



**ENGINEERING, OPERATIONS, AND  
BIOSOLIDS MANAGEMENT  
COMMITTEE MEETING  
OF THE BOARD OF DIRECTORS  
INLAND EMPIRE UTILITIES AGENCY\*  
AGENCY HEADQUARTERS, CHINO, CALIFORNIA**

**WEDNESDAY, MAY 11, 2016  
10:00 A.M.**

*Or immediately following the  
Public, Legislative Affairs, and Water Resources  
Committee Meeting*

**CALL TO ORDER**

**PUBLIC COMMENT**

Members of the public may address the Board on any item that is within the jurisdiction of the Board; however, no action may be taken on any item not appearing on the agenda unless the action is otherwise authorized by Subdivision (b) of Section 54954.2 of the Government Code. Those persons wishing to address the Board on any matter, whether or not it appears on the agenda, are requested to complete and submit to the Board Secretary a "Request to Speak" form which is available on the table in the Board Room. Comments will be limited to five minutes per speaker. Thank you.

**ADDITIONS TO THE AGENDA**

In accordance with Section 54954.2 of the Government Code (Brown Act), additions to the agenda require two-thirds vote of the legislative body, or, if less than two-thirds of the members are present, a unanimous vote of those members present, that there is a need to take immediate action and that the need for action came to the attention of the local agency subsequent to the agenda being posted.

**1. ACTION ITEMS**

**A. MINUTES**

The Committee will be asked to approve the Engineering, Operations, and Biosolids Management Committee meeting minutes from the April 13, 2016, meeting.

**B. WATER QUALITY LABORATORY CONSTRUCTION CONTRACT AWARD**

It is recommended that the Committee/Board:

1. Approve the construction contract award for the Water Quality Laboratory, Project No. EN15008, to Kemp Bros. Construction, Inc., in the amount of \$17,460,000;
2. Approve a total project budget amendment in the amount of \$3,745,000, which will increase the total project budget from \$20,900,000 to \$24,645,000;
3. Authorize the Agency to request an increase to the current SRF Loan Agreement in the amount of \$7,545,000; and
4. Authorize the General Manager to execute the construction contract, budget amendment, and required loan documents.

**C. AMENDMENT TO ENERGY SERVICE PROVIDER AGREEMENTS**

It is recommended that the Committee/Board:

1. Approve the electricity amendment with Shell Energy North America (SENA) US, L.P. through December 31, 2016, to purchase 1.5 megawatts (MW) of electricity per hour at a variable rate;
2. Approve the natural gas amendment with SENA US, L.P. through May 31, 2017, to purchase 200 MMBtu per day of natural gas at a variable rate; and
3. Authorize the General Manager to finalize and execute the amended agreements, and negotiate further amendments for up to three additional years.

**D. CONTRACT AMENDMENT FOR DEMAND RESPONSE SERVICES**

It is recommended that the Committee/Board:

1. Approve the amendment to the Master Service Contract No. 4600000900 with EnerNOC, Inc. for provision of demand response services, including sub-metering data management; and
2. Authorize the General Manager to finalize and execute the contract amendment.

**E. FISCAL YEAR 2016/17 TEN-YEAR CAPITAL IMPROVEMENT PLAN**

It is recommended that the Committee/Board approve the proposed Fiscal Year (FY) 2016/17 through 2025/26 Ten-Year Capital Improvement Plan (TYCIP).

**2. INFORMATION ITEM**

**A. ENGINEERING AND CONSTRUCTION MANAGEMENT MONTHLY UPDATE (POWERPOINT)**

**3. GENERAL MANAGER'S COMMENTS**


**4. COMMITTEE MEMBER COMMENTS**

**5. COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS**

**6. ADJOURN**


\*A Municipal Water District

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Board Secretary (909-993-1736), 48 hours prior to the scheduled meeting so that the Agency can make reasonable arrangements.
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Proofed by: 

**DECLARATION OF POSTING**

I, April Woodruff, Board Secretary of the Inland Empire Utilities Agency, A Municipal Water District, hereby certify that a copy of the agenda has been posted by 5:30 p.m. in the foyer at the Agency's main office, 6075 Kimball Ave., Building A, Chino, CA on Thursday, May 5, 2016.

  
April Woodruff

**ACTION  
ITEM  
1A**



## MINUTES

### ENGINEERING, OPERATIONS, AND BIOSOLIDS MANAGEMENT COMMITTEE MEETING INLAND EMPIRE UTILITIES AGENCY\* AGENCY HEADQUARTERS, CHINO, CA

WEDNESDAY, APRIL 13, 2016  
10:00 A.M.

#### COMMITTEE MEMBERS PRESENT

Michael Camacho, Chair  
Terry Catlin

#### STAFF PRESENT

P. Joseph Grindstaff, General Manager  
Chris Berch, Executive Manager of Engineering/AGM  
Ernest Yeboah, Executive Manager of Operations/AGM  
Martha Davis, Executive Manager of Policy Development  
Jerry Burke, Deputy Manager of Engineering  
Andy Campbell, Deputy Manager of Planning and Environmental Resources  
Pietro Cambiaso, Supervisor  
Jason Gu. Grants Officer  
Elizabeth Hurst, Water Resource Planner  
Joel Ignacio, Senior Engineer  
Sylvie Lee, Manager of Planning and Environmental Resources  
Randy Lee, Manager of Operations  
Bill Leever, Groundwater Recharge Coordinator  
Jason Marseilles, Senior Engineer  
David Mendez, Deputy Manager of Construction Management  
Jeff Noelte, Manager of Technical Services  
Jason Pivovaroff, Senior Engineer  
John Scherck, Acting Deputy Manager of Engineering  
Shaun Stone, Manager of Engineering  
Kenneth Tam, Senior Associate Engineer  
Stephanie Riley, Executive Assistant

#### OTHERS PRESENT

Tom Dodson, Tom Dodson & Associates

The meeting was called to order at 10:16 a.m. There were no public comments received or additions to the agenda.

#### ACTION ITEMS

The Committee:

- Approved the Engineering, Operations, and Biosolids Management Committee meeting minutes of March 9, 2016.

◆ Recommended that the Board:

1. Ratify Contract Amendment No. 4600001970-001, to West Valley Mosquito and Vector Control District (WVMVCD) establishing a contract through June 30, 2016, for midge fly treatment services at Turner, San Sevaine, Victoria and Ely Basins for a not-to-exceed amount of \$120,000; and

2. Authorize the General Manager to execute the contract amendment;

as a Consent Item on the April 20, 2016 Board meeting agenda.

◆ Recommended that the Board:

1. Adopt the California Environmental Quality Act (CEQA) Initial Study/Mitigated Negative Declaration and Mitigation, Monitoring and Reporting Program for the Lower Day Basin Recharge Master Plan Update (PMPU) Improvements, Project No. RW 15004; and

2. Authorize the General Manager to execute the contract amendment;

as a Consent Item on the April 20, 2016 Board meeting agenda.

◆ Recommended that the Board:

1. Approve the construction contract for Groundwater Recharge and Recycled Water Supervisory Control and Data Acquisition (SCADA) Systems Upgrades, Project No. EN14047, to Trimax Systems, Inc. for \$250,989; and

2. Authorize the General Manager to execute the contract;

as a Consent Item on the April 20, 2016 Board meeting agenda.

◆ Recommended that the Board:

1. Approve the construction contract for the Headquarters' Permit Office, Project No. EN16068, to Mike Bubalo Construction Corporation, for \$150,000;

2. Authorize the General Manager to execute the contract;

as a Consent Item on the April 20, 2016 Board meeting agenda.

◆ Recommended that the Board:

1. Authorize the General Manager to purchase the East Declaz property for the sum of \$3.0 million on behalf of Chino Basin Watermaster (Watermaster); contingent upon the approval by the Watermaster Board of Directors; and

2. Authorize the General Manager to spend up to \$100,000 on behalf of Watermaster for necessary fees related to the purchase of the property; and

3. Approve a \$3.1 million budget amendment for Project No. EN18007 in FY 2015/16 through an interofund loan from the Regional Wastewater Capital

Improvement (RC) fund to the Recharge Water (RW) fund;  
as an Action Item on the April 20, 2016 Board meeting agenda.

**INFORMATION ITEMS**

The following information items were presented or received and filed by the Committee:

- ◆ RP-1/RP-5 Expansion Preliminary Design Report Update
- ◆ FY 2016/17 Ten Year Capital Improvement Plan Update
- ◆ Engineering and Construction Management Monthly Update

**GENERAL MANAGER'S COMMENTS**

General Manager Joseph Grindstaff had no further comments.

**COMMITTEE MEMBER COMMENTS**

There were no Committee Member comments.

**COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS**

There were no Committee Member requested future agenda items.

With no further business, Director Camacho adjourned the meeting at 10:55 a.m.

Respectfully submitted,

Stephanie Riley  
Recording Secretary

\*A Municipal Water District

**APPROVED: MAY 11, 2016**

**ACTION  
ITEM  
1B**





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Date: May 18, 2016

To: The Honorable Board of Directors

Through: Engineering, Operations, and Biosolids Management Committee (05/11/16)  
Finance, Legal, and Administration Committee (05/11/16)

From: *for* P. Joseph Grindstaff *WJG*  
General Manager

Submitted by: Chris Berch *CB*  
Executive Manager of Engineering/Assistant General Manager

Shaun J. Stone *SJS*  
Manager of Engineering

Subject: Water Quality Laboratory Construction Contract Award

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### **RECOMMENDATION**

It is recommended that the Board of Directors:

1. Approve the construction contract award for the Water Quality Laboratory, Project No. EN15008, to Kemp Bros. Construction, Inc., in the amount of \$17,460,000;
2. Approve a total project budget amendment in the amount of \$3,745,000, which will increase the total project budget from \$20,900,000 to \$24,645,000;
3. Authorize the Agency to request an increase to the current SRF Loan Agreement in the amount of \$7,545,000; and
4. Authorize the General Manager to execute the construction contract, budget amendment, and required loan documents.

### **BACKGROUND**

In 2005, the Agency performed a preliminary evaluation of the existing laboratory facility located at Regional Water Recycling Plant No. 1 (RP-1) followed by a feasibility study conducted in 2006 for a new laboratory facility. The assessments were performed by independent consultants who concluded that the existing laboratory facility was nearing the end of its useful life and presented several challenges including inadequate ventilation, lack of building

insulation, numerous structural and storage space issues, in addition to being crowded with limited expandability. The existing laboratory facility cannot meet future needs with an anticipated 30 percent increase in the number of annual samples. The existing laboratory facility is composed of 6,200 square feet accommodated within two buildings. Based on the assessments and the future increase in required samples, the decision was made to construct a new laboratory behind the Agency Headquarters Building B.

The Water Quality Laboratory design began in 2010 by The Austin Company (Austin), consulting engineering firm; however, at 50 percent design level, the project was put on hold on October 26, 2010, as part of the Agency's cost containment plan. In 2014, the Agency decided to move forward with the project and reestablished Austin's contract early 2015. The revised project scope includes the addition of the central chiller plant expansion to supply necessary chilled water for the laboratory building air conditioning system.

In 2010, an addendum to the RP-5 Program Environmental Impact Report (PEIR) dated 1999 was developed for the Water Quality Laboratory and verified as still applicable to the project in 2015.

The Water Quality Laboratory project is grant funded via a State Revolving Fund (SRF) Loan at 2.1% rate and \$1,050,000 principal forgiveness. The SRF Loan Agreement will be updated to reflect the revised total project cost to correspond to the construction bid received.

The project team conducted two rounds of contractor prequalification to obtain a list of qualified general contractors who had the required experience to construct the Water Quality Laboratory and Central Chiller Plant expansion. The prequalification process was completed at the end of February 2016 concurrently with the completion of the final design package. The prequalification process yielded five qualified contractors who received an invitation to bid.

