

**MASTER ENABLING AGREEMENT**

**COMMISSIONING** 2021-0520

For use on any CSU project.

This AGREEMENT is made and entered into this **1ST** day of **July 2021** pursuant to the Public Contract Code 10700, *et seq.*, by and between the Trustees of the California State University on behalf of

<i>Campus, hereafter referred to as Trustees, and</i> <b>California State University</b>	Amendment No.: <b>1</b>	Agreement No.: <b>180469</b>	Is agreement for Design Professional services: Yes (GP-8b)	Project No.: <b>N/A</b>
<i>Service Provider, hereafter referred to as Service Provider.</i> <b>Power Engineering Services, Inc.</b>	CSU Vendor ID No.: <b>2291</b>	License Number: <b>L12485</b>		DIR No.: <b>N/A</b>

WITNESSETH: That the Service Provider in consideration of the statements and conditions herein contained, agrees to furnish labor, materials, and equipment and to perform work necessary to complete, in a skillful manner the following: Provide Commissioning Services for public works projects submitted by the California State University to engage the services of Service Provider for work defined in original agreement.

This is an Amendment to a Master Enabling Agreement under which each campus and the administrative office of the California State University may engage the services of Service Provider as provided herein.

Campuses and the administrative office shall execute a Service Order and Authorization to Proceed to secure Service Provider's peer review services under this Agreement.

Agreement No. 180469, dated July 1, 2019, is hereby amended as follows:

1. This amendment exercises the option to extend the term for an additional one (1) year. The term of this agreement shall be from July 1, 2021, through June 30, 2022, with no options remaining.
2. Rider A in the original Agreement is hereby deleted and replaced in its entirety with Rider A-1, which is attached hereto and incorporated herein.

Except as amended herein, all other terms and conditions of the original Agreement remain unchanged.

The Service Provider shall not perform services in excess of the Agreement without prior written authorization to proceed from the Trustees. Service Provider shall report to California State University, Rachel Wong, Associate University Engineer, Capital Planning; Design and Construction R Wong@calstate.edu; 562-951-4017.

Trustees of the California State University							Service Provider						
Campus <b>The California State University, Office of the Chancellor</b>							Firm Name <b>Power Engineering Services, Inc.</b>						
By (Trustees' Authorized Signature) <u>Aaron Klemm</u> Aaron Klemm (Jun 10, 2021 08:14 PDT)							By (Authorized Signature) <u>Barbara Effenberger</u> Barbara Effenberger (Jun 9, 2021 17:40 PDT)						
Printed Name and Title of Person Signing <b>Aaron Klemm, Chief of Energy, Sustainability &amp; Transportation</b>							Printed Name and Title of Person Signing <b>Ms. Barbara Effenbener, Principal</b>						
Address of Campus Project Administrator <b>401 Golden Shore; Long Beach, CA 90802</b>							Address of Service Provider <b>2703 Saturn Street; Brea, CA 92821</b>						
SCO Acct	Fund	Sub Fund	Agency	Yr.	Ref/Item	Category	Program	Element	Component	Chapter	Fiscal Yr. 21/22	Legal Ref.	
Fund Name			PS Account		PS Fund	PS Dept. ID	PS Program	PS Class		PS Project/Grant			
Amount Encumbered <b>\$0.00</b>		<i>I hereby certify upon my personal knowledge that budgeted funds are available for the period and purpose of the expenditures stated above.</i>											
Amount of Increase <b>\$0.00</b>		Signature of Accounting Officer <u>Kelly Cox</u> Kelly Cox (Jun 10, 2021 09:21 PDT)									Date <b>06/10/2021</b>		
Amount of Decrease <b>\$0.00</b>		<i>I hereby certify that I have examined the written Agreement and find the same to be in accordance with the requirements of California State University Contract Law. G. ANDREW JONES, General Counsel</i>											
Total Amount Encumbered <b>\$0.00</b>		By Attorney <u>Christopher C. Fowler</u> Christopher C. Fowler (Jul 13, 2021 14:33 PDT)									Date <b>07/13/2021</b>		

*This Agreement may be executed in counterparts all of which taken together shall constitute one and the same Agreement. The exchange of copies of this Agreement by electronic mail in "portable document format" ("PDF") form or by other similar electronic means shall constitute effective execution and delivery of this Agreement and shall have the same effect as copies executed and delivered with original signatures.*

**Rider A – 1**  
**Agreement General Provisions,**  
**Service Provider**

1. Service Provider Relationship. Service Provider, in the performance of this Agreement, is an independent contractor and is not an employee, agent, or officer of the Trustees.
2. Payments. Payments under this Agreement shall be made in arrears of work increment completed to the satisfaction of the Trustees and upon submission of an invoice in CSU invoice format. If not otherwise specified payments for services rendered will be processed monthly upon presentation of invoice.
3. Services. Trustees may issue a written order with respect to the services to be performed under this Agreement at any time before the completion of the services. Trustees shall pay Service Provider an amount for such services as provided in this Agreement, or if not so provided, Trustees shall pay Service Provider a reasonable amount, which shall be agreed upon by the parties.
4. Service Provider shall not utilize any information, not a matter of public record, which is received by reason of this Agreement, for pecuniary gain not contemplated by the terms of this Agreement, regardless of whether Service Provider is or is not under contract at the time such gain is realized (Education Code Section 89006).
5. Ownership. The report, survey, or other product developed by Service Provider pursuant to this Agreement is the property of Trustees and shall not be disseminated to others by Service Provider unless authorized by Trustees.
6. Termination for Convenience. Trustees may terminate this Agreement upon a three (3) business-day advance written notice to Service Provider. In the event of such termination, Service Provider shall be paid only for the work satisfactorily completed.
7. Termination for Cause. Trustees may terminate this Agreement for cause should Service Provider fail to perform as herein provided. In the event of such termination, Trustees shall be relieved of the obligation to make any payment to Service Provider and Trustees may proceed by other means with the work in any manner the Trustees deem proper.
8. Indemnification.  
The Indemnification subsection below, next to the checked box, applies to this agreement, while the subsection next to the unchecked box does not apply to this agreement.
  - A.  Provisions of item 8a shall apply if the agreement is with a Service Provider that does not qualify under the provisions of California Civil Code section 2782.8. The Service Provider agrees to hold harmless, defend, and indemnify the State of California, the Trustees of the California State University, the University, and the officers, employees representatives, and agents of each of them from any and all claims, damages, losses, causes of action and demands, and all costs and expenses incurred in connection therewith, including, but not limited to, attorneys' fees and costs resulting from or in any manner arising out of or in connection with any negligent act or omission or willful misconduct on the part of the Service Provider, its officers, agents, and employees, in the performance of this Agreement. This provision shall survive the expiration or termination of this Agreement.
  - B.  Provisions of item 8b shall apply if the agreement is with a Service Provider that does qualify under the provisions of California Civil Code section 2782.8 and the scope of work is for design professional services. The Service Provider agrees to hold harmless, defend, and indemnify the State of California, the Trustees of the California State University, the University, and the officers, employees representatives, and agents of each of them from any and all claims, damages, losses, causes of action and demands, and all costs and expenses incurred in connection therewith, including, but not limited to, attorneys' fees and costs to the extent arising out of, pertaining to, or relating to the negligence, recklessness, or willful misconduct on the part of the Service Provider, its officers, agents, and employees, in the performance of this Agreement. In no event shall the cost to defend charged to the Service Provider exceed the Service Provider's proportionate percentage of fault. However, notwithstanding the previous sentence, in the event one or more defendants is unable to pay its share of defense costs due to bankruptcy or dissolution of the business, the Service Provider shall meet and confer with other parties regarding unpaid defense costs. Service Provider's liability is not limited to recoverable insurance. This provision shall survive the expiration or termination of this Agreement.

The provisions of section 8b pertaining to the duty and cost to defend shall not apply to either of the following:

- (1) Any contract for design professional services per the provisions of California Civil Code section 2782.8, or amendment thereto, where a project-specific general liability policy insures all project participants for general liability exposures on a primary basis and also covers all design professionals for their legal liability arising out of

their professional services on a primary basis.

- (2) A design professional per the provisions of California Civil Code Section 2782.8, that provides design professional service and is party to a written design-build joint venture agreement and not the primary holder of the Trustees and Design-Builder contract.

