



# Staff Report

for the Board of Directors' Meeting of March 24, 2021

**TO:** Board of Directors

**FROM:** Keane Sommers, P.E., Hydroelectric Manager *KSS*

**DATE:** March 16, 2021

**SUBJECT:** South Sutter Water District – Hydroelectric Support

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## ***HYDROELECTRIC***

### **RECOMMENDATION:**

Review and discuss the proposal to provide support for South Sutter Water District hydroelectric operations and maintenance. Provide direction as appropriate.

### **BACKGROUND:**

In 1981 South Sutter Water District (SSWD) signed an agreement with Sacramento Municipal Utility District (SMUD) for construction of a 6.8 Megawatt power plant at Camp Far West Reservoir. Power production started in the spring of 1985. Since that time, SMUD has provided administrative support, operations, and maintenance of the powerhouse. The SSWD/SMUD contract is coming to an end, and SSWD is looking for options for the long term support with plant operations and maintenance.

As a part of their due diligence, SSWD reached out to Nevada Irrigation District (NID or District) for advice on potential options. During those discussions, the concept of NID operating and potentially providing maintenance and administrative services was developed.

This item was discussed at the December 1, 2020 and January 5, 2021 Administrative Practices Committee (APC) meetings and the February 24, 2021 Board of Directors meeting

During the February 24, 2021 board meeting the Board of Directors instructed staff to complete the following tasks and report back to the board for further direction:

- Calculate revised hourly rates to provide increased contributions to NID reserves
- Generate a transaction cost to ensure costs associated with the work to enter in to the agreement are paid by SSWD.
- Develop a cost to SSWD to compensate for the knowledge and expertise possessed by Hydroelectric Department Staff.
- Revise several specific items in the January 15, 2021 Draft Term Sheet

### Hourly Rates

During the February 24, 2021 board meeting staff presented hourly rates based on a reserve contribution 10% above the rate currently realized by Hydroelectric Department employees while working on District facilities. The reserve contribution rate is multiplied by the sum of the employee hourly rate of pay and benefit costs. The board directed staff to provide options for an increased reserve contribution rate and provide revised hourly rates for consideration. Table 1 identifies potential hourly rates at various reserve contributions above those which Department employees already contribute. Where readily available, a rate paid by the District to an outside consultant for similar services is also presented. The rate shown in Table 1 is the sum of the salary, benefits, district overhead, and reserve contribution.

**Table 1 – Potential Hourly Rates Based on Reserve Contributions above those Currently Realized (\$/hour)**

Job Classification	Reserve Contribution Rate Above That Currently Realized by a Hydroelectric Department Employee					Comparable Billing Rate
	10%	20%	30%	40%	50%	
Hydroelectric Manager	185	197	209	221	233	
Hydro Compliance Technician II	111	118	124	130	136	
Senior Engineer Dam Safety	171	182	193	204	215	240
Project Manager	113	120	126	133	139	130
Management Assistant	96	101	106	111	116	
Assistant Engineer	123	131	138	145	152	135
Hydro Compliance Administrator	165	176	186	197	207	156-291
Senior Hydro Plant Operator	140	149	157	166	174	
Hydro Generation Superintendent	169	180	191	202	212	
Hydro Plant Operator II	131	139	147	155	162	
Senior Hydrographer	138	146	155	163	171	
Hydro Water System Operator	108	114	120	126	132	
Hydro Maintenance Tech I	120	127	134	141	148	
Hydro Maint Superintendent	164	174	184	195	205	
Hydro Maintenance Tech II	128	136	143	151	158	
Hydro Electrical Machinist II	131	139	147	155	163	
Senior Hydro Electrical Machinist	140	149	157	166	174	
Hydroelectric Systems Tech I/II	136	144	152	160	168	
Utility Worker II	101	107	112	117	123	
Hydro Maint Supervisor - Electric	151	161	170	180	189	210
Hydroelectric Comm Tech I/II	124	131	138	146	153	179
Hydroelectric Systems Tech	145	154	163	172	181	196

Transaction Costs

In order to ensure the District is appropriately compensated for costs associated with preparing and executing the contract for this agreement the Board of Directors requested that a transaction cost be prepared. Potential transaction costs are presented in Table 2. Transaction costs were calculated by estimating the amount of time various staff members and outside legal counsel will spend preparing documents, visiting the powerhouse in preparation for the contract, shadowing SMUD during the April annual outage, and meeting with SSWD. Since the total transaction cost is based on the hourly rate of the staff assigned to the project the cost varies depending on what level of reserve contribution the board selects.