On March 1, 2016, a request for bids was advertised to the five prequalified contractors on PlanetBids for the construction of the Water Quality Laboratory. Four out of the five prequalified general contractors participated in the job walk. On April 5, 2016, the following bids were received:

<b>Bidder's Name</b>	<b>Price</b>
Kemp Bros. Construction, Inc.	\$17,460,000
AMG & Associates, Inc.	\$17,845,000
Tovey/Shultz Construction	\$18,044,438
<b>Engineer's Estimate</b>	<b>\$20,600,000</b>

Kemp Bros. Construction, Inc. is the lowest responsive and responsible bidder with a bid of \$17,460,000. During the prequalification process, IEUA staff and two consultants evaluated Kemp Bros. financial statements, verified references, reviewed past projects and other selection criteria, and validated their ability to perform the construction of the Water Quality Laboratory. Once the bids were received, IEUA staff evaluated Kemp Bros. bid for completeness with the

Bid Document requirements and confirmed that Kemp Bros. Construction, Inc. is the lowest responsive and responsible bidder.

The following is the projected project cost:

Description	Estimated Cost
Design	\$1,625,000
Third Party Services ( <i>technical experts, constructability review, commissioning, geotechnical consultant, survey, special inspection, etc.</i> )	\$250,000
Construction	\$17,460,000
Construction Management	\$2,600,000
Contingency (~10%)	\$1,760,000
Solar P/V System	\$300,000
Special Laboratory Equipment	\$650,000
<b>Total Project Cost</b>	<b>\$24,645,000</b>
<b>Current Total Project Budget</b>	<b>\$20,900,000</b>
<b>Requested Budget Amendment</b>	<b>\$3,745,000</b>

The following is the project schedule:

Project Milestone	Date
Construction Contract Award	May 2016
Construction Completion	August 2018

The Water Quality Laboratory, when constructed, will address all the issues presented above and provide numerous benefits to the Agency as well as stakeholders within the Service Area. Benefits include cost and energy savings, environmental compliance, adaptation to future complex analytical needs, enhanced performance and safety, public educational tours, solar power generation, etc.

The Water Quality Laboratory Project is consistent with the *Agency's Business Goal of Wastewater Management* that systems will be master planned, managed and constructed to ensure that when expansion planning is triggered, designs/construction can be completed to meet regulatory/growth needs in an expeditious, environmentally responsible and cost effective manner.

**PRIOR BOARD ACTION**

On November 18, 2015, the Board awarded the commissioning contract to Heery International, Inc.

On October 14, 2015, the Board awarded the consulting engineering services contract Amendment No. 1 to the Austin Company.

On May 20, 2015, the Board awarded the consulting engineering services contract to The Austin Company.

In 2014, the Board approved a 2.1%, 30 year SRF loan agreement (C-06-7885-110) for \$17,100,000 including 1,050,000 grant.

**IMPACT ON BUDGET**

If approved the budget amendment in the amount of \$3,745,000 will increase the total project from \$20,900,000 to \$24,645,000. The construction award in the amount of \$17,460,000 will be within the amended total project budget of \$24,645,000 in the Regional Wastewater O&M (10800) Fund.

PJG:CB:SS;jz

# Water Quality Laboratory Construction Contract Award

Project No. EN15008  
May 2016

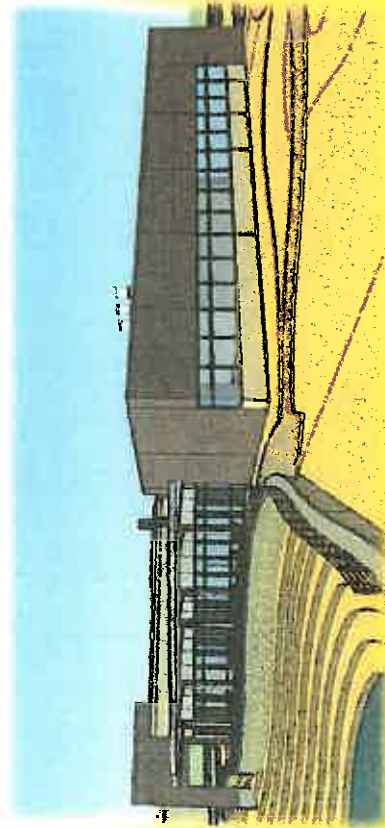


**Inland Empire Utilities Agency**  
A MUNICIPAL WATER DISTRICT

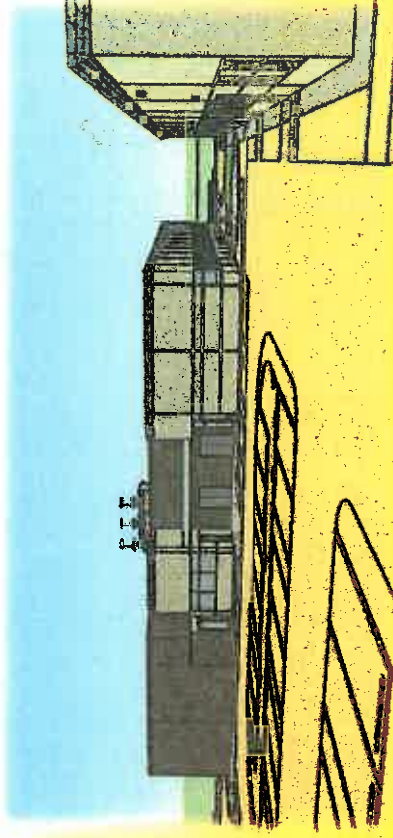
Shaun Stone, P.E.  
Manager of Engineering

Jamal Zughbi, P.E.  
Project Manager

# Headquarters Aerial View (Lab Location)



Southwest Elevation Rendering



East Elevation Rendering

# Project Background

- Existing RP-1 Laboratory evaluation and feasibility study conducted in 2005 and 2006 respectively
- Current condition of Laboratory:
  - Old and crowded (6,200 sq.ft.) within two buildings
  - Limited expandability and adaptability for future analytical needs
  - Aging systems (HVAC, fume hoods, plumbing, electrical, etc.)
  - Numerous Structural and storage issues
  - Limits on annual number of samples analyzed
- Conclusion: Construct a new lab facility at RP-5 Headquarter Campus
- Design started in 2010, put on hold in October 2010, resumed in 2015
- Consultant: The Austin Company



Existing Lab

# Project Description/Highlights

- 16,000 sq. ft. building
- Enhanced safety and work flow layout
- Operational cost and energy savings
- Regional benefits, environmental compliance
- SRF Loan/Grant funded
- Solar power system (~65 kW)
- Silver/Gold LEED rated building
- Public educational tours
- Central Chiller Plant upgrades
  - New chiller, cooling tower, pumps, piping
- Five contractors prequalified in February 2016



Central Chiller Plant



South Elevation Rendering



# Bid Summary

- On March 1, 2016, a request for bids was advertised to the five prequalified contractors
- On April 5, 2016, the following bids were received:

Bidder's Name	Bid
Kemp Bros. Construction, Inc.	\$17,460,000
AMG & Associates, Inc.	\$17,845,000
Tovey/Shultz Construction	\$18,044,438
<b>Engineer's Estimate</b>	<b>\$20,600,000</b>

# Project Cost/Schedule

Description	Estimated Cost
Design	\$1,625,000
Third Party Services (Technical Experts, Constructability Review, Commissioning, Geotechnical Consultant, Survey, Special Inspection)	\$250,000
Construction	\$17,460,000
Construction Management	\$2,600,000
Contingency (~10%)	\$1,760,000
Solar P/V System	\$300,000
Laboratory Equipment	\$650,000
<b>Total Project Cost</b>	<b>\$24,645,000</b>
<b>Current Total Project Budget</b>	<b>\$20,900,000</b>
<b>Requested Budget Amendment</b>	<b>\$3,745,000</b>

Project Milestone	Date
Construction Contract Award	May 18, 2016
Construction Completion	August 2018



# Agency Goal/Recommendation

Staff recommends that the Board of Directors:

1. Approve the construction contract award for the Water Quality Laboratory, Project No. EN15008, to Kemp Bros. Construction, Inc., for the not-to-exceed amount of \$17,460,000;
2. Approve a total project budget amendment in the amount of \$3,745,000;
3. Authorize the Agency to request an increase to the current SRF Loan Agreement in the amount of \$7,545,000; and
4. Authorize the General Manager to execute the construction contract, budget amendment, and required loan documents.

The Water Quality Laboratory Project is consistent with the Agency's Business Goal of Wastewater Management that systems will be master planned, managed and constructed to ensure that when expansion planning is triggered, designs/construction can be completed to meet regulatory/growth needs in an expeditious, environmentally responsible and cost effective manner.

## CONTRACT

### 1.0 CONTRACT

THIS CONTRACT, made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20 \_\_, by and between KEMP BROS. CONSTRUCTION, INC., hereinafter referred to as "Contractor," and The Inland Empire Utilities Agency, a Municipal Water District, located in San Bernardino County, California, hereinafter referred to as "Agency".

#### **WITNESSETH:**

That for and in consideration of the promises and agreements hereinafter made and exchanged, the Agency and the Contractor agree as follows:

1. Contractor agrees to perform and complete in a workmanlike manner, all work required under the bidding schedule of said Agency's specifications entitled SPECIFICATIONS FOR WATER QUALITY LABORATORY AND CENTRAL PLANT EXPANSION, PROJECT NO. EN15008, in accordance with the specifications and drawings, and to furnish at their own expense, all labor, materials, equipment, tools, and services necessary, except such materials, equipment, and services as may be stipulated in said specifications to be furnished by said Agency, and to do everything required by this Contract and the said specifications and drawings.
2. For furnishing all said labor, materials, equipment, tools, and services, furnishing and removing all plant, temporary structures, tools and equipment, and doing everything required by this Contract and said specifications and drawings; also for all loss and damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen difficulties which may arise during the prosecution of the work until its acceptance by said Agency, and for all risks of every description connected with the work; also for all expenses resulting from the suspension or discontinuance of work, except as in the said specifications are expressly stipulated to be borne by said Agency; and for completing the work in accordance with the requirements of said specifications and drawings, said Agency will pay and said Contractor shall receive, in full compensation therefore, the price(s) set forth in this Contract.
3. That the Agency will pay the Contractor progress payments and the final payment, in accordance with the provisions of the contract documents, with warrants drawn on the appropriate fund or funds as required, at the prices bid in the Bidding and Contract Requirements, Section C - Bid Forms and accepted by the Agency, and set forth in this below.

Total Lump Sum Bid Price \$17,460,000.<sup>00</sup> Seventeen Million Four Hundred Sixty Thousand Dollars and Zero Cents.

If this is not a lump sum bid and the contract price is dependent upon the quantities  
WATER QUALITY LABORATORY & May 2016  
CENTRAL PLANT EXPANSION  
PROJECT NO. EN15008 1

constructed, the Agency will pay and said Contractor shall receive, in full compensation for the work the prices named in the Bidding and Contract Requirements, Section C - Bid Forms.

4. The Agency hereby employs the Contractor to perform the work according to the terms of this Contract for the above-mentioned price(s), and agrees to pay the same at the time, in the manner, and upon the conditions stipulated in the said specifications; and the said parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to the full performance of the covenants herein contained.
5. The Notice Inviting Bids, Instructions to Bidders, Bid Forms, Information Required of Bidder, Performance Bond, Payment Bond, Contractors License Declaration, Specifications, Drawings, all General Conditions and all Special Conditions, and all addenda issued by the Agency with respect to the foregoing prior to the opening of bids, are hereby incorporated in and made part of this Contract, as if fully set forth.
6. The Contractor agrees to commence work under this Contract on or before the date to be specified in a written "Notice To Proceed" and to complete said work to the satisfaction of the Agency within eight hundred ten (810) calendar days after award of the Contract. All work shall be completed before final payment is made.
7. Time is of the essence on this Contract.
8. Contractor agrees that in case the work is not completed before or upon the expiration of the contract time, damage will be sustained by the Agency, and that it is and will be impracticable to determine the actual damage which the Agency will sustain in the event and by reason of such delay, and it is therefore agreed that the Contractor shall pay to the Agency the amount of five thousand (\$5,000.00) dollars for each day of delay, which shall be the period between the expiration of the contract time and the date of final acceptance by the Agency, as liquidated damages and not as a penalty. It is further agreed that the amount stipulated for liquidated damages per day of delay is a reasonable estimate of the damages that would be sustained by the Agency, and the Contractor agrees to pay such liquidated damages as herein provided. In case the liquidated damages are not paid, the Contractor agrees that the Agency may deduct the amount thereof from any money due or that may become due to the Contractor by progress payments or otherwise under the Contract, or if said amount is not sufficient, recover the total amount.

