TRUSTEES OF THE CALIFORNIA STATE UNIVERSITY

REQUEST FOR PROPOSAL PW22-4

BATTERY ENERGY STORAGE SYSTEM (BESS) PROJECT ON CAL POLY HUMBOLDT CAMPUS

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SECTION 1 OVERVIEW

1.1 PURPOSE

The purpose of the Request for Proposal (RFP) is to solicit proposals from potential development partners (System Providers) to design, install, operate and own a Battery Energy Storage System (BESS, Tesla Megapack or equal) on the California State Polytechnic, Humboldt henceforth Cal Poly Humboldt campus. To meet the needs of the Cal Poly Humboldt campus, the size of the BESS being sought is 7.7 Megawatt, 15.4 Megawatt Hour, at a minimum.

The Battery Energy Storage System (BESS) will be used to provide monthly energy bill savings when the campus is connected to the PG&E distribution grid and will act as the main grid-forming generator for a campus microgrid that will provide electric power resiliency when the PG&E distribution grid is not available.

Concurrent to this RFP, Cal Poly Humboldt is issuing a Solar Photovoltaic RFP for the other major component of the campus microgrid: 3 MW of distributed solar photovoltaic (PV) generation. Interested providers are encouraged to submit proposals for both the PV and BESS RFPs. While the Solar and BESS proposals are being issued, and will be evaluated separately, the Campus prefers to contract with one entity for both systems.

Background

Through this RFP process, Cal Poly Humboldt is seeking a System Provider to provide a BESS that will be integrated into a campus microgrid. The Schatz Energy Research Center, (Schatz Center or Center), is located on campus and is acting as Owner's Representative and Design Engineers for Cal Poly Humboldt Facilities Management in this microgrid deployment effort. The selected System Provider will work in close collaboration with Cal Poly Humboldt Facilities Management and the Schatz Center to deploy the BESS that is appropriately sized and configured to support the microgrid concept. The Schatz Center will provide the microgrid control system and be responsible for integrating the BESS (and Solar PV under the parallel RFP) with the microgrid control system to support islanding the campus for resiliency purposes. The Schatz Center will also interface with Pacific Gas & Electric and facilitate the interconnection agreement approvals.

The Cal Poly Humboldt campus is well suited for a microgrid due a complete replacement of the medium voltage (MV) switchgear at the point of common coupling (PCC) with PG&E in 2018. The PCC circuit breaker and the four feeder breakers for the campus grid are all new motor operate vacuum breakers supervised and controlled by SEL-751 protection relays. One of the 1200 Amp MV feeder breakers is a spare, which will be used for the BESS interconnection. The Schatz Center will program all protection relays for this project.

The effort to develop a microgrid is in response to several recognized value streams on campus:

Educational opportunities: Cal Poly Humboldt is a leader in sustainable energy education, and the offerings for students are significantly expanding with the recent designation as the third polytechnic university in the Cal State System and the first in Northern California. New programs include Energy Systems Engineering and Mechanical Engineering, and range of others where students can learn from a living microgrid lab.

Energy Resilience: Humboldt County has experiences regular disruption to power service from Public Safety Power Shutoffs, earthquakes, winter storms, and other challenges to an aging power grid. A campus microgrid will enable continuity of educational service and support operations during emergency response.

Clean Energy: Cal Poly Humboldt is working towards installation of clean energy generation and battery storage on campus to support low-carbon and sustainable energy as outlined in our Climate Action Plan. A microgrid will enhance the value of these resources by enabling them to provide resilient electrical service for campus.

Engineering Team Experience

Developing a campus microgrid will be a challenging technical effort. Cal Poly Humboldt and the Schatz Center are seeking a System Providers that are willing to work collaboratively, within well-defined boundaries, throughout the design, installation, and commissioning process, and then transitioning to a mutually beneficial business relationship for the duration of the contract term. The Schatz Center has demonstrated experience implementing microgrids as the prime contractor on the following projects:

Blue Lake Rancheria Community Microgrid (500 kW PV, 1MW/2MWH BESS, 1MW DG). This microgrid is capable of seamless transitions to and from islanded state, inverter-only islanded operations (BESS and PV), and load sharing between BESS and DG with optimal PV utilization while islanded. This microgrid has been operating reliably since July 2017.

- Blue Sky Use Case: Demand charge management and energy arbitrage
- Islanded Use Case: Resiliency for Blue Lake Rancheria campus which supports surrounding communities as has been demonstrated during PSPS events and other weather related extended power outages

Blue Lake Rancheria Solar Plus Microgrid (65 kW/130kWh BESS) capable of seamless transition to and from islanded state with inverter-only islanding and a non-paralleling diesel generator for deep backup. This microgrid has been operating reliably since July 2019.

- Blue Sky Use Case: Demand charge management and energy arbitrage
- Islanded Use Case: Resiliency for gas station/convenience store

Redwood Coast Airport Microgrid, the first front-of-the-meter Community Microgrid on PG&E distribution system (2.3 MW BESS with 2.2 MW of DC-Coupled PV plus a 300 kW net-energy-metered solar PV array). This microgrid has telemetry and microgrid islanding control vested in PG&E Rocklin Distribution Control Center while grid connected operations are automatically controlled by CAISO. This microgrid has been operating in the CAISO markets since December 22, 2021 and has had full permission to operate as a microgrid with automatic seamless islanding since June 2022

- Blue Sky Use Case: Participation in the following CAISO markets; day-ahead and real-time energy, Ancillary Services; regulation up and down, spin/non-spin
- Islanded Use Case: Resiliency for commercial airport, US Coast Guard Air Station, and 18 other retail customers

The three projects described above are fully operational and are within 15 miles of the Cal Poly Humboldt campus. The Schatz Center can arrange for tours of these microgrids to demonstrate their operational capabilities in the context of the plans for the Cal Poly Humboldt Campus Microgrid.

