

RECLAMATION

Managing Water in the West

MID-PACIFIC CONSTRUCTION OFFICE
Willows, California

Construction Progress Report L-29



U.S. Department of the Interior
Bureau of Reclamation
Mid-Pacific Region
Mid-Pacific Construction Office

November 2017

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CONSTRUCTION PROGRESS REPORT (L-29)

MID-PACIFIC CONSTRUCTION OFFICE

MID-PACIFIC REGION

NOVEMBER 2017

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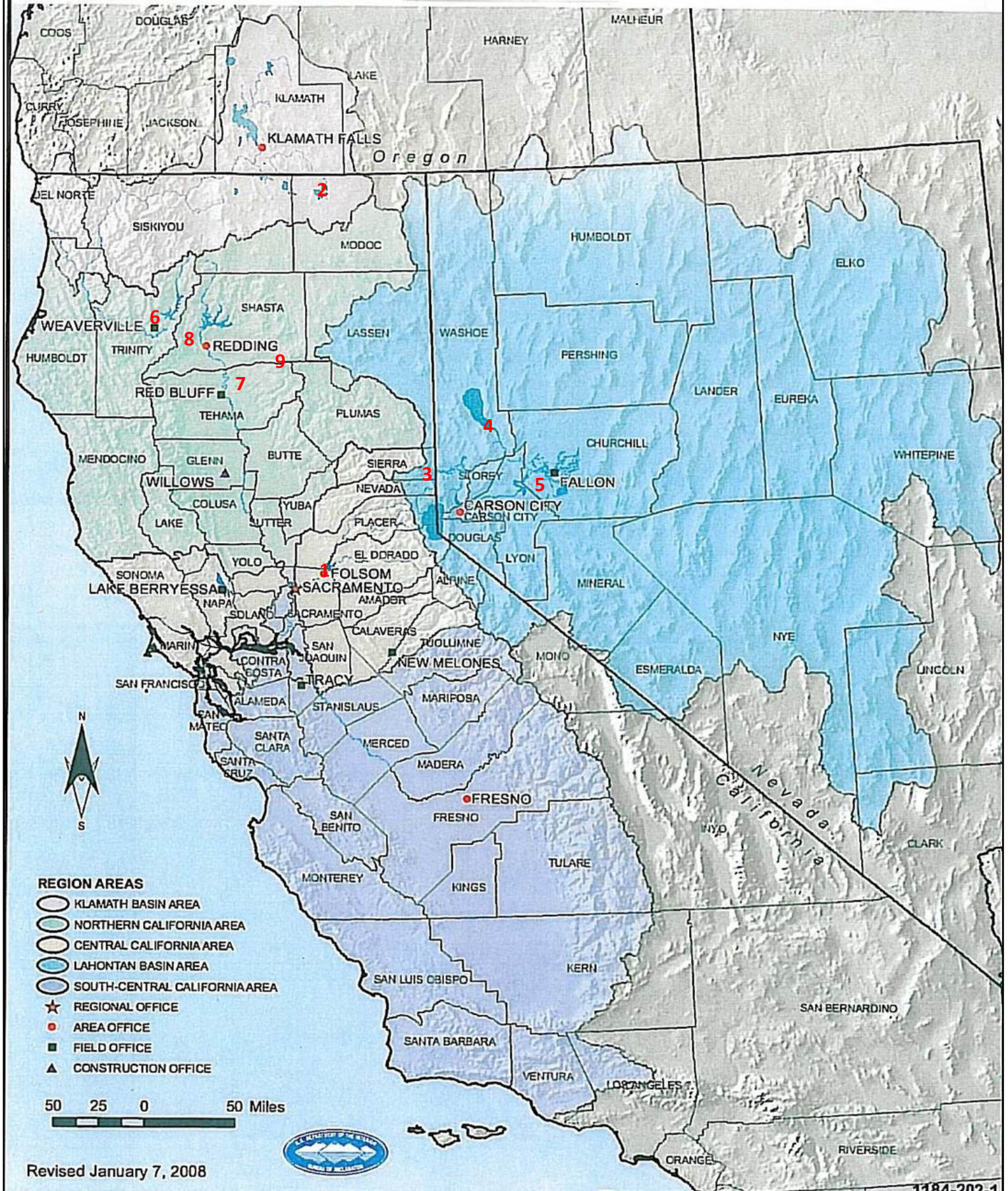
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Areas in the Mid-Pacific Region Where Work was Performed

Mid-Pacific Region

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Managing Water in the West



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STAFFING

MID-PACIFIC CONSTRUCTION OFFICE

The Mid-Pacific Construction Office had 33 construction and administrative employees at the close of this month as follows:

Construction Engineer's Office.....	1
Preaward and Project Management Group.....	3
Administrative Management.....	5
Division of Field Engineering.....	17
Division of Office Engineering.....	4
Materials Lab Branch.....	3

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GLOSSARY

ACRONYMS AND ABBREVIATIONS

ACRONYM	MEANING
CCAO	Central California Area Office
CVP	Central Valley Project
KBAO	Klamath Basin Area Office
LBAO	Lahontan Basin Area Office
MP	Mid-Pacific Regional Office
MPCO	Mid-Pacific Construction Office
NCAO	Northern California Area Office
SCCAO	South Central California Area Office
SJRRP	San Joaquin River Restoration Program
TO	Tracy Office

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Central California Area Office

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Contract No. R10PC20019
Specification No. 20-C0689
Folsom Power Plant Generators U1, U2, and U3 Rewind and
Excitation System Replacement - Folsom Unit, American River
Division, Central Valley Project, California
Andritz Hydro, Charlotte, NC

Work Performed	November	0.0%
	Time Elapsed	100.0%
	Work Completed	100.0%
Contractor Earnings	November	\$0.00
	Previous	\$20,610,792.74
	Total to Date	\$20,610,792.74

Area Office Project Management

Project Manager: Jonathan Rogado, MP-250

Office Engineering

Contract Administrator: Larry Bowman, MPCO-240

Before contract completion the following work will be performed:

- Acceptance testing for Unit 3.
- Remaining warranty inspections for Units 1, 2, and 3.
- Final submittals (including As-built Drawings and O&M Manuals).