In addition to the liquidated damages, which may be imposed if the Contractor fails to complete the work within the time agreed upon, the Agency may also deduct from any sums due or to become due the Contractor, liquidated damages in accordance with the Bidding and Contract Requirements, Section B - Instruction to Bidders, Part 5.0 "Liquidated Damages", for any violation of the General Conditions, Section D - Contractor's Responsibilities, Part 8, "Law and Regulations"; Bidding and Contract Requirements Contract Section D -Contract and Relevant Documents, Part 1.0, Paragraphs 9 through 11; General Conditions , Section D – Contractor's Responsibilities, Part 4.0, "Labor, Materials and Equipment"; General Conditions Section D – Contractor's

Responsibilities, Part 12.0, "Safety and Protection" or General Conditions Section H – Legal Responsibilities, Part 8.0, "Disturbance of the Peace".

9. That the Contractor will pay, and will require subcontractors to pay, employees on the work a salary or wage at least equal to the prevailing salary or wage established for such work as set forth in the wage determinations and wage standards applicable to this work, contained in or referenced in the contract documents.
10. That, in accordance with Section 1775 of the California Labor Code, Contractor shall forfeit to the Agency, as a penalty, not more than Fifty (\$50.00) Dollars for each day, or portion thereof, for each worker paid, either by the Contractor or any subcontractor, less than the prevailing rates as determined by the Director of the California Department of Industrial Relations for the work.
11. That, except as provided in Section 1815 of the California Labor Code, in the performance of the work not more than eight (8) hours shall constitute a day's work, and not more than forty (40) hours shall constitute a week's work; that the Contractor shall not require more than eight (8) hours of labor in a day nor more than forty hours of labor in a week from any person employed by the Contractor or any subcontractor; that the Contractor shall conform to Division 2, Part 7, Chapter 1, Article 3 (Section 1810, et seq.) of the California Labor Code; and that the Contractor shall forfeit to the Agency, as a penalty, the sum of Twenty-Five (\$25.00) Dollars for each worker employed in the execution of the work by Contractor or any subcontractor for each day during which any worker is required or permitted to labor more than eight (8) hours in violation of said Article 3.
12. That the Contractor shall carry Workers' Compensation Insurance and require all subcontractors to carry Workers' Compensation Insurance as required by the California Labor Code.
13. That the Contractor shall have furnished, prior to execution of the Contract, two bonds approved by the Agency, one in the amount of one hundred (100) percent of the contract price, to guarantee the faithful performance of the work, and one in the amount of one hundred (100) percent of the contract price to guarantee payment of all claims for labor and materials furnished.
14. The Contractor hereby agrees to protect, defend, indemnify and hold the Agency and its employees, agents, officers, directors, servants and volunteers free and harmless from any and all liability, claims, judgments, costs and demands, including demands arising from injuries or death of persons (including employees of the Agency and the Contractor) and damage to property, arising directly or indirectly out of the obligation herein undertaken or out of the operations conducted by the Contractor, its employees agents, representatives or subcontractors under or in connection with this Contract.

The Contractor further agrees to investigate, handle, respond to, provide defense for and defend any such claims, demands or suit at the sole expense of the Contractor.

IN WITNESS WHEREOF, The Contractor and the General Manager of Inland Empire Utilities Agency\*, thereunto duly authorized, have caused the names of said parties to be affixed hereto, each in duplicate, the day and year first above written.

Inland Empire Utilities Agency,\*  
San Bernardino County, California.

By \_\_\_\_\_  
General Manager

Contractor  
KEMP BROS. CONSTRUCTION, INC.

By  \_\_\_\_\_  
Title CEO

Greg Solaas  
Co-Chief Executive Officer

\*Municipal Water District

**ACTION  
ITEM  
1C**



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Date: May 18, 2016

To: The Honorable Board of Directors

Through: Engineering, Operations, and Biosolids Management Committee (05/11/16)  
Finance, Legal & Administration Committee (05/11/16)

From: *for* P. Joseph Grindstaff *WJG*  
General Manager

Submitted by: Chris Berch *CB*  
Executive Manager of Engineering/Assistant General Manager

Sylvie Lee *SL*  
Manager of Planning and Environmental Resources

Subject: Amendment to Energy Service Provider Agreements

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### **RECOMMENDATION**

It is recommended that the Board of Directors:

1. Approve the electricity amendment with Shell Energy North America (SENA) US, L.P. through December 31, 2016 to purchase 1.5 megawatts (MW) of electricity per hour at a variable rate;
2. Approve the natural gas amendment with SENA US, L.P. through May 31, 2017 to purchase 200 MMBtu per day of natural gas at a variable rate; and
3. Authorize the General Manager to finalize and execute the amended agreements, and negotiate further amendments for up to three additional years.

### **BACKGROUND**

IEUA currently participates in a program known as Direct Access (DA) that allows the purchase of electricity from an Energy Service Provider (ESP) instead of the local utility, Southern California Edison (SCE). The Agency currently purchases electricity for the power needed at the Regional Water Recycling Plant No. 1 (RP-1), Regional Water Recycling Plant No. 2 (RP-2), and Carbon Canyon Water Recycling Facility (CCWRF) from SENA under a Master Energy Sales Agreement (MESA).

IEUA also receives natural gas commodity service from SENA at five service locations under a master Natural Gas Sales and Purchase Agreement. IEUA's agreement with SENA provides the natural gas necessary to supplement the biogas for the fuel cell and the internal combustion engine (non-core accounts), as well the boilers and other uses (core accounts).

Both current energy service agreements are set to expire on May 31, 2016. Purchases of electricity and natural gas through these Purchase Agreements have consistently reduced overall IEUA costs and are an integral part of the IEUA Energy Management Plan. Both current energy service agreements include variable rates. SENA's variable pricing for the nominated quantities of electricity is based on the California Independent System Operator (CAISO) Day Ahead Electricity Price Index (day ahead price) plus \$0.5/MWh commission. The contract also includes Resource Adequacy (RA) and Renewable Portfolio Standard (RPS) products, both of which are pass through costs. SENA's agreement quantities are for 24 hours per day, 7 days per week; any quantities over or under this amount were priced equal to the energy imbalance price during that hour. Natural gas variable pricing is based on the Natural Gas Intelligence (NGI) monthly index value plus \$0.05/MMBtu commission for non-core accounts, and \$0.10/MMBtu commission for core accounts.

The potential variability of the facilities loads and electricity import, partially due to the unpredictable performance of the fuel cell and the RP-2 engine operation, and the opportunity of negotiating a broader agreement with SENA and Advanced Microgrid Solutions for the energy storage operation, makes the amendment thru December 2016 for the purchase of the electricity a reasonable and safe option. IEUA staff will also continue to monitor the market with the option of converting a portion or all of the variable price to fixed price if beneficial to the Agency.

The energy purchase agreement is part of the Agency's *Energy Management* Business Goal to contain future energy costs, and provide for future rate stabilization.

### **PRIOR BOARD ACTION**

The Board approved the SENA US, L.P. agreements on April 15, 2015, March 19, 2014, April 17, 2013, February 16, 2011, and April 15, 2009.

### **IMPACT ON BUDGET**

The total appropriation for the Agency's DA service accounts is incorporated in the Fiscal Year 2015/16 Regional Operations and Maintenance (RO) Fund Utilities Budget of \$7,400,000, and in the Fiscal Year 2016/17 Regional Operations and Maintenance (RO) Fund Utilities Budget of \$7,700,000. Given the current state of the energy market, staff anticipates no adverse impact on the budget from this agreement.

Attachment A: Electricity confirmation

Attachment B: Natural gas confirmation core accounts

Attachment C: Natural gas confirmation non-core accounts

# Amendment to Energy Purchase Agreements



*Inland Empire Utilities Agency*

**A MUNICIPAL WATER DISTRICT**

Pietro Cambiaso

IEUA Board of Directors Meeting  
May 2016

# Electricity Procurement

Facility	Energy Purchase Agreement	Rate Components		Commodity
		Transmission		
RP-1	Unbundled	SCE		Direct Access
RP-2 Liquids	Bundled	SCE		SCE
RP-2 Solids	Unbundled	SCE		Direct Access
RP-4/IERCF	Bundled	SCE		SCE
RP-5	Bundled	SCE		SCE
CCWRF	Unbundled	SCE		Direct Access
Pump Stations	Bundled	SCE		SCE

# Natural Gas Procurement

Facility	Account	Rate Components	
		Transmission	Commodity
RP-1	Non-Core (Fuel Cell)	SoCal Gas Co	Direct Access
RP-1	Core (Boilers, Lab)	SoCal Gas Co	Direct Access
RP-2	Core	SoCal Gas Co	Direct Access
RP-4	Core	SoCal Gas Co	Direct Access
RP-5	Core	SoCal Gas Co	Direct Access
CCWRF	Core	SoCal Gas Co	Direct Access

# Electricity Agreement

Shell Energy North America	Current	Proposed (June 1, 2016 – December 31, 2016)
Fixed	Option to convert variable to fixed	No Change
Variable	1.5 MW/hr CAISO SP 15	No Change
Commission	\$0.50/MWh	No Change

# Natural Gas Agreement

Shell Energy North America	Current	Proposed (June 1, 2016 – May 31, 2017)
Fixed	Option to convert variable to fixed	No Change
Variable	200 MMBtu/day Monthly Index Value	No Change
Commission	+ \$0.05/MMBtu (non-core) + \$0.095/MMBtu (core)	No Change

# Recommendation

Staff recommends the Board amend the current agreements with Shell Energy North America (SENA) US, L.P. through December 31, 2016 to purchase electricity, and through May 31, 2017 to purchase natural gas at a variable rate.

This project meets the *Agency's Energy Management Business Goal* to contain future energy costs, and provide for future rate stabilization.





**Shell Energy North America (US), L.P.**

1000 MAIN ST LEVEL 12  
HOUSTON, TX 77002  
713-767-5500

April 25, 2016

Deal No:

INLAND EMPIRE UTILITIES AGENCY  
c/o PAT JACKSON, PO BOX 9020  
CHINO HILLS, CA, 91709  
Fax: 1(909) 993-1982

**CONFIRMATION AGREEMENT**

This confirmation agreement (this "Confirmation" or "Agreement") shall confirm the agreement reached on March 28, 2016, between Shell Energy North America (US), L.P. ("Shell Energy") and INLAND EMPIRE UTILITIES AGENCY ("CounterParty") (herein sometimes referred to as a "Party" and collectively as the "Parties") regarding the sale of electric capacity and/or electric energy under the terms and conditions set forth below.

