**CENTRAL VALLEY PROJECT**
**SCHEDULE OF ESTIMATED IRRIGATION PROJECT USE ENERGY COSTS**
**DIRECT PUMPING**
**2011 IRRIGATION WATER RATES**

| A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2011 Projected Deliveries Schedule A-12** | | | | | | | | | |
| | | | **Tehama-Colusa Canal Relifts** | | | | | | **Corning Canal Relifts** | |
| **Facility/Contractor** | **Wintu PP** | | **Colusa County WD** | **Dunnigan WD** | **Glenn Valley WD** | **Kanawha WD** | **Orland-Artois WD** | **Westside WD** | **Corning WD** | **Proberta WD** |
| Ref | <Sch A-12> | | <Sch A-12> | <Sch A-12> | <Sch A-12> | <Sch A-12> | <Sch A-12> | <Sch A-12> | <Sch A-12> | <Sch A-12> |
| **Corning Canal** | | | | | | | | | | |
| Corning WD | | | | | | | | | 11,110 | |
| Proberta WD | | | | | | | | | | 2,244 |
| **Cow Creek Unit** | | | | | | | | | | |
| Bella Vista WD | 7,693 | | | | | | | | | |
| **Tehama-Colusa Canal** | | | | | | | | | | |
| Colusa County WD | | | 36,779 | | | | | | | |
| Dunnigan WD | | | | 12,106 | | | | | | |
| Glenn Valley WD | | | | | 930 | | | | | |
| Kanawha WD | | | | | | 28,693 | | | | |
| Orland-Artois WD | | | | | | | 32,714 | | | |
| Westside WD | | | | | | | | 38,073 | | |
| Total Deliveries | 7,693 | | 36,779 | 12,106 | 930 | 28,693 | 32,714 | 38,073 | 11,110 | 2,244 |
| Est. 2011 Project Use Energy Cost | $ 92,096 | | $ 289,764 | $ 4,557 | $ - | $ 26,985 | $ 47,793 | $ 18,774 | $ 45,040 | $ 15,217 |
| Cost Per A/F | $ 11.97 | | $ 7.88 | $ 0.38 | $ - | $ 0.94 | $ 1.46 | $ 0.49 | $ 4.05 | $ 6.78 |

IRR 2011 Sch A-11 F.Z13.XLSM
1/4/2011

**CENTRAL VALLEY PROJECT**
**SCHEDULE OF ESTIMATED IRRIGATION PROJECT USE ENERGY COSTS**
**DIRECT PUMPING**
**2011 IRRIGATION WATER RATES**

| A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|
| | | **San Luis Canal Relifts** | | | | | | | | |
| | | | | **Westlands WD 1/** | | | | | **Cross Valley Contractors 4/** | |
| **Facility/Contractor** | | **Panoche WD** | **San Luis WD** | **Westlands WD Relifts** | **Pleasant Valley PP** | **Pleasant Valley Rlfts** | **Total** | | **State Delta PP** | **Dos Amigos PP** |
| Ref | | <Sch A-12> | <Sch A-12> | <Sch A-12> | <Sch A-12> | <Sch A-12> | (E+F) | | <Sch A-12> | <Sch A-12> |
| **Cross Valley Canal** | | | | | | | | | | |
| County of Fresno | | | | | | | | | 677 | 677 |
| County of Tulare | | | | | | | | | 1,210 | 1,210 |
| Hills Valley ID | | | | | | | | | 962 | 962 |
| Kern-Tulare ID | 5/ | | | | | | | | 11,527 | 11,527 |
| Lower Tule River ID - CV | | | | | | | | | 8,044 | 8,044 |
| Pixley ID | | | | | | | | | 8,872 | 8,872 |
| Rag Gulch WD | 5/ | | | | | | | | - | - |
| Tri-Valley WD | | | | | | | | | 299 | 299 |
| **San Luis Canal** | | | | | | | | | | |
| Panoche WD -SLC | | 41,479 | | | | | | | | |
| San Luis WD - SLC | | | 46,286 | | | | | | | |
| Westlands WD - SLC | | | | 608,637 | 68,280 | 12,950 | 676,917 | 2/ | | |
| Westlands WD - SLC (DD#2) | | | | 624 | 70 | 13 | 694 | 2/ | | |
| Total Deliveries | | 41,479 | 46,286 | 609,261 | 68,350 | 12,963 | 677,611 | | 31,591 | 31,591 |
| Estimated 2011 Project Use Energy Cost | | $ 990 | $ 539,950 | $ 1,751,752 | $ 254,155 | $ 41,068 | $ 2,046,976 | | $ 69,598 | $ 70,864 |
| Cost Per A/F | | $ 0.02 | $ 11.67 | | | | $ 3.02 | | 4/ | 4/ |