1.2 SUMMARY AND INSTRUCTIONS TO BIDDERS

The following describes what the Trustees are seeking from the System Provider, specifically with regards to the BESS that will be deployed on campus.

System Provider shall finance, design, engineer, construct, own, operate, and maintain the BESS energy and sell storage services to Trustees on a dollar per month basis at a competitive rate, over a fifteen year agreement term, pursuant to fully-executed 3rd party owned and operated energy storage license and service agreement, at the location described in Rider A1 Map in Attachment 2 to this RFP.

System Provider shall also submit a cost proposal with a cash purchase price for the installed and commissioned BESS that at the campus' sole option may be selected.

Proposing System Providers shall be solely responsible for all costs related to, and necessary for, the implementation and on-going operations of the BESS as proposed. In addition, Proposing System Providers should reference Section 3.9, Transaction Fee, within the Energy Storage License and Services Agreement (ESSLSA) which shall reimburse the Trustees for incurred project costs. **Transaction Fee shall be fixed for the purposes of bidding on the project at $1,936,000.**

Proposing System Providers are responsible for ascertaining relevant site conditions.

The integration of the BESS with the electrical systems serving the site will be the responsibility of the System Provider, including step up transformers (480V:12kV) with the single point of connection with the campus grid being at an existing spare 12kV feeder breaker in the campus main switchgear, which is inside a dedicated building. A secure outdoor area directly adjacent to the campus main switchgear building has been reserved for the BESS installation. **Interconnection cost will be the responsibility of Cal Poly Humboldt and should be excluded in the RFP cost proposal.**

Proposals will be evaluated using a points system. The quality points (600 points) will be added to the cost proposal points (400 points), and this total will be adjusted for preference and incentive points (Section 3) to arrive at a total point score. The quality points will be determined as described in Section 5 and the cost proposal points will be determined as described in Section 6 of this RFP. The proposal offering the highest total points specified in the RFP will be recommended for award by the Trustees at its sole discretion.

As mentioned previously, the Trustees prefer to award this RFP and the parallel RFP for solar PV systems on the Cal Poly Humboldt campus to the same System Provider. This could reduce administrative burden, simplify the development process, and may reduce mobilization and construction management costs. The Cost Proposal in Section 6 of this RFP accommodates this possibility and further information can be found there.

1.3 SCHEDULE OF EVENTS

The schedules contained in the RFP Coversheet outline critical timelines associated with the RFP and subsequent award. Proposing System Providers may be disqualified for failing to adhere to the dates and times specified therein. The Trustees reserve the right to adjust this schedule at any time.

1.4 TERM

The Term of this Agreement is described in the RFP Coversheet and shall commence on the Effective Date and shall continue for the period indicated from the Commercial Operation Date of the System unless terminated earlier pursuant to the provisions of the ESSLSA.

1.5 ENERGY STORAGE SITE LICENCE SERVICE AGREEMENT (ESSLSA)

The Energy Storage Site License Service Agreement (ESSLSA) shall serve as the basis for negotiations of a final agreement between the Trustees and the selected System Provider The terms of the ESSLSA include a definition of the scope of work, requirements for the use of Trustees facilities, construction and installation requirements, operations and maintenance provisions, insurance requirements, pricing mechanism, billing requirements, termination rights, events of default, default remedies, assignment, termination fee, end of term provisions, including option to buy out the system, and other terms and conditions. Upon award, selected System Provider shall negotiate in good faith to reach a mutual agreement, and if negotiations are successful, sign and be responsible for complying with the terms and conditions of the ESSLSA as agreed to in the Energy Storage Master Enabling Agreement.

1.6 PRE-BID CONFERENCE

There is a mandatory virtual pre-bid conference at a date and time noted in the RFP Coversheet, all Proposing System Providers are required to attend virtually to be eligible to submit a proposal. Proposing System Providers

are encouraged to ask questions during the conference to gain a better understanding of the project. Any answers that cannot be answered at the conference will be responded to in writing.

1.7 PRE-BID SITE WALK

There is an option pre-bid site walk at a date and time noted in the RFP Coversheet. Proposing System Providers will be able to see proposed locations and existing electrical infrastructure. The Trustees will make a good faith effort to convey by addenda with the information exchanged during the site walk to all Proposers who attended the pre-bid conference. However, questions and answers discussed during the site walk may not be fully documented. Accordingly, Proposing System Providers who do not attend the site walk may not receive all the information that was made available during the site walk.

1.8 QUESTIONS

Aside from verbal questions asked during the pre-bid conference and site walk, all questions, interpretations or clarifications, either administrative or technical regarding this RFP must be submitted in writing and directed to the staff identified in the Campus Contact Information for Solicitation field of RFP Coversheet. All questions submitted will be answered in writing and conveyed via written addenda to all Proposing System Providers. Oral statements concerning the meaning or intent of the contents of this RFP by any person is unauthorized and invalid. **The deadline for all questions is located on the RFP Coversheet**.

