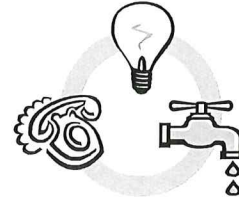


INDUSTRY PUBLIC UTILITIES COMMISSION CITY OF INDUSTRY



REGULAR MEETING AGENDA
APRIL 11, 2019 8:30 A.M.

President Mark D. Radecki
Commissioner Abraham N. Cruz
Commissioner Catherine Marcucci
Commissioner Cory C. Moss
Commissioner Newell W. Ruggles



Location: City Council Chamber, 15651 East Stafford Street, City of Industry, California

Addressing the Commission:

- ▶ **Agenda Items:** Members of the public may address the Commission on any matter listed on the Agenda. Anyone wishing to speak to the Commission is asked to complete a Speaker's Card which can be found at the back of the room and at the podium. The completed form should be submitted to the City Clerk prior to the Agenda item being called and prior to the individual being heard by the Commission.
- ▶ **Public Comments (Non-Agenda Items):** Anyone wishing to address the Commission on an item not on the Agenda may do so during the "Public Comments" period. In order to conduct a timely meeting, there will be a three-minute time limit per person for the Public Comments portion of the Agenda. State law prohibits the Commission from taking action on a specific item unless it appears on the posted Agenda. Anyone wishing to speak to the Commission is asked to complete a Speaker's Card which can be found at the back of the room and at the podium. The completed card should be submitted to the City Clerk prior to the Agenda item being called and prior to the individual being heard by the Commission.

Americans with Disabilities Act:

- ▶ In compliance with the ADA, if you need special assistance to participate in any City meeting (including assisted listening devices), please contact the City Clerk's Office (626) 333-2211. Notification of at least 48 hours prior to the meeting will assist staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting.

Agendas and other writings:

- ▶ In compliance with SB 343, staff reports and other public records permissible for disclosure related to open session agenda items are available at City Hall, 15625 East Stafford Street, Suite 100, City of Industry, California, at the office of the City Clerk during regular business hours, Monday through Thursday 8:00 a.m. to 5:00 p.m., Friday 8:00 a.m. to 4:00 p.m. Any person with a question concerning any agenda item may call the City Clerk's Office at (626) 333-2211.

-
1. Call to Order
 2. Flag Salute
 3. Roll Call
 4. Public Comments

5. **BOARD MATTERS**

5.1 Consideration of the Register of Demands for April 11, 2019

RECOMMENDED ACTION: Approve the Register of Demands and authorize the appropriate City Officials to pay the bills.

5.2 Consideration of a Professional Services Agreement with Richard Heath and Associates, Inc. for engineering and field work services in an amount not-to-exceed \$126,000

RECOMMENDED ACTION: Approve the Agreement.

5.3 Consideration of Professional Services Agreement with Power Engineers, Inc., for professional engineering services for the Waddingham 66/ 12 kV Substation in an amount not-to-exceed \$160,000

RECOMMENDED ACTION: Approve the Agreement.

6. **CLOSED SESSION**

6.1 CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION
Significant exposure to litigation pursuant to Government Code Section 54956.9(d)(2): One potential case

7. Adjournment. Next regular meeting: Thursday, May 9, 2019 at 8:30 a.m.

INDUSTRY PUBLIC UTILITIES COMMISSION

ITEM NO. 5.1

INDUSTRY PUBLIC UTILITIES COMMISSION

AUTHORIZATION FOR PAYMENT OF BILLS

Board Meeting April 11, 2019

<u>FUND</u>	<u>DESCRIPTION</u>	<u>DISBURSEMENTS</u>
161	IPUC ELECTRIC FUND	217,662.67
560	IPUC WATER FUND	41,901.37
TOTAL ALL FUNDS		259,564.04

<u>BANK</u>	<u>DESCRIPTION</u>	<u>DISBURSEMENTS</u>
IPUCELEC.WF	IPUC ELECTRIC WELLS FARGO CKING	217,662.67
IPUC.CHK	IPUC WATER BOFA CKING	41,901.37
TOTAL ALL BANKS		259,564.04

APPROVED PER CITY MANAGER

**Industry Public Utilities Commission
Wells Fargo - Electric
April 11, 2019**

Check	Date		Payee Name	Check Amount
IPUCELEC.WF.CHK - IPUC Electric Wells Fargo CHK				
10075	03/27/2019		FRONTIER	\$572.02
	Invoice	Date	Description	Amount
	2019-00001327	03/10/2019	03/10-04/09/19 SVC - GS-747 S. ANAHEIM PUENTE RD	\$157.61
	2019-00001328	03/10/2019	03/10-04/09/19 SVC - 600 BREA CYN RD	\$232.57
	2019-00001329	03/10/2019	03/10-04/09/19 SVC - EM-21808 GARCIA LN-ALARM	\$71.38
	2019-00001330	03/10/2019	03/10-04/09/19 SVC - GS-21640 VALLEY BLVD	\$55.23
	2019-00001331	03/10/2019	03/10-04/09/19 SVC - EM-21508 BAKER PKWY BLDG 22	\$55.23
10076	03/27/2019		INDUSTRY PUBLIC UTILITY COMMISSI	\$4,779.75
	Invoice	Date	Description	Amount
	2019-00001332	03/15/2019	02/10-03/10/19 SVC - 600 BREA CYN RD	\$4,779.75
10077	03/27/2019		SO CALIFORNIA EDISON COMPANY	\$11,154.88
	Invoice	Date	Description	Amount
	7501006724	03/19/2019	02/01-02/28/19 SVC - 745 ANAHEIM-PUENTE RD	\$1,027.46
	7501006734	03/19/2019	02/01-02/28/19 SVC - 133 N. AZUSA AVE	\$1,860.71
	7501006735	03/19/2019	02/01-02/28/19 SVC - 208 S. WADDINGHAM WAY	\$8,266.71
10078	04/03/2019		CALPINE ENERGY SOLUTIONS, LLC	\$150,060.56
	Invoice	Date	Description	Amount
	190870010498032	03/28/2019	WHOLESALE USE-FEB 2019	\$150,060.56
10079	04/03/2019		FRONTIER	\$211.11
	Invoice	Date	Description	Amount
	2019-00001370	03/16/2019	03/16-04/15/19 SVC - GS-208 OLD RANCH RD	\$52.77
	2019-00001371	03/19/2019	03/19-04/18/19 SVC - GS-21660 VALLEY BLVD	\$47.88
	2019-00001372	03/19/2019	03/19-04/18/19 SVC - EM-21415 BAKER PKWY	\$55.23

Industry Public Utilities Commission
Wells Fargo - Electric
April 11, 2019

Check	Date		Payee Name	Check Amount
IPUCELEC.WF.CHK - IPUC Electric Wells Fargo CHK				
	2019-00001373	03/19/2019	03/19-04/18/19 SVC - EM-21438 BAKER PKWY BLDG 25	\$55.23
10080	04/03/2019		SO CALIFORNIA EDISON COMPANY	\$423.07
	Invoice	Date	Description	Amount
	7501007652	03/22/2019	12/01-12/31/18 SVC - RELIABILITY SVC	\$423.07
10081	04/11/2019		APPLIED METERING TECHNOLOGIES	\$3,030.00
	Invoice	Date	Description	Amount
	6129	03/27/2019	UTILITY OPERATIONS-MAR 2019	\$3,030.00
10082	04/11/2019		ASTRUM UTILITY SERVICES, LLC	\$14,000.00
	Invoice	Date	Description	Amount
	031901	04/01/2019	CONSULTING SVC FOR IPUC-MAR 2019	\$14,000.00
10083	04/11/2019		CNC ENGINEERING	\$16,372.50
	Invoice	Date	Description	Amount
	458350	03/28/2019	CITY ELECTRICAL FACILITIES	\$16,372.50
10084	04/11/2019		ENCO UTILITY SERVICES	\$2,565.00
	Invoice	Date	Description	Amount
	20-3-03-51	03/04/2019	CUSTOMER ACCOUNT-FEB 2019	\$2,565.00
10085	04/11/2019		PACIFIC UTILITY INSTALLATION	\$14,493.78
	Invoice	Date	Description	Amount
	19111	03/28/2019	OPERATIONS/MAINT-VARIOUS SITES	\$7,718.00
	19107	03/28/2019	SUBSTATION MAINT	\$4,200.00
	19110	03/28/2019	SUBSTATION MAINT	\$2,575.78

Industry Public Utilities Commission
Wells Fargo - Electric
April 11, 2019

Check	Date	Payee Name	Check Amount
IPUCELEC.WF.CHK - IPUC Electric Wells Fargo CHK			

Checks	Status	Count	Transaction Amount
	Total	11	\$217,662.67

**Industry Public Utilities Commission
Bank of America - Water
April 11, 2019**

Check	Date			Payee Name	Check Amount
IPUC.CHK - IPUC Water BofA Checking					
40411	03/20/2019			L A COUNTY TAX COLLECTOR	\$389.13
	Invoice	Date	Description	Amount	
	2019-00001318	02/28/2019	PENALTY - WATER DIST. SYSTEM	\$190.88	
	2019-00001319	02/28/2019	PENALTY - WATER DIST. SYSTEM	\$30.25	
	2019-00001320	02/28/2019	PENALTY - WATER DIST. SYSTEM	\$168.00	
40412	03/27/2019			SO CALIFORNIA EDISON COMPANY	\$8,067.58
	Invoice	Date	Description	Amount	
	2019-00001324	03/15/2019	01/30-03/01/19 SVC - 1991 WORKMAN MILL U	\$8,067.58	
40413	04/11/2019			INDUSTRY PUBLIC UTILITIES COMMIS.	\$2,000.00
	Invoice	Date	Description	Amount	
	MAR-19	03/26/2019	REIMBURSE PAYROLL - MARCH 2019	\$2,000.00	
40414	04/11/2019			ROWLAND WATER DISTRICT	\$31,444.66
	Invoice	Date	Description	Amount	
	I-2282019-A	03/07/2019	CONTRACT SVC - FEBRUARY 2019	\$2,940.52	
	I-2282019-B	03/07/2019	CONTRACT SVC & BOOSTER PUMP REPAIRS - FEBRUARY	\$28,504.14	

Checks	Status	Count	Transaction Amount
	Total	4	\$41,901.37

INDUSTRY PUBLIC UTILITIES COMMISSION

ITEM NO. 5.2



INDUSTRY PUBLIC UTILITIES COMMISSION

MEMORANDUM

TO: Honorable President and Members of the Industry Public Utilities Commissioners

FROM: Troy Helling, Public Utilities Director *TH*

STAFF: Joshua Nelson, Contract IPUC Engineer, CNC Engineering *JN*
Dev Birla, Operations Manager, CNC Engineering *DB*

DATE: April 11, 2019

SUBJECT: Consideration of a Professional Services Agreement with Richard Heath and Associates, Inc. for engineering and field work services in an amount not to exceed \$126,000

Background:

On March 28, 2019, the Industry Public Utilities Commission (IPUC) approved an Energy Efficiency (EE) Program (under public purpose program charge or "PPCC") to comply with Assembly Bill (AB) 1890 passed in 1996. IPUC Board approved the EE Program during that meeting and adopted for implementation effective April 15, 2019. Under this EE Program, \$307,000.00 budget was approved for next two years, out of which 126,000.00 were allocated to hire a private contractor to assist IPUC with some of the implementation part. The breakdown of that allocated budget is covered under Table 1.

Table 1

#	Program Name	Program Description	Budget
1	Large General Service Program: Energy Audits	ASHRAE Level I, II, III Energy Audits	\$86,000
2	General Service Program: Energy Surveys	Energy survey of existing facilities and financial feasibility of recommended energy efficiency measures	\$10,000

3	General Service Program: Direct Install Program	Installation of energy efficiency equipment with rebates up to \$1,000 per customer	\$18,000
4	Domestic Service Program: Direct Install Program	Perform energy survey and allowances up to \$500 per every household for qualified expenditures	\$12,000
TOTAL			\$126,000

In order to get the maximum participation from the customers and benefits for maximum number of customers, it will require a flexibility to exceed amount in some programs and less amount in others as long as the total amount does not exceed \$126,000. This required support from the private contractor includes both for engineering and field work and details of scope of work is covered under Exhibit A of the Professional Services Agreement (PSA).

For a number of years, the members of the Southern California Public Power Authority (SCPPA) have competitively selected Richard Heath and Associates, Inc. (RHA), has an office located in the City of Industry, to implement their EE Programs. Those SCPPA members and Public Owned Utilities (POUs) include Anaheim, Azusa, Burbank, Colton, Los Angeles Department of Water and Power, Riverside and Vernon among others. The signed PSA between IPUC and RHA contained in Exhibit B reflects the same rates as listed in the competitively bid SCPPA master agreement.

Discussion:

As stated above IPUC would need support of a private contractor to perform the energy surveys and ASHRAE energy audits and provide other related support to implement EE Program. RHA has the knowledge and the expertise and is currently implementing the EE Program for many local POUs. Their hourly rates and their contract prices for direct installed items are identical to local POUs and SCPPA members. For these reasons, IPUC Staff believes that RHA is a good choice.

Fiscal Impact:

The recommended action for approval of Professional Services Agreement with RHA to implement the EE Program will have an estimated fiscal impact of \$126,000 in next two years effective April 15, 2019 and will be funded from the restricted PPC previously collected from customers.

Recommendation:

It is recommended that the IPUC approve the Professional Services Agreement with Richard Heath and Associates, Inc. in an amount not-to-exceed \$126,000.

Exhibit:

- A. Professional Services Agreement with Richard Heath and Associates, Inc. dated April 11, 2019

TH/JN/DB:jv

EXHIBIT A

Professional Services Agreement with Richard Heath and Associates, Inc. dated April
11, 2019

[Attached]

INDUSTRY PUBLIC UTILITIES COMMISSION

PROFESSIONAL SERVICES AGREEMENT

This PROFESSIONAL SERVICES AGREEMENT (“Agreement”), is made and effective as of April 11, 2019 (“Effective Date”), between the Industry Public Utilities Commission (“IPUC”) and Richard Heath and Associates, Inc., a California Corporation located at 590 W. Locust Avenue, Suite 103, Fresno, CA 93650, (“RHA” or “Contractor” with California License # 608302, Classes B, C10 and C20). The IPUC and Contractor are hereinafter collectively referred to as the “Parties”.

RECITALS

WHEREAS, IPUC desires to engage Contractor to perform the services described herein, and Contractor desires to perform such services in accordance with the terms and conditions set forth herein.

NOW, THEREFORE, for and in consideration of the mutual covenants and conditions herein contained, IPUC and Contractor agree as follows:

1. TERM

This Agreement shall commence on the Effective Date and shall remain and continue in effect until tasks described herein are completed, but in no event later than June 30, 2021, unless sooner terminated pursuant to the provisions of this Agreement.

2. SERVICES

(a) Contractor shall perform the tasks (“Services”) described and set forth in Exhibit A, attached hereto and incorporated herein as though set forth in full. (“Scope of Services”). Tasks other than those specifically described in the Scope of Services shall not be performed without prior written approval of the IPUC. The Services shall be performed by Contractor, unless prior written approval is first obtained from the IPUC. In the event of conflict or inconsistency between the terms of this Agreement and Exhibit A, the terms of this Agreement shall prevail.

(b) IPUC shall have the right to request, in writing, changes to the Services. Any such changes mutually agreed upon by the Parties, and any corresponding increase or decrease in compensation, shall be incorporated by written amendment to this Agreement.

(c) Contractor shall perform all Services in a manner reasonably satisfactory to the IPUC and in a first-class manner in conformance with the standards of quality normally observed by an entity providing professional engineering consulting services, serving a municipal agency.

(d) Contractor shall comply with all applicable federal, state, and local laws, regulations and ordinances in the performance of this Agreement, including but not limited to, the conflict of interest provisions of Government Code Section 1090 and the Political Reform

Act (Government Code Section 81000 *et seq.*)). During the term of this Agreement, Contractor shall not perform any work for another person or entity for whom Contractor was not working on the Effective Date if both (i) such work would require Contractor to abstain from a decision under this Agreement pursuant to a conflict of interest statute or law; and (ii) IPUC has not consented in writing to Contractor's performance of such work. No officer or employee of IPUC shall have any financial interest in this Agreement that would violate California Government Code Sections 1090 *et seq.* Contractor hereby warrants that it is not now, nor has it been in the previous twelve (12) months, an employee, agent, appointee, or official of the IPUC. If Contractor was an employee, agent, appointee, or official of the IPUC in the previous twelve (12) months, Contractor warrants that it did not participate in any manner in the forming of this Agreement. Contractor understands that, if this Agreement is made in violation of Government Code §1090 *et. seq.*, the entire Agreement is void and Contractor will not be entitled to any compensation for Services performed pursuant to this Agreement, and Contractor will be required to reimburse the IPUC for any sums paid to the Contractor. Contractor understands that, in addition to the foregoing, it may be subject to criminal prosecution for a violation of Government Code § 1090 and, if applicable, will be disqualified from holding public office in the State of California.

(e) Contractor represents that it has, or will secure at its own expense, all licensed personnel required to perform the Services. All Services shall be performed by Contractor or under its supervision, and all personnel engaged in the Services shall be qualified and licensed to perform such services.

