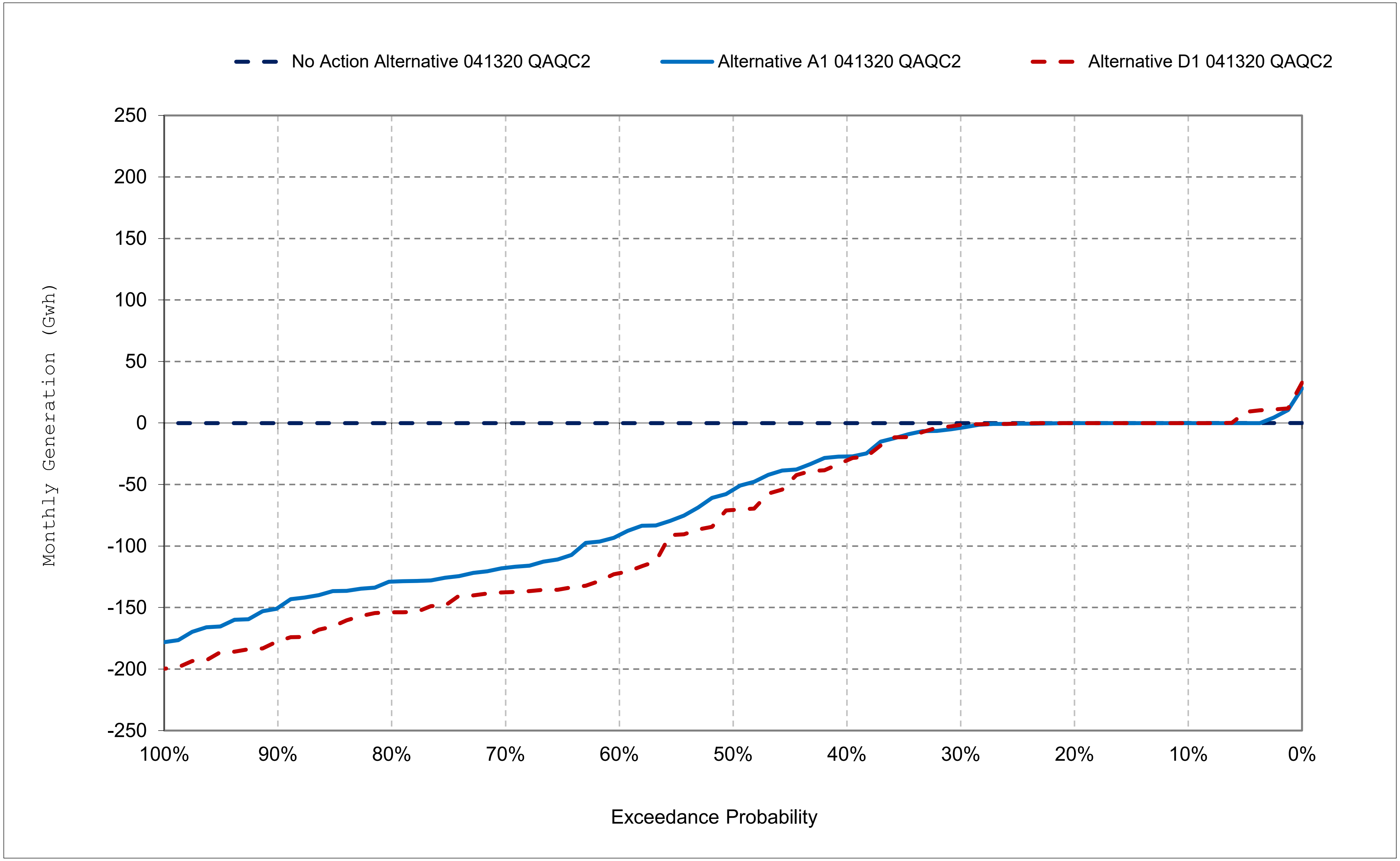
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-10. NODOS Net Generation, January



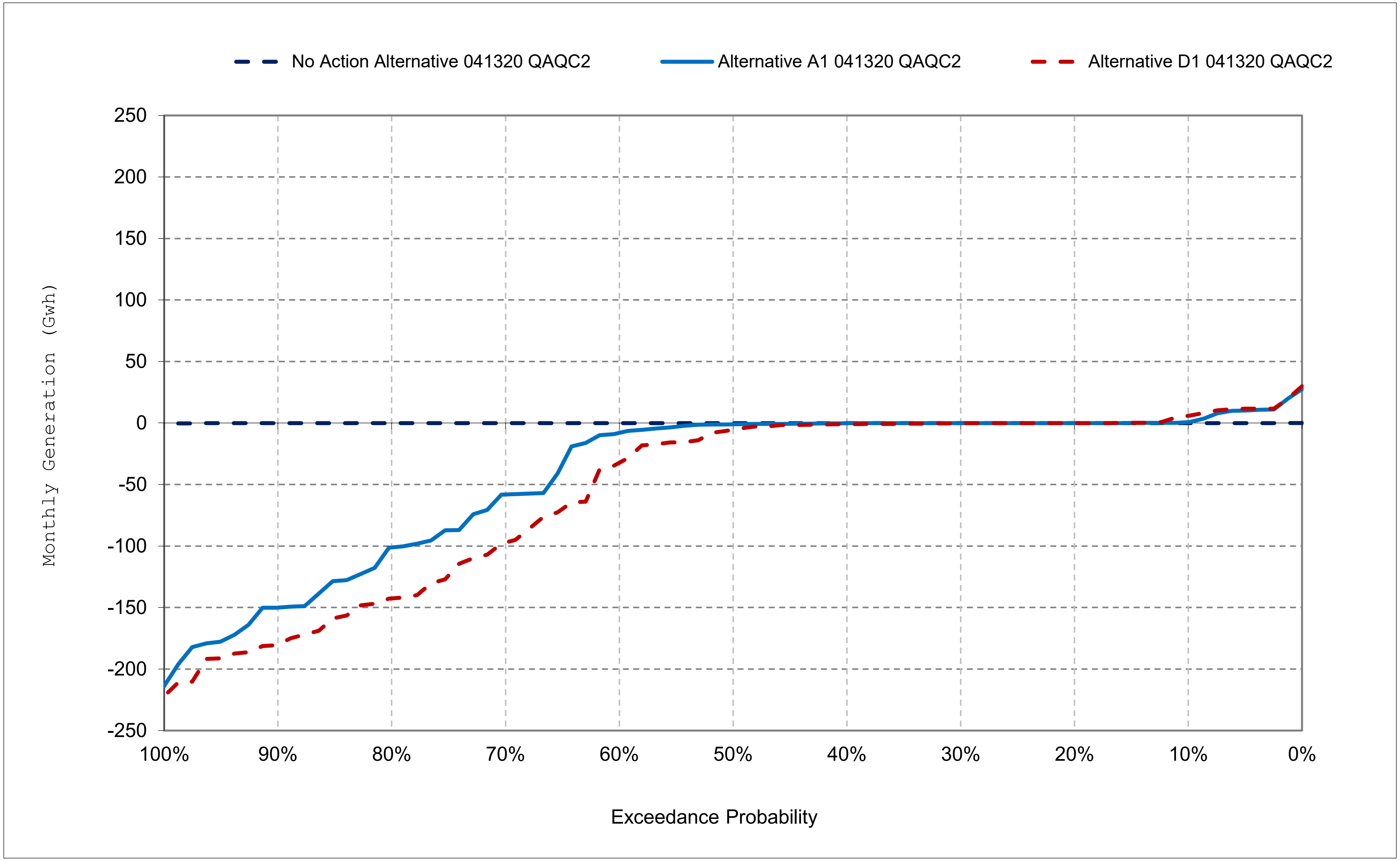
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-11. NODOS Net Generation, February



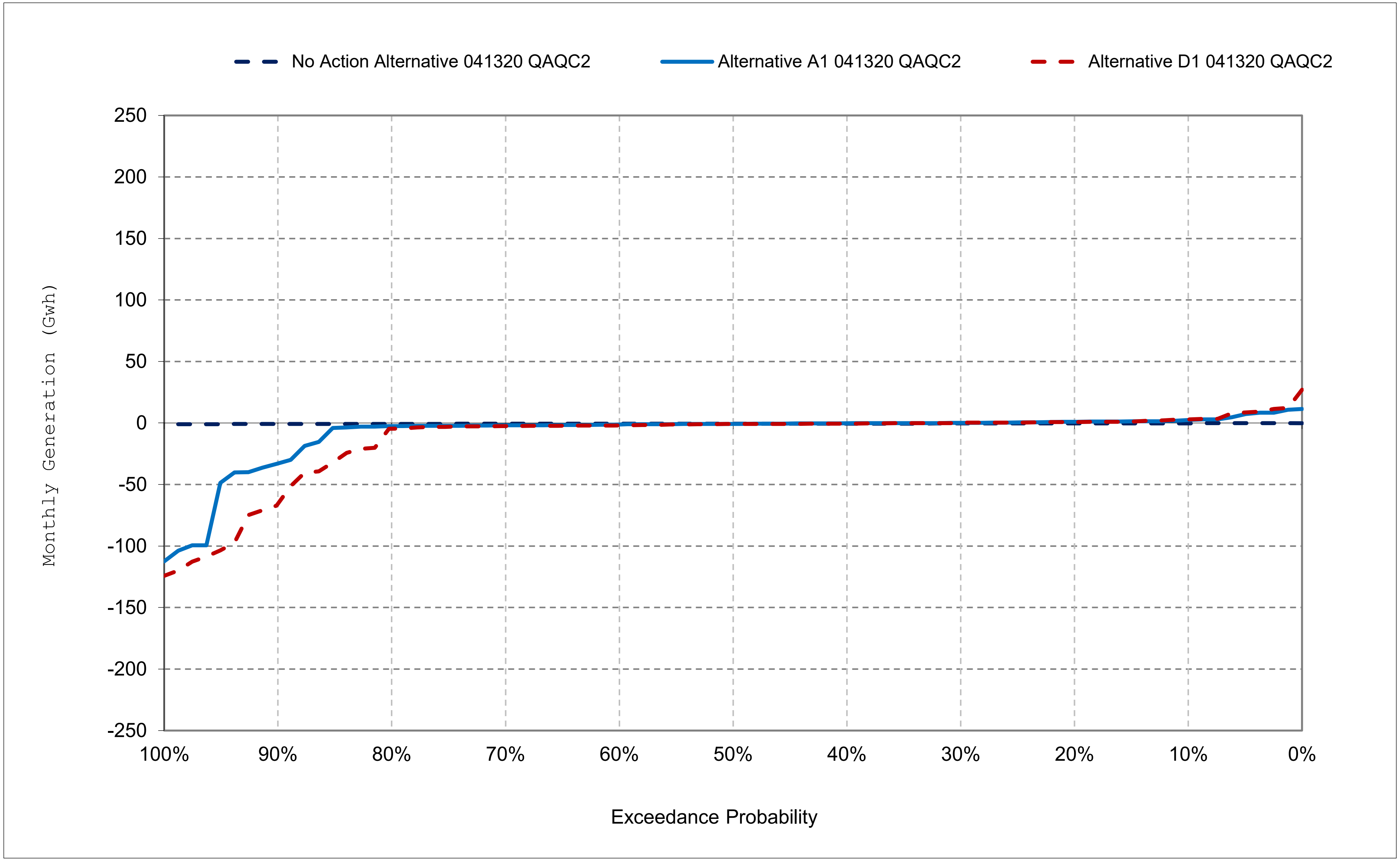
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-12. NODOS Net Generation, March



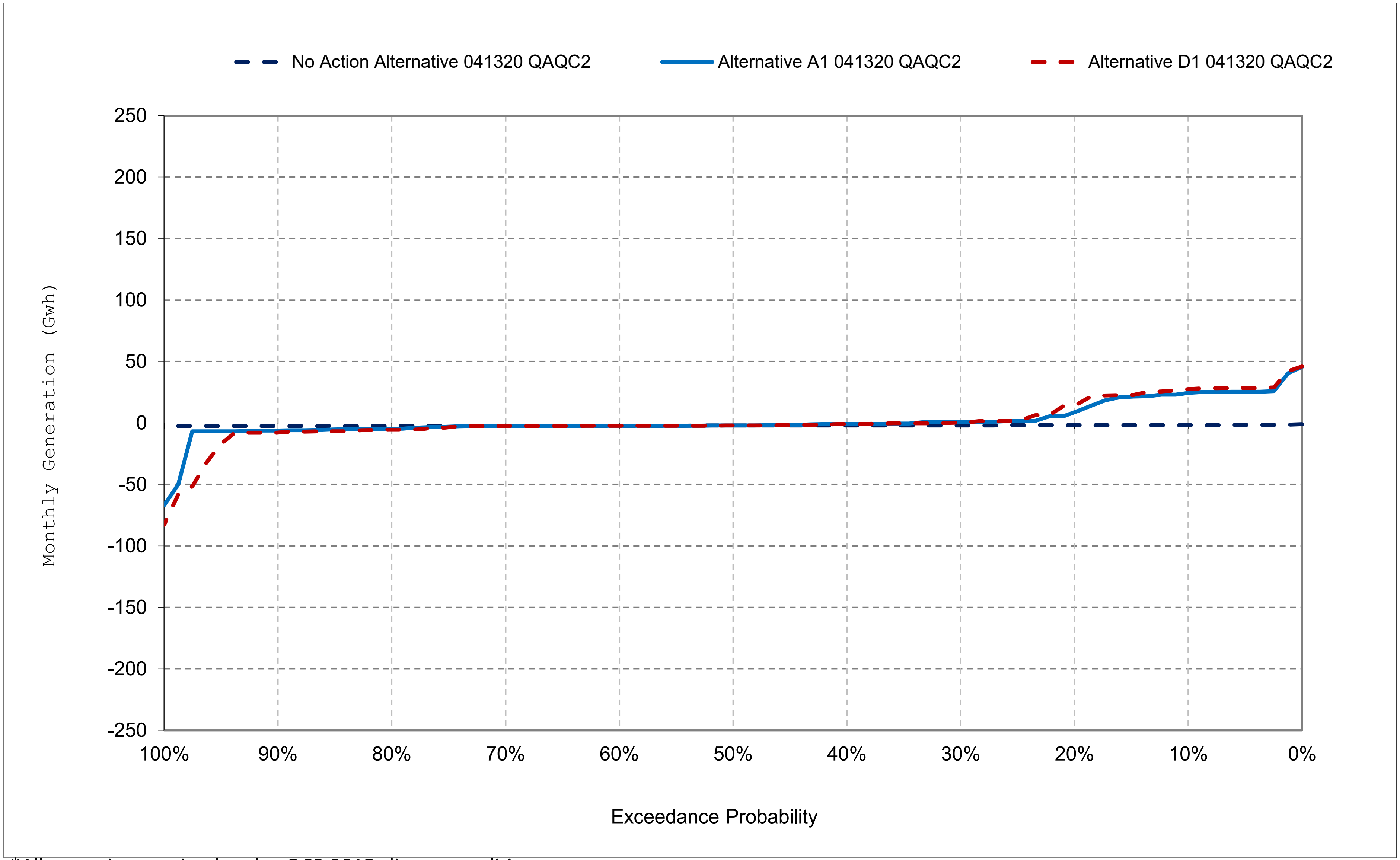
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-13. NODOS Net Generation, April



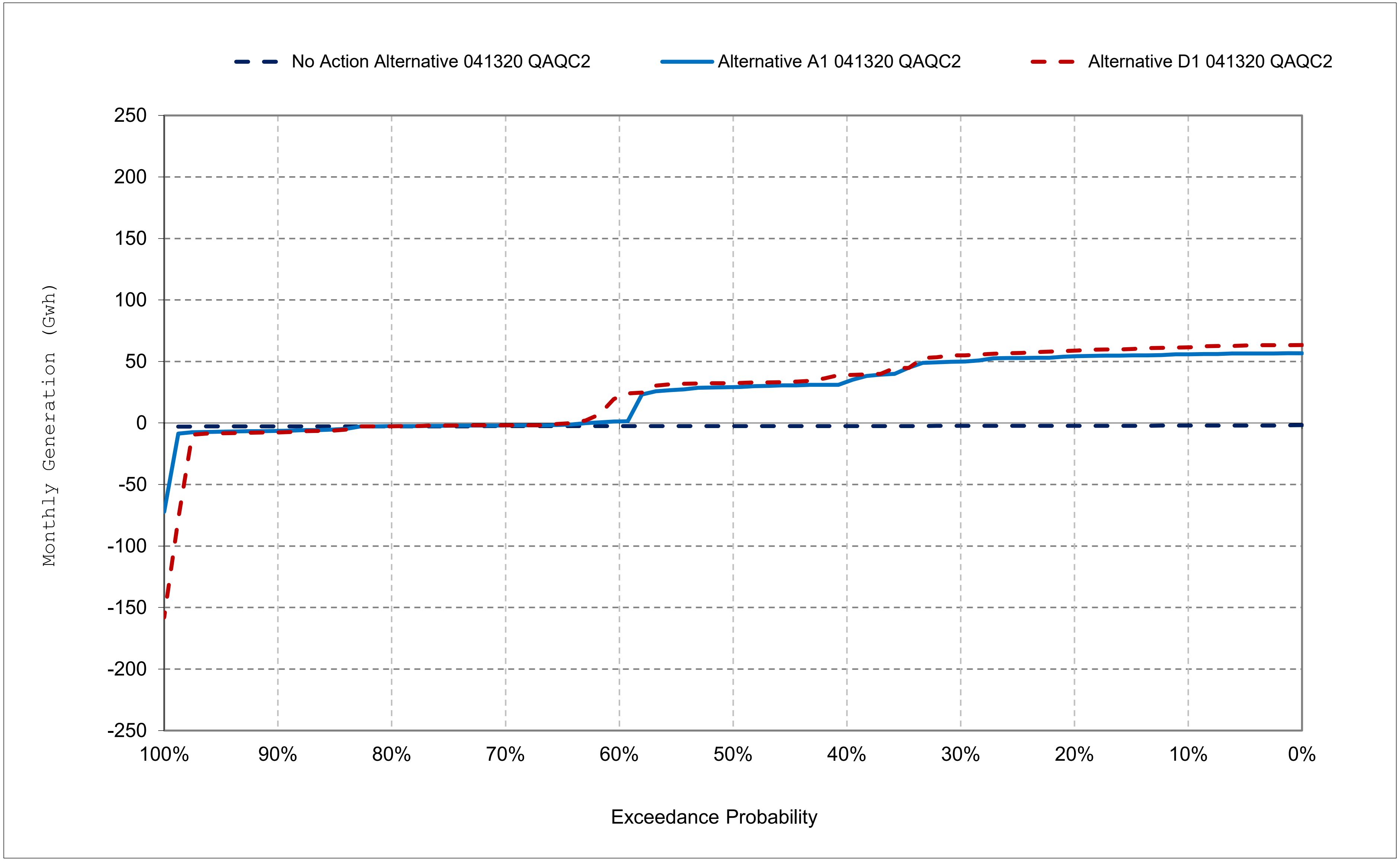
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-14. NODOS Net Generation, May



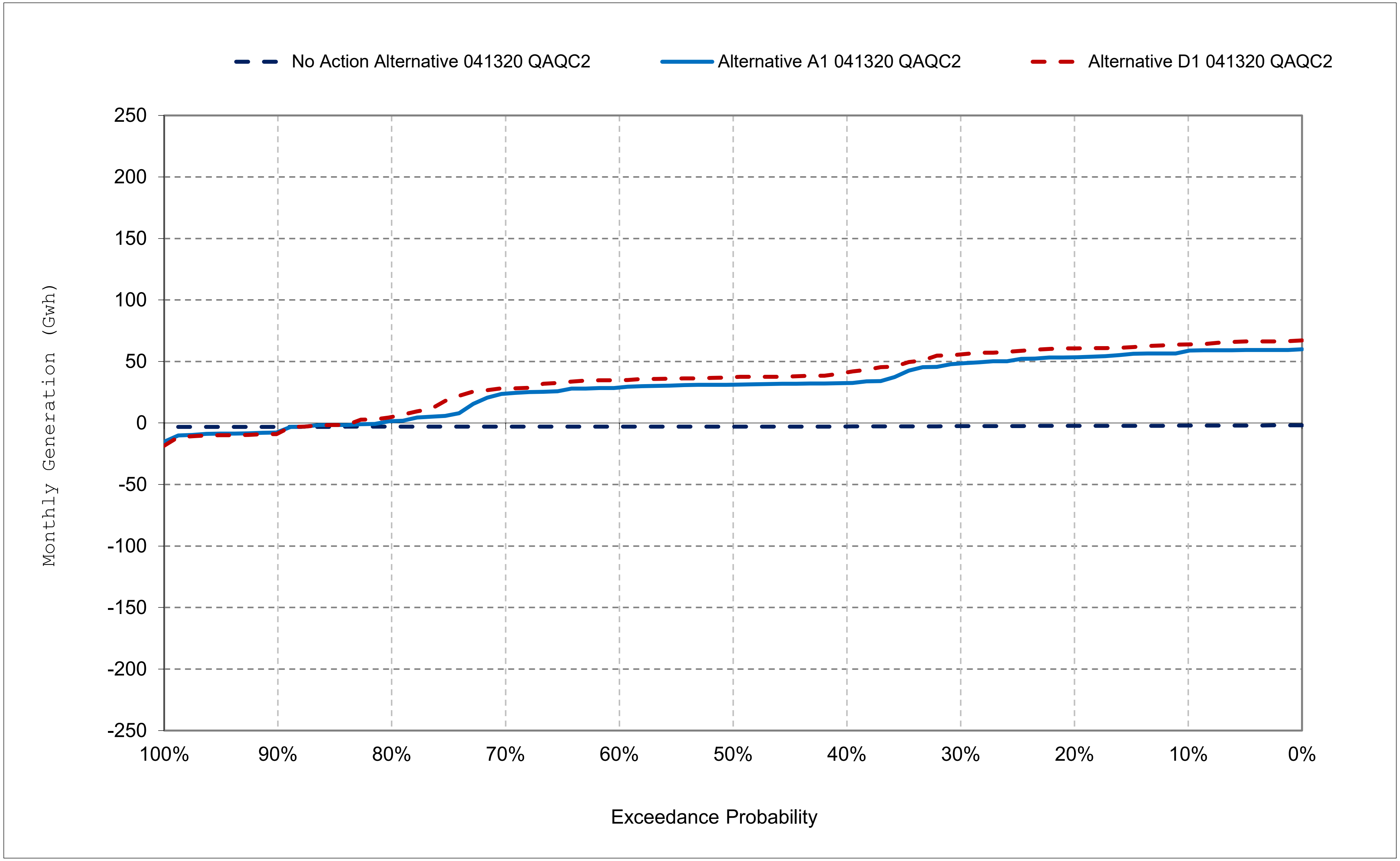
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-15. NODOS Net Generation, June



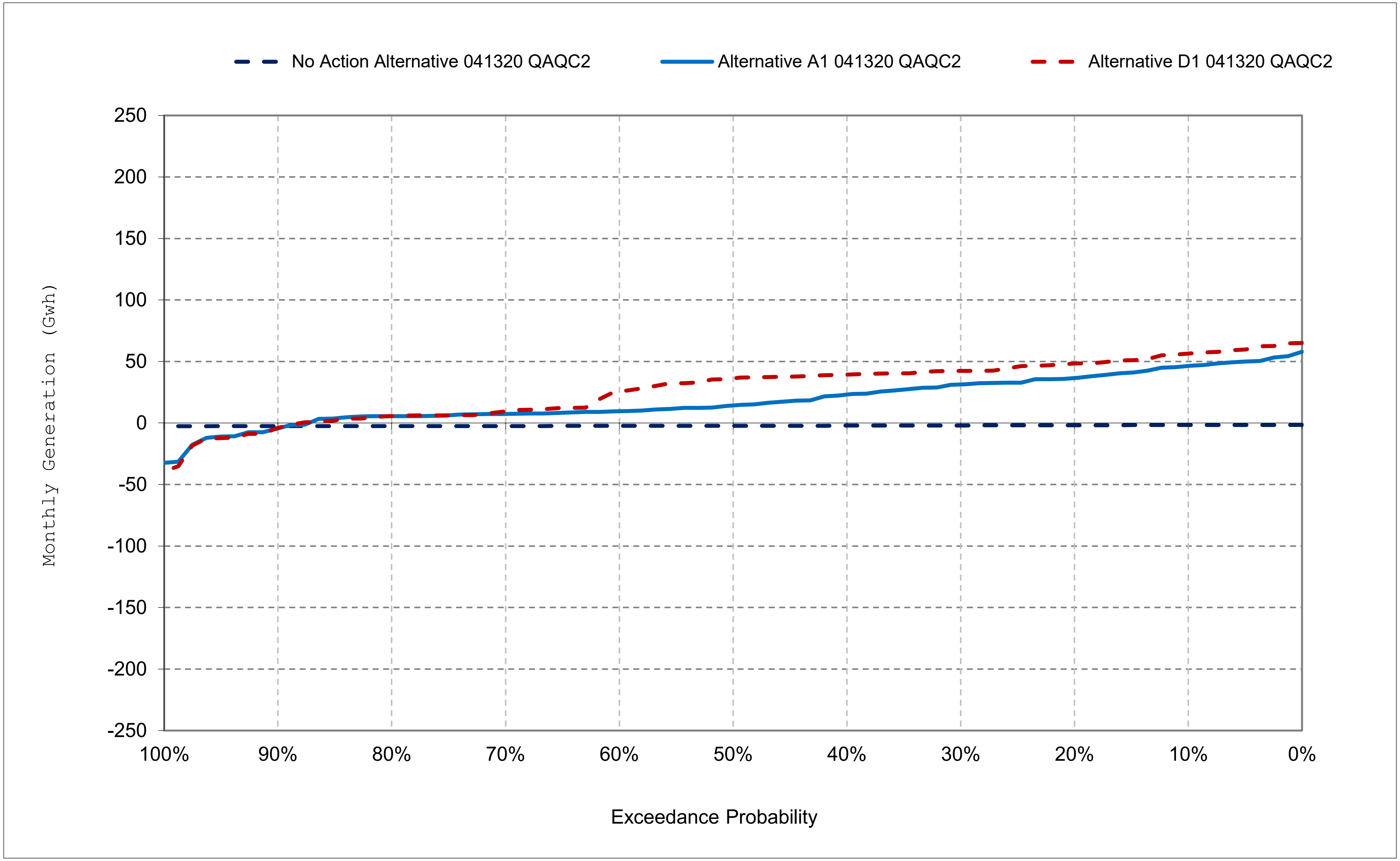
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-16. NODOS Net Generation, July



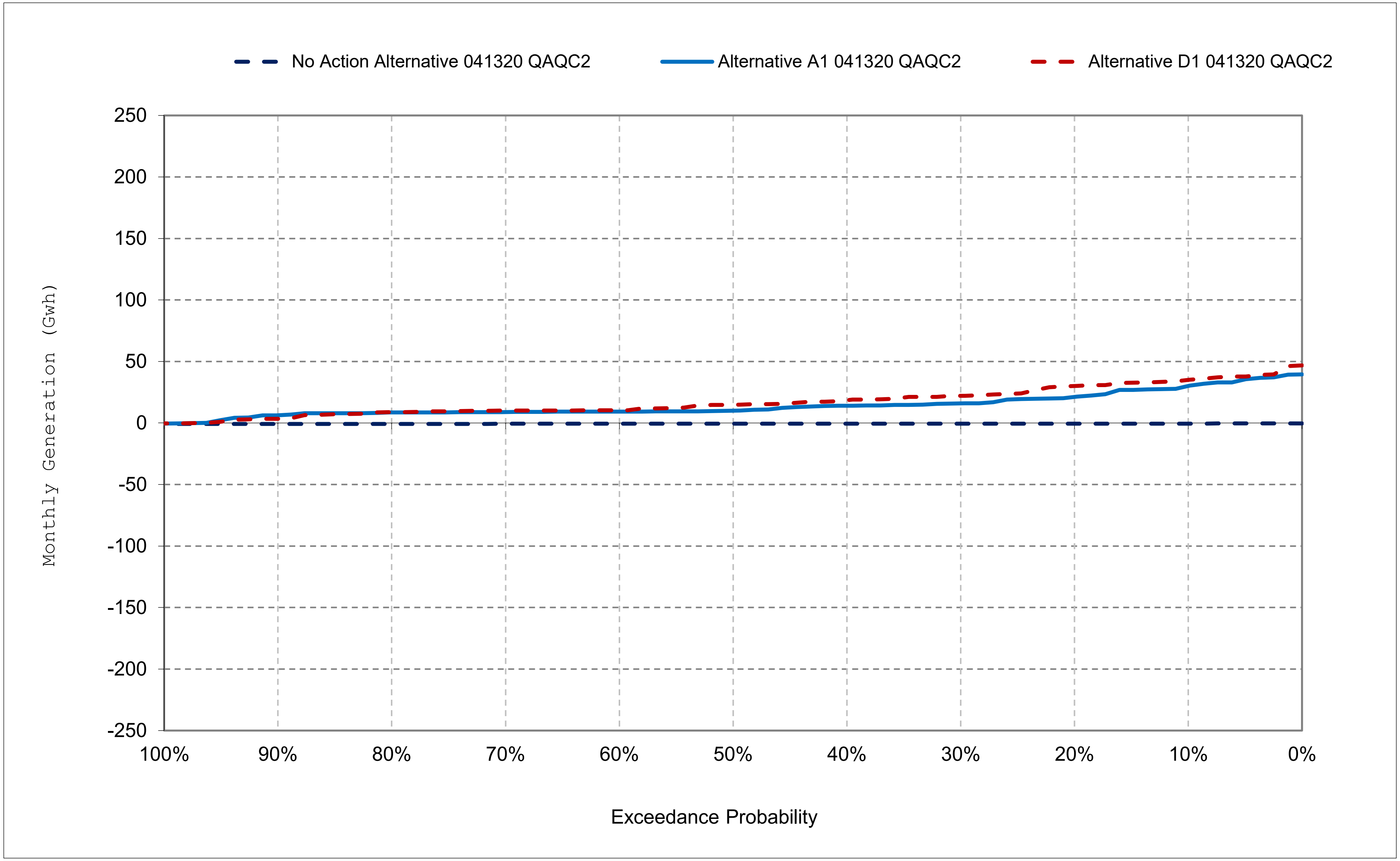
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-17. NODOS Net Generation, August



*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-15-18. NODOS Net Generation, September



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-16-1. NODOS Net Revenue, Monthly Revenue

No Action Alternative 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-21	-21	-7	-3	-2	-1	-11	-81	-103	-117	-99	-25
20%	-22	-22	-7	-3	-3	-1	-15	-86	-112	-132	-108	-26
30%	-24	-23	-7	-3	-3	-1	-19	-91	-117	-141	-119	-28
40%	-25	-25	-8	-3	-3	-1	-24	-95	-121	-154	-129	-32
50%	-27	-26	-8	-3	-3	-1	-26	-99	-123	-161	-135	-34
60%	-27	-27	-9	-3	-3	-1	-29	-102	-125	-163	-138	-36
70%	-30	-29	-10	-3	-3	-3	-31	-105	-127	-167	-145	-36
80%	-31	-30	-11	-4	-3	-4	-34	-111	-131	-168	-149	-37
90%	-32	-31	-12	-5	-3	-6	-39	-115	-135	-172	-153	-38
Long Term												
Full Simulation Period[a]	-26	-26	-9	-4	-3	-3	-26	-97	-121	-151	-129	-32
Water Year Types[b,c]												
Wet (32%)	-28	-27	-9	-4	-3	-2	-21	-101	-123	-166	-148	-35
Above Normal (15%)	-27	-26	-9	-3	-2	-1	-27	-101	-128	-164	-140	-35
Below Normal (17%)	-26	-27	-8	-4	-3	-3	-30	-101	-126	-156	-132	-31
Dry (22%)	-27	-26	-9	-4	-3	-3	-27	-94	-122	-142	-115	-30
Critical (15%)	-22	-24	-7	-4	-3	-5	-27	-87	-101	-116	-98	-28

Alternative A1 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,468	657	605	-3	-3	37	123	1,138	2,738	3,320	2,852	1,772
20%	976	523	238	-3	-3	-1	52	406	2,656	3,021	2,246	1,237
30%	920	343	-1	-6	-216	-1	6	42	2,446	2,734	1,930	935
40%	865	137	-7	-1,399	-1,499	-14	-11	-45	1,636	1,839	1,429	829
50%	570	-23	-7	-3,249	-2,990	-53	-35	-92	1,424	1,762	880	581
60%	432	-26	-8	-4,583	-4,960	-418	-62	-107	59	1,630	594	539
70%	225	-30	-10	-6,074	-6,388	-3,028	-98	-116	-96	1,348	461	521
80%	77	-399	-13	-9,195	-7,030	-5,235	-130	-227	-128	92	351	497
90%	-54	-2,133	-4,001	-10,033	-8,158	-7,621	-1,656	-292	-315	-408	-229	372
Long Term												
Full Simulation Period[a]	547	-528	-881	-3,957	-3,580	-2,168	-404	82	1,166	1,662	1,148	849
Water Year Types[b,c]												
Wet (32%)	240	-1,447	32	-5,409	-3,146	-895	-229	-144	207	1,006	385	613
Above Normal (15%)	508	-672	-1,018	-6,589	-5,813	-2,780	-576	-290	1,358	2,637	1,353	1,288
Below Normal (17%)	762	305	-1,751	-3,743	-3,320	-3,013	-1,003	67	1,488	2,130	1,647	633
Dry (22%)	996	-125	-1,431	-1,987	-4,006	-3,662	-443	291	2,255	2,195	1,947	1,197
Critical (15%)	330	30	-882	-1,383	-1,953	-1,091	144	650	1,044	762	816	649

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,489	678	612	0	-1	38	135	1,219	2,841	3,437	2,951	1,797
20%	998	546	245	0	-1	0	67	492	2,768	3,153	2,355	1,263
30%	944	366	5	-3	-213	0	25	132	2,563	2,875	2,049	964
40%	890	161	1	-1,396	-1,497	-13	13	51	1,757	1,993	1,558	861
50%	597	3	1	-3,246	-2,987	-52	-9	6	1,547	1,923	1,014	615
60%	459	1	1	-4,580	-4,957	-416	-34	-5	184	1,794	732	574
70%	254	-1	0	-6,071	-6,385	-3,025	-67	-11	31	1,515	606	557
80%	108	-369	-1	-9,191	-7,027	-5,231	-96	-116	4	259	500	534
90%	-22	-2,101	-3,989	-10,027	-8,155	-7,615	-1,617	-177	-179	-236	-76	410
Long Term												
Full Simulation Period[a]	574	-502	-872	-3,953	-3,578	-2,166	-378	180	1,287	1,813	1,278	881
Water Year Types[b,c]												
Wet (32%)	268	-1,419	42	-5,406	-3,143	-893	-208	-43	330	1,172	533	648
Above Normal (15%)	534	-646	-1,009	-6,586	-5,810	-2,778	-549	-189	1,486	2,802	1,493	1,322
Below Normal (17%)	789	332	-1,743	-3,739	-3,318	-3,010	-973	168	1,614	2,287	1,779	664
Dry (22%)	1,022	-99	-1,421	-1,983	-4,004	-3,659	-416	386	2,378	2,337	2,062	1,227
Critical (15%)	352	54	-875	-1,379	-1,950	-1,086	171	737	1,145	878	914	677

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

f Net revenue is based on 2030 pricing forecasts developed by DWR.

Table G.2.1-16-2. NODOS Net Revenue, Monthly Revenue

No Action Alternative 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-21	-21	-7	-3	-2	-1	-11	-81	-103	-117	-99	-25
20%	-22	-22	-7	-3	-3	-1	-15	-86	-112	-132	-108	-26
30%	-24	-23	-7	-3	-3	-1	-19	-91	-117	-141	-119	-28
40%	-25	-25	-8	-3	-3	-1	-24	-95	-121	-154	-129	-32
50%	-27	-26	-8	-3	-3	-1	-26	-99	-123	-161	-135	-34
60%	-27	-27	-9	-3	-3	-1	-29	-102	-125	-163	-138	-36
70%	-30	-29	-10	-3	-3	-3	-31	-105	-127	-167	-145	-36
80%	-31	-30	-11	-4	-3	-4	-34	-111	-131	-168	-149	-37
90%	-32	-31	-12	-5	-3	-6	-39	-115	-135	-172	-153	-38
Long Term												
Full Simulation Period[a]	-26	-26	-9	-4	-3	-3	-26	-97	-121	-151	-129	-32
Water Year Types[b,c]												
Wet (32%)	-28	-27	-9	-4	-3	-2	-21	-101	-123	-166	-148	-35
Above Normal (15%)	-27	-26	-9	-3	-2	-1	-27	-101	-128	-164	-140	-35
Below Normal (17%)	-26	-27	-8	-4	-3	-3	-30	-101	-126	-156	-132	-31
Dry (22%)	-27	-26	-9	-4	-3	-3	-27	-94	-122	-142	-115	-30
Critical (15%)	-22	-24	-7	-4	-3	-5	-27	-87	-101	-116	-98	-28

Alternative D1 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,604	956	669	-3	-3	301	144	1,290	3,009	3,619	3,471	2,051
20%	1,251	630	532	-4	-3	-1	42	694	2,879	3,431	2,974	1,752
30%	1,081	584	-7	-6	-83	-4	8	15	2,692	3,155	2,613	1,302
40%	1,047	360	-7	-1,833	-1,679	-51	-25	-44	1,907	2,324	2,421	1,090
50%	873	19	-7	-3,459	-3,830	-286	-40	-96	1,587	2,105	2,237	870
60%	562	-23	-9	-5,174	-6,664	-1,691	-99	-108	1,047	1,974	1,582	609
70%	333	-30	-10	-7,483	-7,487	-4,980	-127	-116	-91	1,601	594	594
80%	135	-431	-13	-10,089	-8,357	-7,232	-234	-269	-130	285	359	517
90%	-26	-2,376	-7,433	-11,009	-9,642	-9,146	-3,311	-380	-381	-468	-200	207
Long Term												
Full Simulation Period[a]	674	-515	-1,118	-4,401	-4,278	-2,831	-655	45	1,224	1,963	1,690	1,028
Water Year Types[b,c]												
Wet (32%)	315	-1,596	9	-6,144	-4,552	-1,646	-658	-316	245	1,140	563	704
Above Normal (15%)	448	-722	-1,120	-7,150	-6,543	-4,521	-1,325	-394	777	3,063	2,307	1,512
Below Normal (17%)	862	441	-2,473	-4,127	-3,643	-3,374	-1,081	108	1,688	2,348	2,390	771
Dry (22%)	1,301	81	-1,840	-2,252	-4,426	-4,203	-476	308	2,499	2,658	2,693	1,511
Critical (15%)	522	28	-891	-1,418	-1,938	-1,016	253	798	1,337	1,152	1,196	820

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,625	977	676	1	-1	301	155	1,371	3,112	3,737	3,570	2,075
20%	1,273	653	539	0	0	0	57	780	2,991	3,563	3,083	1,778
30%	1,104	607	0	-3	-80	-3	27	105	2,809	3,296	2,732	1,330
40%	1,072	385	1	-1,829	-1,677	-50	-1	51	2,027	2,478	2,550	1,122
50%	900	45	1	-3,456	-3,827	-285	-14	2	1,710	2,266	2,372	904
60%	590	4	1	-5,171	-6,662	-1,690	-70	-5	1,172	2,137	1,720	644
70%	363	-1	0	-7,479	-7,484	-4,977	-96	-11	36	1,767	739	630
80%	166	-401	-2	-10,085	-8,354	-7,228	-200	-158	2	453	508	554
90%	5	-2,344	-7,421	-11,004	-9,639	-9,140	-3,272	-265	-246	-297	-47	244
Long Term												
Full Simulation Period[a]	701	-489	-1,109	-4,397	-4,275	-2,828	-629	143	1,345	2,114	1,819	1,060
Water Year Types[b,c]												
Wet (32%)	343	-1,569	18	-6,140	-4,550	-1,644	-637	-215	368	1,306	710	739
Above Normal (15%)	474	-696	-1,112	-7,147	-6,541	-4,519	-1,299	-293	905	3,227	2,446	1,546
Below Normal (17%)	889	467	-2,465	-4,124	-3,640	-3,371	-1,051	209	1,814	2,504	2,521	802
Dry (22%)	1,327	106	-1,831	-2,248	-4,423	-4,201	-449	402	2,621	2,800	2,808	1,541
Critical (15%)	544	53	-884	-1,414	-1,935	-1,012	281	885	1,438	1,268	1,294	847

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

f Net revenue is based on 2030 pricing forecasts developed by DWR.

Table G.2.1-16-3. NODOS Net Revenue, Monthly Revenue

Alternative A1 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,468	657	605	-3	-3	37	123	1,138	2,738	3,320	2,852	1,772
20%	976	523	238	-3	-3	-1	52	406	2,656	3,021	2,246	1,237
30%	920	343	-1	-6	-216	-1	6	42	2,446	2,734	1,930	935
40%	865	137	-7	-1,399	-1,499	-14	-11	-45	1,636	1,839	1,429	829
50%	570	-23	-7	-3,249	-2,990	-53	-35	-92	1,424	1,762	880	581
60%	432	-26	-8	-4,583	-4,960	-418	-62	-107	59	1,630	594	539
70%	225	-30	-10	-6,074	-6,388	-3,028	-98	-116	-96	1,348	461	521
80%	77	-399	-13	-9,195	-7,030	-5,235	-130	-227	-128	92	351	497
90%	-54	-2,133	-4,001	-10,033	-8,158	-7,621	-1,656	-292	-315	-408	-229	372
Long Term												
Full Simulation Period[a]	547	-528	-881	-3,957	-3,580	-2,168	-404	82	1,166	1,662	1,148	849
Water Year Types[b,c]												
Wet (32%)	240	-1,447	32	-5,409	-3,146	-895	-229	-144	207	1,006	385	613
Above Normal (15%)	508	-672	-1,018	-6,589	-5,813	-2,780	-576	-290	1,358	2,637	1,353	1,288
Below Normal (17%)	762	305	-1,751	-3,743	-3,320	-3,013	-1,003	67	1,488	2,130	1,647	633
Dry (22%)	996	-125	-1,431	-1,987	-4,006	-3,662	-443	291	2,255	2,195	1,947	1,197
Critical (15%)	330	30	-882	-1,383	-1,953	-1,091	144	650	1,044	762	816	649

Alternative D1 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	1,604	956	669	-3	-3	301	144	1,290	3,009	3,619	3,471	2,051
20%	1,251	630	532	-4	-3	-1	42	694	2,879	3,431	2,974	1,752
30%	1,081	584	-7	-6	-83	-4	8	15	2,692	3,155	2,613	1,302
40%	1,047	360	-7	-1,833	-1,679	-51	-25	-44	1,907	2,324	2,421	1,090
50%	873	19	-7	-3,459	-3,830	-286	-40	-96	1,587	2,105	2,237	870
60%	562	-23	-9	-5,174	-6,664	-1,691	-99	-108	1,047	1,974	1,582	609
70%	333	-30	-10	-7,483	-7,487	-4,980	-127	-116	-91	1,601	594	594
80%	135	-431	-13	-10,089	-8,357	-7,232	-234	-269	-130	285	359	517
90%	-26	-2,376	-7,433	-11,009	-9,642	-9,146	-3,311	-380	-381	-468	-200	207
Long Term												
Full Simulation Period[a]	674	-515	-1,118	-4,401	-4,278	-2,831	-655	45	1,224	1,963	1,690	1,028
Water Year Types[b,c]												
Wet (32%)	315	-1,596	9	-6,144	-4,552	-1,646	-658	-316	245	1,140	563	704
Above Normal (15%)	448	-722	-1,120	-7,150	-6,543	-4,521	-1,325	-394	777	3,063	2,307	1,512
Below Normal (17%)	862	441	-2,473	-4,127	-3,643	-3,374	-1,081	108	1,688	2,348	2,390	771
Dry (22%)	1,301	81	-1,840	-2,252	-4,426	-4,203	-476	308	2,499	2,658	2,693	1,511
Critical (15%)	522	28	-891	-1,418	-1,938	-1,016	253	798	1,337	1,152	1,196	820

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	137	299	64	1	0	263	20	152	271	299	618	279
20%	274	107	294	0	1	0	-9	289	223	409	728	515
30%	161	241	-5	0	133	-3	1	-27	246	421	683	367
40%	182	224	0	-433	-180	-37	-14	0	270	485	992	261
50%	303	42	-1	-210	-840	-233	-5	-4	163	343	1,357	290
60%	130	3	-1	-591	-1,705	-1,273	-36	0	988	344	989	70
70%	109	0	0	-1,409	-1,099	-1,951	-29	0	5	252	133	73
80%	58	-32	0	-894	-1,327	-1,997	-104	-42	-2	194	8	20
90%	28	-243	-3,432	-976	-1,484	-1,525	-1,655	-88	-67	-61	29	-165
Long Term												
Full Simulation Period[a]	127	13	-237	-444	-698	-663	-250	-37	57	301	542	179
Water Year Types[b,c]												
Wet (32%)	76	-150	-24	-735	-1,407	-751	-429	-172	38	134	177	91
Above Normal (15%)	-60	-50	-102	-561	-731	-1,741	-750	-104	-581	425	954	224
Below Normal (17%)	100	135	-722	-384	-322	-361	-78	41	200	218	743	137
Dry (22%)	305	205	-410	-265	-420	-542	-33	17	243	463	746	314
Critical (15%)	192	-1	-9	-35	15	74	109	148	293	390	380	170

a Based on the 82-year simulation period.

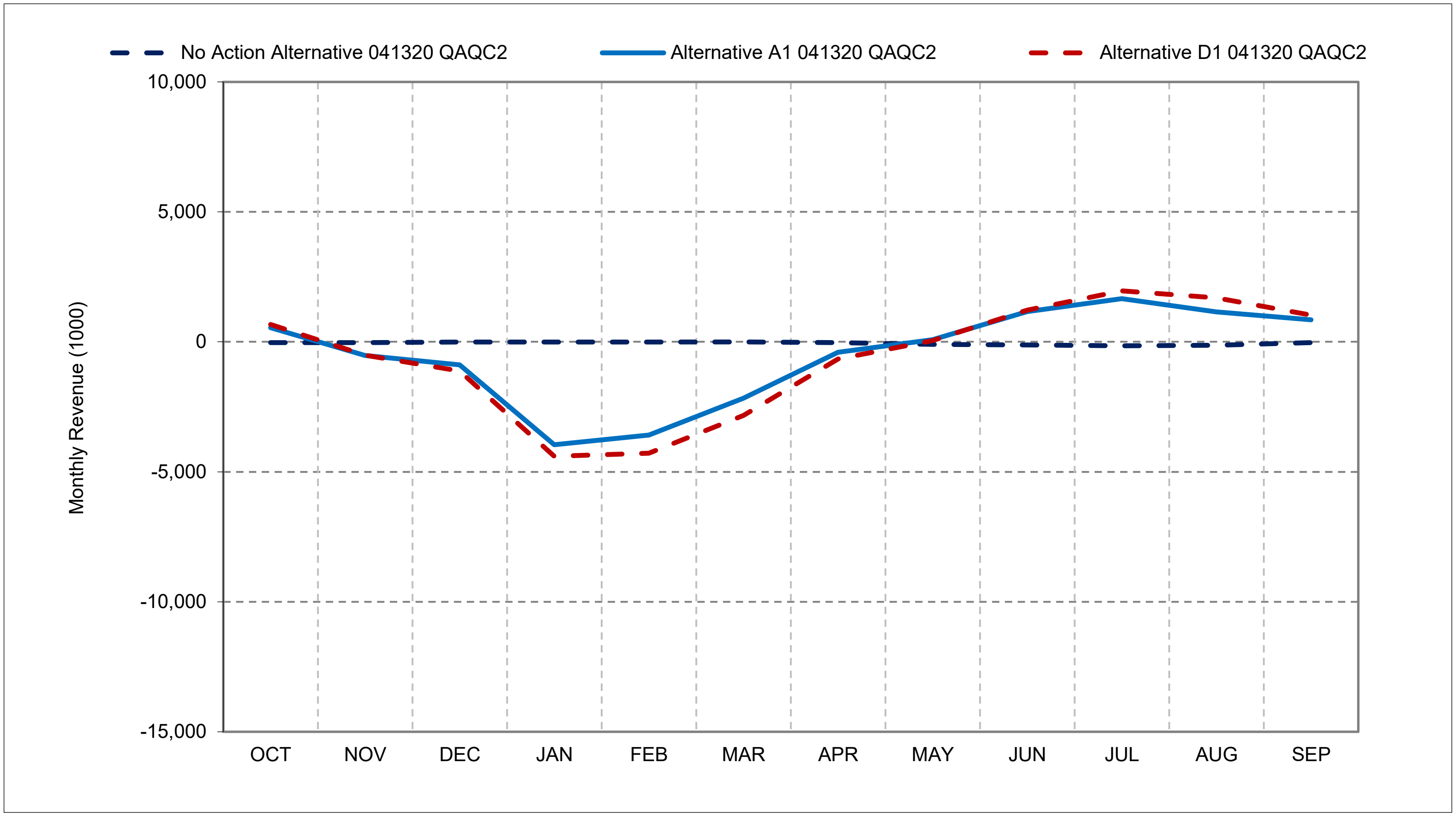
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

f Net revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-16-1. NODOS Net Revenue, Long-Term Average Revenue



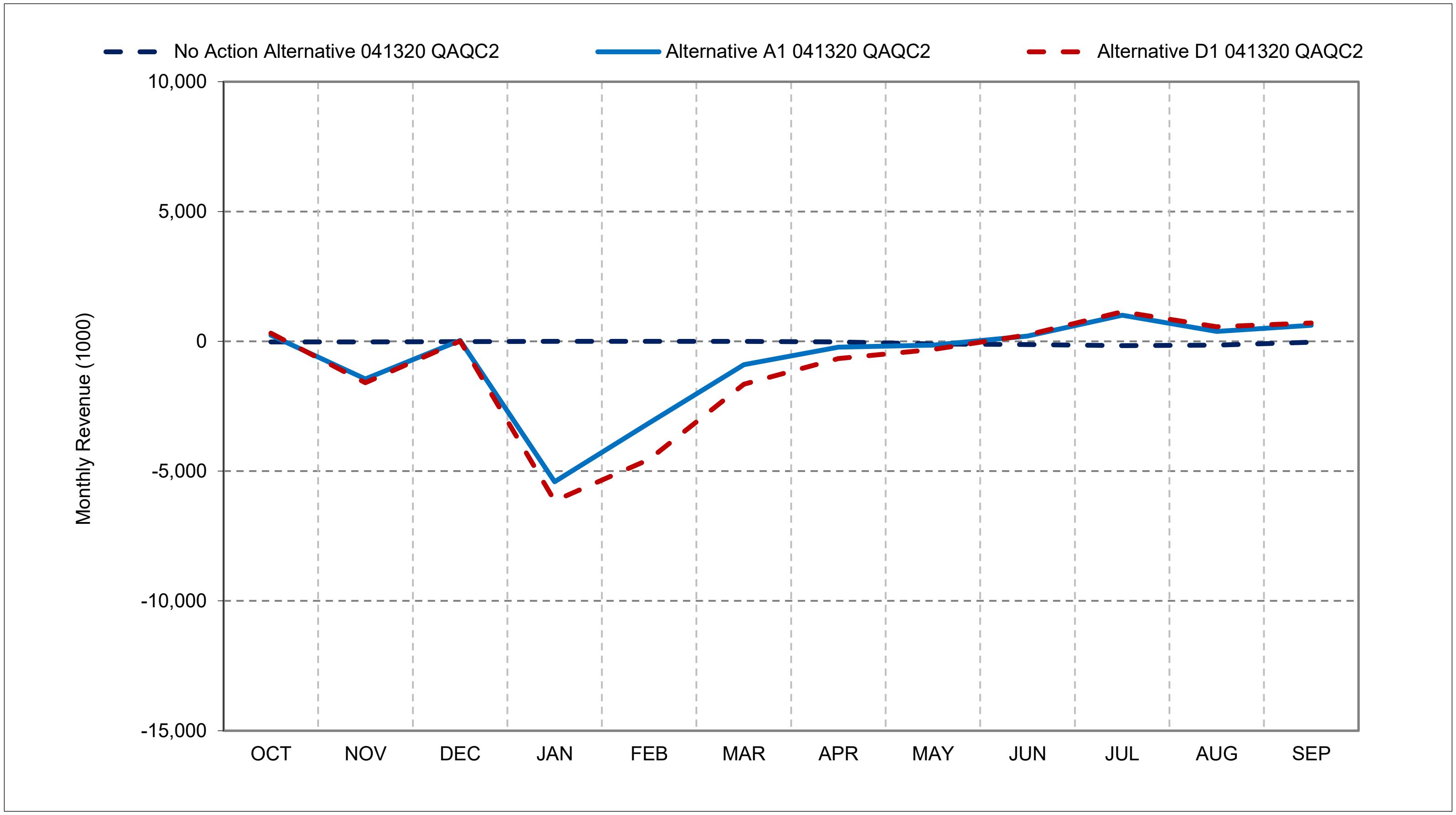
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-16-2. NODOS Net Revenue, Wet Year Average Revenue



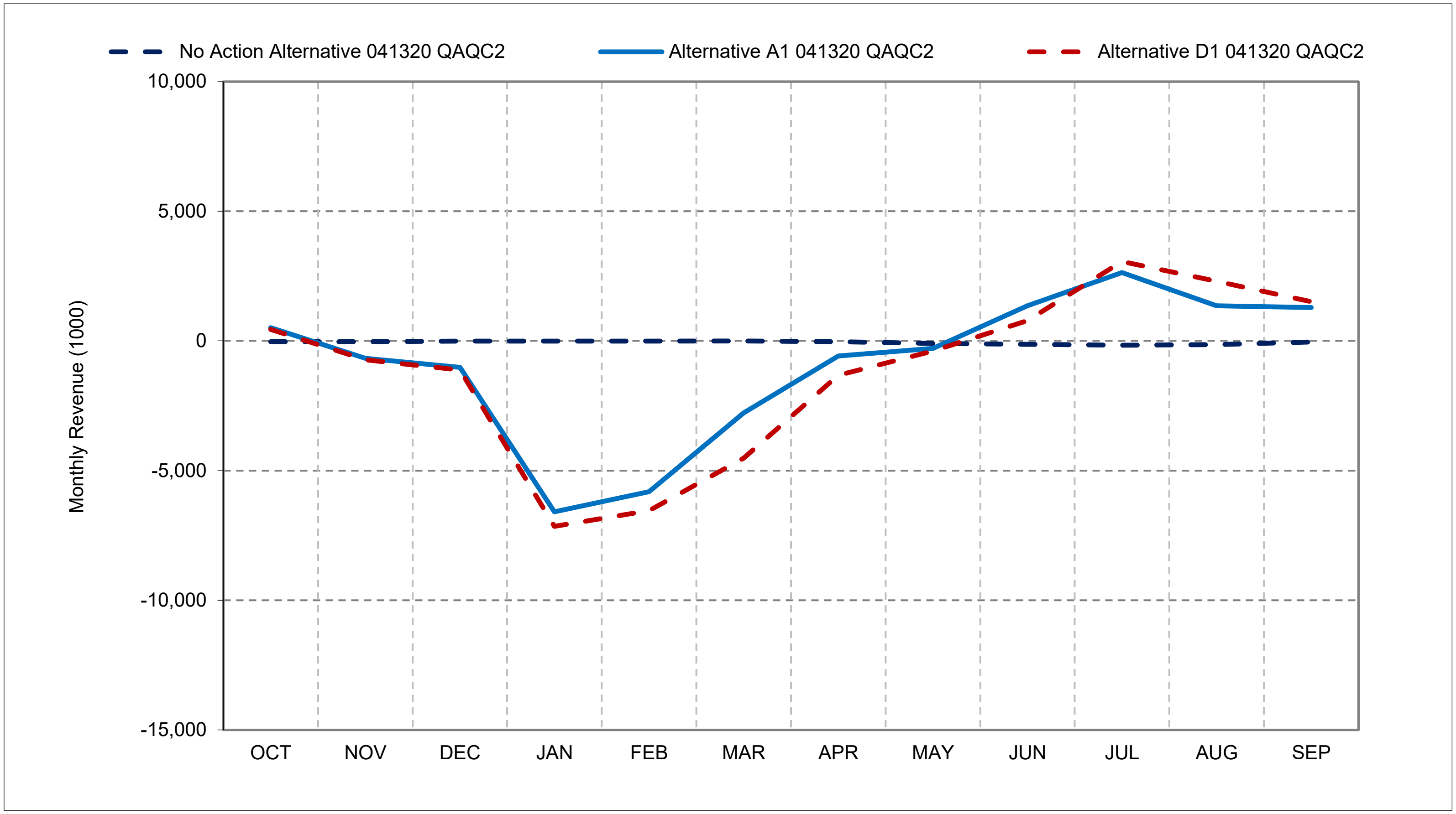
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-16-3. NODOS Net Revenue, Above Normal Year Average Revenue



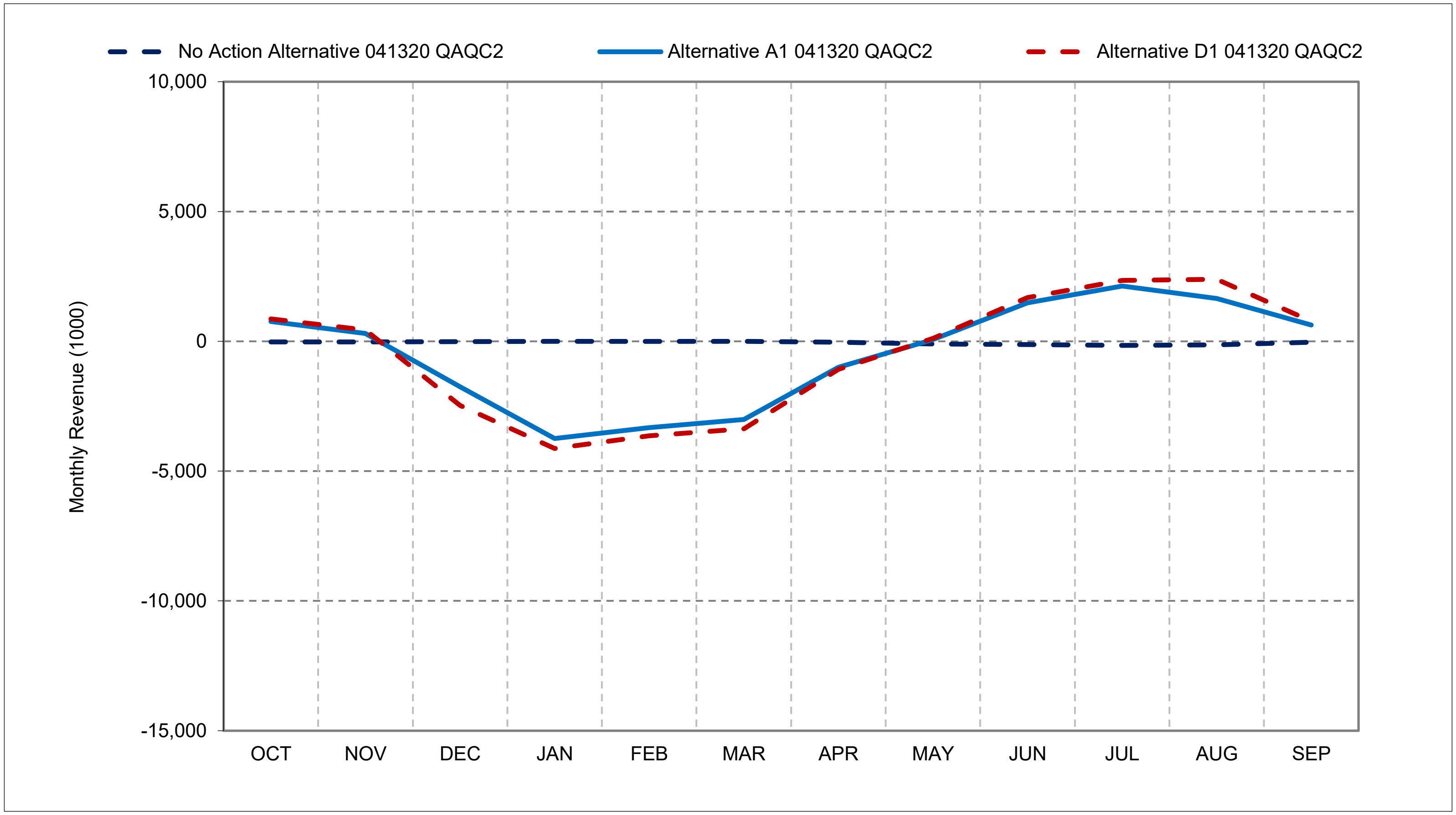
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-16-4. NODOS Net Revenue, Below Normal Year Average Revenue



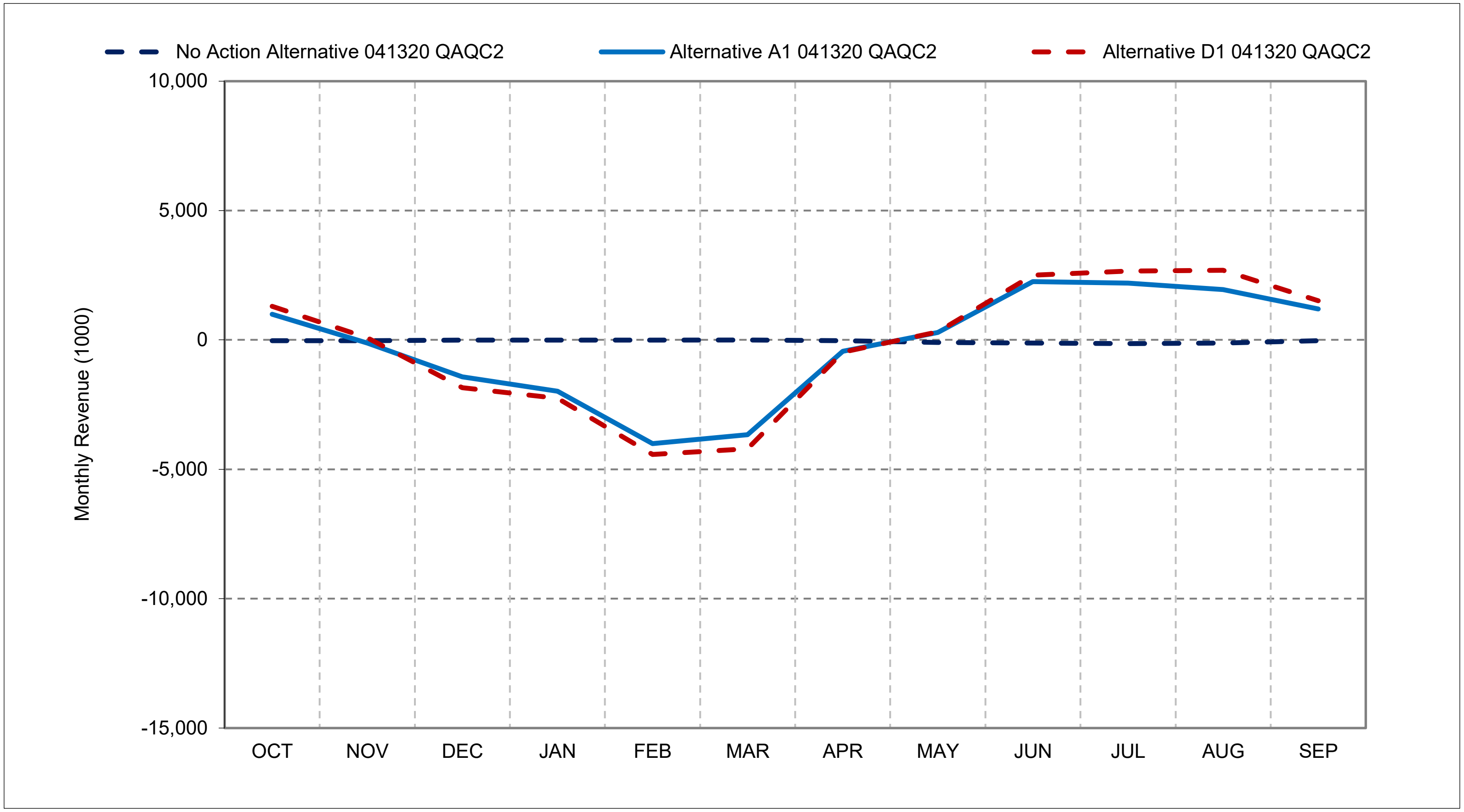
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-16-5. NODOS Net Revenue, Dry Year Average Revenue



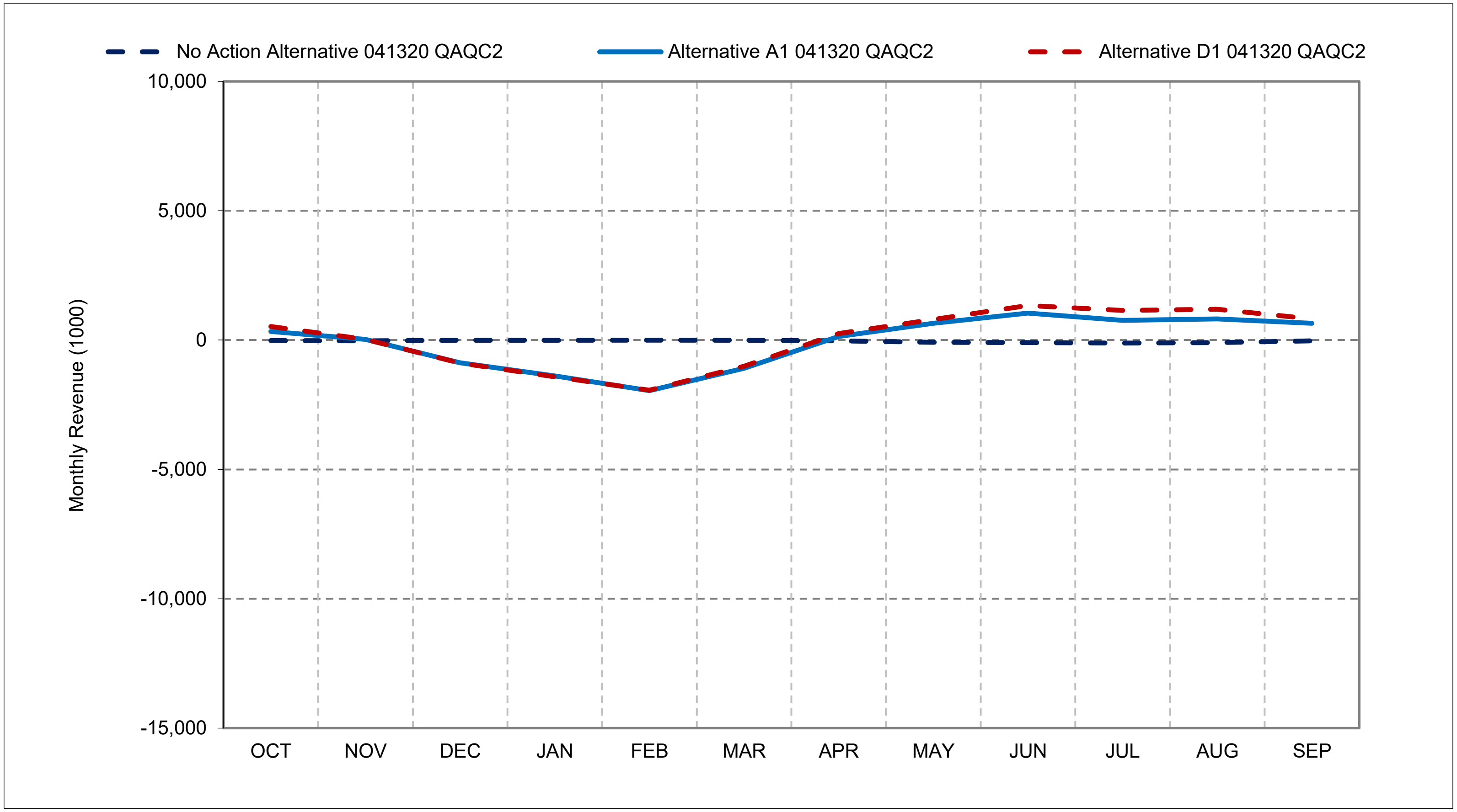
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-16-6. NODOS Net Revenue, Critical Year Average Revenue