**Table 2 – Potential Transaction Costs Based on Reserve Contribution Rates**

Reserve Contribution Rate Above That Currently Realized by a Hydroelectric Department Employee				
10%	20%	30%	40%	50%
\$27,906.00	\$29,170.00	\$30,400.00	\$31,680.00	\$32,894.00

Monthly Fee

The board directed staff to review the proposed monthly fee to consider the breadth and depth of knowledge and skill NID employees would make available to SSWD. In order to calculate the monthly fee staff considered three categories of expense: standby fee, invoice fee, and employee access fee.

The standby fee is calculated based on the rate of standby pay in the current Memorandum of Understanding between the Nevada Irrigation District and all Field employees represented by American Federation of State, County and Municipal Employees, Local 146. The current rate is \$76.95 per day. This number is multiplied by an average of 30.4 days per month and divided by eight to account for the total number of SSWD and NID powerhouses. The standby fee portion of the monthly fee is \$292.57.

The invoice fee is based on the amount of time estimated to prepare and review a monthly invoice. The fee assumes one hour of customer service time at \$128/hour and 0.5 hours of hydroelectric department manager time at \$185/hour. The invoice fee portion of the monthly fee is \$220.50.

The employee access fee is based on the three components: training fee, overhead fee, and knowledge fee.

The training fee is based on the cost to train employees available to SSWD. The NID Hydroelectric Maintenance, Hydroelectric Operations, and Hydroelectric Administration departments have a cumulative training budget of \$105,000 in 2021. SSWD has stated that they expect to use 32 hours per month of NID staff time. This accounts for 0.60% of the total hours department staff are expected to work during the year. Accordingly the total Department training budget was multiplied by 0.60% for a training fee of \$625.31 annually or 52.11 monthly.

The overhead fee is based on the cost of labor and materials charged to facility 57010 (Hydroelectric Field Office) in 2020 as reported to the Board of Directors during the January 13, 2021 meeting. The total cost was \$173,873. A total of 0.60% of the cost (as outlined above) was allocated for a monthly total cost of \$86.29.

The knowledge fee is based on the total 2020 Hydroelectric Department revenue of \$22,604,568 reported to the Board of Directors on February 24, 2021. It is assumed that the knowledge, skill, and expertise needed to realize this revenue per powerhouse is equivalent to the average of the monthly revenue from a powerhouse. This average is multiplied by 0.60% (as calculated above) for a monthly knowledge fee of \$1,602.59

Based on the calculations and assumptions outlined above the total of the monthly fee is \$2,254.06.

Term Sheet

The following changes were made to the Term Sheet to address specific board Comments:

- The markup on subcontracted services and materials procured by NID was reduced to 5% consistent with NID’s standard service agreements.
- Language was added to clarify that travel time and a transaction cost is to be paid by SSWD.
- Language capping annual hourly labor and benefit increases was removed.

**BUDGETARY IMPACT:**

Total annual revenue from the agreement would vary depending on the percentage above the current reserve contribution the board prefers, the monthly fee, and the amount of time worked. Assuming a monthly fee of \$2,254.06 and a total effort of 32 hours per month split between operators, technicians, and machinists, potential estimated revenues are shown in Table 3.