3. MANAGEMENT

Industry Public Utilities Director or his designee, shall represent the IPUC in all matters pertaining to the administration of this Agreement, review and approval of all products submitted by Contractor, but shall have no authority to modify the Services or the compensation due to Contractor.

4. PAYMENT

(a) The IPUC agrees to pay Contractor monthly, in accordance with the payment rates and terms and the schedule of payment as set forth in Exhibit B ("Rate Schedule"), attached hereto and incorporated herein by this reference as though set forth in full, based upon actual time spent on the above tasks. This amount shall not exceed One Hundred Twenty – Six Thousand Dollars (\$126,000.00) for the total Term of the Agreement unless additional payment is approved as provided in this Agreement.

(b) Contractor shall not be compensated for any services rendered in connection with its performance of this Agreement which are in addition to those set forth herein, unless such additional services are authorized in advance and in writing by the IPUC. Contractor shall be compensated for any additional services in the amounts and in the manner as agreed to by IPUC and Contractor at the time IPUC's written authorization is given to Contractor for the performance of said services.

(c) Contractor shall submit invoices monthly for actual services performed. Invoices shall be submitted on or about the first business day of each month, or as soon thereafter

as practical, for services provided in the previous month. Payment shall be made within thirty (30) days of receipt of each invoice as to all non-disputed fees. If the IPUC disputes any of Contractor's fees it shall give written notice to Contractor within thirty (30) days of receipt of an invoice of any disputed fees set forth on the invoice. Any final payment under this Agreement shall be made within 45 days of receipt of an invoice therefore.

5. SUSPENSION OR TERMINATION OF AGREEMENT

(a) The IPUC may at any time, for any reason, with or without cause, suspend or terminate this Agreement, or any portion hereof, by serving upon the Contractor at least ten (10) days prior written notice. Upon receipt of said notice, the Contractor shall immediately cease all work under this Agreement, unless the notice provides otherwise. If the IPUC suspends or terminates a portion of this Agreement such suspension or termination shall not make void or invalidate the remainder of this Agreement.

(b) In the event this Agreement is terminated pursuant to this Section, the IPUC shall pay to Contractor the actual value of the work performed up to the time of termination, provided that the work performed is of value to the IPUC. Upon termination of the Agreement pursuant to this Section, the Contractor shall submit an invoice to the IPUC pursuant to Section 5 of this Agreement.

6. OWNERSHIP OF DOCUMENTS

(a) Contractor shall maintain complete and accurate records with respect to sales, costs, expenses, receipts, and other such information required by IPUC that relate to the performance of services under this Agreement. Contractor shall maintain adequate records of services provided in sufficient detail to permit an evaluation of services. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Contractor shall provide free access to the representatives of IPUC or its designees at reasonable times to review such books and records; shall give IPUC the right to examine and audit said books and records; shall permit IPUC to make transcripts or copies therefrom as necessary; and shall allow inspection of all work, data, documents, proceedings, and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a period of three (3) years after receipt of final payment.

(b) Upon completion of, or in the event of termination or suspension of this Agreement, all original documents, designs, drawings, maps, models, computer files, surveys, notes, and other documents prepared in the course of providing the services to be performed pursuant to this Agreement shall become the sole property of the IPUC and may be used, reused, or otherwise disposed of by the IPUC without the permission of the Contractor. With respect to computer files, Contractor shall make available to the IPUC, at the Contractor's office, and upon reasonable written request by the IPUC, the necessary computer software and hardware for purposes of accessing, compiling, transferring, copying and/or printing computer files. Contractor hereby grants to IPUC all right, title, and interest, including any copyright, in and to the documents, designs, drawings, maps, models, computer files, surveys, notes, and other documents prepared by Consultant in the course of providing the services under this Agreement. All reports, documents, or other

written material developed by Contractor in the performance of the Services pursuant to this Agreement, shall be and remain the property of the IPUC.

7. INDEMNIFICATION

(a) Indemnity for professional liability

When the law establishes a professional standard of care for Contractor's Services, to the fullest extent permitted by law, Contractor shall indemnify, protect, defend and hold harmless the IPUC and any and all of its officials, employees and agents ("Indemnified Parties") from and against any and all losses, liabilities, damages, costs and expenses, including legal counsel's fees and costs caused in whole or in part by any negligent or wrongful act, error or omission of Contractor, its officers, agents, employees or Subcontractors (or any agency or individual that Contractor shall bear the legal liability thereof) in the performance of professional services under this Agreement.

(b) Indemnity for other than professional liability

Other than in the performance of professional services and to the full extent permitted by law, Contractor shall indemnify, defend and hold harmless IPUC, and any and all of its employees, officials and agents from and against any liability (including liability for claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, whether actual, alleged or threatened, including legal counsel fees and costs, court costs, interest, defense costs, and expert witness fees), where the same arise out of, are a consequence of, or are in any way attributable to, in whole or in part, the performance of this Agreement by Contractor or by any individual or agency for which Contractor is legally liable, including but not limited to officers, agents, employees or subcontractors of Contractor.

(c) DUTY TO DEFEND. In the event the IPUC, its officers, employees, agents and/or volunteers are made a party to any action, claim, lawsuit, or other adversarial proceeding arising from the performance of the services encompassed by this Agreement, and upon demand by IPUC, Contractor shall have an immediate duty to defend the IPUC at Contractor's cost or at IPUC's option, to reimburse the IPUC for its costs of defense, including reasonable attorney's fees and costs incurred in the defense of such matters.

Payment by IPUC is not a condition precedent to enforcement of this indemnity. In the event of any dispute between Contractor and IPUC, as to whether liability arises from the sole negligence of the IPUC or its officers, employees, or agents, Contractor will be obligated to pay for IPUC's defense until such time as a final judgment has been entered adjudicating the IPUC as solely negligent. Contractor will not be entitled in the absence of such a determination to any reimbursement of defense costs including but not limited to attorney's fees, expert fees and costs of litigation.

8. INSURANCE

Contractor shall maintain prior to the beginning of and for the duration of this Agreement insurance coverage as specified in Exhibit C attached hereto and incorporated herein by reference.

9. INDEPENDENT CONTRACTOR

(a) Contractor is and shall at all times remain as to the IPUC a wholly independent consultant and/or independent contractor. The personnel performing the services under this Agreement on behalf of Contractor shall at all times be under Contractor's exclusive direction and control. Neither IPUC nor any of its officers, employees, or agents shall have control over the conduct of Contractor or any of Contractor's officers, employees, or agents, except as set forth in this Agreement. Contractor shall not at any time or in any manner represent that it or any of its officers, employees, or agents are in any manner officers, employees, or agents of the IPUC. Contractor shall not incur or have the power to incur any debt, obligation, or liability whatever against the IPUC, or bind the IPUC in any manner.

(b) No employee benefits shall be available to Contractor in connection with the performance of this Agreement. Except for the fees paid to Contractor as provided in the Agreement, IPUC shall not pay salaries, wages, or other compensation to Contractor for performing services hereunder for IPUC. IPUC shall not be liable for compensation or indemnification to Contractor for injury or sickness arising out of performing services hereunder.

10. LEGAL RESPONSIBILITIES

The Contractor shall keep itself informed of State and Federal laws and regulations which in any manner affect those employed by it or in any way affect the performance of its service pursuant to this Agreement. The Contractor shall at all times observe and comply with all such laws and regulations. The IPUC, and its officers and employees, shall not be liable at law or in equity occasioned by failure of the Contractor to comply with this Section.

11. UNDUE INFLUENCE

Contractor declares and warrants that no undue influence or pressure was used against or in concert with any officer or employee of the IPUC in connection with the award, terms or implementation of this Agreement, including any method of coercion, confidential financial arrangement, or financial inducement. No officer or employee of the IPUC has or will receive compensation, directly or indirectly, from Contractor, or from any officer, employee or agent of Contractor, in connection with the award of this Agreement or any work to be conducted as a result of this Agreement. Violation of this Section shall be a material breach of this Agreement entitling the IPUC to any and all remedies at law or in equity.

12. NO BENEFIT TO ARISE TO LOCAL OFFICERS AND EMPLOYEES

No member, officer, or employee of IPUC, or their designees or agents, and no public official who exercises authority over or responsibilities with respect to the Services during his/her tenure or for one year thereafter, shall have any interest, direct or indirect, in any agreement or sub-agreement, or the proceeds thereof, for work to be performed in connection with the Services performed under this Agreement.

13. RELEASE OF INFORMATION/CONFLICTS OF INTEREST

(a) All information gained by Contractor in performance of this Agreement shall be considered confidential and shall not be released by Contractor without IPUC's prior written authorization. Contractor, its officers, employees, agents, or subconsultants, shall not without written authorization from the IPUC, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories, or other information concerning the work performed under this Agreement or relating to any project or property located within the IPUC, unless otherwise required by law or court order.

(b) Contractor shall promptly notify IPUC should Contractor, its officers, employees, agents, or subcontractors be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions, or other discovery request ("Discovery"), court order, or subpoena from any person or party regarding this Agreement and the work performed there under or with respect to any project or property located within the IPUC, unless Contractor is prohibited by law from informing the IPUC of such Discovery, court order or subpoena. IPUC retains the right, but has no obligation, to represent Contractor and/or be present at any deposition, hearing, or similar proceeding as allowed by law. Unless IPUC is a party to the lawsuit, arbitration, or administrative proceeding and is adverse to Contractor in such proceeding, Consultant agrees to cooperate fully with the IPUC and to provide the opportunity to review any response to discovery requests provided by Consultant. However, IPUC's right to review any such response does not imply or mean the right by IPUC to control, direct, or rewrite said response.

14. NOTICES

Any notices which either party may desire to give to the other party under this Agreement must be in writing and may be given either by (i) personal service, (ii) delivery by a reputable document delivery service, such as but not limited to, Federal Express, which provides a receipt showing date and time of delivery, or (iii) mailing in the United States Mail, certified mail, postage prepaid, return receipt requested, addressed to the address of the party as set forth below or at any other address as that party may later designate by notice:

To IPUC: Industry Public Utilities Commission
15625 E. Stafford, Suite 100
City of Industry, CA 91744

Attention: Public Utilities Director

With a Copy to: James M. Casso, Legal Counsel
Casso & Sparks, LLP
13200 Crossroads Parkway North, Suite 345
City of Industry, CA 91746

To Contractor: Roberto Blancas, Program Manager III
1202 John Reed Ct.
City of Industry, CA 91745

15. ASSIGNMENT

The Contractor shall not assign the performance of this Agreement, nor any part thereof, nor any monies due hereunder, without prior written consent of the IPUC.

Before retaining or contracting with any subconsultant for any services under this Agreement, Contractor shall provide IPUC with the identity of the proposed subconsultant, a copy of the proposed written contract between Contractor and such subcontractors which shall include an indemnity provision similar to the one provided herein and identifying IPUC as an indemnified party, or an incorporation of the indemnity provision provided herein, and proof that such proposed subconsultant carries insurance at least equal to that required by this Agreement or obtain a written waiver from the IPUC for such insurance.

Notwithstanding Contractor's use of any subcontractor, Contractor shall be responsible to the IPUC for the performance of its subcontractor as it would be if Contractor had performed the Services itself. Nothing in this Agreement shall be deemed or construed to create a contractual relationship between the IPUC and any subcontractor employed by Contractor. Contractor shall be solely responsible for payments to any subcontractors. Contractor shall indemnify, defend and hold harmless the Indemnified Parties for any claims arising from, or related to, the services performed by a subcontractor under this Agreement.

16. GOVERNING LAW/ATTORNEYS' FEES

The IPUC and Contractor understand and agree that the laws of the State of California shall govern the rights, obligations, duties, and liabilities of the parties to this Agreement and also govern the interpretation of this Agreement. Any litigation concerning this Agreement shall take place in the municipal, superior, or federal district court in Los Angeles County, California. If any action at law or suit in equity is brought to enforce or interpret the provisions of this Agreement, or arising out of or relating to the Services provided by Contractor under this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees and all related costs, including costs of expert witnesses and consultants, as well as costs on appeal, in addition to any other relief to which it may be entitled.

17. ENTIRE AGREEMENT

This Agreement contains the entire understanding between the Parties relating to the obligations of the Parties described in this Agreement. All prior or contemporaneous agreements, understandings, representations, and statements, oral or written and

pertaining to the subject of this Agreement or with respect to the terms and conditions of this Agreement, are merged into this Agreement and shall be of no further force or effect. Each party is entering into this Agreement based solely upon the representations set forth herein and upon each party's own independent investigation of any and all facts such party deems material.

18. SEVERABILITY

If any term or provision of this Agreement or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, then such term or provision shall be amended to, and solely to, the extent necessary to cure such invalidity or unenforceability, and in its amended form shall be enforceable. In such event, the remainder of this Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and be enforced to the fullest extent permitted by law.

19. COUNTERPARTS

This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, but all of which taken together shall constitute one and the same instrument.

20. CAPTIONS

The captions appearing at the commencement of the sections hereof, and in any paragraph thereof, are descriptive only and shall have no significance in the interpretation of this Agreement.

21. WAIVER

The waiver by IPUC or Contractor of any breach of any term, covenant or condition herein contained shall not be deemed to be a waiver of such term, covenant or condition or of any subsequent breach of the same or any other term, covenant or condition herein contained. No term, covenant or condition of this Agreement shall be deemed to have been waived by IPUC or Contractor unless in writing.

22. REMEDIES

Each right, power and remedy provided for herein or now or hereafter existing at law, in equity, by statute, or otherwise shall be cumulative and shall be in addition to every other right, power, or remedy provided for herein or now or hereafter existing at law, in equity, by statute, or otherwise. The exercise, the commencement of the exercise, or the forbearance of the exercise by any party of any one or more of such rights, powers or remedies shall not preclude the simultaneous or later exercise by such party of any of all of such other rights, powers or remedies.

23. AUTHORITY TO EXECUTE THIS AGREEMENT

The person or persons executing this Agreement on behalf of Contractor represents and warrants that he/she has the authority to execute this Agreement on behalf of the Contractor and has the authority to bind Contractor to the performance of its obligations hereunder.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed as of the Effective Date.

“IPUC”
Industry Public Utilities Commission

“CONTRACTOR”
Richard Heath and Associates, Inc. LLC

By: _____
Troy Helling, Public Utilities Director

By _____
Ernie Escobedo, CFO

Attest:

By: _____
Julie Gutierrez- Robles, Deputy Commission Secretary

Approved as to form:

By: _____
James M. Casso, General Counsel

Attachments:	Exhibit A	Scope of Services
	Exhibit B	Rate Schedule
	Exhibit C	Insurance Requirements
	Exhibit D	Large General Service ASHRAE Audit Procedure
	Exhibit E	General Service Energy Survey and Direct Install Program
	Exhibit F	Domestic Energy Survey and Direct Install Program

EXHIBIT A

SCOPE OF SERVICES

The scope of work is to provide both engineering services support and field work support to assist IPUC in the implementation of Energy Efficiency Program. The breakdown of the scope of work is as covered under Table 2 below:

Table 2

#	Program Name	Program Description and RHA Scope
1	Large General Service Program: Energy Audits	Perform ASHRAE Level I, II, III Energy Audits for large general service all in accordance with ASHRAE Energy Audit Procedure covered under Exhibit D
2	General Service Program: Energy Surveys	Perform energy survey of existing facilities and financial feasibility of recommended energy efficiency measures all in accordance with Exhibit E
3	General Service Program: Direct Install Program	Perform installation of energy efficiency equipment with rebates up to \$1,000 per customer all in accordance with Exhibit E
4	Domestic Service Program: Direct Install Program	Perform energy survey and allowances up to \$500 per every two years for qualified expenditure customer

It may also include if needed, provide assistance in reviewing and processing of the incentive projects submitted by the customers and make recommendation to IPUC Staff for reimbursement.

EXHIBIT B
RATE SCHEDULE

As stated in the scope of services the total amount of this Professional Services Agreement is not-to-exceed \$126,000.00. Rate Schedule is as below:

Table 3: Hourly Rates for Engineering Services

<u>Sr. No.</u>	<u>Description of Position</u>	<u>Hourly rate in \$</u>
1.	Director of Engineering	\$150.00
2.	Professional Engineer	\$165.00
3.	Energy Engineer Manager II	\$105.00
4.	Energy Engineer III	\$83.00
5.	Energy Engineer II	\$83.00
6.	Energy Engineer I	\$58.00
7.	Energy Engineer Assistant	\$58.00

Table 4: Hourly Rates for Field Services- Prevailing Wage

<u>Sr. No.</u>	<u>Description of Position</u>	<u>Hourly rate in \$</u>
1.	Electrical Technician	\$112.00
2.	HVAC Technician	\$101.09
3.	Data Base Support and Project Tracking	\$94.35
4.	Residential Inspection Audits –Lighting and HVAC	\$112.29
5.	Commercial Inspection Audits - Lighting and HVAC	\$112.29
6.	ASHRAE Audit Levels I,II and III	\$112.29
7.	Energy Modeling	\$112. 29

Table 5: IPUC Energy Efficiency Measures and Rates

Most of the items under this table will not be applicable to IPUC and for all measures included in the SCPA Contract.