**CENTRAL VALLEY PROJECT**
**SCHEDULE OF ESTIMATED IRRIGATION PROJECT USE ENERGY COSTS**
**DIRECT PUMPING**
**2011 IRRIGATION WATER RATES**

**FOOTNOTES (FOR PAGES 1 AND 2)**

1/ Westlands WD & (DD#2) deliveries are based on firm supplies:

| | Ratios | Allocated 2011 Deliveries Weslands WD | Westlands WD DD#2 |
|---|---|---|---|
| | 3/ | | |
| Westlands WD Relifts: | | | |
| High Side - Relift Pumps | 0.26957 | 182,473 | 187 |
| Low Side (LS) - Gravity Feed | 0.62957 | 426,164 | 437 |
| Subtotal | 0.89913 | 608,637 | 624 |
| Pleasant Valley PP: | | | |
| High Side - Relift Pump | 0.01913 | 12,950 | 13 |
| Coalinga Canal, LS - Gravity | 0.08174 | 55,331 | 57 |
| Subtotal (Pleasant Valley PP) | 0.10087 | 68,280 | 70 |
| Total - WWD Deliveries | 1.0000 | 676,917 | 694 |

2/ Excludes Pleasant Valley Relifts deliveries as they are included with Pleasant Valley Pumping Plant.

3/ Refer to Schedule A-5 worksheet "KWHSPERAF".

**CENTRAL VALLEY PROJECT**
**SCHEDULE OF ESTIMATED IRRIGATION PROJECT USE ENERGY COSTS**
**DIRECT PUMPING**
**2011 IRRIGATION WATER RATES**

**FOOTNOTES - Cont.**

4/ Dos Amigos and State Delta PP Costs:

| | Dos Amigos PP | State Delta PP |
|---|---|---|
| 2011 PUE Estimate | | |
| Direct Billed | $ 1,749,806 | $ 120,557 |
| Cross Valley Canal 2011 Projected Cost | $ 73,045 | $ 71,741 |
| Total | $ 1,822,851 | $ 192,298 |

**Cross Valley Canal**

| | | Dos Amigos PP 2011 Projection | State Delta PP 2011 Projection | Projected 2011 Deliveries | Rate Per A/F Dos Amigos PP | Rate Per A/F State Delta PP | Rate Per A/F Total |
|---|---|---|---|---|---|---|---|
| Irrigation | | | | | | | |
| County of Fresno | | $ 1,518 | $ 1,491 | 677 | $ 2.24 | $ 2.20 | $ 4.44 |
| County of Tulare | | $ 2,714 | $ 2,666 | 1,210 | $ 2.24 | $ 2.20 | $ 4.44 |
| Hills Valley ID | | $ 2,158 | $ 2,120 | 962 | $ 2.24 | $ 2.20 | $ 4.44 |
| Kern-Tulare ID | 5/ | $ 25,856 | $ 25,394 | 11,527 | $ 2.24 | $ 2.20 | $ 4.44 |
| Lower Tule River ID - CV | | $ 18,044 | $ 17,722 | 8,044 | $ 2.24 | $ 2.20 | $ 4.44 |
| Pixley ID | | $ 19,902 | $ 19,547 | 8,872 | $ 2.24 | $ 2.20 | $ 4.44 |
| Rag Gulch WD | 5/ | $ - | $ - | - | $ - | $ - | $ - |
| Tri-Valley WD | | $ 671 | $ 659 | 299 | $ 2.24 | $ 2.20 | $ 4.44 |
| Total Irrigation | | $ 70,864 | $ 69,598 | 31,591 | | | |
| M & I | | | | | | | |
| County of Fresno | | $ 673 | $ 661 | 300 | $ 2.24 | $ 2.20 | $ 4.44 |
| County of Tulare | | $ 1,509 | $ 1,482 | 673 | $ 2.24 | $ 2.20 | $ 4.44 |
| Total M&I | | $ 2,181 | $ 2,142 | 973 | | | |
| Grand Total | | $ 73,045 | $ 71,741 | 32,564 | | | |

5/ Rag Gulch WD assigned all of its entitlement to Kern-Tulare WD effective February 25, 2010.