1.9 SUBMISSION OF PROPOSALS

Technical Proposals and Cost Proposals must be delivered to Campus Contact provided on the RFP Coversheet on or before the time and date set forth in the RFP Coversheet. **PROPOSALS WILL NOT BE RECEIVED AT ANY OTHER LOCATION**. It is the Proposing System Provider's responsibility to ensure that proposals are received at the correct time and place. Mistakes or delays in the mail or other means of delivery employed by the Proposing System Provider are entirely the responsibility of the Proposing System Provider. **LATE SUBMITTALS WILL NOT BE ACCEPTED**.

Technical Proposals:

Technical Proposals must be received on or before the date and time specified in the RFP Coversheet. Packages can be emailed to

Addie Dunaway, Procurement Specialist
addie.dunaway@humboldt.edu

Proposal shall be labelled as

Technical Proposal- BESS RFP PW22-4

Cost Proposals:

Cost proposals must be submitted on the Cost Proposal Form provided by the Trustees, on or before the date and time specified in the RFP Coversheet. Proposals shall be emailed to:

Addie Dunaway, Procurement Specialist
addie.dunaway@humboldt.edu

Cost Proposal shall be labelled

Cost Proposal- BESS RFP PW22-4

End of Section

SECTION 2 RFP GENERAL PROVISIONS

2.1 COMPLETION OF PROPOSAL

Proposals shall be completed in all respects as required by the RFP provisions, including Forms 1, 2, 3, and 4 and the Bid Form in Section 6 of this RFP. A proposal may be rejected if conditional, incomplete, inaccurate in its representation, or if it contains any alterations of form or other irregularities of any kind. Proposals which contain false or misleading statements, or which provide references that do not support an attribute(s) or conditions(s) claimed by the Proposer, may be rejected. All statements made by the Proposer shall also be without ambiguity and with adequate elaboration where necessary for clear understanding.

2.2 REJECTION OF PROPOSALS

The Trustees reserve the right to reject any or all proposals and to waive informalities and minor irregularities in proposals received. The Trustees' waiver of an immaterial defect shall in no way modify the RFP documents or excuse the Proposer from full compliance with the specifications if proposer is awarded an Agreement. Proposals which include terms and conditions other than the Trustees terms and conditions, may be rejected as being non-responsive.

2.3 CANCELLATION OF PROPOSAL

This solicitation does not obligate the Trustees to enter into an Agreement. The Trustees reserve the right to cancel this RFP at any time, for any reason deemed in the best interests of the Trustees. No obligation either expressed or implied, exists on the part of the Trustees to make an award or to pay any costs incurred in the preparation or submission of a proposal.

2.4 COST OF PROPOSALS

All costs associated with responding to this Request for Proposal are entirely the responsibility of the Proposer and shall not be chargeable in any way to the Trustees.

2.5 USE OF PROPOSALS

The Trustees may use any or all ideas or concepts presented in any proposal without compensation to the Proposer. Selection or rejection of the proposal does not affect this right. All materials submitted in response to this RFP will become the property of the Trustees.

2.6 ALTERNATIVE PROPOSALS

Proposer shall submit only one proposal in response to this Cal Poly Humboldt Battery Energy Storage System RFP. Multiple proposals by the same Proposer for battery energy storage systems will result in the rejection of all proposals submitted by that Proposer. As noted previously, Cal Poly Humboldt encourages System Providers who are submitting a proposal under this RFP to also submit a proposal under the Cal Poly Humboldt Solar Photovoltaic RFP, which is being advertised separately and in parallel to this RFP.

2.7 ADDENDA

The Trustees may modify this Request for Proposal or any of its contents or attachments, prior to the date fixed for submission of proposals by issuance of a written addendum. All Addenda will be dated and numbered consecutively. All addenda must specifically be acknowledged and accepted in the proposal.

2.8 NON-COLLUSION AFFIDAVIT

By signing the proposal response, Proposer hereby certifies that the proposal is not made in the interest of, or on behalf of, any undisclosed party; that the proposal is genuine and not collusive, false, or sham; that the proposer has not directly or indirectly induced or solicited any other proposer to put in a false or sham bid, and has not directly or indirectly agreed with any proposer or anyone else to put in a false or sham bid, or to refrain from bidding; that the Proposer has not in any manner, directly or indirectly, sought to fix any overhead, profit or cost element of the bid, of that of any other Proposer, or to secure any advantage against the public body awarding the contract or anyone interested in the proposed contract.

2.9 ERRORS AND OMISSIONS

Before submitting a response to this solicitation, Proposers should thoroughly review and identify any and all errors or omissions for clarification and confirm compliance requirements with the RFP. Proposers should submit all relevant inquiries regarding contents of the RFP, including the ESSLSA in a timely manner in accordance with the RFP timelines.

2.10 CONFIDENTIALITY

The Trustees shall make every effort to protect the confidentiality of submitted proposals however, Proposer clearly understands California State University, is a public entity subject to disclosure laws.

2.11 ON-ENDORSEMENT

Once a proposal is accepted and an award is made, the successful Proposer shall not issue any news releases or other statements pertaining to the award or servicing of the Agreement which state or imply Trustees endorsement of Proposer's services.

2.12 DISPUTES

The Trustees encourage all Proposers to resolve issues regarding the requirements or the procurement process through written correspondence and discussions. The Trustees wish to foster cooperative relationships and to reach fair and objective resolutions in a timely manner. In the event a Proposer feels that the specifications and/or requirements may be unfair or unreasonable, written notification must be submitted to the Contracts and Procurement Office prior to the scheduled proposal submittal deadline.