Measure Code	Installed Measure	Measure Price
<i>INTERIOR LIGHTING</i>		
Linear Fluorescent Retrofit		
LGT362	4ft 4L 32W T8 High Perf w/EB	\$ 80.73
LGT367	4ft 4L 32W T8 High Perf w/2EB	\$ 93.75
LGT373	4ft 3L 32W T8 High Perf w/2EB	\$ 85.68
LGT373a	4ft 3L 32W T8 High Perf w/Elec	\$ 72.66
LGT383	4ft 2L w/EB (Retro)	\$ 58.94

LGT381	4ft 2L T8 U6 w/EB	\$ 70.87
LGT393	4ft 1L 32W T8 High Perf w/EB	\$ 56.78
LGT401	8ft 4L T8 High Perf w/2EB	\$ 142.51
LGT404	8ft 4L T8 High Perf w/EB	\$ 217.53
LGT404	8ft 4L T8 High Perf w/EB	\$ 217.53
LGT405	8ft 2L T8 w/EB	\$ 100.79
LGT406	8ft 2L 28-32W w/EB & retro kit	\$ 112.67
LGT403	8ft 2L T8HO w/EB (Retrofit)	\$ 148.86
LGT407	8ft 1L T8 w/EB	\$ 80.71
LGT408	6ft 4L 28-32W w/EB & retro kit	\$ 110.89
LGT409	6ft 2L 28-32W w/EB & retro kit	\$ 93.87
LGT410	3ft 2L 25W 2nd gen T8 w/EB	\$ 61.32
LGT412	3ft 1L 25W 2nd gen T8 w/EB	\$ 57.97
LGT415	3ft 4L 25W 2nd gen T8 w/EB (6-ft conv kit)	\$ 95.16
LGT416	2ft 4L F17 2nd gen T8 w/EB	\$ 134.22
LGT420	2ft 2L 32T8 U6 w/EB	\$ 70.87
LGT416	2ft 4L F17 2nd gen T8 w/EB	\$ 134.22
LGT422	2ft 2L F17 2nd gen T8 w/EB	\$ 60.22
LGT425	2ft 1L F17 2nd gen T8 w/EB	\$ 57.42
LGT426	4ft tube guard	\$ 16.03
LGT427	8ft tube guard	\$ 16.99
PARTS01_042017	Clear Acrylic Lens Cover (wrap fixture)	\$ 56.95
PARTS01	Clear Acrylic Lens Cover	\$ 17.35
Linear Fluorescent New Fixture		
LGT377	4ft 2L w/EB (New Fixt)	\$ 111.76
LGT403a	8ft 2L T8HO w/EB (New Fixt)	\$ 137.27
T8 Lamps		
LGT 347a	8ft T8 Bulbs Only	\$ 8.27
LGT 347	4ft T8 Bulbs Only	\$ 5.11
Electronic Ballast		
LGT730	Electronic Ballast (Low, Normal, or High ballast factors)	\$ 39.86
INTERIOR LIGHTING T8 DELAMPING		
4ft Retrofit / Delamping		
LGT461	4ft 3L T8 Retro/Delamp	\$ 102.02
LGT462	4ft 2L T8 Retro/Delamp	\$ 74.06
4ft New Fixture / Delamping		
LGT464a	4ft 4L T8 New Fix/Delamp	\$ 165.28
LGT463	4ft 3L T8 New Fix/Delamp	\$ 163.12
LGT464	4ft 2L T8 New Fix/Delamp	\$ 153.76
4ft F25T8 retrofit / Delamping with Anti-Striation Ballast		
LGT610	4ft 3 Lamp F25T8 Retrofit	\$ 123.92
LGT611	4ft 2 Lamp F25T8 Retrofit	\$ 95.53
LGT612	4ft 1 Lamp F25T8 Retrofit	\$ 89.04
HID Replacement to Linear Florescent Fixture		
LGT473	4ft 4 Lamp T8 High Bay Fixture	\$ 267.82
LGT474	4ft 2 Lamp T5HO High Bay Fixture	\$ 273.70

LGT475	4ft 6 Lamp T8 High Bay Fixture	\$ 291.34
LGT476	4ft 4 Lamp T5HO High Bay Fixture	\$ 302.62
LGT477	4ft 8 Lamp T8 High Bay Fixture	\$ 329.26
LGT478	4ft 6 Lamp T5HO High Bay Fixture	\$ 336.94
LGT479	4ft 10 Lamp T8 High Bay Fixture	\$ 441.58
LGT480	4ft 8 Lamp T5HO High Bay Fixture	\$ 427.66
8ft T12 HO Exterior Retrofit to 8ft T8 HO		
LGT481	8ft 1 Lamp T8HO Exterior Retrofit	\$ 92.91
LGT482	8ft 2 Lamp T8HO Exterior Retrofit	\$ 103.05
LGT483	8ft 3 Lamp T8HO Exterior Retrofit	\$ 136.89
LGT484	8ft 4 Lamp T8HO Exterior Retrofit	\$ 161.80
LGT485	8ft 6 Lamp T8HO Exterior Retrofit	\$ 205.78
CFL		
LGT428	CFL 5-13W**	\$ 20.95
	5 W Screw-in CFL**	\$ 20.95
	7 W Screw-in CFL**	\$ 20.95
	9 W Screw-in CFL**	\$ 20.95
LGT428c	9 W Globe CFL**	\$ 20.95
	13W/60W Spiral - Indoor CFL**	\$ 20.95
CFL 14-26W		
	11 W Screw-in CFL**	\$ 20.95
LGT429i	14 W A-Type Screw-in**	\$ 21.79
LGT429a	14W Screw-in CFL**	\$ 17.29
LGT429l	18W Screw-in CFL**	\$ 22.27
LGT429k	23W Screw-in CFL**	\$ 18.16
LGT430	>= 27W**	\$ 25.03
LGT430a_0715	1 27W/100W Spiral Indoor CFL**	\$ 21.79
LGT432	CFL 11W R20**	\$ 21.07
	9 W R20 Flood Type**	\$ 20.50
LGT432a	11 W R20 Flood Type R20 2700K**	\$ 21.70
	11 W R20 Flood Type R20 4000K**	\$ 21.70
LGT433	CFL 15W R30**	\$ 20.77
LGT433e	9W CFL Candle/Base**	\$ 18.97
LGT433	CFL Indoor Flood, 14 W R20**	\$ 21.43
LGT433a	CFL Indoor Flood, 15 W R30 2700K**	\$ 21.43
LGT434e	23W CFL PAR38 2700K**	\$ 25.17
LGT434f	14W CFL PAR20 2700K**	\$ 19.20
LGT434g	19 W CFL R40 2700K**	\$ 25.17
	19 W Screw-in Par 38 CFL**	\$ 22.45
	20 W Screw-in Par 38 CFL**	\$ 22.45
	CFL Indoor Flood, 20 W R40 2700K**	\$ 22.45
	CFL Indoor Flood, 20 W R30 3200K**	\$ 22.45
LGT435	CFL Indoor Flood, 25 W R30 2700K**	\$ 20.47
LGT436	32W CRL Wall Pack Fixture**	\$ 130.01
LGT437	CFL 65W Floodlight Fixture**	\$ 133.61
LGT438	CFL 65W Yardlight Fixture**	\$ 130.61
PAR16 / MR16 Incandescent to CFL		
9-11 W PAR16		
LGT558	9W PAR16**	\$ 31.76

LGT559	11W PAR16**	\$ 31.76
	PAR20 Incandescent to CFL 9-14W PAR20	
LGT560	9W PAR20**	\$ 30.56
LGT561	11W PAR20**	\$ 30.56
LGT562	14W PAR20**	\$ 30.56
	PAR30 Incandescent to CFL 15-19W PAR30	
LGT564	19W PAR30**	\$ 30.53
	PAR38 CFL 19-23W PAR38	
LGT565	19W PAR38**	\$ 31.31
LGT566	20W PAR38**	\$ 31.31
LGT567	23W PAR38**	\$ 31.31
	PAR16 / MR16 Incandescent to CMH PAR16	
LGT568	20W PAR16**	\$ 71.62
	PAR20 Incandescent to CMH PAR20	
LGT569	20W PAR20**	\$ 71.62
LGT570	39W PAR20**	\$ 83.62
	PAR30 Incandescent to CMH PAR30	
LGT571	20W PAR30**	\$ 59.62
LGT572	35W PAR30**	\$ 71.62
LGT573	70W PAR30**	\$ 83.62
	HID Fixture Replacement to CFL	
LGT579	80W CFL Spiral 120V Retrofit**	\$ 165.31
LGT584	100W CFL Spiral 120V/277V Retrofit**	\$ 176.35
LGT587	150W CFL Spiral 120V/277V Retrofit**	\$ 197.11
LGT588	200W CFL Spiral 120V/277V Retrofit**	\$ 210.91
	HID Wall pack Replacement to CFL Wall pack	
LGT590	42W CFL Wall pack Fixture**	\$ 148.57
	Chandelier Incandescent replacement to CFL Chandelier	
LGT596	2W CFL Tear Drop Candelabra**	\$ 25.56
LGT597	14W CFL Tear Drop Candelabra**	\$ 25.56
LGT598	5W CFL Flame Tip Bulb**	\$ 25.56
LGT617	Cold Cathode CFL (1-6W)**	\$ 25.56
LGT617a	Cold Cathode CFL (7-15W)**	\$ 30.36
LED LIGHTING		
	4ft LED Retrofit	
LGT486	4ft 4L Linear LED Retrofit	\$ 187.63
LGT486_2c_0317	4ft 3L (6pc) LED Retrofit Bi-Level	\$ 141.27
LGT486a	4ft 4L LED Retrofit Plug-n-Play	\$ 238.02
LGT487	4ft 3L Linear LED Retrofit	\$ 115.75
LGT487_1b	4FT 2L LED lamp only Plug-n-Play	\$ 54.74
LGT487_1c	4FT 4L LED lamp only Plug-n-Play	\$ 79.94
LGT487_1d	4FT 3L LED lamp only Plug-n-Play	\$ 67.34
LGT487a	4ft 3L LED Retrofit Plug-n-Play	\$ 106.47
LGT488	4ft 2L Linear LED Retrofit	\$ 161.56

LGT487b	4ft 4L LED (New Fixt)	\$ 191.81
LGT488a	4ft 2L LED Retrofit Plug-n-Play	\$ 93.93
LGT489a	4ft 1L LED Retrofit Plug-n-Play	\$ 82.47
LGT489b	3FT 1L LED Lamp and Elec. Ballast Plug-n-Play	\$ 81.39
LGT489c	3FT 2L LED Lamp and Elec. Ballast Plug-n-Play	\$ 93.39
LGT731	Highbay T5 2L LED Lamp and Elec. Ballast Plug-n-Play	\$ 171.78
LGT731a	Highbay T5 3L LED Lamp and Elec. Ballast Plug-n-Play	\$ 209.94
LGT731b	Highbay T5 4L LED Lamp and Elec. Ballast Plug-n-Play	\$ 248.11
LGT731c	Highbay T5 6L LED Lamp and Elec. Ballast Plug-n-Play	\$ 321.68
LGT486a	4ft 4L LED Retrofit Plug-n-Play	\$ 238.02
LGT489e	4FT 4L LED Lamp and Elec. Ballast Plug-n-Play bi-level	\$ 127.71
LGT489a_0216	4ft 1L Linear LED Retrofit	\$ 92.17
LGT489_2b	4ft 1L (2pc) LED Retrofit	\$ 73.10
LGT486_2a_1	2ft 2L U6 (3pc) LED Retrofit	\$ 89.84
LGT486_2a	4ft 2L (4pc) LED Retrofit	\$ 97.70
LGT486_2c	4ft 3L (6pc) LED Retrofit	\$ 118.70
LGT-LED-09	4ft 4L (8pc) LED Retrofit	\$ 151.10
4ft T8 Tubes with Daylight Harvesting (Ballast with Sensor)		
LGT451-B	4ft 1L LED With Daylight Harvesting Ballast and sensor	\$ 190.58
LGT451-B	4ft 2L LED With Daylight Harvesting Ballast and sensor	\$ 207.71
LGT452	4ft 3L LED With Daylight Harvesting Ballast and sensor	\$ 228.45
LGT453	4ft 4L LED With Daylight Harvesting Ballast and sensor	\$ 245.58
4ft T8 Strips with Daylight Harvesting (Ballast with Sensor)		
LGT451-B	4ft (2 PCS) LED With Daylight Harvesting Ballast and sensor	\$ 189.16
LGT451-B	4ft (4 PCS) LED With Daylight Harvesting Ballast and sensor	\$ 204.88
LGT452	4ft (6 PCS) LED With Daylight Harvesting Ballast and sensor	\$ 224.20
LGT453	4ft (8 PCS) LED With Daylight Harvesting Ballast and sensor	\$ 239.92
4ft LED Retrofit / Delamping		
LGT490	4ft 3L LED Retrofit 57W	\$ 136.64
LGT491	4ft 2L LED Retrofit 38W	\$ 98.26
LGT492	4ft 1L LED Retrofit 19W	\$ 83.52
4ft LED New Fixture / Delamping		
LGT493a	4ft 4L LED New Fixture	\$ 225.78
LGT493	4ft 3L LED New Fixture	\$ 211.38
LGT494	4ft 2L LED New Fixture	\$ 196.98
LGT495	4ft 1L LED Fixture 19W	\$ 144.27

4ft LED Retrofit / Delamping		
LGT496	4ft T8 LED Tube Only	\$ 50.18
Chandelier Incandescent replacement to LED Chandelier		
LGT497	3W LED Dimmable Candelabra	\$ 25.56
Incandescent Replacement to LED		
LGT500	9W A-type LED	\$ 28.70
LGT500a	5.5W A-Type LED Non Dimmable	\$ 25.79
LGT500b	6 W A-Type LED Dimmable	\$ 26.96
LGT500c	9 W A-Type LED Dimmable	\$ 27.55
LGT503	12W A-type LED	\$ 29.71
LGT503a	15W A-Type LED Non Dimmable	\$ 29.82
LGT503b	12 W A-Type LED Dimmable	\$ 29.22
LGT503c	15.5 W A-Type LED Dimmable	\$ 31.58
LGT503d	LED downlight, screw-in-lamp, 1-3 W, interior	\$ 27.88
LGT503e	4.5W Globe-Type LED	\$ 74.59
LGT503e	4.5W Globe-Type LED	\$ 74.59
LGT506	9W Globe-Type LED	\$ 37.30
LGT506a	8W Globe-Type LED	\$ 29.65
LGT509	12W Globe-Type LED	\$ 37.60
PAR16 / MR16 incandescent to LED 2-6 W PAR16 / MR16		
LGT539_2b	LED 5W PAR/MR16	\$ 42.23
LGT539_2c	LED 5W GU10 PAR/MR16	\$ 43.43
LGT541	4W PAR16	\$ 42.23
LGT542	6W PAR16	\$ 42.27
LGT542a	10W PAR16	\$ 42.23
LGT542b	5.5 W MR16 to LED	\$ 37.76
LGT542c	6.5 W MR16 to LED	\$ 38.10
LGT542d	6 W MR16 to LED	\$ 38.93
LGT542e	7 W MR16 to LED	\$ 39.02
PAR20 Incandescent to LED 3-9W PAR20		
LGT543	3W PAR20	\$ 38.87
LGT544	4W PAR20	\$ 38.87
LGT545	6W PAR20	\$ 31.82
LGT545a	Par20 6.5 W	\$ 33.63
LGT546	8W PAR20	\$ 38.87
PAR30 Incandescent to LED 7-19W PAR30		
LGT547	7W PAR30	\$ 48.03
LGT547_2b	16W PAR30	\$ 48.03
LGT547a_0715	8W PAR30	\$ 48.03
LGT548	10W PAR30	\$ 37.10
LGT549	11W PAR30	\$ 48.03
LGT549a	Par30L 12.0 W	\$ 31.21
LGT550	13W PAR30	\$ 40.81
LGT551	14W PAR30	\$ 48.03
LGT552	15W PAR30	\$ 42.12
LGT553	19W PAR30	\$ 48.03