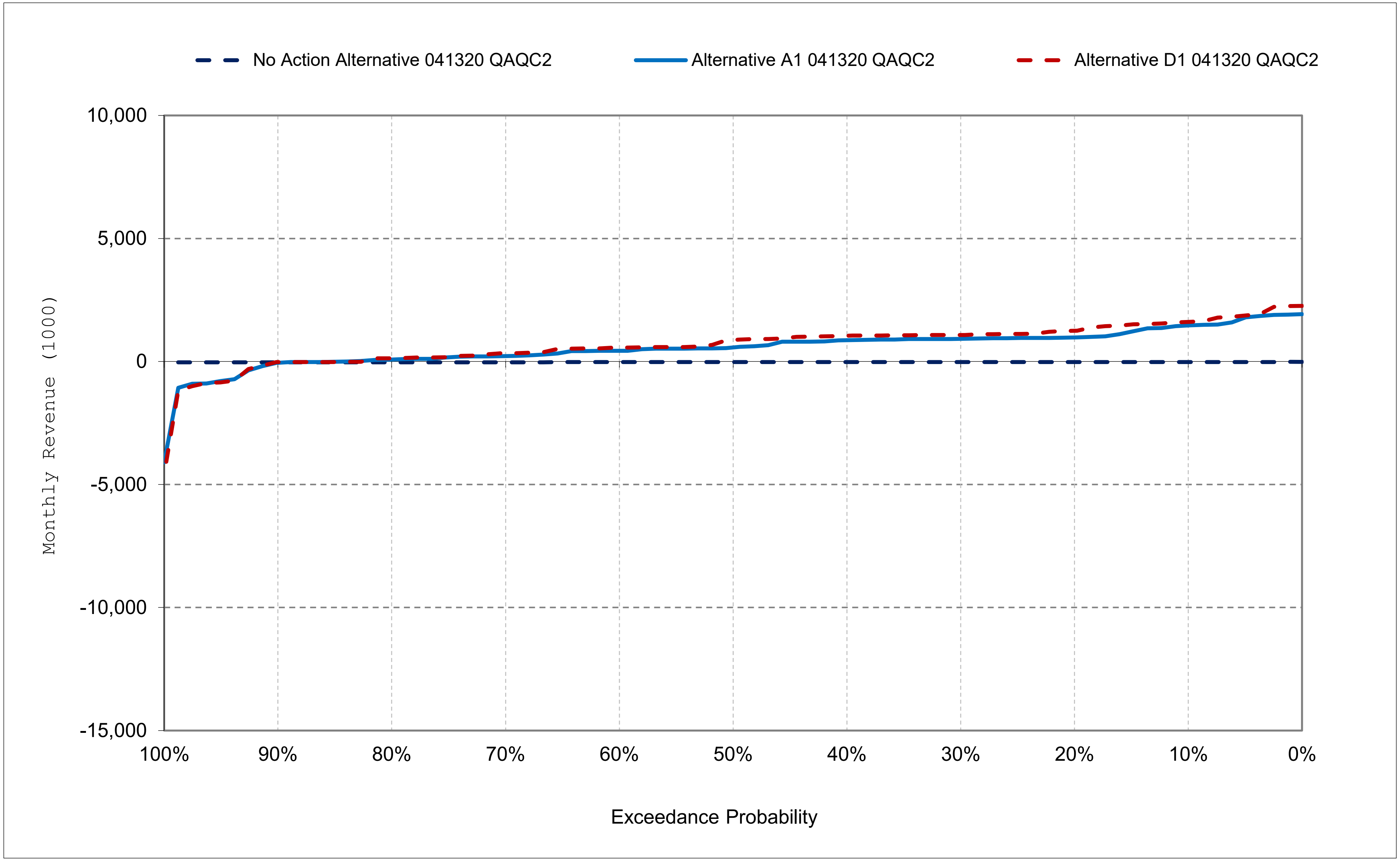
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

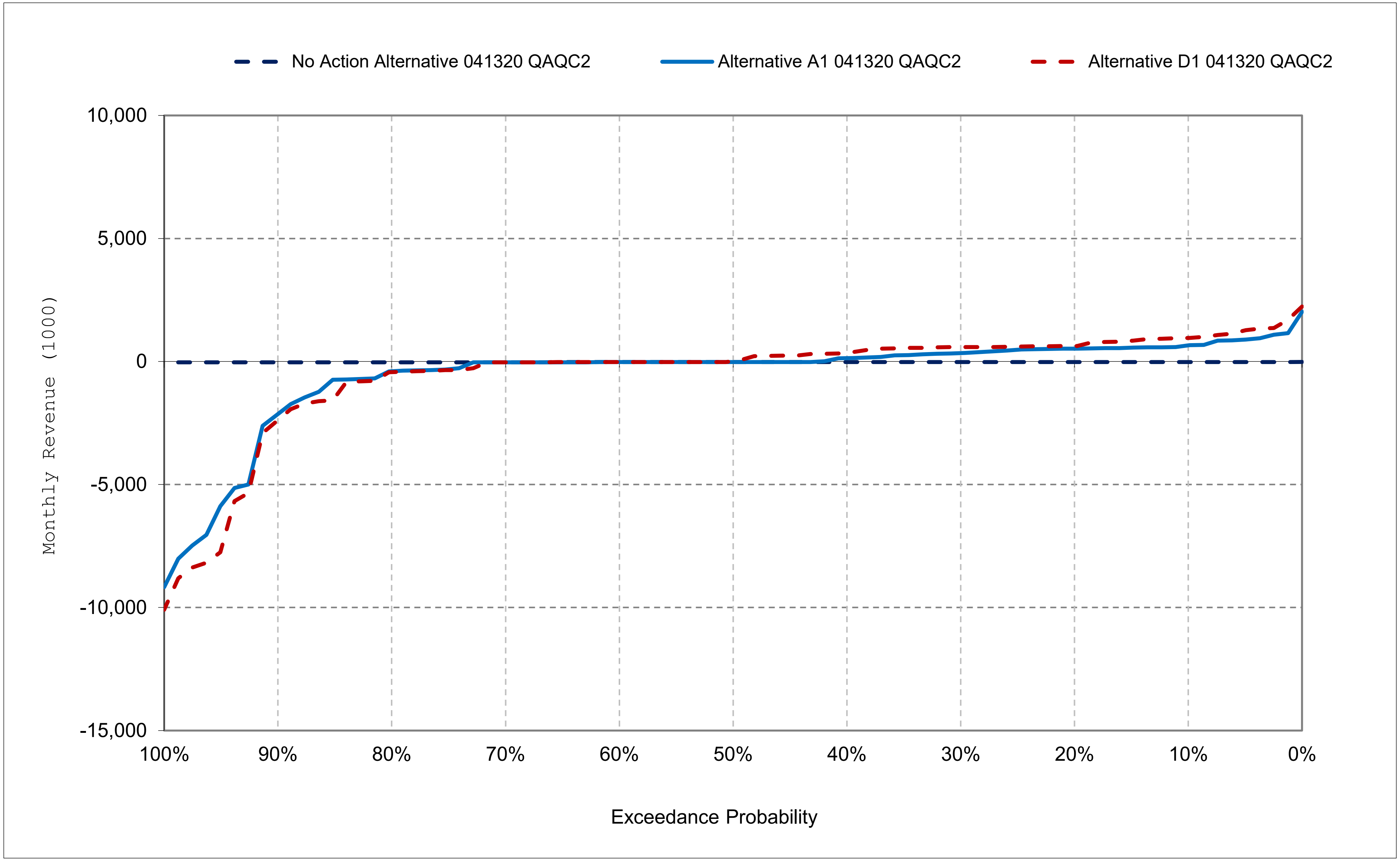
*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-16-7. NODOS Net Revenue, October



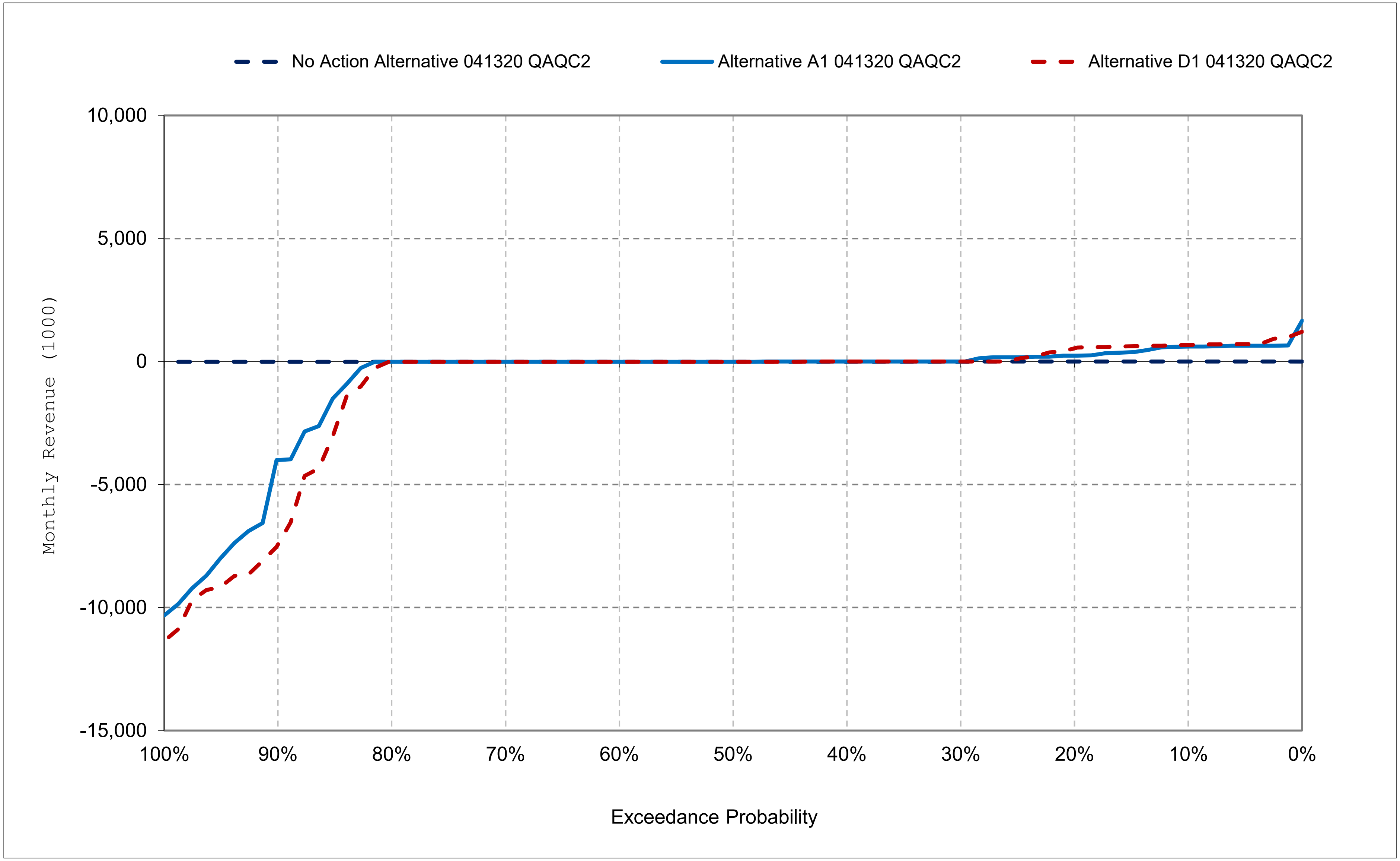
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-16-8. NODOS Net Revenue, November



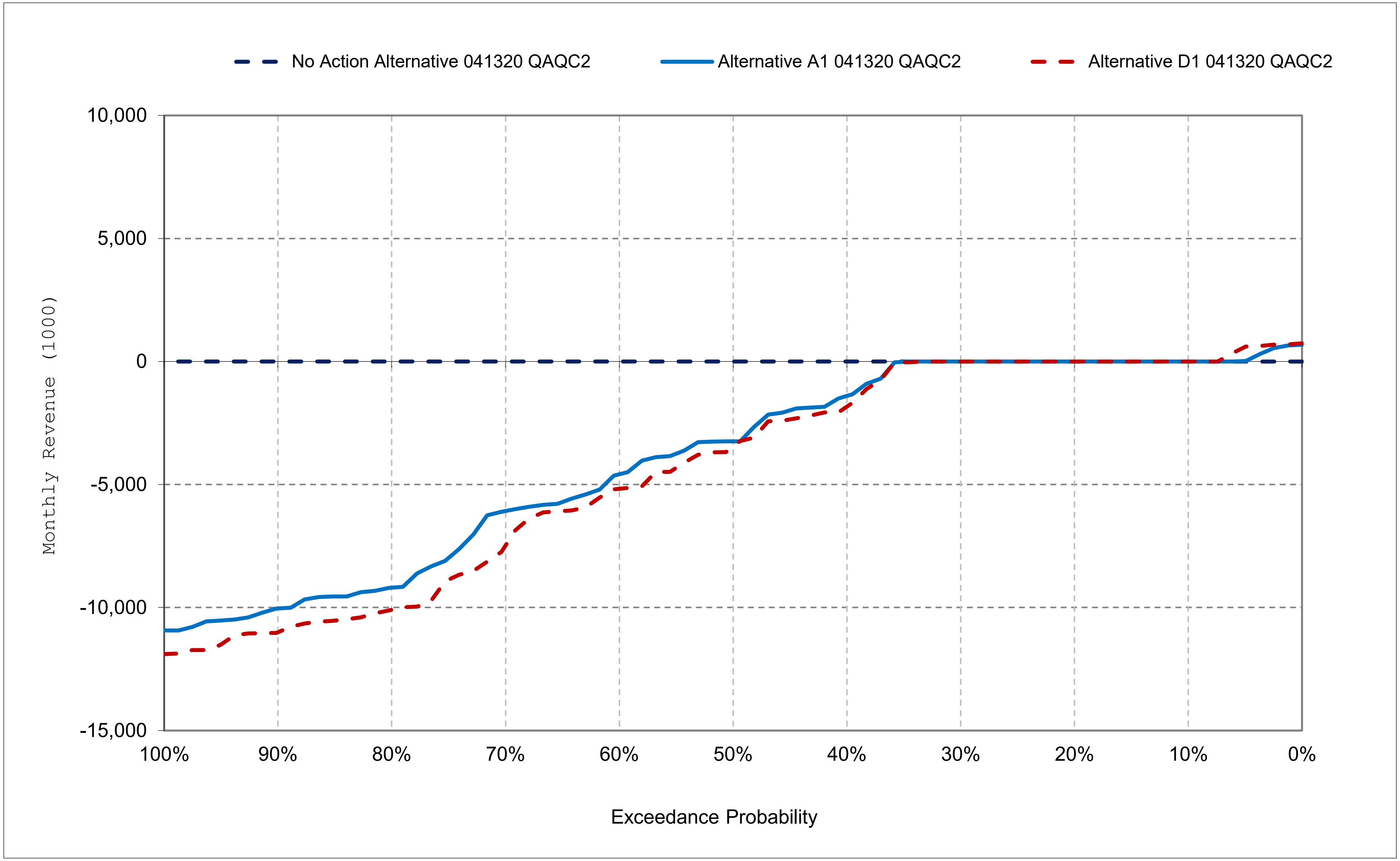
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-16-9. NODOS Net Revenue, December



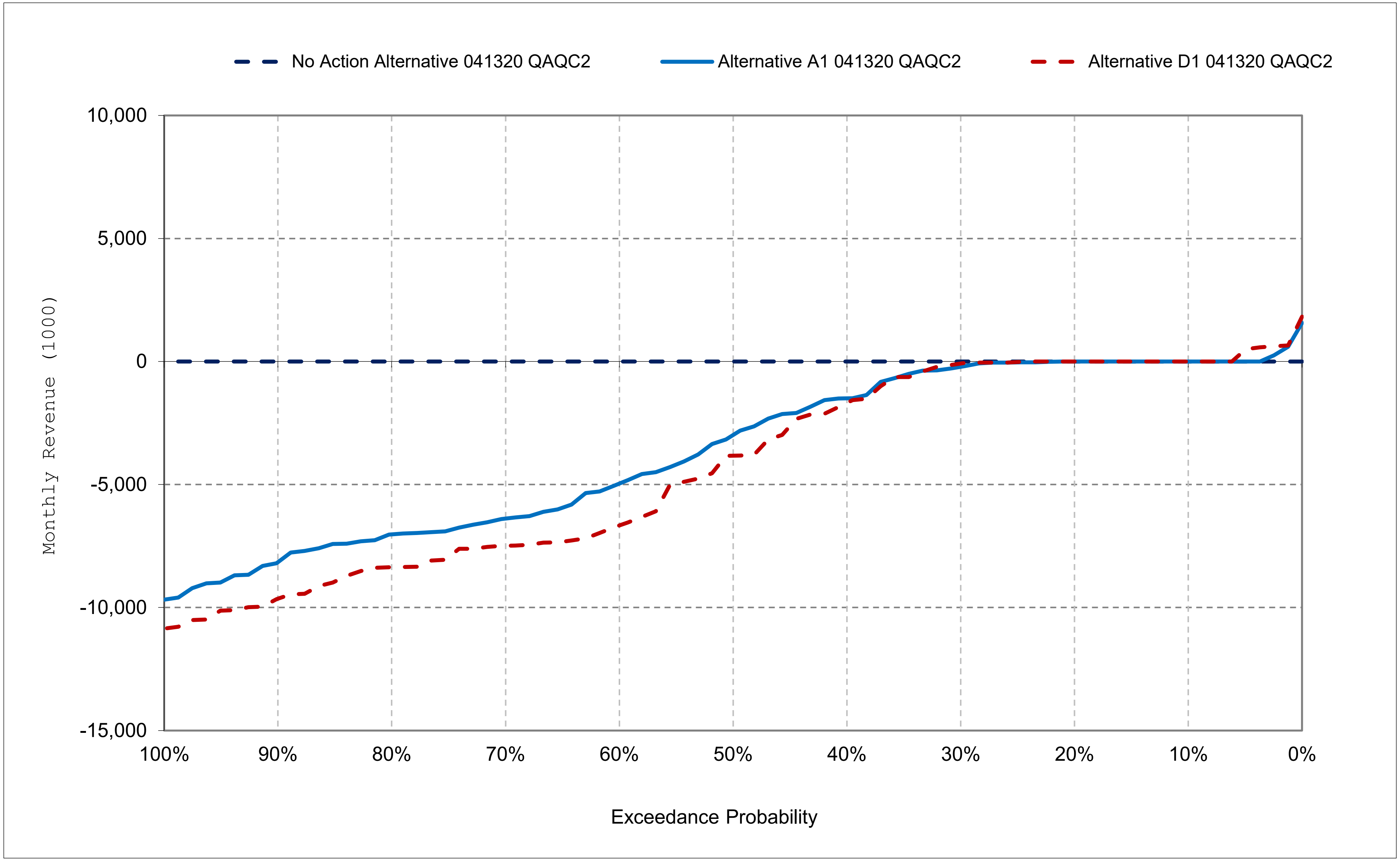
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-16-10. NODOS Net Revenue, January



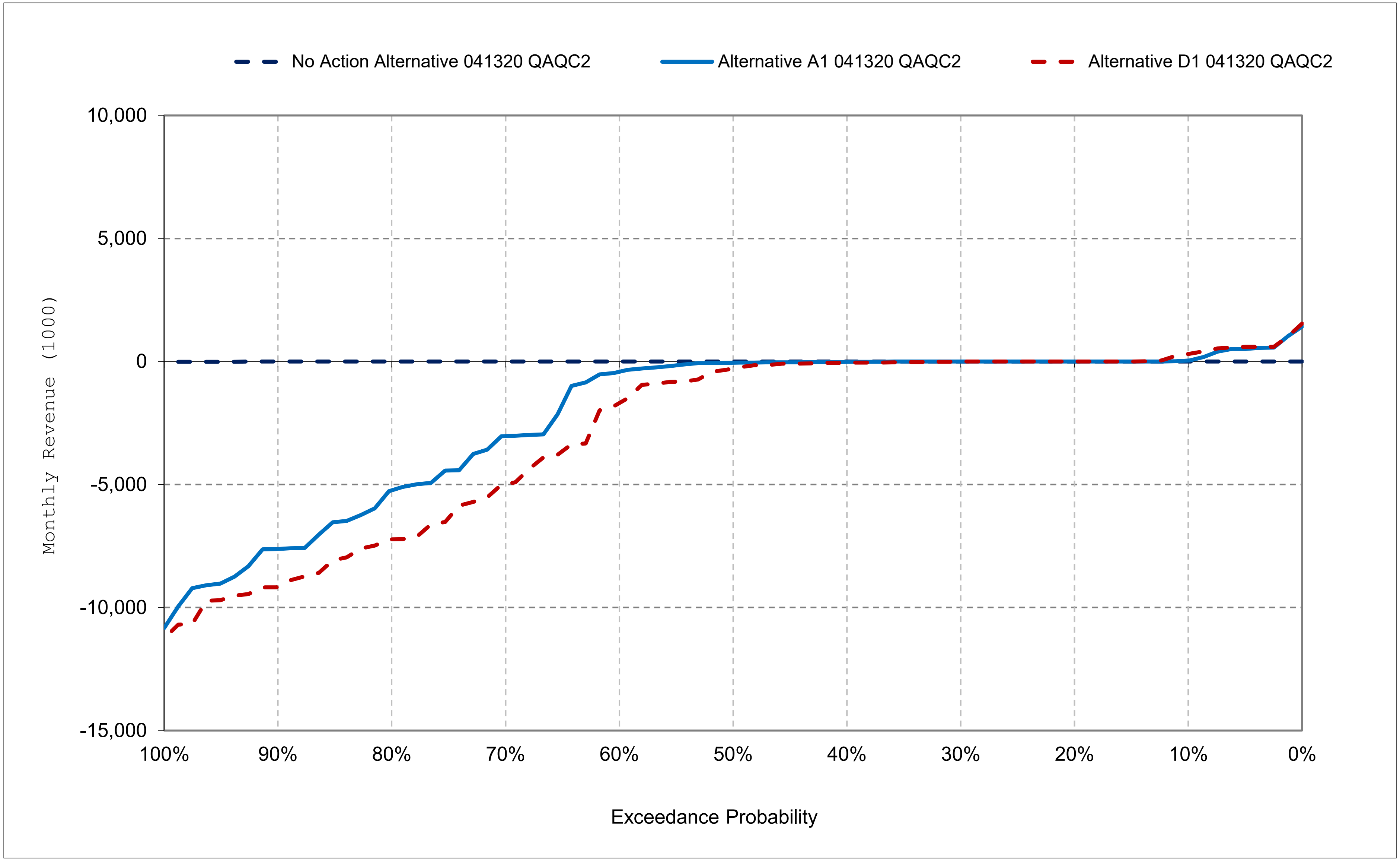
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-16-11. NODOS Net Revenue, February



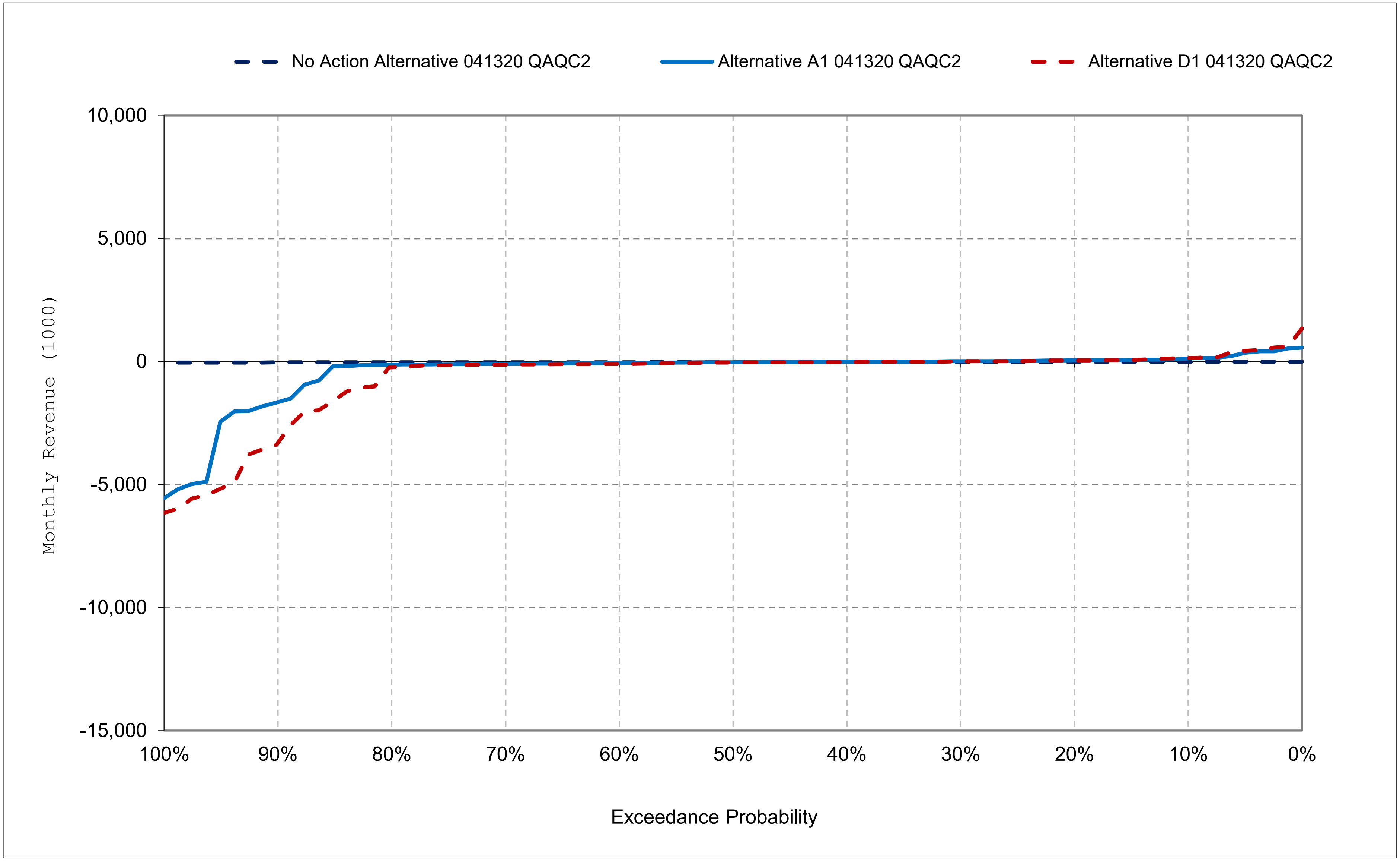
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-16-12. NODOS Net Revenue, March



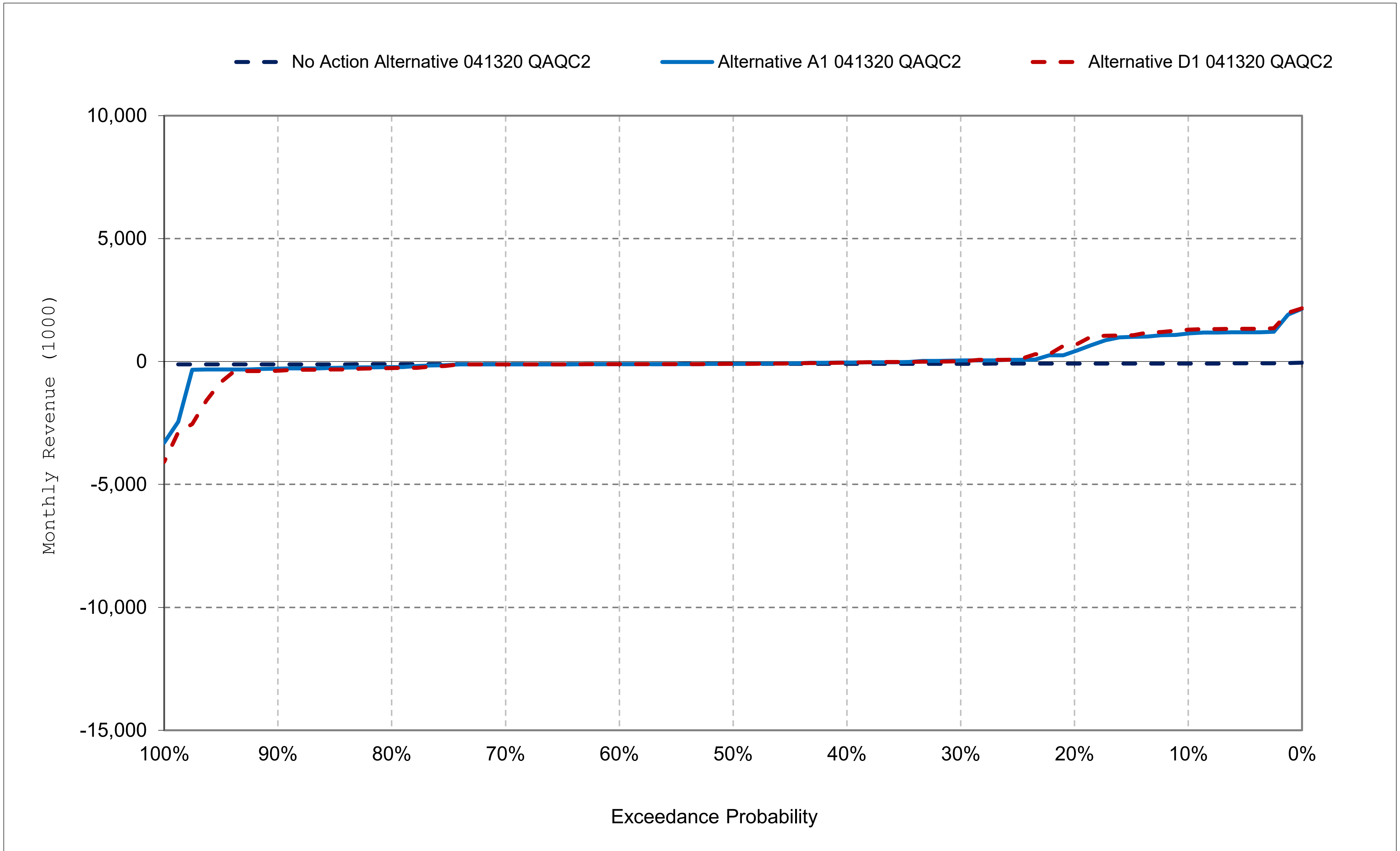
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-16-13. NODOS Net Revenue, April



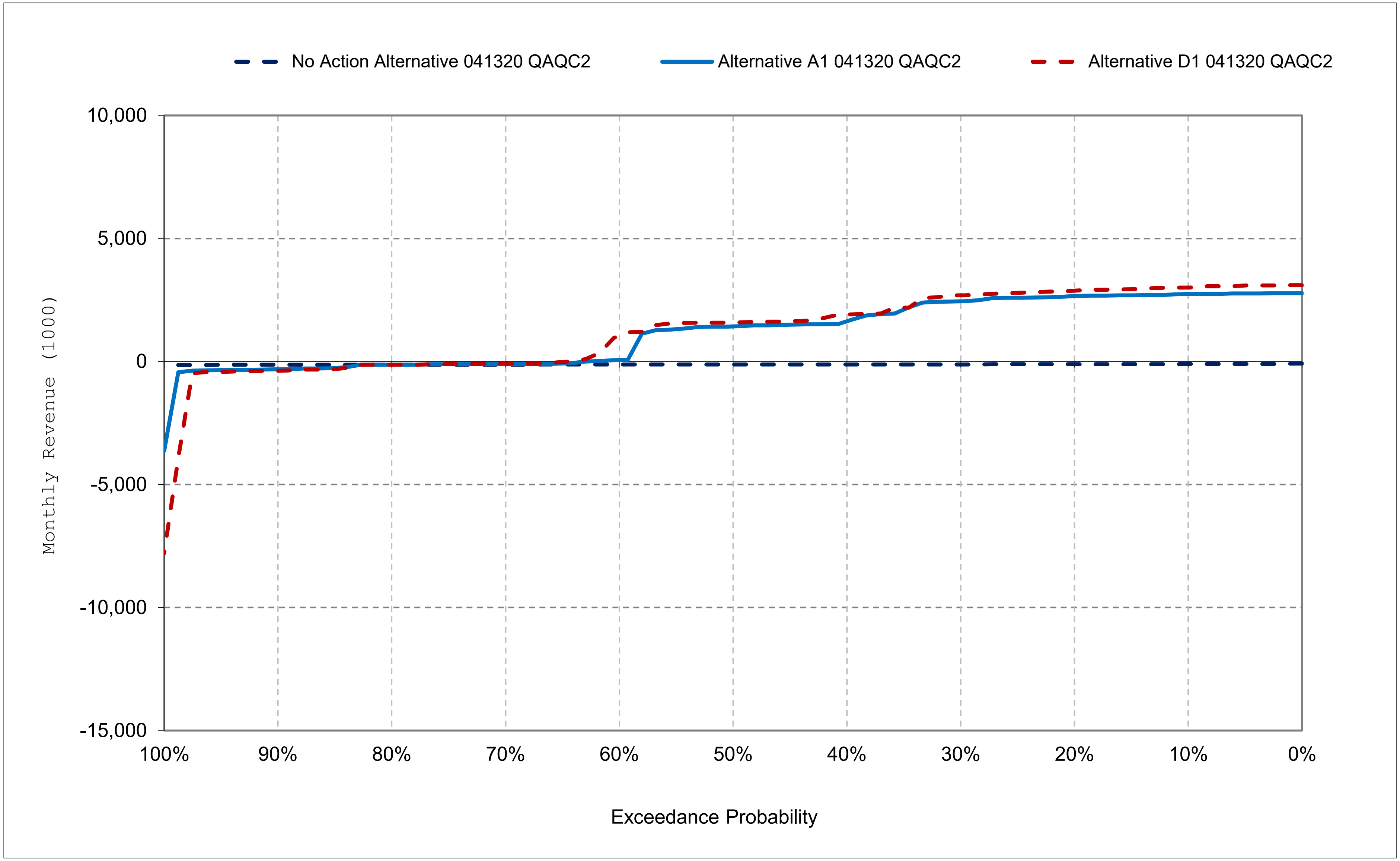
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-16-14. NODOS Net Revenue, May



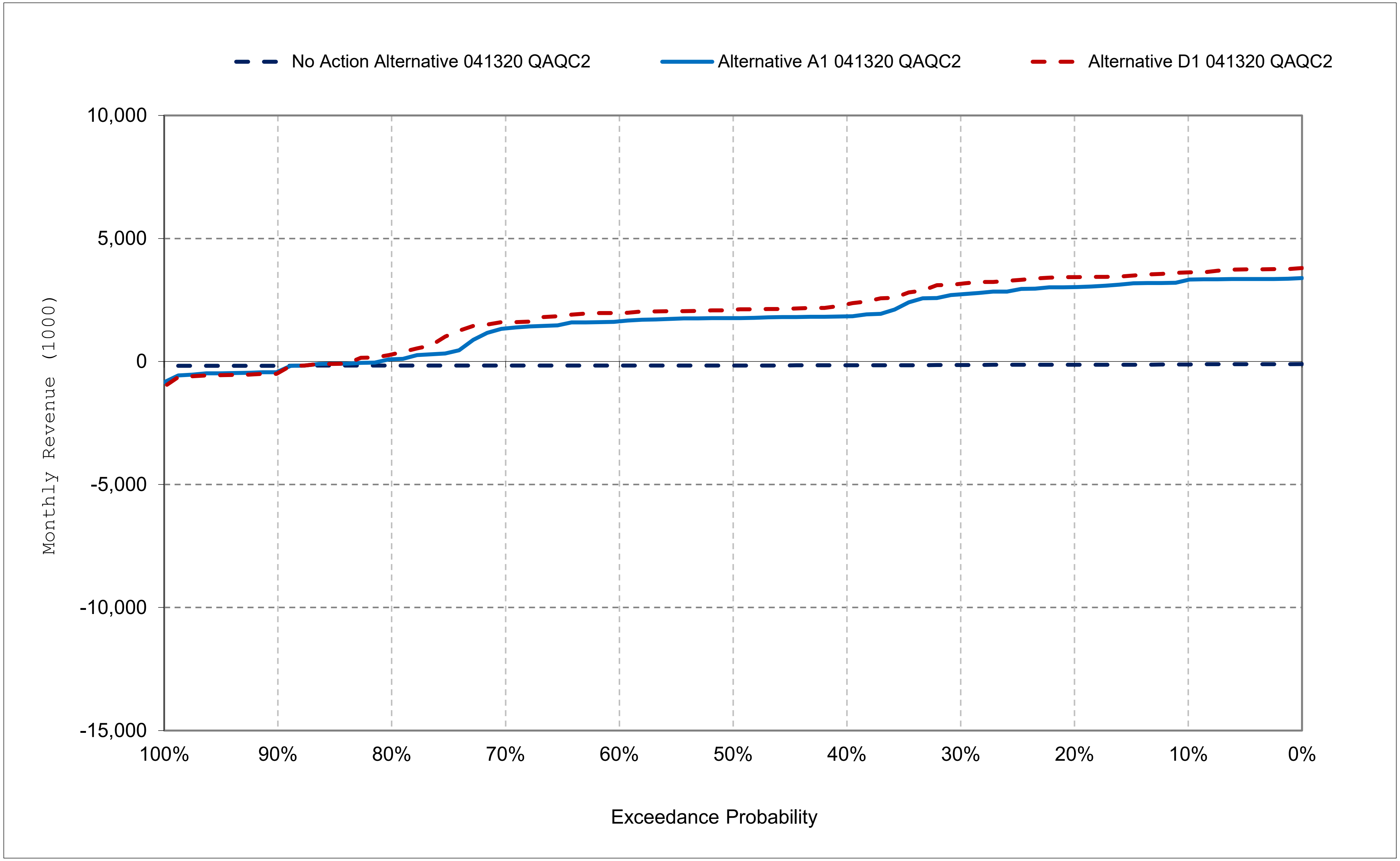
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-16-15. NODOS Net Revenue, June



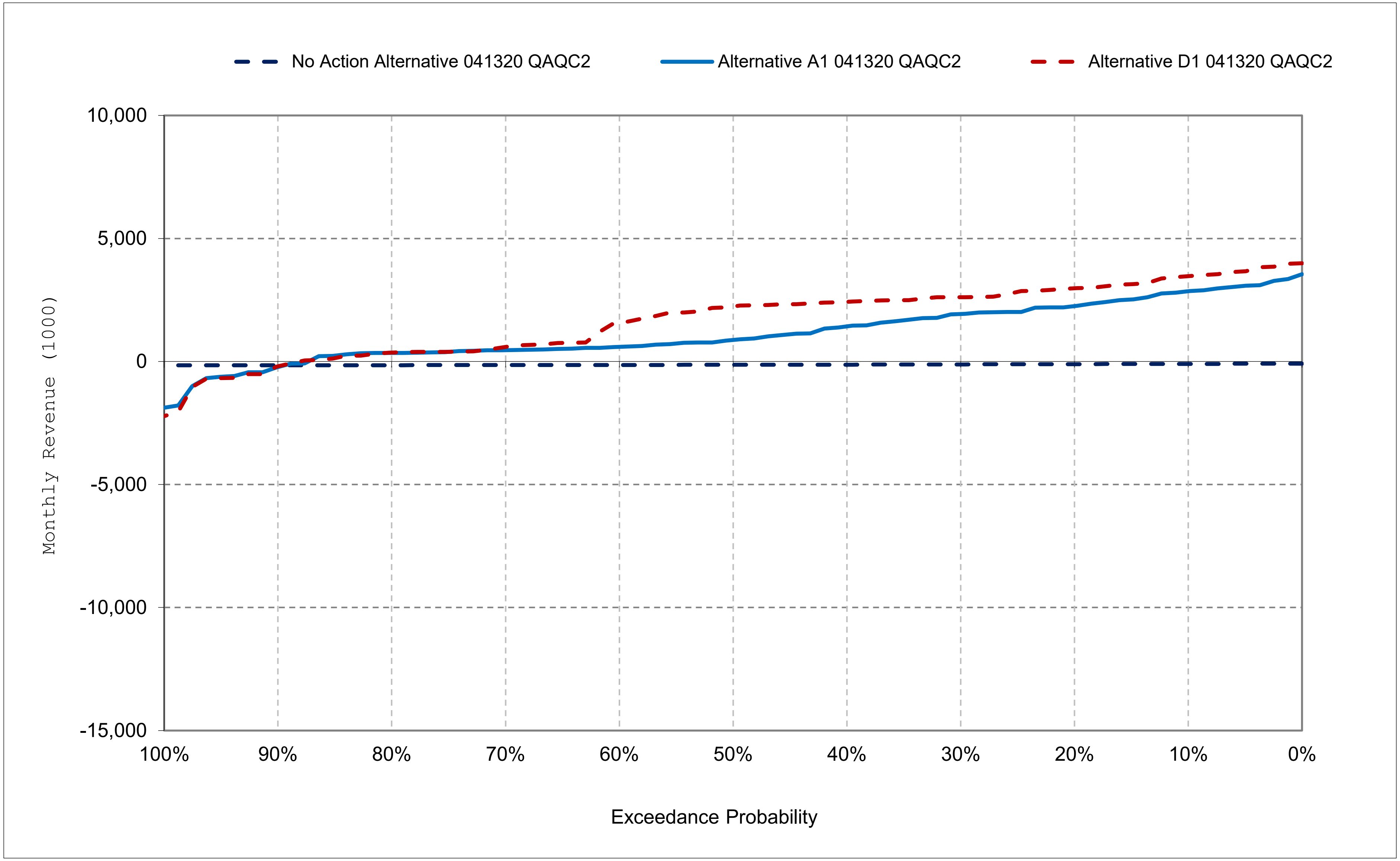
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-16-16. NODOS Net Revenue, July



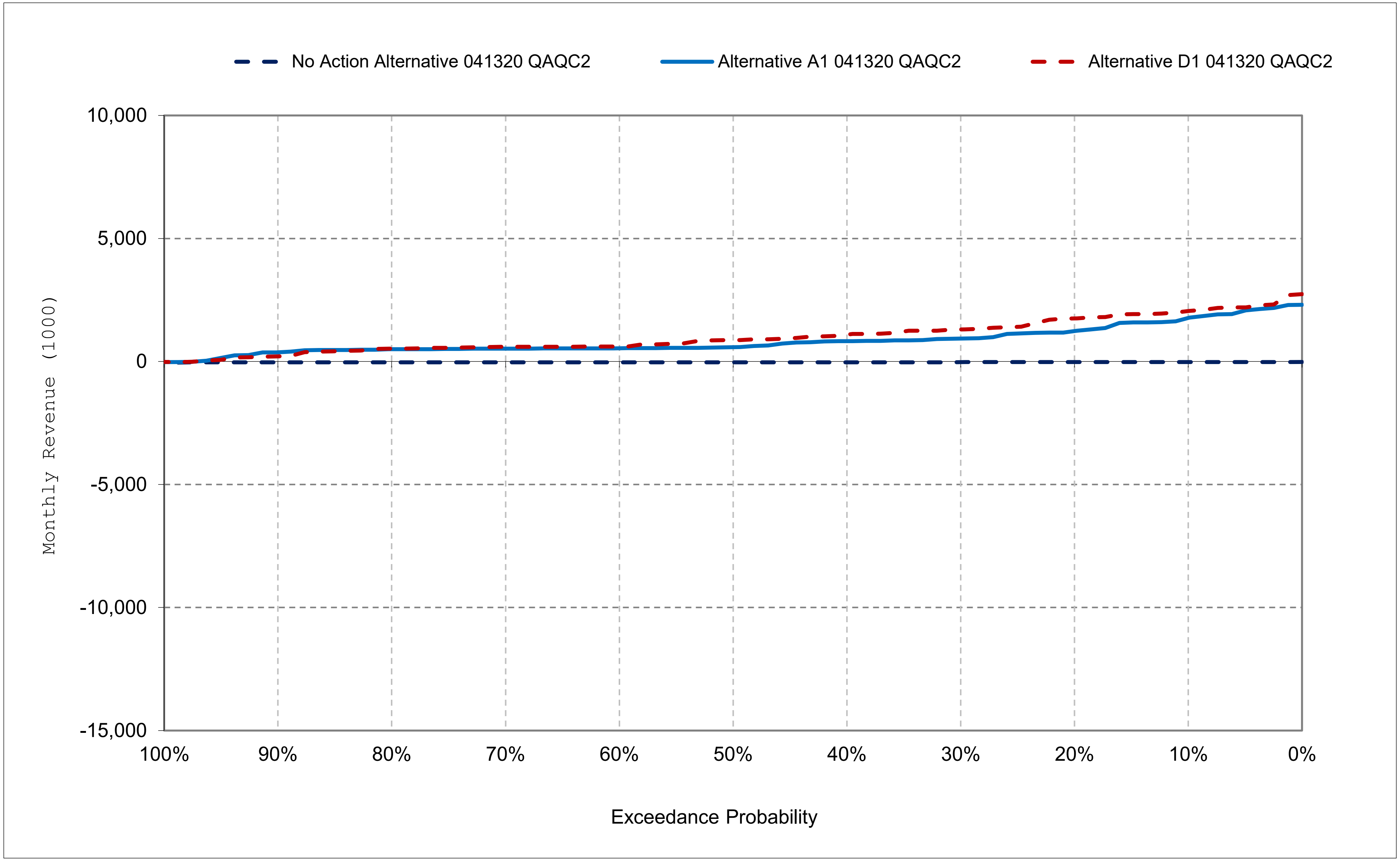
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-16-17. NODOS Net Revenue, August



*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-16-18. NODOS Net Revenue, September



*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Table G.2.1-17-1. CVP, SWP, and NODOS Net Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	35	-76	145	480	474	558	242	385	289	329	124	18
20%	-24	-153	-92	225	309	333	181	295	257	296	13	-72
30%	-119	-227	-170	81	97	108	89	259	213	255	-17	-103
40%	-160	-302	-271	10	20	30	72	211	177	203	-47	-134
50%	-212	-368	-338	-43	-40	-6	1	165	150	170	-65	-168
60%	-249	-392	-429	-81	-78	-35	-66	132	127	139	-96	-224
70%	-289	-471	-481	-109	-105	-101	-148	83	105	96	-126	-296
80%	-317	-510	-537	-144	-157	-194	-241	3	75	49	-149	-345
90%	-434	-558	-592	-237	-262	-290	-275	-109	-22	16	-168	-435
Long Term												
Full Simulation Period[a]	-189	-334	-285	39	47	71	-3	150	155	164	-51	-197
Water Year Types[b,c]												
Wet (32%)	-185	-415	-279	275	234	257	44	224	126	109	-96	-123
Above Normal (15%)	-205	-442	-418	21	144	109	-135	81	88	223	-55	-108
Below Normal (17%)	-367	-369	-334	-118	-64	-130	-136	5	130	181	-122	-378
Dry (22%)	-150	-265	-207	-103	-103	-12	22	177	216	173	6	-283
Critical (15%)	-33	-111	-226	-58	-99	-11	142	189	218	190	46	-102

Alternative A1 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	54	-103	106	404	461	562	248	384	256	301	51	63
20%	-87	-163	-100	119	204	330	148	299	210	267	13	-32
30%	-119	-230	-202	27	47	98	67	249	172	204	-20	-90
40%	-162	-345	-307	-39	-41	19	9	179	161	175	-64	-122
50%	-192	-397	-374	-81	-86	-26	-49	146	126	143	-81	-199
60%	-251	-433	-443	-108	-137	-113	-108	107	102	99	-109	-286
70%	-284	-486	-505	-164	-190	-204	-166	49	81	74	-138	-312
80%	-312	-547	-559	-233	-241	-275	-243	-18	48	34	-157	-374
90%	-394	-619	-620	-302	-298	-332	-308	-115	-43	-5	-180	-443
Long Term												
Full Simulation Period[a]	-191	-361	-307	-29	-15	36	-28	138	129	138	-71	-191
Water Year Types[b,c]												
Wet (32%)	-171	-459	-294	192	191	260	44	216	116	93	-90	-106
Above Normal (15%)	-184	-490	-438	-89	40	77	-126	89	70	191	-58	-6
Below Normal (17%)	-373	-401	-383	-212	-129	-197	-181	-7	95	157	-121	-372
Dry (22%)	-176	-265	-226	-138	-184	-87	-50	156	168	119	-80	-349
Critical (15%)	-51	-116	-241	-71	-132	-32	125	162	195	191	26	-112

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	19	-27	-39	-76	-13	4	6	-1	-33	-28	-73	46
20%	-63	-11	-9	-106	-105	-3	-33	4	-47	-29	0	41
30%	0	-2	-32	-54	-50	-10	-22	-9	-41	-51	-2	14
40%	-2	-43	-36	-49	-61	-11	-64	-32	-16	-28	-17	12
50%	20	-29	-36	-38	-46	-20	-50	-19	-24	-27	-16	-31
60%	-3	-42	-14	-27	-58	-78	-42	-25	-26	-40	-13	-63
70%	6	-15	-23	-55	-85	-103	-18	-33	-24	-23	-12	-16
80%	5	-36	-22	-90	-84	-81	-3	-21	-28	-15	-8	-29
90%	40	-61	-28	-65	-36	-42	-33	-6	-21	-21	-12	-8
Long Term												
Full Simulation Period[a]	-2	-27	-22	-68	-63	-34	-25	-12	-26	-26	-20	6
Water Year Types[b,c]												
Wet (32%)	15	-44	-14	-83	-43	3	0	-8	-10	-16	6	17
Above Normal (15%)	21	-48	-20	-110	-103	-32	9	7	-19	-32	-3	102
Below Normal (17%)	-6	-32	-49	-93	-66	-66	-44	-12	-35	-24	1	6
Dry (22%)	-26	0	-19	-35	-81	-75	-72	-21	-48	-54	-85	-65
Critical (15%)	-18	-6	-15	-13	-33	-21	-17	-27	-23	0	-20	-10

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-17-2. CVP, SWP, and NODOS Net Generation, Monthly Generation

No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	35	-76	145	480	474	558	242	385	289	329	124	18
20%	-24	-153	-92	225	309	333	181	295	257	296	13	-72
30%	-119	-227	-170	81	97	108	89	259	213	255	-17	-103
40%	-160	-302	-271	10	20	30	72	211	177	203	-47	-134
50%	-212	-368	-338	-43	-40	-6	1	165	150	170	-65	-168
60%	-249	-392	-429	-81	-78	-35	-66	132	127	139	-96	-224
70%	-289	-471	-481	-109	-105	-101	-148	83	105	96	-126	-296
80%	-317	-510	-537	-144	-157	-194	-241	3	75	49	-149	-345
90%	-434	-558	-592	-237	-262	-290	-275	-109	-22	16	-168	-435
Long Term												
Full Simulation Period[a]	-189	-334	-285	39	47	71	-3	150	155	164	-51	-197
Water Year Types[b,c]												
Wet (32%)	-185	-415	-279	275	234	257	44	224	126	109	-96	-123
Above Normal (15%)	-205	-442	-418	21	144	109	-135	81	88	223	-55	-108
Below Normal (17%)	-367	-369	-334	-118	-64	-130	-136	5	130	181	-122	-378
Dry (22%)	-150	-265	-207	-103	-103	-12	22	177	216	173	6	-283
Critical (15%)	-33	-111	-226	-58	-99	-11	142	189	218	190	46	-102

Alternative D1 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	25	-86	97	389	380	558	248	355	266	312	42	50
20%	-107	-179	-114	114	192	333	136	303	218	278	5	-40
30%	-134	-220	-211	6	15	101	68	246	172	211	-15	-82
40%	-157	-336	-296	-51	-41	13	-4	173	158	177	-65	-122
50%	-208	-391	-368	-92	-110	-43	-43	134	124	151	-85	-197
60%	-244	-428	-428	-115	-149	-130	-112	107	101	105	-113	-268
70%	-284	-483	-501	-165	-199	-221	-163	50	79	85	-141	-325
80%	-312	-543	-576	-239	-248	-270	-249	-16	35	38	-153	-382
90%	-417	-619	-632	-310	-330	-337	-290	-115	-42	-10	-208	-450
Long Term												
Full Simulation Period[a]	-200	-356	-312	-38	-29	24	-33	135	128	141	-72	-194
Water Year Types[b,c]												
Wet (32%)	-168	-459	-290	178	165	244	36	210	117	98	-87	-109
Above Normal (15%)	-185	-483	-432	-95	30	44	-133	85	62	195	-64	-1
Below Normal (17%)	-363	-370	-408	-222	-140	-211	-178	-3	98	162	-122	-376
Dry (22%)	-216	-279	-226	-146	-192	-88	-58	152	173	127	-91	-354
Critical (15%)	-68	-103	-258	-72	-133	-33	123	156	186	175	36	-119

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-10	-10	-48	-91	-95	0	6	-29	-23	-18	-82	32
20%	-83	-26	-22	-111	-117	0	-45	8	-39	-19	-9	32
30%	-15	8	-41	-75	-82	-7	-20	-13	-41	-44	3	21
40%	3	-34	-25	-61	-60	-16	-76	-38	-18	-26	-18	12
50%	4	-22	-30	-49	-71	-37	-44	-31	-26	-19	-20	-29
60%	4	-36	1	-34	-70	-95	-46	-25	-27	-34	-17	-45
70%	6	-13	-20	-56	-94	-120	-16	-33	-26	-12	-15	-29
80%	5	-33	-39	-96	-90	-76	-9	-19	-41	-10	-4	-37
90%	17	-61	-40	-73	-67	-48	-15	-5	-20	-26	-40	-16
Long Term												
Full Simulation Period[a]	-11	-22	-27	-77	-76	-47	-30	-16	-27	-23	-21	2
Water Year Types[b,c]												
Wet (32%)	17	-44	-11	-97	-69	-13	-8	-14	-9	-12	8	14
Above Normal (15%)	20	-41	-14	-117	-114	-65	2	4	-26	-28	-8	106
Below Normal (17%)	5	-1	-74	-104	-76	-81	-41	-8	-32	-19	0	2
Dry (22%)	-66	-13	-20	-43	-89	-77	-79	-25	-44	-46	-97	-71
Critical (15%)	-35	7	-32	-14	-34	-21	-19	-34	-32	-15	-10	-17

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-17-3. CVP, SWP, and NODOS Net Generation, Monthly Generation

Alternative A1 041320 QAQC2

Statistic	Monthly Generation (GWh) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	54	-103	106	404	461	562	248	384	256	301	51	63
20%	-87	-163	-100	119	204	330	148	299	210	267	13	-32
30%	-119	-230	-202	27	47	98	67	249	172	204	-20	-90
40%	-162	-345	-307	-39	-41	19	9	179	161	175	-64	-122
50%	-192	-397	-374	-81	-86	-26	-49	146	126	143	-81	-199
60%	-251	-433	-443	-108	-137	-113	-108	107	102	99	-109	-286
70%	-284	-486	-505	-164	-190	-204	-166	49	81	74	-138	-312
80%	-312	-547	-559	-233	-241	-275	-243	-18	48	34	-157	-374
90%	-394	-619	-620	-302	-298	-332	-308	-115	-43	-5	-180	-443
Long Term												
Full Simulation Period[a]	-191	-361	-307	-29	-15	36	-28	138	129	138	-71	-191
Water Year Types[b,c]												
Wet (32%)	-171	-459	-294	192	191	260	44	216	116	93	-90	-106
Above Normal (15%)	-184	-490	-438	-89	40	77	-126	89	70	191	-58	-6
Below Normal (17%)	-373	-401	-383	-212	-129	-197	-181	-7	95	157	-121	-372
Dry (22%)	-176	-265	-226	-138	-184	-87	-50	156	168	119	-80	-349
Critical (15%)	-51	-116	-241	-71	-132	-32	125	162	195	191	26	-112

Alternative D1 041320 QAQC2

Statistic	Monthly Generation (GWh) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	25	-86	97	389	380	558	248	355	266	312	42	50
20%	-107	-179	-114	114	192	333	136	303	218	278	5	-40
30%	-134	-220	-211	6	15	101	68	246	172	211	-15	-82
40%	-157	-336	-296	-51	-41	13	-4	173	158	177	-65	-122
50%	-208	-391	-368	-92	-110	-43	-43	134	124	151	-85	-197
60%	-244	-428	-428	-115	-149	-130	-112	107	101	105	-113	-268
70%	-284	-483	-501	-165	-199	-221	-163	50	79	85	-141	-325
80%	-312	-543	-576	-239	-248	-270	-249	-16	35	38	-153	-382
90%	-417	-619	-632	-310	-330	-337	-290	-115	-42	-10	-208	-450
Long Term												
Full Simulation Period[a]	-200	-356	-312	-38	-29	24	-33	135	128	141	-72	-194
Water Year Types[b,c]												
Wet (32%)	-168	-459	-290	178	165	244	36	210	117	98	-87	-109
Above Normal (15%)	-185	-483	-432	-95	30	44	-133	85	62	195	-64	-1
Below Normal (17%)	-363	-370	-408	-222	-140	-211	-178	-3	98	162	-122	-376
Dry (22%)	-216	-279	-226	-146	-192	-88	-58	152	173	127	-91	-354
Critical (15%)	-68	-103	-258	-72	-133	-33	123	156	186	175	36	-119

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Monthly Generation (GWh) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-29	17	-9	-15	-81	-4	0	-28	10	11	-9	-13
20%	-20	-16	-14	-5	-12	4	-12	4	8	10	-8	-9
30%	-15	10	-9	-21	-32	3	1	-4	0	7	5	8
40%	5	9	11	-12	0	-5	-12	-6	-2	2	-1	0
50%	-15	7	6	-11	-25	-18	7	-12	-2	7	-4	2
60%	7	5	15	-7	-12	-17	-4	1	-1	7	-4	18
70%	0	3	3	-1	-9	-17	2	0	-2	11	-3	-13
80%	0	3	-17	-6	-6	5	-6	2	-13	4	4	-8
90%	-23	0	-12	-8	-31	-6	18	0	1	-5	-28	-7
Long Term												
Full Simulation Period[a]	-9	5	-5	-9	-13	-13	-5	-4	-1	2	-1	-3
Water Year Types[b,c]												
Wet (32%)	2	0	4	-14	-27	-17	-8	-6	1	4	3	-3
Above Normal (15%)	-1	7	6	-6	-11	-33	-7	-3	-7	4	-5	5
Below Normal (17%)	10	31	-25	-11	-11	-14	3	4	3	5	-1	-4
Dry (22%)	-40	-13	0	-8	-7	-2	-8	-3	5	8	-11	-5
Critical (15%)	-17	13	-17	-1	0	0	-2	-7	-9	-15	10	-7

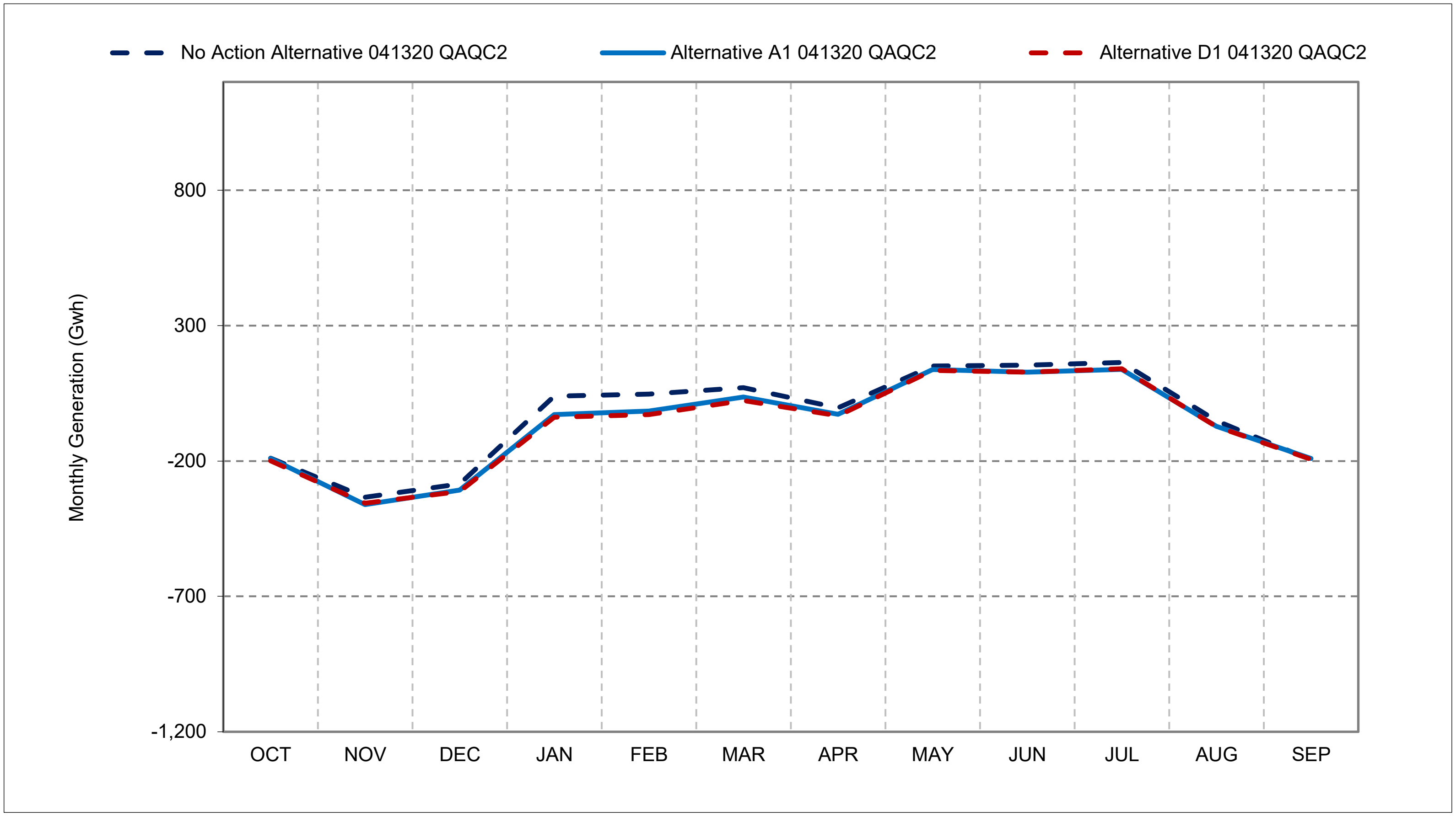
a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-1. CVP, SWP, and NODOS Net Generation, Long-Term Average Generation

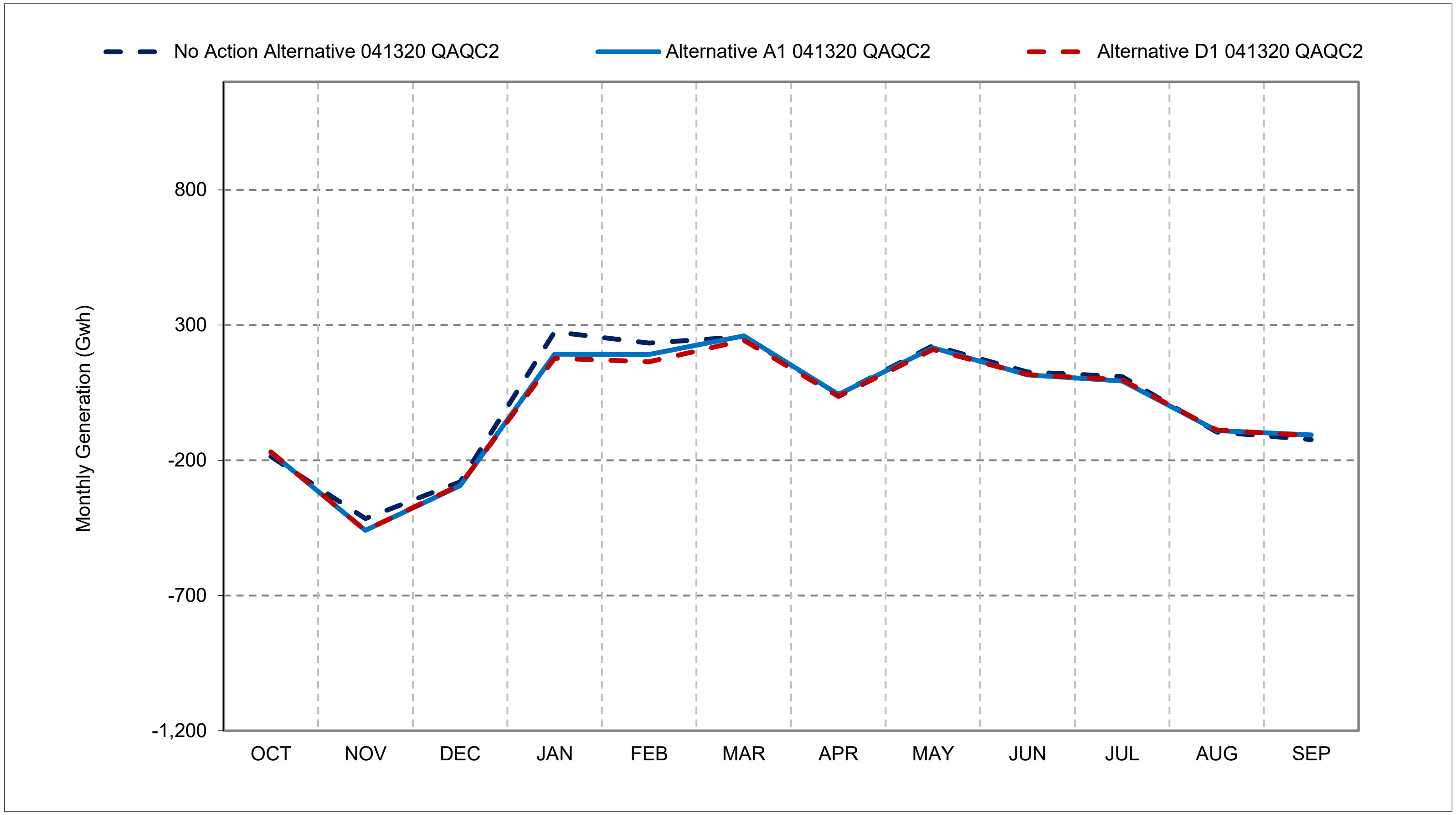


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-2. CVP, SWP, and NODOS Net Generation, Wet Year Average Generation

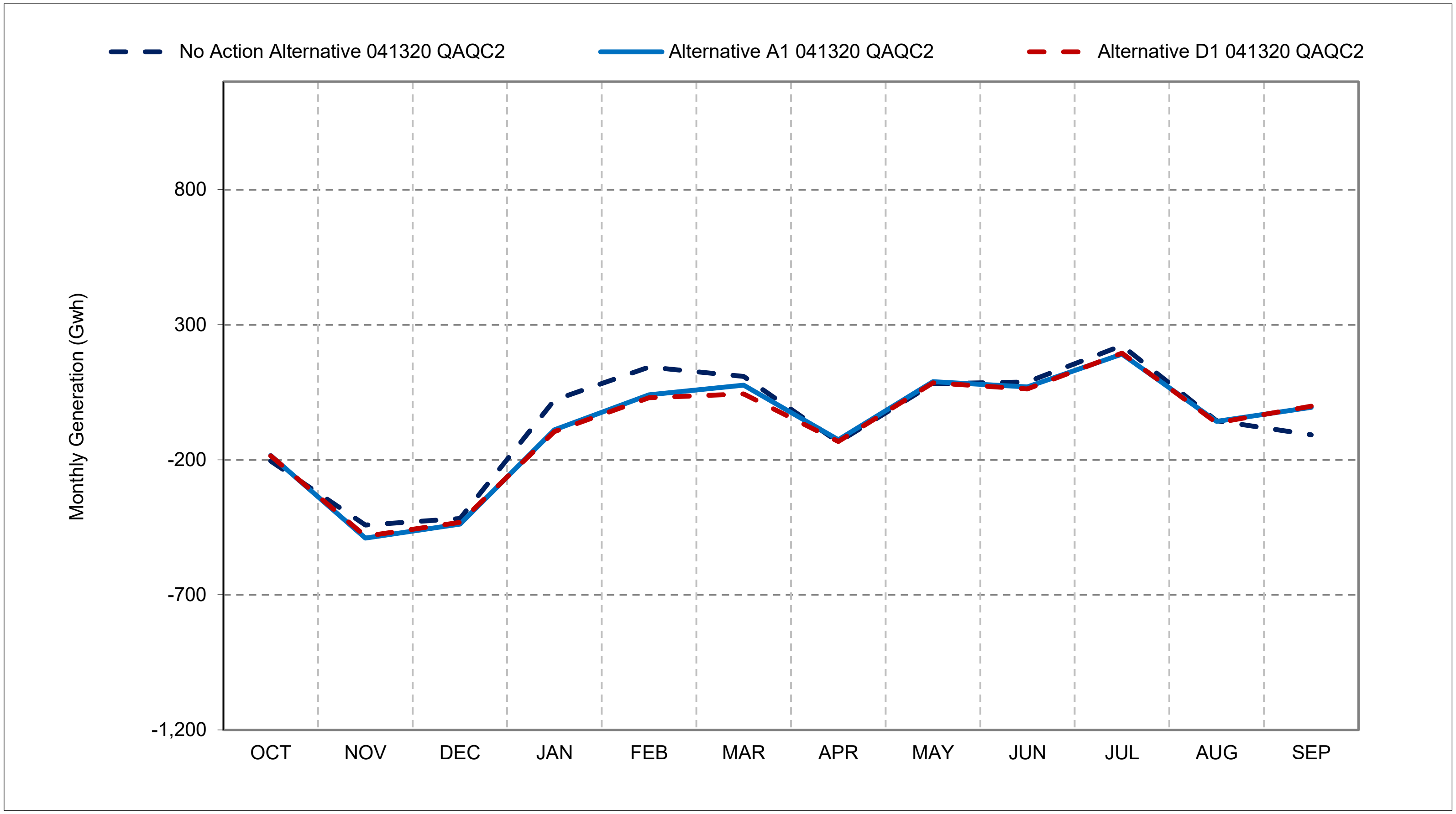


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-3. CVP, SWP, and NODOS Net Generation, Above Normal Year Average Generation