2.13 PROTESTS

Proposer's filing a protest must do so within three (3) working days after Notice of Intent to Award is issued. The Proposer shall submit a full and complete written statement detailing the facts in support of the protest. Protests must be sent by certified or registered mail, or delivered in person to the Director, or designee, at the Campus Contact Information for Solicitation listed on the RFP Coversheet.

An impartial evaluator(s) selected by the Trustees shall perform a review of the protest. Selection of the evaluator shall be at the discretion of the campus. The evaluator shall review the merits and timeliness of the protest and submit a decision in writing within ten (10) working days. The decision will be sent via email or certified or registered mail, to the protesting firm. **THE DECISION OF THE TRUSTEES IS FINAL**.

End of Section

SECTION 3 PROCUREMENT REQUIREMENTS

3.1 PREVAILING WAGE

Successful Proposer, and any subcontractor thereof shall pay the rate of wages for regular, overtime and holiday work plus employer payments for all benefits generally prevailing in the locality in which the work is to be performed, to the extent required by law, as outlined in Attachment 2, Draft Contract Documents.

3.2 INSURANCE

Prior to commencement of work, Successful Proposer shall provide evidence of insurance as required in the RFP and Attachment 2: Draft Contract Documents.

3.3 CONTRACTOR'S LICENSE INFORMATION

The Successful Proposer shall be an individual or firm licensed to do business in California and shall obtain at his/her expense all license(s) and certification(s) required by law for accomplishing any work required in connection with the final executed contract. See Attachment 2: Draft Contract Documents for further details.

The following license(s) are required for this solicitation:

1. At a minimum, the installation Proposer must have a General Contractor's license and a C-10 Electrical Contractor.
2. Any licensing or certification requirements as developed and required for the receipt of any subsidies and incentives. These may include, but not necessarily limited to, an active A (General Engineering Contractor, where applicable to unique projects), B (General Contractor), C-10 (Electrical Contractor). For energy storage systems, a Class B license is required.
3. Any company that subcontracts installation work to a C-10 must have a Class B license.

3.4 SMALL BUSINESS PREFERENCE

The State of California requires agencies to provide a 5% preference when awarding contracts to small businesses or a non-small business that commits 25% of the contract value to a certified small business. Only small businesses certified by the Office of Small Business and DVBE Services (OSBDS) or a non-small business that commits 25% of the contract value to a certified small business are eligible to receive the preference. Proposers wishing to claim the Small Business Preference must comply with and complete the Small Business Preference and Certification Request Form, Form 1.

3.5 DISABLED VETERAN BUSINESS ENTERPRISE (DVBE) AND INCENTIVES

Disabled Veteran-Owned Business Enterprise participation requirements have been waived for this solicitation in the best interests of the University, however the following DVBE incentives are still offered.

Proposed DVBE Participation Level	DVBE Incentive %
4% to 4.99%	1%
5% to 5.99%	2%

6% or more	3%

The minimum incentive a qualifying Proposer can receive is 1%. The combination of preferences with a DVBE incentive cannot exceed 10% or $100,000, whichever is less. A non-small business cannot displace a California certified small business from the top-ranked position due to application of preferences or incentive. Proposers wishing to claim the DVBE incentive must comply with and complete the Disabled Veteran Business Enterprise Participation Requirement Form, Form 2.

End of Section

SECTION 4 SCOPE OF SERVICES

4.1 SPECIFICATIONS AND REQUIREMENTS

This Section delineates the minimum technical and installation specifications required of the Successful Proposer by the Trustees for this Project.

The net campus electrical loads will be changing over the next five years as new buildings are constructed during the polytechnic transformation, and as the 3 Megawatts of solar PV are added to the campus grid as a result of the aforementioned Cal Poly Humboldt Solar Photovoltaic RFP. Due to the uncertainty of the net load growth, a performance guarantee is not a requirement of this RFP. A Performance Monitoring Agreement will be used instead, and a draft is included in Attachment 2, Draft Contract Documents, Rider C.

The design of the energy storage systems will be the responsibility of the Successful Proposer; however, the systems must be compliant with applicable Trustees design guidelines.

4.2 DESIGN

Proposer shall provide complete architectural, engineering, and consulting services as required to construct the project in all details in accordance with good practice, applicable building codes, CSU guidelines, and this RFP. System design documents shall be prepared, stamped, and signed by an engineer or engineers licensed in the State of California. Proposer also understands that System design documents that are submitted for review without the appropriate professional engineering stamp will not be reviewed and will be returned to Proposer as incomplete and insufficient System documentation.

Successful Proposer shall submit system design documents in three phases, as described in this Section. System design documents will include, but not be limited to, the following:

1. Site plan
2. System layout
3. System schematics
4. System capacity calculations - Power capacity should be included separately for each site location and should be measured at the inverter AC output.
5. System production simulations
6. System single line electrical diagrams
7. System three-line electrical diagram
8. Points of interconnection single line electrical diagrams
9. Points of interconnection three-line electrical diagrams
10. Construction documents—plans, elevations, sections, details, specifications, etc.
11. Structural calculations and structural and mounting details
12. Wind loading and seismic calculations
13. List of equipment and materials schedule
14. Manufacturers' data and cut sheets on batteries, inverters and balance of systems equipment
15. Geotechnical report as applicable
16. Construction Specifications
17. Lighting Plan and Photometrics
18. Monitoring system design and documentation
19. Operations and Maintenance Plan
20. Training Plans and training materials

The Successful Proposer agrees to design and construct the System in accordance with all applicable building codes and standards. System design documents will expressly identify the applicable building codes and standards. The system design documents shall be submitted to the Trustees for review and approval. The

Successful Proposer shall allow sufficient time in the project schedule for this review to take place and not be less than 10 working days.