BUYER:	INLAND EMPIRE UTILITIES AGENCY
SELLER:	Shell Energy North America (US), L.P.
PRODUCT/FIRMNESS:	FIRM, WITH LIQUIDATED DAMAGES
<hr/>	
TERM:	06/01/2016 Through 12/31/2016
QUANTITY:	1.50 Mws of energy per hour
PRICE:	[CALISO DAM-SP15-FIN HOURLY] +0.50/Mwhr Index
DELIVERY POINT(S):	SP 15 EZ Gen Hub
SCHEDULING:	Monday thru Saturday, Hours ending 0700 thru 2200 Excluding NERC Holidays
<hr/>	
TERM:	06/01/2016 Through 12/31/2016
QUANTITY:	1.50 Mws of energy per hour
PRICE:	[CALISO DAM-SP15-FIN HOURLY] +0.50/Mwhr Index
DELIVERY POINT(S):	SP 15 EZ Gen Hub
SCHEDULING:	Monday thru Saturday, Hours ending 0100 thru 0600; Monday thru Saturday, Hours ending 2300 thru 2400; NERC Holidays , Hours ending 0100 thru 2400; Sunday thru Sunday, Hours ending 0100 thru 2400
<hr/>	
OTHER PRODUCT:	100% of Counterparty's Facilities RPS requirements (equivalent to 25% of the Counterparty's total energy consumption for 2016 and equivalent to 27% of the Counterparty's total energy consumption for 2017)
TERM:	June 1, 2016 through December 31, 2016
CONTRACT PRICE:	Fixed price of \$14.50/MWH
<hr/>	
OTHER PRODUCT:	California Resource Adequacy
TERM:	June 1, 2016 through December 31, 2016
CONTRACT PRICE:	Fixed price of \$2.65/kW-month
<hr/>	

TIME ZONE: PPT

SUBJECT TO MASTER AGREEMENT DATED: 05/01/2009

Additional Provisions:

1. Seller and Buyer agree to notify each other as soon as practically possible of any interruption or curtailment affecting this Transaction. Buyer should notify Shell Energy at 1-800-267-2562.



**Shell Energy North America (US), L.P.**

1000 MAIN ST LEVEL 12

HOUSTON, TX 77002

713-767-5500

April 25, 2016

Deal No:

2. At any time during the term of this transaction, Buyer may request a quote from Seller for a fixed price of up to 1.5 MW of the Energy Quantity for the remainder of the Delivery Term. This request may be made by Buyer at any time during normal NYMEX trading hours (except that any request made by Buyer on the NYMEX closing day must be received by Buyer by 12:00 p.m. Eastern Time). If the parties mutually agree to a Fixed Price for a specified quantity of energy to be delivered at the Delivery Point for a particular Month, Seller shall forward to Buyer by facsimile a "Fixed Price Confirmation". The Parties' agreement shall be deemed conclusive upon Buyer's receipt of Seller's written Fixed Price Confirmation unless Buyer objects to any errors contained in the Fixed Price Confirmation immediately following its receipt. Once a Fixed Price has been established for a given period, the Fixed Price shall be irrevocable as to the affected quantities, such Fixed Price shall not be subject to change and the corresponding quantities must be nominated by Buyer and shall be deemed to be the first energy volumes purchased during the applicable Month. If Buyer and Seller are unable to agree on a Fixed Price for any given request by Buyer, the Contract Price provided above shall apply.
3. Parties' Obligations. For each Transaction Seller shall sell and cause to be scheduled, and Buyer shall buy and receive, the Contract Quantity of Energy at the Delivery Point, and Buyer shall pay Seller the Contract Price and all Related Charges. Seller shall be responsible for any costs or charges imposed on or associated with Energy or Energy delivery to the Delivery Point. Buyer shall be responsible for any costs or charges imposed on or associated with Energy or its receipt at and from the Delivery Point and all Related Charges.
4. RA, RPS and GHGI Products - Buyer's Obligation. The CPUC imposes certain requirements on Seller as result of Seller acting as a load-serving entity hereunder to buy RA, RPS and GHGI products and such other products as the CPUC may in the future require Seller to buy in its capacity as ESP, all consistent with CPUC decisions currently effective, as of the date of this MESA, as the same may be from time to time amended or superseded in the future) (collectively, "Related Products"). If during the Term of the MESA or any Transaction hereunder there are changes to the CPUC requirements for Related Products, as amended from time-to-time, the Parties agree that, except for Related Products Fixed Quantities Transactions as set forth in Section 6 below, to negotiate to restore the original intent of any affected Transaction(s) between the Parties. Buyer acknowledges such Related Products are not required to be described on a Confirmation relating to an Energy purchase, but are required to be purchased in connection with the Energy purchase. If Buyer buys a Related Products Fixed Quantity pursuant to Section 6 below, such purchase shall be documented in a Confirmation. Buyer shall obtain such Related Products from Seller at prices Seller established for the applicable regulatory compliance reporting period for the particular Related Product, which may occur after this MESA expires or after the term of a given Transaction hereunder expires, and Buyer shall pay Seller the Related Charges for such Related Products in accordance with Seller's monthly invoice, which may be an estimate as hereinafter set forth, subject to reconciliation.
5. Related Products Charges; Allocation/Reconciliation. Seller may procure a portfolio of Related Products related to the sale of Energy to a number of its direct access customers, including Buyer. If Buyer has not entered into a transaction for Related Products Fixed Quantity in connection with Section 6 below pursuant to this Confirmation and with respect to all required Related Products based on Buyer's estimated Energy consumption, Seller may initially allocate on a monthly basis or such other basis as Seller may elect, such Related Products and the associated estimated Related Charges to multiple direct access customers, including Buyer, on a pro rata basis, determined based on Buyer's historical consumption data available to Seller in relation to Seller's direct access customers' aggregate estimated Energy consumption for which Related Products are being or are to be purchased. When actual compliance procurement of Related Products is complete and actual charges for Related Products purchased and the actual energy consumption of Seller's direct access customers (including Buyer), for the applicable period are known, Seller will calculate Buyer's actual share of Related Charges and compare it to the estimated amounts billed and collected from Buyer. If Buyer has paid more for Related Products than it should have paid based on actual charges and consumption, Seller will credit the overpayment against Related Charges associated with the next year's obligation to buy Related Products, or if all obligations hereunder have been satisfied, refund the overpayment to Buyer. If Buyer has paid less for Related Products than it should have based on actual charges and consumption, Buyer will immediately pay Seller such underpayment on receipt of Seller's invoice.



**Shell Energy North America (US), L.P.**

1000 MAIN ST LEVEL 12  
HOUSTON, TX 77002  
713-767-5500

April 25, 2016

Deal No:

6. Buying Fixed Quantity of Related Products at Fixed Price. Buyer may ask Seller to provide pricing for a fixed quantity of some or all Related Products associated with a Transaction ("Related Products Fixed Quantity"), which fixed quantity may be all or less than all of Buyer's estimated Related Products obligations based on Buyer's historical consumption data for a fixed period not to exceed 24 months ("Related Products Fixed Charge Term"). Seller will consider such request and may quote Buyer a price for such Related Products Fixed Quantity. If Seller chooses to quote a fixed price it shall notify Buyer of the price, and Buyer shall have until close of business on the next Business Day to notify Seller that it accepts such price (such agreed price is a "Related Products Fixed Charge"), and the Parties shall execute a Confirmation setting forth the specific Related Products subject to the Related Products Fixed Charge, Related Products Fixed Charge Term, Related Products Fixed Quantity and Related Products Fixed Charge. If Buyer elects this option for a particular Related Product, Buyer shall not be subject to the pro-rated allocation of the price for those particular Related Products described in Section 5 above, to the extent of the Related Products Fixed Quantity subject to the Related Products Fixed Charge. The Related Products Fixed Charge shall be divided over the number of months in the Related Products Fixed Charge Term and included on Seller's monthly invoice to Buyer. If Buyer's actual Energy consumption exceeds estimated consumption and/or Buyer's actual obligations with respect to Related Products exceed the Fixed Price Related Products Quantity covered by the Confirmation, and/or if not all Related Products which Buyer is obligated to buy were included in the Related Products Fixed Quantity, then Seller shall invoice Buyer consistent with the terms of Section 5 above for the excess quantity of required Related Products and for Related Products not covered by the Related Products Fixed Charge. If the Related Products Fixed Quantity that Buyer has purchased exceeds Buyer's obligations to buy Related Products, then to the extent allowed by then current CPUC regulations, such excess portion of the Related Products Fixed Quantity may be carried forward to a subsequent Related Products Fixed Charge Term. If then current CPUC regulations do not allow such carry forward any excess portion of the Related Products Fixed Quantity shall expire at the end of the Related Products Fixed Charge Term, with no additional credit or compensation to Buyer from Seller.

7. No later than seven (7) Business Days prior to the upcoming Month of Delivery, Buyer shall notify Seller of its anticipated daily volume for the Month. In the event Buyer fails to notify Seller within that timeframe, Buyer's volumes for the upcoming Month shall be based on Buyer's historical usage for that Month, and such volumes shall be deemed to be the baseload Contract Quantity and not subject to change.

8. Seller is the sole supplier of Energy for Buyer's facilities supplied under this Confirmation.

This Confirmation sets forth the terms of the transaction into which the Parties have entered into and shall constitute the entire agreement between the Parties relating to the contemplated purchase and sale of electric energy and/or electric capacity. Please have this confirmation executed by an authorized representative or officer of your company and return via facsimile to (713)767-5414. If no facsimile objection to this Confirmation has been received by Shell Energy by facsimile transmission by 5:00 p.m., Houston, Texas time, five (5) business days after delivery of this Confirmation to the other Party by facsimile, then this Confirmation (i) shall be binding and enforceable against Counterparty and Shell Energy and (ii) shall be the final expression of all the terms hereof, regardless whether executed by the other Party.

INLAND EMPIRE UTILITIES AGENCY

Shell Energy North America (US), L.P.

By:

By:

\_\_\_\_\_  
Name : \_\_\_\_\_  
Title : \_\_\_\_\_  
Date : \_\_\_\_\_

\_\_\_\_\_  
Name : John W. Pillion  
Title : Confirmations Team Lead  
Date : 4/25/2016

Confirmation Date:  
Trader:  
Commodity: Natural Gas

Trade Date:  
Endur #:  
Contract #: 013-NG-BS-15276



**SHELL ENERGY NORTH AMERICA  
(US), L.P.**

**CONFIRMATION**

**INLAND EMPIRE UTILITIES AGENCY**  
Attn: Pietro Cambiaso  
IEUA, PO BOX 9020  
CHINO HILLS, CA 91709

Fax: 1-909-993-1951  
Phone: 1909-993-1639

This Transaction Confirmation ("Confirmation") shall confirm and effectuate the agreement between **SHELL ENERGY NORTH AMERICA (US), L.P. ("Shell Energy")** and **INLAND EMPIRE UTILITIES AGENCY ("Counterparty")** regarding the purchase and sale of natural gas under the following terms. Capitalized terms used but not defined herein shall have the meaning ascribed to them in the Contract.