PAR38 Incandescent to LED 16-23W PAR38		
LGT554a	13W PAR38	\$ 49.78
LGT554	16W PAR38	\$ 40.58
LGT555	20W PAR38	\$ 46.82
LGT556	23W PAR38	\$ 46.82
LGT553a	Par30S 10.0 W	\$ 37.99
LGT553b	Par30L 12.0 W	\$ 38.83
LGT556a	Par38 16.5.0 W	\$ 38.15
LED Wall Packs		
LGT510_2a_0818	100W LED Bulb	\$ 282.41
LGT510	30W LED Wall Pack 5000K	\$ 281.02
LGT511	60W LED Wall Pack 5000K	\$ 295.51
LGT512	90W LED Wall Pack 5000K	\$ 299.21
LGT512b_0317	80W LED Wall Pack High Power	\$ 391.15
LGT512_b_0921	150W LED Wallpack High Power	\$ 508.10
LGT512_C	200W LED Wallpack High Power	\$ 671.80
LGT512_D	300W LED Wallpack High Power	\$ 827.62
HID to LED		
LGT513	100W LED Highbay 5000K (Warehouse)	\$ 402.82
LGT514	240W LED Highbay 5000K (Warehouse)	\$ 522.82
LGT514a_0317(AvJet)	320W LED High Bay Fixture 5000K	\$ 624.82
Flood Lights		
LGT515_1	30W LED Flood Light	\$ 127.48
LGT515_2	50W LED Flood Light	\$ 236.67
Area/Street Lighting		
LGT515_4	50W Area/Street Light 5000K	\$ 359.98
LGT515_5	80W Area/Street Light 5000K	\$ 487.18
LGT515_6	100W Area/Street Light 5000K	\$ 542.52
LGT515_7	150W Area/Street Light 5000K	\$ 598.21
LGT515_8	200W Area/Street Light 5000K	\$ 718.78
LGT515_9	300W Area/Street Light 5000K	\$ 842.38
LGT732	30W Post Top LEDs	\$ 482.11
LGT732a	50W Post Top LEDs	\$ 518.11
LGT732b	100W Post Top LEDs	\$ 566.11
LGT732c	150W Post Top LEDs	\$ 686.11
Canopy Station		
LGT515_10	40W LED Canopy Light 5000K	\$ 283.28
LGT515_11	60W LED Canopy Light 5000K	\$ 339.68
LGT515_12	90W LED Canopy Light 5000K	\$ 501.81
LGT515_13	120W LED Canopy Light 5000K	\$ 537.68
LGT515_19	45W LED Slim Canopy Light	\$ 296.91
LGT515_20	70W LED Slim Canopy Light	\$ 338.84

LGT515_21	60W LED Slim Canopy Light 5000K	\$ 353.61
LGT515_22	90W LED Slim Canopy Light 5000K	\$ 410.31
Gas Station		
LGT515_14	40W LED Gas Station Canopy Light 5000K	\$ 392.02
LGT515_15	60W LED Gas Station Canopy Light 5000K	\$ 470.62
LGT515_16	90W LED Gas Station Canopy Light 5000K	\$ 500.26
LGT515_728	150W LED Gas Station Canopy Light 5000K	\$ 657.22
LGT515_729	200W LED Gas Station Canopy Light 5000K	\$ 777.22
Downlights (Recessed)		
LGT727	8.5W LED Downlight (Recess) 4 Inch 5000K	\$ 197.71
LGT728	10.5W LED Downlight (Recess) 4 Inch 5000K	\$ 197.71
LGT729	18W LED Downlight (Recess) 6 Inch 5000K	\$ 212.11
LGT730	22W LED Downlight (Recess) 8 Inch 5000K	\$ 226.88
LGT515_17	13W LED Downlight 4 Inch 5000K	\$ 134.21
LGT515_18	22W LED Downlight 6 Inch 5000K	\$ 141.41
LGT515_19	35W LED Downlight 8 Inch 5000K	\$ 190.01
LGT515_724	40W LED Downlight 8 Inch 5000K	\$ 348.91
LGT515_725	70W LED Downlight 8 Inch 5000K	\$ 232.61
LED PANELS		
LGT_723	2FT X 4 FT 30W LED Flat Panel Retrofit	\$ 220.51
LGT_723.1	2FT X 4 FT 40W LED Flat Panel Retrofit	\$ 224.11
LGT_724	2FT X 2FT 30W LED Flat Panel Retrofit	\$ 155.00
LGT515_724	40W LED Downlight 8 Inch 5000K	\$ 348.91
LGT_725a	2 ft 2L U6 LED Retrofit	\$ 364.41
Solar Tubes		
LGT627	VELUX 10 in. Sun Tunnel Tubular Skylight with Rigid Tunnel and Low Profile Plastic and Metal Flashing	\$ 741.65
LGT627	ODL 10 in. Tubular Skylight with Seamless Composite Flashing	\$ 741.65
LED EXIT/OPEN SIGNS		
LGT439	LED Exit Sign-Red Replacement Battery Back-up	\$ 120.78
LGT440	LED Exit Sign-Green Replacement Battery Back-up	\$ 120.78
LGT500d	LED Open signs replaces Neon	\$ 151.32
LGT500	Green or Red Photo luminescent Exit Sign (Single sided)	\$ 261.20
LGT501	Green or Red Photo luminescent Exit Sign (Double sided)	\$ 253.83
WINDOW FILM		

HVACS202	Medium Reflectivity Window Film	\$ 10.15
HVACS202b_2	Low Reflectivity Window Film	\$ 10.15
HVACS202c_2	High Reflectivity Window Film	\$ 10.15
HVAC		
HVACS203	HVAC Tune-Up Basic Diagnostic < = 5 Ton Unit	\$ 282.22
HVACS204	HVAC Tune-Up Basic Diagnostic > = 5 Ton Unit	\$ 216.18
HVACS206	HVAC Tune-Up Basic Diagnostic > = 10 Ton Unit	\$ 261.91
HVACS222	HVAC Tune-Up Comprehensive Diagnostic < = 10 Ton Unit	\$ 683.17
HVACS208	Duct Sealing, Non-Residential CZ 15 (per Ton)	\$ 348.50
HVACS208	Duct Test and Seal >= 5 Ton Unit (ducting	\$ 420.55
HVACS209	Ceiling Fan with Thermostatic Control 30" to 36" (tied to the HVAC System)	\$ 2,160.00
HVACS210	Ceiling Fan with Thermostatic Control 42" to 44" (tied to the HVAC System)	\$ 2,300.00
HVACS211	Ceiling Fan with Thermostatic Control 52" to 56" (tied to the HVAC System)	\$ 2,645.00
HVACS217	Refrigerant, Non-Residential CZ 15 (per Ton)	\$ 161.50
HVACS220	Dirty Condenser Coil Cleaning	\$ 124.61
T-STATS		
HVACS207	7 Day Programmable Thermostat	\$ 170.95
HVACS207f	5 Day Programmable Thermostat	\$ 148.97
HVACS208	All in One Thermostat	\$ 159.41
HVACS209	Reprogramming/Education Existing Programmable Thermostats	\$ 88.61
HVACS210	Thermostat Lock Box	\$ 83.07
HVACS210.1	Smart Thermostat RTA	\$ 401.62
HVACS210.2	Smart Thermostat Nest	\$ 477.22
HVACS210.3	Smart Thermostat EcoBee3	\$ 453.22
HVACS210.4	Smart Thermostat Honeywell	\$ 429.22
HVACS210.5	Common Wire attachment	\$ 155.07
HVACS210.6	Thermostat Training and Education	\$ 44.30
HVACS210.7	Outreach Customers for Thermostat	\$ 68.97
HVACS210.8	Hourly HVAC Service Tech Rate	\$ 69.69
REFRIGERATION		
APPLS008	Refrigeration Curtains Med. Per Linear ft.	\$ 196.02
APPLS008a	Freezer Curtains Med. Per Linear ft.	\$ 212.64
Refrigeration		
APPLS009_1	Walk-In Cooler - Tune Up	\$ 284.02
APPLS009_2	Walk-In Freezer - Tune Up	\$ 284.02
APPLS009_3	Under Counter & Self Contained - Tune Up	\$ 174.78
APPLS009_4	Split Systems w/Multiple Coils - Tune Up	\$ 284.02
APPLS010	Refrigerator Main Cooler Door Gaskets Med. Temp. per Linear ft.	\$ 22.82

APPLS011	Freezer Main Cooler Door Gaskets Low Temp. per Linear ft.	\$ 22.82
APPLS012	Door Closer	\$ 170.81
APPLS013	Heavy duty UV Refrigeration Pipe-Insulation per Linear ft.	\$ 18.67
APPLS21 Greenwize	Anti-Sweat Heat (ASH) Controls (or Humidistat Controls) Freezer	\$ 588.22
APPLS21_1 Sentry	Anti-Sweat Heat (ASH) Controls (or Humidistat Controls) Freezer	\$ 564.22
APPLS22 Greenwize	Anti-Sweat Heat (ASH) Controls (or Humidistat Controls) Cooler	\$ 567.22
APPLS22_2 Sentry	Anti-Sweat Heat (ASH) Controls (or Humidistat Controls) Cooler	\$ 549.22
APPLS23	Replace Standard Fan Motors with Electronically Commutated Motors (ECM)	\$ 240.07
APPLS23	16W Electronically Commutated Motor	\$ 207.40
LGT_725a	2 ft 2L U6 LED Retrofit	\$ 364.41
APPLS23-a	1/15HP-1/20HP Electronically Commutated Motor	\$ 189.85
APPLS24	Install Fan Controllers	\$ 225.42
APPLS25	Suction Line Insulation (per linear foot)	\$ 13.96
APPLS26	Refrigerant charge for refrigerators/freezers (per pound)	\$ 124.01
Refrigeration LED Retrofit		
APPLS018	4ft 1L LED (Low Temp)	\$ 89.29
APPLS018a	5ft 1L LED (Low Temp)	\$ 128.58
APPLS019	6ft 1L LED (Low Temp)	\$ 139.01
APPLS020	4ft 2L LED (Low Temp)	\$ 121.21
APPLS021	Refrigeration LED retrofit 7ft 1L LED (Low Temp)	\$ 150.48
APPLS022	Refrigeration LED retrofit 8ft 1L LED (Low Temp)	\$ 161.43
WEATHERIZATION		
WTHRS005	Seal Doors - Mohair (per linear foot)	\$ 4.15
WTHRS007	Door Sweeps per Door	\$ 83.90
WTHRS008	Caulking (per linear foot)	\$ 4.55
WTHRS009	Expandable Foam (per linear foot)	\$ 21.41
WTHRS006	Seal Windows - Silicon (per linear foot)	\$ 9.51
WTHRS010	External Water Heater Insulation (=> 50 Gal Tank) and piping insulation (up to 20ft)	\$ 327.22
WTHRS011	Water heater, up to 50 gal.	\$ 1,350.00
SENSORS/TIMERS		
LGT445	Wall sensor	\$ 108.88
LGT445a	Dual Wall Sensor	\$ 134.98
LGT447	Lighting timers	\$ 128.08
LGT448	Lighting dimmers	\$ 95.40
LGT488a	Toggle Switch	\$ 78.94
APPLS016	Appliance Timer 120V 10A	\$ 112.61
LGT599	Photo Cell Sensor	\$ 100.61
LGT600	Ceiling Mount Sensor	\$ 188.05

LGT603	HB3x0-Lx High Bay Line Voltage Passive Infrared Occupancy Sensor	\$ 188.11
VDM01	Vending Miser Unit and Installation	\$ 268.61
VDM02	Plug Miser Unit and Installation	\$ 150.27
VDM03	Cooler Miser Unit and Installation	\$ 287.62
VDM04	Snack Miser Unit and Installation	\$ 189.41
VDM05	VendingMiser/PlugMiser/CoolerMiser/Snack Miser Installation Only	\$ 88.61
VDM06	Tier I Power Strip	\$ 78.87
VDM07	Tier II Smart Power Strip	\$ 145.00
Title 24 Sensors		
T24S01	Light Control Package (Occ. Sensor & Ceilign Mount wireless)	\$ 312.91
T24S02	Power Pak Dimming Module	\$ 247.38
T24S03	Wireless Vacancy Corner Sensor	\$ 157.84
T24S04	Dimmable Wireless Ballast	\$ 110.30
T24S05	Daylight Sensor	\$ 303.22
T24S06	Wireless Control Switch	\$ 109.84
T24S08	Dual-Circuit Occupancy Sensor Switch	\$ 171.87
T24S09	Outdoor photocell sensor	\$ 90.27
T24S10	Astronomical Time Clock With Holiday Programing	\$ 355.38
T24S11	Outdoor Motion Sensor	\$ 210.18
T24S12	Indoor Time Clock	\$ 325.38
WATER CONSERVATION		
Indoor Water Efficiency		
WHS16	Faucet Aerators	\$ 23.93
WHS16	Pre-Rinse Spray Valve	\$ 72.27
WHS24	Standard Pre-Rinse Spray Valve	\$ 137.77
WHS13	Dual Flush Flushometer, Retrofit - Pipe Only	\$ 115.84
WHS19	Lavatory Faucet	\$ 144.28
WHS19A	Single Handle Lavatory Faucet	\$ 138.25
WHS30	Double Handle Lavatory Faucet	\$ 123.91
WHS31	Electronic Faucet	\$ 487.61
WHS32	Basin Faucets	\$ 185.29
WHS33	Metering Faucets Single Handle	\$ 196.25
WHS34	Metering Faucets Double Handle	\$ 204.71
WHS20	Kitchen Faucets Regular	\$ 124.51
WHS35	Kitchen Faucets Single Handle ADA	\$ 165.41
WHS36	Kitchen Faucets Wall Mount	\$ 167.80
WHS37	Laundry Faucet	\$ 128.92
WHS38	Bar Faucet	\$ 137.77
WHS11	High Efficiency Toilet Round 0.8 GPF	\$ 400.58
WHS26	High Efficiency Toilet Elongated 0.8 GPF	\$ 424.70
WHS45	High Efficiency Toilet - Right Handed Elongated	\$ 513.31
WHS11a	High Efficiency Toilet Round 1.1. GPF	\$ 269.92
WHS26a	High Efficiency Toilet Elongated 1.1 GPF	\$ 287.38

High Efficiency Urinals		
WHS22	High Efficiency Urinal (Dual Upper cut or Electronic flush meter)	\$ 838.59
WHS23	Zero Water Use Urinal	\$ 1,025.52
WHS24	Ultra Low Water Urinals (0.125 gpf or less)	\$ 887.97
Urinal/Toilet Flushometer Retrofits		
WHS46	1.5 GPF Electronic/mechanical (Hybrid) Flushometer side Mounted	\$ 324.84
WHS47	1.0 GPF Electronic/mechanical (Hybrid) Flushometer side Mounted	\$ 355.84
WHS48	0.5 GPF Electronic/mechanical (Hybrid) Flushometer side Mounted	\$ 355.84
WHS49	1.28 GPF Electronic/mechanical (Hybrid) Flushometer Top Mounted	\$ 360.64
WHS50	1.0 GPF Electronic/mechanical (Hybrid) Top Mounted	\$ 360.64
WHS51	0.5 GPF Electronic/mechanical (Hybrid) Top Mounted	\$ 360.64
WHS52	1.6 GPF Electronic/mechanical (Hybrid) Top Mounted	\$ 360.64
WHS53	1.6 to 1.28 GPF Dual Flush handle Retrofit	\$ 148.61
WHS53a_0715	1.6 to 1.12 GPF Dual Flush Handle	\$ 148.61
WHS53	1.0 to 0.5 GPF Dual Flush handle Retrofit	\$ 148.61
New Technology High Efficiency Toilets		
WHS55	Toilet Pressure Assisted (1.1 GPF) Elongated Bowl	\$ 596.71
WHS56	Dual Flush Toilets (0.8 partial to 1.28 Full GPF) Round	\$ 297.22
WHS57	Dual Flush Toilets (0.8 partial to 1.28 Full GPF) Elongated	\$ 297.22
WHS58	Niagara Vacuum Assisted (0.8 GPF) Round	\$ 363.22
WHS59	Niagara Vacuum Assisted (0.8 GPF) Elongated	\$ 363.22
WHS60	Flapperless Toilet (1.28 GPF) Round	\$ 477.22
WHS61	Flapperless Toilet (1.28 GPF) Elongated	\$ 477.22
WHS62	Non-Standard Efficiency Toilet (1.28)	\$ 753.22
WHS66	Non-Standard Faucet Aerators	\$ 36.04
WHS66B	Pressure Assist Replacement tank	\$ 325.24
High Efficiency Hand Held Shower Head		
WHS63	2.5 GPM Shower Head	\$ 56.48
WHS64	1.5 GPM Shower Head	\$ 62.02
WHS65	2.0 GPM Shower Head	\$ 28.04
WHS66	Dipper Wells	\$ 868.61
Outdoor Water Conservation		
LSCPG01	High Efficiency Sprinkler Head Replacement (Per Unit)	\$ 70.17
LSCPG02	Soil Moisture Sensor (Per Station)	\$ 532.27
LSCPG05	Weather Based Irrigation Controllers	\$ 528.43
LSCPG03	Automatic Sprinkler Timer/Controllers	\$ 405.22
LSCPG04	Programming Existing Controller System (Per Station)	\$ 88.61
CONTROLS		