Proposer shall:

1. Provide comprehensive project management services for the duration of the project, commencing at contract execution. Proposer shall be responsible for assigning a single project manager who will act as the lead for the design and construction phases of the project. Proposer shall be responsible for conducting weekly project management meetings, producing agendas and minutes for the weekly meetings, and keeping an up-to-date issues/actions log. Proposer shall implement and maintain an internal records management and document control system as required, to support the project. Additionally, Proposer shall be responsible for developing a CPM schedule, which shall be updated and submitted weekly, showing the project's critical path as well as all activities required to complete the work (including the design, construction, testing, and close-out phases of the project) in sufficient detail to manage the complete scope of the project. The project schedule shall include all activities necessary to coordinate the work with other parties (e.g., campus, consultants, inspectors, etc.) and will explicitly show the dependencies between all tasks. At the Trustees' option, Proposer shall submit the schedule in either MS Project or Primavera format. In addition, schedules must also be submitted in Adobe Acrobat format.
2. Conduct detailed site audits and geotechnical studies to confirm the existing site conditions. The geotechnical analysis shall be provided by Proposer and performed by a qualified geotechnical engineering firm. The results of the analysis shall be used when designing the foundations for the structures on the site(s) and for electrical cabling and grounding system. As part of the site audit, and upon request of Proposer, Trustees will provide information related to each site, including information regarding: (1) the utility service account number associated with the Site where the System installed; (2) twelve (12) months of billing data for the meter behind which the System will be installed; (3) a general description of Trustees operations at the site; (4) the energy or capacity reductions related to the system and consumption by Trustees at the site; and (5) a legal description of the physical location of the system and the property where the utility service account associated with the site is located (6) existing geotechnical studies of the site (7) engineering site plans.
3. Complete the design for all elements of the project, including but not limited to: civil, structural, electrical fire access, and specialty consulting areas. Drawings shall be prepared and stamped by an engineer (or engineers) licensed in the State of California.
4. Incorporate the requirements of permitting agencies as may become apparent in the course of design. The Licensee will apply for and secure all required permits and provide all necessary reports, studies and support required to obtain any permits for any agency that has jurisdiction.
5. Include the cost of all permit fees. This comprises the Office of State Fire Marshal, California Environmental Quality Act (CEQA), and Campus Building Inspector.
6. Submit design for review at 60% completion of construction documents; at 95% completion of construction documents; and after incorporating any corrections and changes required by the Trustees, for back-check of 100% complete construction documents; and before commencing construction. After each submittal the Proposer will attend "comments resolution meeting." The Proposer will review the Trustees comments at this meeting and will be prepared, with the appropriate people in attendance, to resolve the Trustees' comments. All comments will be resolved to the Proposer's and the Trustees' mutual satisfaction. The Trustees may employ peer reviewers at its expense as part of the review process.
7. Proposer shall develop and review the construction documents, considering quality of materials and equipment to ensure an efficient design. Proposer shall initiate design

decisions by providing information, estimates, schemes, and recommendations regarding construction materials, methods, systems, phasing, and costs that shall provide the highest quality building within the budget and schedule. The plans and specifications shall identify the design codes, standards, and requirements used for the development of the plans, including the edition and applicable sections.

The construction documents shall include a quality control program and an implementation plan to ensure that the completed project complies with the approved project criteria. The design professional-of-record shall specify within the construction documents all tests and inspections that are required by the building code and those that are appropriate to achieve compliance with the ESSLSA. Proposer shall retain the design professional-of record to provide in a professional capacity, timely construction administration services. These services shall include shop drawing review, response to requests for information regarding the construction documents, and periodic visits to the site to observe the quality of the work.

The final, approved-for-construction set of construction documents shall be signed and stamped by the respective California-licensed professionals who prepared the documents, certifying their compliance with codes, standards, practices and regulations. The design professionals-of-record shall retain full responsibility for the design

8. Prepare draft Operations and Maintenance Plan to serve two functions: (1) the Plan shall specify the services to be provided, their frequency, and the reporting and documentation that will be made available to the Campus throughout the duration of the project, consistent with the O&M requirements specified herein; and (2) the Plan shall be the basis for preparing the final Operations Manual(s) during the Construction phase.
9. Provide all submittals on CD in AutoCAD 2015 (or newer version) for drawings and Microsoft Word for specifications; in addition, provide three sets of half-size drawings on white bond paper for all reviews, and three sets of full-size drawings on white bond paper at the time of construction. Provide the As-built Documents on CD as noted above, as well as three sets of full-size As-built Documents on white bond paper at the completion of construction.

4.3 CONSTRUCTION

The Successful Proposer shall construct the Project in accordance with Trustee-approved plans, specifications and submittals prepared by the Licensee to meet or exceed all requirements of the Trustees.

Proposer shall:

1. Conduct weekly meetings, as necessary, with the Trustees to provide schedules, status updates and technical input. The Licensee is responsible to provide meeting notes, in electronic format within three (3) working days from conclusion of the meeting.
2. Provide required shop drawings and material data submittals. All shop drawings shall be submitted as full-size drawings at a scale usual for the given system, and sufficient to fully show and explain all relevant features, dimensions, etc.
3. Provide complete management, supervision, and reporting of all aspects of the construction of this Project, including but not limited to scheduling and conducting weekly meetings with the Trustees.
4. Provide engineering and contract administration, and pay for all inspections and other related services via the Trustees Transaction Fees, as described in the ESSLSA (Attachment 2), including special inspections, necessary for the functional, safe, and on-schedule completion of the Project, starting with the issuance of a Notice-to-Proceed from the Trustees and extending through issuance of Notice of Completion and Acceptance. The Trustees staff will perform inspection to verify compliance with the contract documents.