Field Engineering

Construction Manager: Reynaldo Garcia, MPCO-310

Construction Representative: Todd Dooley, MPCO-314.

Number of Contractor Employees: 1

Work Performed

Unit 1 Warranty Inspection

After the placement of Unit one's clearance and prior to performing Unit one's warranty inspection, Reclamation plant mechanics removed two deflector plates at the connection end, and two access covers at the turbine end to facilitate access to the top and bottom of the winding. The Contractor's Representative and the Reclamation Representatives reviewed Unit 1's connection end and each separately crawled on top of the rotor poles and reviewed end turns for corona, wedge migration and lashing migration. Representatives each crawled on top of the rotor poles, and the contractor's Representative identified that the windings contained more brake dust than he anticipated.

Representatives separately crawled underneath and inspected the lower half of Unit 1's armature winding without significant findings. As with the top half of the unit, the bottom half of the unit had a fair amount of brake dust accumulation.

After completing Unit 1's warranty inspection, the contractor's representative mentioned the following findings:

- a. The Unit contained more brake dust than he anticipated. He indicated that cleaning the unit (perhaps more frequently) would be a recommendation.
- b. The armature windings appeared to be in good condition.

Unit 2 Warranty Inspection

After the placement of Unit 2's clearance and prior to performing Unit 2's warranty inspection, Reclamation plant mechanics removed two deflector plates at the connection end and two access covers at the turbine end to facilitate access to the top and bottom of the winding.

One Contractor Representative and one Reclamation Representative reviewed Unit 2's connection end and each separately crawled on top of the rotor poles and reviewed end turns for corona, wedge and lashing migration and other unusual features.

We identified a damaged top bar within slot 317 on the end windings. Contractor's Representative speculated that the damage was recent, because they did not see an accumulation of brake dust where the damage occurred. Also, the damage appeared to be the result of impact (as it did not show evidence of charred areas around the damage).

Representatives identified black dots on several connection end series caps. They also identified some silicone caps with poor craftsmanship. Silicone caps of poor craftsmanship, and with black dots was consistent with those findings identified during the previous warranty inspection.

Representatives separately crawled underneath and inspected the lower half of Unit 2's armature winding. They identified soft debris accumulating around heaters. Representatives informed Reclamation Electricians of this debris and they later used a vacuum to remove it.

Reclamation Representative used a caliper to approximate the depth of the damage identified to the top bar within slot 317. Both the Contractor's Representative and Reclamation's Representative approximated the depth between 0.020 and 0.030". However, due to the thickness of the probe being greater than the bottom of the hole in the damaged stator bar, the measured thickness was only approximated.

After the Reclamation Representative received input from both the Technical Service Center in Denver, and the Central California Office, indicating that it is acceptable to return Unit 2 to service with its noted damage, Reclamation plant mechanics began replacing access cover plates. However, when replacing cover plates they damaged the CO2 fire suppression piping. Reclamation plant mechanics repaired the damaged CO2 fire suppression piping to the extent practicable. After Plant Mechanics repaired the damaged piping and replaced access covers, Reclamation's Representative released the clearance for Unit 2.

After completing Unit 2's warranty inspection, the Contractor's Representative indicated he was concerned about the damage found to the top bar within slot 317. Reclamation Representative asked the Contractor's Representative whether it was appropriate to return Unit 2 to service. Contractor's Representative indicated that since the Unit had been running, it would probably be okay to return it to service. However, he indicated he'd follow-up with his engineering group. The Contractor's Representative also noted that although the unit could probably be returned to service, he does not believe it would pass a DC Ramp test in its current state. After following-up with his engineering group, the Representative indicated that Andritz recommends a spot repair to the top bar within slot 317, prior to returning it to service.

Reclamation Representative relayed findings from Unit 2's warranty inspection to both Central California Area Office's Water and Project Manager, Terry Brown, and the Technical Service Center's Electrical Engineer, Eric Eastement. Based on the described damaged area, Mr. Eastement largely concurred with Andritz' assessment that a spot repair is probably appropriate. However, he indicated that he intends to review photographs of the damage to the top bar within slot 317 and Andritz's winding diagram the following shift.

Unit 3 Warranty Inspection

After applying a lock to Unit 3's (U3) clearance, Folsom Plant Mechanics removed two access plates at the top and bottom of Unit 3's armature winding.

The Contractor's Representative and Reclamation Representative inspected the top half of Unit 3's armature winding. They identified black spots on the edges of silicone caps for those top bars within slots 336, 365, 229 and 130. They also identified a black spot on the face of the silicone cap for the top bar within slot 76 and noted that Unit 3's armature winding did not show evidence of corona or of wedge or lashing migration.

Representatives reviewed the bottom half of Unit 3's armature winding. Each crawled underneath Unit 3's armature winding separately and performed a visual inspection. They did not identify anything that appeared unusual on the bottom half of the unit.

Contract No. R14PC00096
Specification No. 20-C0816
Nimbus Dam Radial Gate Repairs, Phase III – Nimbus Dam,
American River Division, Central Valley Project, California
Alltech Engineering Corporation, Mendota Heights, MN

Work Performed	November	1.6%
	Time Elapsed	100%
	Work Completed	60.9%

Contractor Earnings	November	\$269,046.79
	Previous	\$10,286,978.67
	Total to Date	\$10,556,025.46

Area Office Project Management

Project Manager: Jonathan Rogado, MP-250

Office Engineering

Contract Administrator: Larry Bowman, MPCO-240

Invoice No. 28, in the amount of \$269,046.79 for work performed from October 1, 2017 to October 31, 2017, was received this reporting period.