CTRLS01	Demand Side Electrical System Control and Monitoring	\$ 4,777.72
PUMPS AND MOTORS		
EM01	Motors 1.5 HP NEMA Premium Eff.	\$ 537.22
EM02	Motors 2 HP NEMA Premium Eff.	\$ 657.22
EM03	Motors 3 HP NEMA Premium Eff.	\$ 897.22
EM04	Motors 1.5 HP NEMA Premium Eff. totally enclosed	\$ 717.22
EM05	Motors 2 HP NEMA Premium Eff. totally enclosed	\$ 897.22
EM06	Motors 3 HP NEMA Premium Eff. totally enclosed	\$ 1,257.22
EM07	Variable-Speed Water Pump <= 5 HP	\$ 1,257.22
EM08	Pool pumps 3/4 HP - 1.5 HP - Residential	\$ 650.00
EM09	Pool pumps 1.5 HP - 3 HP - Commercial	\$ 850.00
EM10	Variable frequency drives, up to 3 HP	\$ 1,350.00
AC/APPLIANCE REPLACEMENT		
ACS22	Room AC Replacement 5,000 - 5,999 BTU per Unit	\$ 374.02
ACS23	Room AC Replacement 6,000 - 6,999 BTU per Unit	\$ 436.42
ACS24	Room AC Replacement 7,000 - 7,999 BTU per Unit	\$ 536.02
ACS12	Room AC Replacement 8,000 - 8,999 BTU per Unit	\$ 536.02
ACS25	Room AC Replacement 9,000 - 9,999 BTU per Unit	\$ 606.82
ACS26	Room AC Replacement 10,000 - 10,999 BTU per Unit	\$ 606.82
ACS27	Room AC Replacement 11,000 - 11,999 BTU per Unit	\$ 680.02
ACS13	Room AC Replacement 12,000 - 12,999 BTU per Unit	\$ 680.02
ACS17	Room AC Replacement 13,000 - 13,999 BTU per Unit	\$ 680.02
ACS18	Room AC Replacement 14,000 - 14,999 BTU per Unit	\$ 818.02
ACS19	Room AC Replacement 15,000 - 15,999 BTU per Unit	\$ 818.02
ACS20	Room AC Replacement 16,000 - 16,999 BTU per Unit	\$ 882.82
ACS21	Room AC Replacement 17,000 - 17,999 BTU per Unit	\$ 906.82
ACS14	Room AC Replacement 18,000 - 23,999 BTU per Unit	\$ 906.82
ACS15	Room AC Replacement 24,000 BTU per Unit	\$ 1,034.02
ACS16	Power Cord	\$ 13.75
ACS30	Pig Tails	\$ 24.37
Heat Pump Units (HP)		
ACS28	Room HP Replacement 5,000 - 5,999 BTU per Unit	\$ 642.82
ACS29	Room HP Replacement 6,000 - 6,999 BTU per Unit	\$ 642.82

ACS30	Room HP Replacement 7,000 - 7,999 BTU per Unit	\$ 715.42
ACS31	Room HP Replacement 8,000 - 8,999 BTU per Unit	\$ 715.42
ACS32	Room HP Replacement 9,000 - 9,999 BTU per Unit	\$ 821.62
ACS33	Room HP Replacement 10,000 - 10,999 BTU per Unit	\$ 821.62
ACS34	Room HP Replacement 11,000 - 11,999 BTU per Unit	\$ 931.42
ACS35	Room HP Replacement 12,000 - 12,999 BTU per Unit	\$ 931.42
ACS36	Room HP Replacement 13,000 - 13,999 BTU per Unit	\$ 931.42
ACS37	Room HP Replacement 14,000 - 14,999 BTU per Unit	\$ 1,138.42
ACS38	Room HP Replacement 15,000 - 15,999 BTU per Unit	\$ 1,138.42
ACS39	Room HP Replacement 16,000 - 16,999 BTU per Unit	\$ 1,235.62
ACS40	Room HP Replacement 17,000 - 17,999 BTU per Unit	\$ 1,271.62
ACS41	Room HP Replacement 18,000 - 23,999 BTU per Unit	\$ 1,271.62
ACS42	Room HP Replacement 24,000 BTU per Unit	\$ 1,462.42
ACS43	AC/HP Drain Pan	\$ 36.55
ACS44	AC/HP Adapter Plug	\$ 8.05
MISCELLANEOUS		
LABORS06	High Ceiling charge per fixture	\$ 3.50
LABORS07	Scissor Lift per day	\$ 280.00
ADDITIONAL SERVICES (CONSULTING)		
LABOR04	RHA Labor (hourly)	\$ 67.93
LABOR05	Small Business Energy Audit & Report less than 75kW	\$ 228.90
LABOR06	Small Business Advanced Energy Audit & Report	\$ 663.08
LABOR06a	Billing Inquiry/High Bill Complaint Energy Audit & Report	\$ 663.08
LABOR07	Measurements and Verification (Metering hourly rate)	\$ 103.38
LABOR08	IT Consulting Services (hourly)	\$ 177.22
LABOR11	Smart Thermostat Installation Only	\$ 168.35

EXHIBIT C

INSURANCE REQUIREMENTS

Without limiting Consultant's indemnification of IPUC, and prior to commencement of the Services, Consultant shall obtain, provide and maintain at its own expense during the term of this Agreement, policies of insurance of the type and amounts described below and in a form satisfactory to the IPUC.

General liability insurance. Consultant shall maintain commercial general liability insurance with coverage at least as broad as Insurance Services Office form CG 00 01, in an amount not less than \$1,000,000.00 per occurrence, \$2,000,000.00 general aggregate, for bodily injury, personal injury, and property damage. The policy must include contractual liability that has not been amended. Any endorsement restricting standard ISO "insured contract" language will not be accepted.

Automobile liability insurance. Consultant shall maintain automobile insurance at least as broad as Insurance Services Office form CA 00 01 covering bodily injury and property damage for all activities of the Consultant arising out of or in connection with Work to be performed under this Agreement, including coverage for any owned, hired, non-owned or rented vehicles, in an amount not less than \$1,000,000.00 combined single limit for each accident.

Professional liability (errors & omissions) insurance. Consultant shall maintain professional liability insurance that covers the Services to be performed in connection with this Agreement, in the minimum amount of \$1,000,000 per claim and in the aggregate. Any policy inception date, continuity date, or retroactive date must be before the effective date of this agreement and Consultant agrees to maintain continuous coverage through a period no less than three years after completion of the services required by this agreement.

Proof of insurance. Consultant shall provide certificates of insurance to IPUC as evidence of the insurance coverage required herein, along with a waiver of subrogation endorsement for workers' compensation. Insurance certificates and endorsement must be approved by IPUC's Risk Manager prior to commencement of performance. Current certification of insurance shall be kept on file with IPUC at all times during the term of this contract. IPUC reserves the right to require complete, certified copies of all required insurance policies, at any time.

Duration of coverage. Consultant shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the Services hereunder by Consultant, his agents, representatives, employees or subconsultants.

Primary/noncontributing. Coverage provided by Consultant shall be primary and any insurance or self-insurance procured or maintained by IPUC shall not be required to contribute with it. The limits of insurance required herein may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a

primary and non-contributory basis for the benefit of IPUC before the IPUC's own insurance or self-insurance shall be called upon to protect it as a named insured.

IPUC's rights of enforcement. In the event any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, IPUC has the right but not the duty to obtain the insurance it deems necessary and any premium paid by IPUC will be promptly reimbursed by Consultant, or IPUC will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, IPUC may cancel this Agreement.

Acceptable insurers. All insurance policies shall be issued by an insurance company currently authorized by the Insurance Commissioner to transact business of insurance in the State of California, with an assigned policyholders' Rating of A- (or higher) and Financial Size Category Class VI (or larger) in accordance with the latest edition of Best's Key Rating Guide, unless otherwise approved by the IPUC's Risk Manager.

Waiver of subrogation. All insurance coverage maintained or procured pursuant to this agreement shall be endorsed to waive subrogation against IPUC, its elected or appointed officers, agents, officials, employees and volunteers or shall specifically allow Consultant or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Consultant hereby waives its own right of recovery against IPUC, and shall require similar written express waivers and insurance clauses from each of its subconsultants.

Enforcement of contract provisions (non estoppel). Consultant acknowledges and agrees that any actual or alleged failure on the part of the IPUC to inform Consultant of non-compliance with any requirement imposes no additional obligations on the IPUC nor does it waive any rights hereunder.

Requirements not limiting. Requirements of specific coverage features or limits contained in this Section are not intended as a limitation on coverage, limits or other requirements, or a waiver of any coverage normally provided by any insurance. Specific reference to a given coverage feature is for purposes of clarification only as it pertains to a given issue and is not intended by any party or insured to be all inclusive, or to the exclusion of other coverage, or a waiver of any type. If the Consultant maintains higher limits than the minimums shown above, the IPUC requires and shall be entitled to coverage for the higher limits maintained by the Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the IPUC.

Notice of cancellation. Consultant agrees to oblige its insurance agent or broker and insurers to provide to IPUC with a thirty (30) day notice of cancellation (except for nonpayment for which a ten (10) day notice is required) or nonrenewal of coverage for each required coverage.

Additional insured status. General liability policies shall provide or be endorsed to provide that IPUC and its officers, officials, employees, and agents, and volunteers shall be additional insureds under such policies. This provision shall also apply to any excess liability policies.

Prohibition of undisclosed coverage limitations. None of the coverages required herein will be in compliance with these requirements if they include any limiting endorsement of any kind that has not been first submitted to IPUC and approved of in writing.

Separation of Insureds. A severability of interests provision must apply for all additional insureds ensuring that Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the insurer's limits of liability. The policy(ies) shall not contain any cross-liability exclusions.

Pass Through Clause. Consultant agrees to ensure that its subconsultants, subcontractors, and any other party involved with the project who is brought onto or involved in the project by Consultant, provide the same minimum insurance coverage and endorsements required of Consultant. Consultant agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this section. Consultant agrees that upon request, all agreements with consultants, subcontractors, and others engaged in the project will be submitted to IPUC for review.

IPUC's right to revise specifications. The IPUC reserves the right at any time during the term of the contract to change the amounts and types of insurance required by giving the Consultant ninety (90) days advance written notice of such change. If such change results in substantial additional cost to the Consultant, the IPUC and Consultant may renegotiate Consultant's compensation.

Self-insured retentions. Any self-insured retentions must be declared to and approved by the IPUC. The IPUC reserves the right to require that self-insured retentions be eliminated, lowered, or replaced by a deductible. Self-insurance will not be considered to comply with these specifications unless approved by the IPUC.

Timely notice of claims. Consultant shall give the IPUC prompt and timely notice of claims made or suits instituted that arise out of or result from Consultant's performance under this Agreement, and that involve or may involve coverage under any of the required liability policies.

Additional insurance. Consultant shall also procure and maintain, at its own cost and expense, any additional kinds of insurance, which in its own judgment may be necessary for its proper protection and prosecution of the work.

EXHIBIT D

LARGE GENERAL SERVICE ASHRAE AUDIT PROCEDURE

American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Energy Audit Procedures

1. Level I Audit

A Level I audit, which may also be called a site assessment audit or preliminary audit, is used to identify no-cost and low-cost energy saving opportunities, and a general view of potential capital improvements. Activities include an assessment of energy bills and a brief site inspection of the facility.

The steps to be taken and scope of services provided under a Level I Audit are as follows:

1.1. IPUC Representative will either schedule a meeting with facility staff or request an in-person meeting. During the initial contact, IPUC Representative will collect:

- 1.1.1. Business name, address, phone number, facility square footage and usage type
- 1.1.2. Customer contact name, address, phone number and e-mail address
- 1.1.3. Building owner name, address, phone number and e-mail address
- 1.1.4. One year of the most recent electric utility bill information

1.2. If scheduled in advance, prior to the meeting, IPUC Representative will prepare for the meeting by:

- 1.2.1. Reviewing and analyzing the energy bills to identify any unusual usage patterns
- 1.2.2. Benchmarking the buildings energy consumption and comparing it to similar buildings based on the Energy Use Intensity (EUI)

1.3. IPUC Representative will conduct an initial high-level interview with the building owner or the building owner's representative and the facility manager (when applicable). IPUC Representative will:

- 1.3.1. Discuss goals and objectives of the audit as well as the deliverables
- 1.3.2. Discuss the audit schedule, escorts and points of contact for the IPUC Representative. Also, discuss any trade secrets, potential for industrial espionage, or facility areas that are "off limits"
- 1.3.3. Discuss any safety and security protocols observed at the site and equipment access procedures
- 1.3.4. Determine customer's processes, systems, lighting, HVAC, controls and other equipment, and how they are used
- 1.3.5. Determine and document operating schedules, shift work, controls and operational characteristics of the <different areas of the facility
- 1.3.6. Discuss and document customer-specific financial considerations and issues

1.3.7. Discuss and document any critical equipment or functions that cannot contribute to energy efficiency solutions, or that the customer is unwilling to modify
1.3.8. If available, review facility site map to develop strategy for site walkthrough

1.3.9. Collect facility information:

- 1.3.9.1. Year Built
- 1.3.9.2. Utility Meter Information
- 1.3.9.3. Hours of Operation (Weekdays & Weekends)
- 1.3.9.4. Number of Stories
- 1.3.9.5. Single Tenant/Multi-Tenant?
- 1.3.9.6. Annual Percent Occupancy
- 1.3.9.7. HVAC system type(s)

1.4. IPUC Representative will conduct a walkthrough and document all possible low-cost and no-cost recommendations, whether or not they have immediate potential for inclusion in the project. This may include pictures, nameplate data and details regarding:

- 1.4.1. Building envelope
- 1.4.2. Lighting
- 1.4.3. Heating and cooling
- 1.4.4. Refrigeration
- 1.4.5. Miscellaneous Equipment

1.5. IPUC Representative will conduct data analysis of the facility including:

- 1.5.1. Benchmarking the buildings energy consumption and comparing it to similar buildings based on the Energy Use Intensity (EUI)
- 1.5.2 The energy analysis will include a review of the existing equipment to identify low-cost and no-cost recommendations in addition to capital improvements
- 1.5.3. The cost analysis will include a review of current energy costs, measure implementation costs, potential energy cost savings per year, possible rebate and incentive amounts and simple payback period.

1.6. IPUC Representative will create a report including the following:

- 1.6.1. Cover Page: The Report shall begin with a cover page identifying Customer, title of the audit, address of the facility, and date completed.
- 1.6.2. Executive Summary: The executive summary is intended to provide the important findings of the audit at a glance. This will include a statement on the scope and methodology of the audit.
- 1.6.3. Facility Description: A brief description of the facility, square footage, hours of operation, use, location
- 1.6.4. Benchmarking: Comparing the building's energy use to similar buildings based on the Energy Use Intensity (EUI)
- 1.6.5. Energy Efficiency Opportunities: This subsection lists the measures found and provides a brief explanation of low-cost and no-cost energy savings opportunities

1.6.5.1. Measure Identification Number #

- 1.6.5.2. Measure Description
- 1.6.5.3. Measure Quantity
- 1.6.5.4. Description of Energy Saving Opportunities
- 1.6.5.5. Rough Estimate on Project Implementation/Retrofit Cost (\$)
- 1.6.5.6. Estimated Utility Rebates/Incentives (if applicable) (\$)
- 1.6.5.7. Estimated Simple Payback
- 1.6.5.8. Potential measures for future consideration

1.7. After the report is complete, but before presenting to the customer, IPUC Representative's engineering department will review all measures, paybacks, estimated costs and evaluations. The report will be modified until it meets requirements. Once approved by IPUC, IPUC Representative will present the findings to the customer.

2. Level II Audit

Level II audits, also called energy surveys or engineering analysis audits, identify no-cost and low-cost opportunities, as well as potential capital intensive energy savings opportunities. Level II audits include an in-depth analysis of energy costs, energy usage and building characteristics, and a more refined survey of how energy is used in the facility.

A Level II audit will be implemented for those measures that the customer selects from the Level I audit report. It is also possible for a customer to request a Level II audit without a Level I audit performed if that customer verifies that the resulting products for selected equipment are viable within the next year. The customer may proceed with measure implementation following the Level I Audit without having a Level II Audit.