**CENTRAL VALLEY PROJECT**
**SCHEDULE OF ESTIMATED IRRIGATION PROJECT USE ENERGY COSTS**
**DIRECT PUMPING**
**2011 IRRIGATION WATER RATES**

| A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|
| | | **Acre-Feet** | | **Ratio of Acre-Feet** | | | | **For Water Ratesetting** | |
| | | **M&I** | **Irrigation** | **M&I** | **Irrigation** | **Total** | **Total $** | **M&I** | **Irrigation** |
| Ref | | <Sch A-12> | <Sch A-12> | (C/(C+D)) | (D/(C+D)) | (E+F) | <Meter Costs> | (E*H) | (F*H) |
| **Used in Schedule 10** | | | | | | | | | |
| **Storage:** | | | | | | | | | |
| Friant D&R | 2/ | 173.60 | | 100.00% | | 100.00% | 12,344.22 | 12,344.22 | |
| Shasta D&R (Includes Jdg F Carr PH) | | 1,745.40 | 3,155.40 | 35.61% | 64.39% | 100.00% | 176,147.11 | 62,734.08 | 113,413.04 |
| Columbia Mowry (Based on Avg. KWH's) | | 79,381.18 | 562,166.33 | 12.37% | 87.63% | 100.00% | 14,362.60 | 1,777.14 | 12,585.46 |
| Folsom Pump Plant | | 42,414.60 | | 100.00% | | 100.00% | 141,744.16 | 141,744.16 | |
| New Melones Dam & Reservoir | | | 34,788.60 | | 100.00% | 100.00% | 2,643.00 | | 2,643.00 |
| Gianelli WR Pump-Gen Plt | 3/ | 9,989.28 | 539,781.76 | 1.82% | 98.18% | 100.00% | 2,184,529.93 | 39,692.67 | 2,144,837.26 |
| Regen. Credit - San Luis PP | | 9,989.28 | 539,781.76 | 1.82% | 98.18% | 100.00% | (1,743,341.95) | (31,676.33) | (1,711,665.62) |
| SFU Gianelli WR PGP (Direct Pumping) | | 91,542.80 | 34,869.80 | 72.42% | 27.58% | 100.00% | | | |
| **Conveyance Pumping:** | | | | | | | | | |
| Corning Pumping Plant | | | 16,336.00 | | 100.00% | 100.00% | 183,695.30 | | 183,695.30 |
| Dos Amigos Pumping Plant | 4/ | 13,677.40 | 766,395.77 | 1.75% | 98.25% | 100.00% | 1,749,806.07 | 30,680.20 | 1,719,125.87 |
| O'Neill Pump-Gen Plt | | 105,813.20 | 805,986.60 | 11.60% | 88.40% | 100.00% | 1,391,209.59 | 161,448.09 | 1,229,761.49 |
| Regen. Credit - O'Neill Pump-Gen Plt | | 105,813.20 | 805,986.60 | 11.60% | 88.40% | 100.00% | (155,574.31) | (18,054.20) | (137,520.11) |
| Jones Pumping Plant | | 186,186.79 | 1,783,758.81 | 9.45% | 90.55% | 100.00% | 10,742,611.55 | 1,015,323.65 | 9,727,287.90 |
| In-Lieu of Jones Pumping | | | | | | | 120,556.93 | | 120,556.93 |
| **Out-of-Basin Pumping:** | | | | | | | | | |
| Coyote PP | | 43,609.90 | 9,395.60 | 82.27% | 17.73% | 100.00% | 155,863.15 | 128,235.31 | 27,627.85 |
| Pacheco PP | | 91,542.80 | 34,869.80 | 72.42% | 27.58% | 100.00% | 1,280,610.95 | 927,365.72 | 353,245.23 |
| **Used in Schedule 11 Page 1** | | | | | | | | | |
| **Direct Pumping:** | | | | | | | | | |
| Glenn Valley WD | | | 930.20 | | 100.00% | 100.00% | | | |
| Gianelli PGP - SFU | 1/ | | | | | | 502,303.85 | 363,747.76 | 138,556.08 |
| Contra Costa PP | | 87,340.40 | | 100.00% | | 100.00% | 699,419.05 | 699,419.05 | |
| Colusa CWD (Incl. Arb./Will O&M Office) | | 112.50 | 36,779.20 | 0.30% | 99.70% | 100.00% | 290,649.83 | 886.33 | 289,763.51 |
| Corning WD | | | 11,110.40 | | 100.00% | 100.00% | 45,040.08 | | 45,040.08 |
| Dunnigan WD | | | 12,106.20 | | 100.00% | 100.00% | 4,556.78 | | 4,556.78 |
| Kanawha WD | | 4.25 | 28,693.00 | 0.01% | 99.99% | 100.00% | 26,989.07 | 4.00 | 26,985.07 |
| Orland-Artois WD | | | 32,714.00 | | 100.00% | 100.00% | 47,792.68 | | 47,792.68 |
| Panoche WD - SLC | | | 41,478.60 | | 100.00% | 100.00% | 989.67 | | 989.67 |
| Westside WD | | | 38,072.80 | | 100.00% | 100.00% | 18,773.78 | | 18,773.78 |
| Pleasant Valley PP | | 6,774.40 | 55,387.38 | 10.90% | 89.10% | 100.00% | 285,240.64 | 31,085.57 | 254,155.07 |
| Pleasant Valley Relifts | | | 12,963.00 | | 100.00% | 100.00% | 41,068.17 | | 41,068.17 |
| Proberta WD | | | 2,244.00 | | 100.00% | 100.00% | 15,216.63 | | 15,216.63 |
| San Luis WD Relifts | | 620 | 46,286.00 | 1.32% | 98.68% | 100.00% | 547,182.72 | 7,232.62 | 539,950.10 |
| State-Delta PP - Cross Valley Canal | | 973 | 31,591.40 | 2.99% | 97.01% | 100.00% | 71,740.74 | 2,142.49 | 69,598.25 |
| Westlands WD Relifts | | 3,020.00 | 609,261.21 | 0.49% | 99.51% | 100.00% | 1,760,435.46 | 8,683.13 | 1,751,752.33 |
| Wintu PP | | 2,315.40 | 7,693.00 | 23.13% | 76.87% | 100.00% | 119,814.80 | 27,718.63 | 92,096.16 |
| City of Shasta Lake (Shasta PP) | 5/ | 2,554.80 | | 100.00% | | 100.00% | 40,212.45 | 40,212.45 | |
| Dos Amigos PP - Cross Valley Canal | | | | | | | 73,045.08 | 2,181.44 | 70,863.64 |
| Reimbursable Billing | | | | | | | 6,813.46 | | |
| Project General | | | | | | | 10,281.32 | | |
| Nonreimbursable F&W | | | | | | | 35,225.44 | | |
| | | | | | | | 20,900,000.00 | 3,654,928.18 | 17,192,751.60 |