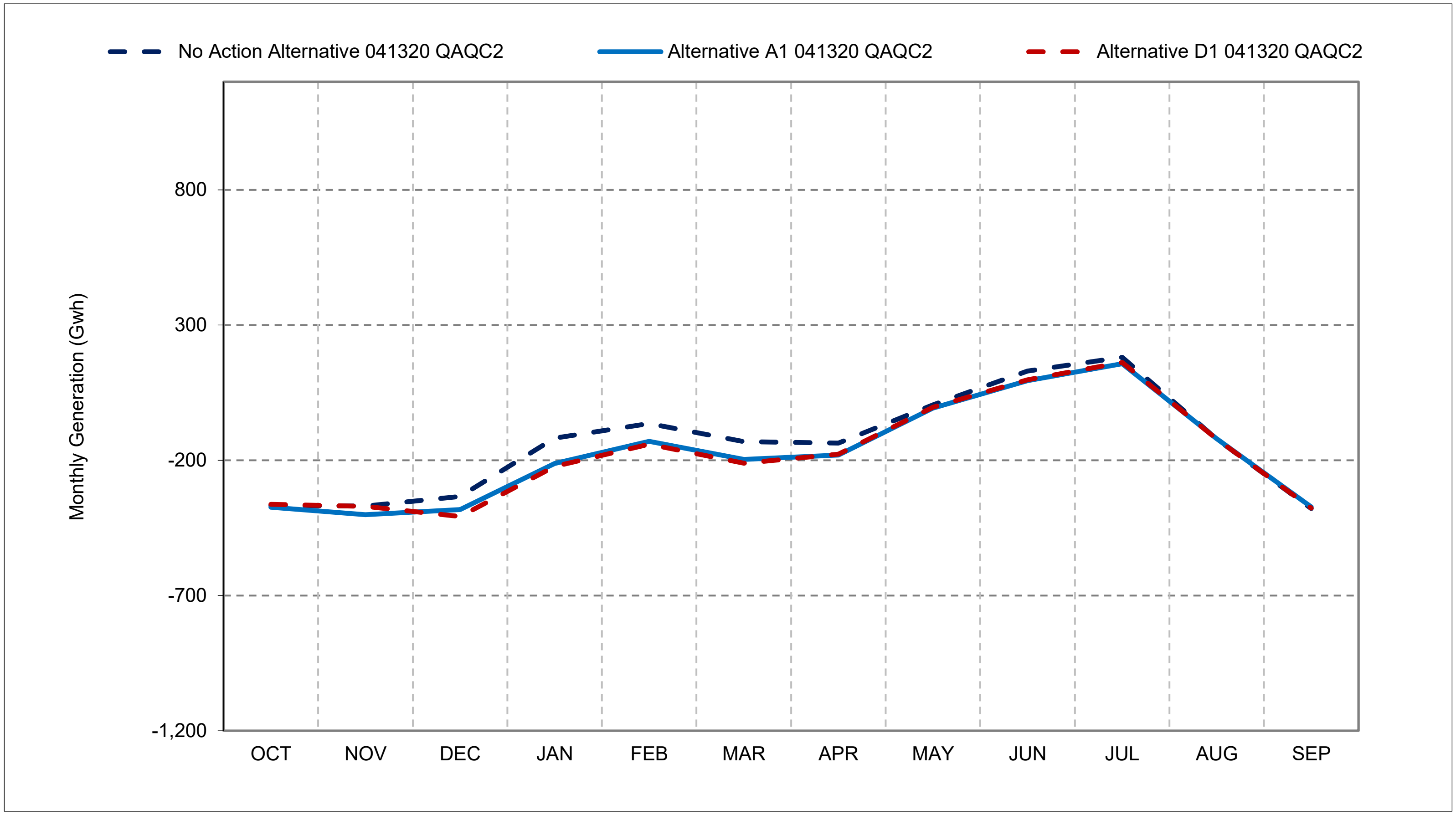


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

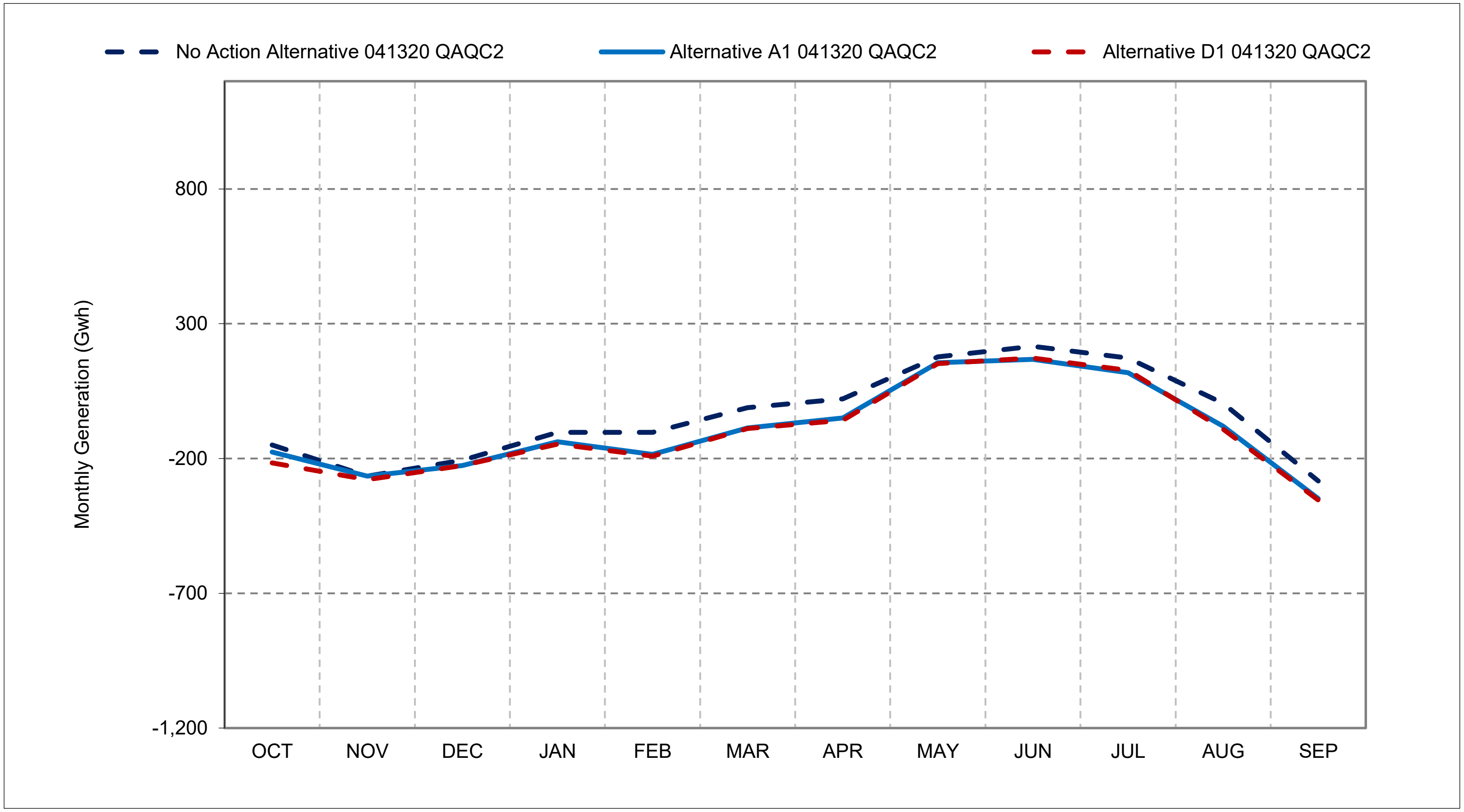
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-4. CVP, SWP, and NODOS Net Generation, Below Normal Year Average Generation



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-5. CVP, SWP, and NODOS Net Generation, Dry Year Average Generation

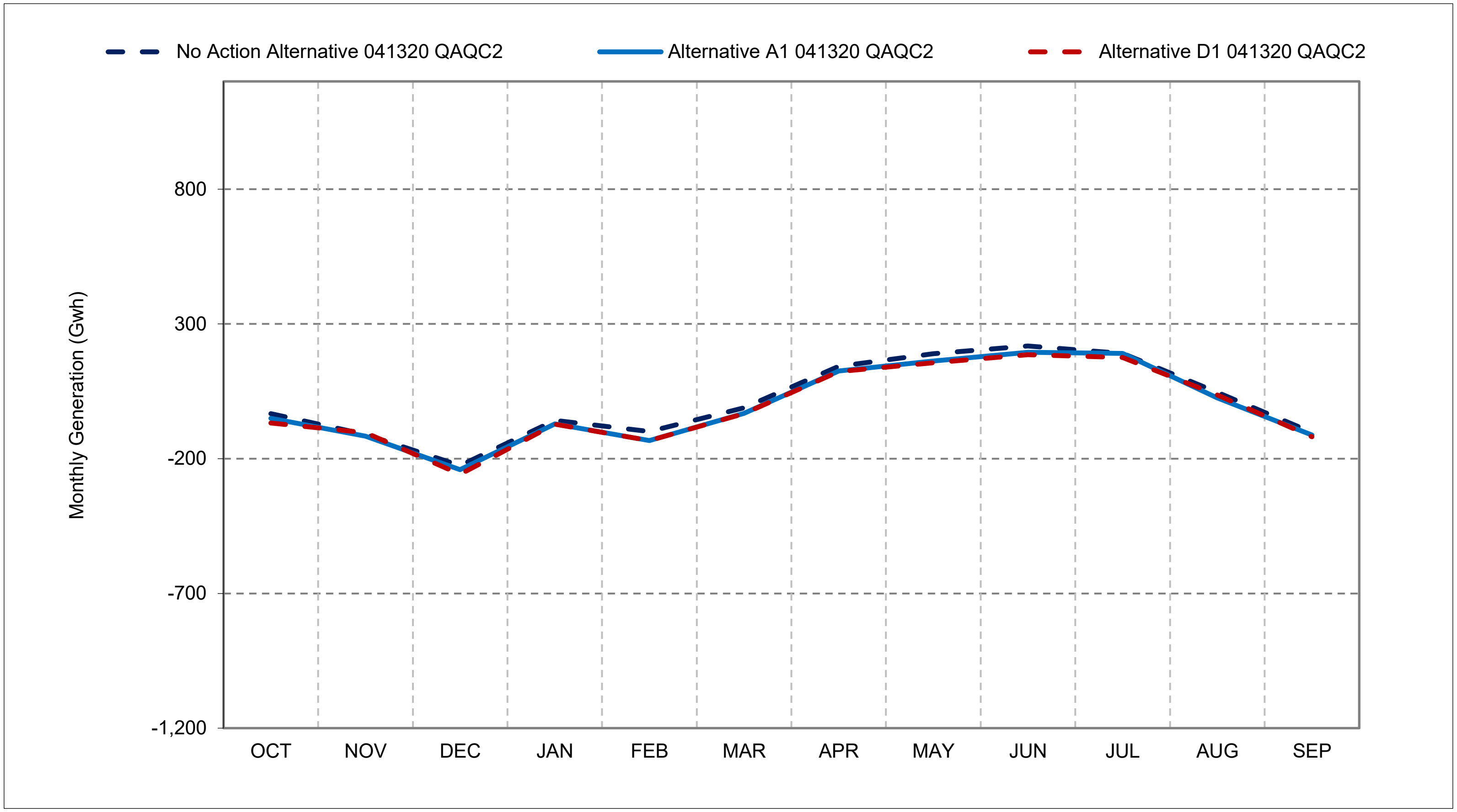


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-6. CVP, SWP, and NODOS Net Generation, Critical Year Average Generation

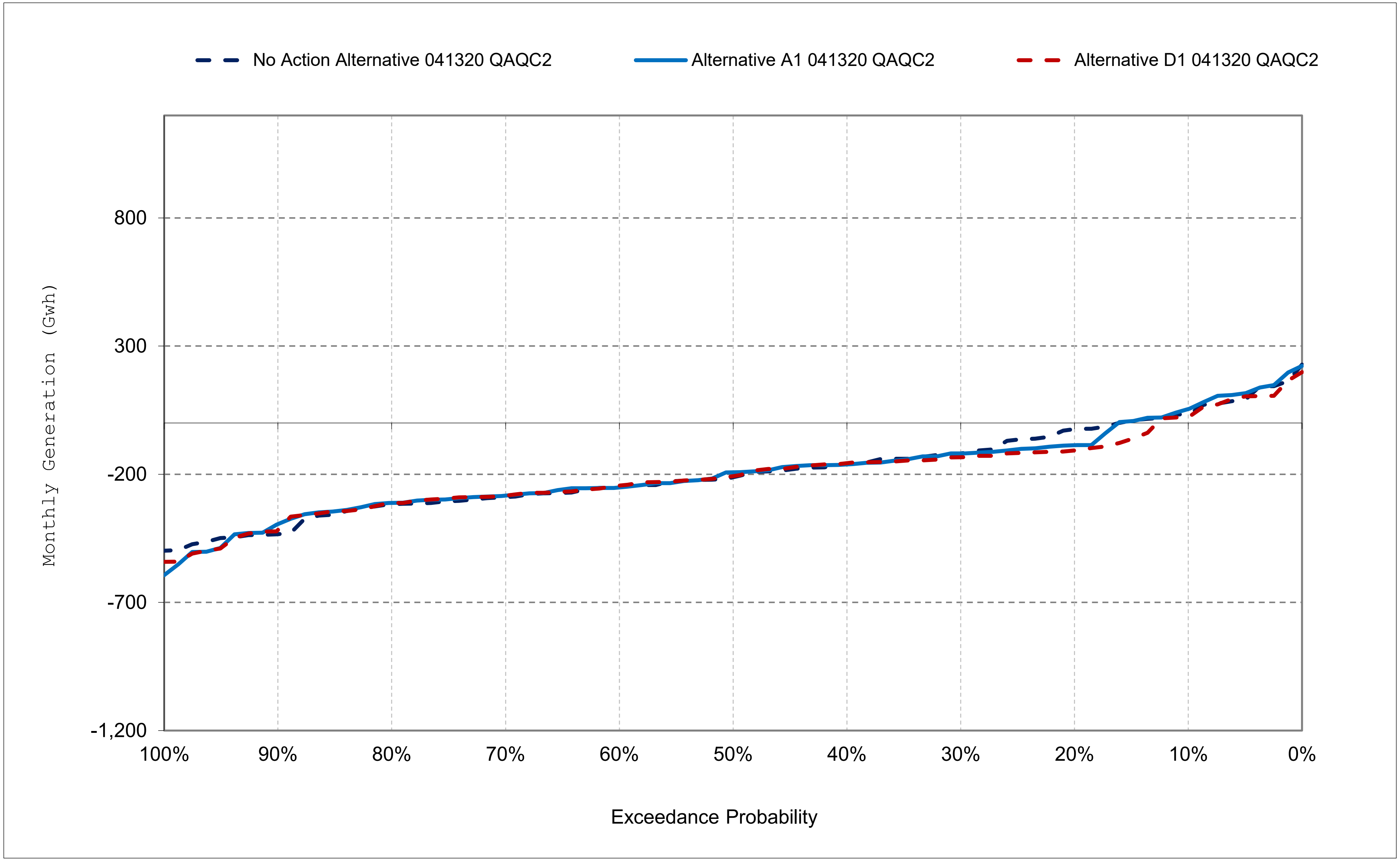


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

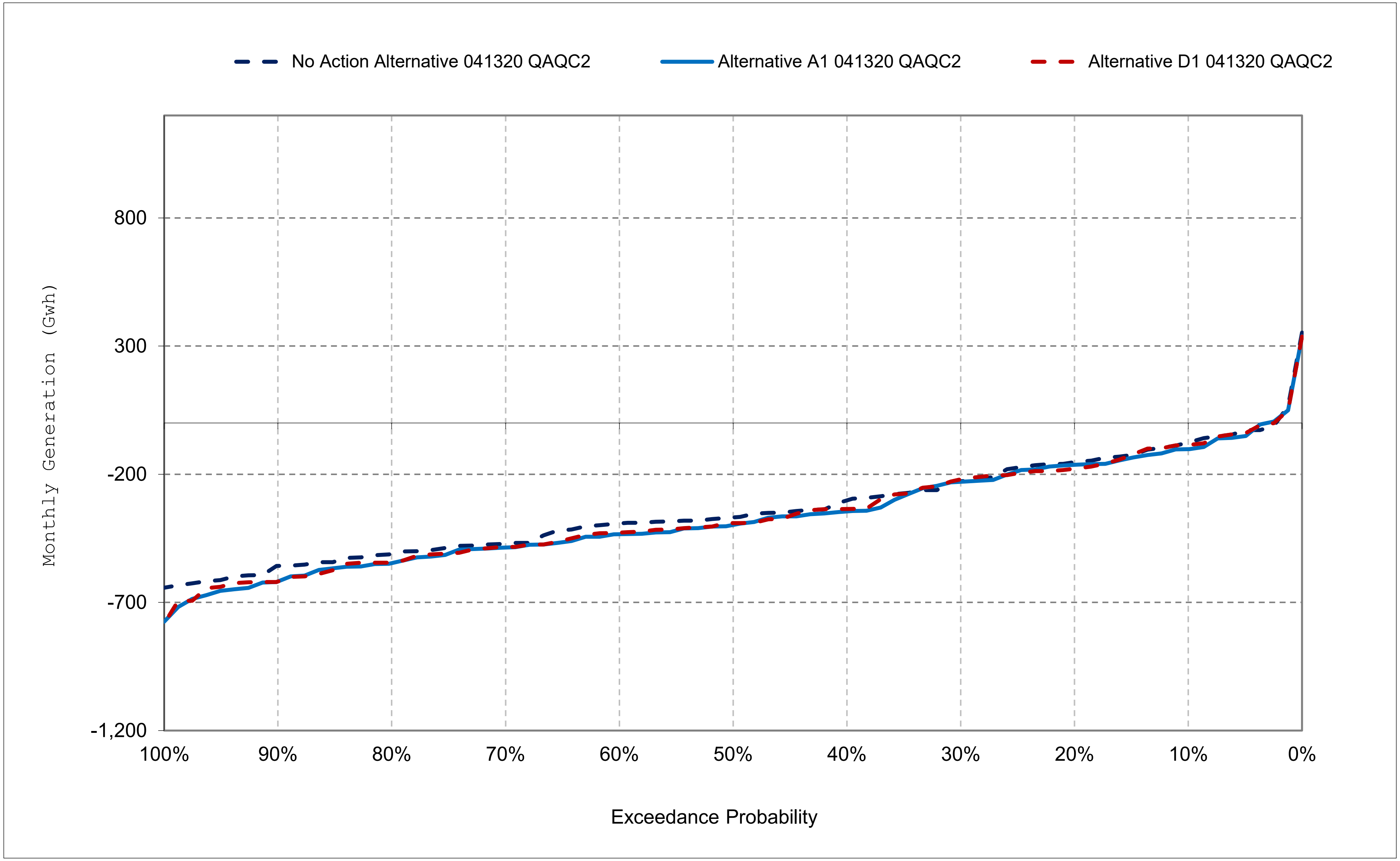
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-7. CVP, SWP, and NODOS Net Generation, October



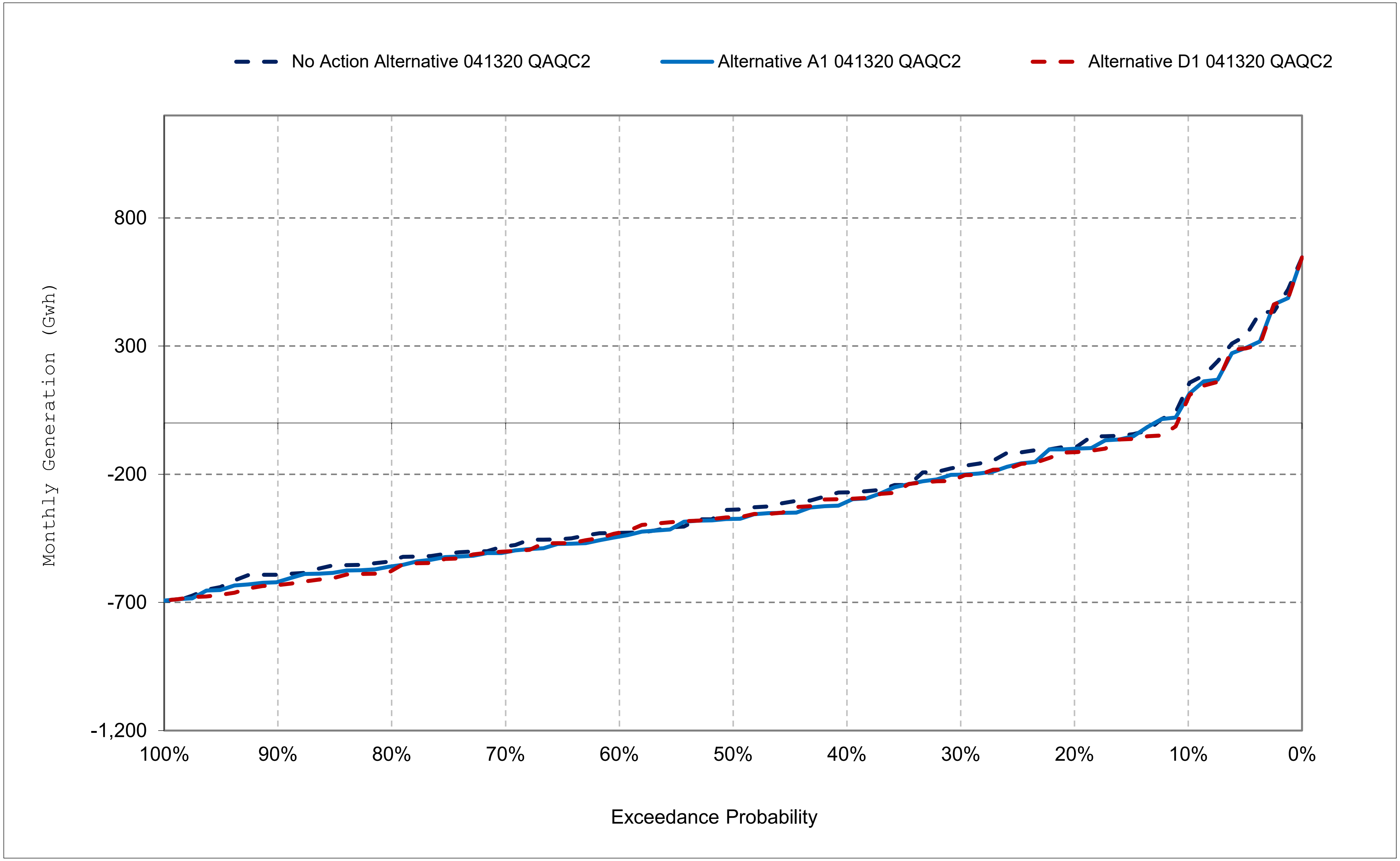
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-8. CVP, SWP, and NODOS Net Generation, November



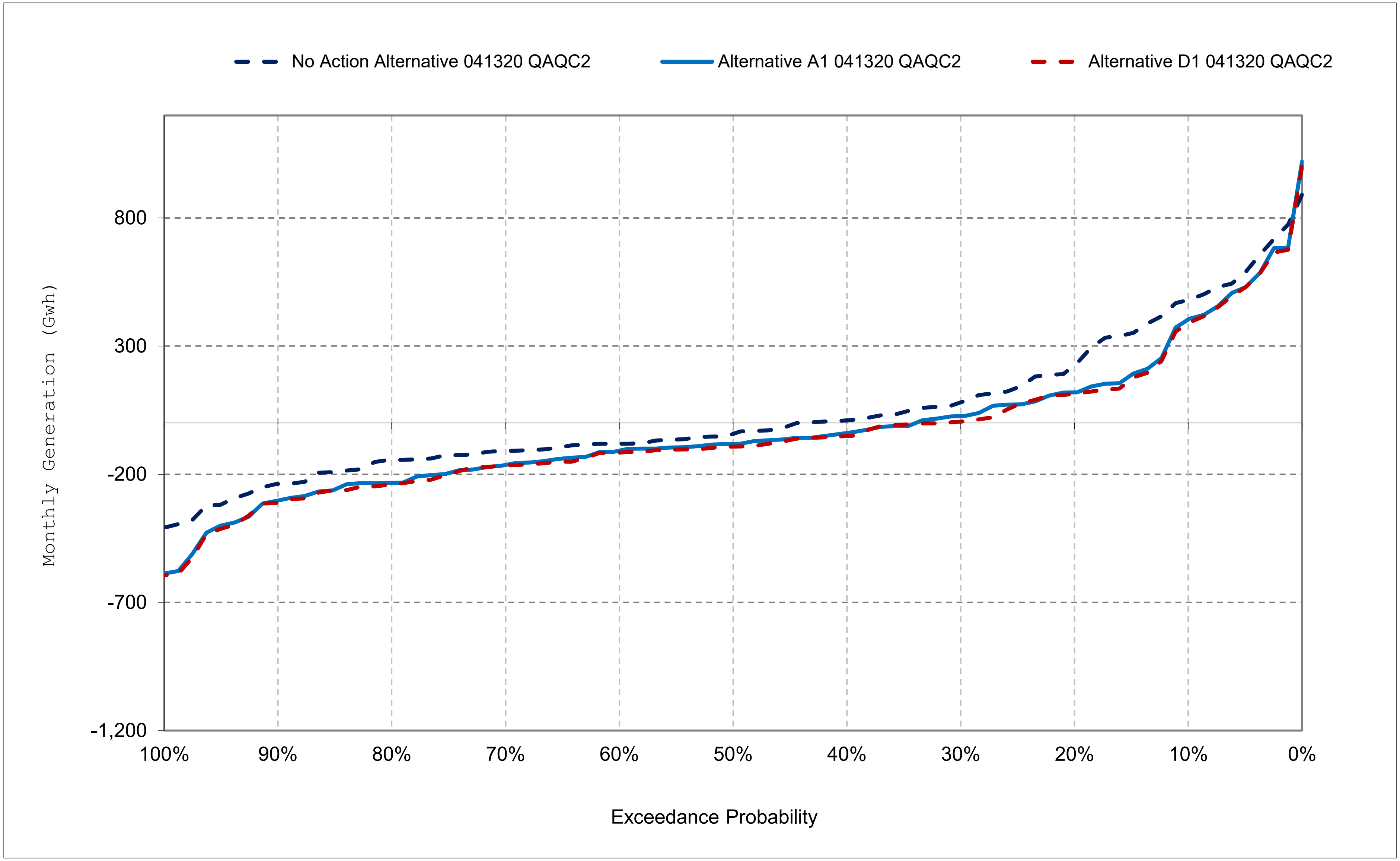
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-9. CVP, SWP, and NODOS Net Generation, December



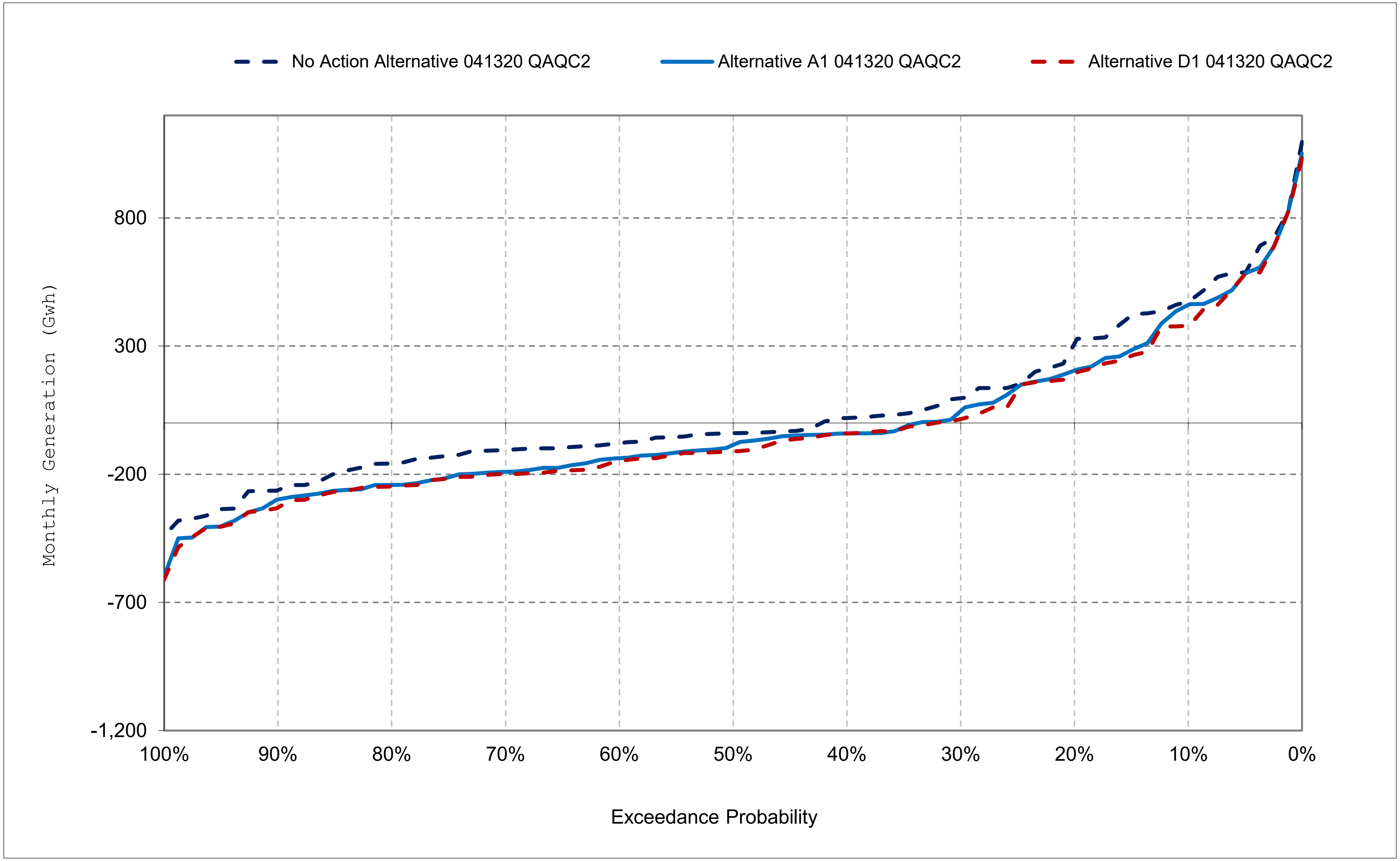
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-10. CVP, SWP, and NODOS Net Generation, January



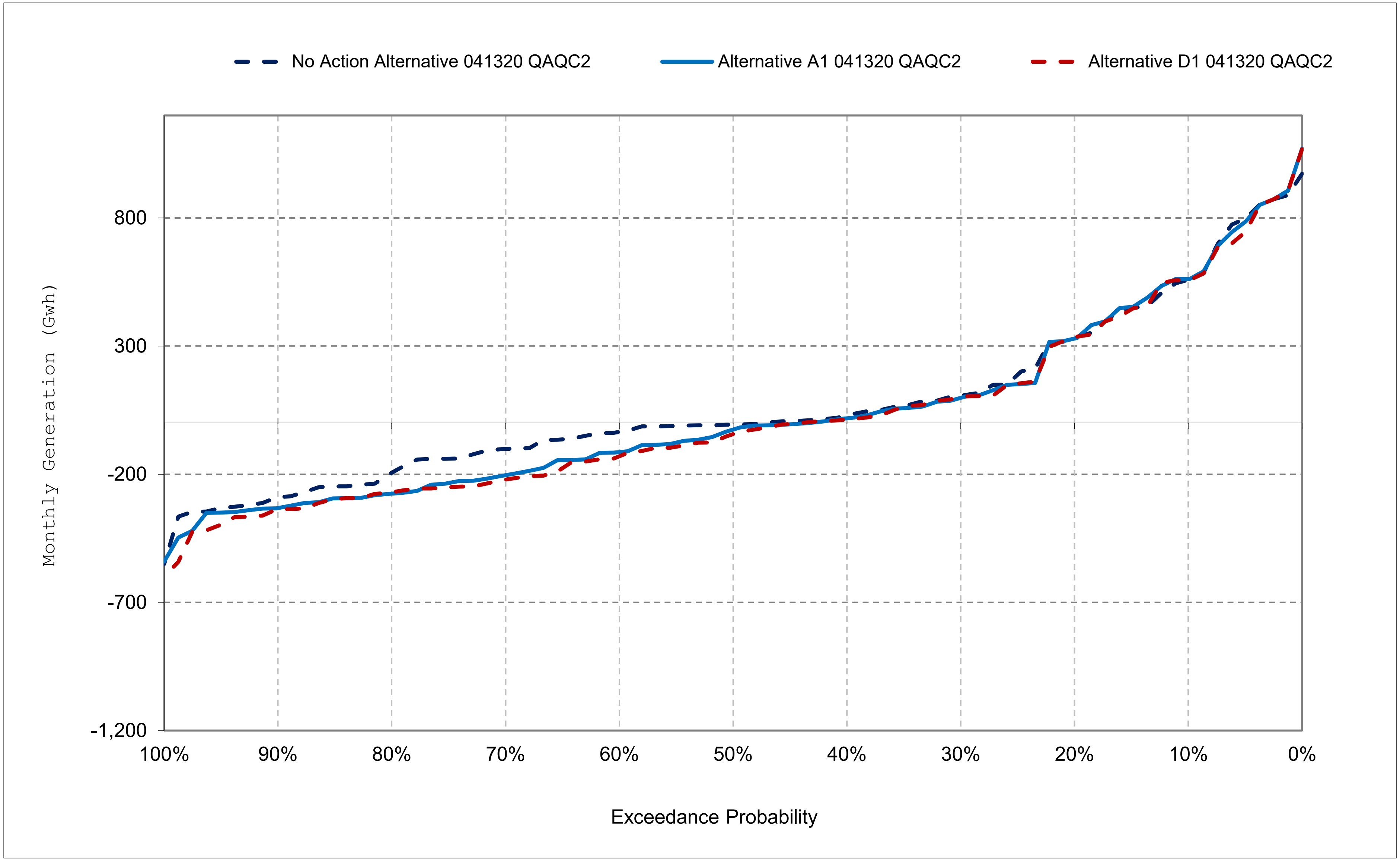
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-11. CVP, SWP, and NODOS Net Generation, February



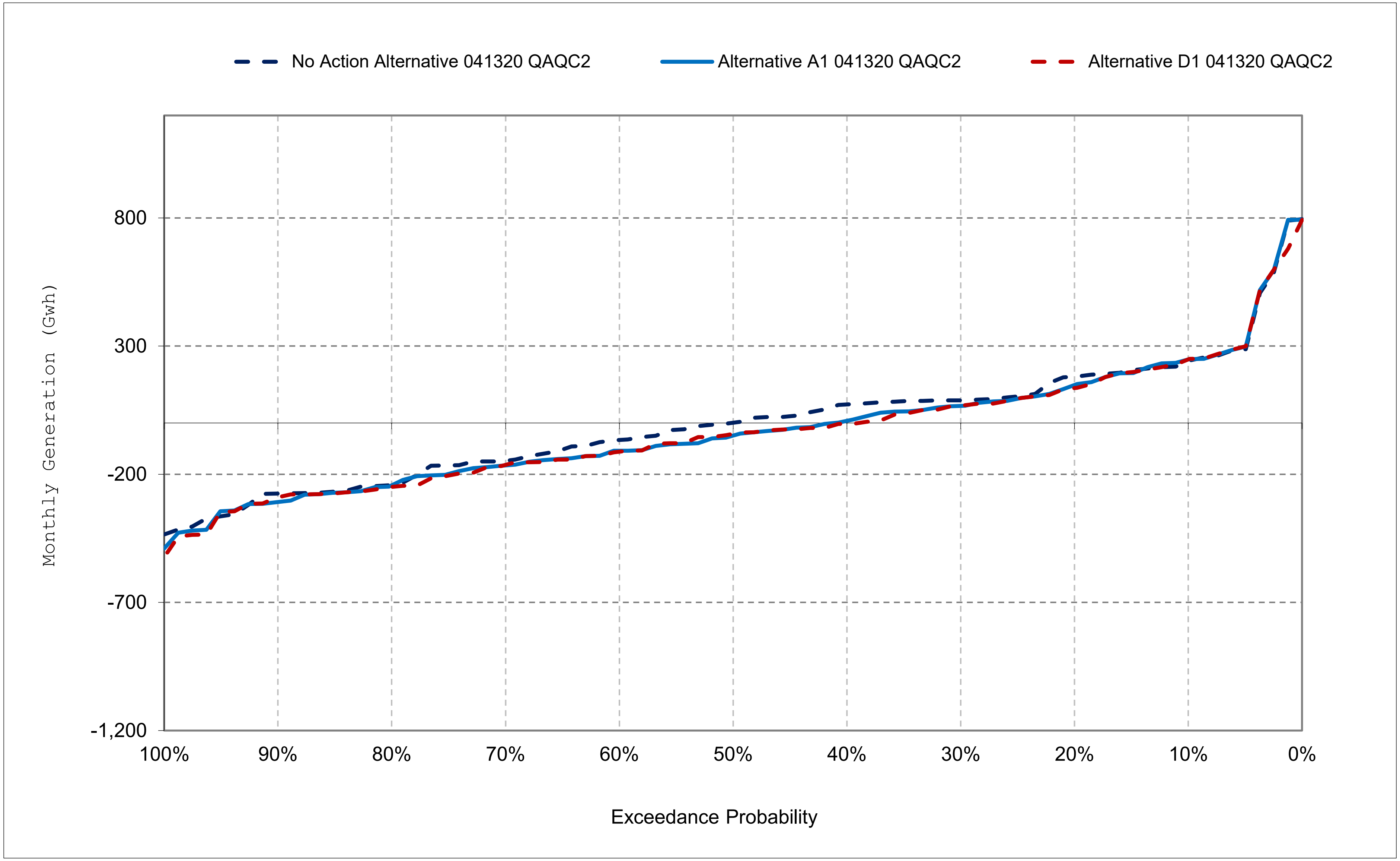
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-12. CVP, SWP, and NODOS Net Generation, March



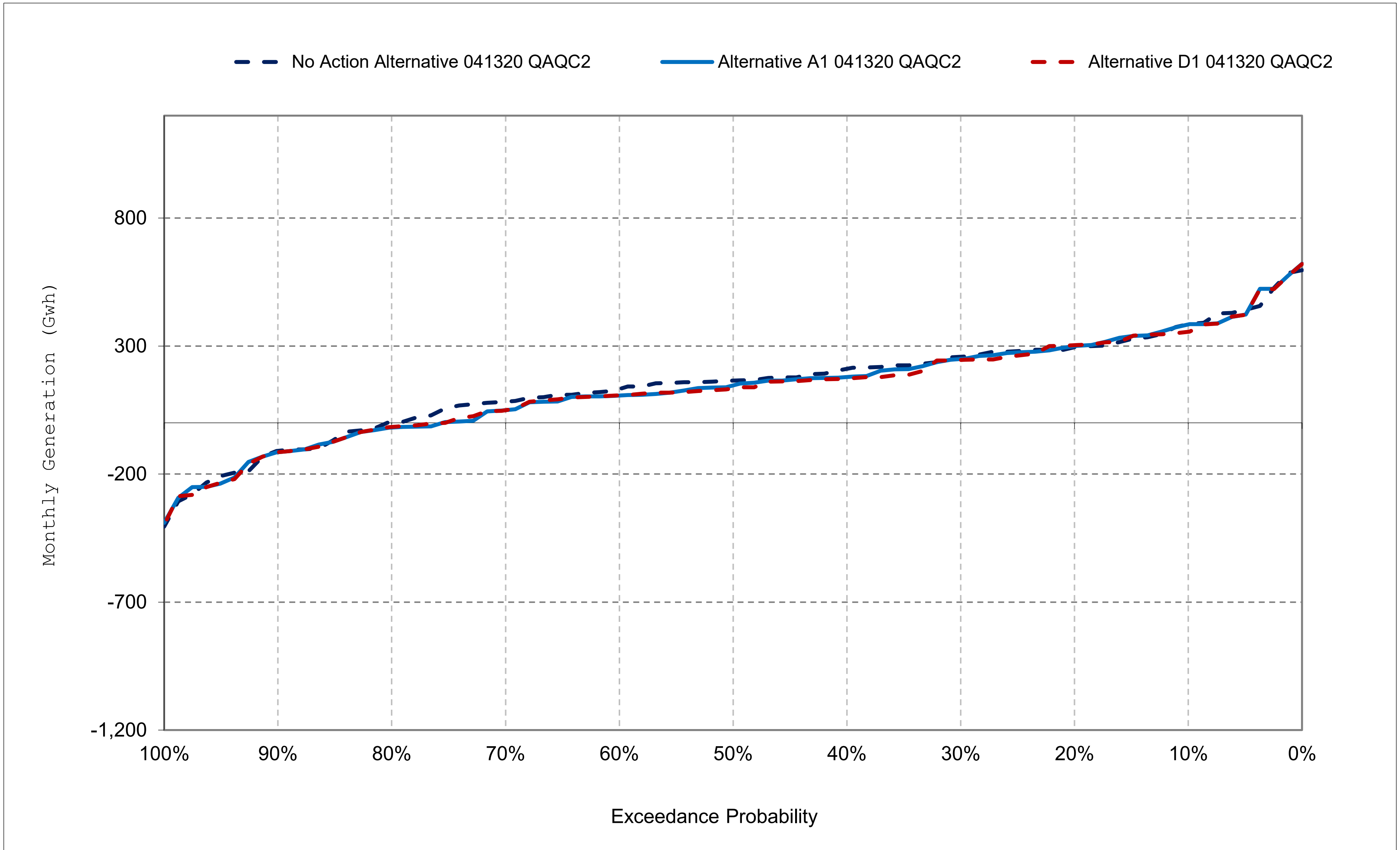
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-13. CVP, SWP, and NODOS Net Generation, April



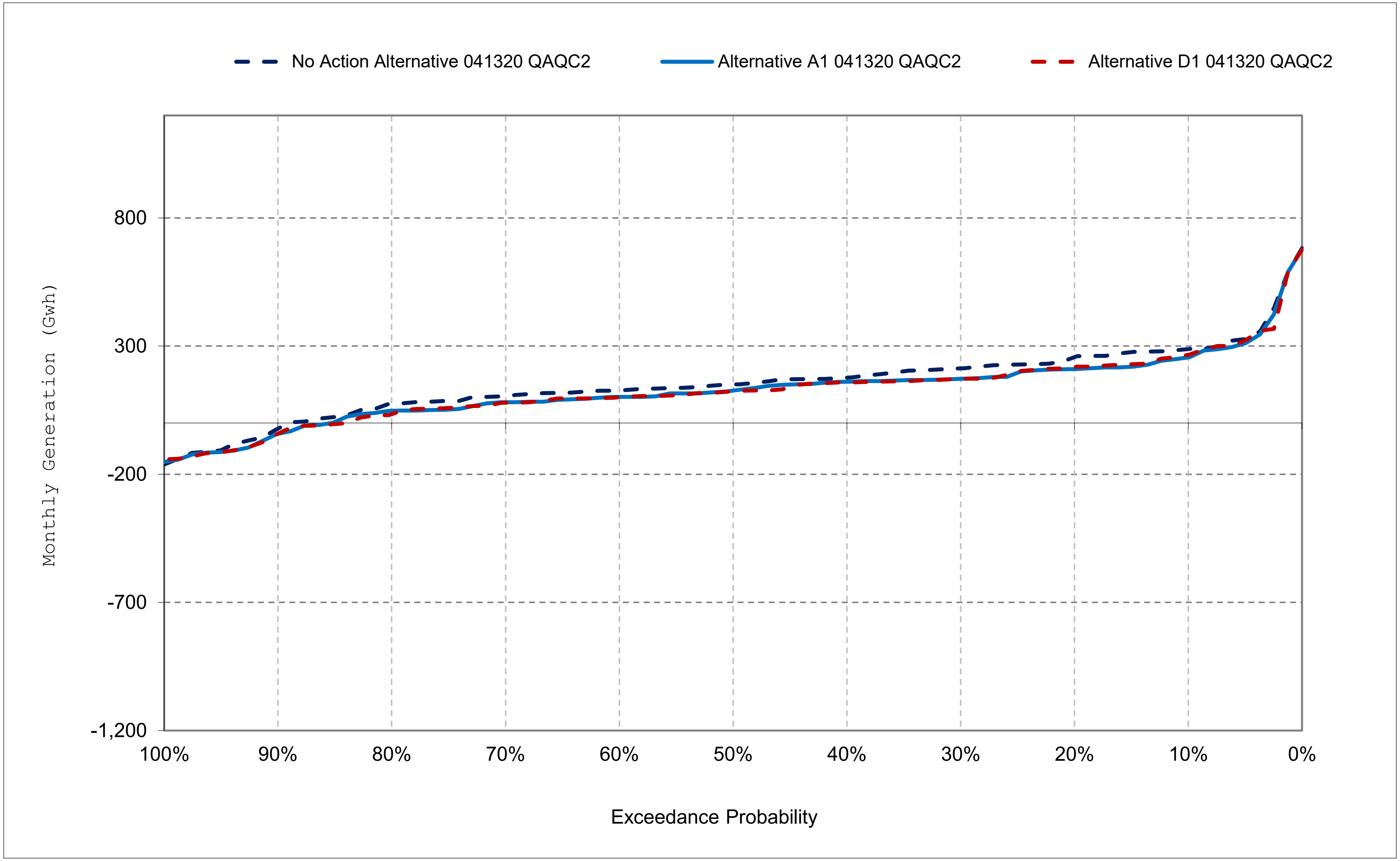
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-14. CVP, SWP, and NODOS Net Generation, May



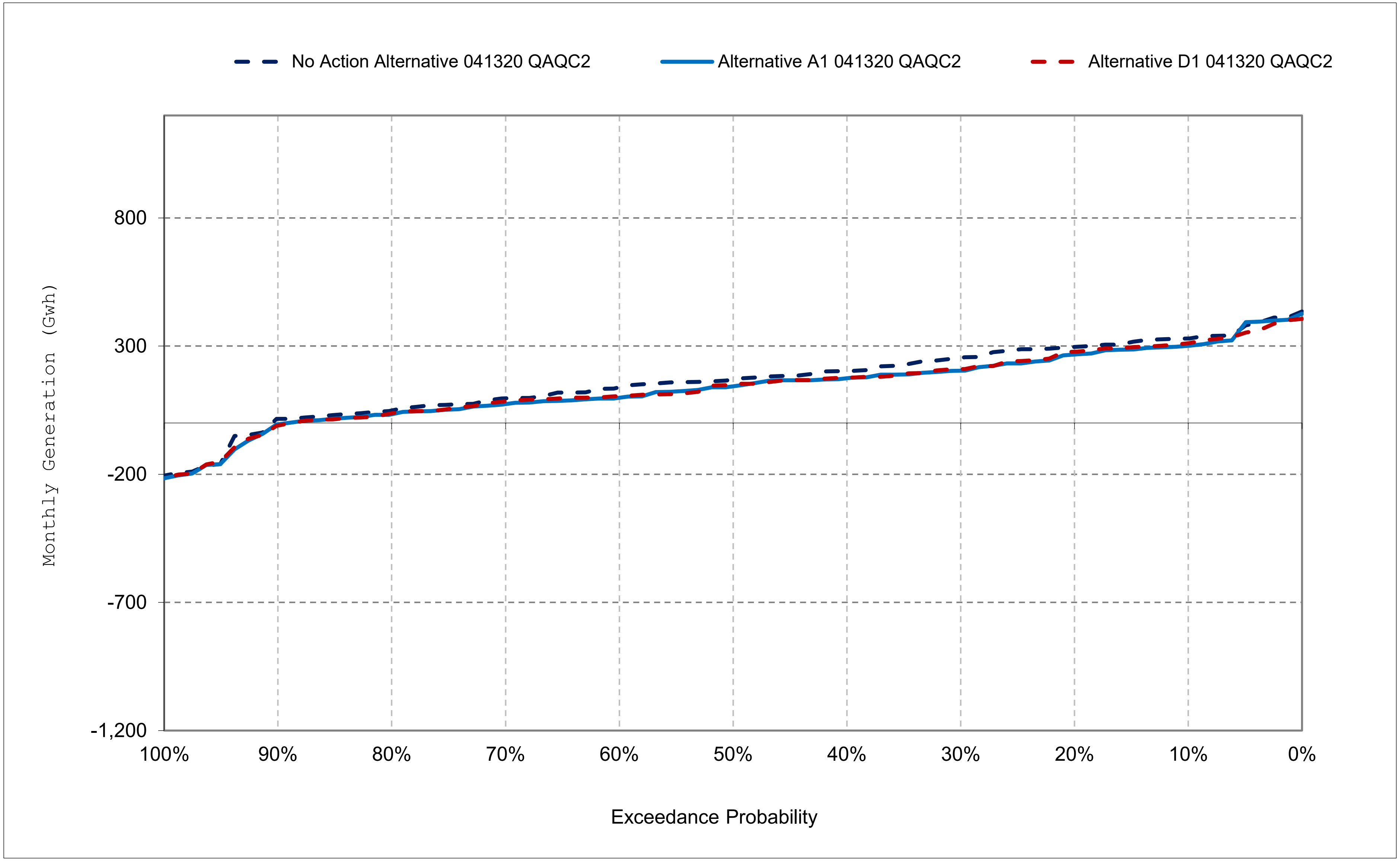
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-15. CVP, SWP, and NODOS Net Generation, June



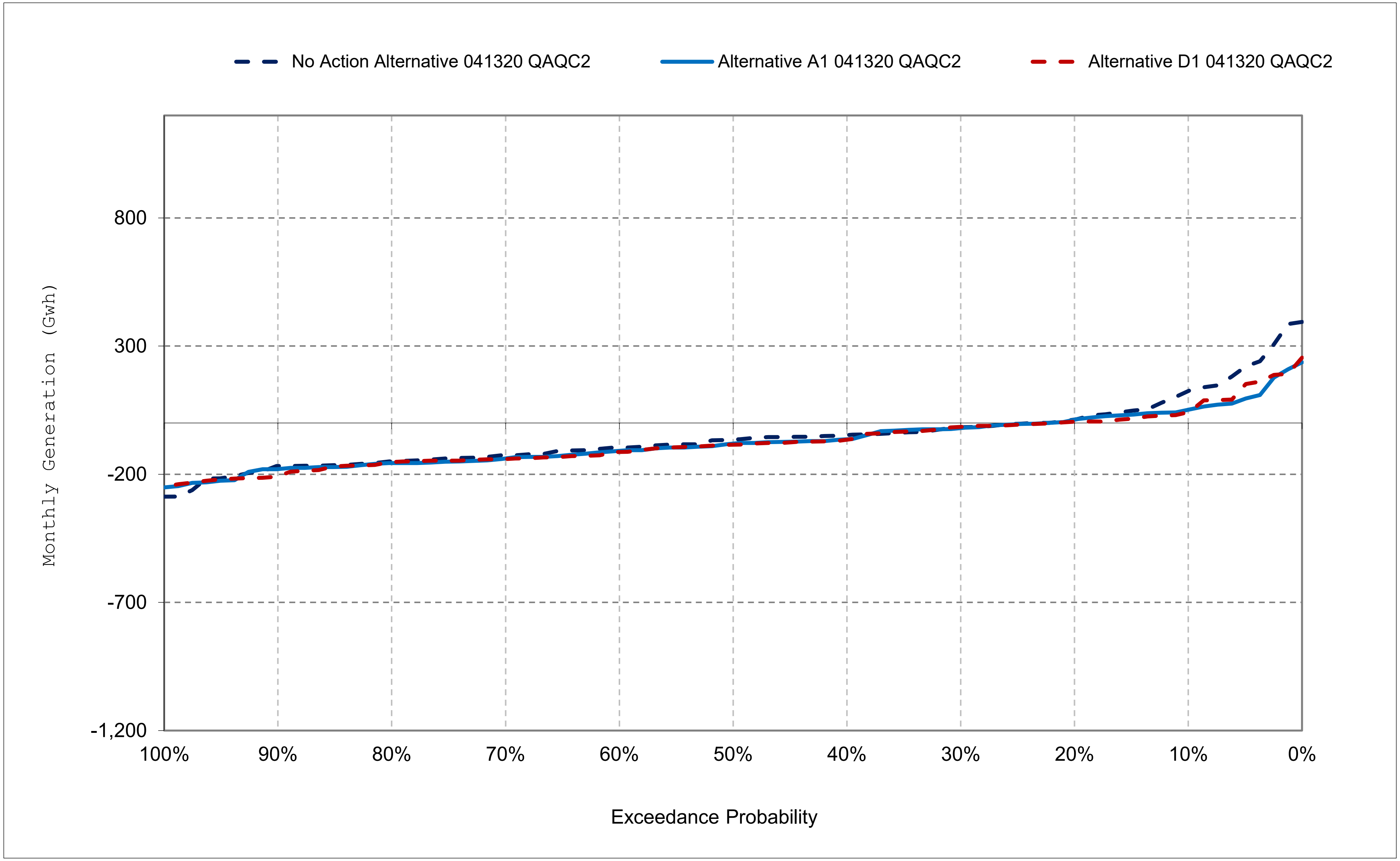
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-16. CVP, SWP, and NODOS Net Generation, July



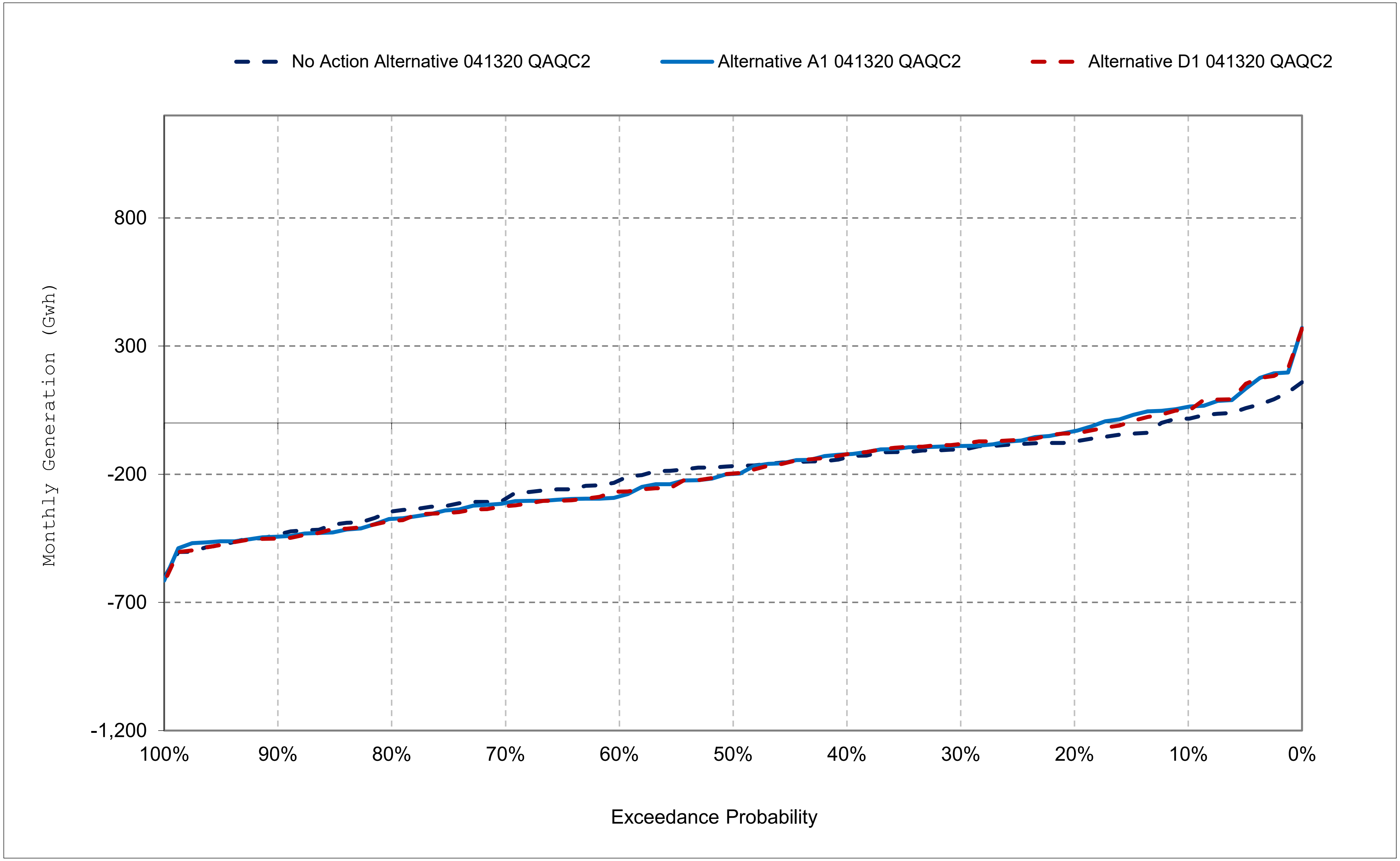
*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-17. CVP, SWP, and NODOS Net Generation, August



*All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.1-17-18. CVP, SWP, and NODOS Net Generation, September



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.1-18-1. CVP, SWP, and NODOS Net Revenue, Monthly Revenue

No Action Alternative 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	2,506	-3,900	9,223	29,726	26,061	27,605	11,313	15,410	13,160	18,766	8,350	1,681
20%	-580	-7,885	-4,569	14,075	17,013	16,064	8,724	12,384	11,530	16,805	2,659	-1,916
30%	-5,105	-11,209	-9,127	5,202	5,231	4,934	4,079	10,882	9,466	14,492	706	-3,667
40%	-7,366	-15,464	-14,894	756	974	828	3,017	8,164	7,786	11,672	-1,163	-6,225
50%	-9,567	-18,868	-18,270	-2,409	-2,357	-563	-591	6,498	6,249	9,853	-2,375	-8,340
60%	-11,667	-20,215	-23,561	-4,663	-4,460	-2,046	-3,875	4,662	5,211	7,903	-4,046	-10,541
70%	-13,811	-24,302	-26,617	-6,240	-5,946	-5,445	-7,995	2,828	4,201	5,499	-5,934	-14,872
80%	-15,276	-26,370	-29,516	-8,214	-8,866	-10,625	-12,578	-1,488	2,642	2,782	-7,345	-18,372
90%	-21,144	-28,849	-32,654	-13,926	-14,779	-15,885	-14,629	-6,913	-2,219	945	-9,025	-23,158
Long Term												
Full Simulation Period[a]	-8,791	-17,115	-15,318	2,765	2,459	3,045	-807	5,526	6,521	9,401	-1,504	-9,620
Water Year Types[b,c]												
Wet (32%)	-8,332	-21,249	-14,755	17,226	12,773	12,244	1,284	8,492	5,030	6,391	-3,846	-4,976
Above Normal (15%)	-9,472	-22,704	-22,718	1,657	7,802	4,866	-7,451	2,122	3,190	12,772	-1,388	-4,299
Below Normal (17%)	-17,855	-19,028	-18,042	-6,791	-3,702	-7,186	-7,401	-1,283	5,259	10,353	-5,642	-19,850
Dry (22%)	-6,969	-13,613	-11,056	-5,942	-5,835	-895	641	7,105	9,561	9,838	1,591	-14,951
Critical (15%)	-1,263	-5,590	-12,353	-3,249	-5,600	-858	6,824	8,080	9,994	10,783	3,640	-5,071

Alternative A1 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	3,491	-4,896	7,000	25,543	25,498	28,206	11,608	15,348	12,103	17,316	4,437	4,638
20%	-4,069	-8,303	-5,144	7,767	11,293	15,881	6,618	12,443	9,281	15,245	2,761	356
30%	-5,111	-11,708	-10,745	2,343	2,561	4,489	2,842	10,677	7,433	11,596	601	-3,006
40%	-7,307	-17,750	-16,378	-1,797	-2,440	415	-13	7,050	6,823	9,995	-1,866	-5,036
50%	-9,206	-20,395	-20,258	-4,489	-4,780	-1,550	-2,798	5,492	5,221	8,277	-3,515	-9,494
60%	-11,681	-22,320	-24,102	-6,022	-7,687	-6,076	-5,885	3,572	3,860	5,655	-4,723	-14,481
70%	-13,376	-25,130	-27,863	-9,374	-10,648	-10,784	-8,981	1,160	2,818	4,228	-6,633	-16,058
80%	-14,855	-27,976	-30,825	-13,633	-13,503	-14,783	-12,927	-2,594	1,228	2,110	-7,997	-19,764
90%	-19,139	-32,095	-34,116	-17,102	-16,762	-17,835	-16,164	-7,056	-3,251	-84	-9,324	-23,569
Long Term												
Full Simulation Period[a]	-8,828	-18,501	-16,509	-1,158	-951	1,296	-2,059	4,917	5,256	7,968	-2,651	-9,241
Water Year Types[b,c]												
Wet (32%)	-7,554	-23,478	-15,551	12,459	10,461	12,444	1,262	8,113	4,538	5,508	-3,443	-3,986
Above Normal (15%)	-8,338	-25,198	-23,766	-4,715	2,184	3,248	-7,015	2,443	2,297	10,986	-1,554	1,499
Below Normal (17%)	-18,056	-20,652	-20,704	-12,243	-7,285	-10,582	-9,625	-1,904	3,575	9,022	-5,533	-19,414
Dry (22%)	-8,283	-13,588	-12,019	-7,968	-10,281	-4,729	-2,997	6,032	7,195	6,791	-3,416	-18,533
Critical (15%)	-2,129	-5,877	-13,171	-3,959	-7,428	-1,917	5,937	6,753	8,822	10,816	2,482	-5,561

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Monthly Revenue (1000)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	985	-996	-2,223	-4,184	-563	602	295	-62	-1,057	-1,450	-3,914	2,957
20%	-3,490	-418	-575	-6,308	-5,721	-183	-2,106	59	-2,248	-1,561	101	2,272
30%	-6	-498	-1,618	-2,859	-2,669	-445	-1,237	-205	-2,033	-2,896	-105	661
40%	59	-2,285	-1,484	-2,553	-3,414	-413	-3,030	-1,114	-963	-1,678	-703	1,189
50%	361	-1,528	-1,988	-2,080	-2,423	-987	-2,208	-1,006	-1,027	-1,576	-1,139	-1,153
60%	-14	-2,105	-541	-1,359	-3,227	-4,030	-2,010	-1,090	-1,351	-2,247	-677	-3,940
70%	435	-828	-1,246	-3,135	-4,702	-5,339	-987	-1,668	-1,383	-1,271	-700	-1,186
80%	420	-1,605	-1,309	-5,419	-4,637	-4,158	-349	-1,106	-1,414	-672	-652	-1,392
90%	2,005	-3,246	-1,462	-3,176	-1,984	-1,951	-1,534	-143	-1,033	-1,029	-300	-410
Long Term												
Full Simulation Period[a]	-37	-1,386	-1,191	-3,923	-3,411	-1,750	-1,252	-609	-1,265	-1,432	-1,147	379
Water Year Types[b,c]												
Wet (32%)	777	-2,229	-796	-4,767	-2,312	199	-23	-379	-492	-883	402	990
Above Normal (15%)	1,134	-2,494	-1,048	-6,371	-5,618	-1,617	436	321	-892	-1,785	-166	5,799
Below Normal (17%)	-201	-1,624	-2,662	-5,452	-3,584	-3,396	-2,224	-621	-1,684	-1,331	109	436
Dry (22%)	-1,314	25	-963	-2,025	-4,446	-3,834	-3,638	-1,073	-2,366	-3,046	-5,007	-3,582
Critical (15%)	-866	-287	-818	-710	-1,829	-1,059	-887	-1,327	-1,173	33	-1,158	-490

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

f Net revenue is based on 2030 pricing forecasts developed by DWR.

Table G.2.1-18-2. CVP, SWP, and NODOS Net Revenue, Monthly Revenue

No Action Alternative 041320 QAQC2

	Monthly Revenue (1000)											
Statistic	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Probability of Exceedance												
10%	2,506	-3,900	9,223	29,726	26,061	27,605	11,313	15,410	13,160	18,766	8,350	1,681
20%	-580	-7,885	-4,569	14,075	17,013	16,064	8,724	12,384	11,530	16,805	2,659	-1,916
30%	-5,105	-11,209	-9,127	5,202	5,231	4,934	4,079	10,882	9,466	14,492	706	-3,667
40%	-7,366	-15,464	-14,894	756	974	828	3,017	8,164	7,786	11,672	-1,163	-6,225
50%	-9,567	-18,868	-18,270	-2,409	-2,357	-563	-591	6,498	6,249	9,853	-2,375	-8,340
60%	-11,667	-20,215	-23,561	-4,663	-4,460	-2,046	-3,875	4,662	5,211	7,903	-4,046	-10,541
70%	-13,811	-24,302	-26,617	-6,240	-5,946	-5,445	-7,995	2,828	4,201	5,499	-5,934	-14,872
80%	-15,276	-26,370	-29,516	-8,214	-8,866	-10,625	-12,578	-1,488	2,642	2,782	-7,345	-18,372
90%	-21,144	-28,849	-32,654	-13,926	-14,779	-15,885	-14,629	-6,913	-2,219	945	-9,025	-23,158
Long Term												
Full Simulation Period[a]	-8,791	-17,115	-15,318	2,765	2,459	3,045	-807	5,526	6,521	9,401	-1,504	-9,620
Water Year Types[b,c]												
Wet (32%)	-8,332	-21,249	-14,755	17,226	12,773	12,244	1,284	8,492	5,030	6,391	-3,846	-4,976
Above Normal (15%)	-9,472	-22,704	-22,718	1,657	7,802	4,866	-7,451	2,122	3,190	12,772	-1,388	-4,299
Below Normal (17%)	-17,855	-19,028	-18,042	-6,791	-3,702	-7,186	-7,401	-1,283	5,259	10,353	-5,642	-19,850
Dry (22%)	-6,969	-13,613	-11,056	-5,942	-5,835	-895	641	7,105	9,561	9,838	1,591	-14,951
Critical (15%)	-1,263	-5,590	-12,353	-3,249	-5,600	-858	6,824	8,080	9,994	10,783	3,640	-5,071

Alternative D1 041320 QAQC2

	Monthly Revenue (1000)											
Statistic	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Probability of Exceedance												
10%	2,032	-3,866	6,414	24,686	20,960	27,962	11,605	15,161	12,546	17,706	3,632	4,605
20%	-4,471	-8,913	-5,993	7,338	10,607	16,011	6,395	12,371	9,555	15,783	2,110	-203
30%	-6,179	-11,141	-11,238	1,088	779	4,500	2,939	10,453	7,406	11,979	659	-2,816
40%	-7,054	-17,142	-15,530	-2,742	-2,423	242	-861	6,878	6,735	10,062	-1,920	-4,671
50%	-9,528	-20,080	-19,917	-5,182	-6,216	-2,485	-3,060	4,676	5,003	8,700	-3,571	-9,411
60%	-11,276	-22,067	-23,306	-6,339	-8,253	-7,143	-6,140	3,752	3,843	5,990	-5,063	-14,045
70%	-13,348	-24,989	-27,584	-9,390	-11,024	-11,652	-8,926	1,226	2,769	4,843	-6,680	-16,995
80%	-14,926	-27,784	-31,895	-13,898	-13,749	-14,342	-13,311	-2,502	672	2,236	-7,381	-20,183
90%	-20,319	-31,952	-34,819	-17,560	-18,445	-17,997	-15,305	-7,044	-3,207	-227	-10,860	-24,004
Long Term												
Full Simulation Period[a]	-9,272	-18,219	-16,767	-1,697	-1,683	632	-2,315	4,738	5,220	8,093	-2,715	-9,408
Water Year Types[b,c]												
Wet (32%)	-7,438	-23,482	-15,344	11,621	9,019	11,596	867	7,802	4,572	5,750	-3,287	-4,137
Above Normal (15%)	-8,388	-24,813	-23,394	-5,057	1,592	1,605	-7,350	2,273	1,931	11,183	-1,894	1,761
Below Normal (17%)	-17,513	-19,024	-22,094	-12,873	-7,874	-11,337	-9,484	-1,720	3,708	9,290	-5,599	-19,648
Dry (22%)	-10,291	-14,287	-12,025	-8,441	-10,680	-4,823	-3,402	5,857	7,422	7,251	-4,076	-18,814
Critical (15%)	-2,984	-5,180	-14,122	-4,040	-7,432	-1,951	5,817	6,419	8,373	9,949	3,113	-5,940

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

	Monthly Revenue (1000)											
Statistic	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Probability of Exceedance												
10%	-474	34	-2,809	-5,041	-5,101	357	292	-248	-614	-1,060	-4,718	2,924
20%	-3,892	-1,027	-1,424	-6,736	-6,406	-53	-2,329	-13	-1,975	-1,023	-550	1,713
30%	-1,075	68	-2,111	-4,114	-4,452	-434	-1,140	-429	-2,059	-2,513	-47	851
40%	311	-1,678	-636	-3,497	-3,397	-586	-3,878	-1,286	-1,051	-1,610	-757	1,554
50%	39	-1,212	-1,647	-2,773	-3,859	-1,922	-2,470	-1,822	-1,246	-1,153	-1,196	-1,071
60%	391	-1,852	256	-1,676	-3,793	-5,097	-2,265	-910	-1,369	-1,913	-1,017	-3,504
70%	463	-687	-967	-3,150	-5,078	-6,206	-931	-1,602	-1,433	-656	-747	-2,123
80%	350	-1,414	-2,379	-5,684	-4,883	-3,717	-733	-1,014	-1,970	-546	-36	-1,811
90%	825	-3,103	-2,166	-3,634	-3,667	-2,112	-676	-131	-988	-1,172	-1,835	-845
Long Term												
Full Simulation Period[a]	-481	-1,104	-1,449	-4,462	-4,143	-2,413	-1,508	-789	-1,301	-1,307	-1,211	212
Water Year Types[b,c]												
Wet (32%)	894	-2,233	-590	-5,605	-3,754	-648	-417	-691	-458	-641	558	839
Above Normal (15%)	1,084	-2,110	-676	-6,714	-6,210	-3,261	101	150	-1,259	-1,589	-505	6,060
Below Normal (17%)	341	4	-4,052	-6,082	-4,172	-4,150	-2,083	-437	-1,551	-1,063	43	202
Dry (22%)	-3,322	-674	-969	-2,499	-4,844	-3,928	-4,042	-1,248	-2,139	-2,586	-5,667	-3,863
Critical (15%)	-1,721	410	-1,769	-791	-1,832	-1,093	-1,007	-1,661	-1,622	-834	-526	-868

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

f Net revenue is based on 2030 pricing forecasts developed by DWR.