Field Engineering

Construction Manager: Reynaldo Garcia, MPCO-310

Construction Representative: Michael Manlick, MPCO-313

Number of Contractor Employees: 18

Work Performed

Subcontractor FD Thomas, completed the epoxy coating on the gate, and applied a UV resistant polyurethane top coat to the downstream side of the gate. Discontinuity testing on the upstream gate skin detected no holidays. The dry film thicknesses (DFTs) was approved as all being within the contract specifications. FD Thomas removed the poly-wrap barrier from the scaffolding surrounding the gate. HEPA filter vacuums were used to pick up the grit and dust that accumulated within the other folds and crevices of the containment/scaffolding structure. A transport removed the bags of spent blast waste (determined by testing to be non-hazardous) off site for proper disposal.

Alltech installed the new gate seal and seal clamp bars; setting the seal tension against the wall plates. The crew performed a light test on the seals to check for any obvious breaks in the seal contact with the wall and sill plates. No voids were noted. The gate shoes with new shims were installed on each end of the gate. Also reinstalled were the two access ladders (one on each of the trunnion arms), the two access plates on the enclosed downstream chamber, and the slide rails used for attaching the fall arrest, retractable cables.

Premier Scaffolding removed the scaffolding from both sides of the gate. This being the final gate work before demobilizing through this winter's flood season, all scaffolding components were taken from the jobsite. Painters used the approved non-sag mortar to fill and pack each of the temporary scaffolding anchoring holes in the concrete spillway. Alltech then installed the new lifting hardware. The new wire ropes on the temporary lifting brackets and then raised the gate; and the gate stands were removed. The gate was closed and the temporary lifting brackets were removed. New bushings were pressed into the lifting eyes on the gate's lifting brackets. The new equalizer bars, links, and pins were then installed, and the spelter sockets of the new wire ropes were attached to the equalizer bars. The gate was cycled open (to approximately 20-22 feet) four times to stretch the new wire ropes. FD Thomas demobilized their equipment and materials, removing most of them from the jobsite. Cathodic Protection Modification had the crew installing 9x9 anode blocks. The plastic coating was cut from the block anodes exposing 8-3/4"x8-3/4" of the zinc metal. The crew laid out locations of blocks. The gate coating was stripped and the anodes were welded onto the gate skin. The leads were attached to lifting components through the use of exothermal welding. Tests were performed on the CP continuity. The epoxy coating and UV resistant coating were recoated as necessary. After Alltech removed the chain come-alongs holding the bottom of the bulkhead, the gate chamber was flooded. The crew then blew ballast from the caissons and laid the bulkhead over in the lake to float it like a raft. The bulkhead was then moved and moored near the South Canal gates for the winter.

Contract No. R16PC00075
Specification No. 20-C0838
Folsom UHA Switchgear Replacement – Folsom Unit, American
River Division, Central Valley Project, California
Cal Electro, Inc., Redding, CA

Work Performed	November	0.0%
	Time Elapsed	100%
	Work Completed	84.5%
Contractor Earnings	November	\$322,852.00
	Previous	\$2,674,087.22
	Total to Date	\$2,996,939.22

Area Office Project Management

Project Manager: Vanhue Ly, CC-614

Office Engineering

Contract Administrator: Larry Bowman, MPCO-240

Field Engineering

Construction Manager: Reynaldo Garcia, MPCO-310

Construction Representative: Sean Frische, MPCO-317

Number of Contractor Employees: 10

Work Performed

Installation of the new switch gear is now complete. Formal training cancelled due to training material was not prepared in time and has not yet been rescheduled. Water was found leaking into the switchgear control building at the floor level during one of the recent rain events. Cal Electro reapplied caulking in those areas. All remaining punch list items were addressed. The final anchoring of the building to the concrete slab was completed.

The Contractor completed work on modification 004, which included removal and replacement of existing power cables for circuits 512, 812, and 912. Removal and replacement of power cable for circuit 812 was completed this month. The Contractor also completed installation of the pad-mounted transformer and service pedestal and removal of the two existing pole mounted transformers along with the poles for circuit 812. The contractor then began to demobilize from the site.

Contract No. R16PC00113
Specification No. 20-C0858
Folsom Dam Municipal and Industrial Temperature Control
Device Safety Measures, Folsom Unit, American River Division,
Central Valley Project, California
Sapper West, Inc., Sacramento, CA

Work Performed	November	0%
	Time Elapsed	94%
	Work Completed	21%
Contractor Earnings	November	\$0.00
	Previous	\$63,021.24
	Total to Date	\$63,021.24

Area Office Project Management

Project Manager: Brian Zewe, CC-612

Office Engineering

Contract Manager: Kent Perkes, MPCO-225

Field Engineering

Construction Manager: Reynaldo Garcia, MPCO-310

Construction Representative: Todd Dooley, MPCO-314

Number of Contractor Employees: 6

Work Performed

Syblon-Reid mobilized their crew and staged a 40-ton crane that was used to pick and place the ladders, landings, railings, wire ropes, and associated hardware used on this job. A rope team used templates to layout and epoxy anchor bolts; then installed ladder sections landing platforms, and safety railings. A safety door and hatch cover was installed at the upper ladder/cage. Each of the maintenance pad eyes was installed in the proper location with their slotted edge fit tightly over the edge of the top gate frame and welded into place. Welds were inspected and tested by a certified welding inspector. Temporary rigging was installed to support the gate. The limit switch controller was then disconnected. With crane assistance, the old ropes were disconnected and removed from the rope drum. Measurements of the existing ropes were used to duplicate the lengths on the new ropes. The crew removed grease, dirt, and debris from the rope drum.

The existing cables and turnbuckle were used as patterns for measuring and installing the new hardware. The new ropes were installed in the reverse order of the removal. The ropes were clamped to the drum with all new hardware. The new ropes were installed on the lifting eyes. Temporary rigging was removed from the maintenance pad eyes; and the bonnet was picked and set over the rope drum, where workers re-bolted it into place.