9. Insurance Provisions. The Service Provider shall not commence work until the Trustees have received evidence of the insurance required in this section and approved it.
  - A. Service Provider shall obtain the following policies and coverage. The insurance furnished by the Service Provider under this section shall provide coverage in amounts not less than the following, unless a different amount is stated in Exhibit A, Scope of Work Description:
    - (1) Comprehensive or Commercial Form General Liability Insurance:

On an occurrence basis, cover work done or to be done by or on behalf of the Service Provider and shall provide insurance coverage for bodily injury, personal injury, property damage, and contractual liability. The aggregate limit shall apply separately to the work. Limits of Liability:  
\$2,000,000 General Aggregate  
\$1,000,000 Each Claim - combined single limit for bodily injury and property damage.
    - (2) Business Automobile Liability Insurance:

On an occurrence basis, cover owned, scheduled, hired, and non-owned automobiles used by or on behalf of the Service Provider and shall provide insurance coverage for bodily injury, property damage, and contractual liability. Use Insurance Service Office (ISO) Form Number CA 0001 covering any automobile. Limits of Liability:  
\$1,000,000 Each Accident - combined single limit for bodily injury and property damage.
    - (3) Workers' Compensation Insurance:

This insurance shall include Employers Liability limits of \$1,000,000 and other limits required under California law.
    - (4) Professional Liability Insurance:

Professional liability (errors and omissions) insurance on an occurrence basis is preferred, covering work done or to be done by or on behalf of the Service Provider and providing insurance for professional liability in the amount of \$1,000,000 each occurrence. The Service Provider shall obtain and maintain professional liability insurance on a claims-made basis for no less than \$1,000,000 each claim and \$2,000,000 annual aggregate, and certification of coverage shall be submitted to the Trustees upon signing of this Agreement. If the total contract amount exceeds \$1,000,000 the Service Provider shall renew and keep such insurance in effect for at least ten (10) years after the recordation of the notice of completion.  
  
For any of the insurance described in the paragraphs above, the amount of limits can be satisfied by a combination of primary and excess or umbrella insurance.
  - B. Insurers shall be authorized in the State of California to transact insurance and shall hold a current A.M. Best's rating of no less than A: VII or alternatively a carrier acceptable to the Trustees.

Verification of coverage shall be provided as follows:

    - (1) The Service Provider shall submit to the Trustees copies of certificates of insurance and endorsements to the policies of insurance required by the Agreement as evidence of the insurance coverage.
    - (2) The scope of coverage shall be shown on the certificate of insurance.
    - (3) The Service Provider shall provide written notice of cancellation of coverage within thirty (30) days to the Trustees.
    - (4) The Service Provider shall notify the Trustees in writing of any material change in insurance coverage.
    - (5) Renewal certifications shall be timely filed by the Service Provider for coverage until the work is accepted as complete.
    - (6) Trustees reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these provisions, at any time.
  - C. Insurance policies except for Workers Compensation and Professional Liability insurance shall contain, or be endorsed to contain, the following provisions:
    - (1) For the general policies, the State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers, and agents shall be covered as additional insureds.

- (2) For claims related to the work, the Service Provider's insurance coverage shall be primary insurance as respects the State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers, and agents. Insurance or self-insurance maintained by the State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers, and agents shall be in excess of the Service Provider's insurance and shall not contribute with it.
- (3) The State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers, and agents shall not by reason of their inclusion as additional insureds incur liability to the insurance carriers for payment of premiums for such insurance.

D. Additional Insurance Provisions

- (1) Any deductible under any policy of insurance required in this section shall be the Service Provider's liability.
  - (2) Acceptance of certificates of insurance by the Trustees shall not limit the Service Provider's liability under the Agreement.
  - (3) The Service Provider's obligations to obtain and maintain required insurance are non-delegable duties under this Agreement.
10. Personal Eligibility Certification. If the Service Provider is a natural person, the Service Provider certifies by signing this Agreement that s/he is a citizen or national of the United States or otherwise qualified to receive public benefits under the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104- 193; 110 STAT. 2105, 2268-69), State of California Governor's Executive Order W-135-96.
11. Corporate Eligibility Certification. If the Service Provider is a corporation, the Service Provider certifies and declares by signing this Agreement that it is eligible to contract with the State of California pursuant to the California Taxpayer and Shareholder Protection Act of 2003 (Public Contract Code Section 10286, et seq.).
12. Nondiscrimination. In the performance of this Agreement the Service Provider and its consultants shall not deny the Agreement's benefits nor shall they discriminate unlawfully against any person on the basis of religion, color, ethnic group identification, sex, actual or perceived gender identity, age, physical or mental disability, medical condition, marital status, or age (over 40). Additionally, the Service Provider and its consultants shall insure that the evaluation and treatment of employees and applicants for employment are free of such discrimination as well.
- A. Service Provider shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12900, et seq.), the regulations promulgated thereunder (California Code of Regulations, Title 2, Sections 7285.0, et seq.), and the provisions of Article 9.5, Chapter 1, Part 1, Division 3, Title 2 of the Government Code (Government Code Sections 11135-11139.5).
  - B. Service Provider shall permit access by representatives of the California Department of Fair Employment and Housing and the Trustees upon reasonable notice at times during normal business hours with at least 24 hours' notice, to its books, records, accounts, other sources of information, and its facilities as the Department or Trustees shall require to ascertain compliance with this Agreement.
  - C. Service Provider and its consultants/subcontractors shall give written notice of their obligations under this Agreement to labor organizations with which they have a collective bargaining or other agreement.
  - D. Service Provider shall include the nondiscrimination and compliance provisions of this Agreement in subcontracts to perform work under the Agreement (Government Code Sections 12990, 11135, et seq., Title 2, California Code of Regulations, Section 11105)
13. Drug Free Workplace Certification. The Service Provider hereby certifies compliance with Government Code Sections 8355, 8356, and 8357 in matters relating to providing a drug-free workplace. In accordance with Government Code Section 8355, the Service Provider shall:
- A. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations;
  - B. Establish a Drug-Free Awareness Program to inform employees about all of the following:
    - (1) The dangers of drug abuse in the workplace,
    - (2) The Service Provider's policy of maintaining a drug-free workplace,
    - (3) Any available counseling, rehabilitation, and employee assistance programs, and

- (4) Penalties that may be imposed upon employees for drug abuse violations;
- C. Require that each employee engaged in the performance of the Agreement be given a copy of the statement required by subpart A, and require that each employee, as a condition of employment on the Agreement, agree to abide by the terms of the statement.
14. Disabled Veteran Business Enterprise. Responsive to direction from the State Legislature (Public Contract Code Section 10115, et seq.), the Trustees are seeking to increase the statewide participation of disabled veteran business enterprises in contract awards. To this end, Service Provider shall inform the Trustees of any contractual arrangements with consultants or suppliers that are certified disabled veteran business enterprises.
15. Assignment. Service Provider shall not assign benefits or delegate duties under this Agreement in whole or in part, nor assign any moneys due or to become due hereunder without the written consent of Trustees.
16. Successors. The provisions of this Agreement shall extend to and be binding upon and inure to the benefit of the heirs, executors, administrators, successors, and assigns to the parties hereto.
17. Notice. Notice for either party may be served by delivering it in writing to the party, or by depositing it in a U.S. mail deposit box with postage fully prepaid addressed as shown within the information block of the Agreement page. Nothing herein shall preclude the giving of notice by personal service.
18. Audit. If the Agreement exceeds \$10,000, the contracting parties shall be subject to the examination and audit of the State Auditor of the State of California and the California State University Auditor for a period of three years after final payment under the Agreement. This examination and audit shall be confined to those matters connected with the performance of this Agreement, including, but not limited to, the cost of administering this Agreement (Government Code Section 8546.7).
19. DIR Registration. In accordance with Labor Code Section 1720, et seq., the Service Provider shall register with the Department of Industrial Relations (DIR) for this project and pay at least the prevailing wages on services/work aspects where a prevailing wage applies. Such services and/or work aspects include, but are not limited to, the Service Provider or its sub-consultant's provision of geotechnical studies, potholing involving digging, site surveying and/or construction Inspector of Record services as defined by the DIR.
20. Agreement Changes. Alteration or variation of the terms of this Agreement shall not be valid unless made in writing and signed and dated by the parties. Oral representations, understandings, or writings not expressly incorporated in the Agreement are void. Unless identified within Exhibit A, Scope of Work, under a separate sub-heading entitled 'Modifications to Agreement', it is the intent of the Trustees to use the standard published form of this Agreement and Rider A without modification. The Agreement and Rider A shall not be modified without review and concurrence by CSU Office of General Counsel.
21. Offshoring of CSU Contract Work. Service Provider warrants it certified under penalty of perjury in its bid for this Agreement that the Agreement, and any subcontract performed under the Agreement, will be performed solely with workers within the United States; and if this Agreement, and any subcontract performed under this Agreement, will not be performed solely with workers within the United States, Service Provider described in its bid any parts of the work to be performed by workers outside of the United States. Further, Service Provider warrants no work will be performed under the Agreement with workers outside the United States, except as described in Service Provider's bid. If Service Provider or its sub-supplier performs the Agreement with workers outside the United States during the life of the Agreement, and Service Provider did not describe such work in its bid, Service Provider acknowledges and agrees that:
- A. CSU may terminate the Agreement without further obligation for noncompliance, and
- B. Service Provider will forfeit to CSU the amount CSU paid for the percentage of work that was performed with workers outside the United States and not described in Service Provider's bid.