Table G.2.1-18-3. CVP, SWP, and NODOS Net Revenue, Monthly Revenue

Alternative A1 041320 QAQC2

Statistic	Monthly Revenue (1000) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	3,491	-4,896	7,000	25,543	25,498	28,206	11,608	15,348	12,103	17,316	4,437	4,638
20%	-4,069	-8,303	-5,144	7,767	11,293	15,881	6,618	12,443	9,281	15,245	2,761	356
30%	-5,111	-11,708	-10,745	2,343	2,561	4,489	2,842	10,677	7,433	11,596	601	-3,006
40%	-7,307	-17,750	-16,378	-1,797	-2,440	415	-13	7,050	6,823	9,995	-1,866	-5,036
50%	-9,206	-20,395	-20,258	-4,489	-4,780	-1,550	-2,798	5,492	5,221	8,277	-3,515	-9,494
60%	-11,681	-22,320	-24,102	-6,022	-7,687	-6,076	-5,885	3,572	3,860	5,655	-4,723	-14,481
70%	-13,376	-25,130	-27,863	-9,374	-10,648	-10,784	-8,981	1,160	2,818	4,228	-6,633	-16,058
80%	-14,855	-27,976	-30,825	-13,633	-13,503	-14,783	-12,927	-2,594	1,228	2,110	-7,997	-19,764
90%	-19,139	-32,095	-34,116	-17,102	-16,762	-17,835	-16,164	-7,056	-3,251	-84	-9,324	-23,569
Long Term												
Full Simulation Period[a]	-8,828	-18,501	-16,509	-1,158	-951	1,296	-2,059	4,917	5,256	7,968	-2,651	-9,241
Water Year Types[b,c]												
Wet (32%)	-7,554	-23,478	-15,551	12,459	10,461	12,444	1,262	8,113	4,538	5,508	-3,443	-3,986
Above Normal (15%)	-8,338	-25,198	-23,766	-4,715	2,184	3,248	-7,015	2,443	2,297	10,986	-1,554	1,499
Below Normal (17%)	-18,056	-20,652	-20,704	-12,243	-7,285	-10,582	-9,625	-1,904	3,575	9,022	-5,533	-19,414
Dry (22%)	-8,283	-13,588	-12,019	-7,968	-10,281	-4,729	-2,997	6,032	7,195	6,791	-3,416	-18,533
Critical (15%)	-2,129	-5,877	-13,171	-3,959	-7,428	-1,917	5,937	6,753	8,822	10,816	2,482	-5,561

Alternative D1 041320 QAQC2

Statistic	Monthly Revenue (1000) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	2,032	-3,866	6,414	24,686	20,960	27,962	11,605	15,161	12,546	17,706	3,632	4,605
20%	-4,471	-8,913	-5,993	7,338	10,607	16,011	6,395	12,371	9,555	15,783	2,110	-203
30%	-6,179	-11,141	-11,238	1,088	779	4,500	2,939	10,453	7,406	11,979	659	-2,816
40%	-7,054	-17,142	-15,530	-2,742	-2,423	242	-861	6,878	6,735	10,062	-1,920	-4,671
50%	-9,528	-20,080	-19,917	-5,182	-6,216	-2,485	-3,060	4,676	5,003	8,700	-3,571	-9,411
60%	-11,276	-22,067	-23,306	-6,339	-8,253	-7,143	-6,140	3,752	3,843	5,990	-5,063	-14,045
70%	-13,348	-24,989	-27,584	-9,390	-11,024	-11,652	-8,926	1,226	2,769	4,843	-6,680	-16,995
80%	-14,926	-27,784	-31,895	-13,898	-13,749	-14,342	-13,311	-2,502	672	2,236	-7,381	-20,183
90%	-20,319	-31,952	-34,819	-17,560	-18,445	-17,997	-15,305	-7,044	-3,207	-227	-10,860	-24,004
Long Term												
Full Simulation Period[a]	-9,272	-18,219	-16,767	-1,697	-1,683	632	-2,315	4,738	5,220	8,093	-2,715	-9,408
Water Year Types[b,c]												
Wet (32%)	-7,438	-23,482	-15,344	11,621	9,019	11,596	867	7,802	4,572	5,750	-3,287	-4,137
Above Normal (15%)	-8,388	-24,813	-23,394	-5,057	1,592	1,605	-7,350	2,273	1,931	11,183	-1,894	1,761
Below Normal (17%)	-17,513	-19,024	-22,094	-12,873	-7,874	-11,337	-9,484	-1,720	3,708	9,290	-5,599	-19,648
Dry (22%)	-10,291	-14,287	-12,025	-8,441	-10,680	-4,823	-3,402	5,857	7,422	7,251	-4,076	-18,814
Critical (15%)	-2,984	-5,180	-14,122	-4,040	-7,432	-1,951	5,817	6,419	8,373	9,949	3,113	-5,940

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Monthly Revenue (1000) Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-1,459	1,030	-586	-857	-4,538	-244	-3	-186	443	389	-804	-33
20%	-402	-610	-849	-428	-686	130	-224	-73	273	538	-651	-559
30%	-1,068	566	-493	-1,255	-1,782	12	97	-224	-26	383	58	190
40%	253	608	849	-945	17	-173	-848	-172	-88	67	-54	366
50%	-322	316	341	-693	-1,436	-935	-262	-816	-218	423	-56	83
60%	405	253	797	-317	-566	-1,068	-255	180	-18	334	-340	436
70%	28	141	279	-15	-375	-868	55	66	-50	614	-47	-937
80%	-70	191	-1,070	-265	-246	441	-384	92	-556	126	616	-420
90%	-1,180	143	-703	-458	-1,683	-161	858	12	45	-142	-1,536	-435
Long Term												
Full Simulation Period[a]	-444	282	-258	-539	-732	-664	-256	-180	-36	125	-64	-167
Water Year Types[b,c]												
Wet (32%)	117	-4	206	-838	-1,442	-848	-394	-312	34	242	156	-151
Above Normal (15%)	-50	385	372	-342	-591	-1,644	-335	-171	-367	197	-339	261
Below Normal (17%)	542	1,628	-1,391	-630	-589	-754	142	183	133	267	-67	-234
Dry (22%)	-2,008	-699	-6	-473	-398	-94	-404	-175	227	460	-660	-280
Critical (15%)	-855	696	-951	-82	-3	-34	-120	-334	-449	-867	632	-378

a Based on the 82-year simulation period.

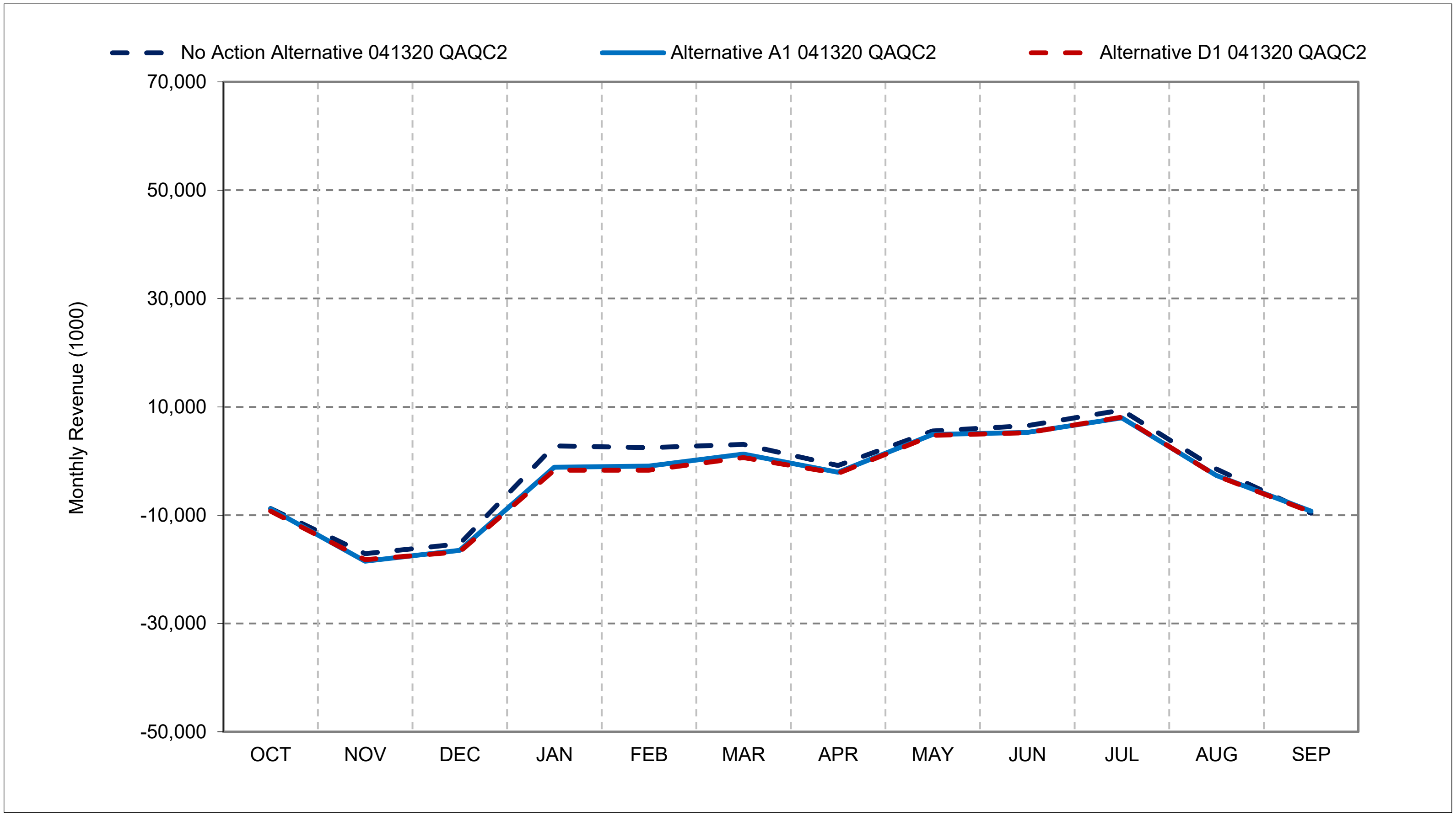
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

f Net revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-18-1. CVP, SWP, and NODOS Net Revenue, Long-Term Average Revenue



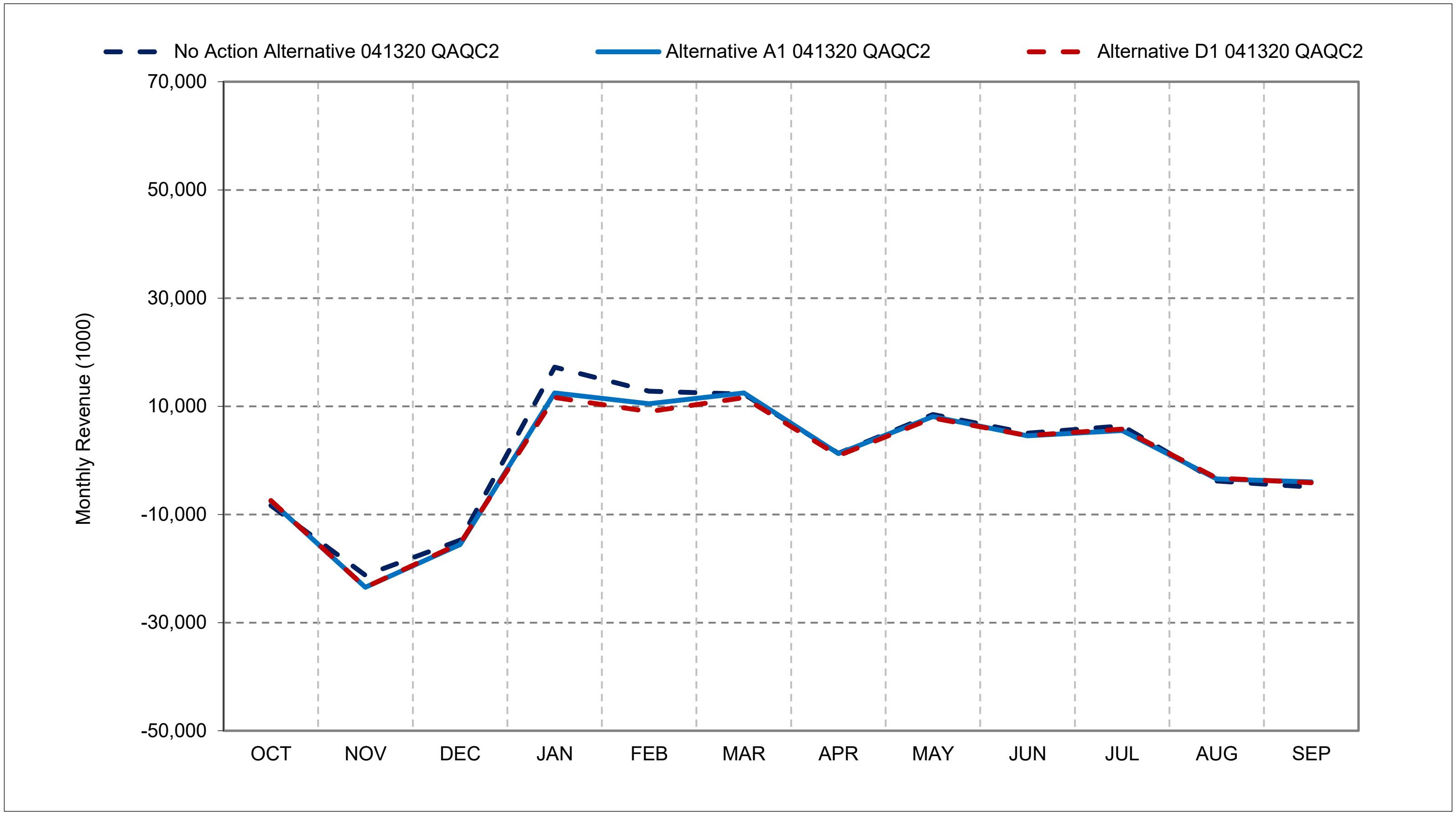
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

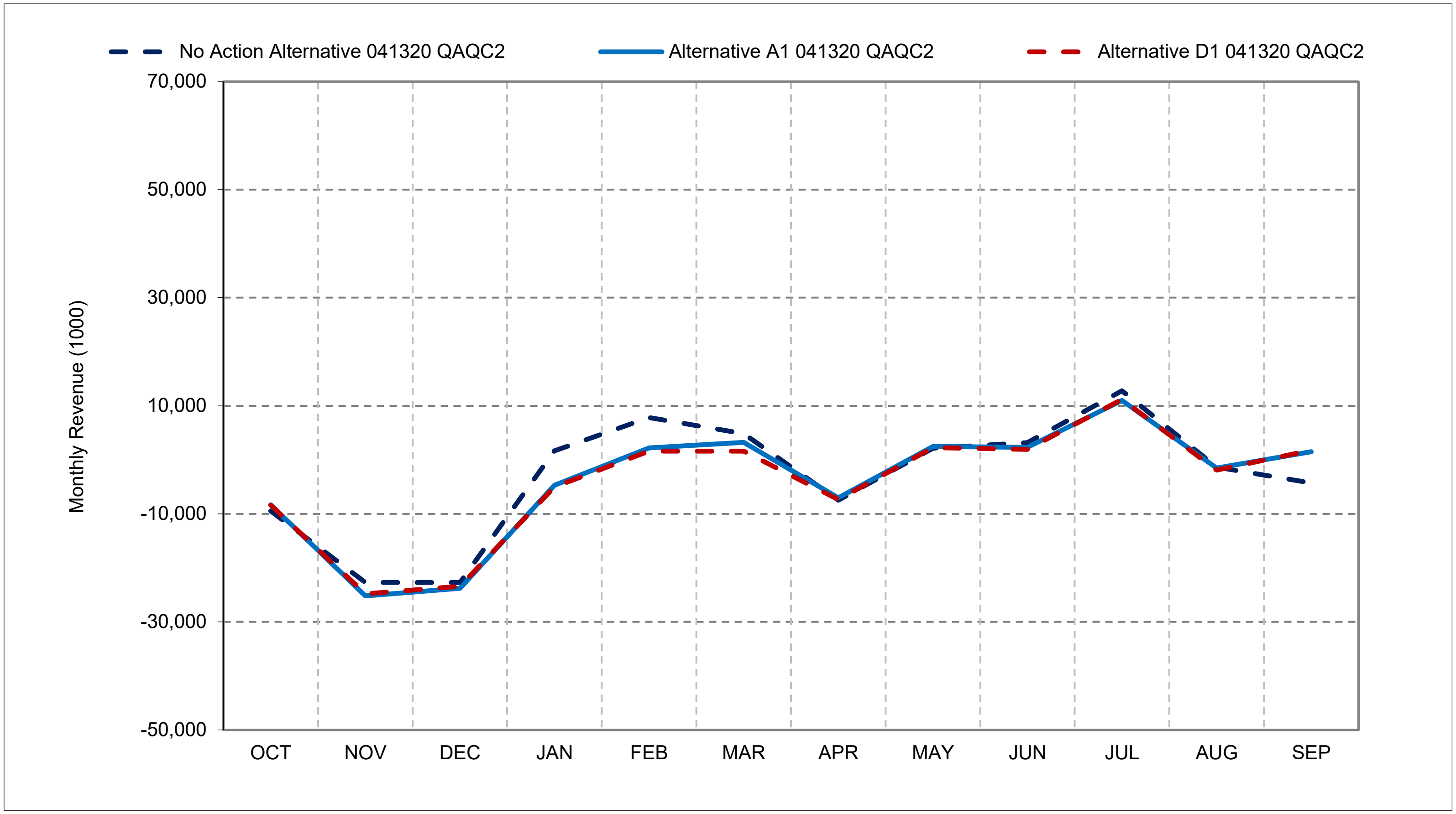
*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-18-2. CVP, SWP, and NODOS Net Revenue, Wet Year Average Revenue



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.
*All scenarios are simulated at DCR 2015 climate conditions.
*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-18-3. CVP, SWP, and NODOS Net Revenue, Above Normal Year Average Revenue



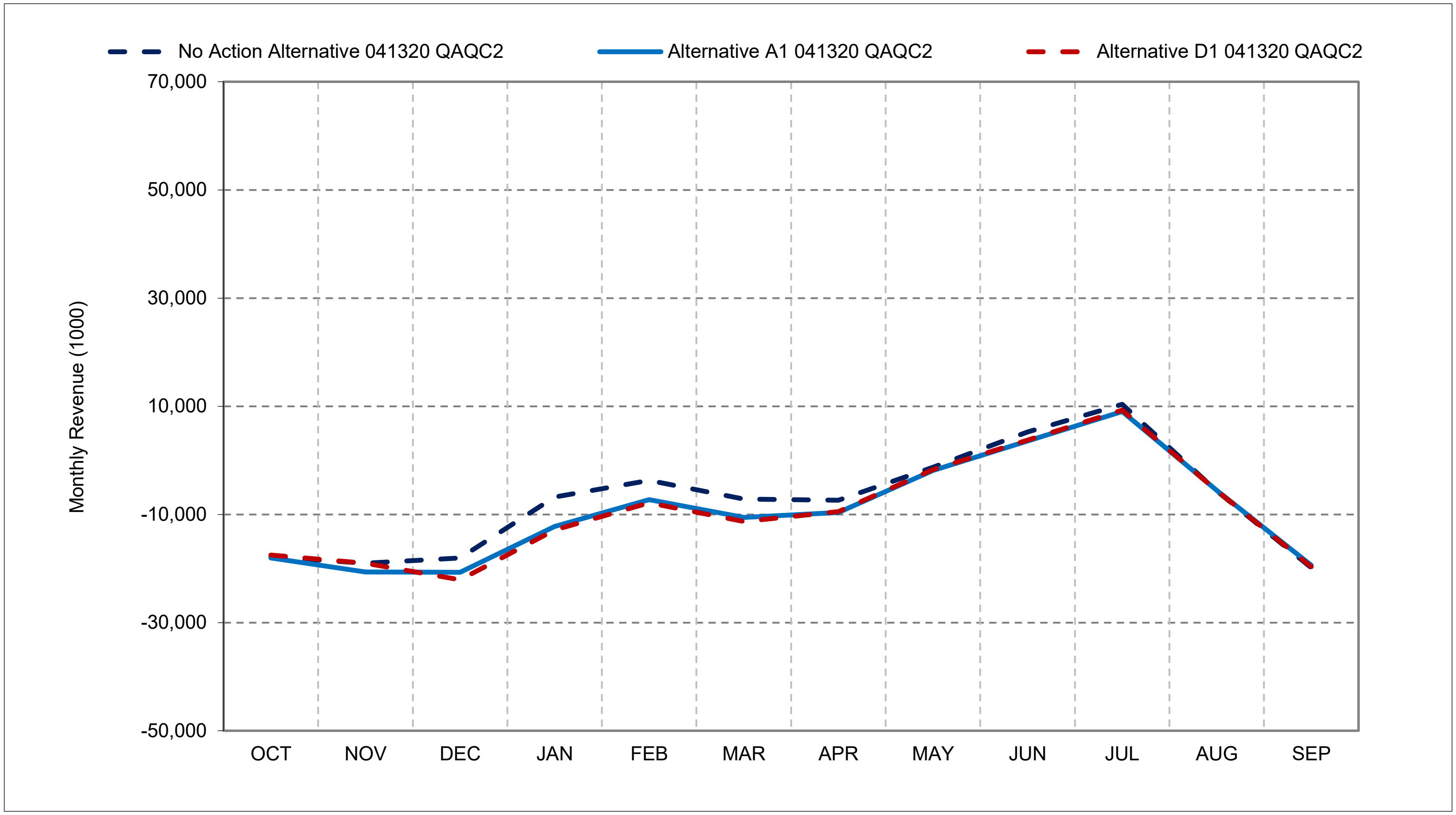
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

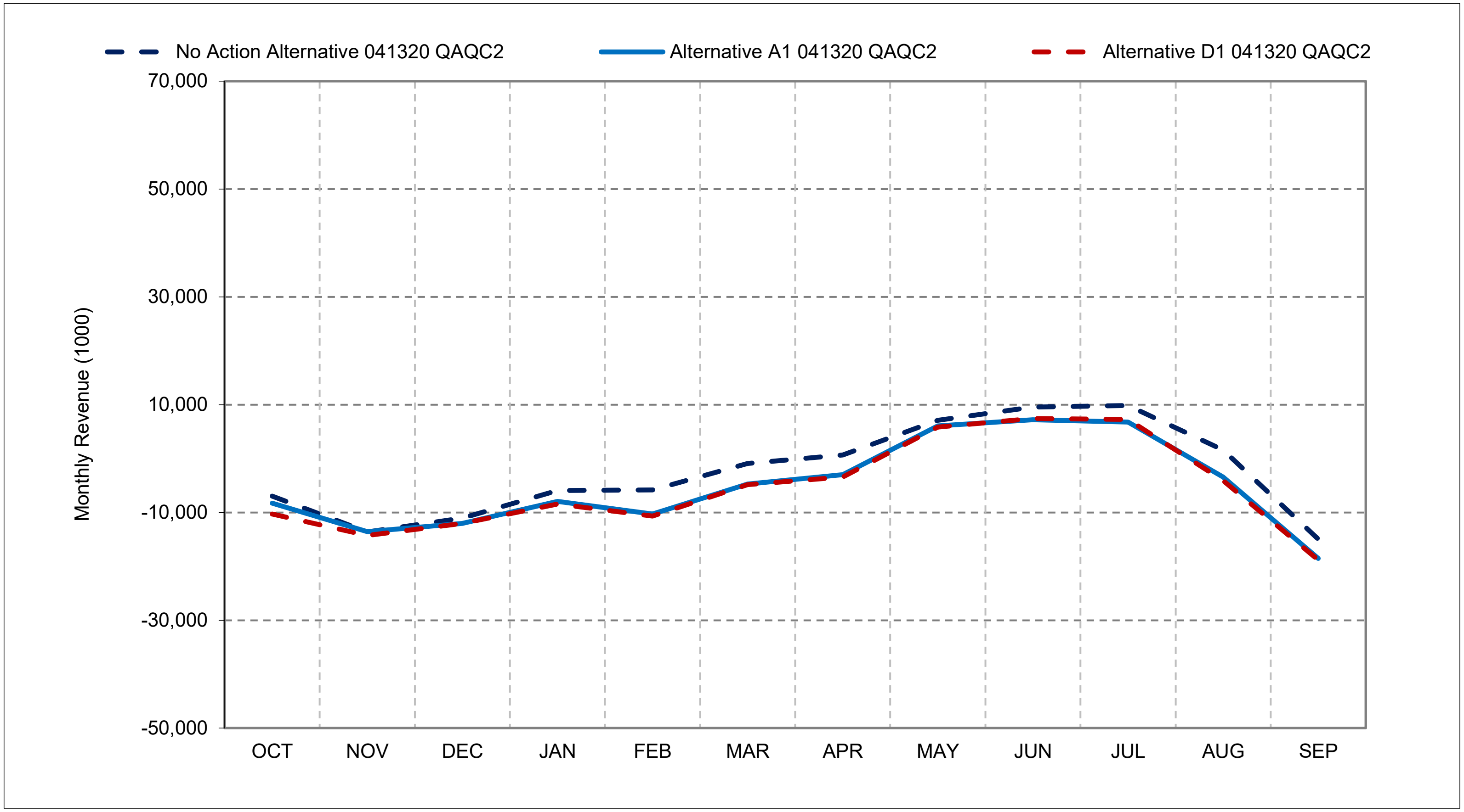
*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-18-4. CVP, SWP, and NODOS Net Revenue, Below Normal Year Average Revenue



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.
*All scenarios are simulated at DCR 2015 climate conditions.
*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-18-5. CVP, SWP, and NODOS Net Revenue, Dry Year Average Revenue



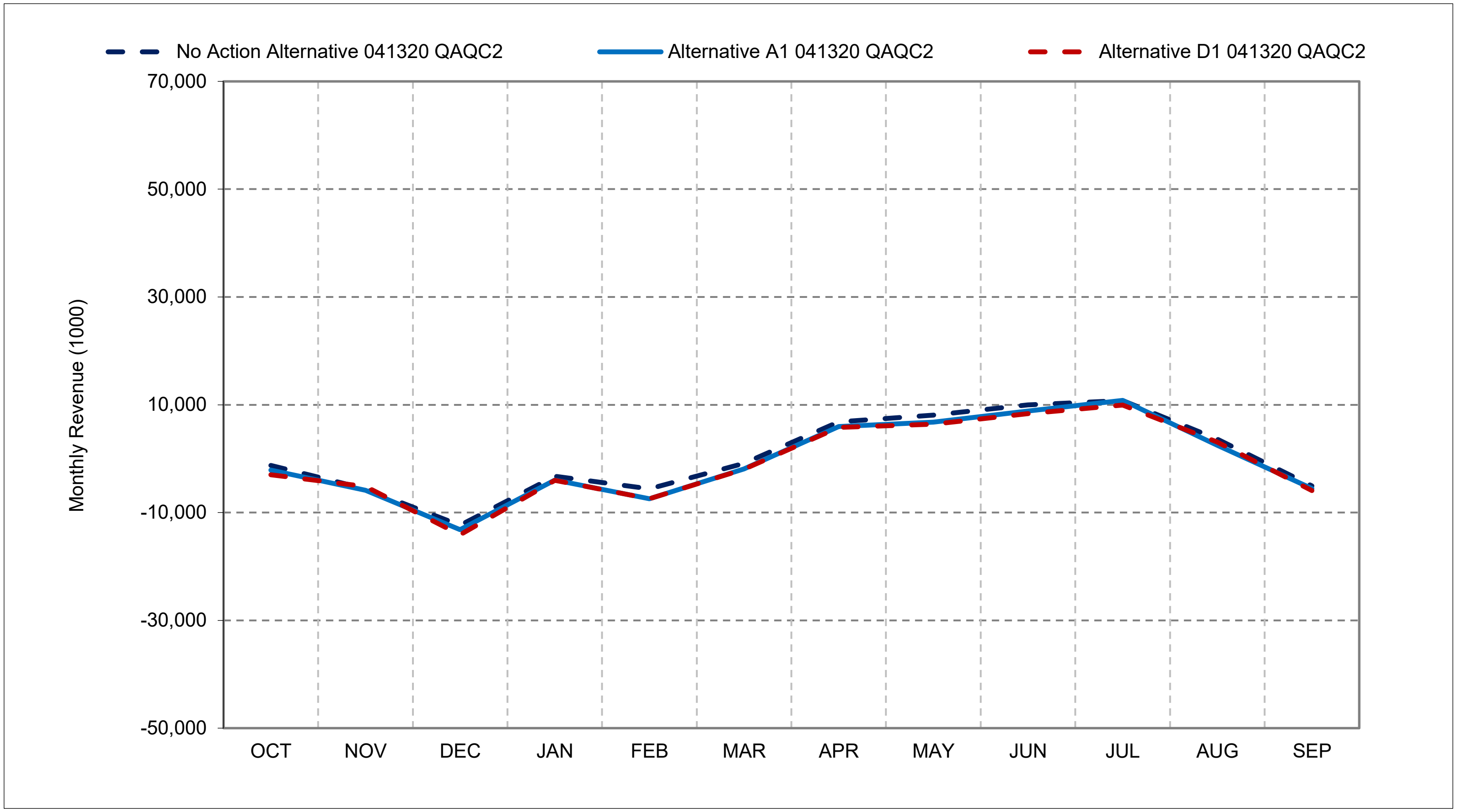
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-18-6. CVP, SWP, and NODOS Net Revenue, Critical Year Average Revenue



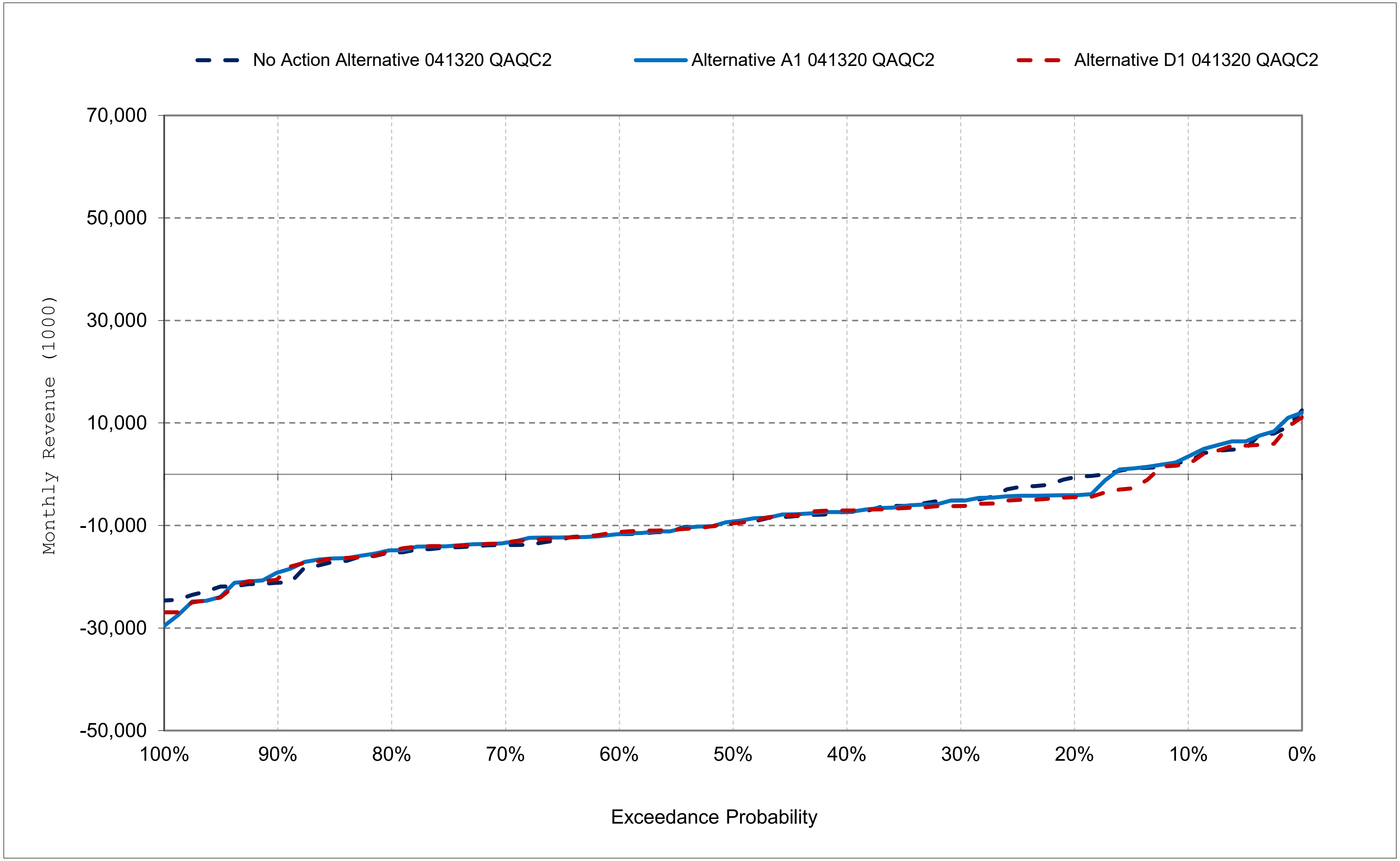
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with calendar year - year type sorting.

*All scenarios are simulated at DCR 2015 climate conditions.

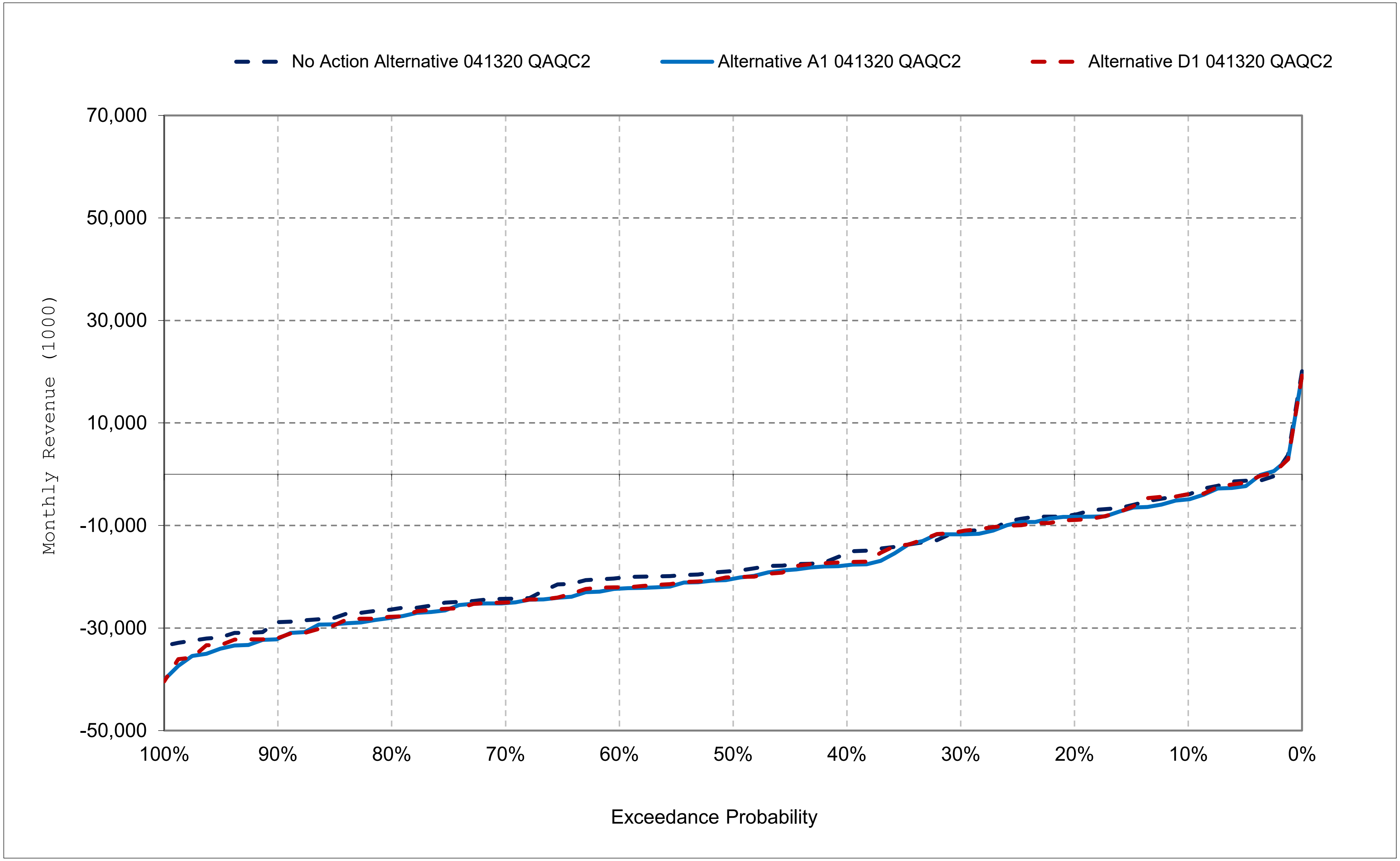
*Net revenue is based on 2030 pricing forecasts developed by DRW.

Figure G.2.1-18-7. CVP, SWP, and NODOS Net Revenue, October



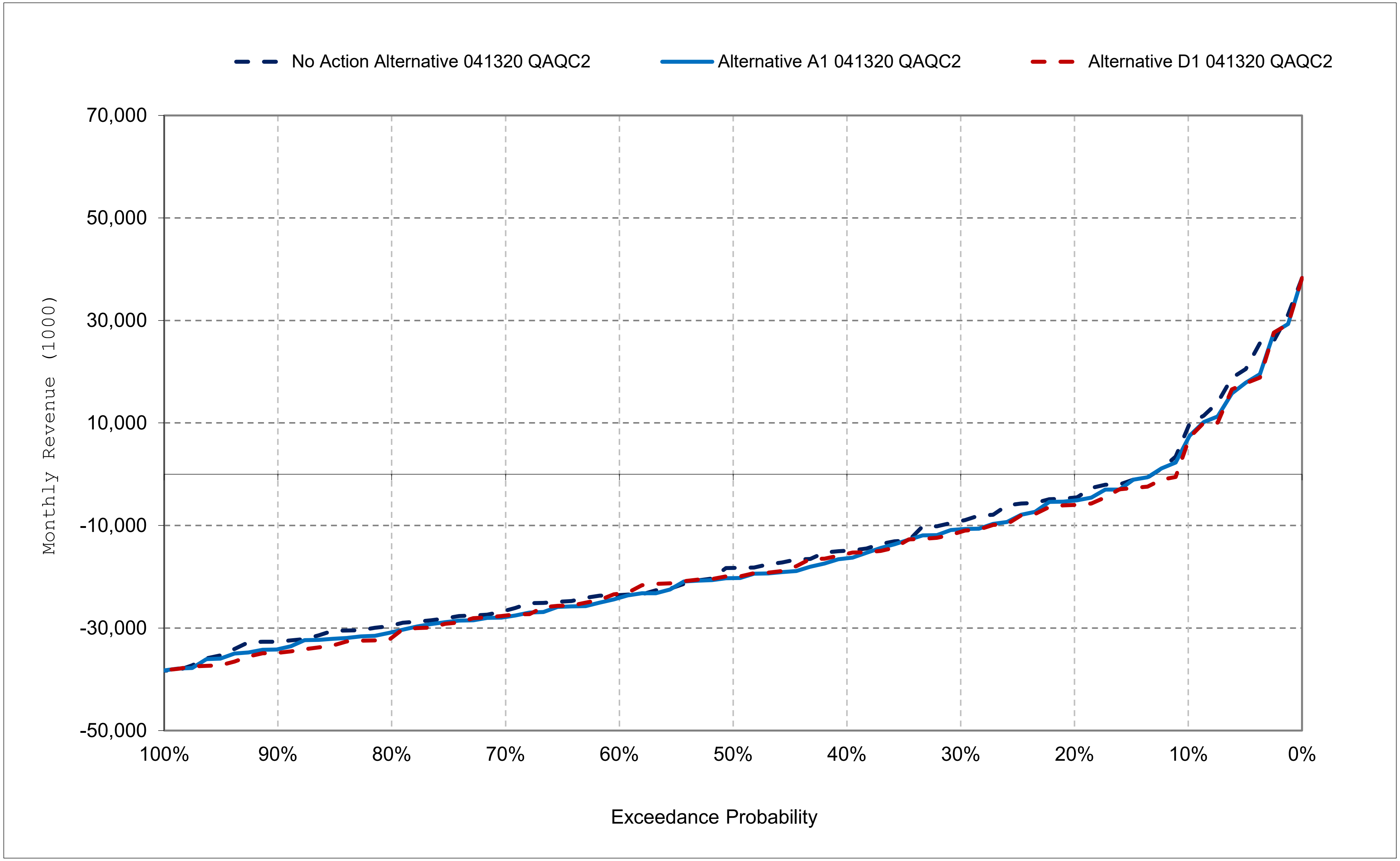
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-18-8. CVP, SWP, and NODOS Net Revenue, November



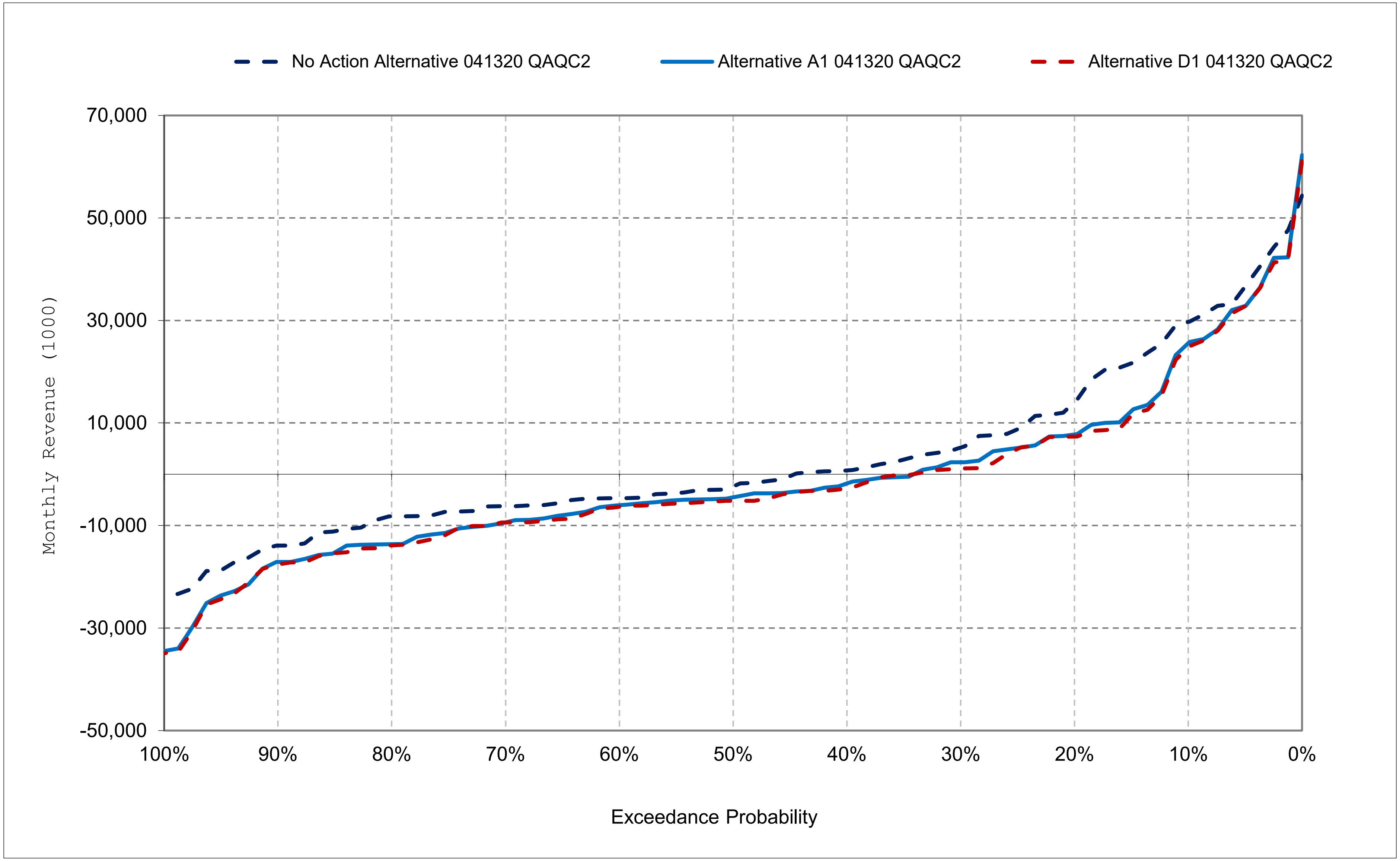
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-18-9. CVP, SWP, and NODOS Net Revenue, December



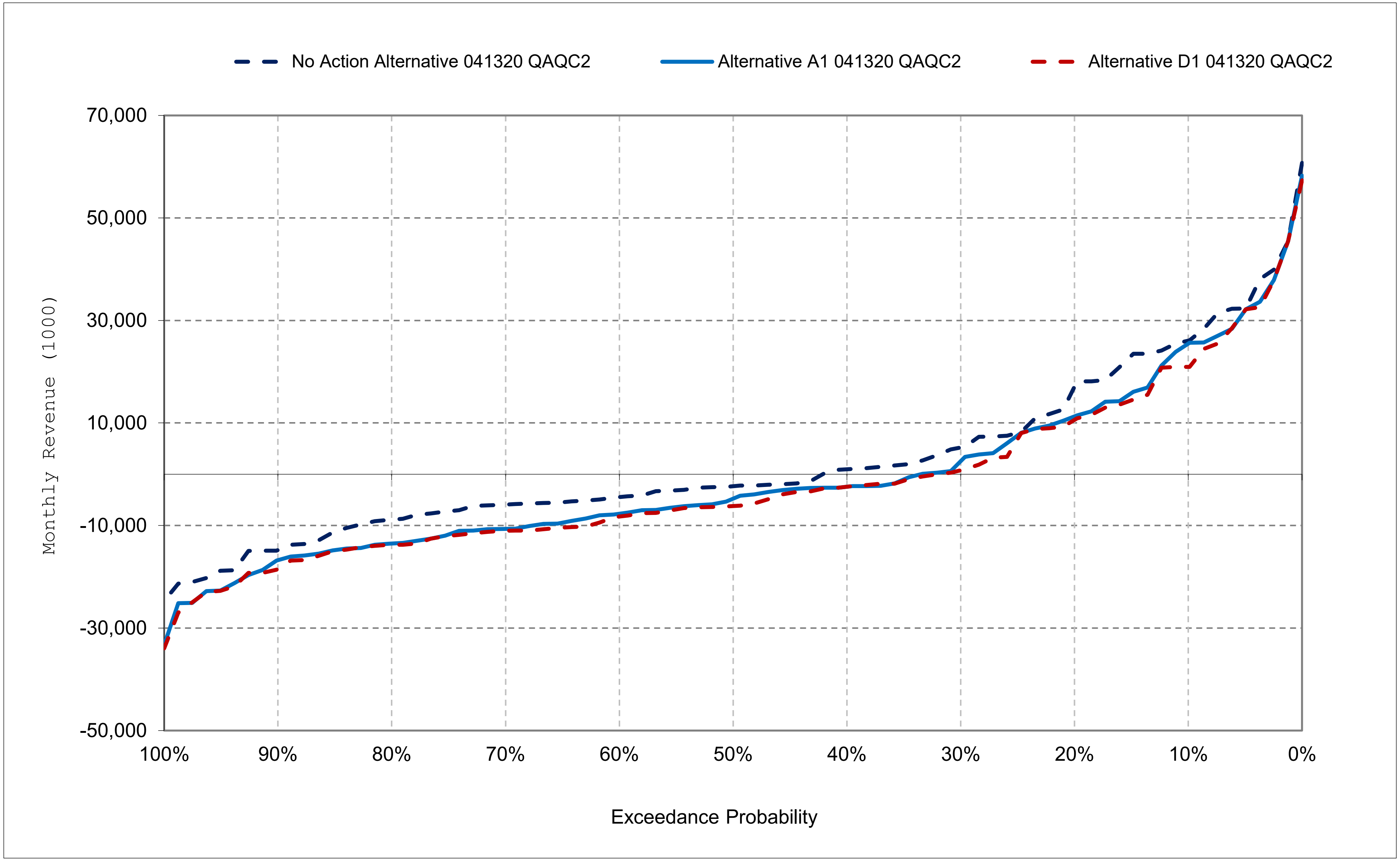
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-18-10. CVP, SWP, and NODOS Net Revenue, January



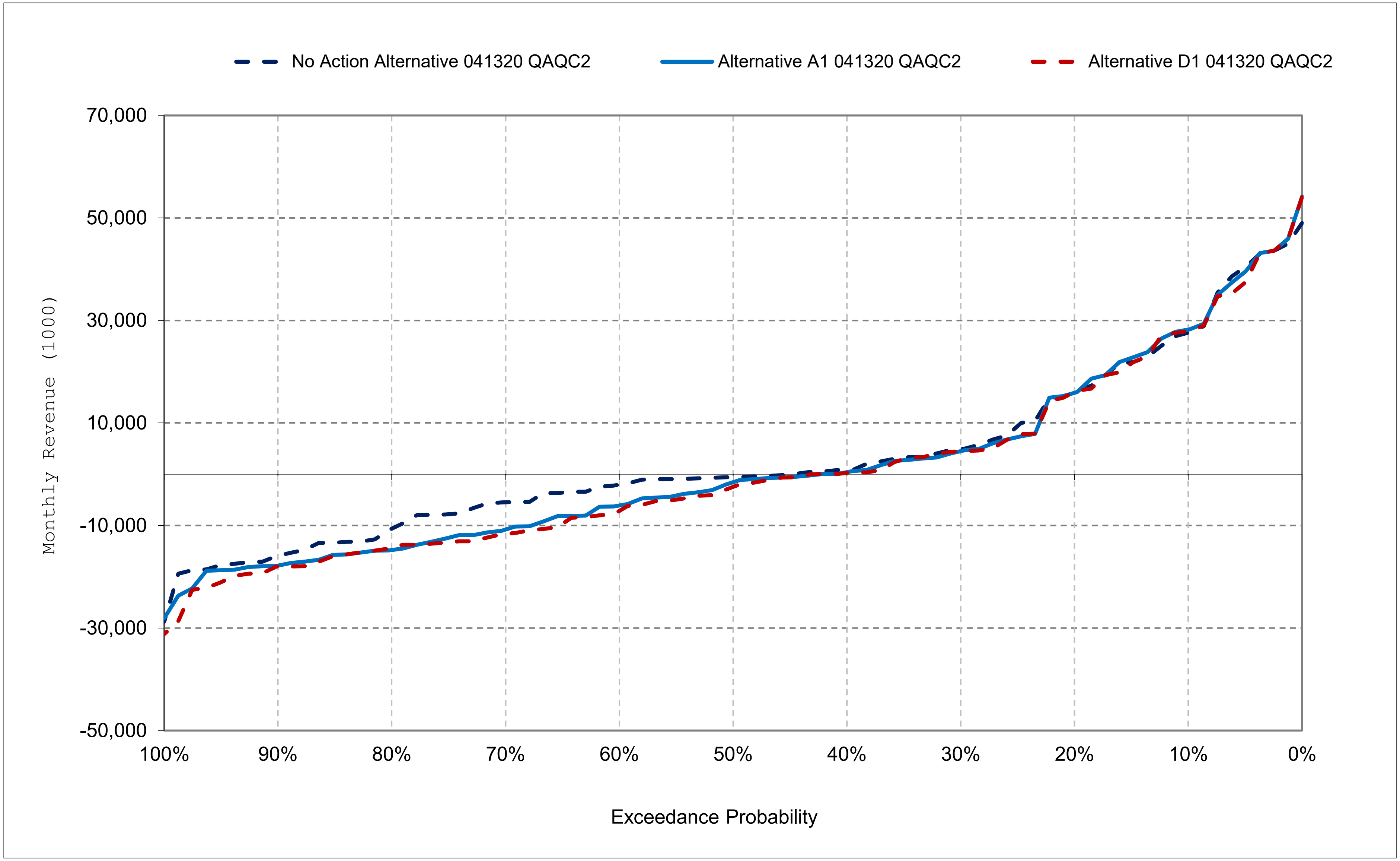
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-18-11. CVP, SWP, and NODOS Net Revenue, February



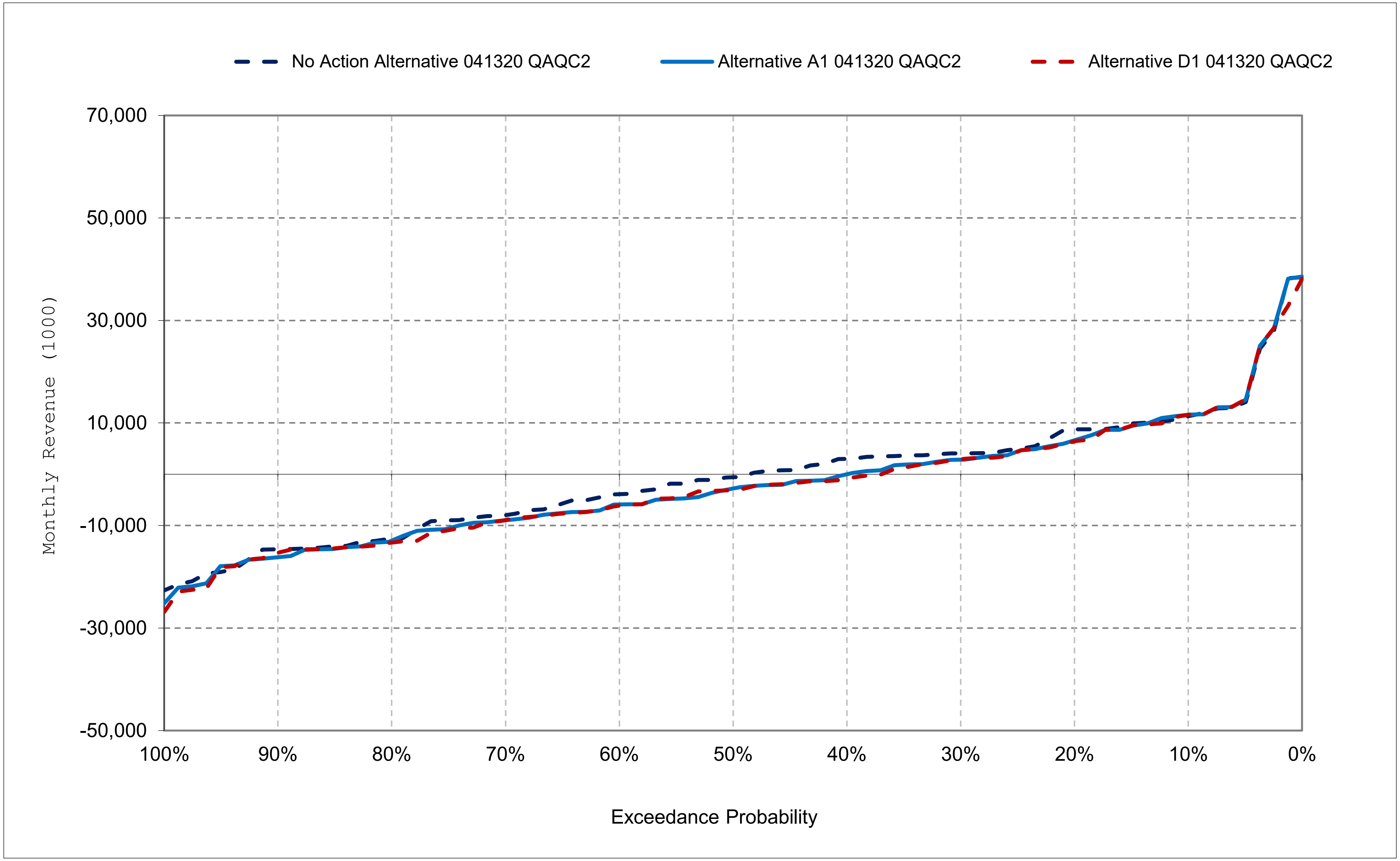
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-18-12. CVP, SWP, and NODOS Net Revenue, March



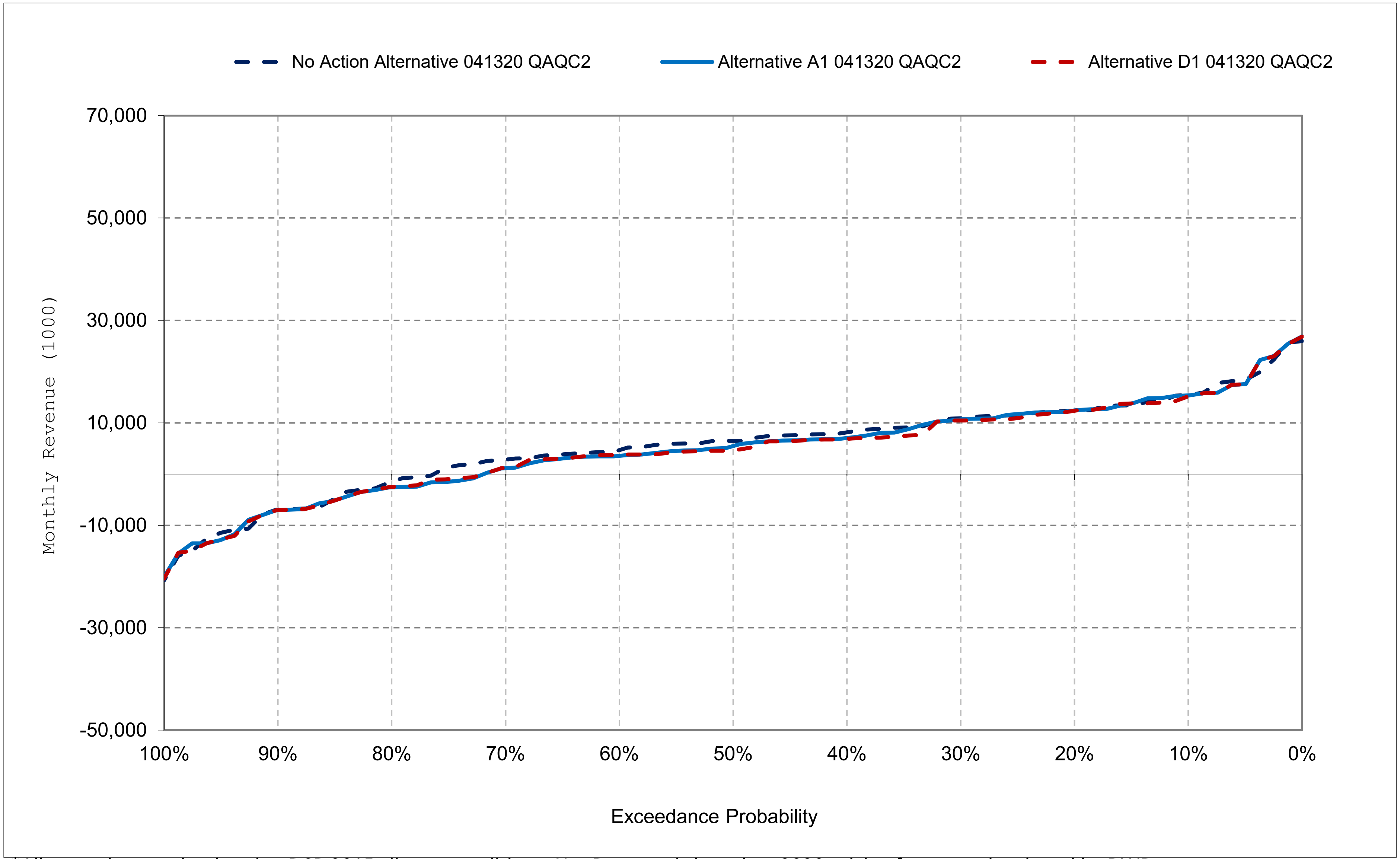
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-18-13. CVP, SWP, and NODOS Net Revenue, April



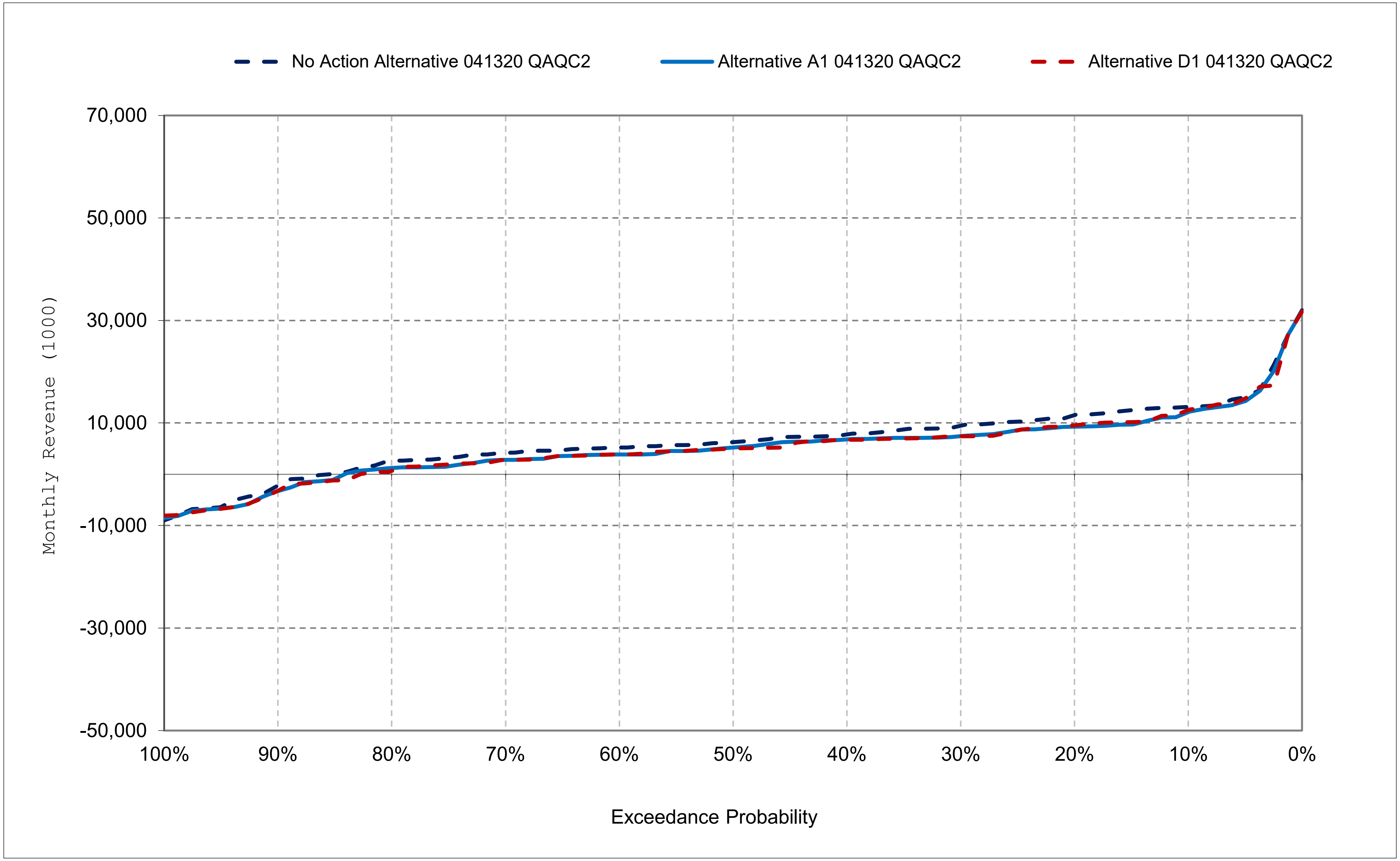
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-18-14. CVP, SWP, and NODOS Net Revenue, May



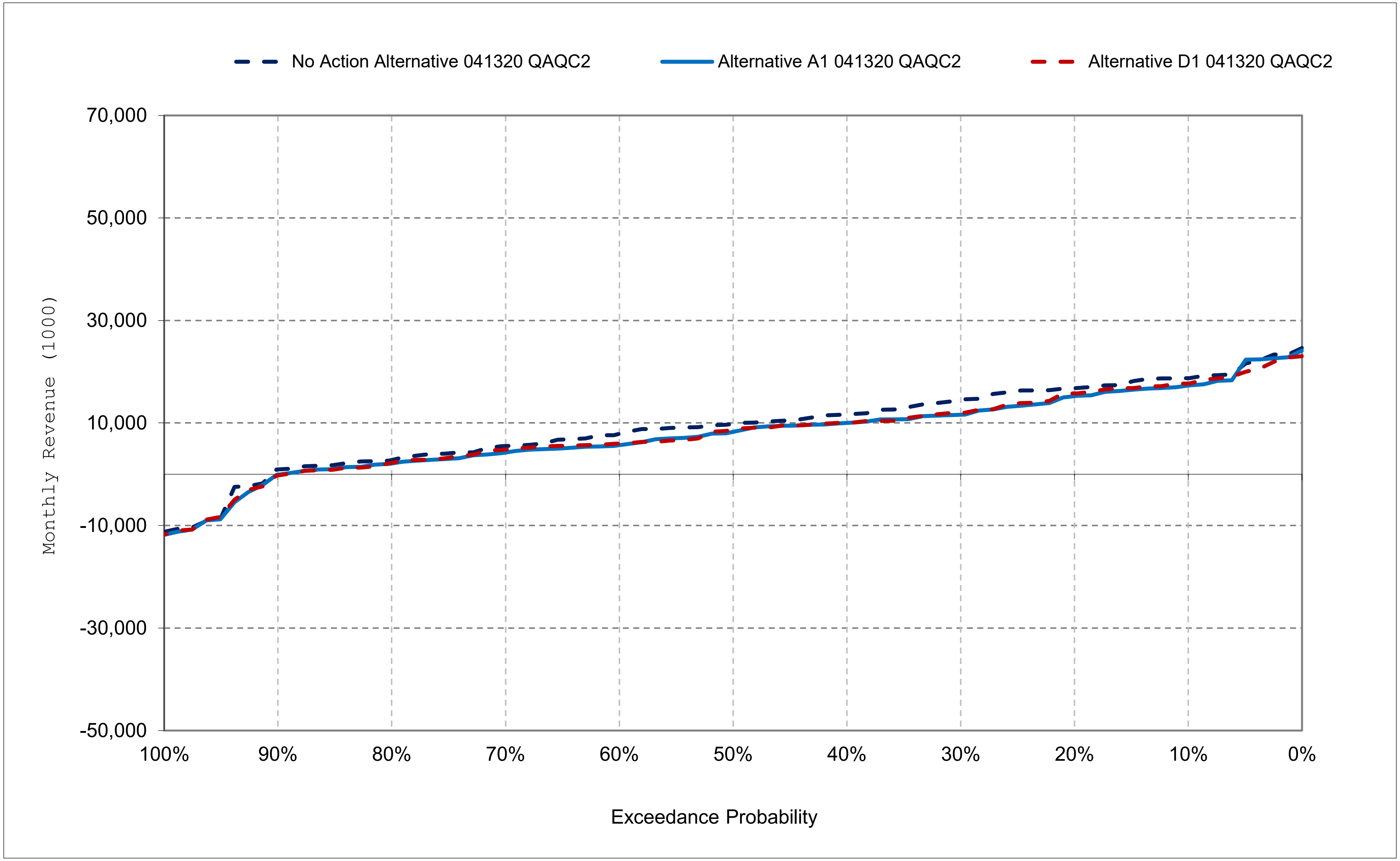
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-18-15. CVP, SWP, and NODOS Net Revenue, June



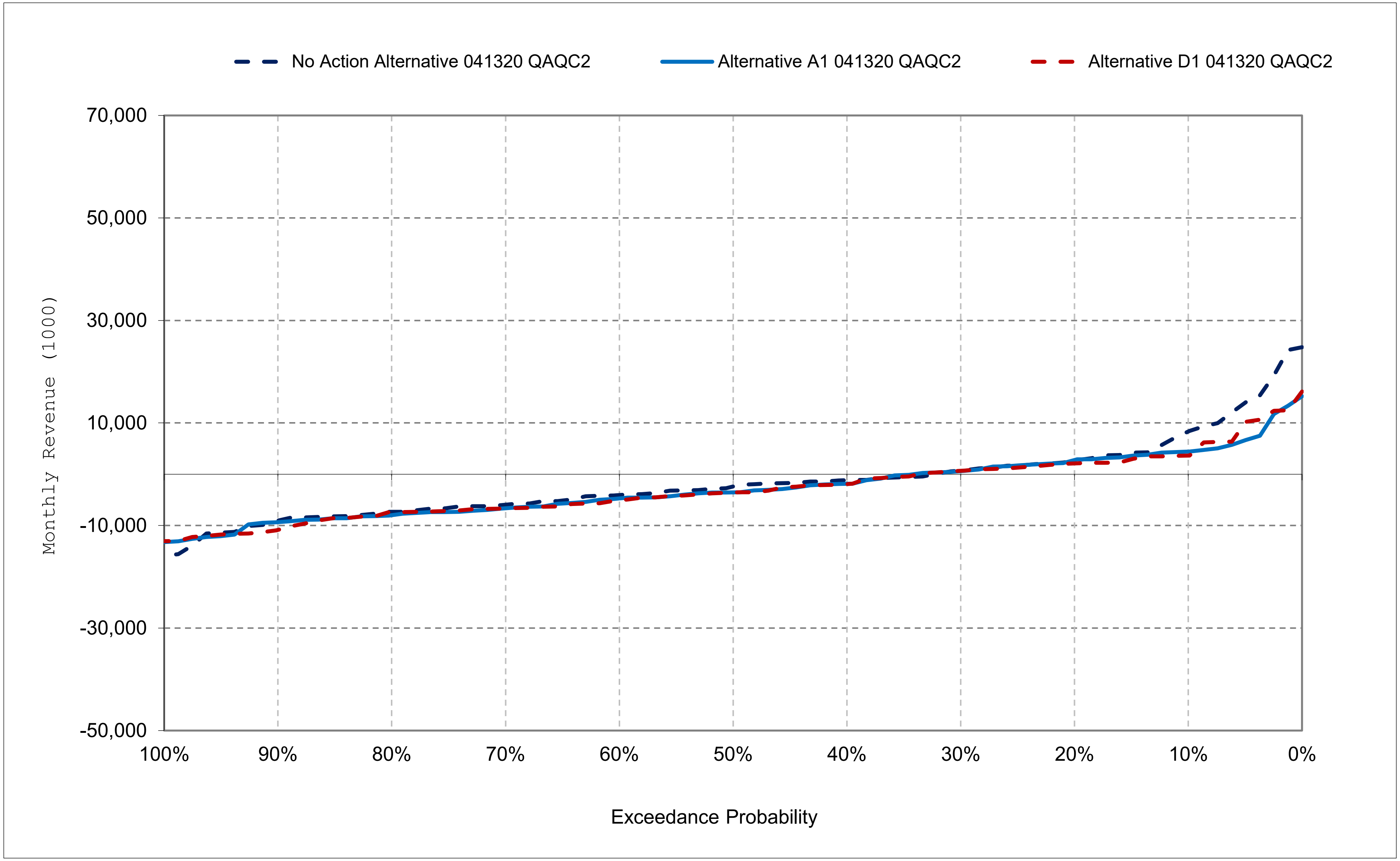
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-18-16. CVP, SWP, and NODOS Net Revenue, July



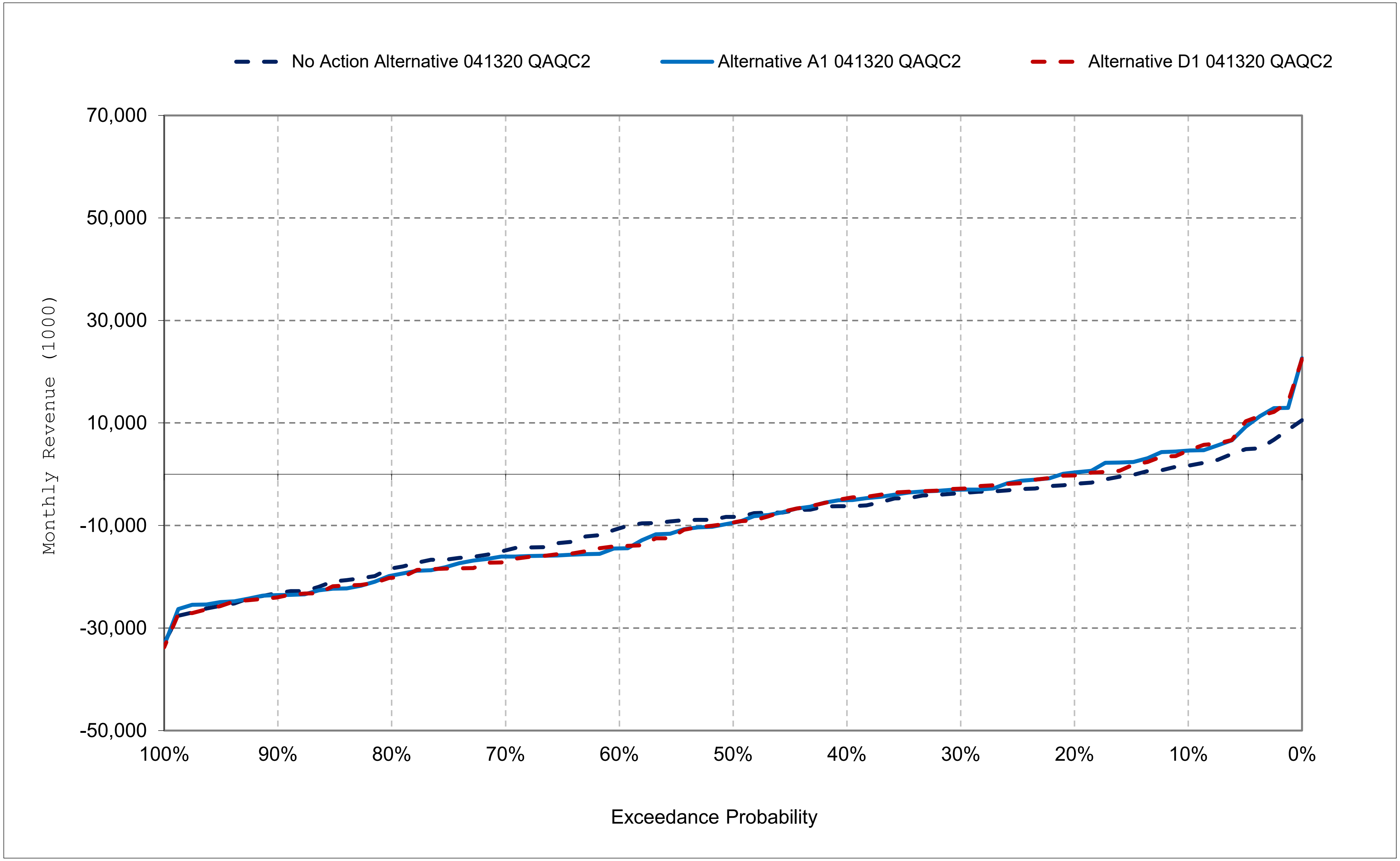
*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-18-17. CVP, SWP, and NODOS Net Revenue, August



*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

Figure G.2.1-18-18. CVP, SWP, and NODOS Net Revenue, September



*All scenarios are simulated at DCR 2015 climate conditions. Net Revenue is based on 2030 pricing forecasts developed by DWR.