The mechanical counter was reset to its original reading of 422.4, simultaneously setting the electronic counter to its original reading of 422.1. The limit switch controller was reengaged. The gate was lowered to the bottom limit and then cycled to the upper limit.

Mason Painting coated the maintenance pad eyes and their welded connections on the top of the control gate. A Bristol Blaster was used to prepare bare steel surfaces on the maintenance pad eyes and surface profile testing confirmed the substrate was within specifications. Environmental conditions were checked prior to applying coatings. A cold-weather formulated two-part epoxy was applied as the base coat. A UV resistant polyurethane top coat was then applied over the epoxy. After a week of cure time for the coatings, the coatings were complete.



Folsom Dam Municipal and Industrial Temperature Control Device Safety Measures

A View of the Ladders, Landings, and Wire Ropes being Delivered to the Job Site.

Contract No. R17PC00100

Specification No. None

Folsom Dam Auxiliary Spillway American River Phase V – Right Bank Stabilization, Folsom Unit, American River Division, Central Valley Project, California

Harrison Western Construction Corporation, Lakewood, CO

Work Performed	November	22%
	Time Elapsed	61%
	Work Completed	22%

Contractor Earnings	November	\$289,500.00
	Previous	\$0.00
	Total to Date	\$289,500.00

Area Office Project Management

Project Manager: Kyle Keer, CC-108

Office Engineering

Contract Manager: Kent Perkes, MPCO-225

Revised Request for Change 004 – Delay in Issuance of NTP, extended the concrete and rock bolt completion date to December 10, 2017 at no cost to the Government.

Request for Change 005 – Conservation Credits, determined that conservation bank credits were not required, and the Government was due a contract cost reduction.

Differing Site Condition notification for bolt RB-22 was reviewed and adjustments made to ensure integrity of the installation.

Invoice No. 01, in the amount of \$13,004.00, was received this reporting period for bonds.

Invoice No. 2, in the amount of \$276,496.00, was received this reporting period for work performed through November 25, 2017.

Field Engineering

Construction Manager: Reynaldo Garcia, MPCO-310

Construction Representative: Ben Richburg, MPCO-318

Number of Contractor Employees: 9

Work Performed

The Contractor completed mobilization onsite, bringing project equipment/materials necessary to continue field activities. The contractors' main staging and auxiliary staging areas were monitored and maintained. The 330 Ton Crane was reconfigured from man-basket to concrete hopper trunk configuration. The Environmental and Hazardous Energy Control Program

was revised, implemented, and monitored to maintain releases. All contract personnel conducted required security briefings and were issued badges. The Contractor completed installation of the contract required pre-production rock bolt to ensure the proposed process for installation was sound. The Second attempt was successful. The Contractor addressed the Critical Lift requirements associated with hoisting personnel in the man basket. The Contractor then drilled forty-two contract Rock Bolts (RB) and two Spot Bolts (SB). After drilling was completed the Contractor installed/inserted 44 prepared RB with contract specified bond lengths, couplers, and at specified angles in previously marked rock bolt locations. The Contractor has grouted 25 of the RBs to date. The Contractor began to place concrete in the three concrete entrants. The entrants were reinforced, formed, placed, and stripped.



**Folsom Dam Auxiliary Spillway American River Phase V – Right Bank
Stabilization
A View of the Dental Concrete Formwork at the entrants**



**Folsom Dam Auxiliary Spillway American River Phase V – Right Bank
Stabilization
A View of the Dental Concrete Formwork at the entrants after being poured**

Contract No. R17PC00139
Specification No. None
Folsom Aggregate Structure Demolition, Removal & Disposal -
Folsom Unit, American River Division, Central Valley Project,
California
Site Work Solutions Inc., Redding, CA

Work Performed	November	86.5%
	Time Elapsed	74.4%
	Work Completed	86.5%
Contractor Earnings	November	\$349,221.55
	Previous	\$0.00
	Total to Date	\$349,221.55

Area Office Project Management

Project Manager: Mark Lewis, CC-641

Office Engineering

Contract Manager: Madelyn Giles, MPCO-230

Invoice No. 01, in the amount of \$349,221.55, was received this reporting period for work performed from September 18, 2017 to November 2017.

Field Engineering

Construction Manager: Reynaldo Garcia, MPCO-310

Construction Representative: Sean Frische, MPCO-317

Number of Contractor Employees: 10

Work Performed

The Contractor used the excavator to begin digging out the aggregate structure sorting bins and spreading the material into small windrows where trash was handpicked and placed into a separate stockpile. Once the trash was removed, the loader moved the remaining earth material to another stockpile. The Contractor excavated and stockpiled approximately 1,500 cubic yards of earth material and approximately 20 cubic yards of trash this month. The Contractor began and completed demolition of the concrete aggregate processing structure this month. For the most part, a Linkbelt 350X4 excavator was used with a hydraulic hammer. A bucket with thumb attachment was used intermittently to demolish the structure. Nearly all of the concrete debris was removed from the site this month. A total of sixty truckloads of concrete were hauled offsite this period to local recycling facilities. One final load of concrete debris will be hauled off next month once the final grading is completed. The Contractor began placing and compacting fill on the slope where the concrete aggregate processing structure was previously located. Quality assurance and quality control soil testing confirmed adequate compaction of the slope.



Folsom Aggregate Structure Demolition, Removal & Disposal
The Excavator using the Hydraulic Hammer to Demolish the Concrete Aggregate Sorting Structure.