5. Ensure compliance with applicable local, state, and federal codes, building and environmental permit requirements.
6. Provide any laboratory, surveying, and other contracted services as required to complete project construction.
7. Continue to prepare and maintain a schedule for the duration of a project, consistent with the requirements in Section 4.2, above. The schedule will be updated and presented at the weekly meeting with the Trustees.
8. Continue to maintain an internal records management and document control system as required, to support project operations.
9. Implement a Safety Program. This includes but is not limited to the following activities:
    - Assign a Safety Engineer to monitor and control this program for the Project.
    - Develop an on-site Project Safety Plan for review and approval by the Trustees.
    - Administer and apply the Trustee approved on-site Project Safety Plan.
    - Enforce all Project Safety Plan requirements at all times pertaining to safety and health issues relating to all personnel on the Project Site including workers, consultants, subcontractors, material suppliers, equipment suppliers, and visitors.
10. Report accidents, claims, and other on-going safety related issues to the Trustees.
11. Adhere strictly to construction access requirements as established by the Trustees and provided in writing during the entire length and scope of the project construction. This shall include the Successful Proposer, its employees, contractors, and/or agents.
12. Realistic schedules including a brief narrative of resources and planning should be included. Electrical shutdown needs to be coordinated with the Trustees well in advance, should be conducted during periods when least disruptive to normal operations, and receive prior approval from the Trustees.

4.4 BATTERY ENERGY STORAGE SYSTEM SPECIFICATIONS

Electricity from the System must be provided at 60 Hertz and at the appropriate voltage for electrical interconnection to the Site at the voltage service level, which will be specified by Trustees.

The System components must comply with all standards relevant to the operation and installation of energy storage equipment by UL or other nationally recognized testing facility. Batteries, enclosures, inverters and components must be certified to comply with the following requirements:

A. UL Subject 1741, "Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources"
B. UL Subject 1973 "Batteries for Use in Light Electric Rail Applications and Stationary Applications"
C. UL Subject 1642 "Standard for Lithium Batteries"
D. UL Subject 9450 "Energy Storage System Equipment"
E. UL Subject 508 "Standard for Industrial Control Panels"
F. Any and all requirements as listed by the SGIP incentive program and/or the CEC for the installation of energy storage systems.
G. Other codes that will apply include, but are not limited to: ANSI C12.1-2008; (electricity metering)
H. NFPA 70 (including NFPA 70E Arc flash)
I. IEEE 1547 (interconnections)
J. PG&E Greenbook Manual (for relevant PCC aspects)
K. PG&E Rule 21

The BESS shall have the following characteristics and capabilities:

1. BESS inverter nameplate power capacity of at least 7.7 MVA and energy capacity greater than or equal to 15,400 kWh and less than or equal to 30,800 kWh.

2. Grid-forming operation in voltage and frequency droop mode with nominal voltage and frequency setpoints and droop curve parameters being settable in real-time by a remote microgrid controller over Modbus or DNP3
3. Ceasing grid-forming operations within 2 seconds of losing telemetry with relay controlling the islanding circuit breaker at the PCC with the PG&E grid
4. Seamlessly islanding the campus grid in the event of most external faults and in the event of a planned island command from a remote microgrid controller
5. Seamlessly reconnecting the campus grid to the PG&E grid using an automatic synchronization algorithm in response to a command from a remote microgrid controller
6. Operating at a minimum of 1.2 times the maximum rated nameplate current for at least 10 seconds during an overload or fault condition
7. Blackstarting the campus grid through an appropriately designed control sequence and maintaining stable voltage and frequency regardless of phase imbalance
8. Maintaining a constant power setpoint at the Point of Common Coupling (PCC) between the campus grid and the PG&E grid via closed loop control using feedback from a Contractor-supplied meter located at the PCC
9. Support voltage during grid-following operations via configurable Volt-VAR curves
10. Support frequency during grid-following operations via configurable Frequency-Watt curves

4.5 ENERGY STORAGE SYSTEM INSTALLATION

The Proposer shall provide the labor necessary to install all equipment, materials, and components to interconnect to the local utility grid with the exception of required equipment supplied and/or installed by the Trustees.

Installation must comply with the following codes and regulations:

A. Systems must be installed in compliance with all applicable State building codes including OSHA and the State Building Standards Code
B. NFPA 855, Standard for the Installation of Stationary Energy Storage Systems
C. National Electrical Safety Code – ANSI C2-2012
D. ANSI/IEEE 519 2014
E. 2013 California Code of Regulations Title 24 – California Building Code part 2 - vol. 1 and 2, California Fire Code -part 9, and California Electrical Code – part 3

All Balance of Systems (transformers, relays, circuit breakers, wiring, component, wiring, conduits, and connections) must be suited for conditions for which they are to be installed. Inverters shall be installed in all-weather enclosures (NEMA4X) suitable for exterior location.