The Level II audit will entail a detailed analysis on measures selected by the customer, or the measures considered by the IPUC Representative to be cost-effective. Each measure will be accompanied with detailed energy saving calculations, cost estimates and financial analysis. In addition to Level I activities, the Level II audit report will include the following:

- 2.1. During the initial contact, IPUC Representative will collect:
 - 2.1.1. Two years of the most recent electric utility bill information
 - 2.1.2. The building as-built plans, and mechanical and electrical schedules
 - 2.1.3. A detailed HVAC equipment list from the building's current HVAC contractor (if applicable) to cross reference with the as-built plans
- 2.2. IPUC Representative will conduct a detailed interview with the building owner or the building owner's representative, the facility manager and facility Engineer (when applicable)
 - 2.2.1. Determine customer's preference of return-on-investment (ROI) or payback period
 - 2.2.2. Determine and document operating schedules, occupancy (especially multi-tenant situations), process operation, shift work, controls and operational characteristics of the different areas of the facility. The purpose

is to gain a better understanding of the customer's needs, wants and expectations regarding energy efficiency, and to compile a complete inventory of all energy consuming devices at the site

2.3. IPUC Representative will conduct a thorough walkthrough of the facility and document all existing equipment, whether or not they have immediate potential for inclusion in the project. This may include pictures of, and data on:

2.3.1. Building envelope

2.3.1.1. Construction details including orientation, construction material type, insulation levels, glazing type and area on each side

2.3.2. Lighting

2.3.2.1. Type, hours of use and control type and count

2.3.3. Heating, Ventilation and Air Conditioning (HVAC) System

2.3.3.1. Nameplate information on each piece of system equipment, hours of operation and zones served

2.3.4. Process/heavy equipment

2.3.4.1. Nameplate information on each piece of equipment, hours of operation, count

2.3.5. Refrigeration

2.3.5.1. Nameplate information on each piece of equipment, count

2.3.6. Miscellaneous Equipment

2.3.6.1. Nameplate information on each piece of equipment, hours of operation, count

2.4. Detailed equipment energy analysis, as selected by the customer or determined by the IPUC Representative for possible recommendations, including:

2.4.1. HVAC System: An analysis on the HVAC system will include: system type; capalPUC; confirmed or estimated age of equipment, efficiency; Expected Useful Life (EUL); and number of units. A special note will be written if the equipment exceeds its useful life. Reference how the system was designed and how it is currently operating, and highlight any major differences discovered through the audit process

2.4.2. Building Controls: The analysis will include: manufacturer; year installed; equipment being controlled; and protocols used by the system

2.4.3. Lighting: The analysis will include: type, wattage; quantity; how the lighting is being controlled (sensors, daylight harvesting, control system, etc.) ; and the typical facility hours of operation for each lighting system

2.4.4. Refrigeration: The analysis will include: compressor type; wattage; quantity; and evaporator fan motor type and controls

2.4.5. Compressed Air: The analysis will include: system components; layout; equipment nameplate data; usage type; and hours of operation

2.4.6. Miscellaneous Equipment: The analysis will include: type; wattage; quantity; and hours of operation

2.5. IPUC Representative will create a detailed energy audit report including:

- 2.5.1. Cover Page: The report will contain a cover page identifying the customer; title of the audit; address of the facility; and date completed.
- 2.5.2. Executive Summary: The executive summary is intended to provide the important findings of the audit at a glance. This will include: a detailed facility description; current conditions; and summary of savings from the energy efficiency recommendations.
- 2.5.3. Building Envelope: A description of the building's orientation; construction material type; insulation levels; glazing type; and area on each side.
- 2.5.4. Utility Billing: This will include an analysis on the electric consumption for the previous twelve months and the average rate charge.
- 2.5.5. Energy Balancing: The goal of the energy balance is to calibrate the facility's energy consumption and the existing equipment with information collected during the audit such as hours of operation and equipment nameplate data.
- 2.5.6. Detailed End-use Breakdown: This will include a percent and chart breakdown for each equipment type obtained from the energy balancing. The end-use breakdown is used to better understand the building and be able to compare it with similar facilities.
- 2.5.7. Energy Efficiency Recommendations: This portion of the report will include a description of the existing equipment and the recommended upgrades or replacement equipment. Only cost-effective measures, as determined by the energy analysis, will be presented to the customer as recommendations.
 - 2.5.7.1. Measure Identification Number #
 - 2.5.7.2. Measure Type (energy efficiency, demand response, distributed generation)
 - 2.5.7.3. Measure Description
 - 2.5.7.4. Measure Location(s)
 - 2.5.7.5. Measure Quantity
 - 2.5.7.6. Description of Energy Efficiency Opportunities
 - 2.5.7.7. Detailed energy and cost savings
 - 2.5.7.8. Potential measures for future consideration
- 2.5.8. Detailed energy and cost analysis on energy efficiency recommendations will include:
 - 2.5.8.1. Energy demand reduction (kW)
 - 2.5.8.2. Annual electric consumption savings (kWh)
 - 2.5.8.3. Bill impact analysis with net annual cost savings (\$)
 - 2.5.8.4. Total Measure/Project Implementation/Retrofit Cost (\$)
 - 2.5.8.5. Assumptions and references (RSMeans, actual quotes, etc.)
 - 2.5.8.6. Detailed payback analysis to include simple payback, internal rate

- of return (IRR), and other customer-specific financial analyses.
- 2.5.9. Utility Programs: Detailed list of rebate and incentive programs offered by the customer's utility provider.
 - 2.5.10. Equipment Inventory: Detailed list of all equipment found on the facility
 - 2.5.10.1. Electrical
 - 2.5.10.2. Mechanical
- 2.6. After the report is complete, but before presenting to the customer, IPUC Representative's engineering department will review all measures, paybacks, estimated costs and evaluations. The report will be modified until it meets requirements. Once approved by IPUC, IPUC Representative will present the findings to the customer.

3. Level III Audit

A Level III audit, also called a detailed analysis of capital-intensive modification audit or investment grade audit, provides detailed recommendations and financial analysis for major capital investments related to energy conservation. In addition to Level I and Level II activities, Level III audits include monitoring/metering equipment, Building Energy Modeling (BEM) and custom engineering analysis.

A Level III audit may be implemented for those measures that the customer selects from the Level II audit report or for targeted capital investments.

The steps taken and scope of services provided under a Level III audit are:

- 3.1. Perform an audit to collect building and equipment information, as outlined in Level I and Level II audits with the addition of:
 - 3.1.1. Determine the HVAC zoning per unit
 - 3.1.2. Collect square footage of each zone
 - 3.1.3. Collect equipment and lighting information per zone
 - 3.1.4. Determine specific processes performed on-site
- 3.2. Meter/record detailed information on targeted equipment performance
 - 3.2.1. Determine which equipment requires monitoring or trending data (energy measurements prior to project starting) include, but are not limited to:
 - 3.2.1.1. Pneumatic to Electric Air Dryers
 - 3.2.1.2. Blowers
 - 3.2.1.3. Chiller Compressor Retrofit
 - 3.2.1.4. Chiller Cross Tie (Cross Connect)
 - 3.2.1.5. Chiller Replacement (if multiple chillers at site)
 - 3.2.1.6. Commercial Laundry with Heat Recovery
 - 3.2.1.7. EMS or DOC Installation

- 3.2.1.8. Engine Jacket Water Heating
- 3.2.1.9. Central Plant Optimization (Hartman Loop)
- 3.2.1.10. Pump Replacement (pump check analysis to establish efficiency of the pump)
- 3.2.1.11. Pump VFD and Pump Station VFD
- 3.2.1.12. Fan VFD
- 3.2.2. Review mechanical or electrical equipment plans and determine the data type that needs to be collected and monitored. Strategize on meter location
- 3.2.3. Install data logger, current transducers or applicable sensor type
- 3.2.4. Record required data for prescribed period

3.3. Analyze whole building performance with a Building Energy Modeling (BEM) software

- 3.3.1. Construct an energy model of the current building and baseline conditions, specifics include:
 - 3.3.1.1. Building shell(s): building type, envelope, orientation, glazing type, climate zone, HVAC zoning, square footage
 - 3.3.1.2. HVAC system type and location: Chiller, package unit, split unit, condenser coil, boilers, cooling towers, air handlers, make-up air units, ventilation fans, etc.
 - 3.3.1.3. Lighting: Lighting Power Density (LPD) per zone
 - 3.3.1.4. Equipment: Watts per square foot for each zone
 - 3.3.1.5. Miscellaneous Equipment: Watts per square foot for each zone
 - 3.3.1.6. Controls: Include any existing controls such as VFDs, EMS, daylight harvesting, occupancy sensors, etc.
 - 3.3.1.7. Occupancy: Include the number of people per facility/zone and the percent occupancy depending on building type (per day/week/month)
 - 3.3.1.8. Schedules: Include the specific operation hours for equipment, elevators, HVAC units, interior and exterior lighting
- 3.3.2. Calibrate the energy model to 10% (or less) of the billing data to accurately simulate energy performance
 - 3.3.2.1. Normalize billing data to increase monthly energy consumption accuracy
 - 3.3.2.2. Analyze and adjust equipment usage until the energy model is well calibrated to meet the required building performance
- 3.3.3. Conduct parametric runs to simulate each energy efficiency measure
 - 3.3.3.1. Analyzes each energy efficiency measure and provides detailed energy and demand savings
 - 3.3.3.2. Calculates the interactive effects each measure will have on other systems and the positive or negative effects on the building's energy consumption

3.4. Perform high precision cost and savings calculations

- 3.4.1. Perform customized engineering calculations for equipment that requires metering
- 3.4.2. Detailed financial analysis, incorporating estimated project cost, rebates, incentives, projected savings from detailed engineering analysis and finance assumptions

3.5. IPUC Representative will create a detailed energy audit report including:

- 3.5.1. Cover Page: The report will contain a cover page identifying the customer, title of the audit, address of the facility and date completed.
- 3.5.2. Executive Summary: The executive summary is intended to provide the important findings of the audit at a glance. This will include a detailed facility description, current conditions and summary of savings from the energy efficiency recommendations.
- 3.5.3. Building Envelope: A description of the building's orientation, construction material type, insulation levels, glazing type and area on each side
- 3.5.4. Utility Billing: This will include an analysis on the electric consumption for the previous twelve months and the average rate charge.
- 3.5.5. Energy Balancing: The goal of the energy balance is to calibrate the facility's energy consumption and the existing equipment with information collected during the audit such as hours of operation and equipment nameplate data.
- 3.5.6. Detailed End-use Breakdown: This will include a percent and chart breakdown for each equipment type obtained from the energy balancing. The end-use breakdown is used to better understand the building and be able to compare it with similar facilities.
- 3.5.7. Energy Efficiency Recommendations: This portion of the report will include a description of the existing equipment and the recommended upgrades or replacement equipment. Only cost-effective measures, as determined by the energy analysis, will be presented to the customer as recommendations:
 - 3.5.7.1. Measure Identification Number #
 - 3.5.7.2. Measure Type (energy efficiency, demand response, distributed generation)
 - 3.5.7.3. Measure Description
 - 3.5.7.4. Measure Location(s)
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 - 3.5.8.4. Total Measure/Project Implementation/Retrofit Cost (\$)
 - 3.5.8.5. Assumptions and references (RSMeans, actual quotes, etc.)
 - 3.5.8.6. Detailed payback analysis to include simple payback, internal rate of return (IRR), and other customer-specific financial analyses
- 3.5.9. Utility Programs: Detailed list of rebate and incentive programs offered by the customer's utility provider
- 3.5.10. Equipment Inventory: Detailed list of all equipment found on the facility
- 3.5.10.1. Electrical
 - 3.5.10.2. Mechanical

After the report is complete, but before presenting to the customer, IPUC Representative's engineering department will review all measures, paybacks, estimated costs and evaluations. The report will be modified until it meets requirements. Once approved by IPUC, IPUC Representative will present the findings to the customer.

EXHIBIT E

GENERAL SERVICE ENERGY SURVEY AND DIRECT INSTALL PROGRAM

1. Energy Survey Process and Direct Install Program
 - 1.1 The IPUC Representative will meet with the General Service customer and if necessary, receive a "Property Owner's Agreement" signed by the property owner or property manager.
 - 1.2 The IPUC Representative will conduct a walk-through and enter in the database all the applicable energy measures for lighting, heating, cooling, and equipment.
 - 1.3 Consistent with IPUC EE Policy, IPUC Representative will recommend the appropriate energy efficiency measures to be installed.
 - 1.4 With the Customer and IPUC's approval, IPUC Representative will install the energy efficiency measures recommended
 - 1.5 The General Service customer or property manager will sign the work order listing the measures installed.

EXHIBIT F

DOMESTIC ENERGY SURVEY AND DIRECT INSTALL PROGRAM

- 1.1 The IPUC Representative will meet with the residential customer and if necessary, receive a "Property Owner's Agreement" signed by the property owner or property manager for each rental unit that will be participating.
- 1.2 The IPUC Representative will conduct a walk-through and enter in the database all the applicable energy measures for lighting, heating, cooling, and equipment.
- 1.3 Consistent with IPUC EE Policy, IPUC Representative will recommend the appropriate energy efficiency measures to be installed.
- 1.4 With the Customer and IPUC's- approval, IPUC Representative will install the energy efficiency measures recommended.
- 1.5 The homeowner or property manager will sign the work order listing the measures installed.

INDUSTRY PUBLIC UTILITIES COMMISSION

ITEM NO. 5.3



INDUSTRY PUBLIC UTILITIES COMMISSION

MEMORANDUM

TO: Honorable President Radecki and Members of the Industry Public Utilities Commissioners

FROM: Troy Helling, Public Utilities Director *TH*

STAFF: Joshua Nelson, Contract IPUC Engineer, CNC Engineering *JN*
Dev Birla, Operations Manager, CNC Engineering *DDB*

DATE: April 11, 2019

SUBJECT: Consideration of a Professional Services Agreement with POWER Engineers, Inc. in amount not to exceed \$160,000

Background:

The Waddingham 66/ 12 kV Substation is one of interconnections of IPUC – Electric Utility with Southern California Edison (SCE). Although the Waddingham Substation was energized 3.5 years ago and carrying customers' load more than a year and half without any issue, currently there is no capability to remotely monitor its major equipment and send email notification of alarms to the appropriate people to respond if required. Without that capability, IPUC is vulnerable to more damage to substation equipment and property, and prolonged outage in the event of malfunction of any equipment. In addition, there are a few other outstanding things that we recommend such as fine-tuning the reconfiguration of meters and protective relays, a ground grid study/evaluation of substation boundary fence grounding, an arc- flash study and labels on both of the 12kV metal clad switchgears and to add cyber security measures. This current status needs to be corrected as soon as possible in order to continue operating the substation in a safe and reliable manner.

This scope of work is for professional engineering services only and covered under Professional Services Agreement (PSA) Exhibit A in detail. All material and equipment required for the construction will be purchased directly by the IPUC. The construction and any required testing of equipment will be performed by IPUC's contractor Pacific Utility Installation (PUI) responsible for the maintenance of the Waddingham Substation and under the direction of the professional engineering firm selected.

IPUC Staff solicited the proposals from two engineering companies specialized in this kind of work and those firms were: Schweitzer Engineering Laboratories Engineering Services Inc. (SEL) and POWER Engineers, Inc. (PEI). Both companies submitted the proposals. The proposals were evaluated based on the completeness of the proposal, experience of the project team, schedule, and overall best qualified. Please see the comparison of proposals below:

Table1 Comparison of Proposals

Description of criteria	PEI	SEL	Remarks
Completeness of Proposal and cover all scope of work	Yes	No	SEL scope of work did not include ground- grid study and evaluation of substation boundary fence grounding
Project Manager and Project Team	Assigned, experienced and local	Assigned, less experienced and mostly in Pullman, Washington, State	
Schedule	Six months from notice- to- proceed	To be determined	SEL will provide schedule after the kick-off meeting
Overall Best Qualified	Yes	No – due to exception to the scope of work, schedule to be determined and less qualified project team	

PEI’s budget for this work is \$117, 963. SEL’s budget is \$165,134 which does not include the ground grid study. PEI has the best overall proposal for this engineering work.

In addition, IPUC Staff also reviewed the Spill Prevention, Control and Counter Measure (SPCC) Plan for Waddingham Substation and determined that it requires updating and needs to be signed by a registered professional engineer in the State of California. IPUC requested a separate proposal from different division of PEI on it. PEI submitted the proposal and covered in detail under PSA Exhibit A and its budget is \$13,477.

There are still few unknowns which may come up, such as design of required modifications in the fence grounding and other equipment, proper functioning of the substation cameras for security of the substation and any follow up required on HMI/SCADA and Metering etc. For all these unknowns we added a contingency of \$ 28,560. Please see Table 2 for breakdown of PEI proposed budget below:

Table 2 PEI Budget Breakdown:

Sr. Number	Description of Task	Budget Estimate
1	Project Management	\$10,402
2	Project Initiation and Single-Line- Diagrams	\$2,900
3	Grounding Grid Study/Fence	\$13,462
4	Control and Relay Schematics	\$ 6,962
5	Wiring Diagrams	\$ 7,469
6	Electrical System Model, Protective Relaying and Studies	\$32,192
7	HMI/SCADA and Metering	\$37,076
8	SEL-TEAM Event and Profile and SEL-5630 Meter Report three software	\$ 7,500
Subtotal		\$117,963
9	SPCC Update	\$ 13,477
10	Misc. such as design of ground grid modification, follow up on any HMI/SCADA or Metering issues and monitoring of security cameras inside substation etc.	\$ 28,560
TOTAL	Not-to- exceed	\$160,000

As mentioned above, this budget is only for engineering services. IPUC Staff will solicit separate quote from PUI for construction/ testing part at a later date.

Discussion:

This current substation status with no remote monitoring capability and the lack of email notification of alarms to respond if required does not meet normal utility practice and is a potential risk. This needs to be corrected as soon as possible in order to continue operating the substation in a safe and reliable manner in future.

Both SEL and PEI proposals are good proposals, but SEL took exception to the grounding grid analysis which is one of critical part of scope of work to investigate substation fence grounding to ensure the safety of the public and people going inside the substation for inspection, operation and maintenance. Also the PEI project team has more experience

has a well-defined schedule, and offers the best overall value. PEI also has the expertise and capability to update SPCC Plan which is a plus.

Fiscal Impact:

The recommended action for this Agreement will have a fiscal impact of \$160,000. An appropriation request from the Electric Utility Reserve Fund to the Electric Utility Fund-City Electric - Budget Contract Labor Professional and Technical (Account No. 161-300-6200) is being requested in the amount of \$160,000.

Recommendation:

It is recommended that the IPUC Board approve the Professional Services Agreement for Consulting Services with POWER Engineers, Inc. in an amount not-to-exceed \$160,000.