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Klamath Basin Area Office

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Contract No. R17PC00083

Specification No. None

Tule Lake Road Improvement Phase 2- Klamath Project, Oregon - California

Coleman Environmental Engineering, Inc., Upper Lake, CA

Work Performed	November	0.0%
	Time Elapsed	38.8%
	Work Completed	0%
Contractor Earnings	November	\$0.00
	Previous	\$0.00
	Total to Date	\$ 0.00

Area Office Project Management

Project Manager: Mike Green, KO-400

Office Engineering

Contract Management: Amber Pierce, MPCO-205

This contract was awarded to Coleman Environmental Engineering Inc. on August 15, 2017, in the amount of \$665,695.69.

Field Engineering

Field Engineer: Brian Wagner, MPCO-300

Onsite Government Representative: Russell Davies, MPCO-341.

Number of Contractor Employees: 2

Work Performed

The contractor, Coleman Environmental Engineering (CEE), performed safety inspections for all rented heavy equipment delivered to the site during this period. CEE staked each road. The contractor assessed the contract Schedule, Location Sequence and Safety Priorities. After they discussed these topics, two drivers drove the full length of Hovey Point Road to assess the condition of that road. Numerous puddles and soft spots in Hovey Point Road deemed these roads impassable for the belly dump trucks. CEE then began analyzing the entire 2 mile length of Middle A Dike Road that was to be reworked. They then began performing minor earthwork (grading 2% fall away slope) along Middle A Dike Road with a grader. They continue to monitor road conditions, as the road conditions improve, construction to proceed.

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Lahontan Basin Area Office

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Contract No. R16PC00062
Specification No. 20-C0850
Stampede Dam, Dam Safety Modifications - Stampede Division,
Washoe Project, Nevada-California
NW Constructors, Inc., Bozeman, MT

Work Performed	November	0.0%
	Time Elapsed	65.0%
	Work Completed	68.6%

Contractor Earnings	November	\$0.00
	Previous	\$15,748,808.42
	Total to Date	\$15,748,808.42

Area Office Project Management

Project Manager: Todd Hill, MP-240

Office Engineering

Contract Manager: Kent Perkes, MPCO-225

Modification No. 0017 – Definitization of Unilateral Modifications 0013, 0015, 0016, Spillway Demolition, and RFP 0003, was executed November 14, 2017, in the amount of \$98,524.63

Field Engineering

Construction Manager: Kyle Hughes, MPCO-324

Construction Representative: Zahid Wazid, MPCO-349; Sean Hill, MPCO-328,
Dennis Schuenemann, MPCO-338;

Number of Contractor Employees: 40

Work Performed

NW Construction continued placed riprap bedding and riprap for the embankment crest and the vista point access road this reporting period. Remaining activities include finishing riprap placement on the upstream slope, aggregate base, asphalt road, and guardrails. NW Construction continued staining the Mechanically Stabilized Earth (MSE) wall panels at the dike as weather permitted. NW Construction continued installing MSE wall panels for the dam section between stations 33+00 to 53+00, and are approximately 93.5-percent complete with the paneling installation. The MSE panels from right and left spillway tie-ins were also installed this month. NW Construction finished backfilling Zone 2A and Zone 2B between stations 37+50 to 34+12. Between stations 34+12 to 34+60 and 35+20 to 37+50, Zone 2A/2B was completed to elevation 5985.08-ft. Between stations 34+60 to 35+20, the area was backfilled up to elevation 5974-ft, and will be completed during the next construction season. Subcontractor, Camblin Steel, finished installing the reinforcement bars for the ogee crest structure.

Subcontractor, Syblon Reid (SRC), finished forming and placing concrete for the ogee crest structure. A total of 68-cyds of 5000-psi concrete were placed and consolidated. NW Construction started and finished removing the cofferdam and stabilizing the inlet. Subcontractor, Green Vista Landscape, finished hydro-seeding/hydro-mulching disturbed areas around project site.

NW Construction covered all the material stockpile, MSE backfill areas, O&M road, and cofferdam slopes with visqueen to mitigate storm-water run-off issues.



**Stampede Dam, Dam Safety Modifications
A view of the Ogee Crest**



Stampede Dam, Dam Safety Modifications
A view of the Stabilized Spillway Inlet Channel and Mechanically Stabilized Earth
Paneling.

Contract No. R17PC00063
Specification No. 20-C0860
Marble Bluff Dam and Fish Passage Facility Radial Gate
Rehabilitation - Washoe Project, Nevada-California
Diana Prince Construction, Inc., Irvine, CA

Work Performed	November	17.8%
	Time Elapsed	62.0%
	Work Completed	29.2%
Contractor Earnings	November	\$157,648.13
	Previous	\$100,235.64
	Total to Date	\$257,883.77

Area Office Project Management

Project Manager: Steven Sprague, LO-470

Office Engineering

Contract Administrator: Madelyn Giles, MPCO-230

Invoice 03 was received this reporting period, in the amount of \$157,648.13, for work performed from October 1, 2017 to October 31, 2017.

Modification 0002 was executed this reporting period, in the amount of \$6,662.00, for work performed from October 15, 2017 to November 3, 2017.

Field Engineering

Construction Engineer: Reynaldo Garcia, MPCO-310

Construction Representative: Todd Dooley, MPCO-314, Michael Manlick, MPCO-313

Number of Contractor Employees: 7

Work Performed

Diana Prince Construction (DPC) performed abrasive blasting on the fish lock false floor and frame. Following abrasive blasting, ASI applied the Zinc Clad 108 primer and V-66e intermediate and top coat coating system to the fish lock false floor and frame. DPC applied Zinc Clad 108 primer coats and V-66e intermediate and top coats to slide gate 10. DPC with Reclamation confirmed the satisfactory installation and operation of slide gate 10. ASI applied three intermediate and one top coat of V-766e to the 24" drain pipe within Marble Bluff Dam's entry channel. ASI applied Pro-Cryl Universal primer coats and one Pro Industrial Acrylic topcoat to Marble Bluff Dam guardrails. DPC installed fence fabric on existing guardrails. They also applied caulking materials to the interface between guardrail posts and concrete.