**End of Rider A-1**



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

5/25/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).**

<b>PRODUCER</b> Risk Strategies Company 2040 Main Street, Suite 450 Irvine, CA 92614  www.risk-strategies.com	<b>CONTACT NAME:</b> Risk Strategies Company <b>PHONE (A/C No. Ext):</b> 949-242-9240 <b>E-MAIL ADDRESS:</b> syoung@risk-strategies.com	<b>FAX (A/C No.):</b>
	<b>INSURER(S) AFFORDING COVERAGE</b>	
<b>INSURED</b> Power Engineering Services, Inc. 2703 Saturn St. Brea CA 92821	<b>CA DOI License No.</b> 0F06675	<b>NAIC #</b>
<b>INSURER A:</b> Travelers Indemnity Company of CT		25682
<b>INSURER B:</b> California Automobile Insurance Company		38342
<b>INSURER C:</b> Chubb Indemnity Insurance Company		12777
<b>INSURER D:</b> Travelers Casualty and Surety Co America		31194
<b>INSURER E:</b> Travelers Property Casualty Co of America		25674
<b>INSURER F:</b>		

**COVERAGES**

CERTIFICATE NUMBER: 61934974

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WYD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:	<input checked="" type="checkbox"/>		6801J614599	6/1/2021	6/1/2022	EACH OCCURRENCE \$ \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ \$1,000,000 MED EXP (Any one person) \$ \$10,000 PERSONAL & ADV INJURY \$ \$1,000,000 GENERAL AGGREGATE \$ \$2,000,000 PRODUCTS - COMP/OP AGG \$ \$2,000,000 \$
B	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	<input checked="" type="checkbox"/>		BA040000059080	6/1/2021	6/1/2022	COMBINED SINGLE LIMIT (Ea accident) \$ \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
E	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 0			CUP6E874773	6/1/2021	6/1/2022	EACH OCCURRENCE \$ \$3,000,000 AGGREGATE \$ \$3,000,000 \$
C	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	2171778670	6/30/2020	6/30/2021	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$ \$1,000,000 E.L. DISEASE - POLICY LIMIT \$ \$1,000,000
D	Professional Liability			106191377	11/5/2020	11/5/2021	Per Claim: \$2,000,000 Aggregate: \$4,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Projects: 180469

For General Liability and Automobile Liability policies, the State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers, and agents are additional insureds where required by written contract. Coverage for any claims related to the insureds work is primary where required by written contract.

**CERTIFICATE HOLDER**

California State University  
 Office of the Chancellor,  
 Construction, Planning, Design & Construction  
 401 Golden Shore  
 Long Beach CA 90802

**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Michael Christian

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ACORD 25 (2016/03)

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**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **SCHEDULED ADDITIONAL INSURED (ARCHITECTS, ENGINEERS AND SURVEYORS)**

This endorsement modifies insurance provided under the following:

**COMMERCIAL GENERAL LIABILITY COVERAGE PART**

### **SCHEDULE**

#### **NAME OF PERSONS OR ORGANIZATIONS:**

The State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers, and agents

#### **PROJECT/LOCATION OF COVERED OPERATIONS:**

Projects: 180469

#### **PROVISIONS**

**1. The following is added to SECTION II – WHO IS AN INSURED:**

The person or organization shown in the Schedule above is an additional insured on this Coverage Part, but:

- a. Only with respect to liability for "bodily injury", "property damage" or "personal injury"; and
- b. If, and only to the extent that, the injury or damage is caused by acts or omissions of you or your subcontractor in the performance of "your work" to which the "written contract requiring insurance" applies, or in connection with premises owned by or rented to you.

The person or organization does not qualify as an additional insured:

- c. With respect to the independent acts or omissions of such person or organization; or
- d. For "bodily injury", "property damage" or "personal injury" for which such person or organization has assumed liability in a contract or agreement.

The insurance provided to such additional insured is limited as follows:

- e. This insurance does not apply to the rendering of or failure to render any "professional services".
- f. In the event that the Limits of Insurance of the Coverage Part shown in the Declarations exceed the limits of liability required by the "written contract requiring insurance", the insurance provided to the additional insured shall be limited to the limits of liability required by that "written contract requiring insurance". This endorsement does not increase the limits of insurance described in Section III – Limits Of Insurance.
- g. This insurance does not apply to "bodily injury" or "property damage" caused by "your work" and included in the "products-completed operations hazard" unless the "written contract requiring insurance" specifically requires you to provide such coverage for that additional insured, and then the insurance provided to that additional insured applies only to such "bodily injury" or "property damage" that occurs before the end of the period of time for which the "written contract requiring insurance" requires you to provide such coverage or the end of the policy period, whichever is earlier.

**MASTER ENABLING AGREEMENT  
COMMISSIONING** Rev. 2017-0725

This AGREEMENT is made and entered into this first day of July, 2019 pursuant to the Public Contract Code 10700, et seq., by and between the Trustees of the California State University on behalf of

Campus, hereafter referred to as Trustees, and California State University	Amendment No.: N/A	Agreement No.: 180469	Project No.: Systemwide - MEA
Service Provider, hereafter referred to as Service Provider. Power Engineering Services, Inc.		CSU Vendor ID No.: 2291	License or DIR No.: E12485

WITNESSETH: That the Service Provider in consideration of the statements and conditions herein contained, agrees to furnish labor, materials, and equipment and to perform work necessary to complete, in a skillful manner the following:

The Service Provider shall provide Commissioning Services for public works projects submitted by the California State University. This agreement is a master enabling agreement under which each campus and the administrative office of the California State University may engage the services of Service Provider as provided herein. Campuses and the administrative office shall execute a Service Order and Authorization to Proceed (Exhibit A) to secure Service Provider's peer review services under this Agreement.

The Service Provider shall provide such services as more fully described in the following Rider and Exhibits, which by this reference are incorporated herein and made part of this Agreement:

- Rider A – Agreement General Provisions, consisting of three (3) pages;
- Exhibit A – Scope of Work, consisting of ten (10) pages;
- Exhibit B – Fee and Payment Schedule, consisting of one (1) page;
- Exhibit C – Service Order & Authorization to Proceed, consisting of one (1) page.

The term shall begin upon receipt of an executed Agreement from July 1, 2019 and shall end as of June 30, 2021, with the option given the Trustees of extending the Agreement with the same items and conditions for one (1) additional one (1) year period.

The Service Provider shall not perform services in excess of the Agreement without prior written authorization to proceed from the Trustees. Service Provider shall report to: California State University, Aaron Klemm, Chief of Energy and Sustainability, Capital Planning, Design and Construction, (562)-951-4122.

The basic services amount to be expended under this Agreement shall be determined by the overall usage of each participating campus and the administrative office of the California State University. Payment shall be made in accordance with Exhibit A, and Exhibit B.