This page intentionally left blank.

Attachment 2 – Annual Power Modeling Results (LTGen, SWP, and NODOS Power)

Attachment 2 – Annual Power Modeling Results (LTGen, SWP, and NODOS Power)

The following results of the LTGen and SWP Power models are included for energy use and energy generation at key project locations for the following alternatives:

- No Action Alternative 041320 QAQC2
- Alternative A1 041320 QAQC2
- Alternative D1 041320 QAQC2

Title	Model Parameter	Table Numbers	Figure Numbers	Page Numbers
CVP Total Generation	CVP_TOTAL	G.2.2-2-1 to G.2.2-2-3	G.2.2-2-1	G2-381 to G2-384
CVP Total Energy Use	CVP_TOTAL	G.2.2-3-1 to G.2.2-3-3	G.2.2-3-1	G2-385 to G2-388
CVP Net Generation	CVP_TOTAL	G.2.2-4-1 to G.2.2-4-3	G.2.2-4-1	G2-389 to G2-392
CVP Net Revenue	CVP_TOTAL	G.2.2-5-1 to G.2.2-5-3	G.2.2-5-1	G2-393 to G2-396
SWP Total Generation	SWP_TOTAL	G.2.2-6-1 to G.2.2-6-3	G.2.2-6-1	G2-397 to G2-400
SWP Total Energy Use	SWP_TOTAL	G.2.2-7-1 to G.2.2-7-3	G.2.2-7-1	G2-401 to G2-404
SWP Net Generation	SWP_TOTAL	G.2.2-8-1 to G.2.2-9-3	G.2.2-8-1	G2-405 to G2-408
SWP Net Revenue	SWP_TOTAL	G.2.2-9-1 to G.2.2-9-3	G.2.2-9-1	G2-409 to G2-412
CVP and SWP Net Generation	CVP_SWP_TOTAL	G.2.2-10-1 to G.2.2-10-3	G.2.2-10-1	G2-413 to G2-416
NODOS Total Generation	NODOS_TOTAL	G.2.2-11-1 to G.2.2-11-3	G.2.2-11-1	G2-417 to G2-420
NODOS Total Energy Use	NODOS_TOTAL	G.2.2-12-1 to G.2.2-12-3	G.2.2-12-1	G2-421 to G2-424
NODOS Net Generation	NODOS_TOTAL	G.2.2-13-1 to G.2.2-13-3	G.2.2-13-1	G2-425 to G2-428
NODOS Net Revenue	NODOS_TOTAL	G.2.2-14-1 to G.2.2-14-3	G.2.2-14-1	G2-429 to G2-432
CVP, SWP, and NODOS Net Generation	CVP_SWP_NODOS_TOTAL	G.2.2-15-1 to G.2.2-15-3	G.2.2-15-1	G2-433 to G2-436
CVP, SWP, and NODOS Net Revenue	CVP_SWP_NODOS_TOTAL	G.2.2-16-1 to G.2.2-16-3	G.2.2-16-1	G2-437 to G2-440

Report formats

- Exceedance tables comparing power modeling results of two scenarios
- Annual exceedance charts including all scenarios

Table G.2.2-2-1. Annual CVP Total Generation

No Action Alternative 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance	
10%	6,311.38
20%	5,847.06
30%	5,253.12
40%	4,991.71
50%	4,495.30
60%	3,934.72
70%	3,696.70
80%	3,368.00
90%	2,988.72
Long Term	
Full Simulation Period[a]	4,617.89
Water Year Types[b,c]	
Wet (32%)	6,112.43
Above Normal (15%)	5,028.26
Below Normal (17%)	4,296.23
Dry (22%)	3,607.34
Critical (15%)	2,914.23

Alternative A1 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance	
10%	6,278.11
20%	5,834.40
30%	5,281.35
40%	4,932.62
50%	4,427.43
60%	3,974.60
70%	3,765.13
80%	3,435.78
90%	2,973.34
Long Term	
Full Simulation Period[a]	4,623.63
Water Year Types[b,c]	
Wet (32%)	6,128.85
Above Normal (15%)	5,015.38
Below Normal (17%)	4,271.47
Dry (22%)	3,612.17
Critical (15%)	2,946.52

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance[a]	
10%	-33.27
20%	-12.66
30%	28.23
40%	-59.09
50%	-67.87
60%	39.88
70%	68.43
80%	67.78
90%	-15.38
Long Term	
Full Simulation Period[a]	5.75
Water Year Types[b,c]	
Wet (32%)	16.42
Above Normal (15%)	-12.88
Below Normal (17%)	-24.76
Dry (22%)	4.83
Critical (15%)	32.30

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-2-2. Annual CVP Total Generation

No Action Alternative 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance	
10%	6,311.38
20%	5,847.06
30%	5,253.12
40%	4,991.71
50%	4,495.30
60%	3,934.72
70%	3,696.70
80%	3,368.00
90%	2,988.72
Long Term	
Full Simulation Period[a]	4,617.89
Water Year Types[b,c]	
Wet (32%)	6,112.43
Above Normal (15%)	5,028.26
Below Normal (17%)	4,296.23
Dry (22%)	3,607.34
Critical (15%)	2,914.23

Alternative D1 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance	
10%	6,276.00
20%	5,831.87
30%	5,311.04
40%	4,937.28
50%	4,414.49
60%	3,972.28
70%	3,750.57
80%	3,457.44
90%	2,980.84
Long Term	
Full Simulation Period[a]	4,627.18
Water Year Types[b,c]	
Wet (32%)	6,141.42
Above Normal (15%)	5,016.99
Below Normal (17%)	4,247.08
Dry (22%)	3,618.97
Critical (15%)	2,952.80

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance[a]	
10%	-35.39
20%	-15.19
30%	57.93
40%	-54.43
50%	-80.80
60%	37.56
70%	53.86
80%	89.44
90%	-7.88
Long Term	
Full Simulation Period[a]	9.29
Water Year Types[b,c]	
Wet (32%)	28.99
Above Normal (15%)	-11.27
Below Normal (17%)	-49.15
Dry (22%)	11.63
Critical (15%)	38.57

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-2-3. Annual CVP Total Generation

Alternative A1 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance	
10%	6,278.11
20%	5,834.40
30%	5,281.35
40%	4,932.62
50%	4,427.43
60%	3,974.60
70%	3,765.13
80%	3,435.78
90%	2,973.34
Long Term	
Full Simulation Period[a]	4,623.63
Water Year Types[b,c]	
Wet (32%)	6,128.85
Above Normal (15%)	5,015.38
Below Normal (17%)	4,271.47
Dry (22%)	3,612.17
Critical (15%)	2,946.52

Alternative D1 041320 QAQC2

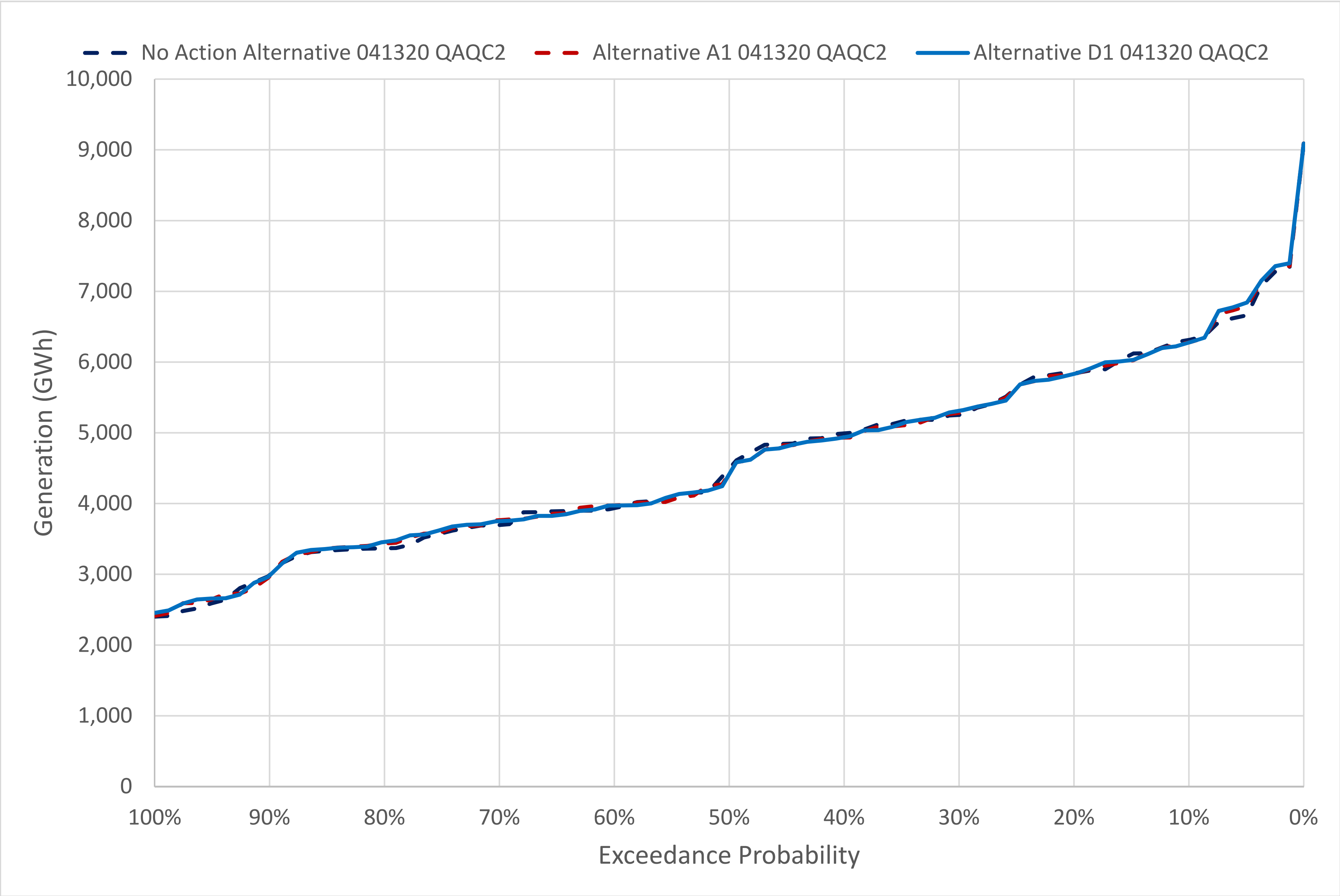
Statistic	Generation (GWh)
Probability of Exceedance	
10%	6,276.00
20%	5,831.87
30%	5,311.04
40%	4,937.28
50%	4,414.49
60%	3,972.28
70%	3,750.57
80%	3,457.44
90%	2,980.84
Long Term	
Full Simulation Period[a]	4,627.18
Water Year Types[b,c]	
Wet (32%)	6,141.42
Above Normal (15%)	5,016.99
Below Normal (17%)	4,247.08
Dry (22%)	3,618.97
Critical (15%)	2,952.80

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance[a]	
10%	-2.11
20%	-2.53
30%	29.69
40%	4.66
50%	-12.94
60%	-2.32
70%	-14.56
80%	21.66
90%	7.50
Long Term	
Full Simulation Period[a]	3.55
Water Year Types[b,c]	
Wet (32%)	12.57
Above Normal (15%)	1.61
Below Normal (17%)	-24.39
Dry (22%)	6.80
Critical (15%)	6.27

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.2-2-1. October-September CVP Total Generation



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-3-1. Annual CVP Total Energy Use

No Action Alternative 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance	
10%	1,626.69
20%	1,558.52
30%	1,480.12
40%	1,423.55
50%	1,350.43
60%	1,285.62
70%	1,215.46
80%	1,139.77
90%	994.96
Long Term	
Full Simulation Period[a]	1,336.13
Water Year Types[b,c]	
Wet (32%)	1,546.93
Above Normal (15%)	1,396.26
Below Normal (17%)	1,354.28
Dry (22%)	1,212.91
Critical (15%)	1,002.97

Alternative A1 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance	
10%	1,635.23
20%	1,576.18
30%	1,535.93
40%	1,443.08
50%	1,397.09
60%	1,325.48
70%	1,268.31
80%	1,212.55
90%	1,051.32
Long Term	
Full Simulation Period[a]	1,375.69
Water Year Types[b,c]	
Wet (32%)	1,569.33
Above Normal (15%)	1,438.61
Below Normal (17%)	1,393.26
Dry (22%)	1,263.43
Critical (15%)	1,058.94

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance[a]	
10%	8.54
20%	17.66
30%	55.81
40%	19.53
50%	46.66
60%	39.86
70%	52.85
80%	72.78
90%	56.35
Long Term	
Full Simulation Period[a]	39.56
Water Year Types[b,c]	
Wet (32%)	22.40
Above Normal (15%)	42.35
Below Normal (17%)	38.99
Dry (22%)	50.53
Critical (15%)	55.97

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-3-2. Annual CVP Total Energy Use

No Action Alternative 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance	
10%	1,626.69
20%	1,558.52
30%	1,480.12
40%	1,423.55
50%	1,350.43
60%	1,285.62
70%	1,215.46
80%	1,139.77
90%	994.96
Long Term	
Full Simulation Period[a]	1,336.13
Water Year Types[b,c]	
Wet (32%)	1,546.93
Above Normal (15%)	1,396.26
Below Normal (17%)	1,354.28
Dry (22%)	1,212.91
Critical (15%)	1,002.97

Alternative D1 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance	
10%	1,636.76
20%	1,579.38
30%	1,541.61
40%	1,447.60
50%	1,397.32
60%	1,315.08
70%	1,286.24
80%	1,166.52
90%	1,049.63
Long Term	
Full Simulation Period[a]	1,374.83
Water Year Types[b,c]	
Wet (32%)	1,569.18
Above Normal (15%)	1,434.61
Below Normal (17%)	1,378.83
Dry (22%)	1,270.56
Critical (15%)	1,059.06

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance[a]	
10%	10.07
20%	20.86
30%	61.49
40%	24.05
50%	46.89
60%	29.46
70%	70.78
80%	26.75
90%	54.67
Long Term	
Full Simulation Period[a]	38.70
Water Year Types[b,c]	
Wet (32%)	22.25
Above Normal (15%)	38.35
Below Normal (17%)	24.56
Dry (22%)	57.66
Critical (15%)	56.09

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-3-3. Annual CVP Total Energy Use

Alternative A1 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance	
10%	1,635.23
20%	1,576.18
30%	1,535.93
40%	1,443.08
50%	1,397.09
60%	1,325.48
70%	1,268.31
80%	1,212.55
90%	1,051.32
Long Term	
Full Simulation Period[a]	1,375.69
Water Year Types[b,c]	
Wet (32%)	1,569.33
Above Normal (15%)	1,438.61
Below Normal (17%)	1,393.26
Dry (22%)	1,263.43
Critical (15%)	1,058.94

Alternative D1 041320 QAQC2

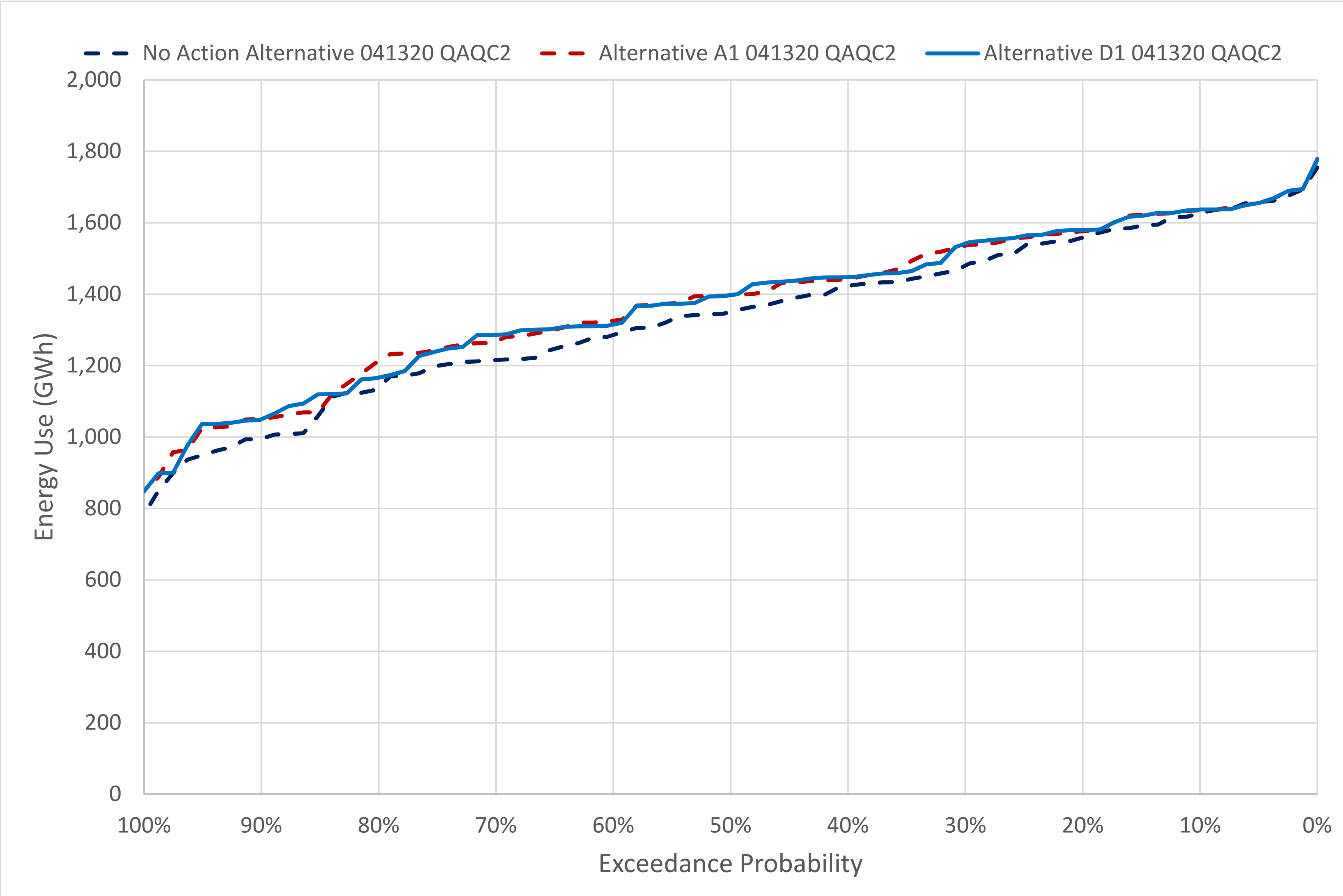
Statistic	Energy Use (GWh)
Probability of Exceedance	
10%	1,636.76
20%	1,579.38
30%	1,541.61
40%	1,447.60
50%	1,397.32
60%	1,315.08
70%	1,286.24
80%	1,166.52
90%	1,049.63
Long Term	
Full Simulation Period[a]	1,374.83
Water Year Types[b,c]	
Wet (32%)	1,569.18
Above Normal (15%)	1,434.61
Below Normal (17%)	1,378.83
Dry (22%)	1,270.56
Critical (15%)	1,059.06

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance[a]	
10%	1.53
20%	3.20
30%	5.68
40%	4.52
50%	0.23
60%	-10.40
70%	17.93
80%	-46.03
90%	-1.68
Long Term	
Full Simulation Period[a]	-0.86
Water Year Types[b,c]	
Wet (32%)	-0.15
Above Normal (15%)	-4.01
Below Normal (17%)	-14.43
Dry (22%)	7.13
Critical (15%)	0.13

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.2-3-1. October-September CVP Total Energy Use



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-4-1. Annual CVP Net Generation

No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	4,931.05
20%	4,273.63
30%	3,854.26
40%	3,591.06
50%	3,048.76
60%	2,631.26
70%	2,454.87
80%	2,266.78
90%	1,967.01
Long Term	
Full Simulation Period[a]	3,281.76
Water Year Types[b,c]	
Wet (32%)	4,565.50
Above Normal (15%)	3,632.01
Below Normal (17%)	2,941.96
Dry (22%)	2,394.44
Critical (15%)	1,911.26

Alternative A1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	4,906.48
20%	4,260.79
30%	3,848.26
40%	3,521.12
50%	3,030.62
60%	2,568.51
70%	2,474.46
80%	2,270.38
90%	1,878.46
Long Term	
Full Simulation Period[a]	3,247.95
Water Year Types[b,c]	
Wet (32%)	4,559.52
Above Normal (15%)	3,576.77
Below Normal (17%)	2,878.21
Dry (22%)	2,348.74
Critical (15%)	1,887.59

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance[a]	
10%	-24.56
20%	-12.84
30%	-6.00
40%	-69.94
50%	-18.14
60%	-62.75
70%	19.59
80%	3.60
90%	-88.55
Long Term	
Full Simulation Period[a]	-33.81
Water Year Types[b,c]	
Wet (32%)	-5.97
Above Normal (15%)	-55.24
Below Normal (17%)	-63.75
Dry (22%)	-45.70
Critical (15%)	-23.67

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-4-2. Annual CVP Net Generation

No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	4,931.05
20%	4,273.63
30%	3,854.26
40%	3,591.06
50%	3,048.76
60%	2,631.26
70%	2,454.87
80%	2,266.78
90%	1,967.01
Long Term	
Full Simulation Period[a]	3,281.76
Water Year Types[b,c]	
Wet (32%)	4,565.50
Above Normal (15%)	3,632.01
Below Normal (17%)	2,941.96
Dry (22%)	2,394.44
Critical (15%)	1,911.26

Alternative D1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	4,887.74
20%	4,263.11
30%	3,840.33
40%	3,512.80
50%	3,055.15
60%	2,570.45
70%	2,468.51
80%	2,262.73
90%	1,872.56
Long Term	
Full Simulation Period[a]	3,252.35
Water Year Types[b,c]	
Wet (32%)	4,572.24
Above Normal (15%)	3,582.38
Below Normal (17%)	2,868.25
Dry (22%)	2,348.41
Critical (15%)	1,893.73

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance[a]	
10%	-43.31
20%	-10.52
30%	-13.93
40%	-78.26
50%	6.39
60%	-60.81
70%	13.64
80%	-4.05
90%	-94.45
Long Term	
Full Simulation Period[a]	-29.41
Water Year Types[b,c]	
Wet (32%)	6.74
Above Normal (15%)	-49.62
Below Normal (17%)	-73.71
Dry (22%)	-46.03
Critical (15%)	-17.52

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-4-3. Annual CVP Net Generation

Alternative A1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	4,906.48
20%	4,260.79
30%	3,848.26
40%	3,521.12
50%	3,030.62
60%	2,568.51
70%	2,474.46
80%	2,270.38
90%	1,878.46
Long Term	
Full Simulation Period[a]	3,247.95
Water Year Types[b,c]	
Wet (32%)	4,559.52
Above Normal (15%)	3,576.77
Below Normal (17%)	2,878.21
Dry (22%)	2,348.74
Critical (15%)	1,887.59

Alternative D1 041320 QAQC2

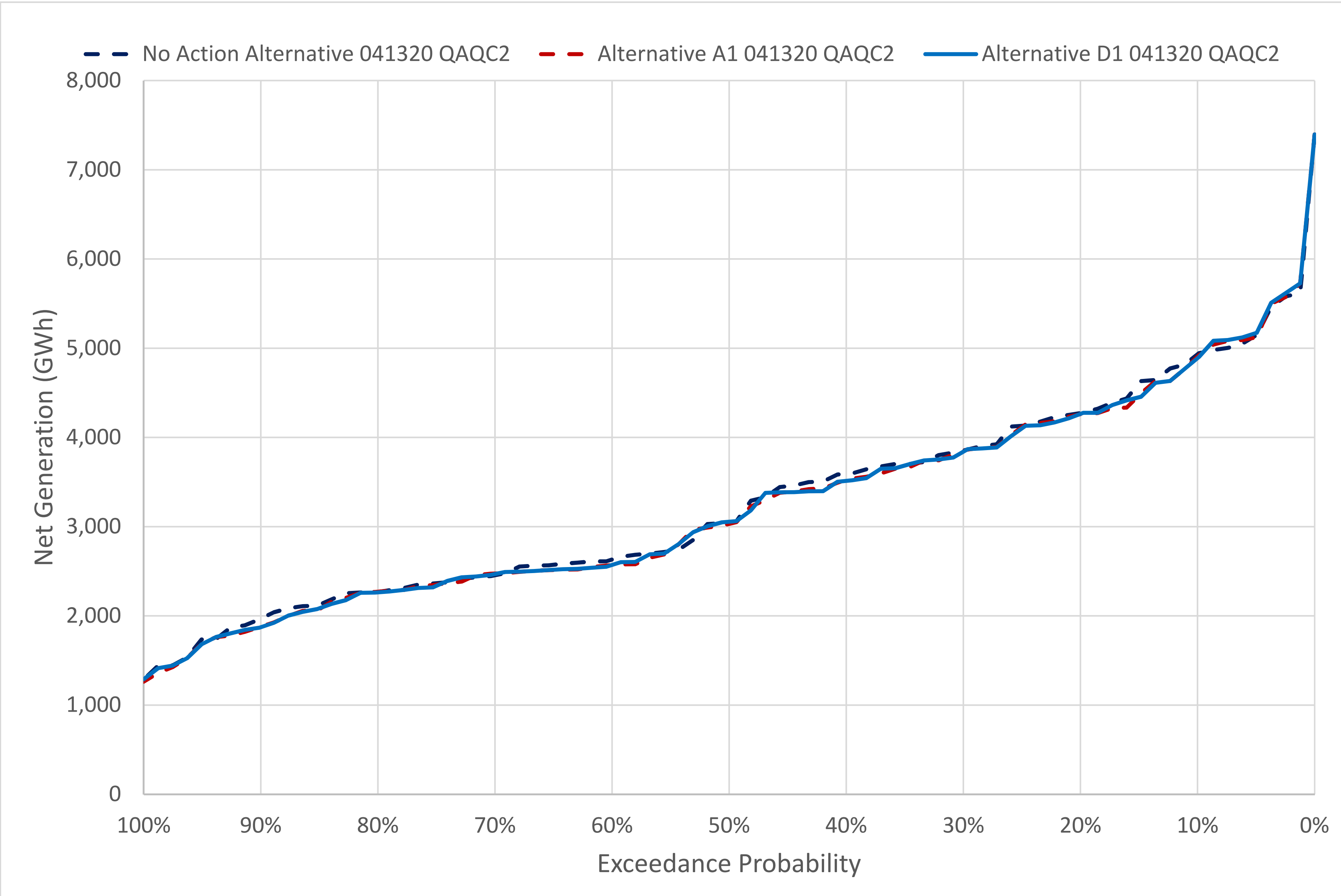
Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	4,887.74
20%	4,263.11
30%	3,840.33
40%	3,512.80
50%	3,055.15
60%	2,570.45
70%	2,468.51
80%	2,262.73
90%	1,872.56
Long Term	
Full Simulation Period[a]	3,252.35
Water Year Types[b,c]	
Wet (32%)	4,572.24
Above Normal (15%)	3,582.38
Below Normal (17%)	2,868.25
Dry (22%)	2,348.41
Critical (15%)	1,893.73

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance[a]	
10%	-18.75
20%	2.32
30%	-7.93
40%	-8.32
50%	24.53
60%	1.94
70%	-5.95
80%	-7.65
90%	-5.90
Long Term	
Full Simulation Period[a]	4.40
Water Year Types[b,c]	
Wet (32%)	12.71
Above Normal (15%)	5.61
Below Normal (17%)	-9.96
Dry (22%)	-0.33
Critical (15%)	6.15

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.2-4-1. October-September CVP Net Generation



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-5-1. Annual CVP Net Revenue

No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	266,683.65
20%	232,647.22
30%	210,471.15
40%	193,630.00
50%	164,608.90
60%	141,943.07
70%	132,545.47
80%	121,473.02
90%	105,820.05
Long Term	
Full Simulation Period[a]	177,753.65
Water Year Types[b,c]	
Wet (32%)	248,693.17
Above Normal (15%)	197,223.40
Below Normal (17%)	158,650.72
Dry (22%)	128,561.70
Critical (15%)	102,456.74

Alternative A1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	271,539.24
20%	232,440.91
30%	209,231.95
40%	188,817.56
50%	163,784.19
60%	137,293.14
70%	132,961.56
80%	122,444.94
90%	100,597.52
Long Term	
Full Simulation Period[a]	175,994.35
Water Year Types[b,c]	
Wet (32%)	248,475.92
Above Normal (15%)	194,137.53
Below Normal (17%)	155,354.38
Dry (22%)	126,188.55
Critical (15%)	101,225.49

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance[a]	
10%	4,855.59
20%	-206.30
30%	-1,239.20
40%	-4,812.45
50%	-824.71
60%	-4,649.93
70%	416.08
80%	971.92
90%	-5,222.53
Long Term	
Full Simulation Period[a]	-1,759.30
Water Year Types[b,c]	
Wet (32%)	-217.25
Above Normal (15%)	-3,085.86
Below Normal (17%)	-3,296.34
Dry (22%)	-2,373.15
Critical (15%)	-1,231.26

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.
e Net revenue is is based on 2030 energy pricing forecasts developed by DWR.

Table G.2.2-5-2. Annual CVP Net Revenue

No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	266,683.65
20%	232,647.22
30%	210,471.15
40%	193,630.00
50%	164,608.90
60%	141,943.07
70%	132,545.47
80%	121,473.02
90%	105,820.05
Long Term	
Full Simulation Period[a]	177,753.65
Water Year Types[b,c]	
Wet (32%)	248,693.17
Above Normal (15%)	197,223.40
Below Normal (17%)	158,650.72
Dry (22%)	128,561.70
Critical (15%)	102,456.74

Alternative D1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	271,149.08
20%	232,099.98
30%	208,138.73
40%	189,254.92
50%	165,819.57
60%	137,655.27
70%	131,646.34
80%	122,510.95
90%	100,295.38
Long Term	
Full Simulation Period[a]	176,178.83
Water Year Types[b,c]	
Wet (32%)	249,153.43
Above Normal (15%)	194,330.80
Below Normal (17%)	154,681.44
Dry (22%)	126,075.50
Critical (15%)	101,614.01

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance[a]	
10%	4,465.43
20%	-547.24
30%	-2,332.41
40%	-4,375.09
50%	1,210.67
60%	-4,287.80
70%	-899.13
80%	1,037.93
90%	-5,524.67
Long Term	
Full Simulation Period[a]	-1,574.83
Water Year Types[b,c]	
Wet (32%)	460.26
Above Normal (15%)	-2,892.59
Below Normal (17%)	-3,969.28
Dry (22%)	-2,486.20
Critical (15%)	-842.73

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.
e Net revenue is is based on 2030 energy pricing forecasts developed by DWR.

Table G.2.2-5-3. Annual CVP Net Revenue

Alternative A1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	271,539.24
20%	232,440.91
30%	209,231.95
40%	188,817.56
50%	163,784.19
60%	137,293.14
70%	132,961.56
80%	122,444.94
90%	100,597.52
Long Term	
Full Simulation Period[a]	175,994.35
Water Year Types[b,c]	
Wet (32%)	248,475.92
Above Normal (15%)	194,137.53
Below Normal (17%)	155,354.38
Dry (22%)	126,188.55
Critical (15%)	101,225.49

Alternative D1 041320 QAQC2

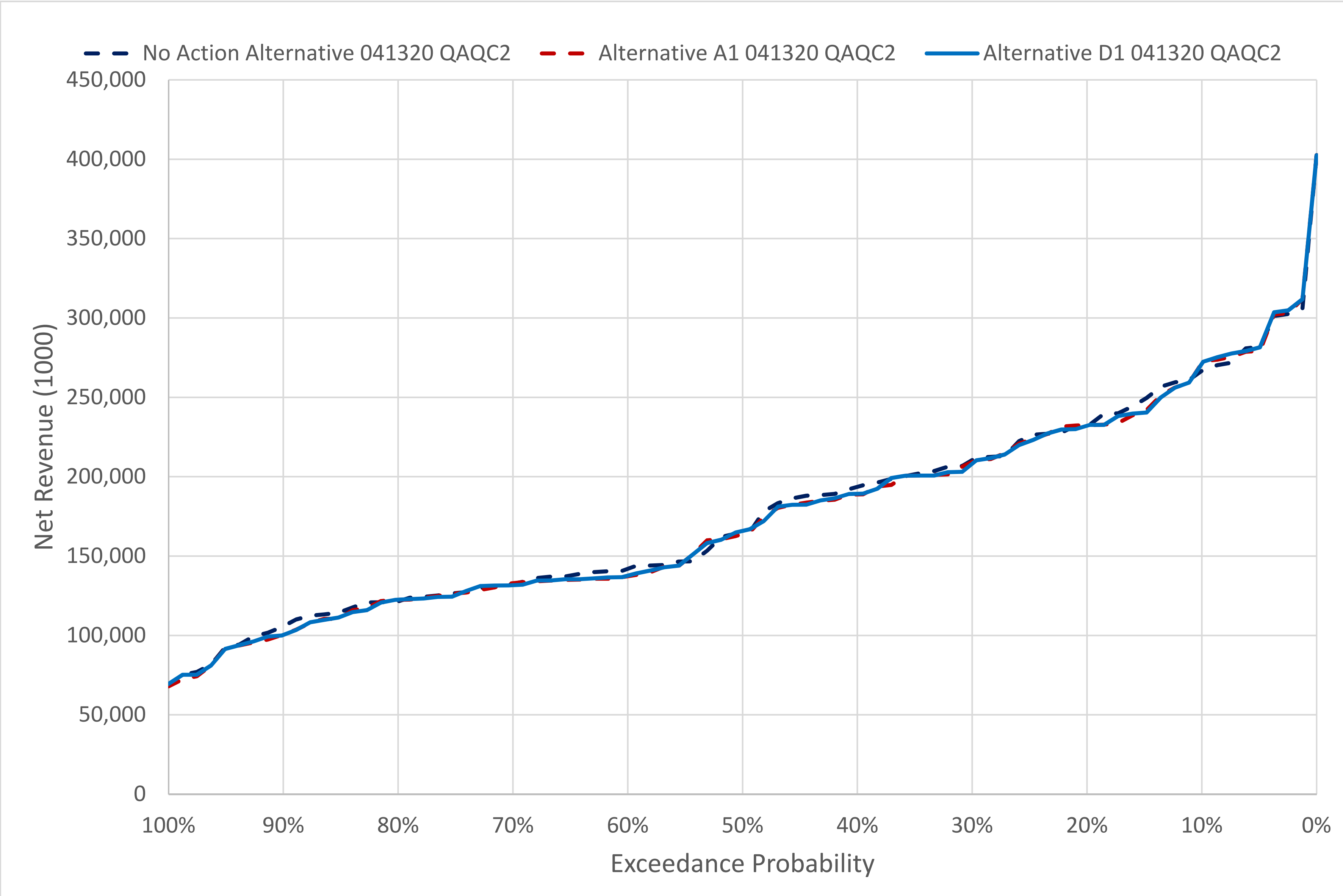
Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	271,149.08
20%	232,099.98
30%	208,138.73
40%	189,254.92
50%	165,819.57
60%	137,655.27
70%	131,646.34
80%	122,510.95
90%	100,295.38
Long Term	
Full Simulation Period[a]	176,178.83
Water Year Types[b,c]	
Wet (32%)	249,153.43
Above Normal (15%)	194,330.80
Below Normal (17%)	154,681.44
Dry (22%)	126,075.50
Critical (15%)	101,614.01

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance[a]	
10%	-390.16
20%	-340.93
30%	-1,093.22
40%	437.36
50%	2,035.38
60%	362.12
70%	-1,315.22
80%	66.01
90%	-302.14
Long Term	
Full Simulation Period[a]	184.47
Water Year Types[b,c]	
Wet (32%)	677.51
Above Normal (15%)	193.27
Below Normal (17%)	-672.94
Dry (22%)	-113.05
Critical (15%)	388.53

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.
e Net revenue is is based on 2030 energy pricing forecasts developed by DWR.

Figure G.2.2-5-1. October-September CVP Net Revenue



*All scenarios are simulated at DCR 2015 climate conditions. Net revenue is based on 2030 energy pricing forecasts developed by DWR.

Table G.2.2-6-1. Annual SWP Total Generation

No Action Alternative 041320 QAQC2

Statistic	Total Generation (GWh)
Probability of Exceedance	
10%	6,158.89
20%	5,586.05
30%	5,167.25
40%	4,777.94
50%	4,363.81
60%	3,954.03
70%	3,249.37
80%	2,919.39
90%	2,261.81
Long Term	
Full Simulation Period[a]	4,263.37
Water Year Types[b,c]	
Wet (32%)	5,889.21
Above Normal (15%)	4,475.99
Below Normal (17%)	4,365.97
Dry (22%)	3,320.17
Critical (15%)	1,988.30

Alternative A1 041320 QAQC2

Statistic	Total Generation (GWh)
Probability of Exceedance	
10%	6,247.70
20%	5,673.15
30%	5,221.59
40%	4,740.34
50%	4,491.11
60%	4,026.05
70%	3,531.84
80%	3,211.08
90%	2,359.19
Long Term	
Full Simulation Period[a]	4,348.41
Water Year Types[b,c]	
Wet (32%)	5,897.27
Above Normal (15%)	4,502.79
Below Normal (17%)	4,422.86
Dry (22%)	3,537.29
Critical (15%)	2,108.91

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Total Generation (GWh)
Probability of Exceedance[a]	
10%	88.81
20%	87.10
30%	54.34
40%	-37.60
50%	127.30
60%	72.01
70%	282.47
80%	291.69
90%	97.38
Long Term	
Full Simulation Period[a]	85.04
Water Year Types[b,c]	
Wet (32%)	8.07
Above Normal (15%)	26.80
Below Normal (17%)	56.89
Dry (22%)	217.12
Critical (15%)	120.61

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-6-2. Annual SWP Total Generation

No Action Alternative 041320 QAQC2

Statistic	Total Generation (GWh)
Probability of Exceedance	
10%	6,158.89
20%	5,586.05
30%	5,167.25
40%	4,777.94
50%	4,363.81
60%	3,954.03
70%	3,249.37
80%	2,919.39
90%	2,261.81
Long Term	
Full Simulation Period[a]	4,263.37
Water Year Types[b,c]	
Wet (32%)	5,889.21
Above Normal (15%)	4,475.99
Below Normal (17%)	4,365.97
Dry (22%)	3,320.17
Critical (15%)	1,988.30

Alternative D1 041320 QAQC2

Statistic	Total Generation (GWh)
Probability of Exceedance	
10%	6,245.85
20%	5,673.29
30%	5,226.96
40%	4,727.33
50%	4,468.11
60%	4,085.45
70%	3,546.83
80%	3,232.07
90%	2,381.07
Long Term	
Full Simulation Period[a]	4,367.80
Water Year Types[b,c]	
Wet (32%)	5,903.65
Above Normal (15%)	4,517.61
Below Normal (17%)	4,439.89
Dry (22%)	3,568.66
Critical (15%)	2,143.62

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Total Generation (GWh)
Probability of Exceedance[a]	
10%	86.96
20%	87.24
30%	59.70
40%	-50.61
50%	104.30
60%	131.42
70%	297.47
80%	312.68
90%	119.26
Long Term	
Full Simulation Period[a]	104.43
Water Year Types[b,c]	
Wet (32%)	14.44
Above Normal (15%)	41.62
Below Normal (17%)	73.92
Dry (22%)	248.49
Critical (15%)	155.32

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-6-3. Annual SWP Total Generation

Alternative A1 041320 QAQC2

Statistic	Total Generation (GWh)
Probability of Exceedance	
10%	6,247.70
20%	5,673.15
30%	5,221.59
40%	4,740.34
50%	4,491.11
60%	4,026.05
70%	3,531.84
80%	3,211.08
90%	2,359.19
Long Term	
Full Simulation Period[a]	4,348.41
Water Year Types[b,c]	
Wet (32%)	5,897.27
Above Normal (15%)	4,502.79
Below Normal (17%)	4,422.86
Dry (22%)	3,537.29
Critical (15%)	2,108.91

Alternative D1 041320 QAQC2

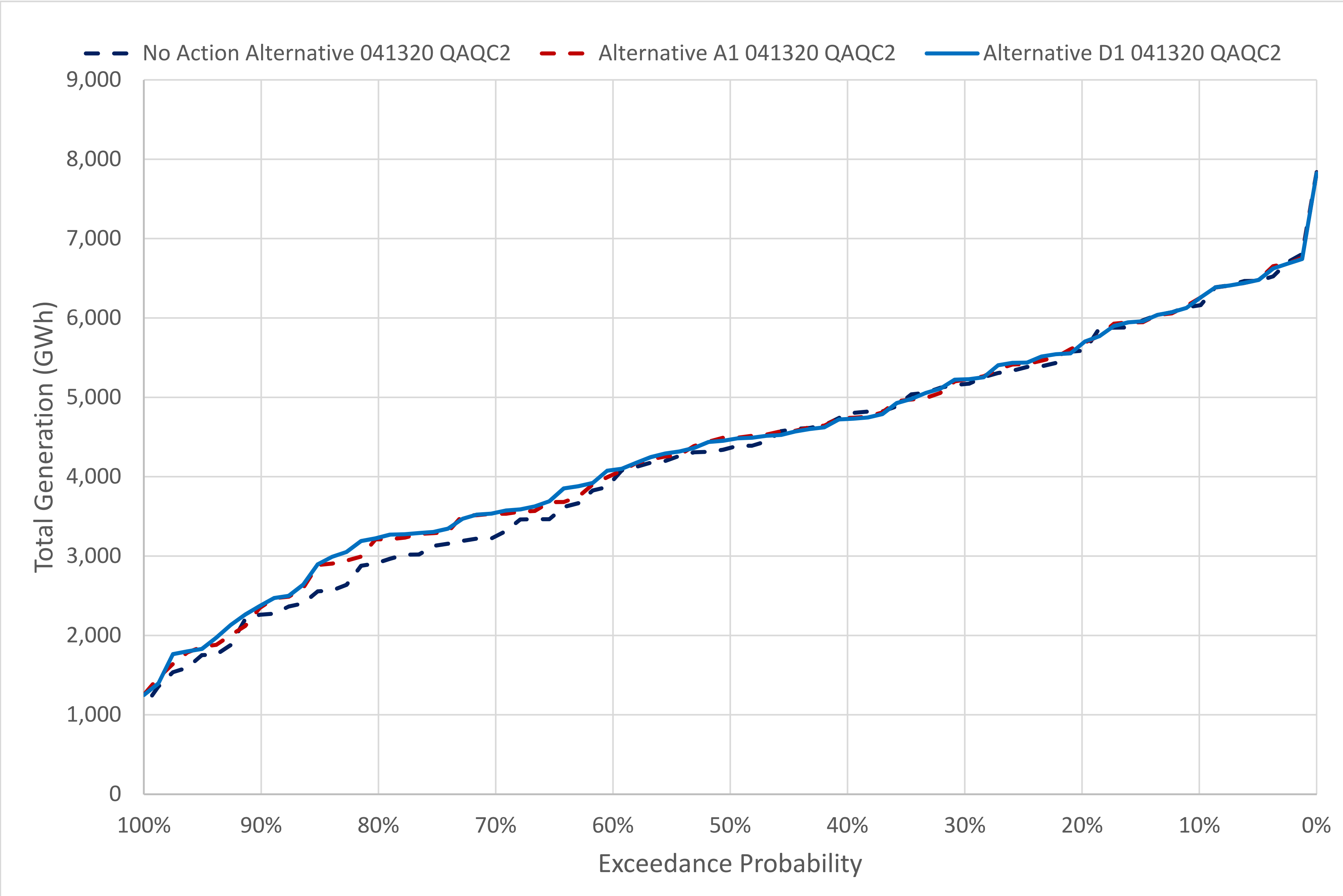
Statistic	Total Generation (GWh)
Probability of Exceedance	
10%	6,245.85
20%	5,673.29
30%	5,226.96
40%	4,727.33
50%	4,468.11
60%	4,085.45
70%	3,546.83
80%	3,232.07
90%	2,381.07
Long Term	
Full Simulation Period[a]	4,367.80
Water Year Types[b,c]	
Wet (32%)	5,903.65
Above Normal (15%)	4,517.61
Below Normal (17%)	4,439.89
Dry (22%)	3,568.66
Critical (15%)	2,143.62

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Total Generation (GWh)
Probability of Exceedance[a]	
10%	-1.85
20%	0.14
30%	5.36
40%	-13.01
50%	-23.00
60%	59.40
70%	14.99
80%	20.99
90%	21.88
Long Term	
Full Simulation Period[a]	19.39
Water Year Types[b,c]	
Wet (32%)	6.38
Above Normal (15%)	14.82
Below Normal (17%)	17.03
Dry (22%)	31.37
Critical (15%)	34.71

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.2-6-1. October-September SWP Total Generation



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-7-1. Annual SWP Total Energy Use

No Action Alternative 041320 QAQC2

Statistic	Total Energy Use (GWh)
Probability of Exceedance	
10%	11,099.01
20%	10,103.40
30%	9,564.67
40%	9,013.92
50%	8,482.40
60%	7,697.20
70%	6,555.89
80%	5,675.56
90%	4,444.35
Long Term	
Full Simulation Period[a]	7,966.43
Water Year Types[b,c]	
Wet (32%)	10,144.37
Above Normal (15%)	8,530.51
Below Normal (17%)	8,759.57
Dry (22%)	6,733.92
Critical (15%)	3,963.60

Alternative A1 041320 QAQC2

Statistic	Total Energy Use (GWh)
Probability of Exceedance	
10%	11,211.39
20%	10,257.32
30%	9,728.53
40%	9,222.73
50%	8,538.79
60%	7,859.70
70%	7,380.68
80%	6,362.11
90%	5,069.34
Long Term	
Full Simulation Period[a]	8,232.14
Water Year Types[b,c]	
Wet (32%)	10,155.56
Above Normal (15%)	8,562.98
Below Normal (17%)	8,973.87
Dry (22%)	7,518.63
Critical (15%)	4,215.63

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Total Energy Use (GWh)
Probability of Exceedance[a]	
10%	112.39
20%	153.92
30%	163.86
40%	208.81
50%	56.39
60%	162.50
70%	824.80
80%	686.55
90%	624.99
Long Term	
Full Simulation Period[a]	265.72
Water Year Types[b,c]	
Wet (32%)	11.19
Above Normal (15%)	32.46
Below Normal (17%)	214.30
Dry (22%)	784.71
Critical (15%)	252.03

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-7-2. Annual SWP Total Energy Use

No Action Alternative 041320 QAQC2

Statistic	Total Energy Use (GWh)
Probability of Exceedance	
10%	11,099.01
20%	10,103.40
30%	9,564.67
40%	9,013.92
50%	8,482.40
60%	7,697.20
70%	6,555.89
80%	5,675.56
90%	4,444.35
Long Term	
Full Simulation Period[a]	7,966.43
Water Year Types[b,c]	
Wet (32%)	10,144.37
Above Normal (15%)	8,530.51
Below Normal (17%)	8,759.57
Dry (22%)	6,733.92
Critical (15%)	3,963.60

Alternative D1 041320 QAQC2

Statistic	Total Energy Use (GWh)
Probability of Exceedance	
10%	11,202.29
20%	10,125.75
30%	9,734.51
40%	9,234.01
50%	8,673.43
60%	7,881.63
70%	7,313.28
80%	6,605.45
90%	5,099.20
Long Term	
Full Simulation Period[a]	8,288.80
Water Year Types[b,c]	
Wet (32%)	10,163.40
Above Normal (15%)	8,608.35
Below Normal (17%)	9,061.21
Dry (22%)	7,593.64
Critical (15%)	4,331.56

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Total Energy Use (GWh)
Probability of Exceedance[a]	
10%	103.28
20%	22.34
30%	169.84
40%	220.09
50%	191.02
60%	184.44
70%	757.39
80%	929.89
90%	654.85
Long Term	
Full Simulation Period[a]	322.38
Water Year Types[b,c]	
Wet (32%)	19.03
Above Normal (15%)	77.84
Below Normal (17%)	301.64
Dry (22%)	859.73
Critical (15%)	367.97

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-7-3. Annual SWP Total Energy Use

Alternative A1 041320 QAQC2

Statistic	Total Energy Use (GWh)
Probability of Exceedance	
10%	11,211.39
20%	10,257.32
30%	9,728.53
40%	9,222.73
50%	8,538.79
60%	7,859.70
70%	7,380.68
80%	6,362.11
90%	5,069.34
Long Term	
Full Simulation Period[a]	8,232.14
Water Year Types[b,c]	
Wet (32%)	10,155.56
Above Normal (15%)	8,562.98
Below Normal (17%)	8,973.87
Dry (22%)	7,518.63
Critical (15%)	4,215.63

Alternative D1 041320 QAQC2

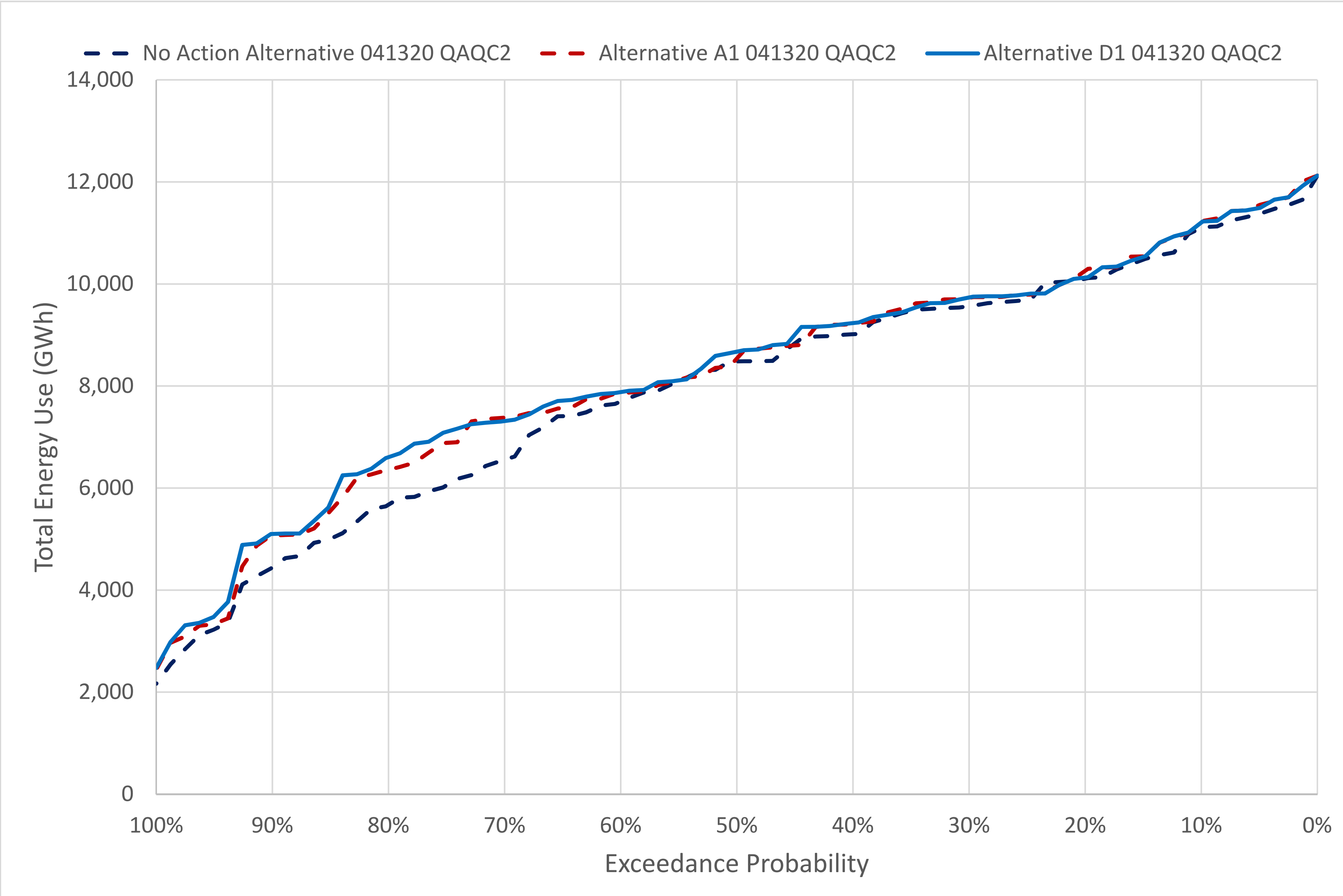
Statistic	Total Energy Use (GWh)
Probability of Exceedance	
10%	11,202.29
20%	10,125.75
30%	9,734.51
40%	9,234.01
50%	8,673.43
60%	7,881.63
70%	7,313.28
80%	6,605.45
90%	5,099.20
Long Term	
Full Simulation Period[a]	8,288.80
Water Year Types[b,c]	
Wet (32%)	10,163.40
Above Normal (15%)	8,608.35
Below Normal (17%)	9,061.21
Dry (22%)	7,593.64
Critical (15%)	4,331.56

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Total Energy Use (GWh)
Probability of Exceedance[a]	
10%	-9.11
20%	-131.57
30%	5.98
40%	11.28
50%	134.63
60%	21.93
70%	-67.41
80%	243.34
90%	29.86
Long Term	
Full Simulation Period[a]	56.66
Water Year Types[b,c]	
Wet (32%)	7.85
Above Normal (15%)	45.37
Below Normal (17%)	87.34
Dry (22%)	75.02
Critical (15%)	115.93

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.2-7-1. October-September SWP Total Energy Use



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-8-1. Annual SWP Net Generation

No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	-2,223.83
20%	-2,809.05
30%	-3,023.99
40%	-3,513.34
50%	-3,986.52
60%	-4,204.67
70%	-4,398.23
80%	-4,609.79
90%	-4,917.17
Long Term	
Full Simulation Period[a]	-3,703.06
Water Year Types[b,c]	
Wet (32%)	-4,255.16
Above Normal (15%)	-4,054.52
Below Normal (17%)	-4,393.60
Dry (22%)	-3,413.74
Critical (15%)	-1,975.29

Alternative A1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	-2,524.57
20%	-2,895.26
30%	-3,371.99
40%	-3,782.78
50%	-4,069.70
60%	-4,291.75
70%	-4,429.10
80%	-4,788.34
90%	-5,054.96
Long Term	
Full Simulation Period[a]	-3,883.73
Water Year Types[b,c]	
Wet (32%)	-4,258.29
Above Normal (15%)	-4,060.18
Below Normal (17%)	-4,551.01
Dry (22%)	-3,981.33
Critical (15%)	-2,106.71

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance[a]	
10%	-300.75
20%	-86.21
30%	-348.00
40%	-269.44
50%	-83.19
60%	-87.08
70%	-30.88
80%	-178.55
90%	-137.79
Long Term	
Full Simulation Period[a]	-180.67
Water Year Types[b,c]	
Wet (32%)	-3.12
Above Normal (15%)	-5.66
Below Normal (17%)	-157.41
Dry (22%)	-567.59
Critical (15%)	-131.42

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-8-2. Annual SWP Net Generation

No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	-2,223.83
20%	-2,809.05
30%	-3,023.99
40%	-3,513.34
50%	-3,986.52
60%	-4,204.67
70%	-4,398.23
80%	-4,609.79
90%	-4,917.17
Long Term	
Full Simulation Period[a]	-3,703.06
Water Year Types[b,c]	
Wet (32%)	-4,255.16
Above Normal (15%)	-4,054.52
Below Normal (17%)	-4,393.60
Dry (22%)	-3,413.74
Critical (15%)	-1,975.29

Alternative D1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	-2,613.22
20%	-3,086.59
30%	-3,534.19
40%	-3,781.71
50%	-4,069.06
60%	-4,316.16
70%	-4,429.04
80%	-4,896.95
90%	-5,084.17
Long Term	
Full Simulation Period[a]	-3,921.01
Water Year Types[b,c]	
Wet (32%)	-4,259.75
Above Normal (15%)	-4,090.74
Below Normal (17%)	-4,621.32
Dry (22%)	-4,024.98
Critical (15%)	-2,187.94

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance[a]	
10%	-389.40
20%	-277.54
30%	-510.21
40%	-268.37
50%	-82.54
60%	-111.49
70%	-30.82
80%	-287.16
90%	-167.00
Long Term	
Full Simulation Period[a]	-217.95
Water Year Types[b,c]	
Wet (32%)	-4.59
Above Normal (15%)	-36.22
Below Normal (17%)	-227.72
Dry (22%)	-611.24
Critical (15%)	-212.65

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-8-3. Annual SWP Net Generation

Alternative A1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	-2,524.57
20%	-2,895.26
30%	-3,371.99
40%	-3,782.78
50%	-4,069.70
60%	-4,291.75
70%	-4,429.10
80%	-4,788.34
90%	-5,054.96
Long Term	
Full Simulation Period[a]	-3,883.73
Water Year Types[b,c]	
Wet (32%)	-4,258.29
Above Normal (15%)	-4,060.18
Below Normal (17%)	-4,551.01
Dry (22%)	-3,981.33
Critical (15%)	-2,106.71

Alternative D1 041320 QAQC2

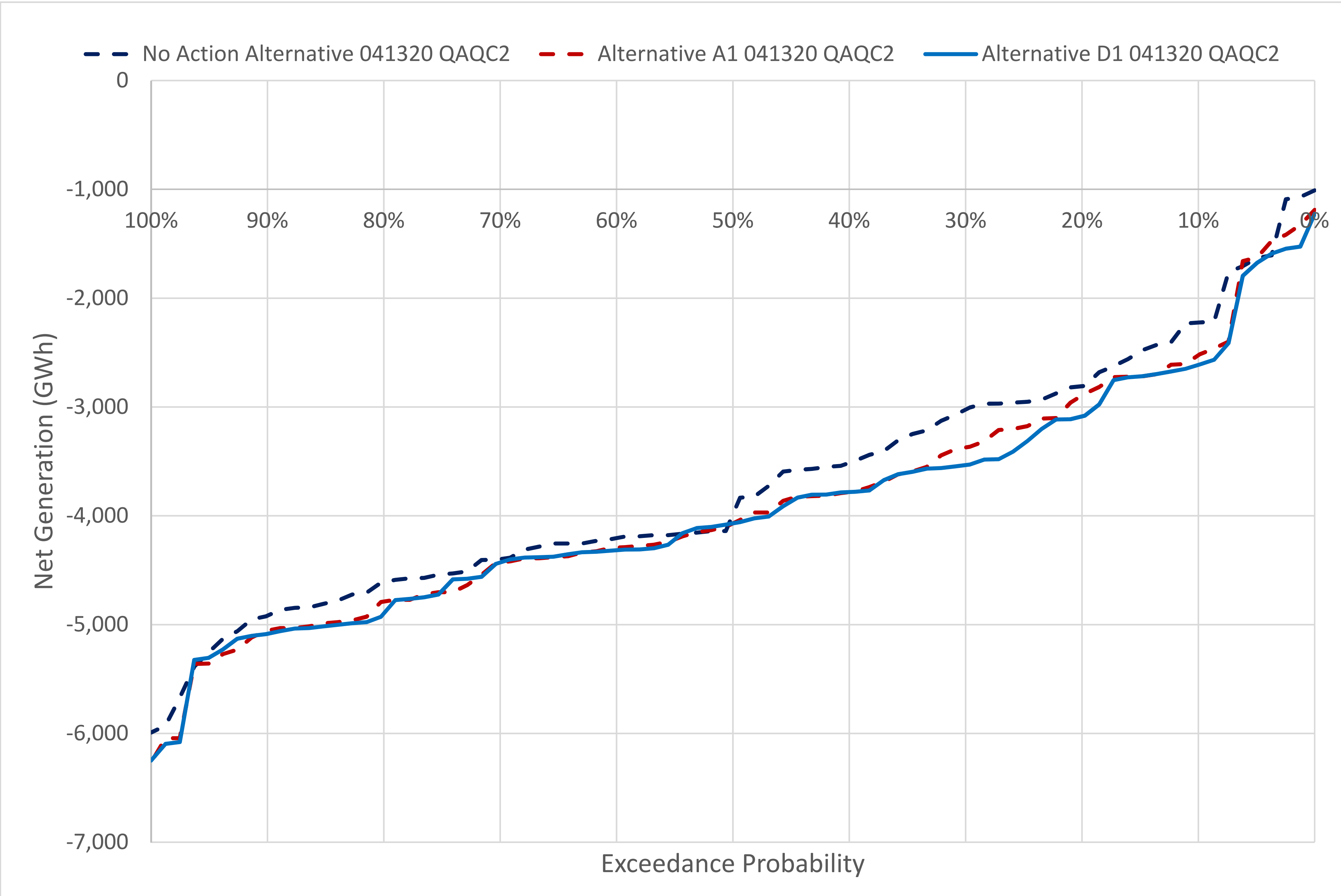
Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	-2,613.22
20%	-3,086.59
30%	-3,534.19
40%	-3,781.71
50%	-4,069.06
60%	-4,316.16
70%	-4,429.04
80%	-4,896.95
90%	-5,084.17
Long Term	
Full Simulation Period[a]	-3,921.01
Water Year Types[b,c]	
Wet (32%)	-4,259.75
Above Normal (15%)	-4,090.74
Below Normal (17%)	-4,621.32
Dry (22%)	-4,024.98
Critical (15%)	-2,187.94

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance[a]	
10%	-88.65
20%	-191.33
30%	-162.20
40%	1.07
50%	0.64
60%	-24.41
70%	0.06
80%	-108.61
90%	-29.21
Long Term	
Full Simulation Period[a]	-37.27
Water Year Types[b,c]	
Wet (32%)	-1.47
Above Normal (15%)	-30.56
Below Normal (17%)	-70.31
Dry (22%)	-43.65
Critical (15%)	-81.23

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.2-8-1. October-September SWP Net Generation



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-9-1. Annual SWP Net Revenue

No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	-119,379.80
20%	-152,035.39
30%	-165,065.64
40%	-190,323.29
50%	-215,135.05
60%	-227,925.90
70%	-237,185.20
80%	-248,204.40
90%	-266,011.70
Long Term	
Full Simulation Period[a]	-200,548.74
Water Year Types[b,c]	
Wet (32%)	-230,495.23
Above Normal (15%)	-218,539.80
Below Normal (17%)	-237,624.71
Dry (22%)	-185,175.12
Critical (15%)	-107,810.75

Alternative A1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	-138,431.99
20%	-155,937.41
30%	-182,213.50
40%	-207,196.03
50%	-222,693.75
60%	-233,223.00
70%	-239,724.75
80%	-258,670.64
90%	-273,426.94
Long Term	
Full Simulation Period[a]	-210,229.37
Water Year Types[b,c]	
Wet (32%)	-230,609.82
Above Normal (15%)	-218,686.23
Below Normal (17%)	-246,192.56
Dry (22%)	-215,841.64
Critical (15%)	-114,590.11

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance[a]	
10%	-19,052.19
20%	-3,902.02
30%	-17,147.86
40%	-16,872.74
50%	-7,558.70
60%	-5,297.09
70%	-2,539.55
80%	-10,466.24
90%	-7,415.24
Long Term	
Full Simulation Period[a]	-9,680.63
Water Year Types[b,c]	
Wet (32%)	-114.59
Above Normal (15%)	-146.43
Below Normal (17%)	-8,567.85
Dry (22%)	-30,666.52
Critical (15%)	-6,779.36

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.
e Net revenue is is based on 2030 energy pricing forecasts developed by DWR.

Table G.2.2-9-2. Annual SWP Net Revenue

No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	-119,379.80
20%	-152,035.39
30%	-165,065.64
40%	-190,323.29
50%	-215,135.05
60%	-227,925.90
70%	-237,185.20
80%	-248,204.40
90%	-266,011.70
Long Term	
Full Simulation Period[a]	-200,548.74
Water Year Types[b,c]	
Wet (32%)	-230,495.23
Above Normal (15%)	-218,539.80
Below Normal (17%)	-237,624.71
Dry (22%)	-185,175.12
Critical (15%)	-107,810.75

Alternative D1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	-143,230.31
20%	-167,112.52
30%	-190,743.22
40%	-205,834.66
50%	-221,257.96
60%	-233,066.10
70%	-239,418.82
80%	-264,476.78
90%	-272,410.78
Long Term	
Full Simulation Period[a]	-212,229.60
Water Year Types[b,c]	
Wet (32%)	-230,667.34
Above Normal (15%)	-220,407.55
Below Normal (17%)	-249,933.21
Dry (22%)	-218,218.84
Critical (15%)	-118,878.03

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance[a]	
10%	-23,850.51
20%	-15,077.13
30%	-25,677.58
40%	-15,511.37
50%	-6,122.91
60%	-5,140.20
70%	-2,233.62
80%	-16,272.39
90%	-6,399.07
Long Term	
Full Simulation Period[a]	-11,680.86
Water Year Types[b,c]	
Wet (32%)	-172.11
Above Normal (15%)	-1,867.75
Below Normal (17%)	-12,308.50
Dry (22%)	-33,043.72
Critical (15%)	-11,067.28

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.
e Net revenue is is based on 2030 energy pricing forecasts developed by DWR.