4.6 RULE 21 APPLICATION

Rule 21 interconnection applications will be the responsibility of Cal Poly Humboldt and its Owner's Representative. The successful Proposed must provide Cal Poly Humboldt with the required supporting documentation when requested to ensure an accurate and timely application. The Successful Proposer will comply with any and all operational standards and requirements imposed by the Utility, and comply with the electrical interconnection requirements as stated in the applicable and controlling Utility tariff.

4.7 UTILITY GRID INTERCONNECTION

Proposer shall supply, install, and deliver all equipment required to interconnect the BESS to the Cal Poly Humboldt campus grid. The Proposer shall support Cal Poly Humboldt and its Owner's Representative in fulfilling all requirements to complete the interconnection process. Interconnection standards will comply with all codes and regulations listed in Section 4.4, 4.5, 4.6, 4.7, and 4.8.

4.8 METERS AND MONITORING

Successful Proposer will provide two meters per system. Meters shall be a revenue grade Interval Data Recording (IDR) meters for each system complete with any telemetry required by the local electric utility under Rule 21 Interconnection Agreement and the Trustees. The interval data meters must be installed to measure the AC output of the inverters. The meters for the Trustees systems are specified in the RFP Coversheet.

A turnkey data acquisition, data export using representational state transfer (REST) application program interface (API) is strongly preferred. The display system shall be included in the proposal to monitor and track the energy input/output of each system and to diagnose underperformance. The monitoring system shall be accessible by the Trustees and the public and will track electrical production at maximum 15- minute intervals and with energy totaled by local electric utility time or use periods as specified in ESSLSA.

4.9 WIRE, CABLE, CONDUIT AND CONNECTORS

Contractor shall provide information about proposed wire, cable, and connectors, including all underground facilities. All electrical wiring shall be either copper. Cable shall be designed and installed for a service life of 30 years. Cable for DC feeders and interconnect shall be 2-kilovolt 90°C (wet or dry) power cable type USE-2 or RHH/RHW-2 with XLPE jacket and UL 1581, VW-1 rating or approved equal for intended use capable of meeting DC collection system design current requirements. Externally installed cables shall be sunlight and ultraviolet resistant, suitable for direct burial, and conform to NEC 300.5 Underground Installation, Table 300.5 Minimum Cover Requirements, rated to the maximum DC voltage of the System(s). Connectors shall be: (i) latching, polarized, and non-interchangeable with receptacles in other systems, and (ii) tap branch connectors with multi-contact termination connectors. Grounding member shall be first to make and last to break contact with mating connector and shall be rated for interrupting current without hazard to operator. Cables shall be listed and identified as wire as stated in NEC Article 690. If a cable tray is utilized, there shall be no self-tapping screws, only a clamping mechanism to secure the top. All underground cable shall be identified in the as-built drawings. Galvanized, rigid metal conduit where underground cable is exposed above ground or stubbed up to junctions or poles shall be used except where protected by concrete caissons. Rigid metal conduit shall be included in the corrosion mitigation plan and shall be designed for a 30-year life in the Site(s) soils and conditions. All 90-degree bends shall follow NEC minimal bend requirements. There shall be no direct burial of cables. No underground cable splicing shall be acceptable under any circumstance. All cable splices shall be brought above ground and housed in a suitable enclosure or, if below grade, shall be watertight and placed in a suitable vault that is clearly marked.

4.10 STRUCTURAL REQUIREMENTS

1. All structures shall be designed to resist dead load, live load, plus wind and seismic loads representative of the geographic area.
2. Systems must be able to withstand winds of maximum regional speeds.
3. Thermal loads caused by fluctuations of component and ambient temperatures must be combined with all the above load combinations
4. All structural components shall be designed in a manner commensurate with attaining a minimum 30-year design life. Particular attention shall be given to the prevention of corrosion at the connections between dissimilar metals.
5. Paint shall be either powder-coated or baked enamel. In all cases, fascia shall be either powder-coated or baked enamel with a Trustee-selected color.
6. The Trustees will oversee construction for conformance to CSU requirements and standards of care in the field through the Trustees' Project Manager and the State Fire Marshal.
7. It is also expected the Proposers installer will adhere to any stationary energy storage Guidelines promulgated by the Fire Protection Office of the State Fire Marshal.

4.11 OPERATIONS AND MAINTENANCE

The system is privately-owned by the Successful Proposer; therefore, the Proposer is responsible for all costs associated with operations and maintenance. All system warranties and workmanship guarantees will be in effect during the entire term of the ESSLSA (Attachment 2). Services shall include the following:

A. The Successful Proposer will be responsible for all necessary maintenance to ensure optimal performance of the systems at the Proposers sole cost and will assure that there will be no disruption to the Trustees' operations.
B. The Proposer shall provide notification to the Trustees as early as practical, but in no event less than five days, prior to any planned repairs or maintenance.
C. The Proposer will provide a minimum of ten (10) days notification to the Trustees of any planned repairs or maintenance that will result in interruption to electrical service at any Trustees-owned owned facility.

The Trustees will not provide any maintenance. All system warranties and workmanship guarantees will be in effect during the ESSLSA period.

4.12 EMERGENCY SHUT DOWN

As part of the acceptance of the BESS system by the Trustees, Proposer shall instruct and provide operations manuals on how to shut down the system in the event of an emergency at the Trustees facilities. The Proposer shall insure that emergency first responders can easily identify what to do in the event of an emergency and perform these tasks quickly and safely. Proposer shall also receive approval by the local fire chief for the emergency shut down design.