Trustees of the California State University							Service Provider						
Campus The California State University, Office of the Chancellor							Firm Name Power Engineering Services, Inc.						
By (Trustees' Authorized Signature) 							By (Authorized Signature) 						
Printed Name and Title of Person Signing Elvyra F. San Juan, Assistant Vice Chancellor							Printed Name and Title of Person Signing Barbara Effenberger, President						
Address of Campus Project Administrator Capital Planning, Design and Construction 401 Golden Shore, Long Beach, CA 90802							Address of Service Provider 2703 Saturn Street Brea, CA 92821						
SCO Acct Data:	Fund	Sub Fund	Agency	Yr.	Ref/Item	Category	Program	Element	Component	Chapter	Fiscal Yr.	Legal Ref.	
Fund Name	Trust Fund			PS Account	PS Fund	PS Dept. ID	PS Program	PS Class	PS Project/Grant				
Amount Encumbered	\$0.00			613001	485C1	1007					SY600PRJ		
Amount of Increase	\$0.00			I hereby certify upon my personal knowledge that budgeted funds are available for the period and purpose of the expenditures stated above.									
Amount of Decrease	\$0.00			Signature of Accounting Officer							Date 9/4/19		
Total Amount Encumbered	\$0.00			I hereby certify that I have examined the written Agreement and find the same to be in accordance with the requirements of California State University Contract Law. G. ANDREW JONES, General Counsel							Date 9/23/19		
				By Attorney									

This Agreement may be executed in counterparts all of which taken together shall constitute one and the same Agreement. The exchange of copies of this Agreement by electronic mail in "portable document format" ("PDF") form or by other similar electronic means shall constitute effective execution and delivery of this Agreement and shall have the same effect as copies executed and delivered with original signatures.



## Rider A - Agreement General Provisions

1. Trustees agrees to pay for the services and materials to be furnished by Service Provider as provided by this Agreement. Payment in arrears shall be made upon Service Provider's completion of the services required by this Agreement to the satisfaction of the Trustees and upon Service Provider's submission of billings as shall be prescribed by the Trustees.
2. Service Provider, in the performance of this Agreement, is an independent contractor and is not an employee, agent, or officer of the Trustees.
3. Trustees may cancel this Agreement should Service Provider fail to perform as herein provided. In the event of such cancellation, Trustees shall be relieved of the obligation to make any payment to Service Provider and Trustees may proceed with the work in any manner the Trustees deem proper.
4. Trustees may terminate this Agreement either upon giving fifteen (15) days written notice or upon the immediate notice with payment of \$25.00 to Service Provider. Payment shall be complete by mailing payment to Service Provider at the address appearing on the face of this Agreement. In the event of such termination, Service Provider shall be paid only for the work satisfactorily completed.
5. Service Provider shall not assign benefits or delegate duties under this Agreement in whole or in part without the prior written approval of the Trustees. Thus, Service Provider may not assign any moneys due or to become due hereunder without the written consent of Trustees.
6. The provisions of this Agreement shall extend to and be binding upon and inure to the benefit of the heirs, executors, administrators, successors and assigns to the parties hereto.
7. No alteration or variation of the terms of this Agreement shall be valid unless made in writing and signed by the parties. Oral understandings or other agreements not incorporated herein shall not be binding.
8. Trustees may issue a written order with respect to the services to be performed under this Agreement at any time before the completion of the services. Trustees shall pay Service Provider an amount for such services as provided in this Agreement, or if not so provided, Trustees shall pay Service Provider a reasonable amount, which shall be agreed upon by the parties.
9. Any notice, which may be proper or necessary for either of the parties hereto to serve on the other, in case of Trustees, may be served effectually upon Trustees by delivering it in writing, addressed to the Trustees of the California State University, attention of the official executing this Agreement for Trustees, at CSU Office of the Chancellor, 401 Golden Shore, Long Beach, CA 90802, or by depositing it in a United States mail deposit box with first class postage thereon fully prepaid and addressed to Trustees at the above-mentioned address. In the case of Service Provider, notice may be served effectually upon Service Provider by delivering it in writing to Service Provider at the address appearing on the first page of this Agreement or depositing it in a United States mail deposit box with first class postage thereon fully prepaid, and addressed to Service Provider at the Service Provider's above-mentioned address. Any notice may also be served effectually by delivering or mailing it, as in this section provided, addressed to Trustees or Service Provider at any other place or places which Trustees or Service Provider, by written notice served upon the other, may designate, provided, however, that nothing herein shall preclude the giving of notice by personal service.
10. In the performance of this Agreement, the Service Provider will not discriminate against any employee or applicant for employment because of race, color, religion, ancestry, sex, age, national origin, physical handicap, medical condition, or marital status. The Service Provider will take action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, ancestry, sex, age, national origin, physical handicap, medical condition, or marital status as prohibited by the California Fair Employment and Housing Act (Government Code Section 12900 et seq.).
11. Service Provider shall not utilize any information, not a matter of public record, which is received by reason of this Agreement, for pecuniary gain not contemplated by the terms of this Agreement, regardless of whether Service Provider is or is not under contract at the time such gain is realized (Education Code Section 89006).
12. The report, survey, or other product developed by Service Provider pursuant to this Agreement is the property of Trustees, and shall not be used in any manner by Service Provider unless authorized by Trustees.
13. In executing this service agreement, Service Provider swears, under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against Service Provider within the immediately preceding two-year period because of Service Provider's failure to comply with an order of a federal court which orders Service Provider to comply with an order of the National Labor Relations Board. Trustees may rescind this contract if Service Provider falsely swears to this statement (Public Contract Code Section 10296).

14. If the Agreement exceeds \$10,000, the contracting parties shall be subject to the examination and audit of the State Auditor of the State of California for a period of three (3) years after final payment under the Agreement. This examination and audit shall be confined to those matters connected with the performance of this contract, including, but not limited to, the cost of administering this Agreement (Government Code Section 8546.7).
15. The Service Provider hereby certifies compliance with Government Code Sections 8355, 8356, and 8357 in matters relating to providing a drug-free workplace. In accordance with Government Code Section 8355, the Service Provider shall:
  - A. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations;
  - B. Establish a Drug-Free Awareness Program to inform employees about all of the following:
    - (1) The dangers of drug abuse in the workplace,
    - (2) The Service Provider's policy of maintaining a drug-free workplace,
    - (3) Any available counseling, rehabilitation, and employee assistance programs, and
    - (4) Penalties that may be imposed upon employees for drug abuse violations;
  - C. Require that each employee engaged in the performance of the Agreement be given a copy of the statement required by subpart A, and require that each employee, as a condition of employment on the Agreement, agree to abide by the terms of the statement.
16. Responsive to direction from the State Legislature (Public Contract Code Section 10115 et seq.), the Trustees are seeking to increase the statewide participation of disabled veteran business enterprises in contract awards. To this end, Service Provider shall inform the Trustees of any contractual arrangements with consultants or suppliers that are certified disabled veteran business enterprises.
17. If the Service Provider is a natural person, the Service Provider certifies by signing this Agreement that s/he is a citizen or national of the United States or otherwise qualified to receive public benefits under the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193; 110 STAT. 2105, 2268-69), State of California Governor's Executive Order W-135-96.
18. If the Service Provider is a corporation, the Service Provider certifies and declares by signing this Agreement that it is eligible to contract with the State of California pursuant to the California Taxpayer and Shareholder Protection Act of 2003 (Public Contract Code Section 10286 et seq.).
19. The Service Provider shall not commence work until it has obtained all the insurance required in this Article, and such insurance has been approved by the Trustees.
  - A. Service Provider shall obtain and maintain the following policies and coverage. The insurance furnished by the Service Provider under this Article shall provide coverage in amounts not less than the following, unless a different amount is stated on the Cover Page of this Agreement:
    - (1) Comprehensive or Commercial Form General Liability Insurance: on an occurrence basis, covering work done or to be done by or on behalf of the Service Provider and providing insurance for bodily injury, personal injury, property damage, and contractual liability. The aggregate limit shall apply separately to the work. Limits of Liability:

\$2,000,000.00	General Aggregate
\$1,000,000.00	Each Occurrence—combined single limit for bodily injury and property damage.
    - (2) Business Automobile Liability Insurance: on an occurrence basis, covering owned, scheduled, hired, and non-owned automobiles used by or on behalf of the Service Provider and providing insurance for bodily injury, property damage, and contractual liability. Limits of Liability:

\$1,000,000.00	Each Accident—combined single limit for bodily injury and property damage.
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    - (3) Workers' Compensation: including Employers Liability limits of \$1,000,000.00 and other limits as required under California law.
    - (4) Errors and Omissions Insurance: on an occurrence basis is preferred, covering work done or to be done by or on behalf of the Service Provider and providing insurance for errors and omissions in the amount of \$1,000,000.00 each occurrence. At a minimum, Service Provider shall obtain and maintain errors and omissions insurance on a claims-made basis for no less than \$1,000,000.00 each claim and \$2,000,000.00 annual aggregate, and certification of coverage shall be submitted to the Trustees upon signing of this Agreement. If the total contract amount exceeds \$1,000,000, Service Provider shall renew and keep such insurance in effect for at least five (5) years after the recordation of the notice of completion.