**CENTRAL VALLEY PROJECT**
**SCHEDULE OF ESTIMATED IRRIGATION PROJECT USE ENERGY COSTS**
**DIRECT PUMPING**
**2011 IRRIGATION WATER RATES**

**FOOTNOTES (FOR PAGE 5)**

1/ See Ratios in the Storage section

2/ Irrigation contractor receives class 2 water which is not charged for the storage component.

3/ According to MP-2810 (CB 06/93) only 70% of San Luis Canal Deliveries are stored in B.F. Sisk San Luis Reservoir and, therefore, require pumping by the WR Gianelli Pump-Generator.

4/ Excludes estimated San Luis WD deliveries before Dos Amigos. The calculation reflects the relationship between actual deliveries versus actual exclusions over a 5 year period.
Source of data is Schedule A-12, worksheet "Input PUE", footnote #4.

| | |
|---|---|
| | 46,286 |
| less | 4,721 |
| | 41,565 |

| | Irrigation Deliveries * | | | |
|---|---|---|---|---|
| | Total | Excluded | Ratio | Estimated Exclusion |
| 2005 | 71,899 | 8,636 | | |
| 2006 | 74,635 | 9,122 | | |
| 2007 | 80,058 | 8,048 | | |
| 2008 | 66,552 | 5,807 | | |
| 2009 | 68,004 | 5,223 | | |
| Total | 361,148 | 36,836 | 10.20% | 4,721 |

Total Dos Amigos Pumping Plant Irrigation Projected Water Deliveries less exclusions for San Luis Water District:

| | |
|---|---|
| | 771,117 |
| less | 4,721 |
| | 766,396 |

* Provided annually by Stacey Smith, CVOCO.

5/ It was determined in late 2000 that Shasta PP serves the City of Shasta Lake exclusively and accordingly is not a pooled storage cost. As a result, PUE O&M will be proactively allocated to this contractor beginning in 2001.