Table G.2.2-9-3. Annual SWP Net Revenue

Alternative A1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	-138,431.99
20%	-155,937.41
30%	-182,213.50
40%	-207,196.03
50%	-222,693.75
60%	-233,223.00
70%	-239,724.75
80%	-258,670.64
90%	-273,426.94
Long Term	
Full Simulation Period[a]	-210,229.37
Water Year Types[b,c]	
Wet (32%)	-230,609.82
Above Normal (15%)	-218,686.23
Below Normal (17%)	-246,192.56
Dry (22%)	-215,841.64
Critical (15%)	-114,590.11

Alternative D1 041320 QAQC2

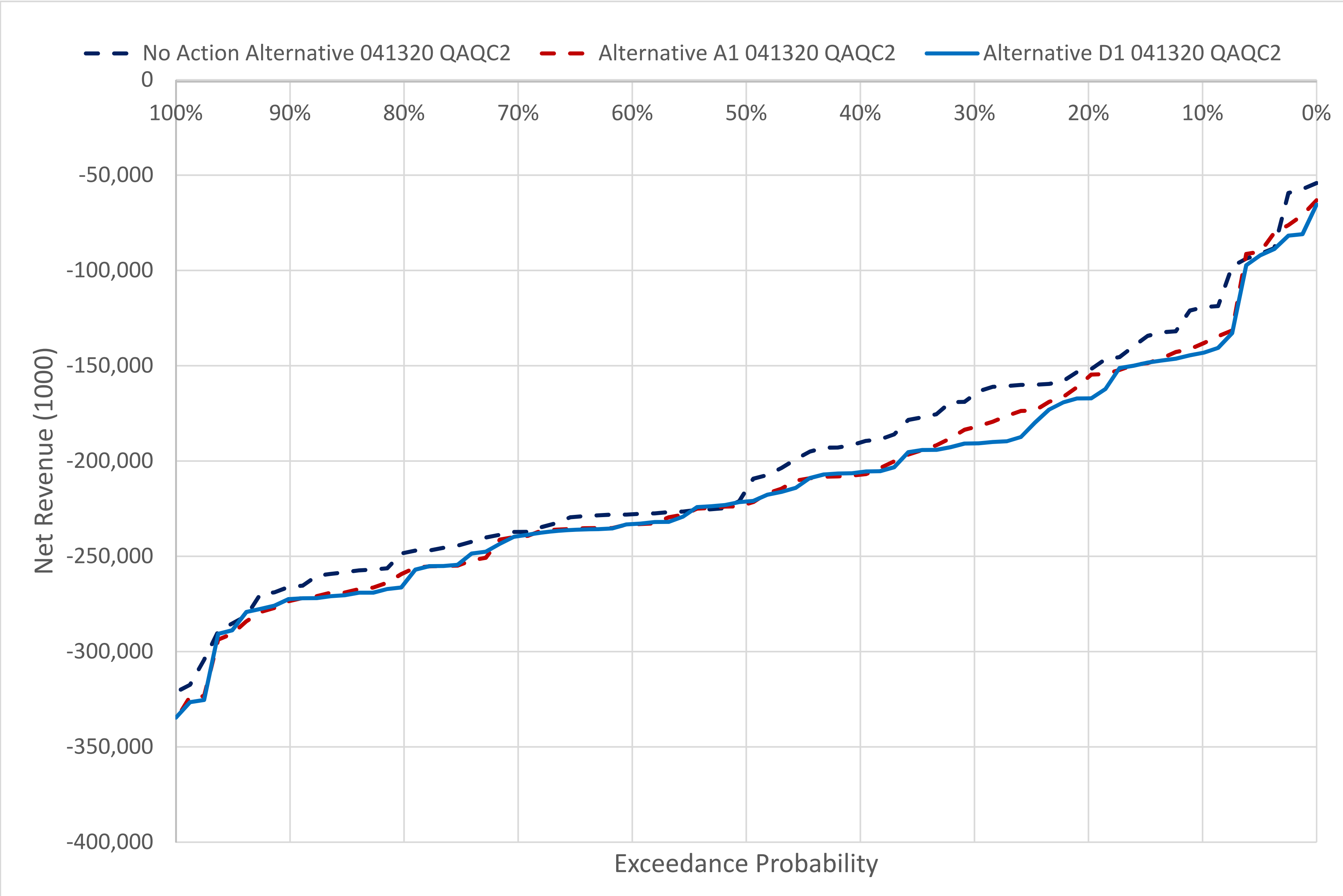
Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	-143,230.31
20%	-167,112.52
30%	-190,743.22
40%	-205,834.66
50%	-221,257.96
60%	-233,066.10
70%	-239,418.82
80%	-264,476.78
90%	-272,410.78
Long Term	
Full Simulation Period[a]	-212,229.60
Water Year Types[b,c]	
Wet (32%)	-230,667.34
Above Normal (15%)	-220,407.55
Below Normal (17%)	-249,933.21
Dry (22%)	-218,218.84
Critical (15%)	-118,878.03

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance[a]	
10%	-4,798.32
20%	-11,175.11
30%	-8,529.72
40%	1,361.38
50%	1,435.80
60%	156.89
70%	305.93
80%	-5,806.15
90%	1,016.16
Long Term	
Full Simulation Period[a]	-2,000.23
Water Year Types[b,c]	
Wet (32%)	-57.52
Above Normal (15%)	-1,721.32
Below Normal (17%)	-3,740.65
Dry (22%)	-2,377.20
Critical (15%)	-4,287.92

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.
e Net revenue is is based on 2030 energy pricing forecasts developed by DWR.

Figure G.2.2-9-1. October-September SWP Net Revenue



*All scenarios are simulated at DCR 2015 climate conditions. Net revenue is based on 2030 energy pricing forecasts developed by DWR.

Table G.2.2-10-1. Annual CVP and SWP Net Generation

No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	914.78
20%	588.70
30%	160.03
40%	-116.53
50%	-324.00
60%	-498.24
70%	-781.04
80%	-1,346.40
90%	-1,974.14
Long Term	
Full Simulation Period[a]	-421.30
Water Year Types[b,c]	
Wet (32%)	310.33
Above Normal (15%)	-422.51
Below Normal (17%)	-1,451.65
Dry (22%)	-1,019.31
Critical (15%)	-64.04

Alternative A1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	997.39
20%	409.68
30%	-113.65
40%	-373.10
50%	-619.00
60%	-874.65
70%	-1,103.11
80%	-1,788.11
90%	-2,265.31
Long Term	
Full Simulation Period[a]	-635.79
Water Year Types[b,c]	
Wet (32%)	301.24
Above Normal (15%)	-483.41
Below Normal (17%)	-1,672.81
Dry (22%)	-1,632.60
Critical (15%)	-219.13

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance[a]	
10%	82.61
20%	-179.03
30%	-273.68
40%	-256.56
50%	-295.01
60%	-376.41
70%	-322.07
80%	-441.71
90%	-291.17
Long Term	
Full Simulation Period[a]	-214.49
Water Year Types[b,c]	
Wet (32%)	-9.10
Above Normal (15%)	-60.90
Below Normal (17%)	-221.16
Dry (22%)	-613.29
Critical (15%)	-155.09

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-10-2. Annual CVP and SWP Net Generation

No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	914.78
20%	588.70
30%	160.03
40%	-116.53
50%	-324.00
60%	-498.24
70%	-781.04
80%	-1,346.40
90%	-1,974.14
Long Term	
Full Simulation Period[a]	-421.30
Water Year Types[b,c]	
Wet (32%)	310.33
Above Normal (15%)	-422.51
Below Normal (17%)	-1,451.65
Dry (22%)	-1,019.31
Critical (15%)	-64.04

Alternative D1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	945.86
20%	332.68
30%	-133.87
40%	-395.62
50%	-683.15
60%	-931.94
70%	-1,179.35
80%	-1,683.89
90%	-2,400.11
Long Term	
Full Simulation Period[a]	-668.66
Water Year Types[b,c]	
Wet (32%)	312.48
Above Normal (15%)	-508.36
Below Normal (17%)	-1,753.07
Dry (22%)	-1,676.57
Critical (15%)	-294.21

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance[a]	
10%	31.08
20%	-256.02
30%	-293.90
40%	-279.09
50%	-359.15
60%	-433.70
70%	-398.30
80%	-337.49
90%	-425.97
Long Term	
Full Simulation Period[a]	-247.36
Water Year Types[b,c]	
Wet (32%)	2.15
Above Normal (15%)	-85.84
Below Normal (17%)	-301.43
Dry (22%)	-657.26
Critical (15%)	-230.17

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-10-3. Annual CVP and SWP Net Generation

Alternative A1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	997.39
20%	409.68
30%	-113.65
40%	-373.10
50%	-619.00
60%	-874.65
70%	-1,103.11
80%	-1,788.11
90%	-2,265.31
Long Term	
Full Simulation Period[a]	-635.79
Water Year Types[b,c]	
Wet (32%)	301.24
Above Normal (15%)	-483.41
Below Normal (17%)	-1,672.81
Dry (22%)	-1,632.60
Critical (15%)	-219.13

Alternative D1 041320 QAQC2

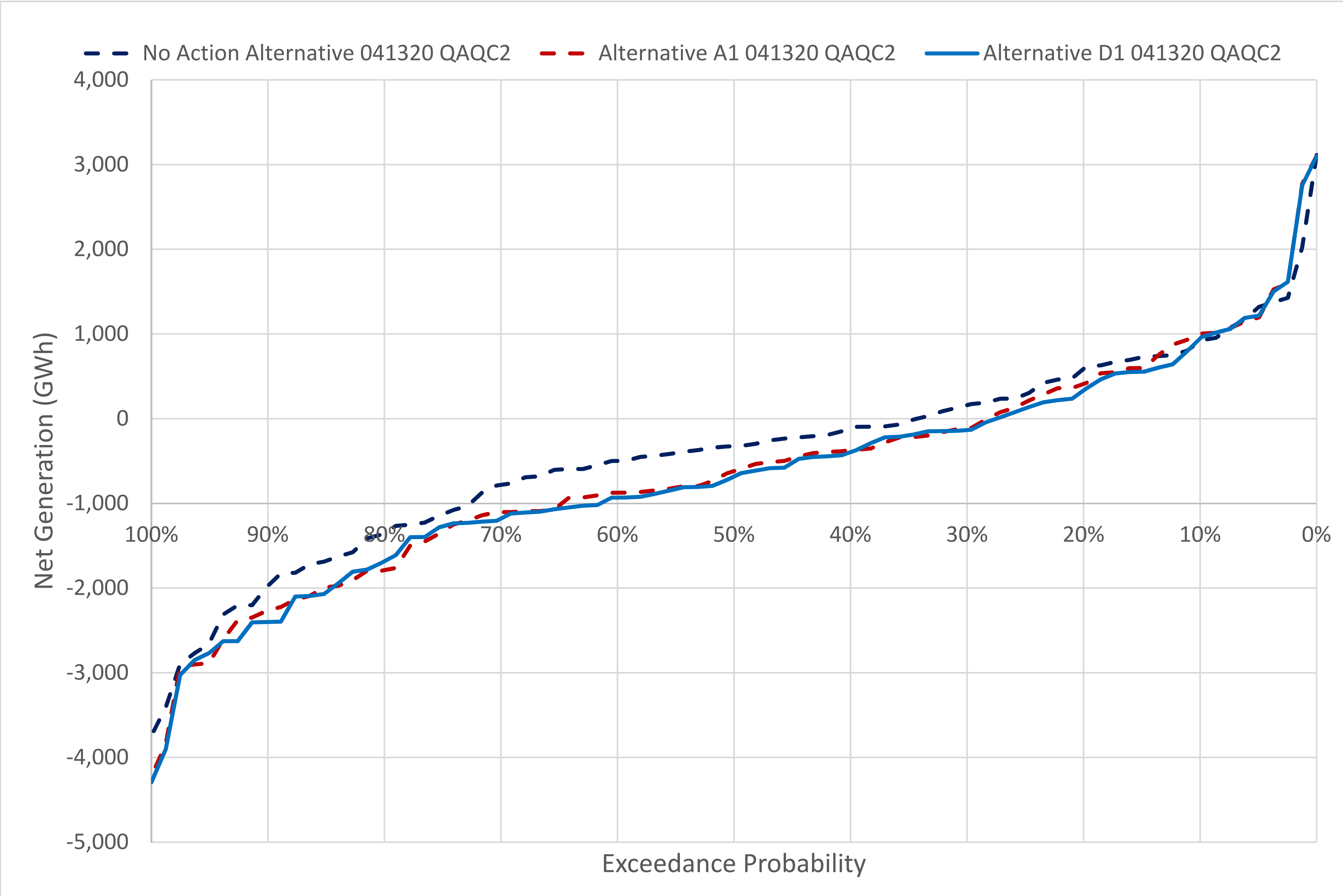
Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	945.86
20%	332.68
30%	-133.87
40%	-395.62
50%	-683.15
60%	-931.94
70%	-1,179.35
80%	-1,683.89
90%	-2,400.11
Long Term	
Full Simulation Period[a]	-668.66
Water Year Types[b,c]	
Wet (32%)	312.48
Above Normal (15%)	-508.36
Below Normal (17%)	-1,753.07
Dry (22%)	-1,676.57
Critical (15%)	-294.21

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance[a]	
10%	-51.53
20%	-76.99
30%	-20.22
40%	-22.52
50%	-64.15
60%	-57.29
70%	-76.24
80%	104.22
90%	-134.80
Long Term	
Full Simulation Period[a]	-32.87
Water Year Types[b,c]	
Wet (32%)	11.25
Above Normal (15%)	-24.94
Below Normal (17%)	-80.27
Dry (22%)	-43.97
Critical (15%)	-75.08

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.2-10-1. October-September CVP and SWP Net Generation



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-11-1. Annual NODOS Total Generation

No Action Alternative 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance	
10%	0.00
20%	0.00
30%	0.00
40%	0.00
50%	0.00
60%	0.00
70%	0.00
80%	0.00
90%	0.00
Long Term	
Full Simulation Period[a]	0.00
Water Year Types[b,c]	
Wet (32%)	0.00
Above Normal (15%)	0.00
Below Normal (17%)	0.00
Dry (22%)	0.00
Critical (15%)	0.00

Alternative A1 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance	
10%	213.97
20%	182.98
30%	160.66
40%	147.67
50%	125.74
60%	107.82
70%	92.17
80%	66.35
90%	40.85
Long Term	
Full Simulation Period[a]	127.79
Water Year Types[b,c]	
Wet (32%)	76.38
Above Normal (15%)	142.28
Below Normal (17%)	144.30
Dry (22%)	189.45
Critical (15%)	105.57

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance[a]	
10%	213.97
20%	182.98
30%	160.66
40%	147.67
50%	125.74
60%	107.82
70%	92.17
80%	66.35
90%	40.85
Long Term	
Full Simulation Period[a]	127.79
Water Year Types[b,c]	
Wet (32%)	76.38
Above Normal (15%)	142.28
Below Normal (17%)	144.30
Dry (22%)	189.45
Critical (15%)	105.57

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-11-2. Annual NODOS Total Generation

No Action Alternative 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance	
10%	0.00
20%	0.00
30%	0.00
40%	0.00
50%	0.00
60%	0.00
70%	0.00
80%	0.00
90%	0.00
Long Term	
Full Simulation Period[a]	0.00
Water Year Types[b,c]	
Wet (32%)	0.00
Above Normal (15%)	0.00
Below Normal (17%)	0.00
Dry (22%)	0.00
Critical (15%)	0.00

Alternative D1 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance	
10%	250.27
20%	225.38
30%	211.59
40%	185.61
50%	162.72
60%	134.56
70%	109.08
80%	87.05
90%	42.87
Long Term	
Full Simulation Period[a]	156.19
Water Year Types[b,c]	
Wet (32%)	89.09
Above Normal (15%)	183.03
Below Normal (17%)	179.12
Dry (22%)	223.43
Critical (15%)	139.40

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance[a]	
10%	250.27
20%	225.38
30%	211.59
40%	185.61
50%	162.72
60%	134.56
70%	109.08
80%	87.05
90%	42.87
Long Term	
Full Simulation Period[a]	156.19
Water Year Types[b,c]	
Wet (32%)	89.09
Above Normal (15%)	183.03
Below Normal (17%)	179.12
Dry (22%)	223.43
Critical (15%)	139.40

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-11-3. Annual NODOS Total Generation

Alternative A1 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance	
10%	213.97
20%	182.98
30%	160.66
40%	147.67
50%	125.74
60%	107.82
70%	92.17
80%	66.35
90%	40.85
Long Term	
Full Simulation Period[a]	127.79
Water Year Types[b,c]	
Wet (32%)	76.38
Above Normal (15%)	142.28
Below Normal (17%)	144.30
Dry (22%)	189.45
Critical (15%)	105.57

Alternative D1 041320 QAQC2

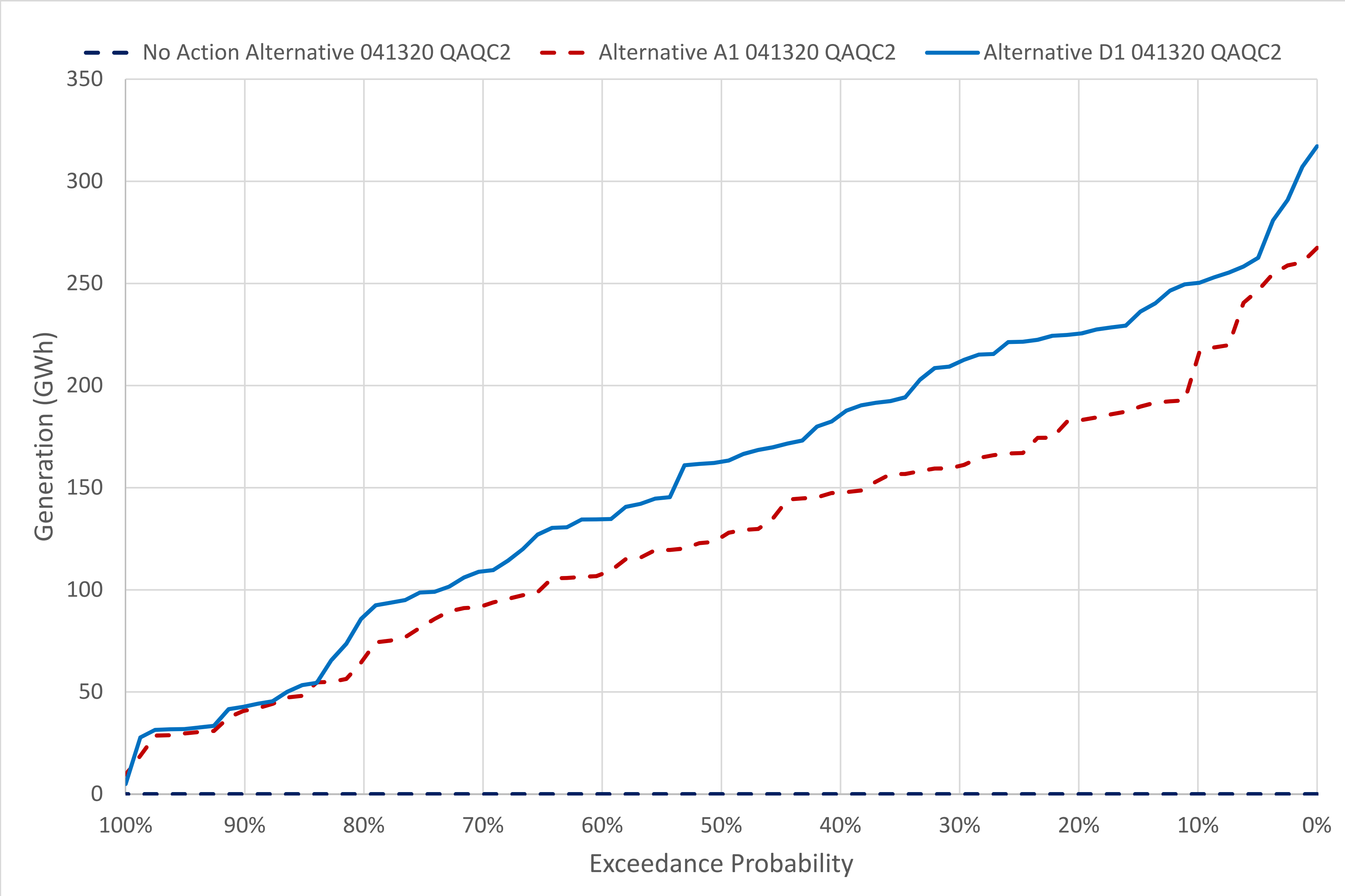
Statistic	Generation (GWh)
Probability of Exceedance	
10%	250.27
20%	225.38
30%	211.59
40%	185.61
50%	162.72
60%	134.56
70%	109.08
80%	87.05
90%	42.87
Long Term	
Full Simulation Period[a]	156.19
Water Year Types[b,c]	
Wet (32%)	89.09
Above Normal (15%)	183.03
Below Normal (17%)	179.12
Dry (22%)	223.43
Critical (15%)	139.40

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Generation (GWh)
Probability of Exceedance[a]	
10%	36.30
20%	42.41
30%	50.92
40%	37.94
50%	36.98
60%	26.74
70%	16.91
80%	20.70
90%	2.02
Long Term	
Full Simulation Period[a]	28.40
Water Year Types[b,c]	
Wet (32%)	12.71
Above Normal (15%)	40.75
Below Normal (17%)	34.82
Dry (22%)	33.98
Critical (15%)	33.82

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.2-11-1. October-September NODOS Total Generation



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-12-1. Annual NODOS Total Energy Use

No Action Alternative 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance	
10%	13.06
20%	12.92
30%	12.63
40%	12.49
50%	12.21
60%	12.04
70%	11.29
80%	10.78
90%	10.03
Long Term	
Full Simulation Period[a]	11.89
Water Year Types[b,c]	
Wet (32%)	12.49
Above Normal (15%)	12.59
Below Normal (17%)	12.67
Dry (22%)	11.33
Critical (15%)	10.07

Alternative A1 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance	
10%	402.64
20%	355.79
30%	302.61
40%	263.27
50%	237.58
60%	204.11
70%	132.31
80%	89.78
90%	61.56
Long Term	
Full Simulation Period[a]	241.36
Water Year Types[b,c]	
Wet (32%)	243.76
Above Normal (15%)	369.27
Below Normal (17%)	205.77
Dry (22%)	249.02
Critical (15%)	117.42

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance[a]	
10%	389.58
20%	342.88
30%	289.98
40%	250.78
50%	225.38
60%	192.07
70%	121.02
80%	79.01
90%	51.52
Long Term	
Full Simulation Period[a]	229.46
Water Year Types[b,c]	
Wet (32%)	231.28
Above Normal (15%)	356.68
Below Normal (17%)	193.10
Dry (22%)	237.69
Critical (15%)	107.35

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-12-2. Annual NODOS Total Energy Use

No Action Alternative 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance	
10%	13.06
20%	12.92
30%	12.63
40%	12.49
50%	12.21
60%	12.04
70%	11.29
80%	10.78
90%	10.03
Long Term	
Full Simulation Period[a]	11.89
Water Year Types[b,c]	
Wet (32%)	12.49
Above Normal (15%)	12.59
Below Normal (17%)	12.67
Dry (22%)	11.33
Critical (15%)	10.07

Alternative D1 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance	
10%	564.81
20%	420.17
30%	391.40
40%	325.70
50%	275.71
60%	222.94
70%	145.47
80%	105.46
90%	67.35
Long Term	
Full Simulation Period[a]	292.37
Water Year Types[b,c]	
Wet (32%)	314.56
Above Normal (15%)	476.89
Below Normal (17%)	230.77
Dry (22%)	280.92
Critical (15%)	119.98

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance[a]	
10%	551.75
20%	407.25
30%	378.76
40%	313.21
50%	263.51
60%	210.89
70%	134.18
80%	94.68
90%	57.32
Long Term	
Full Simulation Period[a]	280.48
Water Year Types[b,c]	
Wet (32%)	302.07
Above Normal (15%)	464.30
Below Normal (17%)	218.10
Dry (22%)	269.58
Critical (15%)	109.92

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-12-3. Annual NODOS Total Energy Use

Alternative A1 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance	
10%	402.64
20%	355.79
30%	302.61
40%	263.27
50%	237.58
60%	204.11
70%	132.31
80%	89.78
90%	61.56
Long Term	
Full Simulation Period[a]	241.36
Water Year Types[b,c]	
Wet (32%)	243.76
Above Normal (15%)	369.27
Below Normal (17%)	205.77
Dry (22%)	249.02
Critical (15%)	117.42

Alternative D1 041320 QAQC2

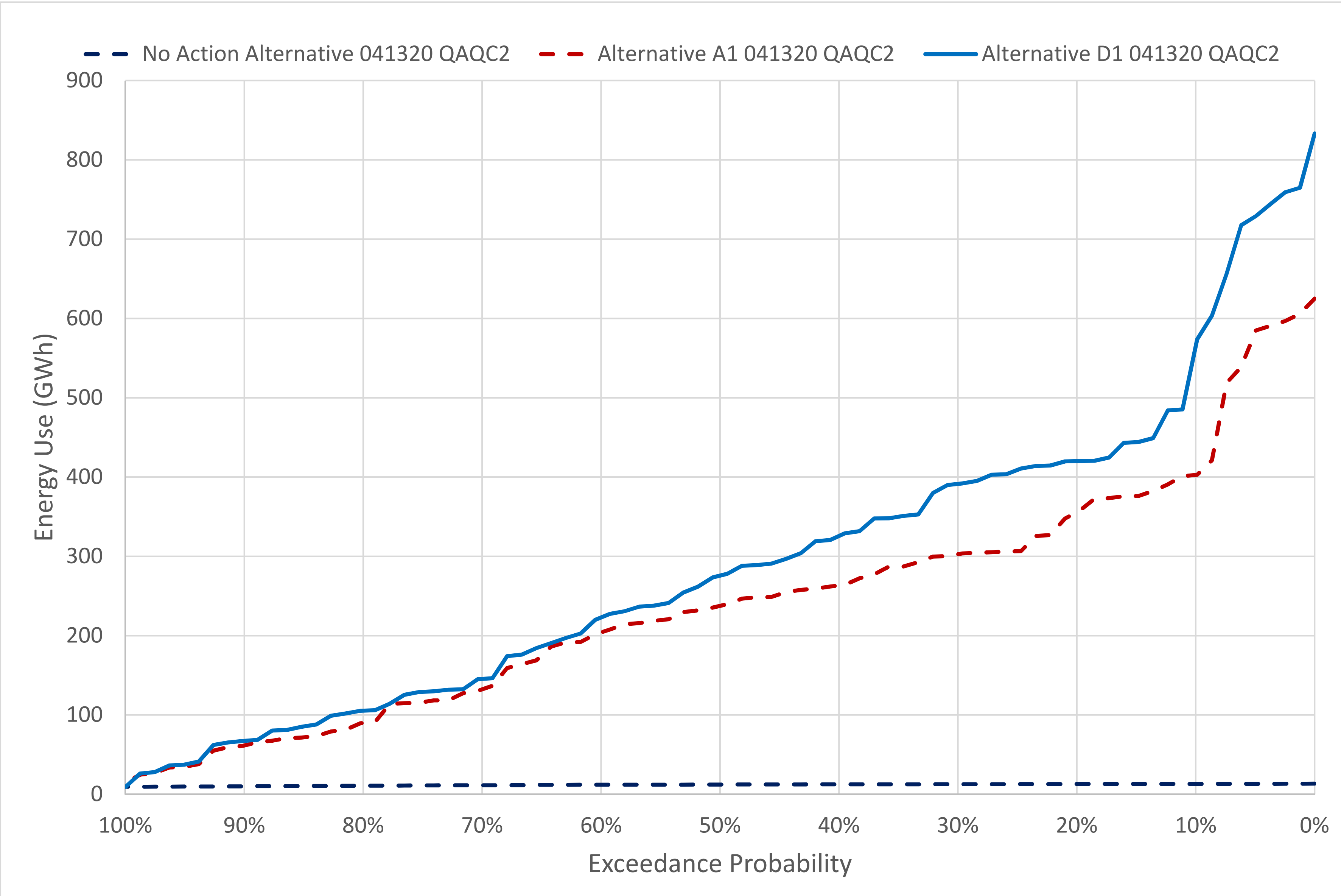
Statistic	Energy Use (GWh)
Probability of Exceedance	
10%	564.81
20%	420.17
30%	391.40
40%	325.70
50%	275.71
60%	222.94
70%	145.47
80%	105.46
90%	67.35
Long Term	
Full Simulation Period[a]	292.37
Water Year Types[b,c]	
Wet (32%)	314.56
Above Normal (15%)	476.89
Below Normal (17%)	230.77
Dry (22%)	280.92
Critical (15%)	119.98

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Energy Use (GWh)
Probability of Exceedance[a]	
10%	162.17
20%	64.37
30%	88.79
40%	62.43
50%	38.13
60%	18.82
70%	13.16
80%	15.68
90%	5.80
Long Term	
Full Simulation Period[a]	51.02
Water Year Types[b,c]	
Wet (32%)	70.80
Above Normal (15%)	107.62
Below Normal (17%)	25.01
Dry (22%)	31.90
Critical (15%)	2.56

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.2-12-1. October-September NODOS Total Energy Use



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-13-1. Annual NODOS Net Generation

No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	-10.03
20%	-10.78
30%	-11.29
40%	-12.04
50%	-12.21
60%	-12.49
70%	-12.63
80%	-12.92
90%	-13.06
Long Term	
Full Simulation Period[a]	-11.89
Water Year Types[b,c]	
Wet (32%)	-12.49
Above Normal (15%)	-12.59
Below Normal (17%)	-12.67
Dry (22%)	-11.33
Critical (15%)	-10.07

Alternative A1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	72.62
20%	28.02
30%	-14.59
40%	-42.18
50%	-84.97
60%	-126.32
70%	-177.33
80%	-244.60
90%	-357.77
Long Term	
Full Simulation Period[a]	-113.57
Water Year Types[b,c]	
Wet (32%)	-167.38
Above Normal (15%)	-226.99
Below Normal (17%)	-61.46
Dry (22%)	-59.57
Critical (15%)	-11.84

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance[a]	
10%	82.66
20%	38.80
30%	-3.30
40%	-30.14
50%	-72.76
60%	-113.84
70%	-164.70
80%	-231.68
90%	-344.71
Long Term	
Full Simulation Period[a]	-101.67
Water Year Types[b,c]	
Wet (32%)	-154.89
Above Normal (15%)	-214.40
Below Normal (17%)	-48.79
Dry (22%)	-48.24
Critical (15%)	-1.78

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-13-2. Annual NODOS Net Generation

No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	-10.03
20%	-10.78
30%	-11.29
40%	-12.04
50%	-12.21
60%	-12.49
70%	-12.63
80%	-12.92
90%	-13.06
Long Term	
Full Simulation Period[a]	-11.89
Water Year Types[b,c]	
Wet (32%)	-12.49
Above Normal (15%)	-12.59
Below Normal (17%)	-12.67
Dry (22%)	-11.33
Critical (15%)	-10.07

Alternative D1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	112.40
20%	67.53
30%	-6.52
40%	-47.51
50%	-85.61
60%	-130.82
70%	-229.46
80%	-312.59
90%	-436.35
Long Term	
Full Simulation Period[a]	-136.19
Water Year Types[b,c]	
Wet (32%)	-225.47
Above Normal (15%)	-293.86
Below Normal (17%)	-51.65
Dry (22%)	-57.49
Critical (15%)	19.42

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance[a]	
10%	122.43
20%	78.30
30%	4.77
40%	-35.46
50%	-73.41
60%	-118.33
70%	-216.83
80%	-299.68
90%	-423.30
Long Term	
Full Simulation Period[a]	-124.29
Water Year Types[b,c]	
Wet (32%)	-212.98
Above Normal (15%)	-281.27
Below Normal (17%)	-38.98
Dry (22%)	-46.15
Critical (15%)	29.48

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-13-3. Annual NODOS Net Generation

Alternative A1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	72.62
20%	28.02
30%	-14.59
40%	-42.18
50%	-84.97
60%	-126.32
70%	-177.33
80%	-244.60
90%	-357.77
Long Term	
Full Simulation Period[a]	-113.57
Water Year Types[b,c]	
Wet (32%)	-167.38
Above Normal (15%)	-226.99
Below Normal (17%)	-61.46
Dry (22%)	-59.57
Critical (15%)	-11.84

Alternative D1 041320 QAQC2

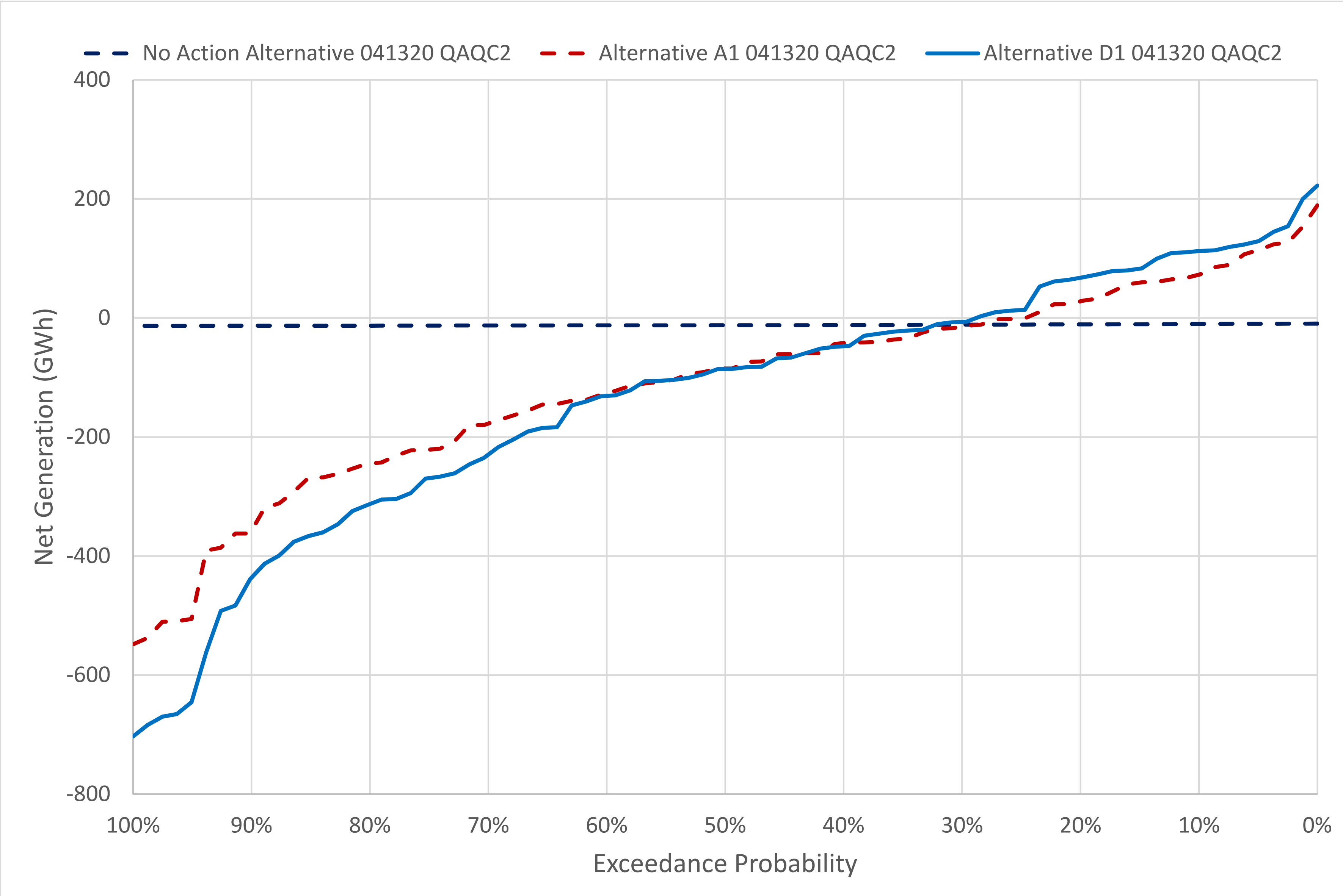
Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	112.40
20%	67.53
30%	-6.52
40%	-47.51
50%	-85.61
60%	-130.82
70%	-229.46
80%	-312.59
90%	-436.35
Long Term	
Full Simulation Period[a]	-136.19
Water Year Types[b,c]	
Wet (32%)	-225.47
Above Normal (15%)	-293.86
Below Normal (17%)	-51.65
Dry (22%)	-57.49
Critical (15%)	19.42

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance[a]	
10%	39.77
20%	39.50
30%	8.07
40%	-5.32
50%	-0.65
60%	-4.49
70%	-52.13
80%	-68.00
90%	-78.59
Long Term	
Full Simulation Period[a]	-22.62
Water Year Types[b,c]	
Wet (32%)	-58.09
Above Normal (15%)	-66.86
Below Normal (17%)	9.81
Dry (22%)	2.08
Critical (15%)	31.26

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.2-13-1. October-September NODOS Net Generation



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-14-1. Annual NODOS Net Revenue

No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	-529.76
20%	-565.28
30%	-593.38
40%	-635.68
50%	-649.73
60%	-661.86
70%	-666.53
80%	-680.35
90%	-687.55
Long Term	
Full Simulation Period[a]	-627.42
Water Year Types[b,c]	
Wet (32%)	-661.19
Above Normal (15%)	-665.33
Below Normal (17%)	-667.55
Dry (22%)	-596.11
Critical (15%)	-528.62

Alternative A1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	4,063.81
20%	1,568.71
30%	-448.83
40%	-2,465.99
50%	-4,698.95
60%	-6,901.22
70%	-9,433.02
80%	-13,561.39
90%	-18,868.82
Long Term	
Full Simulation Period[a]	-6,063.65
Water Year Types[b,c]	
Wet (32%)	-9,113.74
Above Normal (15%)	-12,293.61
Below Normal (17%)	-3,034.20
Dry (22%)	-2,892.61
Critical (15%)	-768.03

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance[a]	
10%	4,593.57
20%	2,133.99
30%	144.55
40%	-1,830.32
50%	-4,049.22
60%	-6,239.35
70%	-8,766.49
80%	-12,881.04
90%	-18,181.27
Long Term	
Full Simulation Period[a]	-5,436.22
Water Year Types[b,c]	
Wet (32%)	-8,452.55
Above Normal (15%)	-11,628.28
Below Normal (17%)	-2,366.65
Dry (22%)	-2,296.50
Critical (15%)	-239.41

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.
e Net revenue is is based on 2030 energy pricing forecasts developed by DWR.

Table G.2.2-14-2. Annual NODOS Net Revenue

No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	-529.76
20%	-565.28
30%	-593.38
40%	-635.68
50%	-649.73
60%	-661.86
70%	-666.53
80%	-680.35
90%	-687.55
Long Term	
Full Simulation Period[a]	-627.42
Water Year Types[b,c]	
Wet (32%)	-661.19
Above Normal (15%)	-665.33
Below Normal (17%)	-667.55
Dry (22%)	-596.11
Critical (15%)	-528.62

Alternative D1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	6,056.29
20%	3,546.57
30%	298.98
40%	-2,396.47
50%	-4,503.12
60%	-7,003.56
70%	-12,326.28
80%	-16,980.41
90%	-22,626.72
Long Term	
Full Simulation Period[a]	-7,173.54
Water Year Types[b,c]	
Wet (32%)	-12,180.32
Above Normal (15%)	-15,562.71
Below Normal (17%)	-2,435.75
Dry (22%)	-2,674.24
Critical (15%)	920.94

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance[a]	
10%	6,586.05
20%	4,111.85
30%	892.35
40%	-1,760.79
50%	-3,853.39
60%	-6,341.70
70%	-11,659.75
80%	-16,300.06
90%	-21,939.18
Long Term	
Full Simulation Period[a]	-6,546.12
Water Year Types[b,c]	
Wet (32%)	-11,519.13
Above Normal (15%)	-14,897.38
Below Normal (17%)	-1,768.21
Dry (22%)	-2,078.13
Critical (15%)	1,449.56

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.
e Net revenue is is based on 2030 energy pricing forecasts developed by DWR.

Table G.2.2-14-3. Annual NODOS Net Revenue

Alternative A1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	4,063.81
20%	1,568.71
30%	-448.83
40%	-2,465.99
50%	-4,698.95
60%	-6,901.22
70%	-9,433.02
80%	-13,561.39
90%	-18,868.82
Long Term	
Full Simulation Period[a]	-6,063.65
Water Year Types[b,c]	
Wet (32%)	-9,113.74
Above Normal (15%)	-12,293.61
Below Normal (17%)	-3,034.20
Dry (22%)	-2,892.61
Critical (15%)	-768.03

Alternative D1 041320 QAQC2

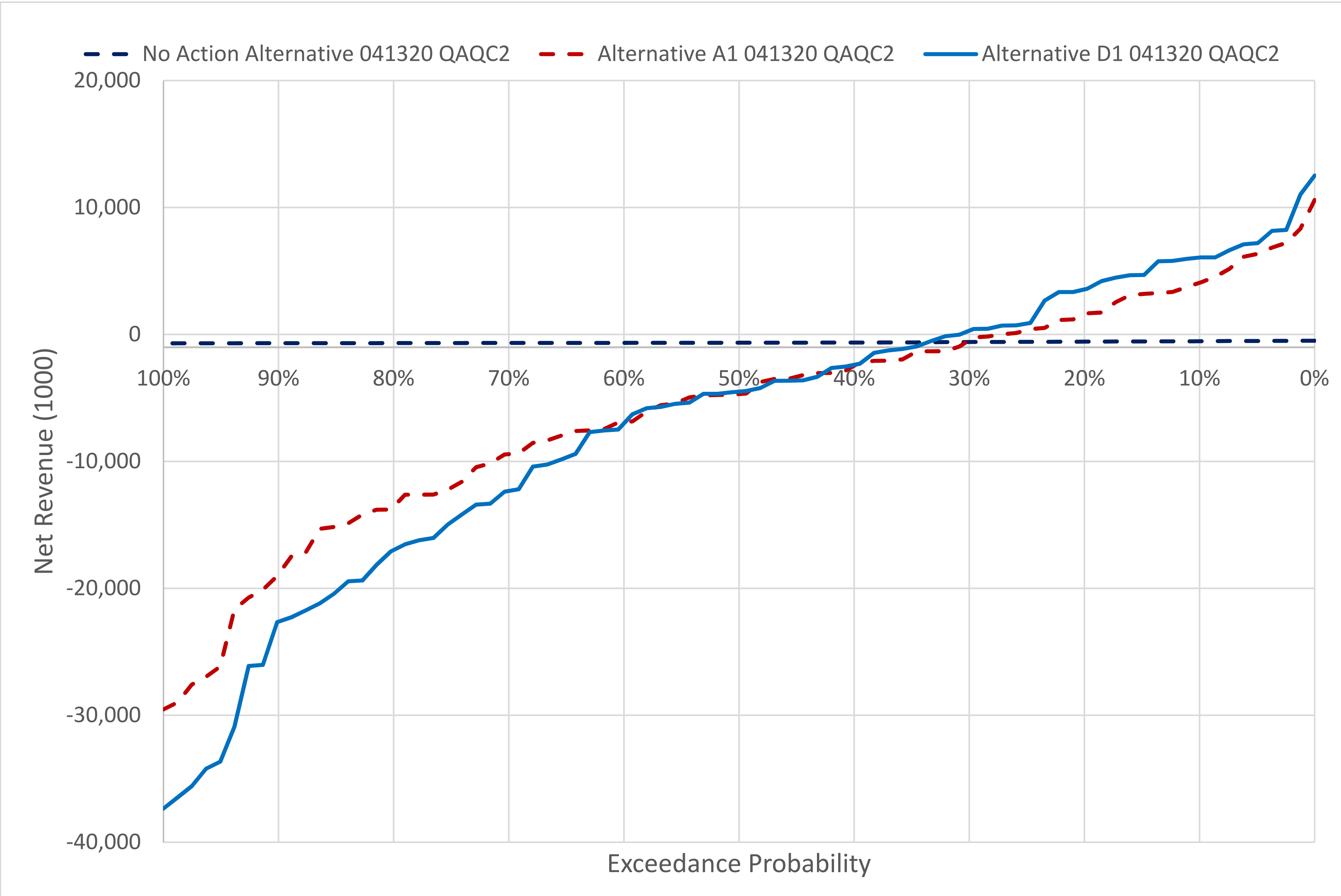
Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	6,056.29
20%	3,546.57
30%	298.98
40%	-2,396.47
50%	-4,503.12
60%	-7,003.56
70%	-12,326.28
80%	-16,980.41
90%	-22,626.72
Long Term	
Full Simulation Period[a]	-7,173.54
Water Year Types[b,c]	
Wet (32%)	-12,180.32
Above Normal (15%)	-15,562.71
Below Normal (17%)	-2,435.75
Dry (22%)	-2,674.24
Critical (15%)	920.94

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance[a]	
10%	1,992.48
20%	1,977.86
30%	747.81
40%	69.53
50%	195.83
60%	-102.34
70%	-2,893.26
80%	-3,419.02
90%	-3,757.90
Long Term	
Full Simulation Period[a]	-1,109.89
Water Year Types[b,c]	
Wet (32%)	-3,066.58
Above Normal (15%)	-3,269.10
Below Normal (17%)	598.44
Dry (22%)	218.37
Critical (15%)	1,688.97

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.
e Net revenue is is based on 2030 energy pricing forecasts developed by DWR.

Figure G.2.2-14-1. October-September NODOS Net Revenue



*All scenarios are simulated at DCR 2015 climate conditions. Net revenue is based on 2030 energy pricing forecasts developed by DWR.

Table G.2.2-15-1. Annual CVP, SWP, and NODOS Net Generation

No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	901.82
20%	575.93
30%	148.33
40%	-127.64
50%	-335.39
60%	-510.68
70%	-794.19
80%	-1,359.32
90%	-1,984.74
Long Term	
Full Simulation Period[a]	-433.23
Water Year Types[b,c]	
Wet (32%)	297.79
Above Normal (15%)	-435.15
Below Normal (17%)	-1,464.39
Dry (22%)	-1,030.64
Critical (15%)	-74.13

Alternative A1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	736.16
20%	250.50
30%	-171.40
40%	-440.96
50%	-614.84
60%	-1,007.80
70%	-1,257.16
80%	-1,862.61
90%	-2,275.39
Long Term	
Full Simulation Period[a]	-752.24
Water Year Types[b,c]	
Wet (32%)	131.11
Above Normal (15%)	-714.48
Below Normal (17%)	-1,736.92
Dry (22%)	-1,695.26
Critical (15%)	-232.77

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance[a]	
10%	-165.66
20%	-325.43
30%	-319.73
40%	-313.32
50%	-279.45
60%	-497.12
70%	-462.98
80%	-503.29
90%	-290.65
Long Term	
Full Simulation Period[a]	-319.01
Water Year Types[b,c]	
Wet (32%)	-166.68
Above Normal (15%)	-279.34
Below Normal (17%)	-272.53
Dry (22%)	-664.61
Critical (15%)	-158.63

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-15-2. Annual CVP, SWP, and NODOS Net Generation

No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	901.82
20%	575.93
30%	148.33
40%	-127.64
50%	-335.39
60%	-510.68
70%	-794.19
80%	-1,359.32
90%	-1,984.74
Long Term	
Full Simulation Period[a]	-433.23
Water Year Types[b,c]	
Wet (32%)	297.79
Above Normal (15%)	-435.15
Below Normal (17%)	-1,464.39
Dry (22%)	-1,030.64
Critical (15%)	-74.13

Alternative D1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	642.35
20%	78.95
30%	-213.51
40%	-476.44
50%	-774.22
60%	-1,084.70
70%	-1,318.11
80%	-1,861.47
90%	-2,321.89
Long Term	
Full Simulation Period[a]	-807.86
Water Year Types[b,c]	
Wet (32%)	84.11
Above Normal (15%)	-806.61
Below Normal (17%)	-1,807.42
Dry (22%)	-1,737.23
Critical (15%)	-276.59

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance[a]	
10%	-259.47
20%	-496.98
30%	-361.85
40%	-348.80
50%	-438.84
60%	-574.02
70%	-523.92
80%	-502.15
90%	-337.15
Long Term	
Full Simulation Period[a]	-374.62
Water Year Types[b,c]	
Wet (32%)	-213.68
Above Normal (15%)	-371.46
Below Normal (17%)	-343.02
Dry (22%)	-706.59
Critical (15%)	-202.45

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-15-3. Annual CVP, SWP, and NODOS Net Generation

Alternative A1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	736.16
20%	250.50
30%	-171.40
40%	-440.96
50%	-614.84
60%	-1,007.80
70%	-1,257.16
80%	-1,862.61
90%	-2,275.39
Long Term	
Full Simulation Period[a]	-752.24
Water Year Types[b,c]	
Wet (32%)	131.11
Above Normal (15%)	-714.48
Below Normal (17%)	-1,736.92
Dry (22%)	-1,695.26
Critical (15%)	-232.77

Alternative D1 041320 QAQC2

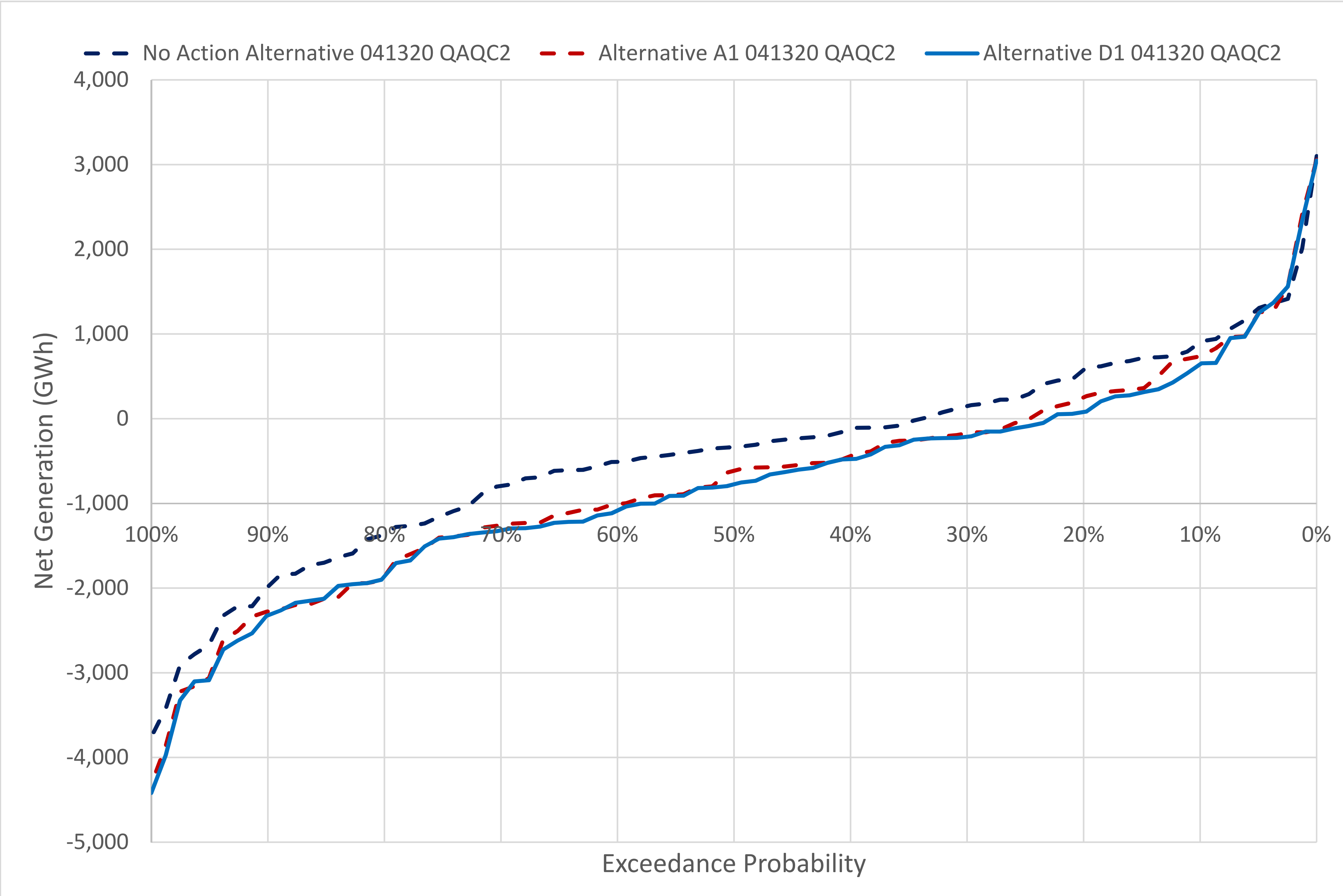
Statistic	Net Generation (GWh)
Probability of Exceedance	
10%	642.35
20%	78.95
30%	-213.51
40%	-476.44
50%	-774.22
60%	-1,084.70
70%	-1,318.11
80%	-1,861.47
90%	-2,321.89
Long Term	
Full Simulation Period[a]	-807.86
Water Year Types[b,c]	
Wet (32%)	84.11
Above Normal (15%)	-806.61
Below Normal (17%)	-1,807.42
Dry (22%)	-1,737.23
Critical (15%)	-276.59

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Net Generation (GWh)
Probability of Exceedance[a]	
10%	-93.81
20%	-171.55
30%	-42.11
40%	-35.49
50%	-159.38
60%	-76.90
70%	-60.94
80%	1.14
90%	-46.50
Long Term	
Full Simulation Period[a]	-55.61
Water Year Types[b,c]	
Wet (32%)	-47.00
Above Normal (15%)	-92.13
Below Normal (17%)	-70.49
Dry (22%)	-41.98
Critical (15%)	-43.82

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.

Figure G.2.2-15-1. October-September CVP, SWP, and NODOS Net Generation



*All scenarios are simulated at DCR 2015 climate conditions.

Table G.2.2-16-1. Annual CVP, SWP, and NODOS Net Revenue

No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	45,627.49
20%	30,586.46
30%	7,857.72
40%	-7,669.10
50%	-19,442.59
60%	-31,415.20
70%	-41,597.04
80%	-74,641.12
90%	-109,814.82
Long Term	
Full Simulation Period[a]	-23,437.32
Water Year Types[b,c]	
Wet (32%)	17,520.41
Above Normal (15%)	-21,997.70
Below Normal (17%)	-79,659.10
Dry (22%)	-57,221.59
Critical (15%)	-5,894.89

Alternative A1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	38,990.91
20%	15,587.10
30%	-6,761.20
40%	-21,480.12
50%	-35,848.50
60%	-57,092.39
70%	-69,696.95
80%	-102,762.47
90%	-122,131.87
Long Term	
Full Simulation Period[a]	-40,460.71
Water Year Types[b,c]	
Wet (32%)	8,596.70
Above Normal (15%)	-37,072.50
Below Normal (17%)	-94,019.60
Dry (22%)	-92,716.50
Critical (15%)	-14,233.70

Alternative A1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance[a]	
10%	-6,636.59
20%	-14,999.37
30%	-14,618.92
40%	-13,811.02
50%	-16,405.91
60%	-25,677.19
70%	-28,099.91
80%	-28,121.35
90%	-12,317.05
Long Term	
Full Simulation Period[a]	-17,023.39
Water Year Types[b,c]	
Wet (32%)	-8,923.71
Above Normal (15%)	-15,074.80
Below Normal (17%)	-14,360.50
Dry (22%)	-35,494.91
Critical (15%)	-8,338.81

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.
e Net revenue is is based on 2030 energy pricing forecasts developed by DWR.

Table G.2.2-16-2. Annual CVP, SWP, and NODOS Net Revenue

No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	45,627.49
20%	30,586.46
30%	7,857.72
40%	-7,669.10
50%	-19,442.59
60%	-31,415.20
70%	-41,597.04
80%	-74,641.12
90%	-109,814.82
Long Term	
Full Simulation Period[a]	-23,437.32
Water Year Types[b,c]	
Wet (32%)	17,520.41
Above Normal (15%)	-21,997.70
Below Normal (17%)	-79,659.10
Dry (22%)	-57,221.59
Critical (15%)	-5,894.89

Alternative D1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	29,411.20
20%	8,856.34
30%	-10,826.48
40%	-23,646.03
50%	-42,033.31
60%	-61,183.38
70%	-71,131.12
80%	-101,033.98
90%	-125,552.21
Long Term	
Full Simulation Period[a]	-43,393.11
Water Year Types[b,c]	
Wet (32%)	6,141.94
Above Normal (15%)	-41,886.83
Below Normal (17%)	-97,837.21
Dry (22%)	-94,992.91
Critical (15%)	-16,444.08

Alternative D1 041320 QAQC2 minus No Action Alternative 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance[a]	
10%	-16,216.30
20%	-21,730.13
30%	-18,684.20
40%	-15,976.93
50%	-22,590.72
60%	-29,768.18
70%	-29,534.08
80%	-26,392.86
90%	-15,737.39
Long Term	
Full Simulation Period[a]	-19,955.79
Water Year Types[b,c]	
Wet (32%)	-11,378.47
Above Normal (15%)	-19,889.14
Below Normal (17%)	-18,178.11
Dry (22%)	-37,771.32
Critical (15%)	-10,549.18

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.
e Net revenue is is based on 2030 energy pricing forecasts developed by DWR.

Table G.2.2-16-3. Annual CVP, SWP, and NODOS Net Revenue

Alternative A1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	38,990.91
20%	15,587.10
30%	-6,761.20
40%	-21,480.12
50%	-35,848.50
60%	-57,092.39
70%	-69,696.95
80%	-102,762.47
90%	-122,131.87
Long Term	
Full Simulation Period[a]	-40,460.71
Water Year Types[b,c]	
Wet (32%)	8,596.70
Above Normal (15%)	-37,072.50
Below Normal (17%)	-94,019.60
Dry (22%)	-92,716.50
Critical (15%)	-14,233.70

Alternative D1 041320 QAQC2

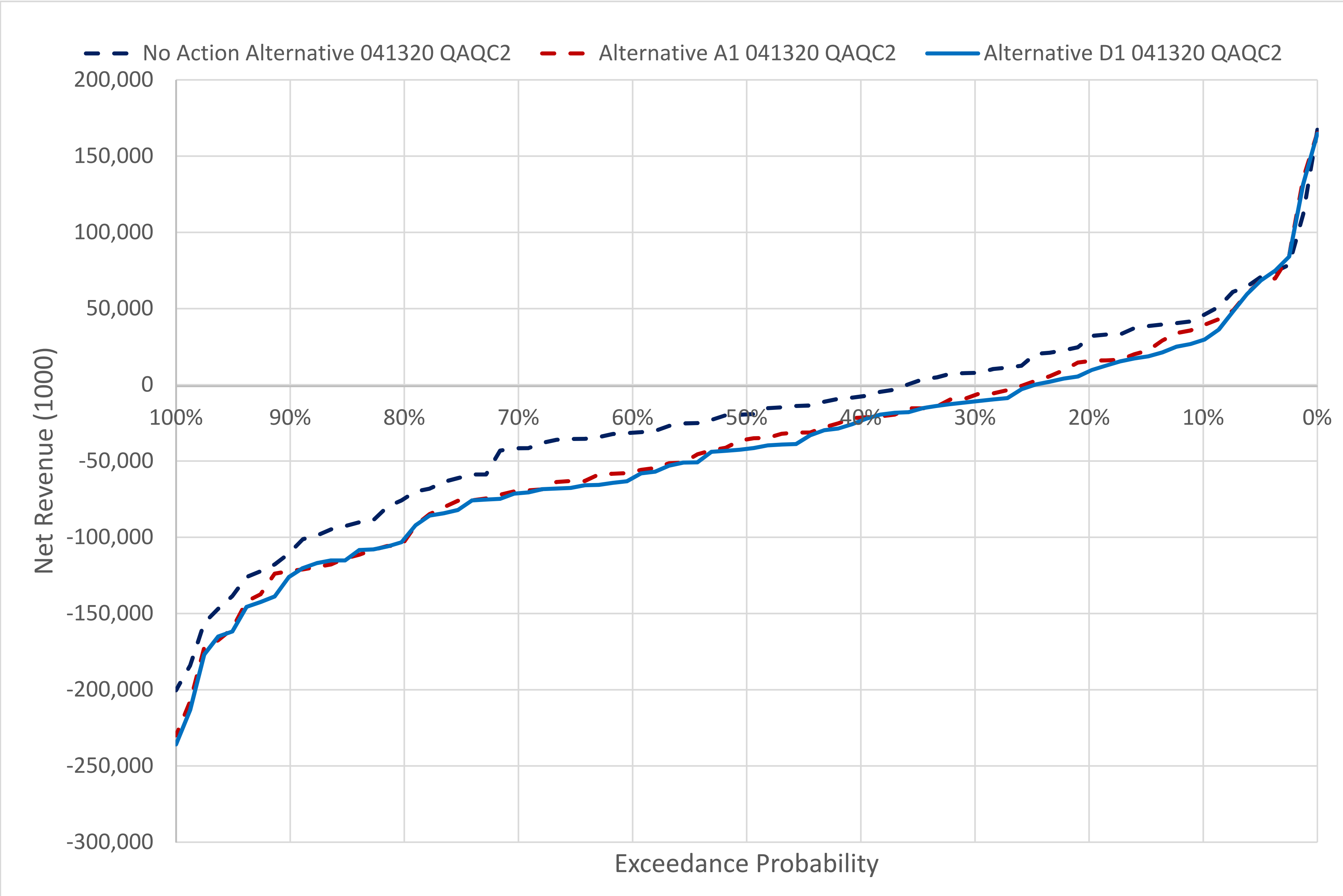
Statistic	Net Revenue (1000)
Probability of Exceedance	
10%	29,411.20
20%	8,856.34
30%	-10,826.48
40%	-23,646.03
50%	-42,033.31
60%	-61,183.38
70%	-71,131.12
80%	-101,033.98
90%	-125,552.21
Long Term	
Full Simulation Period[a]	-43,393.11
Water Year Types[b,c]	
Wet (32%)	6,141.94
Above Normal (15%)	-41,886.83
Below Normal (17%)	-97,837.21
Dry (22%)	-94,992.91
Critical (15%)	-16,444.08

Alternative D1 041320 QAQC2 minus Alternative A1 041320 QAQC2

Statistic	Net Revenue (1000)
Probability of Exceedance[a]	
10%	-9,579.71
20%	-6,730.76
30%	-4,065.28
40%	-2,165.90
50%	-6,184.81
60%	-4,090.99
70%	-1,434.17
80%	1,728.49
90%	-3,420.34
Long Term	
Full Simulation Period[a]	-2,932.40
Water Year Types[b,c]	
Wet (32%)	-2,454.76
Above Normal (15%)	-4,814.33
Below Normal (17%)	-3,817.62
Dry (22%)	-2,276.40
Critical (15%)	-2,210.38

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at DCR 2015 climate conditions.
e Net revenue is is based on 2030 energy pricing forecasts developed by DWR.

Figure G.2.2-16-1. October-September CVP, SWP, and NODOS Net Revenue



*All scenarios are simulated at DCR 2015 climate conditions. Net revenue is based on 2030 energy pricing forecasts developed by DWR.

This page intentionally left blank.

Power Model Documentation

Power Model Documentation

This Appendix describes the power model assumptions, methods, and models used for the Sites Project Feasibility Report update (2020). This appendix also provides model results processing and interpretation methods used for the impacts analysis and descriptions.

Power Modeling Methodology & Assumptions

Energy generation can be quantified by estimating hydropower generation, at a monthly level, over a sequence of years representing varying hydrologic conditions. This kind of analysis is based on input hydrology and reservoir operations information. Energy generation capability will be based on the reservoir storage and flow through the turbines. Energy consumption will be based on pumping requirements to meet the operating criteria. These inputs are fed into two spreadsheet-based models, Long-Term Generation (LTGen) and SWP Power, which compute energy generation at each CVP and SWP pumping facility through a series of computations.

Power Models

LTGEN and SWP_Power are two commonly used, publicly available models developed by Reclamation and DWR. These models calculate a facility's long-term power generation capacity and pumping energy consumption for CVP and SWP facilities (Reclamation, 2015). To calculate long-term power generation, the models use reservoir storage and release data from the CalSim II model along with user-specified generation characteristics, such as the number of units and transmission loss, to calculate a monthly average energy generation at all CVP and SWP reservoirs with power plants. NODOS_Power has been developed to calculate the power generation and pumping energy consumption for facilities used to divert water to and from the proposed Sites Reservoir.

The models compute energy generation requirements using flow and storage data from CalSim II and user- specified characteristics, such as percentage of on-peak and off-peak pumping and transmission losses to calculate the monthly average energy consumption of all CVP and SWP pumping plants under the assumed CalSim II scenarios. Flows and storages from the entire CalSim II simulation period (October 1921 to September 2003) are used as inputs to the models. Climate change and sea level rise are inherently represented through CalSim II outputs.

Metrics for quantifying hydropower generation are displayed in terms of energy units generated (such as megawatts). Calculating energy generation annually, monthly, and by water year type can help in evaluating the overall hydropower performance under a variety of energy demand and hydrologic conditions.

For this analysis, the energy capacity, energy generation, energy use, and net energy generation of CVP and SWP facilities for No Action Alternative and three proposed Sites Project alternatives are compared against each other using exceedance tables, exceedance charts, and monthly pattern charts. Using LTGen and SWP_Power, the following parameters have been computed for each CVP and SWP facility:

- Facility Capacity (megawatts; MW)
- Energy Generation (gigawatt hours; GWh)

- Energy Use (gigawatt hours; GWh)
- Net Energy Generation (gigawatt hours; GWh)

Energy Generation Calculations

Energy generation is computed using empirical energy factors provided by the Western Area Power Authority (WAPA) for CVP facilities and by the DWR Operations Control Office (OCO) for SWP facilities. Energy generation can be calculated using Equation 1.

$$\text{Energy\_Generation } (MWh) = Energy\_Factor_G * \text{Q}\frac{ft^3}{s} \qquad \text{Eq. 1}$$

Average Monthly Power Capacity Calculations

Energy generation is limited on a monthly basis by an average power capacity at each facility. Power capacity fluctuates with varying reservoir levels and scheduled water releases. Generally, power production is higher during summer months when reservoir levels are higher and water is released to satisfy delivery requirements.

For CVP facilities, average monthly power capacity is estimated using empirical equations provided by WAPA. For SWP facilities, average monthly power capacity is computed using Equation 2, where the peak capacity is assumed to be a function of total head and average power plant flow.

$$\text{Power\_Capacity } (MW) = 0.7457\frac{kW}{hp} * 62.4\frac{lbs}{ft^3} * \frac{1MW}{1{,}000kW} * \frac{1hp}{550\frac{lb*ft}{s}} * \frac{1}{\eta} * head(ft) * Avg.powerplant\_flot\_rate\left(\frac{ft^3}{s}\right) \qquad \text{Eq. 2}$$

Energy Use Calculations

Energy use is computed using empirical energy factors provided by WAPA for CVP facilities and by the OCO for SWP facilities. Energy use can be calculated using Equation 3.

$$\text{Energy\_Use } (MWh) = Energy\_Factor_U * \text{Q}\frac{ft^3}{s} \qquad \text{Eq. 3}$$

In addition, the power models determine whether user-specified off-peak energy use targets can be satisfied under given power and flow capacity limits. Moreover, the tools determine the feasibility of requiring a certain percentage of pumping energy use to occur during off-peak hours for a particular month.

Transmission Losses

Transmission losses are estimated to determine energy use and generation at load centers, as percentages of energy use or generation.

NODOS Power

The NODOS Power tool estimates average annual energy generation and use at proposed Sites Project generation and pumping facilities, including existing facilities that would be operated differently if Sites Reservoir is built. For generation facilities, the tool estimates average annual energy generation and average annual peaking power capacity. For pumping facilities, the tool estimates average annual power requirements. The tool also checks to determine whether off-peak energy use targets are being met. Transmission losses are estimated for both pumping and generation facilities. In addition, the tool estimates the economic benefits and costs of power generation and use at the proposed Sites Reservoir generation and pumping facilities.

A total of six pumping facilities and three generation facilities are included in the analysis.

Pumping facilities:

1. Sacramento River diversion to Tehama-Colusa Canal to Funks Reservoir (existing pumping facility)
2. Sacramento River diversion to Glenn-Colusa Canal to Glenn-Colusa Canal Terminal Regulating Reservoir (existing pumping facility)
3. Conveyance from Glenn-Colusa Canal Terminal Regulating Reservoir to Fletcher Forebay/Afterbay (proposed conveyance with pumping facilities)
4. Conveyance from Sacramento River to Fletcher Forebay/Afterbay (proposed conveyance with pumping facilities)
5. Conveyance from Funks Reservoir to Fletcher Forebay/Afterbay (proposed conveyance with pumping facilities)
6. Conveyance from Fletcher Forebay/Afterbay to Sites Reservoir (proposed conveyance with pumping facilities)

Generation facilities:

1. Conveyance from Sites Reservoir to Fletcher Forebay/Afterbay (proposed conveyance with power generation facilities)
2. Conveyance from Fletcher Forebay/Afterbay to the Sacramento River (proposed conveyance with power generation facilities)
3. Conveyance from Fletcher Forebay/Afterbay to Glenn-Colusa Canal Terminal Regulating Reservoir (proposed conveyance with power generation facilities)

Figure G.2.2-17-1 includes a schematic of the pumping and generation facilities used in NODOS Power. The red lettering represents CalSim II arcs and the green lettering represents water elevation. Each pumping and generation facilities (PP and GP) is associated with a capacity in cfs.

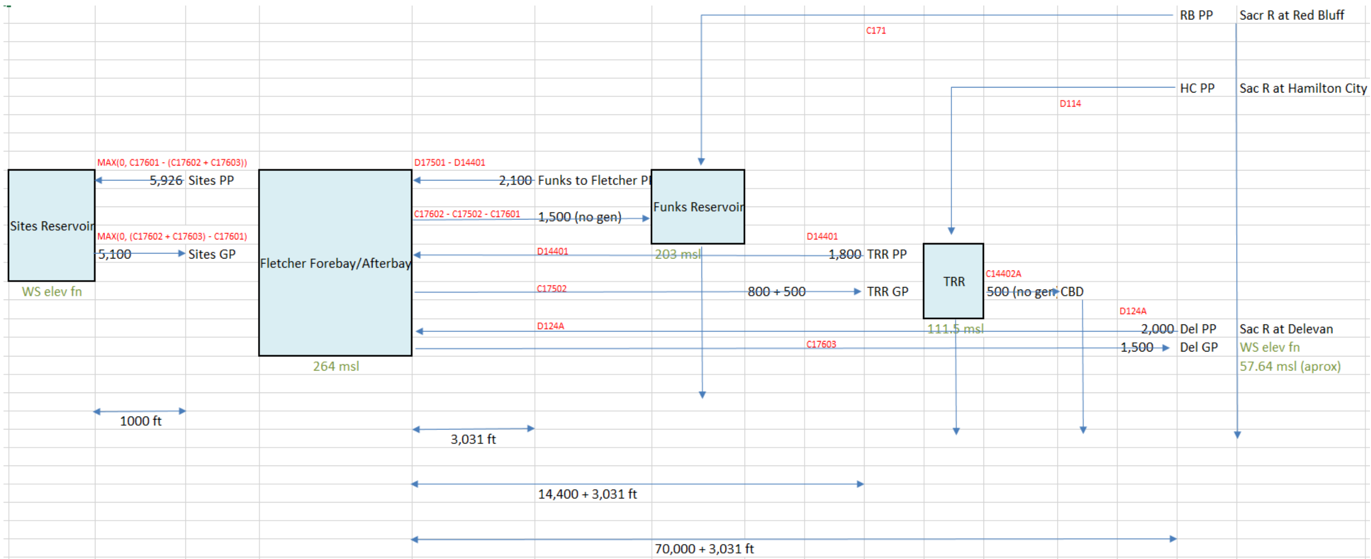


Figure G.2.2-17-1. NODOS Power Model Schematic.