- B. Service Provider shall submit to the Trustees certificates of insurance and original endorsements to the policies of insurance required by the agreement as evidence of the insurance coverage. The scope of coverage and deductible shall be shown on the certificate of insurance. The certificates of insurance and endorsements shall provide for no cancellation of coverage without thirty (30) days written notice to the Trustees, as specified in Section 19-C (3). Renewal certifications and endorsements shall be timely filed by the Service Provider for all coverage until the work is accepted as complete. The Trustees reserve the right to require the Service Provider to furnish the Trustees complete, certified copies of all required insurance policies. The Service Provider shall notify the Trustees in writing of any material change in insurance coverage.
- C. The insurance policies shall contain, or be endorsed to contain, the following provisions:
- (1) For the general and automobile liability policies, the State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers, and agents shall be covered as additional insureds.
  - (2) For any claims related to the work, the Service Provider's insurance coverage shall be primary insurance as respects the State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers, and agents. Any insurance or self-insurance maintained by the State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers, and agents shall be in excess of the Service Provider's insurance and shall not contribute with it.
  - (3) Each insurance policy required by this Article shall state that coverage shall not be canceled by either party, except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the Trustees.
  - (4) The State of California, the Trustees of the California State University, the University, their officers, employees, representatives, volunteers, and agents shall not by reason of their inclusion as additional insureds incur liability to the insurance carriers for payment of premiums for such insurance.
- D. Insurers shall be licensed by the State of California to transact insurance and shall hold a current A.M. Best's rating of no less than A:VII or equivalent carrier otherwise acceptable to the Trustees.
- E. Miscellaneous:
- (1) Any deductible under any policy of insurance required in this Article shall be Service Provider's liability.
  - (2) Acceptance of certificates of insurance by the Trustees shall not limit the Service Provider's liability under the agreement.
  - (3) In the event the Service Provider does not comply with these insurance requirements, the Trustees may, at its option, provide insurance coverage to protect the Trustees. The Service Provider shall pay the cost of the insurance and, if prompt payment is not received by the insurance carrier from the Service Provider, the Trustees may pay for the insurance from agreement sums otherwise due the Service Provider.
  - (4) If the Trustees are damaged by the failure of Service Provider to provide or maintain the required insurance, the Service Provider shall pay the Trustees for all such damages.
  - (5) The Service Provider's obligations to obtain and maintain all required insurance are non-delegable duties under this agreement.
20. The Service Provider agrees to hold harmless, defend, and indemnify the State of California, the Trustees of the California State University, the University, and the officers, employees representatives, and agents of each of them from any and all claims, damages, losses, causes of action and demands, and all costs and expenses incurred in connection therewith, resulting from or in any manner arising out of or in connection with any negligent act or omission or willful misconduct on the part of the Service Provider, its officers, agents, and employees, in the performance of this Agreement. This provision shall survive the expiration or termination of this Agreement.
21. In accordance with Labor Code Section 1720 et seq., Service Provider must pay employees at least the prevailing rate wages for public works performed on the Project, including preconstruction inspection and surveying. If and to the extent the Project will involve public works, Service Provider must register with the Department of Industrial Relations (DIR) to bid and/or perform work on the Project, and Service Provider must submit certified payroll records to DIR at least monthly for such work. The Project is subject to DIR monitoring and enforcement.

**End of Rider A**

## Exhibit A - Scope of Work CSU Commissioning (Cx)

### 1. Commissioning (Cx) Objectives

By statute, Title 24 of the California Code of Regulations (CCR), Part 6- California Energy Code, and Part 11 - California Green Building Standards [CALGreen], requires a building system commissioning effort in most cases for new construction of 10,000SF and greater. Commissioning shall be included in addition to the requirements of the Title 24 CCR, for all California State University (CSU) construction projects with \$3,000,000 or greater in construction costs.

The objective of the CSU commissioning process is to provide a systematic quality assurance process that spans the entire design and construction process, including verifying and documenting that building systems and components are planned, designed, installed, tested, operated and maintained to the applicable codes and standards as well as meet the CSU's project requirements.

The Cx Scope – Base Commissioning Scope (Section 2) applies to all projects. Each project shall also adhere to one of the identified supplemental scope packages (Sections 3, 4, 5, or 6) described herein. The specific scope to be used for this project is identified in Section 13 - Modifications to Scope Summary.

Cx scope of work for each project will vary based on project cost/size and complexity. The supplemental scopes align with project construction costs and become more comprehensive as project cost/complexity increase. The supplemental scope cost thresholds is a recommended paring. For smaller, but mechanically demanding projects it may be more appropriate to utilize a more comprehensive commissioning scope. Conversely for larger, but mechanically simple projects a lesser commissioning scope may be appropriate.

- A. Confirm the applicability and extent of commissioning to be provided on each individual project with the campus at the onset of each project.
- B. The Service Provider engaged for this work is hereby designated as the Commissioning Agent (CxA) for the project. In this role the CxA acts as a campus agent and as a consulting campus advisor to the design team and contractor on issues that affect commissioning. The CxA's role is advisory. The Architect/Engineer and Contractor under their own separate contracts with the University are the respective Architect/Engineer-of- Record and Contractor-of-Record.
- C. The CxA shall perform to the selected individual Scope of Work using the most current CSU Commissioning Guidelines (available on the CSU CPDC website) as a reference. The CxA shall seek direction from the campus where guideline or scope requirements relative to the specific project appear inappropriate.
- D. The CxA Scope of Work will involve the CxA from the onset of project through its completion and potentially a one-year post-occupancy period thereafter. The scope of involvement will vary based on the project and its construction delivery method.
  - (1) During the pre-design phase, the CxA shall work with the campus project team to challenge and define project performance expectations and document project performance and commissioning goals. In the case of a design-build delivery the CxA shall develop commissioning requirements suitable for use in a project RFQ/RFP.
  - (2) During the design phases, the role of the CxA is to develop commissioning specification and testing plan recommendations for the design team. In a design-build delivery the CxA shall be impartially available to each proposing design team to offer independent and non-partisan recommendations relative to each respective design-build team's development of their own outline commissioning plan.

As the design is developed the CxA shall monitor to ensure that the project design documents are generally consistent with the commissioning recommendations as to quality, constructability, operability and campus-identified objectives. In the case of a design-build delivery, the CxA shall confirm that the selected design-build team is developing the design and commissions consistent with the RFP award.
  - (3) During construction, the CxA shall monitor to ensure commission related tasks are completed consistent with the approved Construction Documents and the commissioning testing plan incorporated therein.
  - (4) During the one-year post-occupancy period, if requested, the CxA shall provide an independent assessment of warranty claims relative to MEP commissioning issues.

2. The Base Commissioning Scope

The Base Cx scope in this section is applicable to all CSU commissioning projects. Each project shall also adhere to a supplemental scope package (Section 3, 4, 5, or 6). This will be identified in Section 13 - Scope Summary. The 'Base Cx Scope' and the selected 'Supplementary Scope' for the project shall be read as complimentary and additive. The appointed Commissioning Agent shall:

A. Base Scope - Cx Pre-Design Phase 1

- (1) Actively coordinate the commissioning work effort during pre-design and all design phases. Provide a brief written assessment to the University at the completion of each design phase on the progress of the commissioning effort.
- (2) Develop commissioning plan and specification recommendations for design team use. We reiterate that the Cx Agent's role here is to provide advisory support. The project A/E retains record authority for the functionality and appropriateness of the design.
- (3) Consistent with Title 24 of the CCR, Part 6- California Energy Code, and CALGreen requirements, develop an Owner's Project Requirement document (OPR) to memorialize the project's functional requirements, expectations of building use and operation as it relates to systems being commissioned.