DPC fabricated new guardrail sections. They also constructed a containment and performed abrasive blasting on the piping for the guardrails. Following abrasive blasting, ASI applied primer coats of Pro-Cryl Universal to the guardrail piping. ASI cleaned and removed coatings from the interior of gate 9's control cabinet. They also coated the interior of the control cabinet with Pro-Cryl Universal Primer and Pro Industrial Acrylic topcoat. DPC anchored "T-beams" to Marble Bluff Dam upstream sluiceways and installed the bulkhead gate upstream of the radial gate.

Contract No. R17PC00067

Specification No. None

**Lahontan Dam Rated Vehicle Barrier System - Newlands Project,
Fallon, Nevada**

Sentinel Builders LCC, Sparks NV

Work Performed	November	58.3%
	Time Elapsed	100%
	Work Completed	100%

Contractor Earnings	November	\$81,769.79
	Previous	\$64,765.21
	Total to Date	\$146,535.00

Area Office Project Management

Project Manager: Scott Schoenfeld, LO-410

Office Engineering

Contract Administrator: Lawrence Bowman, MPCO-240

Invoice number 03 in the amount of \$81,769.79 was received this reporting period covering the period from September 19, 2017 to October 30, 2017.

Field Engineering

Construction Engineer: Reynaldo Garcia, MPCO-310

Construction Representative: Reynaldo Garcia, MPCO-310

Number of Contractor Employees: 3

Work Performed

Contractor completed installation of the security barrier system this reporting period. Contractor completed installation of all road signage and onsite punch list items. The Contractor demobilized from the site during this reporting period.

Northern California Area Office

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Contract No. R15PC00150
Specification No. 20-C0824
Trinity Dam Intake Mechanical Equipment Refurbishment/Gate
Shaft Refurbishing, Phase I - Trinity River Division, Central Valley
Project, California
BCI Construction USA, Inc., Belleville, IL

Work Performed	November	0.0%
	Time Elapsed	100%
	Work Completed	99.0%
Contractor Earnings	November	\$0.00
	Previous	\$2,626,778.50
	Total to Date	\$2,626,778.50

Area Office Project Management

Project Manager: Robert Gee, NC-230

Office Engineering

Contract Manager: Kent Perkes, MPCO-225

Field Engineering

Construction Manager: Brian Wagner, MPCO-300

Construction Representative: Jason Foust, MPCO-325

Number of Contractor Employees: 0

Work Performed

No onsite work was performed during this reporting period.

Contract No. R15PC00089
Specification No. 20-C0831
Intake 3 Screen Extension, Coleman National Fish Hatchery,
Shasta Division, Central Valley Project, California
Contractor Services Group, Inc., West Sacramento, CA

Work Performed	November	0.0%
	Time Elapsed	100%
	Work Completed	90.0%
Contractor Earnings	November	\$0.00
	Previous	\$1,815,088.05
	Total to Date	\$1,815,088.05

Area Office Project Management

Project Manager: Hank Harrington, NC-210

Office Engineering

Contract Manager: Kent Perkes, MPCO-225

Field Engineering

Construction Manager: Brian Wagner, MPCO-300

Construction Representative: Fernando Pavone, MPCO-333

Number of Contractor Employees: 2

Work Performed

Contractor Services Group (CSG) installed stainless steel fittings and hoses for the Spray Water System this reporting period. The system could not be tested since the submersible pumps were unusable due to excessive sediment accumulation. CSG installed stainless steel fittings and hoses for the Air Burst System this reporting period. The system was tested and no leaks were found.

Contract No. R16PC00006
Specification No. 20-C0841
Trinity Powerplant Generator Rewinds - Trinity River Division,
Central Valley Project, California
Voith Hydro, Inc., York, PA

Work Performed	November	16.0%
	Time Elapsed	76.0%
	Work Completed	73.1%

Contractor Earnings	November	\$2,133,390.77
	Previous	\$7,635,407.29
	Total to Date	\$9,768,798.06

Area Office Project Management

Project Manager: Joe Ascoli, NC-650

Office Engineering

Contract Administrator: Madelyn Giles, MPCO-230

Field Engineering

Construction Manager: Brian Wagner, MPCO-300

Construction Representative: Stephen Holmes, MPCO-320

Number of Contractor Employees: 13

Work Performed

Subcontractor ECI Coatings returned to the site and painted the stator frame with assistance from the Voith crew. Once the frame was painted then the 62 stator core lamination key bars were reassembled. The stator core was stacked and secured with upper and lower compression plates attached by bolts with spring washers torqued to meet specification requirements.

The magnetization core “Loop” test was conducted on the finished core stack. The core was wrapped with 4/0 AWG cable which was connected to an engine/generator set that produced enough current to get the unit up to working flux. An infrared camera was used to record the heat change of the core every ten minutes for one hour while at magnetic flux and every ten minutes during cool down looking for a five degree Celsius change which meant repairs were needed. No such change was recorded so the core was accepted.

During the month as fill in work, Voith crew members cleaned rotor fan components with a mild household cleaner removing built-up oil and break dust.



**Trinity Powerplant Generator Rewinds
A View of the Stator Core being Prepared for Testing.**

Contract No. R17PC00029
Specification No. 20-C0847
Trinity River Division Powerplants Replacement of Station
Service Transformers and Low Voltage Bus System – Trinity
River Division, Central Valley Project, Trinity and Shasta
Counties, California
Gardner Zemke, Albuquerque, NM

Work Performed	November	1.6%
	Time Elapsed	33%
	Work Completed	5.5%
Contractor Earnings	November	\$44,000.00
	Previous	\$111,144.00
	Total to Date	\$155,144.00

Area Office Project Management

Project Manager: Laurie Larson, NC-211

Office Engineering

Contract Administrator: Madelyn Giles, MPCO-230

Invoice No. 03, in the amount of \$44,000.00, was received this reporting period for work performed 10/21/17 to 11/20/17.