Assumption Tables

Tables G.2.2-17-1, G.2.2-17-2, and G.2.2-17-3 show the assumptions used to estimate energy use and transmission losses at CVP, SWP, and NODOS pumping facilities. Tables G.2.2-17-4, G.2.2-17-5, and G.2.2-17-6 show the assumptions used to estimate energy generation, power capacity, and transmission losses at CVP, SWP, and NODOS generation facilities.

Table G.2.2-17-1 Central Valley Project Pumping Plant Characteristics.

Jones Pumping Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	237.5	237.5	237.5	237.5	237.5	237.5	237.5	237.5	237.5	237.5	237.5	237.5
# Units	6	6	6	6	6	6	6	6	6	6	6	6
Capacity/Unit (MW)	16	16	16	16	16	16	16	16	16	16	16	16
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Percent Eng Off Peak (%)	42.9%	42.9%	42.9%	42.9%	42.9%	42.9%	42.9%	42.9%	42.9%	42.9%	42.9%	42.9%
On Peak Cap Adj Factor	1.05	1.05	1.05	1.50	1.20	2.20	1.60	2.30	1.50	1.05	1.05	1.05
Off Peak Cap Adj Factor	1.05	1.05	1.05	1.50	1.20	2.20	1.60	2.30	1.50	1.05	1.05	1.05

CVP Banks Pumping Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	297	297	297	297	297	297	297	297	297	297	297	297
# Units	0	0	0	0	0	0	0	0	0	0	0	0
Capacity/Unit (MW)	0	0	0	0	0	0	0	0	0	0	0	0
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Percent Eng Off Peak (%)	53.7%	53.7%	53.7%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	53.7%	53.7%	53.7%
On Peak Cap Adj Factor	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Off Peak Cap Adj Factor	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00

Contra Costa Pumping Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	164.8	164.8	164.8	164.8	164.8	164.8	164.8	164.8	164.8	164.8	164.8	164.8
# Units	6	6	6	6	6	6	6	6	6	6	6	6
Capacity/Unit (MW)	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Transmission Loss (%)	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Percent Eng Off Peak (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
On Peak Cap Adj Factor	2.00	2.00	2.00	2.00	2.00	2.00	1.20	1.20	1.20	1.20	2.00	2.00
Off Peak Cap Adj Factor	2.00	2.00	2.00	2.00	2.00	2.00	1.20	1.20	1.20	1.20	2.00	2.00

O'Neill Pumping Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2
# Units	6	6	6	6	6	6	6	6	6	6	6	6
Capacity/Unit (MW)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Percent Eng Off Peak (%)	48.5%	48.5%	48.5%	48.5%	48.5%	48.5%	48.5%	48.5%	48.5%	48.5%	48.5%	48.5%
On Peak Cap Adj Factor	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Off Peak Cap Adj Factor	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00

CVP San Luis Pumping Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	function	function	function	function	function	function	function	function	function	function	function	function
# Units	8	8	8	8	8	8	8	8	8	8	8	8
Capacity/Unit (MW)	function	function	function	function	function	function	function	function	function	function	function	function
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Percent Eng Off Peak (%)	89.7%	89.7%	89.7%	89.7%	89.7%	89.7%	89.7%	89.7%	89.7%	89.7%	89.7%	89.7%
On Peak Cap Adj Factor	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Off Peak Cap Adj Factor	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50

San Felipe Pumping Plant (Pacheco)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	function	function	function	function	function	function	function	function	function	function	function	function
# Units	12	12	12	12	12	12	12	12	12	12	12	12
Capacity/Unit (MW)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Percent Eng Off Peak (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
On Peak Cap Adj Factor	2.00	2.00	2.00	1.50	1.50	1.50	1.50	1.20	1.20	1.20	1.20	1.20
Off Peak Cap Adj Factor	2.00	2.00	2.00	1.50	1.50	1.50	1.50	1.20	1.20	1.20	1.20	1.20

CVP Dos Amigos Pumping Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	137.9	137.9	137.9	137.9	137.9	137.9	137.9	137.9	137.9	137.9	137.9	137.9
# Units	6	6	6	6	6	6	6	6	6	6	6	6
Capacity/Unit (MW)	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Percent Eng Off Peak (%)	76.6%	76.6%	76.6%	76.6%	76.6%	76.6%	76.6%	76.6%	56.6%	56.6%	56.6%	76.6%
On Peak Cap Adj Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Off Peak Cap Adj Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Folsom Pumping Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	function	function	function	function	function	function	function	function	function	function	function	function
# Units	6	6	6	6	6	6	6	6	6	6	6	6
Capacity/Unit (MW)	5	5	5	5	5	5	5	5	5	5	5	5
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Percent Eng Off Peak (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
On Peak Cap Adj Factor	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Off Peak Cap Adj Factor	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50

Table G.2.2-17-1 Central Valley Project Pumping Plant Characteristics (cont.).

Corning Pumping Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	190	190	190	190	190	190	190	190	190	190	190	190
# Units	0	0	0	0	0	0	0	0	0	0	0	0
Capacity/Unit (MW)	0	0	0	0	0	0	0	0	0	0	0	0
Transmission Loss (%)	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Percent Eng Off Peak (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
On Peak Cap Adj Factor	3.00	4.00	4.00	4.00	4.00	3.00	2.00	2.00	2.00	2.00	2.00	2.00
Off Peak Cap Adj Factor	3.00	4.00	4.00	4.00	4.00	3.00	2.00	2.00	2.00	2.00	2.00	2.00

Red Bluff Pumping Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	12	12	12	12	12	12	0	0	0	0	0	12
# Units	0	0	0	0	0	0	0	0	0	0	0	0
Capacity/Unit (MW)	0	0	0	0	0	0	0	0	0	0	0	0
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Percent Eng Off Peak (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
On Peak Adj Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Off Peak Adj Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

San Luis Other	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
# Units	0	0	0	0	0	0	0	0	0	0	0	0
Capacity/Unit (MW)	0	0	0	0	0	0	0	0	0	0	0	0
Transmission Loss (%)	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Percent Eng Off Peak (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
On Peak Cap Adj Factor	2.00	2.00	2.00	2.00	2.00	2.00	1.50	1.50	1.50	1.50	1.50	2.00
Off Peak Cap Adj Factor	2.00	2.00	2.00	2.00	2.00	2.00	1.50	1.50	1.50	1.50	1.50	2.00

DMC Other	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
# Units	0	0	0	0	0	0	0	0	0	0	0	0
Capacity/Unit (MW)	0	0	0	0	0	0	0	0	0	0	0	0
Transmission Loss (%)	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Percent Eng Off Peak (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
On Peak Cap Adj Factor	3.00	3.00	3.00	3.00	2.50	2.00	2.00	1.50	1.50	1.50	1.50	1.50
Off Peak Cap Adj Factor	3.00	3.00	3.00	3.00	2.50	2.00	2.00	1.50	1.50	1.50	1.50	1.50

Tehama Other	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
# Units	0	0	0	0	0	0	0	0	0	0	0	0
Capacity/Unit (MW)	0	0	0	0	0	0	0	0	0	0	0	0
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Percent Eng Off Peak (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
On Peak Cap Adj Factor	2.00	3.00	3.00	3.00	3.00	3.00	1.50	1.50	1.50	1.50	1.50	1.50
Off Peak Cap Adj Factor	2.00	3.00	3.00	3.00	3.00	3.00	1.50	1.50	1.50	1.50	1.50	1.50

Miscellaneous Project Use	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
MW	7	5	6	6	9	11	4	5	15	23	33	9
Transmission Loss (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GWH	5.1	3.4	4.6	4.5	6.1	8.5	2.5	3.7	10.6	16.8	24.8	6.2
Percent Eng Off Peak (%)	59.1%	61.6%	67.3%	64.3%	62.0%	59.0%	52.2%	52.9%	49.1%	50.3%	49.8%	61.3%

DMC Intertie	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3
# Units	8	8	8	8	8	8	8	8	8	8	8	8
Capacity/Unit (MW)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Percent Eng Off Peak (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
On Peak Cap Adj Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Off Peak Cap Adj Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table G.2.2-17-2 State Water Project Pumping Plant Characteristics.

Banks Pumping Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	297	297	297	297	297	297	297	297	297	297	297	297
# Units	0	0	0	0	0	0	0	0	0	0	0	0
Capacity/Unit (MW)	0	0	0	0	0	0	0	0	0	0	0	0
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Percent Eng Off Peak (%)	53.7%	53.7%	53.7%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	53.7%	53.7%	53.7%

SWP San Luis Pumping Plant (Gianelli Pumping Plant)	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	function	function	function	function	function	function	function	function	function	function	function	function
# Units	8	8	8	8	8	8	8	8	8	8	8	8
Capacity/Unit (MW)	function	function	function	function	function	function	function	function	function	function	function	function
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Percent Eng Off Peak (%)	89.7%	89.7%	89.7%	89.7%	89.7%	89.7%	89.7%	89.7%	89.7%	89.7%	89.7%	89.7%

Dos Amigos Pumping Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	137.9	137.9	137.9	137.9	137.9	137.9	137.9	137.9	137.9	137.9	137.9	137.9
# Units	6	6	6	6	6	6	6	6	6	6	6	6
Capacity/Unit (MW)	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Percent Eng Off Peak (%)	76.6%	76.6%	76.6%	76.6%	76.6%	76.6%	76.6%	76.6%	56.6%	56.6%	56.6%	76.6%

Buena Vista Pumping Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	242	242	242	242	242	242	242	242	242	242	242	242
Plant Power Rating (MW)	107.797	107.797	107.797	107.797	107.797	107.797	107.797	107.797	107.797	107.797	107.797	107.797
Transmission Loss (%)	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%
Percent Eng Off Peak (%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Teerink (Wheeler Ridge) Pumping Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	295	295	295	295	295	295	295	295	295	295	295	295
Plant Power Rating (MW)	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9
Transmission Loss (%)	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%
Percent Eng Off Peak (%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Chrisman (Wind Gap) Pumping Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	639	639	639	639	639	639	639	639	639	639	639	639
Plant Power Rating (MW)	246.18	246.18	246.18	246.18	246.18	246.18	246.18	246.18	246.18	246.18	246.18	246.18
Transmission Loss (%)	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%
Percent Eng Off Peak (%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Edmonson Pumping Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236	2,236
Plant Power Rating (MW)	775.84	775.84	775.84	775.84	775.84	775.84	775.84	775.84	775.84	775.84	775.84	775.84
Transmission Loss (%)	1.64%	1.64%	1.64%	1.64%	1.64%	1.64%	1.64%	1.64%	1.64%	1.64%	1.64%	1.64%
Percent Eng Off Peak (%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Pearblossom Pumping Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	703	703	703	703	703	703	703	703	703	703	703	703
Plant Power Rating (MW)	151.588	151.588	151.588	151.588	151.588	151.588	151.588	151.588	151.588	151.588	151.588	151.588
Transmission Loss (%)	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%
Percent Eng Off Peak (%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Oso Pumping Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	280	280	280	280	280	280	280	280	280	280	280	280
Plant Power Rating (MW)	69.975	69.975	69.975	69.975	69.975	69.975	69.975	69.975	69.975	69.975	69.975	69.975
Transmission Loss (%)	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%
Percent Eng Off Peak (%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

South Bay Pumping Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	797	797	797	797	797	797	797	797	797	797	797	797
Plant Power Rating (MW)	20.69	20.69	20.69	20.69	20.69	20.69	20.69	20.69	20.69	20.69	20.69	20.69
Transmission Loss (%)	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%
Percent Eng Off Peak (%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Del Valle Pumping Plant	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	72	72	72	72	72	72	72	72	72	72	72	72
Plant Power Rating (MW)	0.746	0.746	0.746	0.746	0.746	0.746	0.746	0.746	0.746	0.746	0.746	0.746
Transmission Loss (%)	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
Percent Eng Off Peak (%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Table G.2.2-17-2 State Water Project Pumping Plant Characteristics (cont.).

Las Perillas Pumping Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	77	77	77	77	77	77	77	77	77	77	77	77
Plant Power Rating (MW)	3.021	3.021	3.021	3.021	3.021	3.021	3.021	3.021	3.021	3.021	3.021	3.021
Transmission Loss (%)	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%
Percent Eng Off Peak (%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Badger Hill Pumping Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	200	200	200	200	200	200	200	200	200	200	200	200
Plant Power Rating (MW)	8.766	8.766	8.766	8.766	8.766	8.766	8.766	8.766	8.766	8.766	8.766	8.766
Transmission Loss (%)	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%
Percent Eng Off Peak (%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Table G.2.2-17-3. Sites Project (NODOS) Pumping Plant Characteristics.

	Tehama-Colusa Canal Pump Station												
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Plant Efficiency (%)	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
	Dynamic Head (feet)	12	12	12	12	12	12	12	12	12	12	12	12
	Plant Power Rating (MW)	6	6	6	6	6	6	6	6	6	6	6	6
	Transmission Loss (%)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	Flow Capacity (CFS)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
	Percent Eng Off Peak (%)												
	Terminal Regulating Reservoir Pump Station												
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Head Loss	Number of Pipelines	2	2	2	2	2	2	2	2	2	2	2	2
Head Loss	Flow/Pipeline (CFS)	900	900	900	900	900	900	900	900	900	900	900	900
Head Loss	Pipe Roughness	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Head Loss	Pipeline Diameter (feet)	12	12	12	12	12	12	12	12	12	12	12	12
Head Loss	Pipeline Length (feet)	17431	17431	17431	17431	17431	17431	17431	17431	17431	17431	17431	17431
	Elevation 1	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5
	Elevation 2	264	264	264	264	264	264	264	264	264	264	264	264
	Plant Power Rating (MW)	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1
	Plant Efficiency (%)	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
	Transmission Loss (%)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	Percent Eng Off Peak (%)												
	Sacramento River Pump Station												
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Head Loss	Number of Pipelines	2	2	2	2	2	2	2	2	2	2	2	2
Head Loss	Flow/Pipeline (CFS)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Head Loss	Pipe Roughness	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Head Loss	Pipeline Diameter (feet)	12	12	12	12	12	12	12	12	12	12	12	12
Head Loss	Pipeline Length (feet)	73031	73031	73031	73031	73031	73031	73031	73031	73031	73031	73031	73031
	Plant Power Rating (MW)	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2
	Plant Efficiency (%)	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
	Transmission Loss (%)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	Elevation 1	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage
	Elevation 2	264	264	264	264	264	264	264	264	264	264	264	264
	Percent Eng Off Peak (%)	1	1	1	1	1	1	1	1	1	1	1	1
	Funks (to Fletcher) Pump Station												
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Head Loss	Number of Pipelines	1	1	1	1	1	1	1	1	1	1	1	1
Head Loss	Flow/Pipeline (CFS)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Head Loss	Pipe Roughness	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Head Loss	Pipeline Diameter (feet)	12	12	12	12	12	12	12	12	12	12	12	12
Head Loss	Pipeline Length (feet)	3031	3031	3031	3031	3031	3031	3031	3031	3031	3031	3031	3031
	Elevation 1	203	203	203	203	203	203	203	203	203	203	203	203
	Elevation 2	264	264	264	264	264	264	264	264	264	264	264	264
	Plant Power Rating (MW)	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4
	Plant Efficiency (%)	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
	Transmission Loss (%)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	Percent Eng Off Peak (%)	1	1	1	1	1	1	1	1	1	1	1	1
	Fletcher Pump Station												
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Head Loss	Number of Pipelines	1	1	1	1	1	1	1	1	1	1	1	1
Head Loss	Flow/Pipeline (CFS)	5926	5926	5926	5926	5926	5926	5926	5926	5926	5926	5926	5926
Head Loss	Pipe$_{concrete}$ Roughness	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Head Loss	Pipe$_{steel}$ Roughness	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Head Loss	Pipeline Diameter (feet)	30	30	30	30	30	30	30	30	30	30	30	30
Head Loss	Pipeline$_{concrete}$ Length (feet)	0	0	0	0	0	0	0	0	0	0	0	0
Head Loss	Pipeline$_{steel}$ Length (feet)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
	Elevation 1	203	203	203	203	203	203	203	203	203	203	203	203
	Elevation 2	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS
	Plant Power Rating (MW)	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4
	Plant Efficiency (%)	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
	Transmission Loss (%)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	Percent Eng Off Peak (%)	1	1	1	1	1	1	1	1	1	1	1	1
	GCID-NODOS Pump Station												
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Plant Efficiency (%)	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
	Dynamic Head (feet)	10	10	10	10	10	10	10	10	10	10	10	10
	Plant Power Rating (MW)	3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39
	Transmission Loss (%)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	Flow Capacity (CFS)	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
	Percent Eng Off Peak (%)												

Table G.2.2-17-4. Central Valley Project Powerplant Characteristics.

Trinity Powerplant - Peaking Operation												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
# Units	2	2	2	2	2	2	2	2	2	2	2	2
Capacity/Unit (MW)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
Transmission Loss (%)	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

Lewiston Powerplant - Baseload Operation												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
# Units	0	0	0	0	0	0	0	0	0	0	0	0
Capacity/Unit (MW)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
Transmission Loss (%)	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

Carr Powerplant - Peaking Operation												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
# Units	2	2	2	2	2	2	2	2	2	2	2	2
Capacity/Unit (MW)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
Transmission Loss (%)	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

Spring Creek Powerplant - Peaking Operation												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
# Units	2	2	2	2	2	2	2	2	2	2	2	2
Capacity/Unit (MW)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
Transmission Loss (%)	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

Shasta Powerplant - Peaking Operation												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
# Units	5	5	5	5	5	5	5	5	5	5	5	5
Capacity/Unit (MW)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
Transmission Loss (%)	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

Keswick Powerplant - Baseload Operation												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
# Units	3	3	3	3	3	3	3	3	3	3	3	3
Capacity/Unit (MW)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
Transmission Loss (%)	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

Folsom Powerplant - Peaking Operation												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
# Units	3	3	3	3	3	3	3	3	3	3	3	3
Capacity/Unit (MW)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
Transmission Loss (%)	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

Nimbus Powerplant - Baseload Operation												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
# Units	2	2	2	2	2	2	2	2	2	2	2	2
Capacity/Unit (MW)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
Transmission Loss (%)	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

New Melones Powerplant - Peaking Operation												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
# Units	2	2	2	2	2	2	2	2	2	2	2	2
Capacity/Unit (MW)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%

Table G.2.2-17-4. Central Valley Project Powerplant Characteristics (cont.).

CVP San Luis Powerplant - Peaking Operation												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
# Units	8	8	8	8	8	8	8	8	8	8	8	8
Capacity/Unit (MW)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Share of Total Cap (%)	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%

O'Neill Powerplant - Baseload Operation, flow computation												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
# Units	6	6	6	6	6	6	6	6	6	6	6	6
Capacity/Unit (MW)	3	3	3	3	3	3	3	3	3	3	3	3
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%

Table G.2.2-17-5 State Water Project Powerplant Characteristics.

Hyatt (Lake Oroville) Power Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
Maximum Flow Capacity (cfs)	16,950	16,950	16,950	16,950	16,950	16,950	16,950	16,950	16,950	16,950	16,950	16,950
Plant Power Rating (MW)	812	812	812	812	812	812	812	812	812	812	812	812
Plant Efficiency	87.3%	87.3%	87.3%	87.3%	87.3%	87.3%	87.3%	87.3%	87.3%	87.3%	87.3%	87.3%
Transmission Loss (%)	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

Thermalito Power Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
Maximum Flow Capacity (cfs)	17,400	17,400	17,400	17,400	17,400	17,400	17,400	17,400	17,400	17,400	17,400	17,400
Plant Power Rating (MW)	120	120	120	120	120	120	120	120	120	120	120	120
Plant Efficiency	87.3%	87.3%	87.3%	87.3%	87.3%	87.3%	87.3%	87.3%	87.3%	87.3%	87.3%	87.3%
Transmission Loss (%)	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

SWP San Luis (Gianelli Power Plant)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
Capacity/Unit (MW)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
# Units	8	8	8	8	8	8	8	8	8	8	8	8
Share of Total Cap (%)	52.9%	52.9%	52.9%	52.9%	52.9%	52.9%	52.9%	52.9%	52.9%	52.9%	52.9%	52.9%
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%

Alamo Power Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	105	105	105	105	105	105	105	105	105	105	105	105
Maximum Flow Capacity (cfs)	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740	1,740
Plant Power Rating (MW)	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6
Plant Efficiency	80.1%	80.1%	80.1%	80.1%	80.1%	80.1%	80.1%	80.1%	80.1%	80.1%	80.1%	80.1%
Transmission Loss (%)	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%

Mojave Power Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	95	95	95	95	95	95	95	95	95	95	95	95
Maximum Flow Capacity (cfs)	2,880	2,880	2,880	2,880	2,880	2,880	2,880	2,880	2,880	2,880	2,880	2,880
Plant Power Rating (MW)	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90	32.90
Plant Efficiency	84.00%	84.00%	84.00%	84.00%	84.00%	84.00%	84.00%	84.00%	84.00%	84.00%	84.00%	84.00%
Transmission Loss (%)	5.93%	5.93%	5.93%	5.93%	5.93%	5.93%	5.93%	5.93%	5.93%	5.93%	5.93%	5.93%

Devil's Canyon Power Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	1,113	1,113	1,113	1,113	1,113	1,113	1,113	1,113	1,113	1,113	1,113	1,113
Maximum Flow Capacity (cfs)	2,940	2,940	2,940	2,940	2,940	2,940	2,940	2,940	2,940	2,940	2,940	2,940
Plant Power Rating (MW)	357.90	357.90	357.90	357.90	357.90	357.90	357.90	357.90	357.90	357.90	357.90	357.90
Plant Efficiency	82.03%	82.03%	82.03%	82.03%	82.03%	82.03%	82.03%	82.03%	82.03%	82.03%	82.03%	82.03%
Transmission Loss (%)	2.23%	2.23%	2.23%	2.23%	2.23%	2.23%	2.23%	2.23%	2.23%	2.23%	2.23%	2.23%

W. E. Warne Power Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	573	573	573	573	573	573	573	573	573	573	573	573
Maximum Flow Capacity (cfs)	1,564	1,564	1,564	1,564	1,564	1,564	1,564	1,564	1,564	1,564	1,564	1,564
Plant Power Rating (MW)	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2
Plant Efficiency	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%
Transmission Loss (%)	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%

Castaic Power Plant												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy Factor (kWh/af)	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function	Function
Maximum Flow Capacity (cfs)	17,840	17,840	17,840	17,840	17,840	17,840	17,840	17,840	17,840	17,840	17,840	17,840
Plant Power Rating (MW)	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260
Plant Efficiency	88.4%	88.4%	88.4%	88.4%	88.4%	88.4%	88.4%	88.4%	88.4%	88.4%	88.4%	88.4%
Transmission Loss (%)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%

Table G.2.2-17-6 Sites Project (NODOS) Powerplant Characteristics.

	Fletcher Power Plant											
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Head Loss	Number of Pipelines	1	1	1	1	1	1	1	1	1	1	1	1
	Capacity/Pipeline	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100
	Pipe$_{concrete}$ Roughness	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030
	Pipe$_{steel}$ Roughness	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	Pipeline Diameter (feet)	30	30	30	30	30	30	30	30	30	30	30	30
	Pipeline$_{concrete}$ Length (feet)	0	0	0	0	0	0	0	0	0	0	0	0
	Pipeline$_{steel}$ Length (feet)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	Elevation 1	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS	Sites WS
	Elevation 2	203	203	203	203	203	203	203	203	203	203	203	203
	Plant Power Rating (MW)	123	123	123	123	123	123	123	123	123	123	123	123
	Plant Efficiency (%)	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%
	Transmission Loss (%)	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
	Percent Eng On Peak (%)	100.00%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Sac Power Plant											
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Head Loss	Number of Pipelines	2	2	2	2	2	2	2	2	2	2	2	2
	Capacity/Pipeline	750	750	750	750	750	750	750	750	750	750	750	750
	Pipe Roughness	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030
	Pipeline Diameter (feet)	12	12	12	12	12	12	12	12	12	12	12	12
	Pipeline Length (feet)	73,031	73,031	73,031	73,031	73,031	73,031	73,031	73,031	73,031	73,031	73,031	73,031
	Elevation 1	264	264	264	264	264	264	264	264	264	264	264	264
	Elevation 2	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage	Sac Stage
	Plant Power Rating (MW)	15	15	15	15	15	15	15	15	15	15	15	15
	Plant Efficiency (%)	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%
	Transmission Loss (%)	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
	Percent Eng On Peak (%)	100.00%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	TRR Power Plant											
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Head Loss	Number of Pipelines	2	2	2	2	2	2	2	2	2	2	2	2
	Capacity/Pipeline	750	750	750	750	750	750	750	750	750	750	750	750
	Pipe Roughness	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030
	Pipeline Diameter (feet)	12	12	12	12	12	12	12	12	12	12	12	12
	Pipeline Length (feet)	17,431	17,431	17,431	17,431	17,431	17,431	17,431	17,431	17,431	17,431	17,431	17,431
	Elevation 1	264	264	264	264	264	264	264	264	264	264	264	264
	Elevation 2	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5
	Plant Power Rating (MW)	16	16	16	16	16	16	16	16	16	16	16	16
	Plant Efficiency (%)	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%
	Transmission Loss (%)	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
	Percent Eng On Peak (%)												

References

U.S. Department of the Interior, Bureau of Reclamation (Reclamation). 2015. Final Environmental Impact Statement for the Coordinated Long-term Operation of the Central Valley Project and the State Water Project, Appendix 8A: Power Model Documentation.

This page intentionally left blank.

Appendix G3
Initial Alternatives

Contents

Tables

Figures

This page intentionally left blank.

Appendix G3 Initial Alternatives

G3.1 Introduction

This appendix describes the assumptions that were used to model project operations for the Sites Reservoir Project Authority (Authority) Alternative D. Significant work remains to secure permits and water rights that will further define future operations. Once permits and water rights are secured, detailed operating agreements would need to be developed to define a framework and procedures for cooperative operations among the Authority, Central Valley Project (CVP), and State Water Project (SWP).

Alternative D would include a 1.81-million-acre-foot (MAF) reservoir, which would be located in the Sacramento Valley west of the town of Maxwell, and associated conveyance facilities, including use of existing Tehama-Colusa Canal (T-C Canal) and Glenn-Colusa Irrigation District (GCID) Main Canal diversion and conveyance facilities, plus a proposed new diversion and discharge pipeline. The proposed reservoir would be filled by diversion of excess Sacramento River water that originates from unregulated tributaries to the Sacramento River downstream from Keswick Dam, pursuant to Application A025517. These flows are "excess" to those needed to meet current regulatory requirements or other water demands. Operation of the proposed reservoir would be in cooperation with the operations of existing CVP and SWP system facilities to facilitate and maximize the potential for a wide range of benefits.

With-project operations are designed to improve the ability to meet the following primary objectives:

- Enhance overall California systemwide water management flexibility
- Provide coldwater conservation in Shasta, Oroville, and Folsom to assist in temperature control downstream at critical times for salmonids
- Increase the reliability of water supplies for the overall California water system
- Provide storage and operational benefits for programs to improve Sacramento-San Joaquin River Delta (Delta) and upstream ecosystems

G3.2 Approach

The operations modeled for Alternative D was developed through a series of meetings and coordination with Authority representatives, including Bureau of Reclamation (Reclamation), California Department of Water Resources (DWR), and water district managers and county representatives. The operations modeled for Alternative D build on previous work conducted under the CALFED Bay-Delta Program (CALFED) by Reclamation and DWR. Subsequent to CALFED, DWR has been the lead on technical studies, in coordination with the Authority as part of the North-of-Delta Offstream Storage (NODOS) Project and associated investigations. Alternative D is largely based on NODOS project Alternative C; it includes a 1.81 MAF reservoir and associated facilities similar to Alternative C. Following are key features included in Alternative D versus Alternative C:

- Higher deliveries of supplemental water supply to north-of-the-Delta water users
- Delevan Pipeline diversion pump station power provided by north/south transmission line along existing Highway 45 utility corridor (versus new east/west line adjacent to proposed Delevan Pipeline alignment)
- Reduced Terminal Regulating Reservoir (TRR) storage capacity to 1,200 acre-feet (versus 2,000 acre-feet proposed as part of Alternative C)
- Two recreation areas and a boat ramp (versus five proposed as part of Alternative C)

The planning process and development of the operations model included development and confirmation of Authority member project goals; review of DWR NODOS project materials; evaluation of Colusa Basin and Authority participant water needs; assessment of potential operational alternatives; and preliminary investigatory modeling.

Modeling was conducted using CalSim-II to evaluate Alternative D operations to provide water from Sites Reservoir for participating Authority members, cooperate with the CVP and SWP, and supply water from Sites Reservoir for ecosystem benefits. The modeling for Alternative D tiers off of NODOS Alternative C modeling, conducted previously by DWR, which assumes projected year 2020 level of development conditions. This level of development reflects current operating conditions, and does not include potential changes based on forecasts of future climate change or sea level rise. Additional information developed and documented as part of the NODOS project is available on the DWR website (http://www.water.ca.gov/storage/northdelta/).

CalSim-II is a planning model developed by Reclamation and DWR to simulate the CVP and SWP, and areas tributary to the Delta. CalSim-II uses a monthly time step to route flow throughout the river and reservoir system of the Central Valley. The model includes an 82-year (water years 1922–2003) modified historical hydrology, including tributary inflows for the Central Valley, developed jointly by Reclamation and DWR. The model includes the major CVP and SWP facilities and reservoirs in the Central Valley of California, including Trinity Lake, Lewiston Reservoir, Whiskeytown Reservoir, Shasta Lake, Keswick Reservoir, Lake Oroville, Folsom Lake, San Luis Reservoir, and New Melones Reservoir, located along the Sacramento and San Joaquin Rivers and their tributaries. CalSim-II uses a set of generalized rules that reflect assumed regulations, and are used to specify the operations of the CVP and SWP systems. The CalSim-II model is based on a monthly time step; therefore, it does not incorporate all the detailed decision processes that occur in actual daily operations of the CVP and SWP systems. To evaluate naturally occurring storm event flows, supplemental modeling was conducted on a daily time step to assess availability of excess Sacramento River flows. Model results are intended to be used in a comparative manner, which allows for assessing the changes in system operations and resulting incremental effects.

G3.3 Proposed Sites Reservoir Project Authority Operations

Sites Reservoir would be filled by diversion of excess Sacramento River flows that originate from unregulated tributaries to the Sacramento River downstream from Keswick Dam, pursuant to Application A025517. As described below, diversions are assumed to potentially occur in any month or water year type, but would likely be greatest in the winter months with wetter conditions (depending on storage conditions and annual flows and events). The Sites Reservoir Project could operate in cooperation with CVP and SWP system facilities to facilitate the realization of a wide range of benefits. Sites Reservoir would provide water through two primary mechanisms: (1) water stored in Sites Reservoir could be released directly to Authority and Colusa Basin users or released to the Sacramento River; and (2) Reclamation's water stored in Sites Reservoir could be exchanged for water stored in Shasta Lake or other CVP and SWP system reservoirs. This second mechanism could be used to significantly increase upstream north-of-Delta storage and operational flexibility to support multiple water supply and ecosystem benefits.

The operations model employed the same opportunistic approach developed as part of the NODOS project to maximize potential benefits of the NODOS project, while not adversely affecting the CVP and SWP's ability to meet existing system regulatory requirements including the following:

- Water rights
- Instream flow requirements
- Biological opinions
- Delta water quality requirements
- CVP and SWP regulatory and contractual requirements
- Central Valley Project Improvement Act (CVPIA) requirements

The following sections describe the proposed NODOS project facilities, Sacramento River diversion criteria, Alternative D demands and reservoir operations, and cooperative operations with the CVP and SWP systems.

G3.4 Project Facilities

The primary facilities proposed as part of Alternative D would include a 1.81 MAF Sites Reservoir that would rely on the existing T-C Canal and GCID Main Canal for diversion and conveyance purposes, as well as a new proposed Delevan Pipeline and intake to divert and convey water to and from the reservoir. Figure G3-1 shows the location of the proposed reservoir and associated conveyance facilities. A brief description of existing and proposed new conveyance facilities and their proposed operation follows.

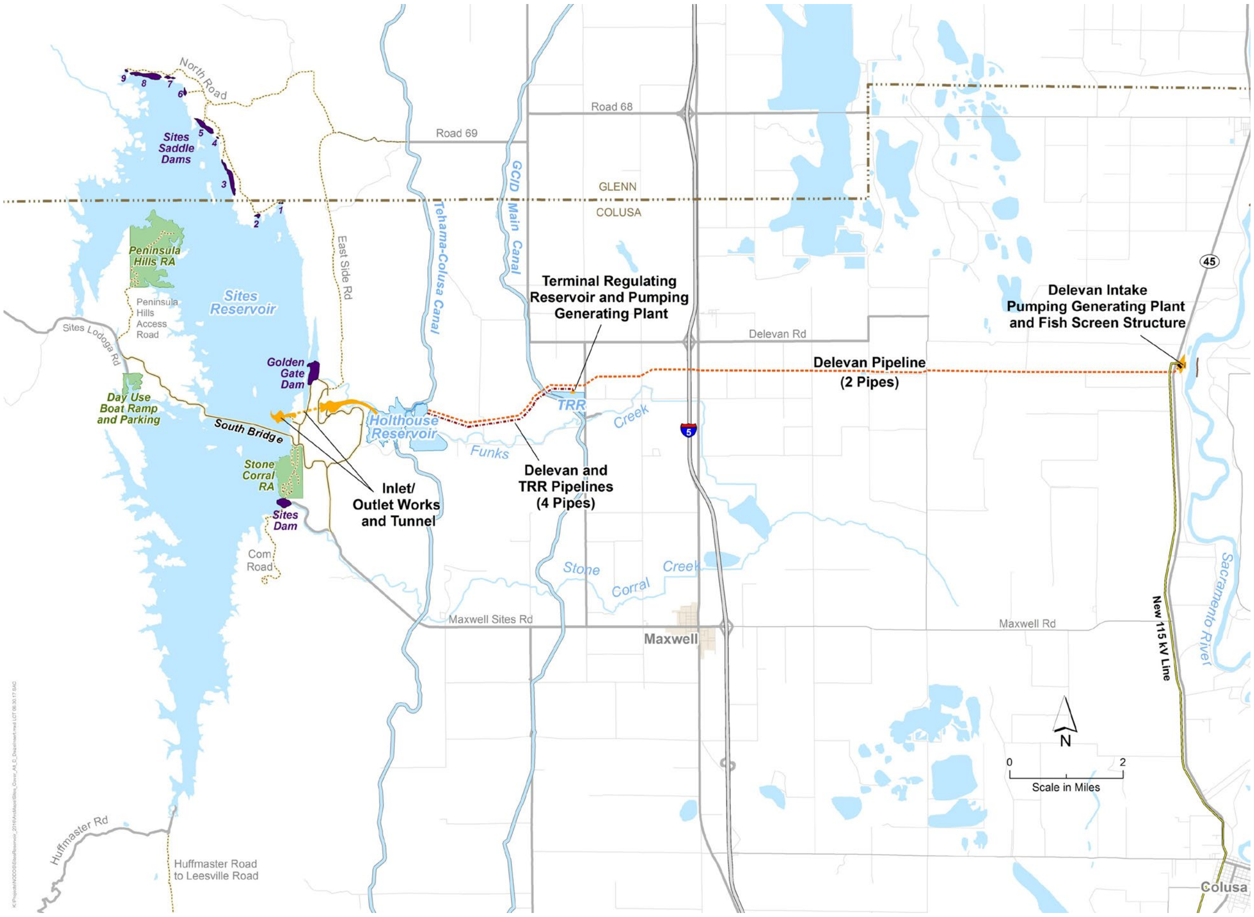


Figure G3-1. Sites Reservoir and Proposed Facilities

Tehama-Colusa Canal and Red Bluff Pumping Plant Facilities and Capacity

The existing T-C Canal and Red Bluff Pumping Plant, located on the Sacramento River near Red Bluff, would be used to divert and convey Sites Reservoir Project water to the proposed Sites Reservoir. The Authority, and/or its participating members, would need to enter into a contract with the United States, pursuant to the Warren Act of 1911, for use of Federal facilities.

Red Bluff Pumping Plant has an existing pumping capacity of 2,000 cubic feet per second (cfs), which is used to meet current agricultural water demand. Alternative D would include installation of one additional pump (250 cfs) to the existing pump grouping, which would increase the overall pumping capacity to 2,250 cfs, to fully use the 2,100 cfs capacity for diversion of water through T-C Canal to Sites Reservoir. The total conveyance capacity of T-C Canal is assumed to be 2,250 cfs at the upstream end of the canal, and 2,100 cfs at Holthouse Reservoir. Any unused capacity remaining after meeting existing agricultural demands could be used as necessary to convey water to fill Sites Reservoir. Approximately 50 to 60 cfs of the T-C Canal capacity is assumed to be used for existing winter operations, based on communication with Tehama-Colusa Canal Authority representatives.

No dedicated period for maintenance was assumed for the T-C Canal on the basis of current canal capacity and projected Sites Reservoir diversion amounts. Discussions with TCCA representatives revealed operations and maintenance could be scheduled around proposed NODOS project operations.

Glenn-Colusa Irrigation District Main Canal and Hamilton City Pumping Facilities and Capacity

Similar to T-C Canal, GCID Main Canal would be used to convey water pumped from the existing Hamilton City pumping facility to divert and convey Sacramento River water to the proposed Sites Reservoir. Operating agreements between the Authority and GCID would need to be developed to define NODOS project operations and cooperation between the parties. The Hamilton City pumping facility has a 3,000 cfs diversion capacity at the Sacramento River intake, and the capacity of GCID Main Canal is 1,800 cfs at TRR. Any unused capacity remaining after satisfying existing agricultural requirements and obligations pursuant to Cooperative Agreement No. R13AC20502, as modified or superceded, for conveyance of Level 2 and Incremental Level 4 water supplies to Sacramento, Delevan, and Colusa National Wildlife Refuges, could be used to convey Sites Reservoir Project water to the proposed Sites Reservoir. The following flows are assumed to occupy capacity in the canal during existing winter operations of GCID Main Canal (values in cfs).

October	November	December	January	February	March
513	534	389	235	56	48

A dedicated annual maintenance shutdown period was assumed from January 7 through February 21.

Proposed Delevan Pipeline and Intake Diversion and Release Capacities

The proposed Delevan Pipeline would extend east/west across the GCID service area, located west of the existing Maxwell Irrigation District intake facility. The proposed intake and discharge facility would include a fish screen and pump station intake to divert up to 2,000 cfs from the Sacramento River to Sites Reservoir when excess Sacramento River water is available for diversion. The pipeline would also have the ability to convey up to 2,500 cfs by gravity from the Sites Reservoir back to the Sacramento River for downstream uses.

A dedicated annual maintenance shutdown period sometime between April 1 and May 31 is assumed for the pipeline, intake, and fish screen facility in wet, above-normal, and below-normal water year types, in accordance with the Sacramento Valley 40-30-30 index. During the maintenance, both diversion and release operations at Delevan would be shut down. No maintenance would be scheduled in dry and critical water year types.

Existing Tehama-Colusa Canal and Glenn-Colusa Irrigation District Main Canal Intertie

The existing T-C Canal and GCID Main Canal intertie provides flexibility in routing flows of up to 285 cfs from the T-C Canal to the GCID Main Canal.

Williams Outlet

The Williams Outlet provides flexibility in routing water of up to 65 cfs from the T-C Canal to the GCID Main Canal.

Holthouse (Funks) Reservoir

The existing Funks Reservoir includes a storage capacity of 2,250 acre-feet and serves as a regulating reservoir to stabilize flows in T-C Canal as diverters come on line and off line. The existing Funks Reservoir would be expanded to form Holthouse Reservoir by constructing a new dam (Holthouse Dam) and reservoir to the east of Funks Reservoir, with an enlarged active storage capacity of approximately 6,500 acre-feet and a surface area of approximately 450 acres.

Terminal Regulating Reservoir and Pipeline

TRR would be a 1,200 acre-foot regulating reservoir constructed adjacent to GCID Main Canal, approximately 3 miles northeast of Holthouse Reservoir. TRR would be composed of an earthen embankment dam, concrete emergency overflow weir, outfall standpipe, and an approximate 4,000 foot-long underground 60-inch-diameter overflow outlet pipe to Funks Creek.

Water conveyed down GCID Main Canal would be directed into the proposed TRR. A new pump station (the proposed TRR pumping and generating plant) would then convey the water from TRR via the proposed TRR pipeline to the proposed Holthouse Reservoir. TRR would be required to provide operational storage for the TRR pumping and generating plant to balance normal and emergency flow variations between the upstream GCID Main Canal pump station, the 40 miles of connecting canal, and the TRR pumping and generating plant.

The proposed TRR pipeline would be bidirectional, allowing water to be pumped from TRR to Holthouse (Funks) Reservoir for storage, and allowing water to flow by gravity from Holthouse Reservoir for release to TRR and GCID Main Canal. The pipeline would have a capacity of 1,800 cfs to convey water pumped from TRR to Holthouse Reservoir. The capacity of the pipeline to convey water by gravity flow from Holthouse Reservoir to TRR would be 900 cfs.

G3.5 Diversions to Sites Reservoir

The Authority will need to obtain water rights for the delivery and beneficial use of water, either by assignment of a state filed application or through an application for a new water right, to include the necessary points of diversion and rediversion, diversion rates and quantities, season of diversion, places of use, and purposes of use. Implementation of the NODOS project would include*:*

- Possible assignment of the State Filing (A025517), as it would need to be amended
- Possible additional water right filings as may be needed for the operation of Sites Reservoir
- Obtaining a water right permit from the SWRCB for the operation of Sites Reservoir
- Assignment of other water rights water

Diversions could only occur during excess conditions in the Delta as defined under COA. Operations would be consistent with the terms and conditions contained in the water right permit(s) approved by SWRCB. The permit(s) would describe the points and methods of diversion, diversion season, purposes of use, and places of use.

The proposed Sites Reservoir would be filled through the diversion of excess Sacramento River water that originates from unregulated tributaries to the Sacramento River downstream from

Keswick Dam, possibly pursuant to Application A025517, and/or any other right that may be ordered by the SWRCB. These unregulated tributaries contribute over 3 MAF of flow to the Sacramento River on an average annual basis. Less than 1 percent of diversions to Sites Reservoir are assumed to be provided by flood releases or spills that flow through Shasta Lake. Under Alternative D, Sites Reservoir Project water could be diverted from the Sacramento River at the three locations on the river, as described above. Excess conditions under COA are periods when it is agreed that releases from upstream reservoirs plus unregulated flow exceed Sacramento Valley in basin uses, plus export.

A description of proposed minimum bypass flow requirements and pulse flow criteria (identical to those developed previously in DWR NODOS investigations) to protect existing and future water uses are provided below.

Sites Reservoir Diversion Bypass Flow Protection

Excess Sacramento River flow diversions to Sites Reservoir would only take place when flow monitoring indicates that bypass flows are present in the river due to storm event flows. Several existing and additional proposed bypass flow criteria were assumed at specified locations, as part of Alternative D. These flow criteria are designed to make certain only excess water would be diverted into Sites Reservoir to maintain and protect existing downstream water uses, as follows.

- A bypass flow of 3,250 cfs downstream from Red Bluff Diversion Dam must be present to maintain flows in the upper Sacramento River that are required in SWRCB WR 90-5 to prevent dewatering salmonid redds and maintain water temperatures. Diversions at Red Bluff Pumping Plant for filling Sites Reservoir would only be allowed when flows in the river were above the 3,250 cfs bypass flow criteria.
- Diversions at the Hamilton City intake for GCID Main Canal currently require a bypass flow of 4,000 cfs to prevent fish entrainment. Diversions at Red Bluff Pumping Plant and GCID Main Canal intake for filling Sites Reservoir would only be allowed when flows in the river were above the 4,000 cfs bypass flow requirement downstream from Hamilton City.
- Diversions for filling Sites Reservoir would only be allowed when flows below Wilkins Slough were above 5,000 cfs given the current minimum flow requirements. Wilkins Slough Navigation Control Point minimum flows currently range from 3,250 to 5,000 cfs depending on hydrologic conditions.
- Diversions for filling Sites Reservoir would only be allowed when a Sacramento River flow of 15,000 cfs is present at Freeport in January, 13,000 cfs in December and February through June, and 11,000 cfs in all other months. This flow threshold was designed to protect and maintain existing downstream water uses and water quality in the Delta.

Sites Reservoir Diversion Restrictions for Pulse Flow Protection

As a mitigation measure to more fully avoid and minimize entrainment and impingement of juvenile salmonids and other poor-swimming aquatic species, diversions to Sites Reservoir would also be restricted to protect fish migration during naturally occurring, storm-induced, pulse flow events in the Sacramento River. Protection of fish migration pulse flows is included because numerous recent studies have documented fish movement in association with naturally occurring flow pulses. A recent study by del Rosario et al. (2013) found an abrupt and substantial spike in winter-run Chinook salmon arrivals at Knights Landing in association with the first storm event producing a flow of 400 cubic meters per second (14,126 cfs) at Wilkins Slough. This spike was followed shortly by passage of the 50th percentile of cumulative migration. This relationship was apparent for a wide range of water year types, as shown by catch data collected between 1999 and 2007.

The proposed pulse protection period would extend from October through May to address outmigration of juvenile winter-, spring-, fall- and late-fall-run Chinook salmon, as well as steelhead. Pulse flows during this period would provide flow continuity between the upper and lower Sacramento River to support fish migration. It is recognized that research regarding the benefits of pulse flows is ongoing, and further research and adaptive management will be required to develop and refine a pulse flow protection strategy for fish migration.

For the purpose of NODOS project operations, pulse flows are defined by extended peak river flows at Bend Bridge that originate from storm event tributary inflows downstream from Keswick Dam. A naturally occurring pulse event would be considered initiated when the 3-day running average Bend Bridge flow exceeded 15,000 cfs. Such an event would need to continue for at least a 7-day duration to be considered a "qualified" storm event. Diversions to Sites Reservoir would not be allowed during the 7-day period when flow was greater than 15,000 cfs. The duration of a pulse flow event would be considered terminated if (1) the 3-day running average flow remained greater than 15,000 cfs for 7 days after initiation, (2) the 3-day running average flow dropped below 15,000 cfs before reaching the 7-day duration, or (3) the 3-day running average flow exceeded 25,000 cfs before reaching the 7-day duration as shown on Figure G3-2.

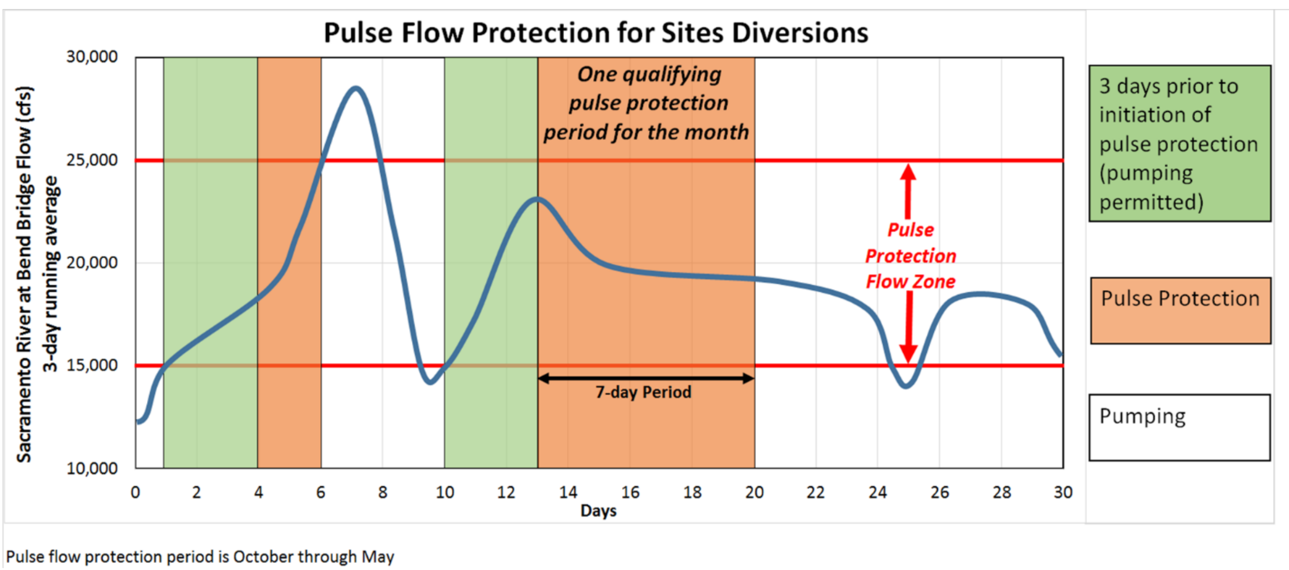


Figure G3-2. Pulse Flow Protection for Sites Diversions

Because del Rosario et al. (2013) showed that the first storm event was associated with a spike in salmon arrivals at Knights Landing, diversions to Sites Reservoir would not be allowed during the first 7-day "qualified" pulse period when flows reach 15,000 cfs during the outmigration season starting in October. Subsequent to the first major storm event of the migration season, "real-time" monitoring of fish movement would be evaluated to determine the timing for additional pulse protection periods. For evaluation of NODOS project operations, it was assumed that up to one qualified 7-day pulse event would occur each month during the pulse protection period from October through May to encourage and support salmonid outmigration and minimize potential diversion impacts. Therefore, diversions to Sites Reservoir storage would be restricted (1) if pulse conditions exist at Bend Bridge and a qualified pulse event has not already occurred within the given month, and (2) if Bend Bridge flows are less than 25,000 cfs during the pulse event. Diversions are allowed when flows exceed 25,000 cfs because flows of this magnitude are considered to provide lesser benefits to fish migration.

Diversions to Fill Sites Reservoir Storage

Diversions of Sites Reservoir Project water to Sites Reservoir using existing T-C Canal and GCID Main Canal conveyance facilities could occur at any time during the year, given the flow conditions described above are present in the river. Diversions at Red Bluff Pumping Plant and Hamilton City Pumping Plant for TCCA and GCID service areas, respectively, have first priority at the existing T-C Canal and GCID intakes, with diversions to Sites Reservoir receiving the unused capacities of the two canals.

Diversions at the Delevan Intake through the proposed Delevan Pipeline could also occur at any time of the year assuming Sacramento River flow conditions are greater than the bypass and pulse flow criteria described above. In summer months, preference would generally be given to Sites Reservoir releases to the river, resulting in limited diversions to storage because the pipeline could only convey flows in one direction at a time.

Given the diversion criteria and facility capacities identified above, investigatory CalSim-II modeling results for Alternative D indicate an average annual diversion of 545 thousand acre-feet (TAF) of excess Sacramento River flow could be conveyed to the proposed Sites Reservoir. Annual diversions would be a function of varying hydrologic conditions, excess Sacramento River water availability, and diversion and conveyance facility capacities. Annual diversions of excess river water would range from close to zero in critical and dry years to over 1,000 TAF in wetter years.

G3.6 Water Demands and Supply Operations

A series of meetings were held with Authority members to identify and evaluate local demands for Sites Reservoir Project water, potential water supply operational concepts, and conveyance constraints. Investigatory modeling was conducted to evaluate potential Sites Reservoir diversion and reservoir storage scenarios that could provide water to meet the demands of participating agencies in the Authority. The modeling analysis tiered from the DWR modeling conducted for the NODOS project Alternative C.

The fundamental concept guiding development of the NODOS project operations strategy was to develop a balanced operation that (1) provides reliable average annual water deliveries of Sites Reservoir Project water to supplement existing water supplies from other sources (i.e., CVP water); and (2) retains a reasonable volume of water in storage to provide deliveries of Sites Reservoir Project water during extended drought periods. In general, one-third of the reservoir storage capacity was operated aggressively to meet yearly demands, and the remaining two thirds of storage were managed more conservatively, and retained Sites Reservoir Project water as long-term carryover storage to provide water during drought periods. The drought periods of 1929–1934, 1976–1977, and 1987–1992 were used to evaluate longer-term carryover storage needs.

The primary operational criteria developed through this evaluation process include the following:

- Sites Reservoir Project water would be used to meet unmet demands and supplement existing CVP allocations to CVP contractors in the Colusa Basin, including participating TCCA districts (North-of-Delta CVP water service contractors), and GCID and Reclamation District 108 (RD 108) (both CVP Sacramento River Settlement Contractors [SRSC]).
- Each of the participating Authority members would be allocated a defined storage account in the NODOS project to manage their water, as well as store water from other potential sources of supply.
- It is assumed that a water market of some form would be facilitated by the Authority to promote efficient use and exchange of water in Sites Reservoir storage.
- All Authority members would receive an equal proportional share of Sites Reservoir Project water as it is diverted into Sites Reservoir storage.
- Any Sites Reservoir Project water in storage beyond designated member account volumes would be "at risk" and would be "spilled" if Sites Reservoir fills to capacity.
- A set of operating guidelines and rules would need to be developed to promote efficient water management for operations of Sites Reservoir and associated facilities.
- All water stored in Sites Reservoir storage accounts is subject to evaporation and other losses.

The following summarizes the process conducted to determine Authority participant water demands and associated storage requirements, as well as anticipated ability of the NODOS project to assist in meeting annual member demands. Historical water diversion records were compared to CalSim-II water demand patterns and diversion results to confirm that historical data correlated sufficiently well with the model to support the evaluation of NODOS project operations to meet Colusa Basin water demands. Supporting CalSim-II model results, including Sites Reservoir levels and diversions, are provided in Attachment A.

Tehama-Colusa Canal Authority Water Demands and Operations

TCCA historical monthly diversion data were reviewed to assess seasonal diversion patterns and variations in water use for a range of hydrologic conditions and CVP allocations. The historical data were compared to CalSim-II model demands to verify that irrigation demands and diversion patterns were representative of actual water operations for a range of water year types, as defined by the Sacramento Valley 40-30-30 water year type index (SVI). The SVI is computed using flows in the Sacramento, Feather, Yuba, and American Rivers, and includes five water year types: wet, above normal, below normal, dry, and critical.

The TCCA Member Unit's CVP Water Service Contracts are subject to shortage allocations based on CVP storage and annual hydrologic conditions. Although not typical, the contractors received a zero allocation from the CVP in 2014 and 2015 for irrigation purposes because of severe drought conditions and extremely low Shasta storage levels. In 1990, the cut was 50 percent; in 1991 and 1992, the cut was 75 percent; in 1993, the cut was 35 percent; and in 1994, the cut was 65 percent. Preliminary CalSim-II investigatory model runs were conducted at various supply levels to evaluate the availability of NODOS project water and storage to meet TCCA member district demands. TCCA participants ultimately determined the goal was to use water from the Sites Reservoir Project to supplement their existing CVP contract supplies to meet demands, and achieve an annual delivery target, which would equate to, 100 percent of their existing CVP Contract Total.

Based on CalSim-II forecasts of future CVP delivery levels, an average annual supplemental supply of 90 TAF from the Sites Reservoir Project is estimated to be needed to achieve this level of reliability. Figure G-3 shows CalSim-II estimated annual allocations of Sites Reservoir Project water needed to supplement existing CVP allocations to attempt to achieve 100 percent of the

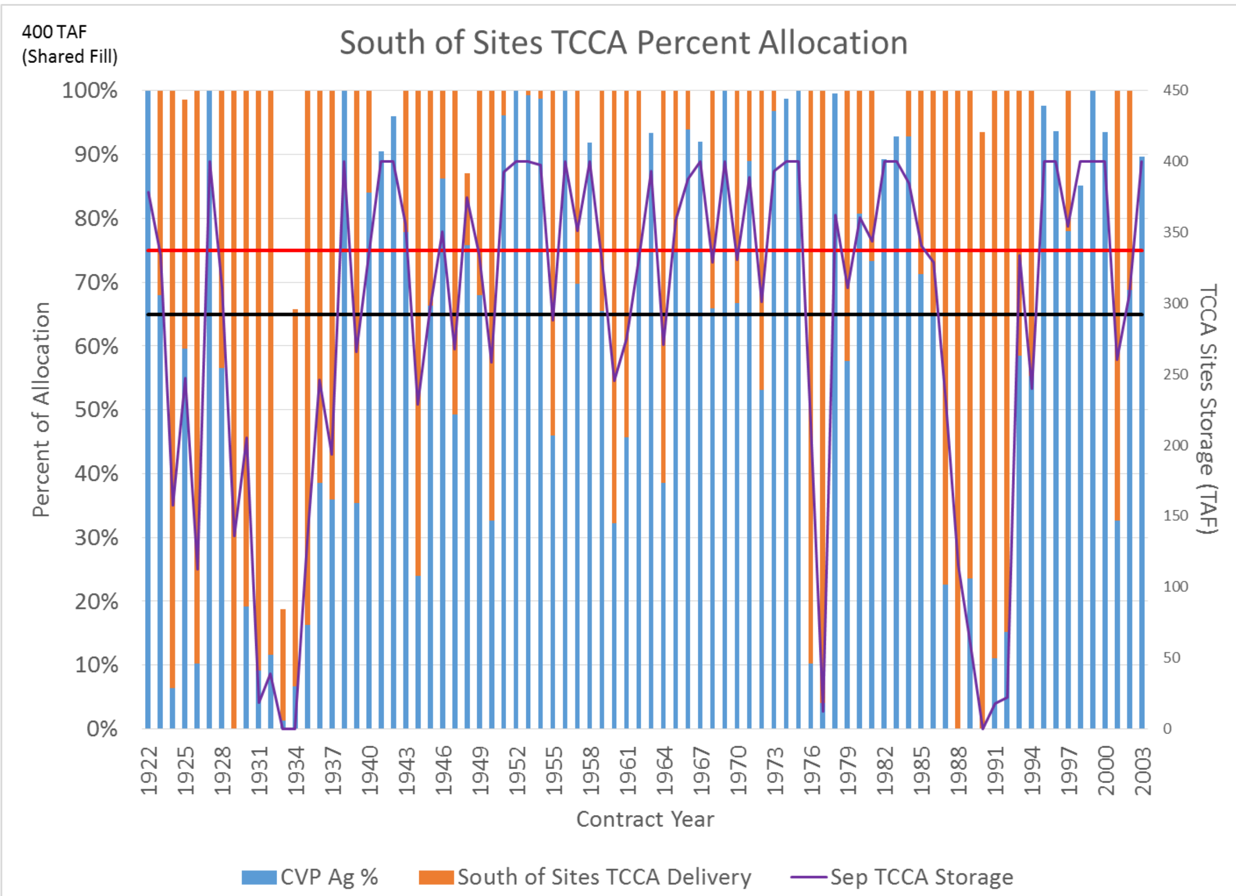


Figure G3-3. Sites Reservoir Allocation to Meet TCCA 100 Percent Delivery

Contract Total goal. The figure also shows Sites Reservoir end-of-September storage values, demonstrating how Sites Reservoir Project water could be used to meet demands. Delivery of Sites Project Water to Sites Project participants, who are also CVP Contractors, would occasionally equate to less than 100 percent of the CVP Contractor's Contract Total in years when Sites Reservoir storage would not be sufficient to meet all demands; or in some very wet years when the demands for Sites Project Water by the CVP Contractors, who are also Sites Project participants, are reduced and no Sites Project Water is needed.

Sites Project participants, who are also CVP Contractors, and who are served by the T-C Canal north of Sites Reservoir, would only be able to receive Sites Project Water through exchange. CVP

Contractors located south of Sites Reservoir would take Sites Reservoir Project water directly through Holthouse Reservoir and T-C Canal. The conveyance of Sites Reservoir Project water, in the T-C Canal, for delivery to CVP Contractors who are also Sites Reservoir Project participants, will require a Warren Act contract.

Participating TCCA districts requesting Sites Reservoir Project water include the following:

- Proberta Water District
- Colusa County Water District
- Colusa County
- Davis Water District
- Dunnigan Water District
- La Grande Water District
- Westside Water District
- Cortina Water District
- 4M Water District

Glenn-Colusa Irrigation District and Reclamation District 108 Demands and Operations

GCID and RD 108 are CVP SRSCs and are subject to a 25 percent Critical Year reduction in severe drought. A Critical Year is defined in the Sacramento River Settlement Contract as a Year when the total annual inflow to Shasta Reservoir is below 3.2 MAF. In consecutive dry years, this criterion increases to 4.0 MAF.

GCID and RD 108 historical monthly diversion data were reviewed to assess seasonal diversion patterns and variations in water use for recent operating conditions. The historical data were compared to CalSim-II model demands to verify that CalSim-II irrigation demands and diversion patterns were representative of actual water supply operations.

GCID and RD 108 are each interested in 20 TAF of water per year from the Sites Reservoir Project to supplement their existing CVP supplies and water rights diversions. Figure G-4 and Figure G-5 show percent annual allocations of Sites Reservoir Project water needed to supplement existing GCID and RD 108 CVP deliveries in Critical Years.

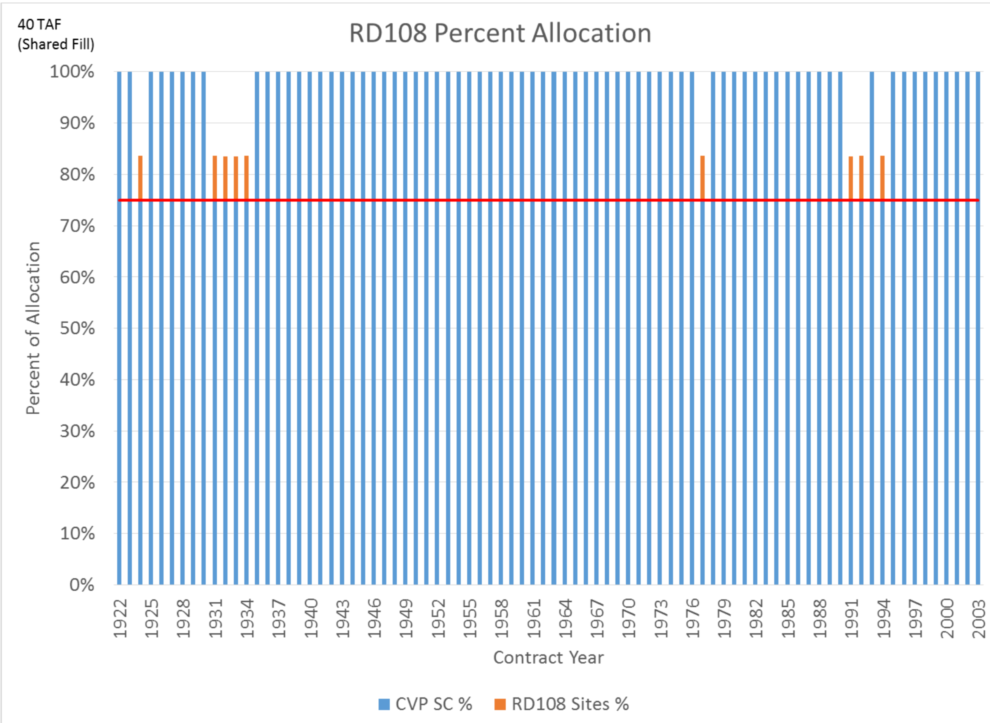


Figure G3-4. Sites Reservoir Allocation to Meet RD 108 Delivery Target

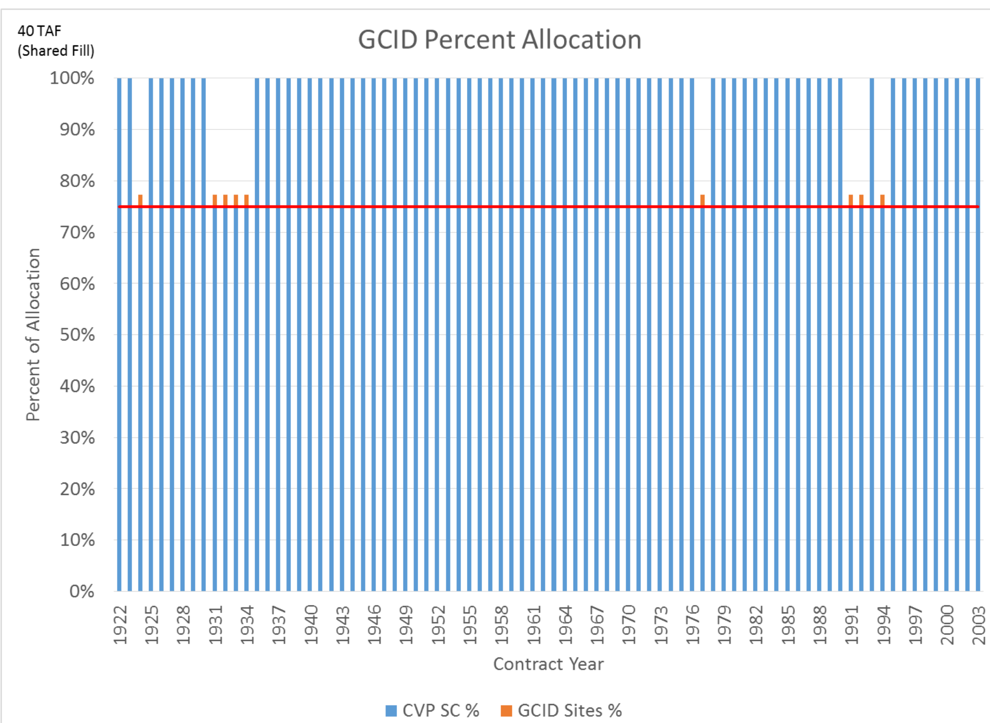


Figure G3-5. Sites Reservoir Allocation to Meet GCID Delivery Target

GCID would take delivery of Sites Reservoir Project water from Sites Reservoir through the TRR pipeline, which has a gravity-flow capacity of 900 cfs. RD 108 would take delivery of Sites Reservoir Project water from Sites Reservoir through the Delevan Pipeline, which has a gravity-flow capacity of up to 2,500 cfs.

Other Regional Water Demands

In addition to improving local water supply reliability in the Colusa Basin, the Sites Reservoir project has the potential to provide a substantial amount of water to other potential project participants, and provide water to support a wide range of ecosystem and water quality benefits. With an estimated average annual diversion to storage of over 500 TAF, the Sites Reservoir project could provide an average annual volume of up to 350 TAF of water for other purposes after accounting for supplies dedicated to meet Authority demands. Other sources of demand for Sites Reservoir Project water could include agricultural, municipal and industrial (M&I), and environmental needs.

South-of-Delta Water Demands

State Water Project Contractors: The parties that receive water from the Sites Reservoir project, and also have water supply contracts with the SWP, have contract provisions for the conveyance of extra water through SWP facilities above their SWP allocations. These water users may opt to have their Sites Reservoir Project water conveyed as either "project" water or "non-project," depending on the conveyance agreements they develop with DWR. If the Sites Reservoir Project water is conveyed as SWP water, then it has a more flexible timeframe for its conveyance and the releases of their water from Sites via the Delevan Pipeline. If the Sites Reservoir Project water is conveyed as non-SWP water, then the water would likely be released from Sites Reservoir and conveyed south or west of the Delta during the "water transfer window" in the biological opinions for the operation on the CVP/SWP in the Delta, provided there is capacity to convey this non-SWP water. That window is typically July through September.

It is assumed that South-of-the-Delta participants would leave their Sites Reservoir Project water in Sites Reservoir storage during wet and above normal years when there is little or no capacity to convey water across the Delta. Conversely, when hydrologic conditions are dry or critically dry, they would call on the Sites Reservoir Project water stored in Sites Reservoir and convey it across the Delta for dry year supply.

Central Valley Project Contractors: The Sites Reservoir Project Contractors that receive Sites Reservoir Project water from the Sites Reservoir Project, and also have water service contracts with the CVP, will need to enter into a Warren Act contract for use of Federal facilities to pump and convey the Sites Reservoir Project water to their point(s) of delivery. The Sites Reservoir Project water would likely be released from Sites Reservoir and conveyed south or west of the Delta during the "water transfer window" in the biological opinions for the operation on the CVP/SWP in the Delta, provided there is capacity to convey this non-CVP water. That window is typically July through September.

Ecosystem Benefits

The operation of the NODOS project to provide a variety of ecosystem benefits would allow for the potential development and administration of storage for ecosystem enhancement that could be managed by either the Authority, the Federal government, or the State to provide water for ecosystem and water quality purposes. This storage can be used to improve coldwater conservation storage, stabilize river flows during critical fisheries periods, increase flows through certain watercourses and/or facilities (such as Yolo Bypass), improve water quality, and/or enhance habitat restoration.

The following section summarizes how Sites Reservoir Project operations, in cooperation with the CVP and SWP system facilities, could improve overall system flexibility and water supply reliability to support additional environmental benefits. Additional information developed and documented as part of the Sites Reservoir Project is available on the DWR website (http://www.water.ca.gov/storage/northdelta/).

G3.7 Cooperation with Central Valley Project and State Water Project

Under Alternative D, the Sites Reservoir Project would be operated in cooperation with CVP and SWP operations to coordinate releases from Sites Reservoir, Shasta Lake, Lake Oroville, and Folsom Lake. Releases from Sites Reservoir would allow reduced releases from other reservoirs while still meeting requirements for minimum instream flow objectives, Sacramento River temperature requirements, and Delta salinity control assigned to the CVP and SWP. Through this reduction in releases, storage could be conserved in Trinity Lake, Shasta Lake and Folsom Lake to significantly increase operational flexibility to improve river water temperatures for fish survival, Delta water quality, water supply reliability, flood control, and recreation.