**Table 3 – Potential Annual Revenue Based on Increased Reserve Contribution Rates**

Reserve Contribution Rate Above That Currently Realized by a Hydroelectric Department Employee				
10%	20%	30%	40%	50%
79,272.74	\$82,536.74	\$85,584.74	\$88,872.74	\$91,824.74

KSS

Attachments: (1)

- Term Sheet Dated March 15, 2021 with changes from January 15, 2021 shown in track changes

## Term Sheet

**January 15 March 12, 2021**

<b>Facilities Subject to Agreement</b>	South Sutter Water District's Camp Far West Powerhouse and Camp Far West Dam (FERC Project No. 2997)
<b>Cost Structure</b>	<ul style="list-style-type: none"> <li>• Fixed monthly fee at a rate of <del>five hundred dollars</del> <u>TBD</u> (<del>\$500</del> <u>TBD</u>) per month.</li> <li>• Hourly labor at the following rates for the following classifications:             <ul style="list-style-type: none"> <li>○ Operations                 <ul style="list-style-type: none"> <li>▪ Hydroelectric Generation Superintendent – <del>\$169.00</del> <u>TBD</u></li> <li>▪ Senior Hydroelectric Plant Operator – \$ <u>TBD140.00</u></li> <li>▪ Hydroelectric Plant Operator I/II – \$ <u>TBD131.00</u></li> <li>▪ Hydroelectric Water Systems Operator I/II – \$ <u>TBD108.00</u></li> </ul> </li> <li>○ Compliance                 <ul style="list-style-type: none"> <li>▪ Hydroelectric Compliance Administrator – \$ <u>TBD165.00</u></li> <li>▪ Hydroelectric Compliance Technician I/II – \$ <u>TBD111.00</u></li> </ul> </li> <li>○ Dam Safety                 <ul style="list-style-type: none"> <li>▪ Senior Engineer (Registered) – Dam Safety – \$ <u>TBD171.00</u></li> <li>▪ Assistant Engineer – Associate Engineer (Registered) – \$ <u>TBD124.00</u></li> </ul> </li> <li>○ Maintenance                 <ul style="list-style-type: none"> <li>▪ Hydroelectric Maintenance Superintendent – \$ <u>TBD169.00</u></li> <li>▪ Hydroelectric Maintenance Supervisor – \$ <u>TBD152.00</u></li> <li>▪ Senior Hydroelectric Systems Technician – \$ <u>TBD145.00</u></li> <li>▪ Senior Hydro Electrical Machinist – \$ <u>TBD145.00</u></li> <li>▪ Hydroelectric Maintenance Technician I/II – \$ <u>TBD128.00</u></li> <li>▪ Hydro Electrical Machinist I/II – \$ <u>TBD140.00</u></li> <li>▪ Hydroelectric Communication Technician I/II – \$ <u>TBD124.00</u></li> <li>▪ Utility Worker I/II – \$ <u>TBD101.00</u></li> </ul> </li> <li>○ Administration                 <ul style="list-style-type: none"> <li>▪ Hydroelectric Manager – \$ <u>TBD185.00</u></li> <li>▪ Management Assistant – \$ <u>TBD96.00</u></li> <li>▪ Project Manager – \$ <u>TBD114.00</u></li> </ul> </li> </ul> </li> <li>• Overtime and Emergency Call-Out rates shall be billed at the rate above multiplied by the value indicated in the current Memorandum of Understanding for the appropriate employee</li> <li>• Mileage paid at current IRS rate</li> <li>• Materials procured by the NID at cost plus markup not to exceed <u>ten-five</u> percent.</li> </ul>