**Seller: SHELL ENERGY NORTH AMERICA (US), L.P. Buyer: INLAND EMPIRE UTILITIES AGENCY**

<u>Period of Delivery</u>	<u>Performance Obligation</u>	<u>Transporter / Delivery Point(s)</u>	<u>Contract Quantity MMBTU Per Month</u>	<u>Contract Price USD / MMBTU</u>
06/01/2016 – 05/31/2017	Firm	SOCAL RETAIL, SOCAL CITYGATE, INLAND EMPIRE UTLTY AGENCY CORE	600	Natural Gas Intelligence Social Gas CityGate +\$0.09500

**SPECIAL CONDITIONS:**

- The Contract Quantities specified above are baseload quantities for firm delivery and receipt each and every Day of the Month and not subject to change; provided, any necessary adjustments to the baseload Contract Quantities based upon Buyer's under or over usage of the applicable baseload Contract Quantity shall be effectuated per the Monthly Balancing and Daily Balancing provisions below.
- Fixed Price.** At any time during the Delivery Period of this transaction, Buyer may request a quote from Seller for a monthly fixed price, a floating price with a fixed Basis Spread or a floating price with a fixed price floor, cap, ceiling or collar (each such transaction, whether at a fixed-price or at a floating price with a fixed Basis Spread or fixed-price floor, cap, ceiling or collar, is herein called a 'Fixed Price') that is based on the New York Mercantile Exchange ('NYMEX') natural gas futures contract or otherwise as an alternative to a Contract Price that floats based on NYMEX, industry postings, reference publications, or other external market factors or indices, for a specified quantity of Gas to be delivered at the Delivery Point for the relevant Delivery Period. This request may be made by Buyer at any time during normal NYMEX trading hours (except that any request made by Buyer on the NYMEX closing day must be received by Buyer by 12:00 p.m. Eastern Time). If the parties mutually agree to a Fixed Price for a specified quantity of Gas to be delivered at the Delivery Point for a particular Month, Seller shall forward to Buyer by facsimile a 'Fixed Price Confirmation'. The Parties' agreement shall be deemed conclusive upon Buyer's receipt of Seller's written Fixed Price Confirmation unless Buyer objects to any errors contained in the Fixed Price Confirmation immediately following its receipt. Once a Fixed Price has been established for a given period, the Fixed Price shall be irrevocable as to the affected quantities, such Fixed Price shall not be subject to change and the corresponding quantities must be nominated by Buyer and shall be deemed to be the first Gas purchased during the applicable Month. If Buyer and Seller are unable to agree on a Fixed Price for any given request by Buyer, the Contract Price provided above shall apply. If Buyer and Seller have agreed to a Basis Spread Fixed Price in a Fixed Price Confirmation and Buyer does not agree upon a fixed NYMEX price to accompany the Basis Spread Fixed Price before the settlement of the prompt month, then the prompt Month price will default to the NYMEX last day settlement price plus the Basis Spread Fixed Price. As used herein, 'Basis Spread' means the location price differential, which may be either a positive or a negative amount, stated as the fixed amount above (positive) or below (negative) a floating price index or other reference point (for example, in the price term 'NYMEX - \$0.10', the Basis Spread is '-\$0.10'). For the avoidance of any doubt, this provision (d) shall be inapplicable and inoperative in the event that the parties underlying Contract already contains any fixed price election language and such fixed price election language in the Contract shall control.
- SoCal Gas Unbundled Firm Access Rights:** The Delivery Point specified under this Confirmation is a SoCal Gas Citygate Receipt Point and subject to the terms and conditions of the Southern California Gas Company's Tariff.
- Monthly Balancing:**  
If at any time during the Delivery Period of this Confirmation, deliveries of Gas on Transporter's system are subject to a monthly balancing requirement, the following terms shall apply: Buyer shall provide, or authorize Seller to receive, all information reasonably necessary for Seller to monitor Buyer's actual consumption for each facility and authorize Seller as the sole and exclusive party to utilize Buyer's Transporter(s) imbalance trade mechanism(s) to balance Buyer's account(s) for under- or over-deliveries of Gas. As long as Buyer complies with this provision, Seller shall pay all monthly balancing penalties, cash outs, and other charges properly imposed upon Seller on behalf of Buyer by the applicable Transporter(s) which relate to Gas delivered under this Confirmation.
  - Buyer's incremental quantities in excess of the Contract Quantity specified above (Buyer's Excess Imbalance) shall be priced at the higher of the monthly average of Platt's Gas Daily "Common High" for the applicable month in which Buyer's Excess Imbalance occurred, or the month in which Seller receives the Transporter's statement identifying Buyer's Excess Imbalance.
  - Buyer's incremental quantities less than the Contract Quantity specified above (Buyer's Shortfall Imbalance) shall be priced at the lower of the monthly average of Platt's Gas Daily "Common Low" for the applicable month in which the Buyer's Shortfall Imbalance occurred, or the month in which Seller receives the Transporter's statement identifying Buyer's Shortfall Imbalance.

Confirmation Date:  
Trader:  
Commodity: Natural Gas

Trade Date:  
Endur #:  
Contract #: 013-NG-BS-15276

iii. For the avoidance of any doubt, the Contract Price paid for such incremental or surplus quantities of Gas as specified under Special Condition 4.(i) or 4.(ii) immediately above is in addition to, and separate from, any Imbalance Charges assessed and owed hereunder.

#### **5. Daily Balancing:**

"Daily Balancing" means any period when Gas end-users and/or suppliers shipping and receiving Gas on Transporter's system are required by Transporter to balance supply and usage on a daily basis within a specified percentage tolerance band ("Transporter's Tolerance Band") or be subject to penalties, cash outs or charges for noncompliance. If at any time during the Delivery Period of this Confirmation, deliveries of Gas on Transporter's system are subject to a Daily Balancing requirement, the following terms and conditions shall apply:

a. Determination of Daily Contract Quantity. For each Day on which Daily Balancing applies, the Contract Quantity (specified above as a monthly quantity) for such Day will be determined and restated as either the Buyer's "Average Daily Usage Quantity" or Buyer's "Revised Daily Usage Quantity", (as defined below) as follows:

i. "Average Daily Usage Quantity" shall be determined by dividing the monthly Contract Quantity by the number of calendar days in the applicable month of Delivery, resulting in an equal quantity of Buyer's anticipated Gas usage each calendar day of the month; or

ii. "Revised Daily Usage Quantity" means that Buyer notifies Seller, in writing by 5:30 a.m. Pacific Prevailing Time on the Trading Day before the Day (or Days) of delivery, of Buyer's anticipated Gas usage on that particular Day(s) of delivery. If Buyer fails to provide Seller with a Revised Daily Usage Quantity, the Daily Contract Quantity will be deemed to be the Average Daily Usage Quantity (as defined above) for the applicable Day or Days of Delivery. For purposes of this Confirmation, "Trading Day" shall mean the calendar day set forth on the Intercontinental Exchange ("ICE") U.S. Next Day Trading Calendar-Physical Natural Gas for the applicable calendar year.

iii. Once determined as either the Average Daily Usage Quantity or the Revised Daily Usage Quantity, such Day's amount may also be referred to as the "Daily Contract Quantity".

b. Contract Price for Revised Daily Usage Quantity (i.e. Buyer Provided Revised Quantities in Ratable Quantities for such Gas flow Day(s)). For any Trading Day where the Revised Daily Usage Quantity is specified as a ratable quantity:

i. Unless otherwise mutually agreed, the price for the Revised Daily Usage Quantity above the Average Daily Usage Quantity shall be equal to Platt's Gas Daily, "Daily Price Survey" "SoCal Citygate" "Common High" price for the applicable Trading Day.

ii. Unless otherwise mutually agreed, the repurchase price for the deemed buy-back of the Revised Daily Usage Quantity below the Average Daily Usage Quantity shall be equal to Platt's Gas Daily, "Daily Price Survey" "SoCal Citygate" "Common Low" price for the applicable Trading Day.

iii. For the avoidance of any doubt, the Contract Price paid for such incremental or surplus quantities of Gas under (i) or (ii) immediately above is in addition to, and separate from, any Imbalance Charges assessed hereunder due to Buyer's actual usage being outside of the Transporter's Tolerance Band when Daily Balancing is in effect.

c. Contract Price for Revised Daily Usage Quantity in Non-Ratable Quantities. If Buyer's Revised Daily Usage Quantity is specified as a non-ratable quantity for the Trading Day (i.e. during a weekend or holiday), the Contract Price for such Gas in excess or below the Average Daily Usage Quantity shall be mutually agreed between the parties. For the avoidance of any doubt, the Contract Price paid for such incremental or surplus quantities of Gas is in addition to, and separate from, any Imbalance Charges assessed hereunder due to Buyer's actual usage being outside of the Transporter's Tolerance Band when Daily Balancing is in effect.

d. Daily Contract Quantity Imbalance Price. For the avoidance of any doubt, at the end of each month during the Period of Delivery, the total sum of the actual quantities of Gas used each Day in excess or below the total sum of the Daily Contract Quantity shall be priced as either an incremental quantity or surplus quantity, in accordance with Section 4i-iii, above.

e. Responsibility for Imbalance Charges During Daily Balancing Periods. If Buyer's actual Gas usage on the Day of delivery is outside the Transporter's Tolerance Band in relation to the applicable Daily Contract Quantity, Buyer shall pay to Seller an Imbalance charge on the quantity of Gas that is outside the Transporter's Tolerance Band (the "Imbalance Charge"). The Imbalance Charge paid by Buyer shall be equal to the Transporter's applicable daily tolerance noncompliance charge. Buyer shall also be responsible for any other associated penalties, cash outs, or charges attributable to Buyer's actual Gas usage being outside of Transporter's Tolerance Band on any Day that Daily Balancing is in effect.

#### **Special Provisions:**

A component of the Fixed Price agreed to by the parties herein contains the actual or estimated Southern California Gas Company's Tariff - Receipt Point Access Right charges in effect for the applicable delivery month. If, after this transaction is entered into, there is any change in the amount of such Southern California Gas Company's Tariff - Receipt Point Access Right charges, the Fixed Price specified under this transaction shall be adjusted accordingly to reflect such changes in the Receipt Point Access Right charges.

Seller is the sole supplier of Gas for Buyer's facilities described in this confirmation: (INLAND EMPIRE UTLTY AGENCY CORE).

This Confirmation is being provided pursuant to and in accordance with the master natural gas purchase and/or sale contract dated 5/1/2009 between Shell Energy (the "Contract") and Counterparty and constitute part of and is subject to all of the provisions of the Contract. With respect to the above stated Deal Number identifying this specific transaction, this Confirmation shall supersede any prior Confirmations of this specific transaction.

Please evidence your acceptance of this Confirmation by signing below and returning a faxed copy to Shell Energy. If no facsimile objection to this  
SHELL ENERGY NORTH AMERICA (US), L.P. ♦ 1000 MAIN ST. LEVEL 12, HOUSTON, TX 77002

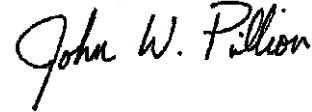
Confirmation Date:  
Trader:  
Commodity: Natural Gas

Trade Date:  
Endur #:  
Contract #: 013-NG-BS-15276

Confirmation is received by Shell Energy by 5:00 p.m., HOUSTON, Texas time, within two (2) Business Days after delivery of this Confirmation to Counterparty (unless otherwise specified in the Contract), then this Confirmation shall be the final expression of all the terms hereof and shall be binding and enforceable against Seller and Buyer regardless of whether executed by Counterparty.

**INLAND EMPIRE UTILITIES AGENCY**

**SHELL ENERGY NORTH AMERICA (US), L.P.**



Per: \_\_\_\_\_  
Name/Title: \_\_\_\_\_  
Date: \_\_\_\_\_

Per: \_\_\_\_\_  
Name/Title: John W. Pillion – Confirmations Team Lead  
Date: 04/29/2016

**Please return the signed confirmation to Fax: 713-265-2171**

**Questions and comments should be directed to Shell Energy at Phone: 877-504-2491**

Confirmation Date:  
Trader:  
Commodity: Natural Gas

Trade Date:  
Endur #:  
Contract #: 013-NG-BS-15276



**SHELL ENERGY NORTH AMERICA  
(US), L.P.**

**CONFIRMATION**

**INLAND EMPIRE UTILITIES AGENCY:**

Attn: Pietro Cambiaso  
IEUA, PO BOX 9020  
CHINO HILLS, CA 91709

Fax: 1-909-993-1951  
Phone: 1-909-993-1639

This Transaction Confirmation ("Confirmation") shall confirm and effectuate the agreement between SHELL ENERGY NORTH AMERICA (US), L.P. ("Shell Energy") and INLAND EMPIRE UTILITIES AGENCY ("Counterparty") regarding the purchase and sale of natural gas under the following terms. Capitalized terms used but not defined herein shall have the meaning ascribed to them in the Contract.