B. Base Scope - Cx Pre-Design Phase 2

- (1) Develop commissioning specification recommendations for each system to be commissioned.
- (2) Commissioning specification recommendations shall generally include:
  - a. Reporting and documentation requirements
  - b. Alerts to coordination issues
  - c. Construction checklist and startup requirements
  - d. Contractor functional test requirements. Include testing conditions and acceptance criteria for each piece of equipment and systems being commissioned. The following resources offer model guidelines for content, rigor and format of Cx specifications:
    - i. Model Commissioning Plan and Guide Specifications, USDOE/FEMP; Portland Energy Conservation, Inc. (PECI), <http://www.peci.org/model-commissioning-plans-guide-specifications>
    - ii. The HVAC Commissioning Process, ASHRAE Guideline <http://www.ashrae.org>
- (3) Provide commissioning plan and specification recommendations to design team and contractor.
- (4) Monitor for incorporation into the Construction Documents. Review to ensure that Cx specifications incorporate the elements specified by Title 24 of the CCR, Part 6- California Energy Code, and CALGreen. Periodically advise the campus as to efficacy of this effort.
- (5) Review Design Team's Basis of Design (BOD) report. Ensure that it adequately describes the building systems being commissioned and design assumptions made.

C. Base Scope - Cx Construction Phase 3

- (1) Coordinate as required to ensure that commissioning activities occur in a logical and efficient manner using consistent protocols and forms. Coordinate as required to ensure that clear, effective and regular communications with all parties on commissioning related items occurs.
- (2) Monitor to ensure that commissioning activities are appropriately incorporated into the contractor's project construction schedule.
- (3) Monitor construction meeting minutes. Participate periodically in construction meetings as needed to ensure that commissioning activities are adequately and effectively represented. At appropriate points during the construction process the CxA shall call for and conduct a commissioning-centric meeting. The CxA shall draft and issue minutes for these meetings.
- (4) Seek to be notified on and participate in the resolution of RFP's, Substitution Requests and proposed Change Orders where they impact commissioning objectives. Where the University approves changes to the Contract that materially impact commissioning objectives work with the project team to ensure that the commissioning requirements accommodate the planned Change Order work.
- (5) Participate as an owner's advocate in reviews related to commissioning, I.e., HVAC and lighting submittals, testing and balancing submittals and systems Operations and Maintenance materials.
- (6) Monitor construction progress and conduct periodic site observations sufficient to confirm commissioning activities are being appropriately completed consistent with the progress of the completion of the work.
- (7) Review HVAC piping pressure testing and flushing documentation, sufficient to assess that proper procedures were followed and satisfactory results obtained.
- (8) Review HVAC ductwork testing and cleaning documentation sufficient to assess that proper procedures were followed and satisfactory results were obtained.

- (9) Review systems startup reports to ensure satisfactory results were achieved. Conduct related site observations as may be warranted.
- (10) Review air and water balancing reports. Conduct related site observations as may be warranted. Provide written assessment to the University recommending acceptance (or not) of the test and balance report.
- (11) Analyze functional performance trend logs and monitoring data to verify planned system(s) performance is realized. Provide written assessment recommending acceptance (or not) to the University.
- (12) Witness and document functional performance tests by the installing mechanical sub-contractors.
- (13) Functional testing is expected to include operation of the mechanical systems and components through all specified sequences of operation. I.e., startup, shutdown, unoccupied mode, manual mode, staging, miscellaneous alarms, power failure, security alarm, etc.
- (14) Confirm correct functioning of interlocks with other systems or equipment.
- (15) Confirm that sensors and actuators are appropriately calibrated by the installing contractors.
- (16) Witness re-testing as necessary until satisfactory performance is achieved. Provide written assessment recommending acceptance (or not) to the University.
- (17) Confirm calibration and certification of utility meters (gas, water, electric). For electric meters ensure that tests are against a known standard or load to ensure correct values. Provide written assessment recommending acceptance (or not) to the University.
- (18) Confirm integrity of utility meters data connection to building Energy Management Systems. Verify reliable communication, consistency, and accuracy of values being recorded by EMS. If a central utility metering system connection is provided, verify same for that data connection. Provide written assessment recommending acceptance (or not) to the University.
- (19) Witness tests on HVAC equipment to verify heating and cooling operation. The override of certain control values to simulate seasonal conditions may be necessary. Verify functional testing using conventional manual methods, control system trend logs, and/or stand-alone data loggers, as necessary to confirm proper and reliable system function. Provide written assessment recommending acceptance (or not) to the University.
- (20) Review/audit for adequacy systems training provided by the contractor. Review records that training of campus personnel was completed and that a licensed copy of the control system's operational software is provided. Review to ensure that scope and content of training complies with requirements of Title 24 of the CCR, Part 6- California Energy Code, and CALGreen. Provide written assessment recommending acceptance (or not) to the University.
- (21) Review for adequacy the O&M manuals on commissioned equipment and systems provided by the contractor. Provide written assessment recommending acceptance (or not) to the University.
- (22) Where and if present, identify non or marginally compliant commissioned elements. If present each non-compliance issue shall be referenced to the specific functional test, inspection, trend log, etc. where the deficiency is documented. Provide written assessments to the University.
- (23) Compile a Project Commissioning Reference Manual. This manual shall include:
  - a. Campus Project Requirements
  - b. Basis of Design; Performance Metrics, completed during design
  - c. Space and use descriptions; single-line drawings and schematics for major systems
  - d. Control drawings, sequences of operation
  - e. Recommendations for re-commissioning frequency by equipment type
  - f. Energy tracking recommendations
  - g. Annotated building trend logs with a brief description of acceptable readings and variances
- (24) Compile a Commissioning Record. This record shall include:
  - a. A summary report that includes a list of participants and roles, facility/building description, description of commissioning and testing scope, and a general narrative of testing and verification methods.
  - b. For each piece of commissioned equipment and system, the report shall contain an assessment by the CxA of the following:
    - i. Equipment and systems compliance with contract documents
    - ii. Equipment and systems installation
    - iii. Functional performance
    - iv. Provision of systems O &M documentation
    - v. Operator training

- (25) The Commissioning Record shall meet all requirements of Title 24 of the CCR, Part 6- California Energy Code, and CALGreen for a 'Commissioning Report'.
- (26) Deliver the Project Commissioning Record and Project Commissioning Manual to campus. Set up a meeting and review the document package with staff. Pick up requested edits and/or clarifications.

D. Base Scope - Cx Post-Occupancy Phase 4

- (1) The post-occupancy phase of this commissioning work begins with the acceptance of the project by the campus and extends for approximately a one (1) year period to coincide with the contractor's warranty expiration date for the project. It is critical that all post-occupancy commissioning work under this agreement be identified and completed in advance of this date.
- (2) During the post-occupancy period the CxA shall be available to provide an independent knowledgeable opinion on whether an issue should be considered as a warranty or construction contract scope item.
- (3) Return to the project site at ten months into the twelve-month post-occupancy period. Coordinate with the campus and the contractor to identify and schedule testing dates.
- (4) Interview facility staff and identify any problems or concerns relative to operating the facility as originally intended. Document any outstanding issues related to the original commissioning effort.
- (5) Develop corrective action plan recommendations based on the post-occupancy testing, staff interviews and observed operational concerns. Compile the final corrective action plan testing documentation and assessment as an amendment to finalize and complete the Project Commissioning Record. Deliver/present to campus.
- (6) Document Energy Use intensity for first twelve (12) months of operations and provide a copy of documentation to CPDC.