Exhibit:

- A. Professional Services Agreement with PEI dated April 11, 2019
-

TH/JN/DB:jv

EXHIBIT A

Professional Services Agreement with PEI dated April 11, 2019

[Attached]

INDUSTRY PUBLIC UTILITIES COMMISSION PROFESSIONAL SERVICES AGREEMENT

This PROFESSIONAL SERVICES AGREEMENT (“Agreement”), is made and effective as of April 11, 2019 (“Effective Date”), between the Industry Public Utilities Commission (“IPUC”) and POWER Engineers, Incorporated, an Idaho corporation, (“Consultant”). The IPUC and Consultant are hereinafter collectively referred to as the “Parties”.

RECITALS

WHEREAS, IPUC desires to engage Consultant to perform the services described herein, and Consultant desires to perform such services in accordance with the terms and conditions set forth herein.

NOW, THEREFORE, for and in consideration of the mutual covenants and conditions herein contained, IPUC and Consultant agree as follows:

1. TERM

This Agreement shall commence on the Effective Date, and shall remain and continue in effect until tasks described herein are completed, but in no event later than June 30, 2020, unless sooner terminated pursuant to the provisions of this Agreement.

2. SERVICES

(a) Consultant shall perform the tasks (“Services”) described and set forth in Exhibit A, attached hereto and incorporated herein as though set forth in full. (“Scope of Services”). Tasks other than those specifically described in the Scope of Services shall not be performed without prior written approval of the IPUC. The Services shall be performed by Consultant, unless prior written approval is first obtained from the IPUC. In the event of conflict or inconsistency between the terms of this Agreement and Exhibit A, the terms of this Agreement shall prevail.

(b) IPUC shall have the right to request, in writing, changes to the Services. Any such changes mutually agreed upon by the Parties, and any corresponding increase or decrease in compensation, shall be incorporated by written amendment to this Agreement.

(c) Consultant shall perform all Services in a manner reasonably satisfactory to the IPUC and in a first-class manner in conformance with the standards of quality normally observed by an entity providing engineering consulting services, serving a municipal agency.

(d) Consultant shall comply with all applicable federal, state, and local laws, regulations and ordinances in the performance of this Agreement, including but not limited to, the conflict of interest provisions of Government Code Section 1090 and the Political Reform Act (Government Code Section 81000 *et seq.*). During the term of this Agreement, Consultant shall not perform any work for another person or entity for whom

Consultant was not working on the Effective Date if both (i) such work would require Consultant to abstain from a decision under this Agreement pursuant to a conflict of interest statute or law; and (ii) IPUC has not consented in writing to Consultant's performance of such work. No officer or employee of IPUC shall have any financial interest in this Agreement that would violate California Government Code Sections 1090 *et seq.* Consultant hereby warrants that it is not now, nor has it been in the previous twelve (12) months, an employee, agent, appointee, or official of the IPUC. If Consultant was an employee, agent, appointee, or official of the IPUC in the previous twelve (12) months, Consultant warrants that it did not participate in any manner in the forming of this Agreement. Consultant understands that, if this Agreement is made in violation of Government Code §1090 *et. seq.*, the entire Agreement is void and Consultant will not be entitled to any compensation for Services performed pursuant to this Agreement, and Consultant will be required to reimburse the IPUC for any sums paid to the Consultant. Consultant understands that, in addition to the foregoing, it may be subject to criminal prosecution for a violation of Government Code § 1090 and, if applicable, will be disqualified from holding public office in the State of California.

(e) Consultant represents that it has, or will secure at its own expense, all licensed personnel required to perform the Services. All Services shall be performed by Consultant or under its supervision, and all personnel engaged in the Services shall be qualified and licensed to perform such services.

3. MANAGEMENT

IPUC's Public Utilities Director or his designee shall represent the IPUC in all matters pertaining to the administration of this Agreement, review and approval of all products submitted by Consultant, but shall have no authority to modify the Services or the compensation due to Consultant.

4. PAYMENT

(a) The IPUC agrees to pay Consultant monthly, in accordance with the payment rates and terms and the schedule of payment as set forth in Exhibit B ("Rate Schedule"), attached hereto and incorporated herein by this reference as though set forth in full, based upon actual time spent on the above tasks. This amount shall not exceed One Hundred Sixty Thousand Dollars (\$160,000.00) for the total Term of the Agreement unless additional payment is approved as provided in this Agreement.

(b) Consultant shall not be compensated for any services rendered in connection with its performance of this Agreement which are in addition to those set forth herein, unless such additional services are authorized in advance and in writing by the IPUC. Consultant shall be compensated for any additional services in the amounts and in the manner as agreed to by IPUC and Consultant at the time IPUC's written authorization is given to Consultant for the performance of said services.

(c) Consultant shall submit invoices monthly for actual services performed. Invoices shall be submitted on or about the first business day of each month, or as soon thereafter as

practical, for services provided in the previous month. Payment shall be made within thirty (30) days of receipt of each invoice as to all non-disputed fees. If the IPUC disputes any of Consultant's fees it shall give written notice to Consultant within thirty (30) days of receipt of an invoice of any disputed fees set forth on the invoice. Any final payment under this Agreement shall be made within 45 days of receipt of an invoice therefore.

5. SUSPENSION OR TERMINATION OF AGREEMENT

(a) The IPUC may at any time, for any reason, with or without cause, suspend or terminate this Agreement, or any portion hereof, by serving upon the Consultant at least ten (10) days prior written notice. Upon receipt of said notice, the Consultant shall immediately cease all work under this Agreement, unless the notice provides otherwise. If the IPUC suspends or terminates a portion of this Agreement such suspension or termination shall not make void or invalidate the remainder of this Agreement.

(b) In the event this Agreement is terminated pursuant to this Section, the IPUC shall pay to Consultant the actual value of the work performed up to the time of termination, provided that the work performed is of value to the IPUC. Upon termination of the Agreement pursuant to this Section, the Consultant shall submit an invoice to the IPUC pursuant to Section 5 of this Agreement.

6. OWNERSHIP OF DOCUMENTS

(a) Consultant shall maintain complete and accurate records with respect to sales, costs, expenses, receipts, and other such information required by IPUC that relate to the performance of services under this Agreement. Consultant shall maintain adequate records of services provided in sufficient detail to permit an evaluation of services. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Consultant shall provide free access to the representatives of IPUC or its designees at reasonable times to review such books and records; shall give IPUC the right to examine and audit said books and records; shall permit IPUC to make transcripts or copies therefrom as necessary; and shall allow inspection of all work, data, documents, proceedings, and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a period of three (3) years after receipt of final payment.

(b) Upon completion of, or in the event of termination or suspension of this Agreement, and upon final payment of all undisputed invoices, all original documents, designs, drawings, maps, models, computer files, surveys, notes, and other documents prepared in the course of providing the services to be performed pursuant to this Agreement shall become the sole property of the IPUC and may be used, reused, or otherwise disposed of by the IPUC without the permission of the Consultant. The IPUC shall not gain ownership of any intellectual property of Consultant that was used to create the services. With respect to computer files, Consultant shall make available to the IPUC, at the Consultant's office, and upon reasonable written request by the IPUC, the necessary computer software and hardware for purposes of accessing, compiling, transferring, copying and/or printing computer files. Consultant shall grant to IPUC a non-exclusive, perpetual,

royalty-free, world-wide, limited license under copyright to use all reports, documents, or other written material developed by Consultant in the performance of the Services pursuant to this Agreement, shall be and remain the property of the Consultant.

7. INDEMNIFICATION

(a) Indemnity for professional liability

When the law establishes a professional standard of care for Consultant's Services, to the fullest extent permitted by law, Consultant shall indemnify, protect, defend and hold harmless the IPUC and any and all of its officials, and employees ("Indemnified Parties") from and against any and all losses, liabilities, damages, costs and expenses, including legal counsel's fees and costs caused in whole or in part by any negligent or wrongful act, error or omission of Consultant, its officers, agents, employees or Subconsultants (or any agency or individual that Consultant shall bear the legal liability thereof) in the performance of professional services under this Agreement.

(b) Indemnity for other than professional liability

Other than in the performance of professional services and to the full extent permitted by law, Consultant shall indemnify, defend and hold harmless IPUC, and any and all of its employees, and officials from and against any liability (including liability for claims, suits, actions, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, whether actual, alleged or threatened, including legal counsel fees and costs, court costs, interest, and expert witness fees), where the same arise out of, are a consequence of, or are in any way attributable to, in whole or in part, the negligent performance of this Agreement by Consultant or by any individual or agency for which Consultant is legally liable, including but not limited to officers, agents, employees or subcontractors of Consultant.

(c) DUTY. In the event the IPUC, its officers, employees, and/or volunteers are made a party to any action, claim, lawsuit, or other adversarial proceeding arising from the comparatively negligent performance of the services encompassed by this Agreement, and upon demand by IPUC, Consultant shall have an immediate duty to mutually consult the IPUC at Consultant's cost or at IPUC's option, to reimburse the IPUC for its costs of defense, including reasonable attorney's fees and costs incurred in the defense of such matters to the extent that any liability arises out of the negligent acts or omissions of Consultant.

In the event of any dispute between Consultant and IPUC, as to whether liability arises from the sole negligence of the IPUC or its officers, employees, or agents, Consultant will be obligated to pay for IPUC's defense until such time as a final judgment has been entered adjudicating the IPUC as comparatively negligent. Consultant will be entitled in the event of such a determination to any reimbursement of defense costs including but not limited to fees, expert fees and costs of litigation.

8. INSURANCE

Consultant shall maintain prior to the beginning of and for the duration of this Agreement insurance coverage as specified in Exhibit C attached hereto and incorporated herein by reference.

9. INDEPENDENT CONSULTANT

(a) Consultant is and shall at all times remain as to the IPUC a wholly independent consultant and/or independent contractor. The personnel performing the services under this Agreement on behalf of Consultant shall at all times be under Consultants exclusive direction and control. Neither IPUC nor any of its officers, employees, or agents shall have control over the conduct of Consultant or any of Consultant's officers, employees, or agents, except as set forth in this Agreement. Consultant shall not at any time or in any manner represent that it or any of its officers, employees, or agents are in any manner officers, employees, or agents of the IPUC. Consultant shall not incur or have the power to incur any debt, obligation, or liability whatever against the IPUC, or bind the IPUC in any manner.

(b) No employee benefits shall be available to Consultant in connection with the performance of this Agreement. Except for the fees paid to Consultant as provided in the Agreement, IPUC shall not pay salaries, wages, or other compensation to Consultant for performing services hereunder for IPUC. IPUC shall not be liable for compensation or indemnification to Consultant for injury or sickness arising out of performing services hereunder.

10. LEGAL RESPONSIBILITIES

The Consultant shall keep itself informed of State and Federal laws and regulations which in any manner affect those employed by it or in any way affect the performance of its service pursuant to this Agreement. The Consultant shall at all times observe and comply with all such laws and regulations. The IPUC, and its officers and employees, shall not be liable at law or in equity occasioned by failure of the Consultant to comply with this Section.

11. UNDUE INFLUENCE

Consultant declares and warrants that no undue influence or pressure was used against or in concert with any officer or employee of the IPUC in connection with the award, terms or implementation of this Agreement, including any method of coercion, confidential financial arrangement, or financial inducement. No officer or employee of the IPUC has or will receive compensation, directly or indirectly, from Consultant, or from any officer, employee or agent of Consultant, in connection with the award of this Agreement or any work to be conducted as a result of this Agreement. Violation of this Section shall be a material breach of this Agreement entitling the IPUC to any and all remedies at law or in equity.

12. NO BENEFIT TO ARISE TO LOCAL OFFICERS AND EMPLOYEES

No member, officer, or employee of IPUC, or their designees or agents, and no public official who exercises authority over or responsibilities with respect to the Project during his/her tenure or for one year thereafter, shall have any interest, direct or indirect, in any agreement or sub-agreement, or the proceeds thereof, for work to be performed in connection with the Project performed under this Agreement.

13. RELEASE OF INFORMATION/CONFLICTS OF INTEREST

(a) All information gained by Consultant in performance of this Agreement shall be considered confidential and shall not be released by Consultant without IPUC's prior written authorization. Consultant, its officers, employees, agents, or subconsultants, shall not without written authorization from the IPUC, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories, or other information concerning the work performed under this Agreement or relating to any project or property located within the IPUC, unless otherwise required by law or court order. (b)

Consultant shall promptly notify IPUC should Consultant, its officers, employees, agents, or subconsultants be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions, or other discovery request ("Discovery"), court order, or subpoena from any person or party regarding this Agreement and the work performed there under or with respect to any project or property located within the IPUC, unless Consultant is prohibited by law from informing the IPUC of such Discovery, court order or subpoena. IPUC retains the right, but has no obligation, to represent Consultant and/or be present at any deposition, hearing, or similar proceeding as allowed by law. Unless IPUC is a party to the lawsuit, mediation or administrative proceeding and is adverse to Consultant in such proceeding, Consultant agrees to cooperate fully with the IPUC and to provide the opportunity to review any response to discovery requests provided by Consultant. However, IPUC's right to review any such response does not imply or mean the right by IPUC to control, direct, or rewrite said response.

14. NOTICES

Any notices which either party may desire to give to the other party under this Agreement must be in writing and may be given either by (i) personal service, (ii) delivery by a reputable document delivery service, such as but not limited to, Federal Express, which provides a receipt showing date and time of delivery, or (iii) mailing in the United States Mail, certified mail, postage prepaid, return receipt requested, addressed to the address of the party as set forth below or at any other address as that party may later designate by notice:

To IPUC:

Industry Public Utilities Commission
15625 E. Stafford, Suite 100
City of Industry, CA 91744

Attention: Troy Helling, Public Utilities Director

With a Copy to: James M. Casso, Legal Counsel
Casso & Sparks, LLP
13200 Crossroads Parkway North, Suite 345
City of Industry, CA 91746

To Consultant: POWER Engineers, Inc.
3944 Murphy Canyon Road, Suite 100
San Diego, CA 92123

Attention: Hector Esquer, PE, Project Manager

15. ASSIGNMENT

The Consultant shall not assign the performance of this Agreement, nor any part thereof, nor any monies due hereunder, without prior written consent of the IPUC.

Before retaining or contracting with any subconsultant for any services under this Agreement, Consultant shall provide IPUC with the identity of the proposed subconsultant, a copy of the proposed written contract between Consultant and such subconsultant which shall include an indemnity provision similar to the one provided herein and identifying IPUC as an indemnified party, or an incorporation of the indemnity provision provided herein, and proof that such proposed subconsultant carries insurance at least equal to that required by this Agreement or obtain a written waiver from the IPUC for such insurance.

Notwithstanding Consultant's use of any subconsultant, Consultant shall be responsible to the IPUC for the performance of its subconsultant as it would be if Consultant had performed the Services itself. Nothing in this Agreement shall be deemed or construed to create a contractual relationship between the IPUC and any subconsultant employed by Consultant. Consultant shall be solely responsible for payments to any subconsultants. Consultant shall indemnify, and hold harmless the Indemnified Parties for any claims arising from, or related to, the negligent services performed by a subconsultant under this Agreement.

16. GOVERNING LAW/ATTORNEYS' FEES

The IPUC and Consultant understand and agree that the laws of the State of California shall govern the rights, obligations, duties, and liabilities of the parties to this Agreement and also govern the interpretation of this Agreement. Any litigation concerning this Agreement shall take place in the municipal, superior, or federal district court in Los Angeles County, California. If any action at law or suit in equity is brought to enforce or interpret the provisions of this Agreement, or arising out of or relating to the Services provided by Consultant under this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees and all related costs, including costs of expert witnesses and consultants, as well as costs on appeal, in addition to any other relief to which it may be entitled.

17. ENTIRE AGREEMENT

This Agreement contains the entire understanding between the Parties relating to the obligations of the Parties described in this Agreement. All prior or contemporaneous agreements, understandings, representations, and statements, oral or written and pertaining to the subject of this Agreement or with respect to the terms and conditions of this Agreement, are merged into this Agreement and shall be of no further force or effect. Each party is entering into this Agreement based solely upon the representations set forth herein and upon each party's own independent investigation of any and all facts such party deems material.

18. SEVERABILITY

If any term or provision of this Agreement or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, then such term or provision shall be amended to, and solely to, the extent necessary to cure such invalidity or unenforceability, and in its amended form shall be enforceable. In such event, the remainder of this Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and be enforced to the fullest extent permitted by law.

19. COUNTERPARTS

This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, but all of which taken together shall constitute one and the same instrument.

20. CAPTIONS

The captions appearing at the commencement of the sections hereof, and in any paragraph thereof, are descriptive only and shall have no significance in the interpretation of this Agreement.

21. WAIVER

The waiver by IPUC or Consultant of any breach of any term, covenant or condition herein contained shall not be deemed to be a waiver of such term, covenant or condition or of any subsequent breach of the same or any other term, covenant or condition herein contained. No term, covenant or condition of this Agreement shall be deemed to have been waived by IPUC or Consultant unless in writing.

22. REMEDIES

Each right, power and remedy provided for herein or now or hereafter existing at law, in equity, by statute, or otherwise shall be cumulative and shall be in addition to every other right, power, or remedy provided for herein or now or hereafter existing at law, in equity, by statute, or otherwise. The exercise, the commencement of the exercise, or

the forbearance of the exercise by any party of any one or more of such rights, powers or remedies shall not preclude the simultaneous or later exercise by such party of any of all of such other rights, powers or remedies.