The summary of Alternative D proposed operations in Table G3-1 (located after the text in Appendix G) shows the types of beneficiary operations under drought and other hydrologic conditions, and priorities assumed for various seasonal operations. It is intended that storage and associated releases could be adaptively managed to support operational actions found to produce the greatest benefits at any point in time.

Additional descriptions of potential actions that could be done in cooperation with the CVP and SWP operations are provided below.

Coldwater Pool and Sacramento River Temperature Control

Reclamation's Sites Reservoir Project Water, as operationally integrated with operation of the CVP, could be used by Reclamation to maintain the volume of coldwater stored in CVP reservoirs and improve the ability to maintain appropriate water temperatures in the Sacramento River during summer months, especially in drought years. Reclamation, at it's discretion, could choose to release it's Sites Reservoir Project Water in Sites Reservoir to meet CVP obligations downstream of Sites Reservoir, in lieu of making releases from CVP reservoirs. This would allow the coldwater pool to be maintained at higher levels in CVP reservoirs than are currently achievable. In particular, Shasta Lake release patterns could be shifted in season and between adjacent years to improve coldwater storage and flow management for salmon that use the Sacramento River between Keswick Dam and Red Bluff as habitat.

Stabilize Upper Sacramento River Fall Flows

Reclamation's Sites Reservoir Project Water, as operationally integrated with operation of the CVP, could be used by Reclamation to avoid abrupt reductions in flow that are harmful to salmonids.

Reclamation, at it's discretion, could choose to release it's Sites Reservoir Project Water in Sites Reservoir to meet CVP obligations downstream of Sites Reservoir, in lieu of making releases of CVP Water from Shasta Reservoir. This would conserve water at Shasta Lake, and a portion of the conserved water would be released to benefit fall-run Chinook salmon. This would reduce adverse conditions for spawning fall-run Chinook salmon (such as dewatering of redds and scour damage).

Sacramento River Diversion Reductions at Red Bluff and Hamilton City

Reclamation's Sites Reservoir Project Water, as operationally integrated with operation of the CVP, could be used by Reclamation to meet demands of CVP contractors who would have otherwise diverted CVP Water at Red Bluff Pumping Plant and Hamilton City Pumping Plant, so that releases of CVP Water from Shasta Lake could provide increased and uninterrupted flows in the Sacramento River from spring through fall for fisheries purposes, such as augmented transport flows, increased habitat availability, increased productivity, and improved nutrient transport and food availability. Reclamation, at it's discretion, could choose to release it's Sites Reservoir Project Water in Sites Reservoir to meet CVP obligations downstream of Sites Reservoir, in lieu of making releases of CVP Water from Shasta Reservoir.

Folsom Lake Coldwater Pool Improvement and Supply Reliability

Reclamation's Sites Reservoir Project Water, as operationally integrated with operation of the CVP, could be used by Reclamation to improve the coldwater carryover storage at Folsom Lake, stabilize flows in the American River, and help maintain suitable water temperatures in the lower American River. Additional summer releases of Reclamation's Sites Project Water from Sites Reservoir could reduce the need for releases of CVP water from Folsom Lake, resulting in increased carryover storage. Provision of Reclamation's Sites Project Water in lieu of CVP Water from Folsom Lake to American River basin water users could also help increase the reliability of supplies to M&I users in that basin.

Delta Outflow Improvement

Sites Reservoir Project water releases for upstream actions could provide supplemental Delta outflow during summer and fall months to help manage Delta X2 salinity position, protect estuarine habitat, reduce entrainment risk, and improve food availability for anadromous fishes and other estuarine-dependent species. Increasing Delta outflow could help maintain the X2 position west of Collinsville, and improve food availability for estuarine species, including Delta smelt.

Water Quality

Sites Reservoir Project water releases from Sites Reservoir for upstream actions could augment Delta outflow for the purpose of improving control of salinity intrusion, and could improve water quality.

Lake Oroville Coldwater Pool Improvement

The State's Sites Reservoir Project Water, as operationally integrated with the operation of the SWP, could be used by the State, in lieu of making releases from Lake Oroville, to increase the reliability of coldwater pool storage in Lake Oroville to reduce lower Feather River water temperatures for juvenile steelhead and spring-run Chinook salmon over-summer rearing, and fall-run Chinook salmon.

G3.8 Reference

del Rosario, R. B., Y. J. Redler, K. Newman, P. L. Brandes, T. Sommer, K. Reece, R. Vincik. 2013. "Migration Patterns of Juvenile winter-run-sized Chinook Salmon (*Oncorhynchus tshawytscha*) through the Sacramento–San Joaquin Delta." *San Francisco Estuary and Watershed Science*. Vol. 11(1).

Acronyms and Other Abbreviations

Authority	Sites Reservoir Project Authority
CALFED	CALFED Bay-Delta Program
cfs	cubic feet per second
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
Delta	Sacramento-San Joaquin River Delta
DWR	California Department of Water Resources
GCID	Glenn-Colusa Irrigation District
M&I	municipal and industrial
MAF	million acre-foot (feet)
NODOS	North-of-Delta Offstream Storage
RD 108	Reclamation District 108
Reclamation	Bureau of Reclamation
SRSC	Sacramento River Settlement Contractor
SVI	Sacramento Valley 40-30-30 water year type index
SWP	State Water Project
SWRCB	State Water Resources Control Board
TAF	thousand acre-feet
T-C Canal	Tehama-Colusa Canal
TCCA	Tehama-Colusa Canal Authority
TRR	Terminal Regulating Reservoir

Table G3-1. Description of Proposed Seasonal Schedule for Project Operations

General Operation					The darker shading indicates months where there is heavy use of operations to attain the stated objective. Lighter shading indicates months where operations for the objective are light to moderate (i.e., operations occur when supplies are available and conditions favor the operation). No shading indicates no use to light use for the indicated objective.
Diversions	Conduct diversions to T-C Canal, GCID Canal, and the proposed Delevan Pipeline (diversions could occur in any month). Diversions would only occur once the D-1641, CVPIA 3406(b)(2), 2008 and 2019 USFWS BiOp, and 2009 and 2109 NMFS BiOp requirements have been met and existing authorized Delta diversions have been satisfied. Diversions to Sites Reservoir would be restricted by Sacramento River bypass criteria at Red Bluff, Hamilton City, Wilkins Slough, and Freeport, and the restrictions for protecting fish outmigration-related pulse flows (7 to 10 days once a month when flow conditions provide). Shading indicates the period in which diversion operations would occur, with the highest diversions during November through March. Diversions could also be limited by future regulatory requirements which may be placed on the United States.	A, B, C, and D	N/A	N/A	
Seasonal Reservoir Operations	Fill Sites Reservoir by pumping water diverted and stored pursuant to Water Right Application A025517 throughout the winter and spring and drain during peak release periods throughout the summer and fall.	A, B, C, and D	N/A	N/A	Fill Cycle / Drain Cycle / Fill Cycle
Water Supply Operations (modeled results are provided in Error! Reference source not found.**)**					
Authority	Provide average annual deliveries of 225 TAF for agricultural and municipal water supply. Approximately 98 TAF would be delivered to the Sacramento River Valley, and the remainder would be exported. Export would require new contracts for conveyance with Reclamation and DWR.	D	SPA-1	AN, BN, D, C	
SWP Contractors	Increase water supply reliability up to SWP Table A contract amounts in years when SWP delivery allocation is below 85 percent. Shading highlights period in which Delta exports would be increased. Table A represents the maximum annual contract amount of water delivery that SWP contractors can receive.	A, B, C	DP-1	BN, D, C	
CVP Contractors	Increase CVP water supply reliability up to Contract Total[3] (total increase up to 55 TAF in Dry and Critical years) in any Year[4] when water supply availability limits water made available by the CVP. There would be little effect if Delta export capacity is limiting water made available by the CVP. Reliability increase would mostly affect agricultural water service contractors. Shading indicates the typical agricultural diversion pattern.	A, B, C	AVG-4	AN, BN, D	
Incremental Level 4 Water Supply to Refuges					
Incremental Level 4 water supply for refuges	Provide 3.35 TAF per year maximum for refuges north of the Delta and up to a maximum of 101.09 TAF per year for refuges south of the Delta to help meet the requirements under CVPIA to provide refuge supplies up to the full Level 4 water supplies.	All	AVG-3	AN, BN, D	
Delta Environmental Water Quality Operation					
Delta environmental water quality	Augment Delta outflow above base D-1641 operations for up to 6 months, with monthly rates varying within 750 cfs, 1,000 cfs, and 1,500 cfs tiers (maximum augmentation of 450 TAF per period).	All	AVG-1	AN, BN, D	
EI-5: Delta Outflow for Delta Smelt Habitat Improvement (Summer/Fall)	Augment Delta outflow during summer and fall months (i.e., May through December) to improve X2 (if possible, west of Collinsville 81 km), and increase estuarine habitat, reduce entrainment, and improve food availability for anadromous fishes and other estuarine-dependent species (e.g., Delta smelt, longfin smelt, Sacramento splittail, starry flounder, and *Crangon franciscorum*). Shading highlights period in which Delta outflow would be augmented (operation coordinated with Delta environmental water quality action).	All	AVG-2	ALL	
Hydropower Operation					

Table G3-1. Description of Proposed Seasonal Schedule for Project Operations

Dispatchable hydropower generation	Provide more than 30 hours per week of uninterrupted operation, with dedicated afterbay/forebay (Holthouse Reservoir) with 6,500–acre-foot capacity.	All	N/A	ALL
Ecosystem Improvements				
EI-1: Shasta Coldwater Pool	Conserve water in Shasta Lake to provide additional coldwater pool storage. This action would have particular emphasis in Below Normal, Dry, and Critical water-year types. This benefit would be achieved by (1) exchanging environmental water from Sites Reservoir to conserve storage in Shasta for later release to provide benefits to anadromous fish; (2) releasing water from Sites Reservoir to meet CVP south-of-the-Delta needs instead of releasing water from Shasta; and (3) releasing water from Sites Reservoir to meet a portion of the CVP commitment for Delta outflow.	All	DP-1	BN, D, C
EI-2: Sacramento River Flows for Temperature Control	Maintain water temperatures year-round at levels suitable for all species and life stages of anadromous salmonids in the Sacramento River between Keswick Dam and Red Bluff Pumping Plant, and during the July through November period for Below Normal, Dry, and Critical water-year types. This objective would be achieved by using additional water stored in Shasta as a result of the exchange (see EI-1).	All	DP-2	BN, D, C
EI-3: Folsom Lake Coldwater Pool	Conserve water in Folsom Lake to provide additional coldwater pool to achieve temperatures that are more suitable for juvenile steelhead summer rearing and fall-run Chinook salmon spawning in the lower American River from May through November during all water-year types. The additional water retained in storage (see EI-1) would be achieved by relying on Sites Reservoir to respond to some of the Delta objectives that are currently met through releases from Folsom, particularly from January through August.	All	DP-2	D, C
EI-4: Stabilize American River Flows	Augment flows in the lower American River to reduce dewatering of fall-run Chinook salmon redds (i.e., October through March) and steelhead redds (i.e., January through May). This action would also reduce juvenile anadromous salmonid isolation events (through avoiding extreme fluctuations in flow), particularly from October through June. This objective would be accomplished by releasing a portion of the additional water retained in storage at Folsom Reservoir resulting from reliance on Sites Reservoir to meet Delta objectives.	All	DP-2	ALL
EI-6: Lake Oroville Coldwater Pool	Improve the reliability of coldwater pool storage in Lake Oroville to improve water temperature suitability for juvenile steelhead and spring-run Chinook salmon over-summer rearing and fall-run Chinook salmon spawning in the lower Feather River from May through November during all water-year types. Additional water retained in storage would be accomplished through releases from Sites Reservoir to meet Lake Oroville compliance obligations. (1) Provide releases from Oroville Dam to maintain mean daily water temperatures at levels suitable for juvenile steelhead and spring-run Chinook salmon over-summer rearing and fall-run Chinook salmon spawning in the lower Feather River. (2) Stabilize flows in the lower Feather River to minimize redd dewatering, juvenile stranding, and isolation of anadromous salmonids.	All	DP-2	BN, D, C
EI-7: Stabilize Sacramento River Fall Flows	Stabilize flows in the Sacramento River between Keswick Dam and the Red Bluff Diversion Dam to minimize dewatering of fall-run Chinook salmon redds (for the spawning and embryo incubation life-stage periods extending from October through March), particularly during fall months. Avoid abrupt changes. Operations would avoid adverse impacts to coldwater pool operations in Dry and Critical water-year types.	All	AVG-1	AN, BN, D

This page intentionally left blank.

Attachment GA
Initial Alternatives Modeling Results

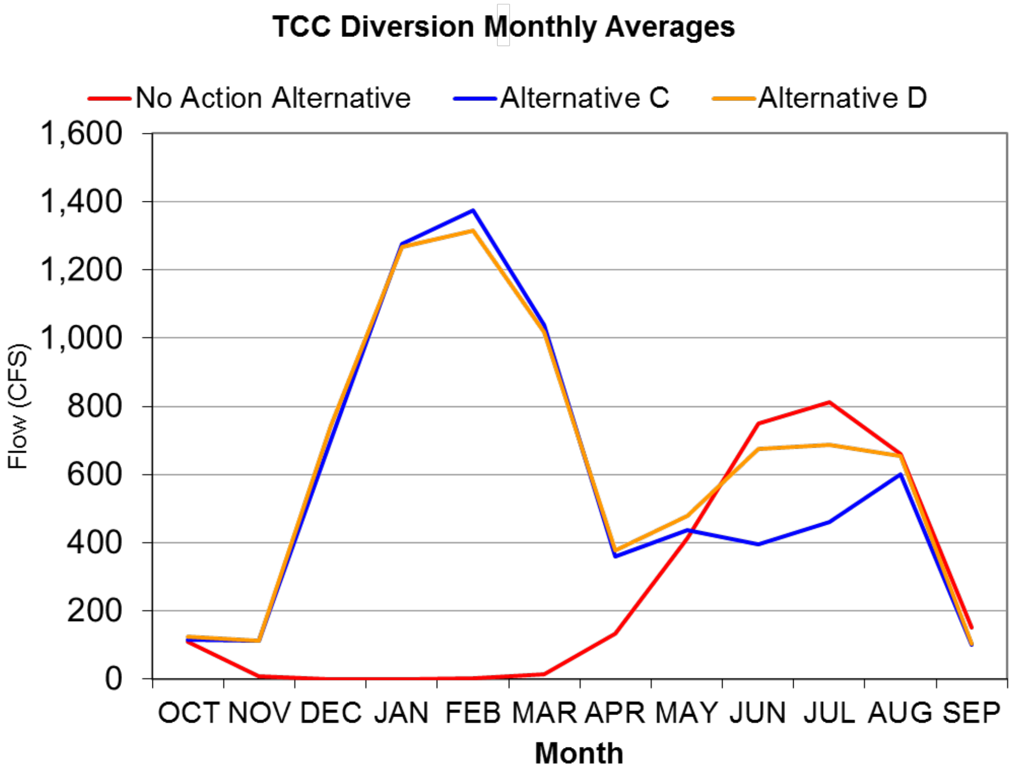
Attachment A

Initial Alternatives Modeling Results

Modeling was conducted using the CalSim-II model to evaluate potential Proposed Alternative operations to provide water for participating Authority members, operate in cooperation with the CVP and SWP systems, and supply water for ecosystem and water quality benefits. The Proposed Alternative modeling tiers off NODOS project Alternative C modeling conducted previously by DWR, which assumes projected year 2020 level of development conditions.

The figures included in this appendix present CalSim-II results for the NODOS No Action Alternative (NAA), NODOS Alternative C (ALT_C), and Alternative D.

Additional information developed and documented as part of the NODOS project is available on the DWR website (http://www.water.ca.gov/storage/northdelta/).


TCC Diversion Monthly Averages
No Action Alternative
Alternative C
Alternative D
Flow (CFS)
1,600
1,400
1,200
1,000
800
600
400
200
0
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP
Month

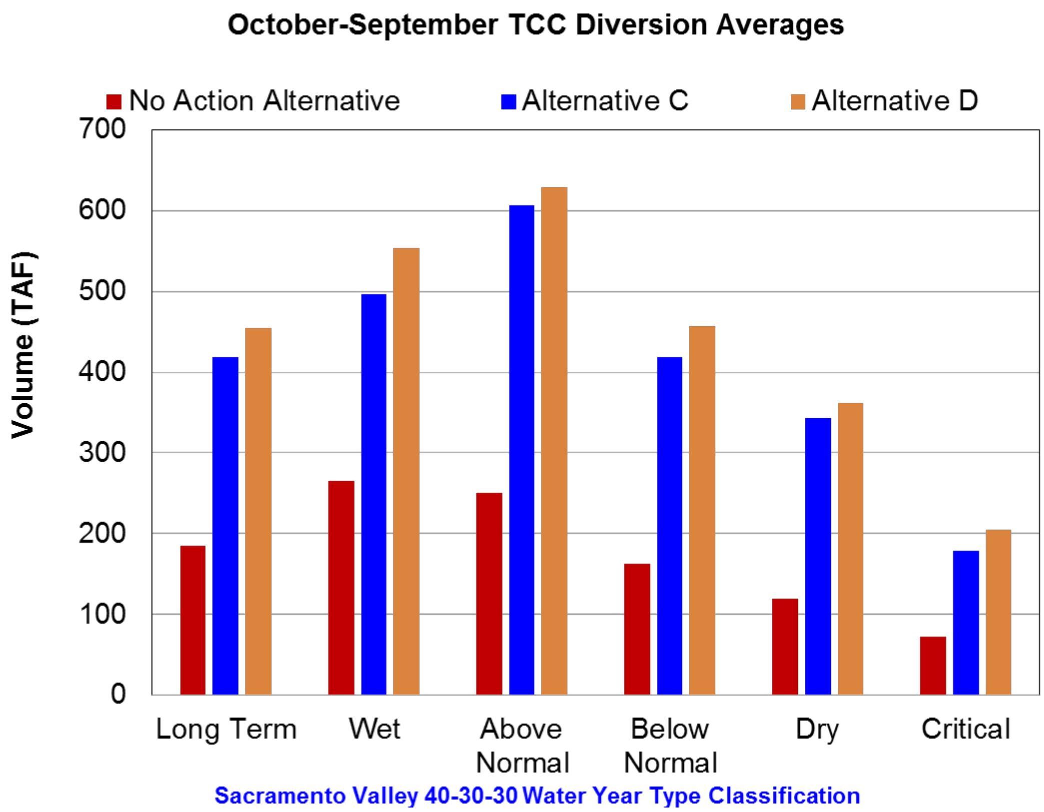
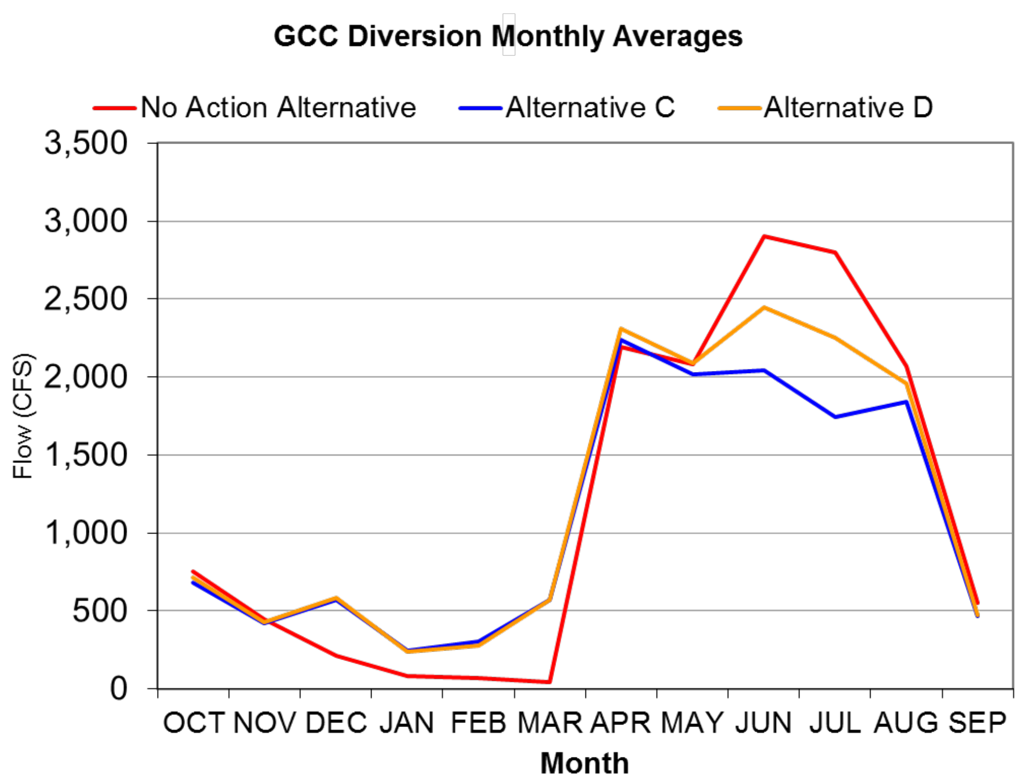

October-September TCC Diversion Averages
No Action Alternative
Alternative C
Alternative D
Volume (TAF)
700
600
500
400
300
200
100
0
Long Term
Wet
Above Normal
Below Normal
Dry
Critical
Sacramento Valley 40-30-30 Water Year Type Classification

Figure GA-1


GCC Diversion Monthly Averages
No Action Alternative
Alternative C
Alternative D
Flow (CFS)
3,500
3,000
2,500
2,000
1,500
1,000
500
0
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP
Month

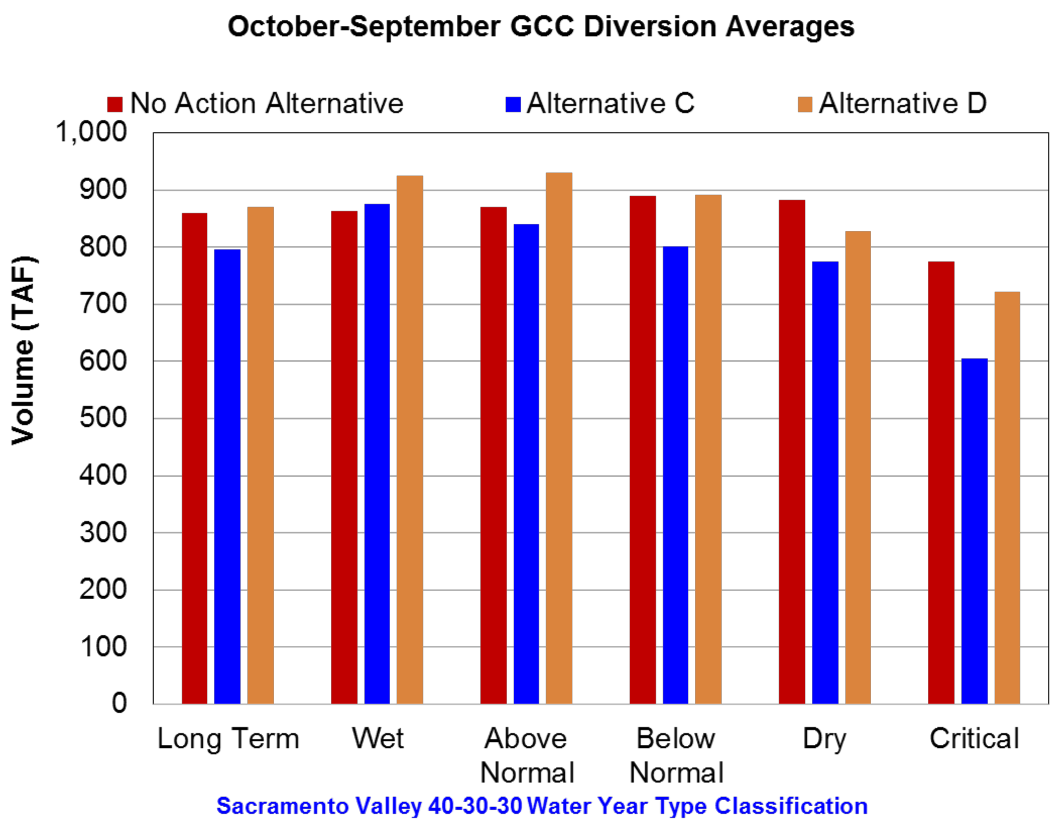
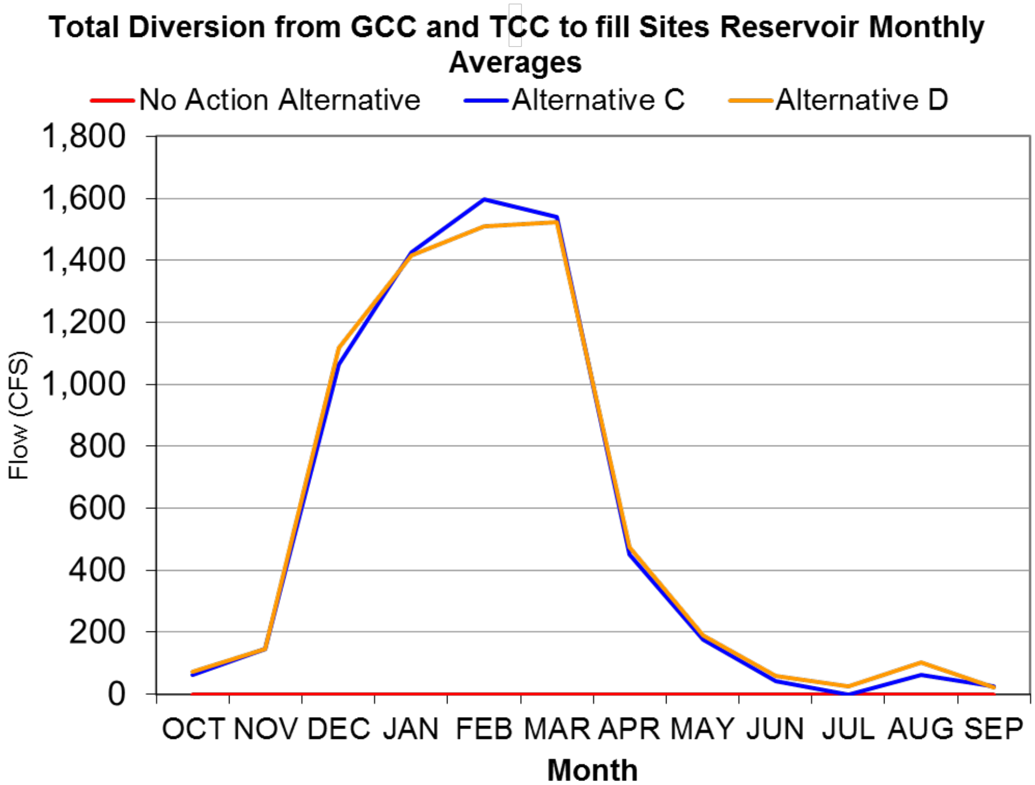

October-September GCC Diversion Averages
No Action Alternative
Alternative C
Alternative D
Volume (TAF)
1,000
900
800
700
600
500
400
300
200
100
0
Long Term
Wet
Above Normal
Below Normal
Dry
Critical
Sacramento Valley 40-30-30 Water Year Type Classification

Figure GA-2


Total Diversion from GCC and TCC to fill Sites Reservoir Monthly Averages
No Action Alternative
Alternative C
Alternative D
Flow (CFS)
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP
Month

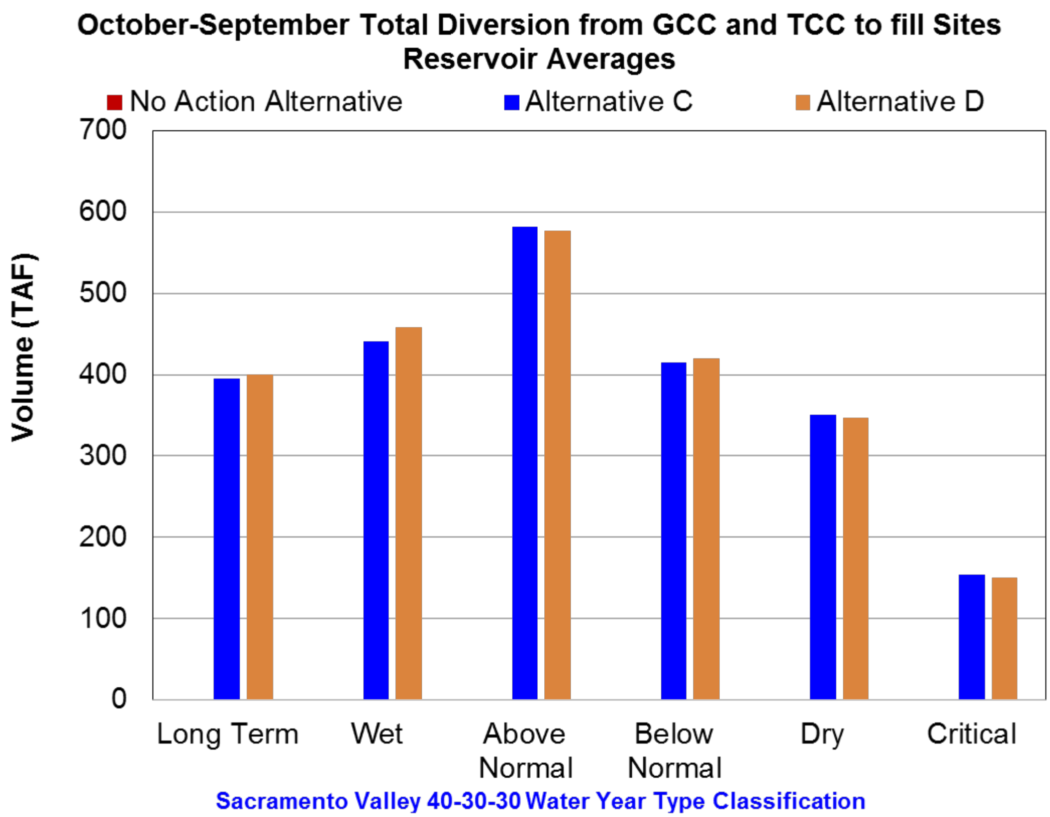
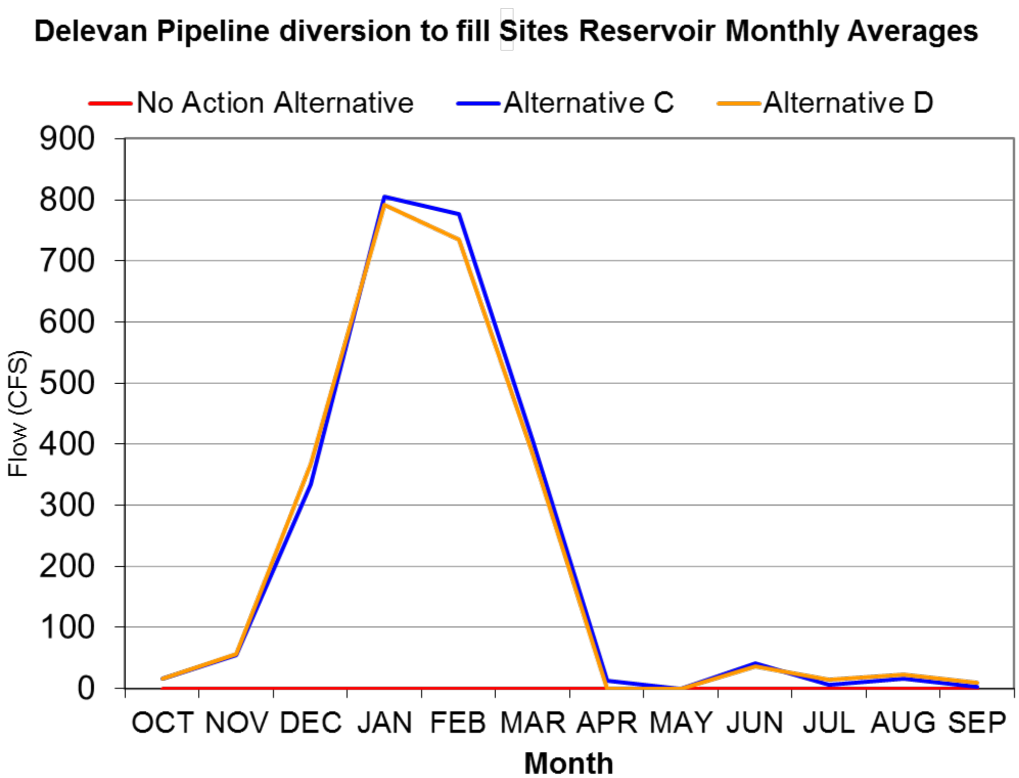

October-September Total Diversion from GCC and TCC to fill Sites Reservoir Averages
No Action Alternative
Alternative C
Alternative D
Volume (TAF)
700
600
500
400
300
200
100
0
Long Term
Wet
Above Normal
Below Normal
Dry
Critical
Sacramento Valley 40-30-30 Water Year Type Classification

Figure GA-3


Delevan Pipeline diversion to fill Sites Reservoir Monthly Averages
No Action Alternative
Alternative C
Alternative D
900
800
700
600
500
400
300
200
100
0
Flow (CFS)
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP
Month

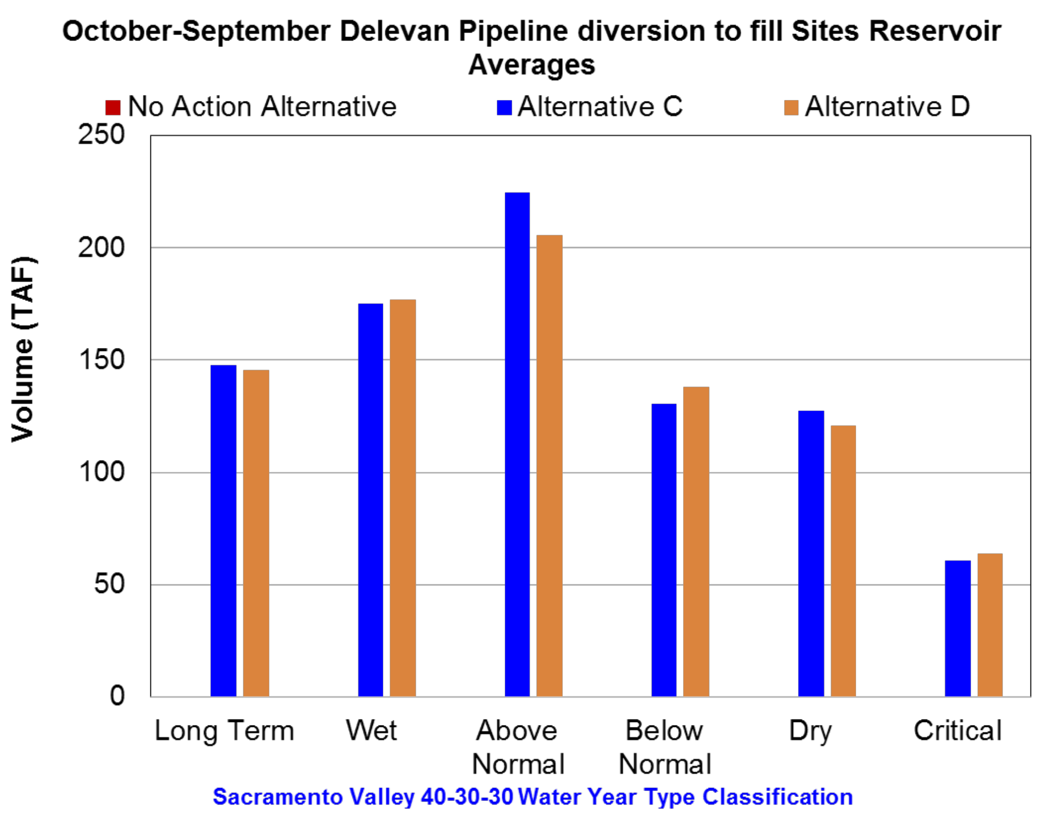
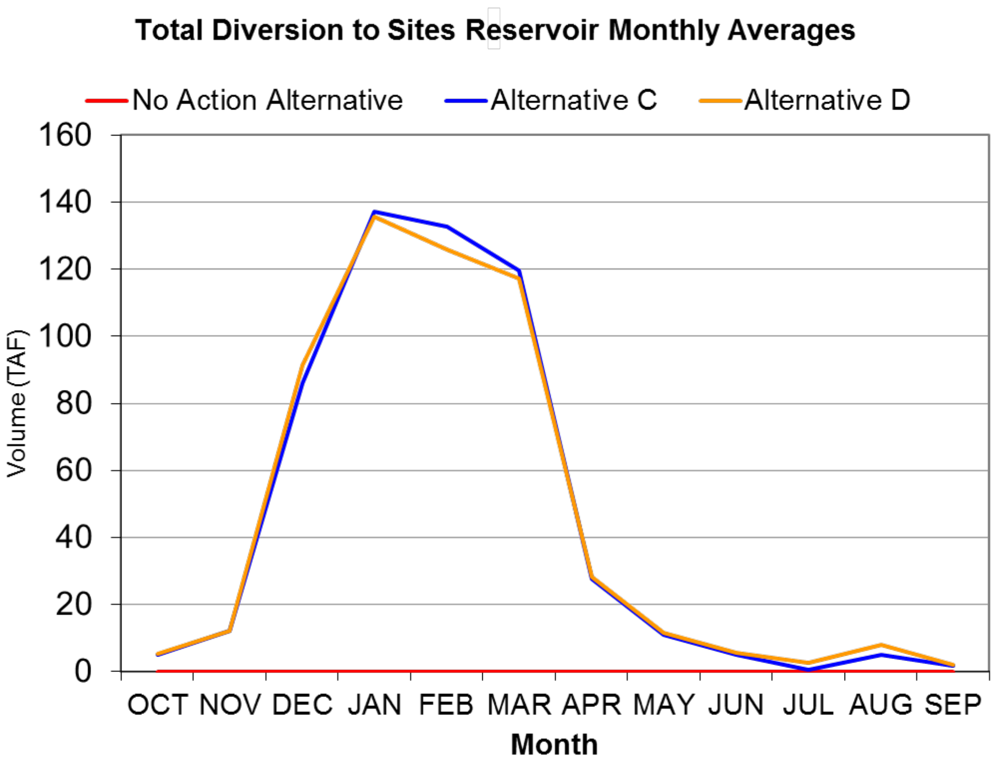
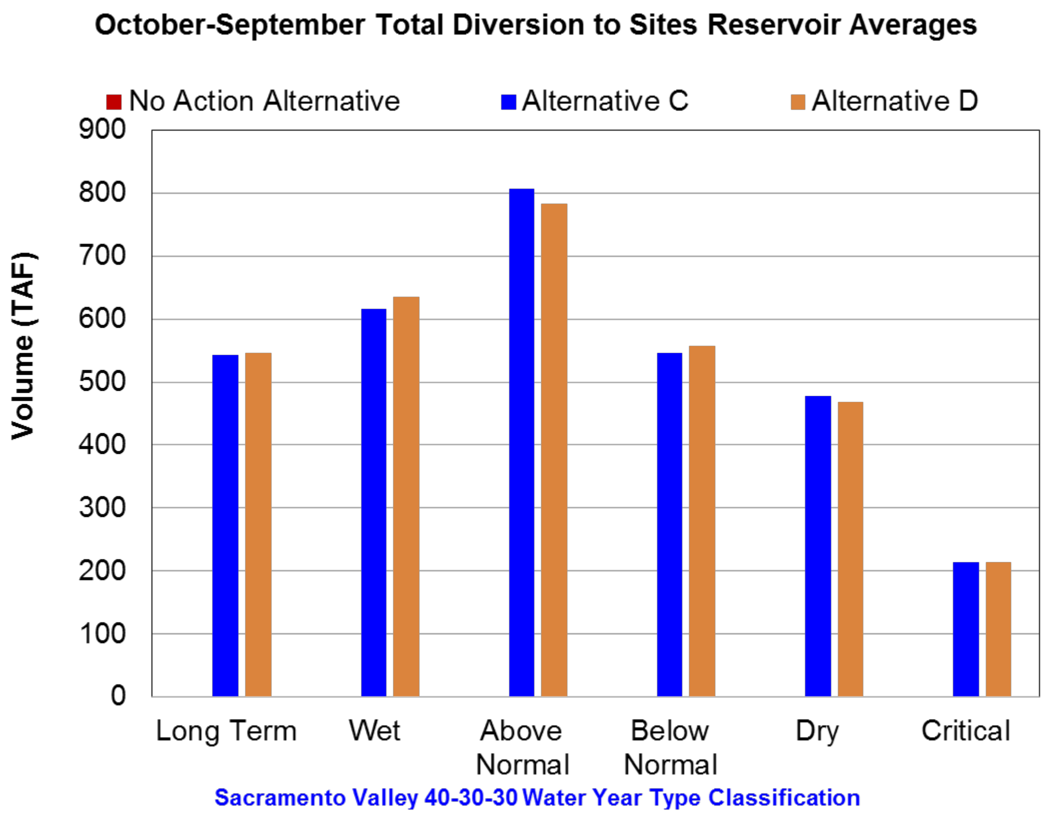

October-September Delevan Pipeline diversion to fill Sites Reservoir Averages
No Action Alternative
Alternative C
Alternative D
250
200
150
100
50
0
Volume (TAF)
Long Term
Wet
Above Normal
Below Normal
Dry
Critical
Sacramento Valley 40-30-30 Water Year Type Classification

Figure GA-4

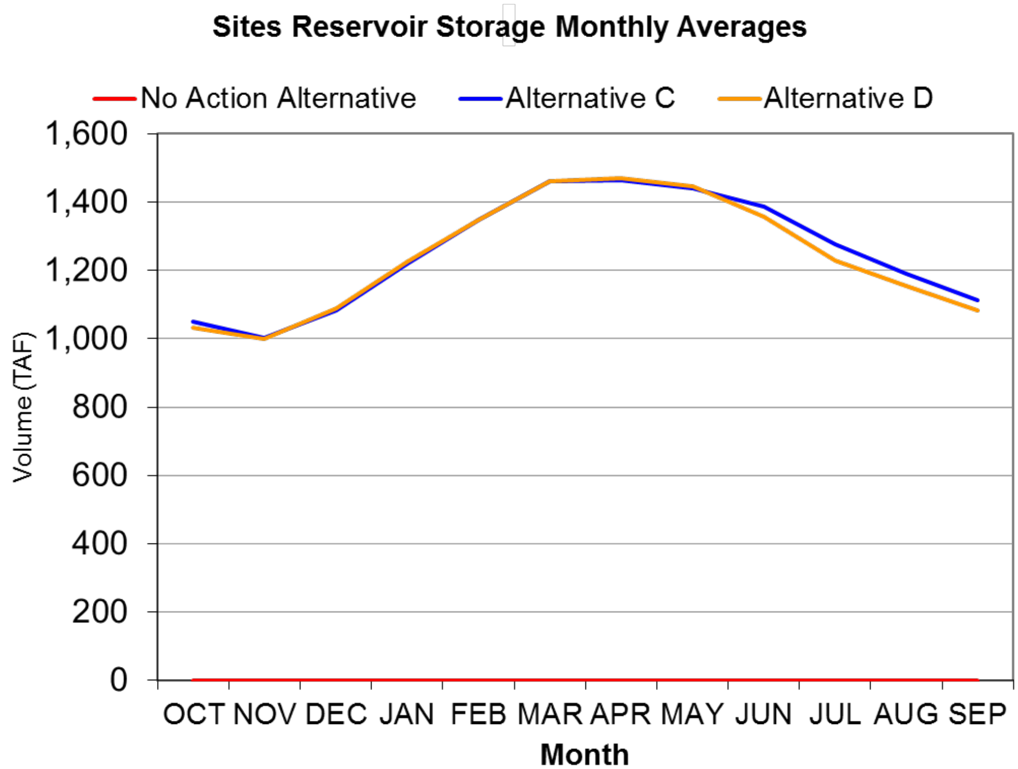


Total Diversion to Sites Reservoir Monthly Averages
No Action Alternative
Alternative C
Alternative D
Volume (TAF)
160
140
120
100
80
60
40
20
0
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP
Month

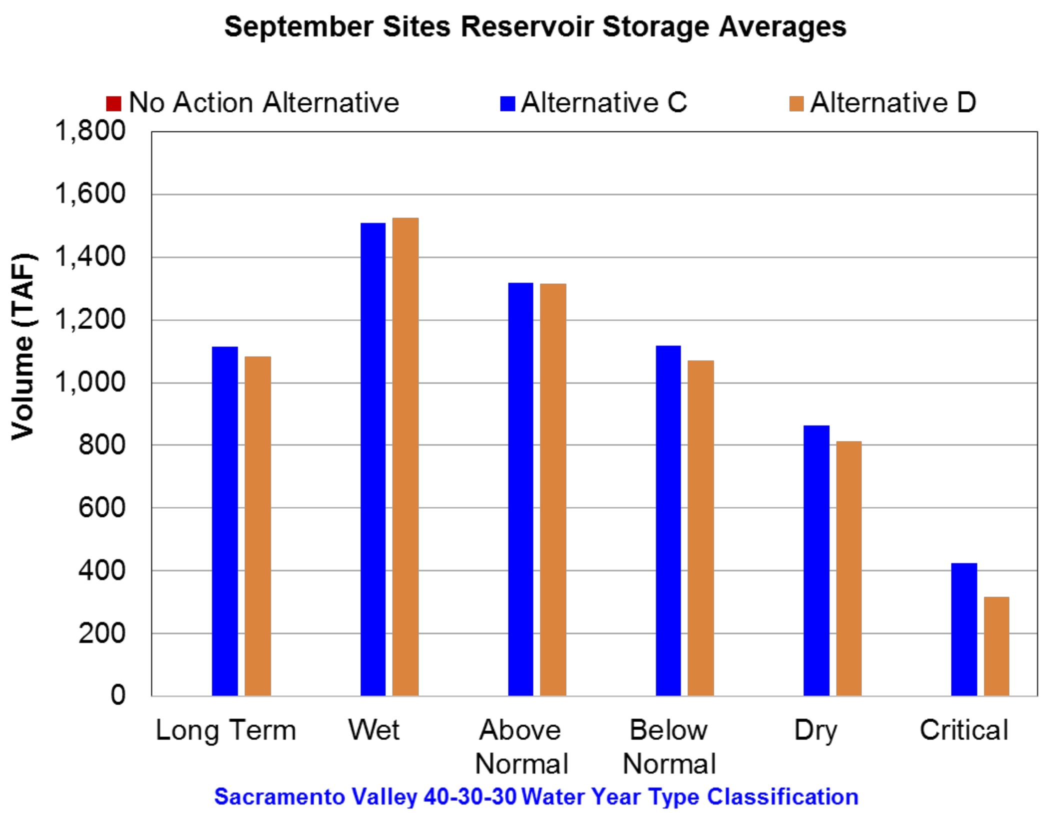


October-September Total Diversion to Sites Reservoir Averages
No Action Alternative
Alternative C
Alternative D
Volume (TAF)
900
800
700
600
500
400
300
200
100
0
Long Term
Wet
Above Normal
Below Normal
Dry
Critical
Sacramento Valley 40-30-30 Water Year Type Classification

Figure GA-5

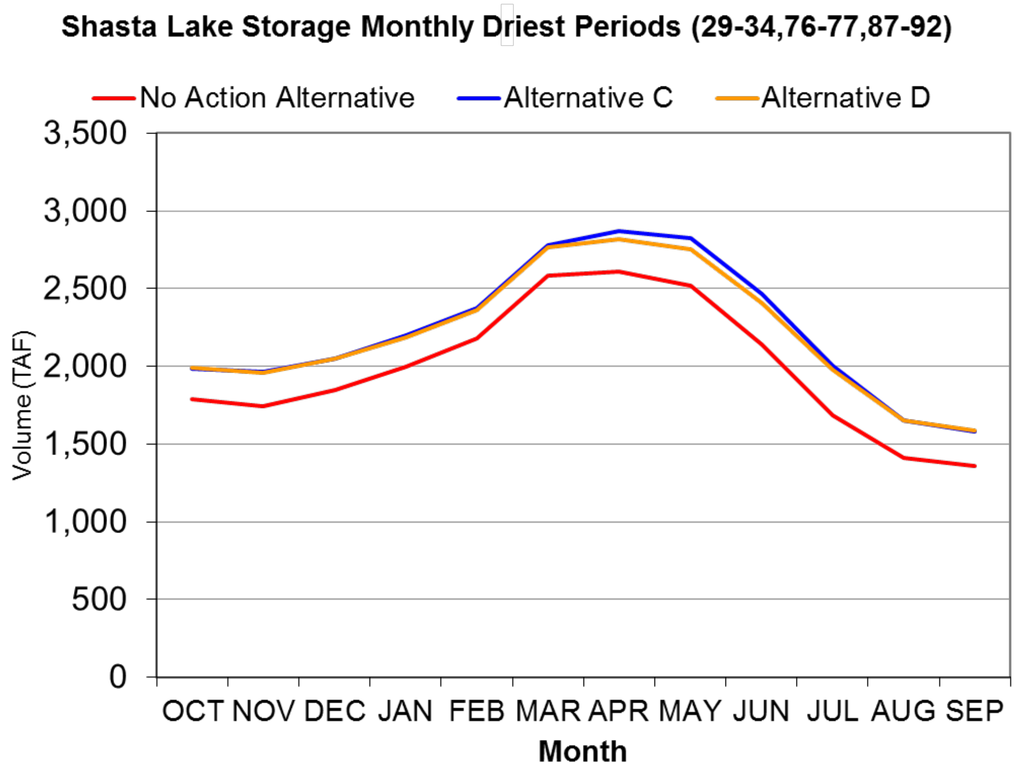


Sites Reservoir Storage Monthly Averages
No Action Alternative
Alternative C
Alternative D
1,600
1,400
1,200
1,000
800
600
400
200
0
Volume (TAF)
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP
Month



September Sites Reservoir Storage Averages
No Action Alternative
Alternative C
Alternative D
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
Volume (TAF)
Long Term
Wet
Above Normal
Below Normal
Dry
Critical
Sacramento Valley 40-30-30 Water Year Type Classification

Figure GA-6


Shasta Lake Storage Monthly Driest Periods (29-34,76-77,87-92)
No Action Alternative
Alternative C
Alternative D
Volume (TAF)
3,500
3,000
2,500
2,000
1,500
1,000
500
0
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP
Month

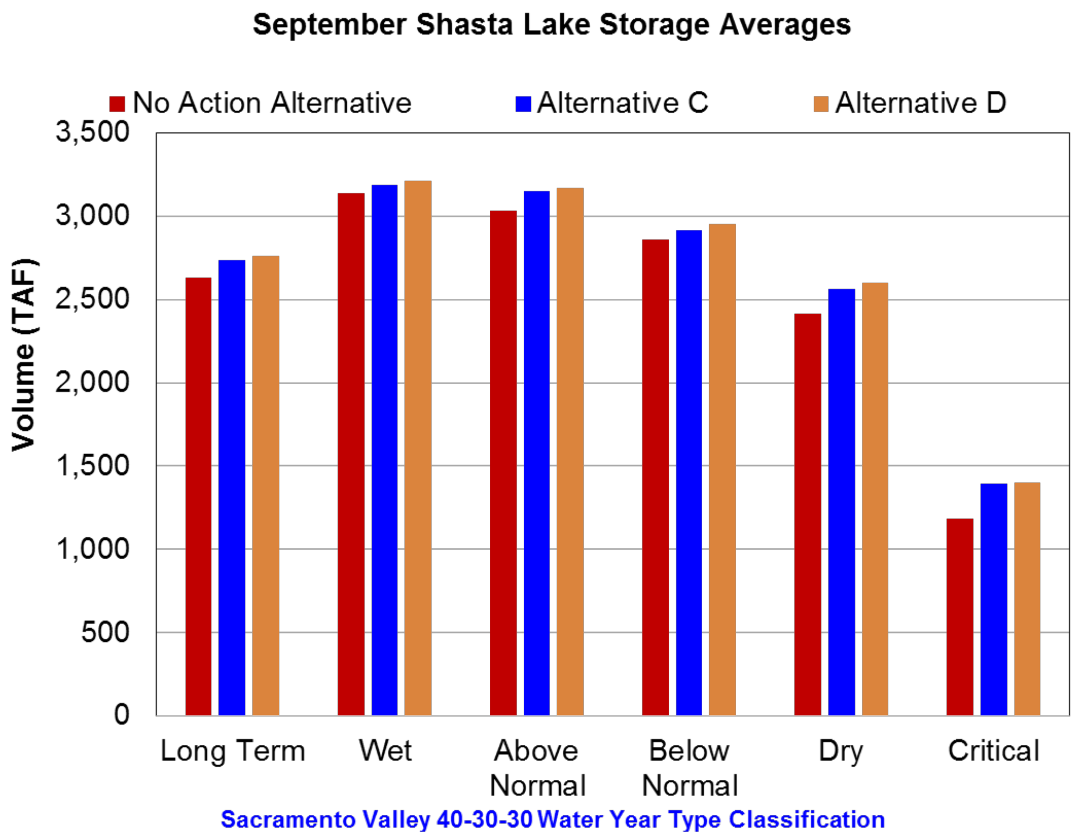
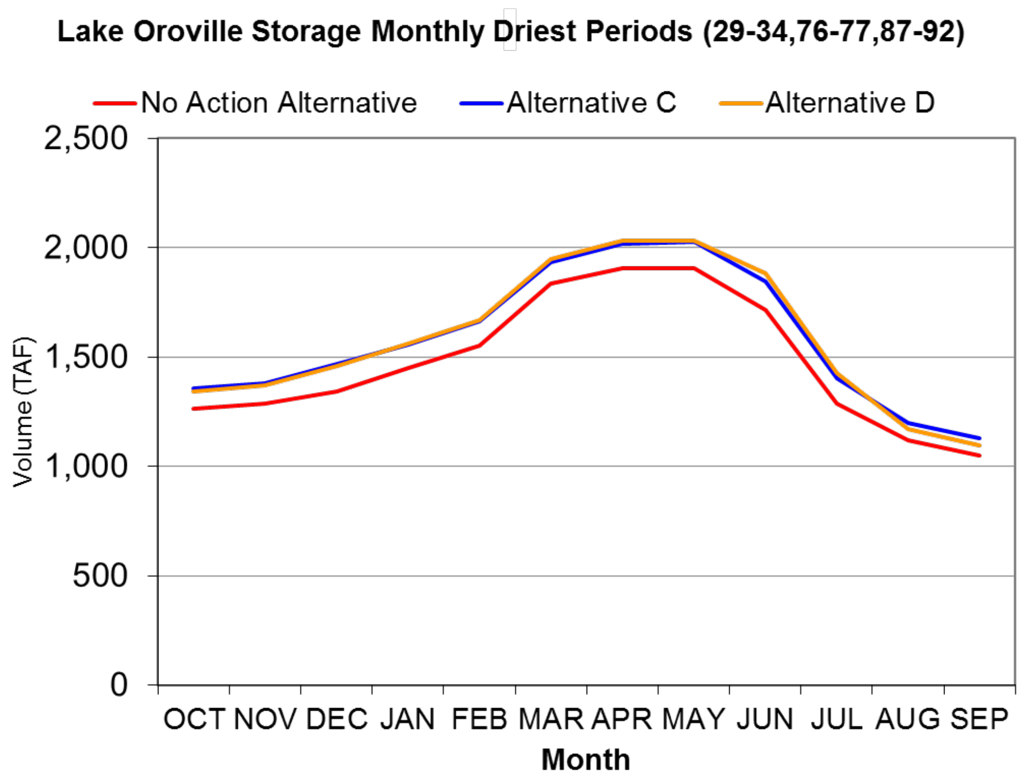
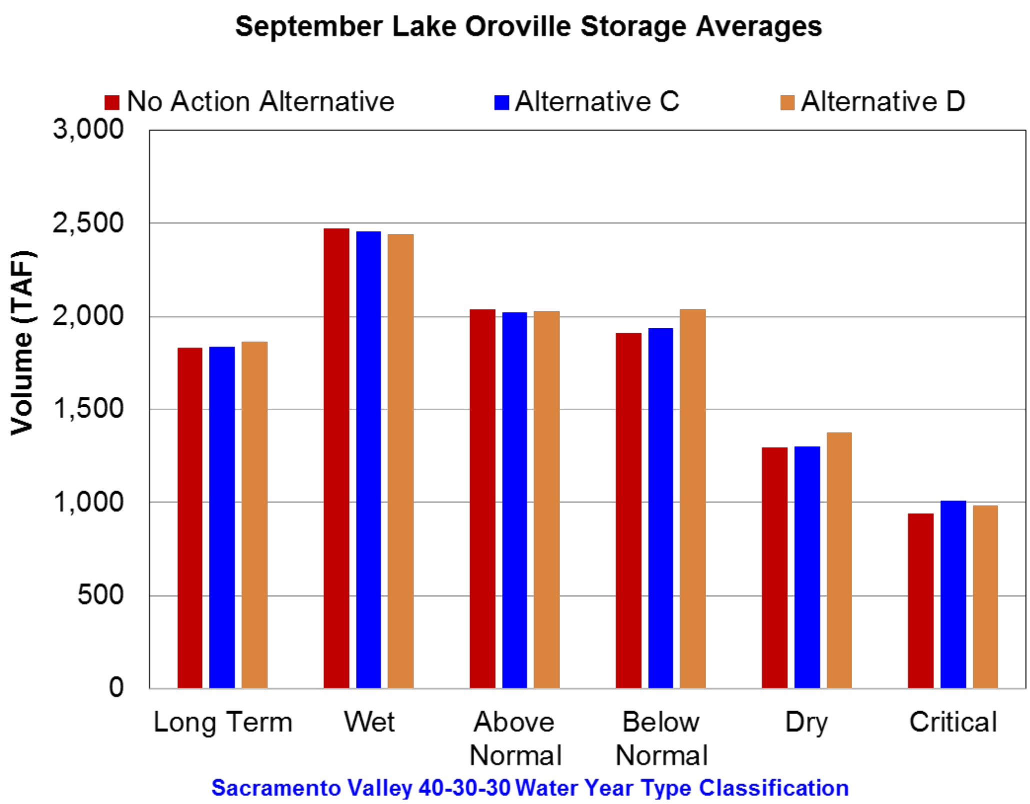

September Shasta Lake Storage Averages
No Action Alternative
Alternative C
Alternative D
Volume (TAF)
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Long Term
Wet
Above Normal
Below Normal
Dry
Critical
Sacramento Valley 40-30-30 Water Year Type Classification

Figure GA-7

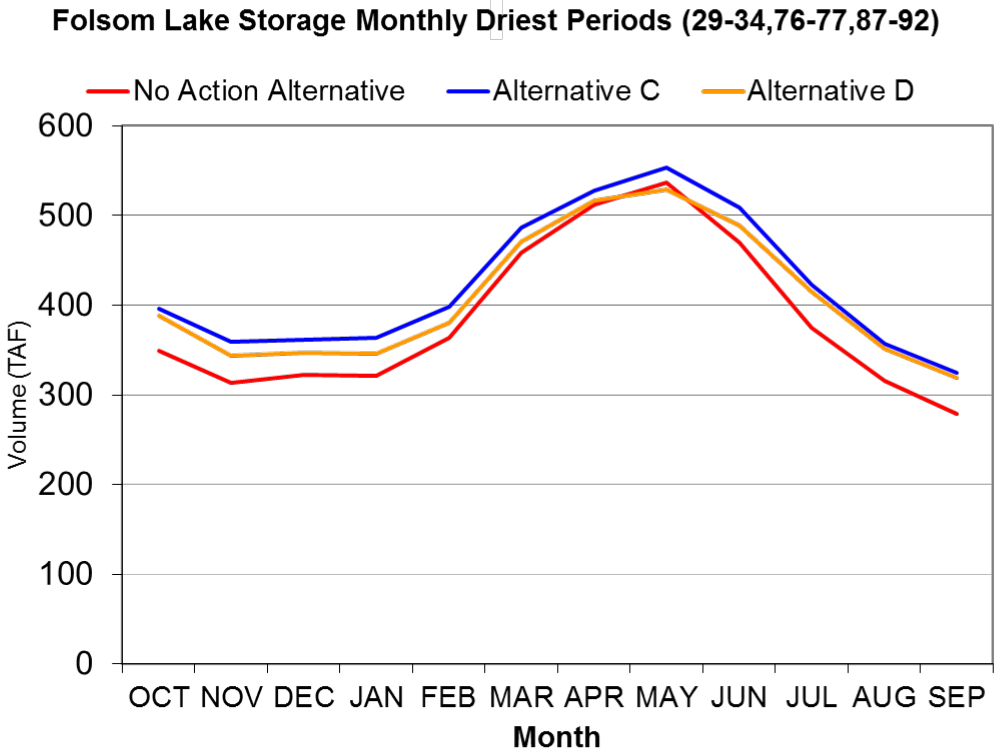


Lake Oroville Storage Monthly Driest Periods (29-34,76-77,87-92)
No Action Alternative
Alternative C
Alternative D
2,500
2,000
1,500
1,000
500
0
Volume (TAF)
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP
Month



September Lake Oroville Storage Averages
No Action Alternative
Alternative C
Alternative D
3,000
2,500
2,000
1,500
1,000
500
0
Volume (TAF)
Long Term
Wet
Above Normal
Below Normal
Dry
Critical
Sacramento Valley 40-30-30 Water Year Type Classification

Figure GA-8


Folsom Lake Storage Monthly Driest Periods (29-34,76-77,87-92)
No Action Alternative
Alternative C
Alternative D
Volume (TAF)
600
500
400
300
200
100
0
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP
Month

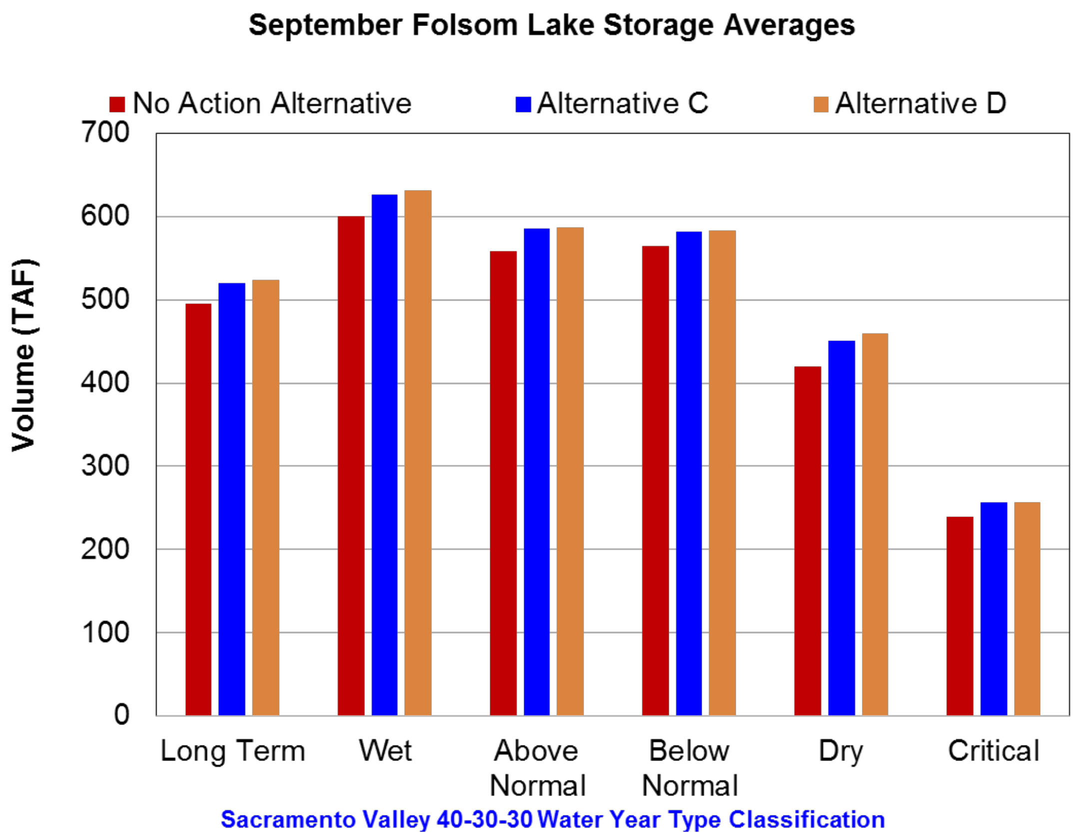
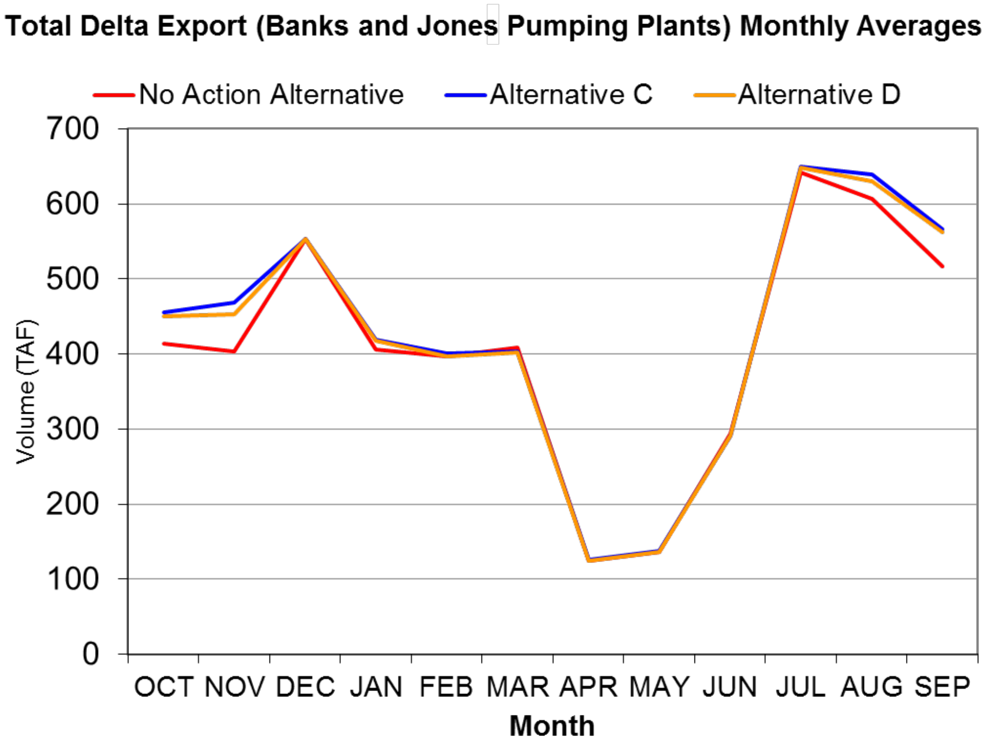

September Folsom Lake Storage Averages
No Action Alternative
Alternative C
Alternative D
Volume (TAF)
700
600
500
400
300
200
100
0
Long Term
Wet
Above Normal
Below Normal
Dry
Critical
Sacramento Valley 40-30-30 Water Year Type Classification

Figure GA-9


Total Delta Export (Banks and Jones Pumping Plants) Monthly Averages
No Action Alternative
Alternative C
Alternative D
700
600
500
400
300
200
100
0
Volume (TAF)
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP
Month

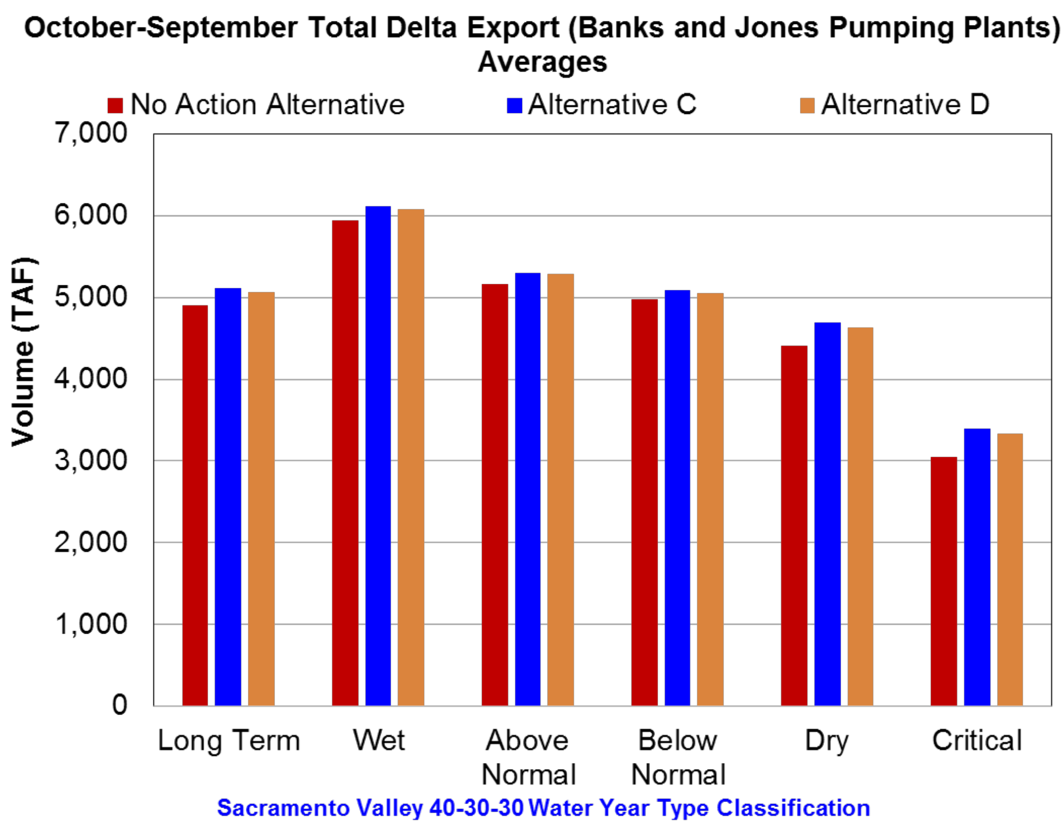

October-September Total Delta Export (Banks and Jones Pumping Plants) Averages
No Action Alternative
Alternative C
Alternative D
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Volume (TAF)
Long Term
Wet
Above Normal
Below Normal
Dry
Critical
Sacramento Valley 40-30-30 Water Year Type Classification

Figure GA-10

This page intentionally left blank