3. Cx Scope of Services - Very Small Projects (less than 10,000SF and less than \$6 Million)

- A. In addition to the requirements of the Title 24 of the CCR, Part 6- California Energy Code, and CALGreen See Section 13, Scope Summary to identify if this section applies (or not) to this work.
- B. The following systems and assemblies shall be commissioned:
  - (1) Building energy management and control (EMS) systems
  - (2) Heating, ventilating and air conditioning systems
  - (3) Indoor lighting system and controls
  - (4) Laboratory, hoods and relative rooms pressurization systems (where present)
  - (5) Domestic water systems
  - (6) Landscape irrigation systems (where present)
  - (7) Water reuse systems (where present)
  - (8) Title 24 of CCR:
    - a. Projects less than 10,000 SF shall comply with the design review requirements specified in the Title 24 of the CCR, Part 6- California Energy Code, and shall include any measures or requirements necessary for completing the review in the construction documents in a manner that meets or exceeds code requirements.
    - b. Projects greater than 10,000 SF shall meet all mandated commissioning of systems not otherwise listed above using test procedures that meet or exceed Title 24 CCR requirements.
- C. The following companion Supplemental Checklist applies:
  - (1) Very Small Projects Checklist
- D. For this project the following MODIFICATIONS TO SCOPE apply:
  - (1) If applicable, modifications to this scope are listed in Section 13 - Scope Summary
- E. Very Small Projects Checklist (☛= required)

Design Area	Review Description	Schematic Design	Design Development	Construction Docs 50%	Construction Docs 95%
Owner's Project Requirements	Document project functional requirements, expectations of building use and operational considerations for systems to be commissioned.	✱	✱		
Basis of Design	Ensure that Basis of Design is clear, complete and meets stated campus project requirements.	✱			✱
Commissioning facilitation	Ensure that the design will accommodate effective commissioning (i.e., appropriate system access, test ports, monitoring points, etc.).		✱	✱	✱
Control system & strategies	Review lighting controls, building energy management controls, and HVAC sequences of operation for effectiveness, efficiency and reliability.				✱
Operations and maintenance (O&M)	Ensure that proposed design support O&M (i.e., equipment access, system control, consumables, etc.).	✱			✱
Indoor environmental quality	Ensure that HVAC systems provide end user comfort and a pleasant work environment. Review for thermal, visual, acoustical, distribution and air quality issues.				✱
O&M documentation	Verify adequacy of system Operations and Maintenance documentation.				✱
Training	Verify adequacy of operator training.			✱	✱
Commissioning specifications	Verify that bid documents adequately specify building commissioning and supporting testing requirements.			✱	✱
Campus design guideline or standards	Verify that the design complies with the CSU policies on energy efficiency.	✱	✱		✱
Environmental sustainability	Ensure that building sustainable features are well-integrated, practical and durable.		✱	✱	✱
MEP systems	Review MEP systems design for functionality, efficiency, and durability.		✱	✱	
Life cycle costs	Review that life cycle assessments provide consideration of viable alternatives.	✱			

4. Cx Scope of Services - Small Projects (from \$6 Million to \$15 Million)
- A. See Section 13, Scope Summary to identify if this section applies (or not) to this work.
  - B. The following systems and assemblies shall be commissioned:
    - (1) Building energy management and control (EMS) systems.
    - (2) Heating, ventilating and air conditioning systems.
    - (3) Indoor lighting system and controls.
    - (4) Laboratory, hoods and relative rooms pressurization systems (where present.)



- (5) Domestic water systems.
  - (6) Landscape irrigation systems (where present.)
  - (7) Water reuse systems (where present.)
  - (8) Title 24 of CCR: If the project is greater than 10,000 SF, all Title 24 of CCR mandated systems not otherwise listed above shall be commissioned, using test procedures that meet or exceed Title 24 of CCR requirements.
- C. The following companion Supplemental Checklist applies:
- (1) Small Projects Checklist.
- D. For this project the following MODIFICATIONS TO SCOPE apply:
- (1) If applicable, modifications to this scope are listed in Section 13 - Scope Summary.
- E. Small Projects Checklist (★= required)

Design Area	Review Description	Schematic Design	Design Development	Const Docs 50%	Const Docs 95%
Owner's Project Requirements	Document project functional requirements, expectations of building use and operational considerations for systems to be commissioned.	★	★		
Basis of Design	Ensure that Basis of Design is clear, complete and meets stated campus project requirements (above).	★			★
Commissioning facilitation	Ensure that the design will accommodate effective commissioning (I.e., appropriate system access, test ports, monitoring points, etc.).		★	★	★
Control system & strategies	Review lighting controls, building energy management controls, and HVAC sequences of operation for effectiveness, efficiency and reliability.				★
Operations and maintenance (O&M)	Ensure that proposed design support O&M (I.e., equipment access, system control, consumables, etc.).	★			★
Indoor environmental quality	Ensure that HVAC systems provide end user comfort and a pleasant work environment. Review for thermal, visual, acoustical, distribution and air quality issues.				★
O&M documentation	Verify adequacy of system Operations and Maintenance documentation.				★
Training	Verify adequacy of operator training.			★	★
Commissioning specifications	Verify that bid documents adequately specify building commissioning and supporting testing requirements.			★	★
Campus design guideline or standards	Verify that the design complies with the CSU policies on energy efficiency.	★	★		★
Environmental sustainability	Ensure that building sustainable features are well-integrated, practical and durable.		★	★	★
MEP systems	Review MEP systems design for functionality, efficiency, and durability.		★	★	
Life cycle costs	Review that life cycle assessments provide consideration of viable alternatives.	★			

5. Cx Scope of Services - Medium Projects (From \$15 Million to less than \$30 Million)

- A. See Section 12, Scope Summary to identify if this section applies (or not) to this work.
- B. The following systems and assemblies shall be commissioned:
  - (1) Building energy management and control (EMS) systems
  - (2) Heating, ventilating and air conditioning systems
  - (3) Indoor lighting system and controls
  - (4) Laboratory, hoods and relative rooms pressurization systems (where present)
  - (5) Domestic water systems
  - (6) Landscape irrigation systems (where present)
  - (7) Water reuse systems (where present)
  - (8) Title 24 of CCR : if the project is greater than 10,000 SF, all Title 24 of CCR mandated systems not otherwise listed above shall be commissioned, using test procedures that meet or exceed Title 24 of CCR requirements.
  - (9) Scheduled or occupancy sensor lighting controls
  - (10) Daylight diming controls (where present)
  - (11) Emergency power generators and transfer switch (where present)
  - (12) Uninterruptable Power Supply (UPS) systems (where present)
- C. The following companion Supplemental Checklist applies:
  - (1) Medium Projects Checklist
- D. For this project the following MODIFICATIONS TO SCOPE apply:
  - (1) If applicable, modifications to this scope are listed in Section 13 - Scope Summary
- E. Medium Projects Checklist (★= required)

Design Area	Review Description	Schematic Design	Design Development	Const Docs 50%	Const Docs 95%
Owner's Project Requirements	Document project functional requirements, expectations of building use and operational considerations for systems to be commissioned.	★	★		
Basis of Design	Ensure that Basis of Design is clear, complete and meets stated campus project requirements (above).	★	★		★
Commissioning facilitation	Ensure that the design will accommodate effective commissioning (I.e., appropriate system access, test ports, monitoring points, etc.).		★	★	★
Control system & strategies	Review lighting controls, building energy management controls, and HVAC sequences of operation for effectiveness, efficiency and reliability.		★		★
Operations and maintenance (O&M)	Ensure that proposed design support O&M (I.e., equipment access, system control, consumables, etc.).	★			★
Indoor environmental quality	Ensure that HVAC systems provide end user comfort and a pleasant work environment. Review for thermal, visual, acoustical, distribution and air quality issues.		★		★
O&M documentation	Verify adequacy of system Operations and Maintenance documentation.				★
Training	Verify adequacy of operator training.			★	★
Commissioning specifications	Verify that bid documents adequately specify building commissioning and supporting testing requirements.			★	★

Campus design guideline or standards	Verify that the design complies with the CSU policies on energy efficiency.	★	★		★
Environmental sustainability	Ensure that building sustainable features are well-integrated, practical and durable.		★	★	★
MEP systems	Review MEP systems design for functionality, efficiency, and durability.		★	★	
Life cycle costs	Review that life cycle assessments provide consideration of viable alternatives.	★			

6. Cx Scope of Services - Large Projects (>\$30MM)

A. The following systems and assemblies shall be commissioned:

- (2) Building energy management and control (EMS) systems
- (3) Heating, ventilating and air conditioning systems
- (4) Indoor lighting system and controls
- (5) Laboratory, hoods and relative rooms pressurization systems (where present)
- (6) Domestic water systems
- (7) Landscape irrigation systems (where present)
- (8) Water reuse systems (where present)
- (9) Title 24 of CCR: If the project is greater than 10,000 SF, all Title 24 of CCR mandated systems not otherwise listed above shall be commissioned, using test procedures that meet or exceed Title 24 of CCR requirements.
- (10) Scheduled or occupancy sensor lighting controls
- (11) Daylight dimming controls (where present)
- (12) Emergency power generators and transfer switch (where present)
- (13) Uninterruptable Power Supply (UPS) systems (where present)
- (14) Data and communication. Review line quality tests.