**Seller: SHELL ENERGY NORTH AMERICA (US), L.P. Buyer: INLAND EMPIRE UTILITIES AGENCY**

<u>Period of Delivery</u>	<u>Performance Obligation</u>	<u>Transporter / Delivery Point(s)</u>	<u>Contract Quantity MMBTU Per Month</u>	<u>Contract Price USD / MMBTU</u>
06/01/2016 – 05/31/2017	Firm	SOCAL RETAIL, SOCAL CITYGATE, INLAND EMPIRE UTLTY AGENCY C138	5,400	Natural Gas Intelligence Social Gas CityGate +\$0.05000

**SPECIAL CONDITIONS:**

1. The Contract Quantities specified above are baseload quantities for firm delivery and receipt each and every Day of the Month and not subject to change; provided, any necessary adjustments to the baseload Contract Quantities based upon Buyer's under or over usage of the applicable baseload Contract Quantity shall be effectuated per the Monthly Balancing and Daily Balancing provisions below.
2. **Fixed Price.** At any time during the Delivery Period of this transaction, Buyer may request a quote from Seller for a monthly fixed price, a floating price with a fixed Basis Spread or a floating price with a fixed price floor, cap, ceiling or collar (each such transaction, whether at a fixed-price or at a floating price with a fixed Basis Spread or fixed-price floor, cap, ceiling or collar, is herein called a 'Fixed Price') that is based on the New York Mercantile Exchange ('NYMEX') natural gas futures contract or otherwise as an alternative to a Contract Price that floats based on NYMEX, industry postings, reference publications, or other external market factors or indices, for a specified quantity of Gas to be delivered at the Delivery Point for the relevant Delivery Period. This request may be made by Buyer at any time during normal NYMEX trading hours (except that any request made by Buyer on the NYMEX closing day must be received by Buyer by 12:00 p.m. Eastern Time). If the parties mutually agree to a Fixed Price for a specified quantity of Gas to be delivered at the Delivery Point for a particular Month, Seller shall forward to Buyer by facsimile a 'Fixed Price Confirmation'. The Parties' agreement shall be deemed conclusive upon Buyer's receipt of Seller's written Fixed Price Confirmation unless Buyer objects to any errors contained in the Fixed Price Confirmation immediately following its receipt. Once a Fixed Price has been established for a given period, the Fixed Price shall be irrevocable as to the affected quantities, such Fixed Price shall not be subject to change and the corresponding quantities must be nominated by Buyer and shall be deemed to be the first Gas purchased during the applicable Month. If Buyer and Seller are unable to agree on a Fixed Price for any given request by Buyer, the Contract Price provided above shall apply. If Buyer and Seller have agreed to a Basis Spread Fixed Price in a Fixed Price Confirmation and Buyer does not agree upon a fixed NYMEX price to accompany the Basis Spread Fixed Price before the settlement of the prompt month, then the prompt Month price will default to the NYMEX last day settlement price plus the Basis Spread Fixed Price. As used herein, 'Basis Spread' means the location price differential, which may be either a positive or a negative amount, stated as the fixed amount above (positive) or below (negative) a floating price index or other reference point (for example, in the price term 'NYMEX - \$0.10', the Basis Spread is '-\$0.10'). For the avoidance of any doubt, this provision (d) shall be inapplicable and inoperative in the event that the parties underlying Contract already contains any fixed price election language and such fixed price election language in the Contract shall control.
3. **SoCal Gas Unbundled Firm Access Rights:** The Delivery Point specified under this Confirmation is a SoCal Gas Citygate Receipt Point and subject to the terms and conditions of the Southern California Gas Company's Tariff.
4. **Monthly Balancing:**  
If at any time during the Delivery Period of this Confirmation, deliveries of Gas on Transporter's system are subject to a monthly balancing requirement, the following terms shall apply: Buyer shall provide, or authorize Seller to receive, all information reasonably necessary for Seller to monitor Buyer's actual consumption for each facility and authorize Seller as the sole and exclusive party to utilize Buyer's Transporter(s) imbalance trade mechanism(s) to balance Buyer's account(s) for under- or over-deliveries of Gas. As long as Buyer complies with this provision, Seller shall pay all monthly balancing penalties, cash outs, and other charges properly imposed upon Seller on behalf of Buyer by the applicable Transporter(s) which relate to Gas delivered under this Confirmation.
  - i. For Buyer's usage that is greater than the sum of the Contract Quantity and any incremental quantities purchased or sold during the month ("overburns"), such quantities shall be priced as mutually agreed by Buyer and Seller. In the absence of a mutually agreed upon price, such quantities of Gas shall be priced at the average of the applicable Month's Gas Daily, "Daily Price Survey," "SoCal Citygate," "Common High".
  - ii. For Buyer's usage that is less than the sum of the Contract Quantity and any incremental quantities purchased or sold during the month ("underburns"), such quantities shall be priced and disposed of at a price that is mutually agreed upon between Buyer and Seller. In the absence of a mutually agreed upon price, such quantities of Gas shall be priced at the average of the applicable Month's Gas Daily, "Daily Price Survey," "SoCal Citygate," "Common Low".

Confirmation Date:  
Trader:  
Commodity: Natural Gas

Trade Date:  
Endur #:  
Contract #: 013-NG-BS-15276

iii. For the avoidance of any doubt, the Contract Price paid for such incremental or surplus quantities of Gas as specified under Special Condition 4.(i) or 4.(ii) immediately above is in addition to, and separate from, any Imbalance Charges assessed and owed hereunder.

#### 5. Daily Balancing:

"Daily Balancing" means any period when Gas end-users and/or suppliers shipping and receiving Gas on Transporter's system are required by Transporter to balance supply and usage on a daily basis within a specified percentage tolerance band ("Transporter's Tolerance Band") or be subject to penalties, cash outs or charges for noncompliance. If at any time during the Delivery Period of this Confirmation, deliveries of Gas on Transporter's system are subject to a Daily Balancing requirement, the following terms and conditions shall apply:

a. Determination of Daily Contract Quantity. For each Day on which Daily Balancing applies, the Contract Quantity (specified above as a monthly quantity) for such Day will be determined and restated as either the Buyer's "Average Daily Usage Quantity" or Buyer's "Revised Daily Usage Quantity", (as defined below) as follows:

i. "Average Daily Usage Quantity" shall be determined by dividing the monthly Contract Quantity by the number of calendar days in the applicable month of Delivery, resulting in an equal quantity of Buyer's anticipated Gas usage each calendar day of the month; or

ii. "Revised Daily Usage Quantity" means that Buyer notifies Seller, in writing by 5:30 a.m. Pacific Prevailing Time on the Trading Day before the Day (or Days) of delivery, of Buyer's anticipated Gas usage on that particular Day(s) of delivery. If Buyer fails to provide Seller with a Revised Daily Usage Quantity, the Daily Contract Quantity will be deemed to be the Average Daily Usage Quantity (as defined above) for the applicable Day or Days of Delivery. For purposes of this Confirmation, "Trading Day" shall mean the calendar day set forth on the Intercontinental Exchange ("ICE") U.S. Next Day Trading Calendar-Physical Natural Gas for the applicable calendar year.

iii. Once determined as either the Average Daily Usage Quantity or the Revised Daily Usage Quantity, such Day's amount may also be referred to as the "Daily Contract Quantity".

b. Contract Price for Revised Daily Usage Quantity (i.e. Buyer Provided Revised Quantities in Ratable Quantities for such Gas flow Day(s)). For any Trading Day where the Revised Daily Usage Quantity is specified as a ratable quantity:

i. Unless otherwise mutually agreed, the price for the Revised Daily Usage Quantity above the Average Daily Usage Quantity shall be equal to Platt's Gas Daily, "Daily Price Survey" "SoCal Citygate" "Common High" price for the applicable Trading Day.

ii. Unless otherwise mutually agreed, the repurchase price for the deemed buy-back of the Revised Daily Usage Quantity below the Average Daily Usage Quantity shall be equal to Platt's Gas Daily, "Daily Price Survey" "SoCal Citygate" "Common Low" price for the applicable Trading Day.

iii. For the avoidance of any doubt, the Contract Price paid for such incremental or surplus quantities of Gas under (i) or (ii) immediately above is in addition to, and separate from, any Imbalance Charges assessed hereunder due to Buyer's actual usage being outside of the Transporter's Tolerance Band when Daily Balancing is in effect.

c. Contract Price for Revised Daily Usage Quantity in Non-Ratable Quantities. If Buyer's Revised Daily Usage Quantity is specified as a non-ratable quantity for the Trading Day (i.e. during a weekend or holiday), the Contract Price for such Gas in excess or below the Average Daily Usage Quantity shall be mutually agreed between the parties. For the avoidance of any doubt, the Contract Price paid for such incremental or surplus quantities of Gas is in addition to, and separate from, any Imbalance Charges assessed hereunder due to Buyer's actual usage being outside of the Transporter's Tolerance Band when Daily Balancing is in effect.

d. Daily Contract Quantity Imbalance Price. For the avoidance of any doubt, at the end of each month during the Period of Delivery, the total sum of the actual quantities of Gas used each Day in excess or below the total sum of the Daily Contract Quantity shall be priced as either an incremental quantity or surplus quantity, in accordance with Section 4I-iii, above.

e. Responsibility for Imbalance Charges During Daily Balancing Periods. If Buyer's actual Gas usage on the Day of delivery is outside the Transporter's Tolerance Band in relation to the applicable Daily Contract Quantity, Buyer shall pay to Seller an imbalance charge on the quantity of Gas that is outside the Transporter's Tolerance Band (the "Imbalance Charge"). The Imbalance Charge paid by Buyer shall be equal to the Transporter's applicable daily tolerance noncompliance charge. Buyer shall also be responsible for any other associated penalties, cash outs, or charges attributable to Buyer's actual Gas usage being outside of Transporter's Tolerance Band on any Day that Daily Balancing is in effect.

#### Special Provisions:

A component of the Fixed Price agreed to by the parties herein contains the actual or estimated Southern California Gas Company's Tariff - Receipt Point Access Right charges in effect for the applicable delivery month. If, after this transaction is entered into, there is any change in the amount of such Southern California Gas Company's Tariff - Receipt Point Access Right charges, the Fixed Price specified under this transaction shall be adjusted accordingly to reflect such changes in the Receipt Point Access Right charges.

Seller is the sole supplier of Gas for Buyer's facilities described in this confirmation: (INLAND EMPIRE UTLTY AGENCY C138).

This Confirmation is being provided pursuant to and in accordance with the master natural gas purchase and/or sale contract dated 5/1/2009 between Shell Energy (the "Contract") and Counterparty and constitute part of and is subject to all of the provisions of the Contract. With respect to the above stated Deal Number identifying this specific transaction, this Confirmation shall supersede any prior Confirmations of this specific transaction.

Please evidence your acceptance of this Confirmation by signing below and returning a faxed copy to Shell Energy. If no facsimile objection to this



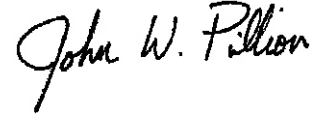
Confirmation Date:  
Trader:  
Commodity: Natural Gas

Trade Date:  
Endur #:  
Contract #: 013-NG-BS-15276

Confirmation is received by Shell Energy by 5:00 p.m., HOUSTON, Texas time, within two (2) Business Days after delivery of this Confirmation to Counterparty (unless otherwise specified in the Contract), then this Confirmation shall be the final expression of all the terms hereof and shall be binding and enforceable against Seller and Buyer regardless of whether executed by Counterparty.