Any and all disputes, controversies or claims between the Parties to this Agreement, if not settled within twenty (20) days following written notice of such dispute, shall be referred to senior management of the Parties for resolution. In the event the Parties are unable to settle the dispute through senior management negotiations as set forth above, all remaining controversies or claims shall then be submitted to mediation within ten (10) days from written notice by either Party to the other of the conclusion of senior management negotiations. Mediation shall follow the Commercial Mediation Rules published by the American Arbitration Association. The Parties shall share equally the costs and fees of the mediator and each Party shall pay its own costs and attorneys' fees incurred in mediation or any subsequent litigation. Unless the Parties agree otherwise, mediation shall be held in Los Angeles County, California. This agreement to mediate and any other agreement or consent to mediate entered into in accordance with this Agreement shall be specifically enforceable under the prevailing law of any court having jurisdiction. In the event the dispute has not been resolved within thirty (30) days following mediation, or such longer period as the Parties may agree, either Party may initiate formal proceedings against the other Party.

Consultant and the IPUC waive, to the fullest extent permitted by law, any right they may have to receive damages from the other Party based on any theory of liability for any special, indirect, consequential (including lost profits), exemplary or punitive damages.

NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT TO THE CONTRARY, THE IPUC AGREES TO LIMIT THE CONSULTANT'S LIABILITY TO THE IPUC AND TO ALL PERSONS HAVING CONTRACTUAL RELATIONSHIPS WITH THE IPUC TO THE AMOUNT OF INSURANCE UNDER EXHIBIT C.

23. AUTHORITY TO EXECUTE THIS AGREEMENT

The person or persons executing this Agreement on behalf of Consultant represents and warrants that he/she has the authority to execute this Agreement on behalf of the Consultant and has the authority to bind Consultant to the performance of its obligations hereunder.

24. LIMITATION OF LIABILITY

NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT TO THE CONTRARY, THE IPUC AGREES TO LIMIT THE CONSULTANT'S LIABILITY TO THE IPUC AND TO ALL PERSONS HAVING CONTRACTUAL RELATIONSHIPS WITH THE IPUC TO THE AMOUNT OF INSURANCE UNDER EXHIBIT C.

25. MUTUAL WAIVER OF CONSEQUENTIAL DAMAGES

Consultant and the IPUC waive, to the fullest extent permitted by law, any right they may have to receive damages from the other Party based on any theory of liability for any special, indirect, consequential (including lost profits), exemplary or punitive damages.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed as of the Effective Date.

“IPUC”
Industry Public Utilities Commission

“CONSULTANT”
POWER Engineers, Inc.

By _____
Troy Helling, Public Utilities Director

By _____
Greg Clark, Sr. Project Manager

Attest:

By _____
Julie Gutierrez –Robles, Deputy Commission Secretary

Approved as to form:

By: _____
James M. Casso, General Counsel

- | | | |
|--------------|-----------|------------------------|
| Attachments: | Exhibit A | Scope of Services |
| | Exhibit B | Rate Schedule |
| | Exhibit C | Insurance Requirements |

EXHIBIT A

SCOPE OF SERVICES

Consultant shall provide the following Services:

1. Remote monitoring of Waddingham substation, cyber security, grounding grid analysis and ETAP system model etc.

- Update substation drawings to include the following:
 - One (1) new SEL -3620 Ethernet Security Gateway
 - One (1) new SEL-2730 U 24-Port Ethernet Switch
 - Wiring of GPS clock IRIG-B signals to 66 kV relays and meters.
 - Update single-line- diagram with additions and corrections
- Develop Electric System Model in ETAP from SCE 66 kV power source through the 12 kV feeder breakers
- Perform load flow study (real and reactive power), short-circuit analysis, protective coordination and arc flash incident energy analysis
- Update relay settings based on protection coordination study
- Arc- flash analysis per IEEE Std. 1584 and provide arc flash labels for 12 kV switchgears
- Perform Soil Resistivity tests in the substation and develop a model in CDEGS software package. Using the CDEGS model analyze step and touch voltages within the substation and 3 feet beyond the swing of outward opening gate. Provide a summary grounding report with the required mitigations in the ground grid including the substation boundary fence grounding.
- Facilitate remote monitoring of substation. Define network criteria document and provide configuration for the SEL-3620 Ethernet Security Gateway. The configuration to include remote access to the existing two SEL RTACs, Citect HMI and two SEL 66 kV substation meters.
- As – built points list for existing SEL RTACs configuration before any performing any modifications and then a recorded version of points list as record documentation after commissioning is completed.
- Modify existing Citect HMI one line diagram to include the addition of the 12 kV bypass breaker status , remote control of breakers and disconnects and 66 kV metering information IPUC requires to display.
- Provide remote web access to the CITECT HMI for monitoring the substation- specify the Web/Internet view only software and make it functional
- Add email notification functionality to provide notification on critical and non- critical alarms, equipment status changes and relay operations. Include battery and battery chargers alarms. Develop a point list of alarms and points and implement after IPUC approval.
- Purchase and configure three software SEL-5045 Team Event, TEAM Profile and SEL-5630 Meter Reports. Automate event report collection from relays, sequence of event data collection and notification via email or SMS text messages.
- Modify or configure two substation SEL 66 kV meters to allow hourly automated meter readings using SEL-5045 TEAM Profile software.
- Issue for construction (IFC) package for any new construction.
- Provide direction and supervision for any related field work done in the substation by IPUC's contractor

- Any training related to TEAM and other functions

2. Update Spill Prevention Control and Counter Measures(SPCC) Plan for Waddingham Substation

- Review the existing SPCC Plan for the Waddingham 66 kV to 12 kV substation against the most recent amendments to the U.S. Environmental Protection Agency's oil pollution prevention regulations at Title 40 CFR Part 112 and California Aboveground Petroleum Storage Act.
- Kick-off meeting at IPUC office and site visit to Waddingham Substation
- Conduct Field Investigation and validate the data
- Identify instances of non-compliance and recommend solutions
- Update the SPCC Plan and conduct conference call with IPUC
- Develop final plan for IPUC approval
- Deliver signed and PE stamped final SPCC Plan

EXHIBIT B
RATE SCHEDULE

PERSONNEL CLASSIFICATION

President	\$283.00/hr.
Executive Vice President	
Senior Project Manager IV	
Project Manager Director	\$280.00/hr.
Senior Project Manager III	
Senior Project Manager II	\$265.00/hr.
Senior Program Manager II	
Senior Project Manager I	\$250.00/hr.
Senior Program Manager I	
Senior Project Engineer III	
Strategic Consultant III	
Project Manager III	\$235.00/hr.
Project Lead IV	
Construction Manager III	
Senior Project Engineer II	
Strategic Consultant II	
Senior Consultant III	
Project Manager II	\$210.00/hr.
Project Lead III	
Strategic Consultant I	
Senior Consultant II	
Project Engineer III	
Construction Manager II	
Senior Project Engineer I	
Engineer V	
Project Manager I	\$180.00/hr.
Project Lead II Construction	
Manager I Environmental	
Specialist IV Project Engineer II	
Engineer IV	
Designer V	
Project Administrator III	
Senior Consultant I	
Consultant III	

Project Lead I \$170.00/hr.
Project Engineer I
Engineer III
Designer IV
Environmental Specialist III
Procurement Specialist III
Scheduling Specialist III
Project Administrator II
Consultant II

Engineer II \$158.00/hr.
Designer III
Technician IV
Environmental Specialist II
Procurement Specialist II
Scheduling Specialist II
Project Administrator I
Consultant I

Engineer I \$144.00/hr.
Designer II
Technician III
Environmental Specialist I
Procurement Specialist I Field
Representative IV Scheduling
Specialist I Project
Managers Assistant III

Designer I \$127.00/hr.
Drafter III
Technician II
Administrative Assistant I
Field Representative III
Staff Assistant II
Project Managers Assistant II

Drafter II \$107.00/hr.
Staff Assistant
Field Representative II
Project Manager Assistant I

Drafter I \$87.00/hr.
General Office Assistant
Field Representative I

SPECIAL APPLICATION SOFTWARE

Level I Software *	\$10.00/hr.
Level II Software **	\$20.00/hr.
Level III Software ***	\$35.00/hr
Level IV Software ****	\$60.00/hr

* Level I Software includes, among others: Structural Design, Foundation Design, HVAC Design, Conveyor Design, and Rockwell RSView & RSLogix.

** Level II Software includes, among others: ASPEN OneLiner, ESA Easy Power, Milsoft Windmil, OSI ETAP, Pathloss, SKM PTW, SynerGEE, Smart Plant P&ID, Smart Plant Instrumentation, Autodesk Revit, Navisworks, PTW, Matlab, PLS-Cad, TL-PRO, AutoCAD, AutoCAD Plant, AutoCAD Civil 3D, MicroStation, and specialized estimating programs.

***Level III Software includes, among others: CDEGS (RESAP/MALZ), GE PSLF, PSCAD (PSCAD/EMTDC), PTI PSS/E, WinIGS, Smart Plant 3D, PDS, ArcGis, Caesar II, and Electrocon CAPE.

****Level IV Software includes, among others: CDEGS, CDEGS (HiFREQ), Aspentech, and Autodesk 3D Max.

REPRODUCTION

Drawings – Black & White

Large Scale Drawings (C Size)	\$1.90/ea.
Large Scale Drawings (D Size)	\$3.30/ea.
Large Scale Drawings (E Size)	\$5.50/ea.

Drawings – Color

Large Scale Drawings (C Size)	\$6.00/ea.
Large Scale Drawings (D Size)	\$10.90/ea.
Large Scale Drawings (E Size)	\$17.50/ea.

Documents – Black & White

Single-sided copies	8 x 11 \$0.11/ea.	11 x 17 \$0.17/ea.
Double-sided copies	8 x 11 \$0.22/ea.	11 x 17 \$0.34/ea.

Documents – Color

Single-sided copies	8 x 11 \$0.50/ea.	11 x 17 \$1.00/ea.
Double-sided copies	8 x 11 \$1.00/ea.	
Spiral Comb		\$2.65/ea.
3 Ring Binder		Dependent on size
Special Copy Center Projects (Labor)		\$45.00/hr.

SURVEY EQUIPMENT

Survey Equipment to support field crew		\$70.00/day
GPS Equipment 2 Units	\$60.00/hour	\$350.00/day
GPS Equipment 3 Units	\$80.00/hour	\$450.00/day

Communication Charge - including but not limited to VOIP charges, file sharing cloud services, and web collaboration sites, charged at 1% of labor billing charges.

CAD Usage Charge – charged at 3% of labor billing charges.

*This standard Rate Schedule is for professional services. Unless agreed otherwise, charges for work on continuing projects will be based on the then current Rate Schedule. A new Rate Schedule will be issued to be effective January 1 of each new year and as necessary on an intermediate basis to accommodate new items or revised charges. Invoices will be submitted monthly and/or upon completion of the work and will be due and payable when issued. All accounts not paid within thirty (30) days after Owner’s receipt of the invoice will bear a **SERVICE CHARGE OF 1.0% PER MONTH** for each month the invoice is unpaid.

EXHIBIT C

INSURANCE REQUIREMENTS

Without limiting Consultant's indemnification of IPUC, and prior to commencement of the Services, Consultant shall obtain, provide and maintain at its own expense during the term of this Agreement, policies of insurance of the type and amounts described below and in a form satisfactory to IPUC.

General liability insurance. Consultant shall maintain commercial general liability insurance with coverage at least as broad as Insurance Services Office form CG 00 01, in an amount not less than \$1,000,000.00 per occurrence, \$2,000,000.00 general aggregate, for bodily injury, personal injury, and property damage. The policy must include contractual liability that has not been amended. Any endorsement restricting standard ISO "insured contract" language will not be accepted.

Automobile liability insurance. Consultant shall maintain automobile insurance at least as broad as Insurance Services Office form CA 00 01 covering bodily injury and property damage for all activities of the Consultant arising out of or in connection with Work to be performed under this Agreement, including coverage for any owned, hired, non-owned or rented vehicles, in an amount not less than \$1,000,000.00 combined single limit for each accident.

Professional liability (errors & omissions) insurance. Consultant shall maintain professional liability insurance that covers the Services to be performed in connection with this Agreement, in the minimum amount of \$1,000,000 per claim and in the aggregate. Any policy inception date, continuity date, or retroactive date must be before the effective date of this agreement and Consultant agrees to maintain continuous coverage through a period no less than three years after completion of the services required by this agreement.

Workers' compensation insurance. Consultant shall maintain Workers' Compensation Insurance (Statutory Limits) and Employer's Liability Insurance (with limits of at least \$1,000,000.00).

Consultant shall submit to IPUC, along with the certificate of insurance, a Waiver of Subrogation endorsement in favor of IPUC, its officers, agents, employees and volunteers.

Proof of insurance. Consultant shall provide certificates of insurance to IPUC as evidence of the insurance coverage required herein, along with a waiver of subrogation endorsement for workers' compensation. Insurance certificates and endorsement must be approved by IPUC's Risk Manager prior to commencement of performance. Current certification of insurance shall be kept on file with IPUC at all times during the term of this contract. IPUC reserves the right to require complete, certified copies of all required insurance policies, at any time.

Duration of coverage. Consultant shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property, which may

arise from or in connection with the performance of the Services hereunder by Consultant, his agents, representatives, employees or subconsultants.

Primary/noncontributing. Coverage provided by Consultant shall be primary and any insurance or self-insurance procured or maintained by IPUC shall not be required to contribute with it. The limits of insurance required herein may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of IPUC before the IPUC's own insurance or self-insurance shall be called upon to protect it as a named insured.

IPUC's rights of enforcement. In the event any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, IPUC has the right but not the duty to obtain the insurance it deems necessary and any premium paid by IPUC will be promptly reimbursed by Consultant, or IPUC will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, IPUC may cancel this Agreement.

Acceptable insurers. All insurance policies shall be issued by an insurance company currently authorized by the Insurance Commissioner to transact business of insurance in the State of California, with an assigned policyholders' Rating of A- (or higher) and Financial Size Category Class VI (or larger) in accordance with the latest edition of Best's Key Rating Guide, unless otherwise approved by the IPUC's Risk Manager.

Waiver of subrogation. All insurance coverage maintained or procured pursuant to this agreement shall be endorsed to waive subrogation against IPUC, its elected or appointed officers, agents, officials, employees and volunteers or shall specifically allow Consultant or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Consultant hereby waives its own right of recovery against IPUC, and shall require similar written express waivers and insurance clauses from each of its subconsultants.

Enforcement of contract provisions (non estoppel). Consultant acknowledges and agrees that any actual or alleged failure on the part of the IPUC to inform Consultant of non-compliance with any requirement imposes no additional obligations on the IPUC nor does it waive any rights hereunder.

Requirements not limiting. Requirements of specific coverage features or limits contained in this Section are not intended as a limitation on coverage, limits or other requirements, or a waiver of any coverage normally provided by any insurance. Specific reference to a given coverage feature is for purposes of clarification only as it pertains to a given issue and is not intended by any party or insured to be all inclusive, or to the exclusion of other coverage, or a waiver of any type. If the Consultant maintains higher limits than the minimums shown above, the IPUC requires and shall be entitled to coverage for the higher limits maintained by the Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the IPUC.

Notice of cancellation. Consultant agrees to oblige its insurance agent or broker and insurers to provide to IPUC with a thirty (30) day notice of cancellation (except for nonpayment for which a ten (10) day notice is required) or nonrenewal of coverage for each required coverage.

Additional insured status. General liability policies shall provide or be endorsed to provide that IPUC and its officers, officials, employees, and agents, and volunteers shall be additional insureds under such policies. This provision shall also apply to any excess liability policies.

Prohibition of undisclosed coverage limitations. None of the coverages required herein will be in compliance with these requirements if they include any limiting endorsement of any kind that has not been first submitted to IPUC and approved of in writing.

Separation of Insureds. A severability of interests provision must apply for all additional insureds ensuring that Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the insurer's limits of liability. The policy(ies) shall not contain any cross-liability exclusions.

Pass Through Clause. Consultant agrees to ensure that its subconsultants, subcontractors, and any other party involved with the project who is brought onto or involved in the project by Consultant, provide the same minimum insurance coverage and endorsements required of Consultant. Consultant agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this section. Consultant agrees that upon request, all agreements with consultants, subcontractors, and others engaged in the project will be submitted to IPUC for review.

IPUC's right to revise specifications. The IPUC reserves the right at any time during the term of the contract to change the amounts and types of insurance required by giving the Consultant ninety (90) days advance written notice of such change. If such change results in substantial additional cost to the Consultant, the IPUC and Consultant may renegotiate Consultant's compensation.

Self-insured retentions. Any self-insured retentions must be declared to and approved by the IPUC. The IPUC reserves the right to require that self-insured retentions be eliminated, lowered, or replaced by a deductible. Self-insurance will not be considered to comply with these specifications unless approved by the IPUC.

Timely notice of claims. Consultant shall give the IPUC prompt and timely notice of claims made or suits instituted that arise out of or result from Consultant's performance under this Agreement, and that involve or may involve coverage under any of the required liability policies.

Additional insurance. Consultant shall also procure and maintain, at its own cost and expense, any additional kinds of insurance, which in its own judgment may be necessary for its proper protection and prosecution of the work.