Field Engineering

Construction Engineer: Brian Wagner, MPCO-300

Construction Representative: Stephen Holmes, MPCO-320

Number of Contractor Employees: 0

Work Performed:

No onsite work was performed during this reporting period.

Contract No. R16PC00134
Specification No. 20-C0852
Whiskeytown Lake, Spring Creek Temperature Control Curtain -
Trinity River Division, Central Valley Project, California
BCI Construction USA, Inc., Belleville IL

Work Performed	November	41.2%
	Time Elapsed	99.3%
	Work Completed	99.5%

Contractor Earnings	November	\$801,647.51
	Previous	\$777,649.62
	Total to Date	\$1,579,325.13

Area Office Project Management

Project Manager: Robert Gee, NC-230

Office Engineering

Contract Manager: Amber Pierce, MPCO-205

Invoice No. 04, in the amount of \$801,675.51, was received this reporting period for work performed from October 1, 2017 to October 31, 2017.

Field Engineering

Construction Manager: Brian Wagner, MPCO-300

Construction Representative: Stephen M. Holmes, MPCO-320, Russell Davies, MPCO-341

Number of Contractors Employees: 8

Work performed

Due to wave action and other site activities, the completion of reflective tape placement was performed intermittently and around other activities. Some tape adhesion to upper boom float tanks failed early in the month, due to water and incorrect installation procedures. Once the Contractor worked solely on this task and corrected their installation procedures, the failed reflective tape was replaced and remaining sections installed properly without issue. The Contractor continued tank rehabilitation by replacing bushings and chain connections, foam filling the tanks, and repairing cracked welds. The location of failed welded seams was determined by pressurizing the upper boom float tanks with an air compressor and checking the tanks both manually and visually. Underwater welding was not in the capacity of the contractor. Application of a zinc repair coating (ZRC) was applied to welds and other uncoated metals. Disassembly of the dive barge was completed this reporting period. Some of the barge pieces were staged on semi-trailers for removal from the Brandy Creek Marina parking area. BCI then vacated the site. The Contractor's lock was removed from the access gate and the United States Bureau of Reclamation (USBR) lock was then connected the gate chain.



**Whiskeytown Lake, Spring Creek Temperature Control Curtain
A View of the Contractor Disassembling the Barge.**



**Whiskeytown Lake, Spring Creek Temperature Control Curtain
An Image of Some of the New Reflective Tape after Being Installed.**

Contract No. R17PC00103
Specification No. 20-C0866
Keswick & Shasta Powerplant Weldshop Ventilation System
Procurement & Installation - Shasta and Keswick Powerplant -
Central Valley Project - California
Air-O-Service, Redding, CA

Work Performed	November	0.00%
	Time Elapsed	39.4%
	Work Completed	0.00%
Contractor Earnings	November	\$0.00
	Previous	\$0.00
	Total to Date	\$0.00

Area Office Project Management

Project Manager: Thomas Darlington, NC-232

Office Engineering

Contract Administrator: Casandra Arthur, MPCO-111

Field Engineering

Construction Manager: Stephen Holmes, MPCO-320

Construction Representative: David Derk, MPCO-334

Number of Contractor Employees: 0

Work Performed

No onsite work was performed during this period.

Contract No. R17PC00091
Specification No. 20-C0869
Intake 3 Trash Rake, Coleman National Fish Hatchery, Shasta
Division, Central Valley Project, California
Tompco-Triton, Seabeck, WA

Work Performed	November	1.1%
	Time Elapsed	13.0%
	Work Completed	1.1%
Contractor Earnings	November	\$16,143.00
	Previous	\$0.00
	Total to Date	\$16,143.00

Area Office Project Management

Project Manager: Hank Harrington, NC-210

Office Engineering

Contract Manager: Kent Perkes, MPCO-225

Invoice No. 1, in the amount of \$16,143.00 was received this reporting period for bonds.

Field Engineering

Construction Manager: Brian Wagner, MPCO-300

Construction Representative:

Number of Contractor Employees: 0

Work Performed

No onsite work was performed during this period.

Contract No. R17PC00092

Specification None

Install K12 Rated Vehicle Barriers at Keswick, Shasta and Trinity Power Plants

Shasta and Trinity Division, Central Valley Project, California

Purgatory Fence Company, Inc., Boise, ID

Work Performed	November	3.6%
	Time Elapsed	10.1%
	Work Completed	6.1%

Contractor Earnings	November	\$17,700.00
	Previous	\$12,000.00
	Total to Date	\$29,700.00

Area Office Project Management

Project Manager: Robert Gee, NC-230

Office Engineering

Contract Manager: Amber Pierce, MPCO-205

Invoice No. 02 was received this reporting period, in the amount of \$17,700.00, for work performed during the period October 19th to November 8th

Field Engineering

Field Engineer: Brian Wagner, MPCO-300

Construction Manager: Stephen Holmes, MPCO-320.

Number of Contractor Employees: 0

Work Performed

No onsite work was performed during this period.

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South Central California Area Office

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There was no work performed during this period for the South Central California Area Office.

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San Joaquin River Restoration Program

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There was no work performed during this period for the South Central California Area Office.

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Mid-Pacific Regional Office

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Contract No. R16PC00091
Specification No. 20-C0843
North Fork Screens and Ladder Completion Contract - Battle Creek Salmon and Steelhead Restoration Project, California
TNT Industrial Contractors, Inc., Sacramento, CA

Work Performed	November	29.7%
	Time Elapsed	76.0%
	Work Completed	77.5%
Contractor Earnings	November	\$1,626,236.15
	Previous	\$2,633,786.95
	Total to Date	\$4,260,023.10

Area Office Project Management

Project Manager: Mary Marshall, MP-203

Office Engineering

Contract Administrator: Casandra Arthur, MPCO-111

Invoice 08, in the amount of \$1,626,236.15, was received this reporting period for work performed from September 19, 2017 to October 28, 2017, was received this reporting period.