**INLAND EMPIRE UTILITIES AGENCY**

**SHELL ENERGY NORTH AMERICA (US), L.P.**



Per: \_\_\_\_\_  
Name/Title: \_\_\_\_\_  
Date: \_\_\_\_\_

Per: \_\_\_\_\_  
Name/Title: John W. Pillion – Confirmations Team Lead  
Date: 04/29/2016

**Please return the signed confirmation to Fax: 713-265-2171**

**Questions and comments should be directed to Shell Energy at Phone: 877-504-2491**

**ACTION  
ITEM  
1D**



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Date: May 18, 2016

To: The Honorable Board of Directors

Through: Engineering, Operations, and Biosolids Management Committee (05/11/16)  
Finance, Legal & Administration Committee (05/11/16)

From: *for* P. Joseph Grindstaff *WJ*  
General Manager

Submitted by: Chris Berch *CB*  
Executive Manager of Engineering/Assistant General Manager

Sylvie Lee *SL*  
Manager of Planning and Environmental Resources

Subject: Contract Amendment for Demand Response Services

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## RECOMMENDATION

It is recommended that the Board of Directors:

1. Approve the amendment to the Master Service Contract No. 4600000900 with EnerNOC, Inc. for provision of demand response services; including sub-metering data management;
2. Authorize the General Manager to finalize and execute the contract amendment.

## BACKGROUND

On June 1, 2011, the Agency entered into a contract with EnerNOC Inc. for demand response services; from June 1, 2011 through September 2015, the Agency realized cumulative savings of \$329,463. In 2013 EnerNOC implemented sub-metering for all high-power and critical equipment, and monitoring services through a web-based dashboard. The sub-metering project is a valuable tool in tracking and optimizing energy usage.

With the proposed contract amendment, the Agency will continue its participation in the Demand Response program with EnerNOC through May 2019; in addition, EnerNOC will continue to provide: technical support and maintenance of all meters and software, analyst service to help review and identify energy savings opportunities, energy profiling tools (custom report, charts, alerts) through the web-based dashboard, maintenance, upgrades, off-site data backup, and mobile access.

Contract Amendment for Demand Response Services  
May 18, 2016  
Page 2 of 2

The demand response and sub-metering monitoring service agreement is part of the Agency's *Energy Management* Business Goal to optimize facility energy use and contain future energy costs.

**PRIOR BOARD ACTION**

On January 16, 2013 the Agency's Board of Directors approved the amendment to Contract No. 4600000900 with EnerNOC, Inc for the development of the Sub-Metering Project.

**IMPACT ON BUDGET**

The required monthly monitoring fee costs of \$30 per monitoring point, equivalent to \$68,000 per year are included in the Fiscal Year 2016/2017 Regional Operations and Maintenance (RO), Utilities Budget and will be funded from the expected demand response payments from EnerNOC of approximately \$70,000 per year.

Attachment: Amendment to Contract No. 4600000900 with EnerNOC, Inc.

# Contract Amendment for Demand Response Services



*Inland Empire Utilities Agency*  
A MUNICIPAL WATER DISTRICT

Pietro Cambiaso

IEUA Board of Directors Meeting  
May 2016

# Demand Response

- Time-of-Use Base Interruptible Program (2008-2010)
- Demand Response Program EnerNOC (2011 to date)
  - 1,900 kW target (2011)
  - 1,230 kW target (current)
- \$70,000 - \$100,000 annual revenue

# Sub-Metering

**Remote Access**  
Mobile access via laptop, tablet, smart phone



**Energy Profiling**  
Centralized near real-time view of energy consumption

**Reports**  
Standard and custom reports on consumption, costs, trends, power factor, benchmarks

Number: 25453  
Name: Account Summary  
Bill Details: With Account Client  
Bill To Meter Usage Comparison  
Building Report  
Buildings filtered by Annualized Cost Per Area  
Executive Cost Profile Fiscal Year  
Executive Summary by Commodity

**Bill To Meter Usage Comparison**

Location	Facility Code	Billing Period	Meter Date	Emp Cost	Rolls Util	Minerest Util	Variance	Variance %
Bradford PA	BRADFORD-BLE1	2/1/09	1/18/09	850,097.00	595,724.54	(254,372.46)	(29.91)	
Bradford PA	BRADFORD-BLE1	2/1/09	2/18/09	1,436,705.00	1,273,630.91	(163,074.09)	(11.35)	
Bradford PA	BRADFORD-BLE1	20104	3/17/11	1,737,574.00	801,415.00	(936,159.00)	(53.66)	
Total for BRADFORD-BLE1				42,004,026.00	41,503,351.49	(500,674.51)	(1.19)	
Total for Bradford PA				42,004,026.00	41,503,351.49	(500,674.51)	(1.19)	

# Recommendation

Staff recommends the Board amend the Master Service Contract No. 4600000900 with EnerNOC, Inc. for provision of demand response services including sub-metering data management.

This project meets the **Agency's Business Goal of Energy Management** in optimizing facility energy use, and containing future energy costs.





**MASTER SERVICES CONTRACT  
AMENDMENT NUMBER: 460000900-004  
FOR PROVISION OF DEMAND RESPONSE SERVICES**

THIS AMENDMENT FOUR is made and entered into this 1st day of May, 2016, by and between the Inland Empire Utilities Agency, a Municipal Water District, organized and existing in the County of San Bernardino under and by virtue of the laws of the State of California (hereinafter referred to as "Agency"); and EnerNOC, Inc. with offices located in Boston, Massachusetts (hereinafter referred to as "Consultant"), in order to establish mutually acceptable terms and conditions which will hold for and govern all "Task Order" releases subsequently issued under this Master Services Contract, and shall revise the Contract as amended:

**REVISE SECTION 3., TERM, TO READ:**

**TERM:** The term of this Contract shall extend from the date of the contract execution and terminate on June 1, 2019, unless agreed to by both parties, reduced to writing, and formally incorporated as an amendment to this Contract.

**ALL OTHER PROVISIONS OF THIS CONTRACT REMAIN UNCHANGED.**

WITNESSETH, that the parties hereto have mutually covenanted and agreed as per the above amendment items, and in doing so have caused this document to become incorporated into the Contract documents.

INLAND EMPIRE UTILITIES AGENCY:

ENERNOC, INC.:

P. Joseph Grindstaff  
General Manager

(Date)

Michael Berdik  
Deputy General Counsel

(Date)

\_\_\_\_\_

\_\_\_\_\_

DocuSigned by:  
*Michael Berdik*  
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April 28, 2016 | 11:21

**ACTION  
ITEM  
1E**

Date: May 18, 2016

To: The Honorable Board of Directors

Through: Engineering, Operations, and Biosolids Management Committee  
- (05/11/16)  
Finance, Legal & Administration Committee (05/11/16)

From: *for* P. Joseph Grindstaff *WJG*  
General Manager

Submitted by: Chris Berch *CB*  
Executive Manager of Engineering/Assistant General Manager

Sylvie Lee *SL*  
Manager of Planning and Environmental Resources

Subject: Fiscal Year 2016/2017 Ten-Year Capital Improvement Plan

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### RECOMMENDATION

It is recommended that the Board of Directors approve the proposed Fiscal Year (FY) 2016/17-2025/26 Ten-Year Capital Improvement Plan (TYCIP).

### BACKGROUND

Each year, pursuant to the terms of the Regional Sewage Service Contract based on estimated growth provided by each contracting Agency, the Agency submits a ten-year forecast of capacity demands and capital projects or Ten-Year Capital Improvement Plan (TYCIP) to the Regional Technical and Policy Committees. The current TYCIP identifies projects for the FY 2016/17 through FY 2025/26 that are needed for the rehabilitation, replacement, or expansion of the facilities owned or operated by the Agency to meet the projected increase of more than 34,000 new units over that time period.

Two major themes in the FY 2016/17 TYCIP are the continuing need for maintenance, repair, and replacement of aging equipment and facilities and the need for expansion of the regional system to meet future growth. Maintaining the Agency's facilities and infrastructure is critical to ensure the long-term reliability, compliance and quality of services that the Agency is committed to provide.

As noted in the 2015 Wastewater Facilities Master Plan, increased strength of influent wastewater is a major driving force for improvements at Agency treatment plants over the next 20 years. As

a result, major projects within the 10-year window include: the relocation of the RP-2 Solids Treatment Facility above the Prado floodplain; RP-5 liquid treatment expansion to accommodate the growth in the southern service area; and RP-1 process improvements to address aging infrastructure and capacity constraints.

While the TYCIP is instrumental for the on-going rate and budget discussions, it is intended to be a planning level document. Only projects that can be accommodated by the adopted budget will be initiated.

This item was presented to the Regional Technical and Policy Committees in March and April, and as an informational item to the Board of Directors in April. There have not been any substantial changes to the projects listed in the TYCIP since these meetings.

The TYCIP covers many programs and projects that directly align with several Agency Business Goals, including *Water Reliability*, *Wastewater Management*, *Environmental Stewardship*, and *Fiscal Responsibility*.

### **PRIOR BOARD ACTION**

On March 18, 2015, the IEUA Board of Directors adopted the FY2015/16-2024/25 TYCIP.

### **IMPACT ON BUDGET**

There is no direct impact on the budget as a result of the adoption of FY2016/17-2025/26 TYCIP.

Attachment: The TYCIP can be viewed at the following link:  
<https://ieua.hostedftp.com/CY536XaoF8TqibOL8WyivMG4B>