	<ul style="list-style-type: none"> <li>• Subcontracted services to be provided at cost plus markup not to exceed <del>ten-five</del> percent.</li> <li>• Rates will be escalated annually to respond to increase labor and benefit costs. <del>Hourly rate increase shall not exceed 5% annually.</del></li> <li>• <u>Travel time will be billed at the hourly rates above.</u></li> <li>• Labor rates include the cost of hand tools with a value less than \$5,000 and other non-capital equipment used during the performance of work as well utility costs, incidental printing and copying, and computer software.</li> <li>• <u>A transaction cost of \$TBD will be paid to NID within 90 days of close of the contract.</u></li> <li>• Capital equipment used during the performance of services shall be billed in full day increments at the following rates: <ul style="list-style-type: none"> <li>○ Fabrication Equipment (e.g. mill, lathe, ironworker) - \$382.00/day</li> <li>○ Hydrography Equipment (e.g. flow meters, other measuring equipment) - \$70.00/day</li> <li>○ Welding Equipment (e.g. TIG welder) - \$142.00/day</li> <li>○ General Electrical Test Equipment (e.g. thermal imager, TTR tester, power quality analyzer) - \$119/day <ul style="list-style-type: none"> <li>▪ Specialized Electrical Test Equipment (e.g. Doble High Voltage Substation Analyzer) - \$600/day</li> </ul> </li> <li>○ Remote Operated Vehicles (e.g. Deep Trekker) - \$586/day</li> </ul> </li> <li>• All equipment used during the completion of services must be used by a qualified NID employee and is not available for rent.</li> </ul>
<p style="text-align: center;"><b>Services NID Available to Provide</b></p>	<ul style="list-style-type: none"> <li>• “Operations” tasks may include: <ul style="list-style-type: none"> <li>○ Routine inspection and documentation of Camp Far West Powerhouse and Camp Far West Dam</li> <li>○ Call out (emergency) response to issues at the powerhouse or dam</li> </ul> </li> <li>• “Compliance” tasks may include: <ul style="list-style-type: none"> <li>○ Standard Project documentation and communications with Project regulators.</li> </ul> </li> <li>• “Maintenance” tasks may include: <ul style="list-style-type: none"> <li>○ Equipment troubleshooting</li> <li>○ Preliminary diagnosis of fault/failures</li> <li>○ Recommendations for maintenance and/or replacement schedules</li> </ul> </li> <li>• “Dam Safety” tasks may include: <ul style="list-style-type: none"> <li>○ FERC/DSOD regulations including Owner’s Dam Safety Program, Dam Safety Surveillance Monitoring Program/Report, Emergency Action Plan, etc.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ Review of consultant drawings, technical specifications or other submittals.</li> <li>● “Administration” tasks may include <ul style="list-style-type: none"> <li>○ Representation at local/regional member groups.</li> <li>○ Operational status reports and staff reports for Board/Committee Meetings.</li> <li>○ Consultant/contractor management</li> </ul> </li> </ul>
<b>Excluded Services</b>	<p>NID shall not provide services relating to:</p> <ul style="list-style-type: none"> <li>● Control room services including 24-hour, real-time monitoring of facilities</li> <li>● CAISO scheduling and associated settlement services</li> </ul>
<b>Services to be Provided on As – Available Basis</b>	<p>NID is obligated to operate, maintain, and repair its own facilities in order to perform its obligations as a California Irrigation District. Should NID determine, at any time, that its own forces are needed for NID business, NID shall have the right to divert personnel from performing any services under this agreement.</p>
<b>Term and Termination</b>	<p>The term of the Agreement shall be for two years.</p> <p>Each party shall be authorized to terminate the Agreement upon 60 days’ written notice to the other.</p>
<b>Limitation of NID’s Liability</b>	<p>The Aggregate liability of NID to any party claiming by or through SSWD by reason of NID’s performance of Services under the Agreement to be the lesser of the amount of the Fixed Monthly Fee, or the Amount actually paid to NID for the performance of the services that gave rise to the claim.</p>
<b>Insurance and Indemnity</b>	<p>SSWD to indemnify and Defend from any liability, loss, or damage arising out of or relating to the performance of tasks contemplated by this Agreement.</p> <p>SSWD to obtain policies of insurance for Project works pursuant to terms and conditions acceptable to NID. Coverage to include loss of revenue. Coverage to waive insurer’s subrogation rights against NID.</p>
<b>Term Sheet Not Binding</b>	<p>This term sheet does not constitute an offer, agreement, commitment, agreement to agree, or contract by either party to consummate any of the transactions contemplated by this term sheet. The effectiveness of the terms discussed herein is conditioned upon the execution of a definitive agreement and each party’s receipt of all required approvals of such agreement by their respective governing bodies.</p>