Field Engineering

Construction Manager: Brian Wagner, MPCO-300

Construction Representative: Jason Foust, MPCO-325

Number of Contractor Employees: 18

Work Performed

The following work took place at the North Battle Creek Feeder Diversion Dam (NBCFDD) site; Subcontractor Syblon Reid (SRC) began Unilateral Modification 006 work including installation of the transition step between the fish screen structure platform and transition structure, the supporting metals for the headworks platform and the bullnose trashrack at the headworks structure, as well as, installing the box beam at the upstream fish ladder baffle.

SRC tested the slide gates in the fish ladder structure. The slide gates were operated through the full range of motion in dry conditions. The bays were then filled with water working upstream to downstream for the leakage test. All 22 gates were fully functioning with no significant leaks noted.

SRC personnel installed the working platform for the primary trash rack at the fish screen structure, the guardrail and chains for the catwalk modification at the fish ladder, the slide gates at the fish screen structure and the dam angle on the existing dam. All ladder modifications were completed during this reporting period.

SRC completed the installation of the geotextile fabric and the riprap on the downstream side of the dam on the left bank using the CAT 10k forklift to move the riprap in skip boxes to the 130-ton crane. The crane then flew the material to the point of placement and deposited for laborers to hand place. Approximately 2 CY of backfill concrete was placed with a $\frac{3}{4}$ CY bucket and the 130-ton crane. The backfill was placed in the voids left by the supports for the diversion piping.

Subcontractor San Joaquin Electric (SJE) pulled and terminated conductors for panel FA1 and made modifications to the gate modulators. The electricians finished mounting the water leveling sensors and run conduit and wire to the sensors. Subcontractor Tesco worked on startup of the programmable controller and I/O testing.

Subcontractor M & S Environmental was onsite for the application of the hydro seed in Contractor Use Area #3. The seed slurry was applied first and then straw mulch was placed over it. The stabilizing emulsion was then placed over the straw mulch.

SRC began and completed removals of the creek diversion system. The 42" and 30" diversion pipe was removed in sections and staged in the Contractor laydown area. After the pipe was removed the cofferdam was breached and the super sacks, bents, and supports removed. Equipment was also demobilized and removed from the site.

The following work took place at the Eagle Canyon Diversion Dam (ECDD) site; SJE personnel installed new water level sensors. Electricians modified the gate modulators, mounted the new control panel and ran conduit and conductors to the sensors and panel. Tesco technicians Tesco worked on programmable controller start-up and I/O testing.

SRC personnel worked on demobilizing all of the materials and equipment at the ECDD site. A trailer load of trash was taken to the nearby landfill. Other items were moved to the NBCFDD laydown areas. Remaining salvaged items were identified and turned over to PG&E.

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**North Fork Screens and Ladder Completion Contract
A View of the New Bullnose Trash rack on the North Battle Creek Feeder
Diversion Dam.**



**North Fork Screens and Ladder Completion Contract
Riprap being Installed on the downstream left abutment.**

Contracts in Warranty Status

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R11PC20185 No. 20-C0778 Tracy 13.8kV Switchgear/Breaker Replacement – Tracy Pumping Plant and Substation - Delta Division, Central Valley Project, California

There was no Office Engineering Administrative activity this period. The warranty work for the B15 DFR will extend the 1-year warranty from June 29, 2017 through June 28, 2018.

R13PC20159 No. 20-C0819 Lake Berryessa Concessions Areas Improvements – Lake Berryessa, Solano Project, California

There was no Office Engineering Administrative activity this period. The 1-year warranty period began on March 31, 2017 and will end March 30, 2018.

R16PC00079 No. 20-C0851 Red Bluff Flap Gate Retrofit - Sacramento Canals Unit, Sacramento River Division, Central Valley Project, California

There was no Office Engineering Administrative activity this period. The 1-year warranty period began March 16, 2017 and will end March 15, 2018.

R17PC00022 No. 20-C0857 Western Tracy Switchyard - Chain Link Fence Project Tracy Pumping Plant and Substation - Delta Division, Central Valley Project, California

There was no Office Engineering Administrative activity this period. The 1-year warranty period began May 11, 2017 and will end May 10, 2018.

R11PC2023S None Red Bluff Diversion Dam, Fish Passage Improvement Project Terrestrial Mitigation - Sacramento River Division, Central Valley Project, California

There was no Office Engineering Administrative activity this period. The 1-year warranty period began December 31, 2016 and will end December 30, 2017.

R16PC00099 None Folsom Dam Resource Building Replacement - Folsom Unit, American River Division, Central Valley Project, California

There was no Office Engineering Administrative activity this period. The 1-year warranty period began February 14, 2017 and will end February 13, 2018.

R16PC00100 None Lake Woollomes Recreation Area Asphalt Replacement - Central Valley Project, California

There was no Office Engineering Administrative activity this period. The 1-year warranty period began April 26, 2017 and will end April 25, 2018.

R15PC00080 20-C0836 Klamath Basin Area Office Sewer Lift Station, Klamath Basin Area Office, Klamath Falls, Oregon

Office Engineering is reviewing required submittals. The 1-year warranty period began January 20, 2017 and will end January 19, 2018.

R16PC00111 20-C0855 San Joaquin Hatchery Water Supply Pipeline - Friant Division, Central Valley Project, California

There was no Office Engineering Administrative activity this period. The 1-year warranty period began June 29, 2017 and will end June 28, 2018.

**R16PC00110 20-C0853 Madera Canal Headworks Low-Flow Valve - Friant
Division, Central Valley Project, California**

There was no Office Engineering Administrative activity this period. The 1-year warranty period began June 29, 2017 and will end June 28, 2018

Lab Reports

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Stampede Safety of Dams Project

There was no laboratory information provided from the Materials Lab for this project during this period.

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North Fork Screens and Ladders Completion Contract

There was no laboratory information provided from the Materials Lab for this project during this period.

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