# Fiscal Year 2016/2017 Ten Year Capital Improvement Plan



*Inland Empire Utilities Agency*

**A MUNICIPAL WATER DISTRICT**

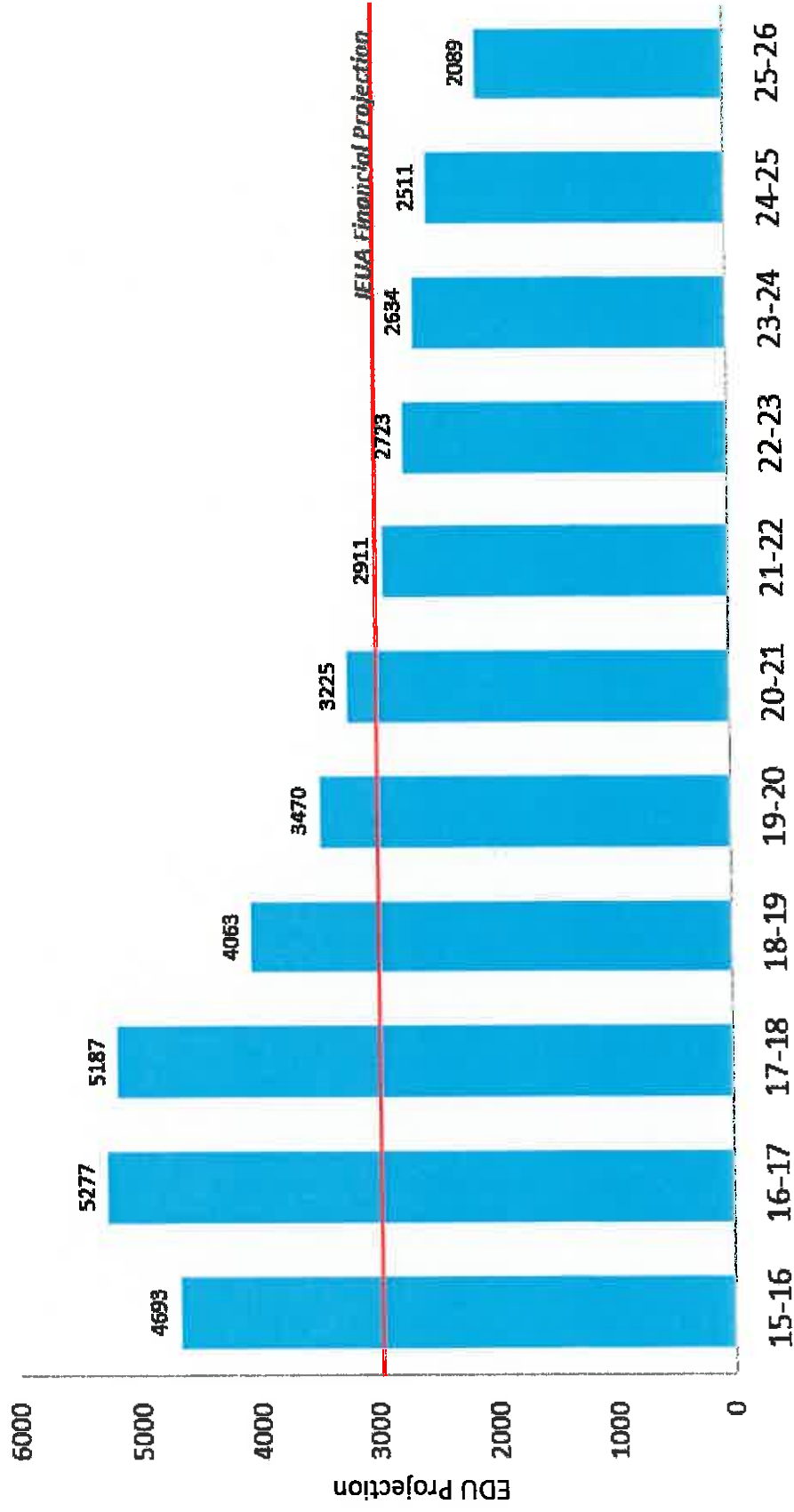
Elizabeth Hurst

IEUA Board of Directors Meeting  
May 2016

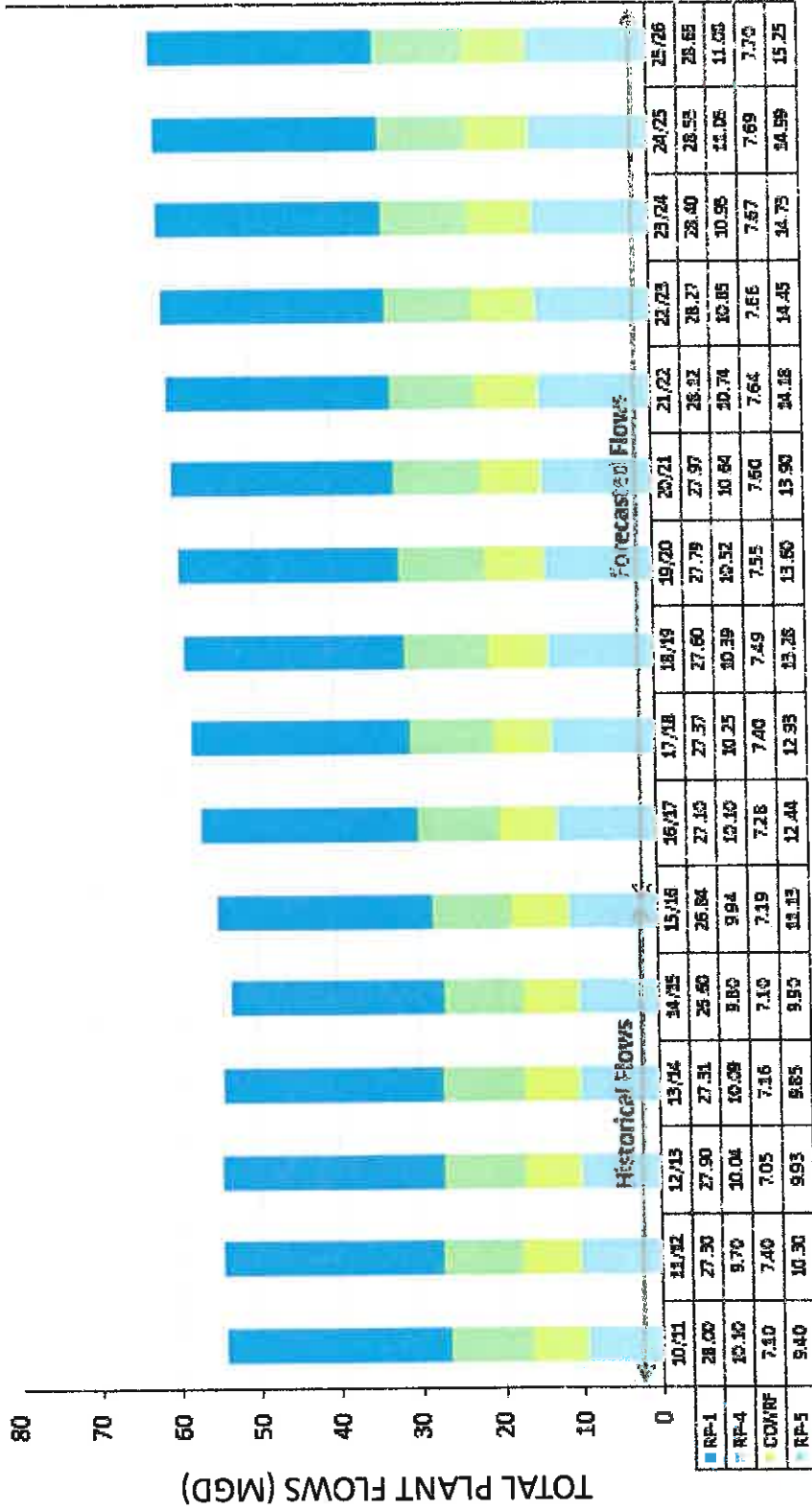
# Key Drivers of the FY16/17 TYCIP

- Member Agency growth projections
- 2015 Wastewater Facilities Master Plan Updated flow factors and concentrations
- Asset Management Plan
- 2015 Recycled Water Program Strategy Update
- 2015 Energy Management Plan
- 2016 Integrated Resources Plan
- 2016 Water Use Efficiency Business Plan

# 10-Year EDU Growth Forecast



# FY16/17-FY25/26 Member Agency Wastewater Flow Projections<sup>1</sup>



<sup>1</sup> Flows estimated at 200 GPD/EDU



# TYCIP Budget Estimate by Fund

Description	FY 16/17	FY17/18	FY18-26	TYCIP Total
GG Administrative Services Fund	\$ 4,648,012	\$ 1,680,200	\$ 6,738,600	\$ 13,066,812
NC Non-Reclaimable Wastewater Fund	\$ 1,250,000	\$ 610,000	\$ 9,280,000	\$ 11,140,000
RC Regional Capital Improvement Fund	\$ 22,104,400	\$ 24,329,000	\$ 338,965,000	\$ 385,398,400
RO Regional Operations and Maintenance	\$ 24,270,520	\$ 35,305,000	\$ 79,282,000	\$ 138,857,520
RW Recharge Water Fund	\$ 4,739,800	\$ 12,730,500	\$ 35,749,500	\$ 53,219,800
WC Recycled Water Fund	\$ 14,738,063	\$ 28,458,458	\$ 41,845,000	\$ 85,041,521
WW Water Resources Fund	\$ 6,344,195	\$ 4,550,000	\$ 35,020,000	\$ 45,914,195
<b>TOTAL</b>	<b>\$ 78,094,990</b>	<b>\$ 107,663,158</b>	<b>\$ 546,880,100</b>	<b>\$ 732,638,248</b>

# TYCIP Comparison to FY 15/16

Description		Existing FY15/16 TYCIP	Proposed FY16/17 TYCIP
GG	Administrative Services Fund	\$ 9.5 M	\$ 13.1 M
NC	Non-Reclaimable Wastewater Fund	\$ 17.2 M	\$ 11.1 M
RC	Regional Capital Improvement Fund	\$ 348.9 M	\$ 385.4 M
RO	Regional Operations and Maintenance	\$ 131.0 M	\$ 138.4 M
RW	Recharge Water Fund	\$ 49.3 M	\$ 53.2 M
WC	Recycled Water Fund	\$ 75.2 M	\$ 85.0 M
WW	Water Resources Fund	\$ 60.9 M	\$ 45.9 M
<b>TOTAL</b>		<b>\$ 692.0 M</b>	<b>\$ 732.6 M</b>



# Recommendation

Approve the proposed Fiscal Year (FY) 2016/17-2025/26 Ten-Year Capital Improvement Plan (TYCIP).

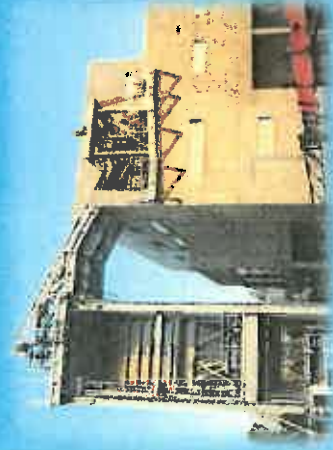
The TYCIP covers many programs and projects that directly align with several Agency Business Goals, including **Water Reliability, Wastewater Management, Environmental Stewardship, and Fiscal Responsibility.**

**INFORMATION**

**ITEM**

**2A**

# Engineering and Construction Management Project Updates May 2016





# RA14003 - Receiving Pit and Drainage

- Contractor: TBD
- Total Project Budget: \$375 K
- Scope of Work: Install a new sump pumping system at the basement level of the IERCF receiving area
- Anticipated Completion: July 2016
- Percent Complete: 0% (Bid and Award)
- Current Activities:
  - Agency staff preparing final contract documents in preparation for bids
- Focus Points:
  - Project will be advertised to pre-qualified Minor Construction Contractors



Location of the proposed basement sump

# EN14019 – RP-1 Headworks Primary and Secondary Upgrades

- Engineering Consultant: RMC Water and Environment
- Current Contract (Design): \$723 K
- Total Project Budget: \$10.5 M
- Scope of Work: Upgrade deteriorated headworks, upgrade Plant 3 scum system, and install bypass for System C flow meter
- Current Activities:
  - RMC preparing the Preliminary Design Report
- Contract Completion: November 2017
- Percent Complete: 10%
- Focus Point:
  - Agency review Preliminary Design Report



Scum Pump Location



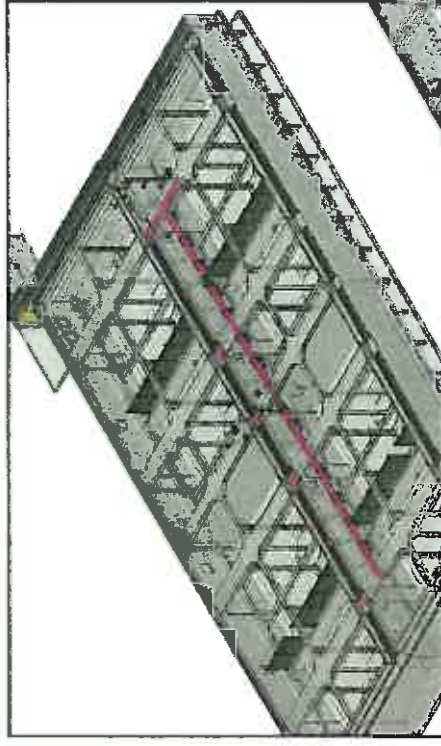
System C Flow Meter



# EN16024 – RP-1 Mixed Liquor Return Pumps

Engineering Consultant: RMC Water and Environment

- Current Contract (Design): \$468 K
- Total Project Budget: \$4 M
- Scope of Work: Install six (6) Mixed Liquor Return Pumps/VFDs and flowmeter in the Aeration Basins
- Current Activities:
  - Finalize the Project Management Plan and proceed with 85% design
  - New Scope
    - Aeration Panel Repairs, Project No. EN17040
- Contract Completion: December 2017
- Percent Complete: 70%
- Focus Point:
  - Prequalify the construction contractors on May 30, 2016
  - Add aeration plan repairs to Construction Plan



Aeration Basin – 3D Design

# EN13018 – Montclair Diversion Structure Improvements

- Contractor: J. F. Shea
- Current Contract: \$558 K
- Total Project Budget: \$3 M
- Scope of Work: Install three remotely operated electric actuated stainless steel slide gates and upgrade the metering station
- Current Activities:
  - Coordination of shutdown procedures
  - Verified existing gate dimensions
- Contract Completion: July 2016
- Percent Complete: 85%
- Focus Point:
  - Contractor to resubmit SCADA programming based on IEUA comments



Verifying Existing Gate Dimensions



Existing Gate