B. The following companion Supplemental Checklist applies:

- (1) Large Projects Checklist

C. For this project the following MODIFICATIONS TO SCOPE apply:

- (1) If applicable, modifications to this scope are listed in Section 13 - Scope Summary

D. Large Projects Checklist (★= required)

Design Area	Review Description	Schematic Design	Design Development	Const Docs 50%	Const Docs 95%
Owner's Project Requirements	Document project functional requirements, expectations of building use and operational considerations for systems to be commissioned.	★	★		
Basis of Design	Ensure that Basis of Design is clear, complete and meets stated campus project requirements (above).	★	★		★
Commissioning facilitation	Ensure that the design will accommodate effective commissioning (I.e., appropriate system access, test ports, monitoring points, etc.).		★	★	★
Control system & strategies	Review lighting controls, building energy management controls, and HVAC sequences of operation for effectiveness, efficiency and reliability.		★		★
Operations and maintenance (O&M)	Ensure that proposed design support O&M (I.e., equipment access, system control, consumables, etc.).	★			★

Indoor environmental quality	Ensure that HVAC systems provide end user comfort and a pleasant work environment. Review for thermal, visual, acoustical, distribution and air quality issues.		★		★
O&M documentation	Verify adequacy of system Operations and Maintenance documentation.				★
Training	Verify adequacy of operator training.			★	★
Commissioning specifications	Verify that bid documents adequately specify building commissioning and supporting testing requirements.			★	★
Campus design guideline or standards	Verify that the design complies with the CSU policies on energy efficiency.	★	★		★
Environmental sustainability	Ensure that building sustainable features are well-integrated, practical and durable.		★	★	★
MEP systems	Review MEP systems design for functionality, efficiency, and durability.		★	★	
Life cycle costs	Review that life cycle assessments provide consideration of viable alternatives.	★			

7. Service Duration

The term of the service authorization shall begin at the onset of Schematic Design and conclude at the end of the Post-Occupancy phase.

8. Fee

- A. Commissioning fee for this project shall be provided on an hourly rate in accordance with the Billing Rate Table agreed and attached hereto as Exhibit B with a maximum ‘not to exceed’ amount identified. Invoicing for services shall be provided monthly.
- B. The work effort shall generally align to the percentage’s ranges below. Advise the trustees at the earliest opportunity if it is anticipated that the required effort will vary materially from these ranges.

Percentage of fee	Payment milestone
25%	Completion of Schematic Phase
25%	Completion of Design Development Phase
0%	Bidding
20%	50% construction completion
25%	100% construction completion
5%	1-year Post-Occupancy review and report

9. Deliverables:

- A. Provide electronic copies of report. Deliver via email or FTP, Drop box, etc.
- B. Provide 2 print report copies to campus.
- C. Provide 1 electronic report copy to CPDC Office of the Chancellor.

10. Reimbursables

Reasonable non-local travel and outsourced reprographic expenses are reimbursable under this agreement. Claims for reimbursable items shall be without mark-up for directly related project charges incurred. Provide supporting documentation as a part of claim submittal. In general, travel reimbursement will be provided for project-related travel within the following limitations:

- A. Local travel, less than thirty (30) miles to campus, contractor, or project site is not reimbursable.

- B. Reasonable travel costs for distances greater than thirty (30) miles are reimbursable.
- (1) Commercial Air Travel: Reasonable airfare costs will be reimbursed when air travel is required. Reimbursement shall be limited to reasonable air fare charges incurred for refundable economy class travel. Generically reasonable example: Southwest Airlines into San Jose with a rental car into Monterey. Generically unreasonable example United Airlines into Monterey and needing to incur similar rental car charges where that cost is disproportionately higher than the San Jose cost.
  - (2) General Aviation: General aviation travel is reimbursable. Total reimbursement (including fuel and tie down) shall be conservatively limited to approximate equivalent fare amounts that would otherwise be incurred via reasonable commercial air travel from a serving regional airport.
  - (3) Rental Car: Reasonable rental car costs will be reimbursed when air travel is required.
  - (4) Private Automobile Mileage: Travel by personal automobile beyond a thirty (30) mile radius will be reimbursed at current federal mileage rates.
  - (5) Lodging: Lodging costs will be reimbursed up to the maximum CSU per diem maximum.
  - (6) Meals: Meal costs will be reimbursed when overnight travel is required at the CSU per diem maximum.

11. Extra Services

- A. This agreement may authorize extras services via issue of an Extra Service Work Authorization describing the supplemental related project work and agreed fee. Such work must be countersigned by the Service Provider to take effect.
- B. Extra service work MUST be authorized in advance.

12. Invoicing

- A. Payment for services will be made upon presentation of a written invoice in arrears of work completed to the satisfaction of the trustees.
- B. Prepare monthly invoicing using supplied invoicing template. For each invoice provide supporting back-up information identifying staff performing work, hourly rate, previous invoiced amounts, payments received and hours being billed.

13. SCOPE SUMMARY

This work includes:

- Section 2 - Cx Scope - All Projects

And the following supplemental scope:

- Section 3 - Very Small Projects (less than 10,000SF and less than \$6 Million)  
 Section 3 - Small Projects (\$6 Million to \$15 Million)  
 Section 3 - Medium Projects (greater than \$15 Million to less than \$30 Million)  
 Section 3 - Large Projects (greater than \$30 Million)

This combined scope is modified as follows:

- No modifications  
 As listed below:

All correspondence regarding New Construction and/or Building Code Activities and Processes shall be sent to Ebi Saberi, University Architect, with a copy to Aaron Klemm, Chief of Energy and Sustainability.

**End of Exhibit A**

### Exhibit B – Fee and Payment Schedule

<u>Discipline</u>	<u>Maximum Rate</u>
Principal	\$ 180 Per Hour
Professional Engineer, Registered P.E.	\$ 165 Per Hour
Project Manager	\$ 155 Per Hour
Project Engineer	\$ 150 Per Hour
Engineer	\$ 125 Per Hour
Senior Designer	\$ 135 Per Hour
Designer	\$ 115 Per Hour
CAD Specialist	\$ 85 Per Hour
Technical Admin Assistant	\$ 70 Per Hour
Admin Assistant/Word Processing	\$ 60 Per Hour
Third Party Cx Services	Cost plus 5%

THE CALIFORNIA STATE UNIVERSITY  
Exhibit C – Service Order & Authorization to Proceed  
Commissioning Services

[Date]

Power Engineering Services, Inc.  
2703 Saturn Street  
Brea, CA 92821

Attn: Ms. Effenberger:

[Project Name], [Project Number]  
[Campus]  
Service Order & Authorization to Proceed Number: [insert #]

In accordance with the provisions of the Systemwide Master Enabling Agreement No. 180469 you are hereby authorized to provide [commissioning (Cx)] services for the [subject project]. Services provided shall be in accordance with [MEA Exhibit A: Commissioning for CSU Projects] “Scope of Services” [for small, medium or large – (traditional Cx only) projects].

Additionally, please provide the following related extra service(s): [insert brief description]

The Service Provider shall not perform services in excess of this Service Order without prior written authorization to proceed from the University.

Service Provider shall report to:  
[CSU Campus Name]  
[Campus Department]  
[Executive Facility Officer or designated campus project manager]  
[Campus Address]  
[Campus Project Manger's Phone Number]

The total amount to be expended under this Service Order shall not exceed [written and numerical dollar value] inclusive of reimbursables, regardless of Service Provider's cost in performing these services. It is expected that this project will be completed within [insert number of days to complete] Service Provider shall submit all invoices in duplicate with the Agreement and Service Order & Authorization to Proceed number on each copy to the project manager named above.

Questions regarding this authorization shall be directed to the above-named project manager.

Approved,

Fund Certified,

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[Name]  
[Department Head]  
[Department]

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[Name]  
[Accounting/Fiscal Officer]  
[Department]