4.13 COMMISSIONING AND ACCEPTANCE TEST

Prior to the commissioning of the system, the Proposer shall:

A. Conduct a walk-through with the Trustees and address comments as necessary with to generate a completion punch list and subsequently to confirm all items are complete.
B. Hire and oversee an independent third party conduct NETA acceptance testing, as appropriate.
C. Administer and coordinate the project contract closeout process and resolve any warranty provision issues.
D. Report progress of project contract closeout to the Trustees.

The completeness of the construction will be formally verified by the Trustees against design documents. The Trustees shall observe and verify the system's performance. The acceptable productive power output will be measured in kW (AC) at the BESS electrical interconnection point, and must be consistent with the specifications for the system. Approvals as required by the State Fire Marshal and local electric utility will be a pre-requisite for acceptance and for authorization to energize the system(s). A Certification of Acceptance will be issued by the Trustees to the Proposer upon the approval of the Commissioning and Acceptance Test.

4.14 WARRANTIES AND GUARANTEES

The Successful Proposer shall provide evidence of the following warranties to provide for no-cost maintenance, repair and replacement of the system and/or its components as needed to keep the system operating as designed:

1. Complete 15-year BESS warranty and preventative maintenance agreement
2. 10-year warranty on step-up transformers, switchgear, meters, relays, and data acquisition system

4.15 TRAINING AND MAINTENANCE MANUALS

The Successful Proposer shall provide training manuals and training sessions for Cal Poly Humboldt building operators on emergency operations sequences. Proposer shall provide to the Trustees two (2) sets of site-specific operation, maintenance, and parts manuals for each installed system. These O&M Manuals shall cover all components, options and accessories supplied. The Manuals shall include maintenance, trouble- shooting, and safety precautions specific to the supplied equipment at the site.

4.16 LIGHTING

All systems shall include LED lighting in compliance with Title 24 standards as part of the design and must include occupancy controls. The amount of lighting required is specified by the Trustees in the Energy Storage RFP Coversheet.

4.17 RECORD DOCUMENTS

The Proposer shall also provide one (1) set of As-built Documents in AutoCAD 2020 or higher (for drawings) and Microsoft Word (for specifications). These requirements shall be delivered prior to acceptance of the site-specific system.

4.18 PAINT

All exposed elements (steel, etc.) shall be factory primed and painted per Trustees standards and protocol including quality and color.

4.19 PERMITS AND ENVIRONMENTAL CLEARANCES

The Trustees are the primary Authority Having Jurisdiction (AHJ) for compliance with California Code of Regulations (CCR) Title 24 and issuing building permits. The Office of the State Fire Marshall (OSFM) and/or the CSU Office of Fire Safety (OFS) are responsible for the enforcement of CCR, Title 24 and AHJ as it relates to fire and panic safety; also approval and certification of accessibility compliance is required from the Division of State Architect-Accessibility (DSA-AC) for all CSU major capital construction projects. All building permits shall be issued by the Campus Deputy Building Official on behalf of the Trustees and the CSU Chief Building Official with concurrence of the OSFM and/or OFS - not local AHJs. All plan review and building permitting processing shall be in full compliance with the CCR, Title 24 and CSU policies listed in PolicyStat/SUAM 9200 thru 9203 and as outlined on the CSU Capital Planning, Design and Construction website: https://www.calstate.edu/csu-system/doing-business-with-the-csu/capital-planning-design-construction/operations-center/Pages/permitting-and-review.aspx

The "permit" to install and construct a BESS at the Trustees host facility will come in the form of a "Notice to Proceed," after the system plans and drawings have been reviewed and approved for both compliance with the applicable California Building Codes and Standards and achieving constructability requirements as dictated by the Trustees.

Constructability requirements typically mean the system plans and drawings indicate that the system can be installed as engineered and designed, and that the construction schedule, tasks and activities have been reviewed to ensure coordination with host facility operations and requirements. All outside permitting and inspection costs shall be covered by the Proposer.

4.20 STRUCTURAL REQUIREMENTS AND CEQA

Any and all structures and structural elements necessary for the installation and operation of the BESS shall be designed in accordance with all applicable California Building Codes and Standards that pertain to the erection of such structures.

An analysis of the potential impacts associated with Proposers proposed Systems is required under CEQA. The Successful Proposer shall not commence construction of the Systems until the Trustees have complied with CEQA, per the ESSLSA.

Projects will either be exempt under CEQA, will be addressed by the Trustees, or will be the responsibility of the Proposer, as indicated in the RFP Coversheet.

The Successful Proposer shall provide structural calculations, stamped and signed by a licensed professional structural engineer in good standing with the State of California, as part of the plan check and review requirement.

All structural components shall be designed in a manner commensurate with attaining a minimum 30-year design life (even if the system is warranted for 15 years) and consistent with any host facility specific design guidelines and standards. Particular attention shall be given to the prevention of corrosion at the connections between dissimilar metals such as aluminum and steel, or corrosive soils. Successful Proposer must warrant and maintain the full structural integrity of the system for the full term of the ESSLSA.

The Successful Proposer will be responsible for ascertaining relevant site conditions and making their own finding of appropriate system installation conditions prior to signing the ESSLSA. The Trustees facilities are in an "as is" state of condition, and Proposers should not anticipate that the Trustees host facilities will make any accommodations or efforts to assist in installation of the system.

4.21 CONSTRUCTION COMPLETION AND LIQUIDATED DAMAGES

All construction work shall be completed no later than the Construction Completion Date indicated on the RFP Coversheet.

The Successful Proposer shall ensure all affected license areas are fully restored and available for public parking as scheduled.

Liquidated damages will be assessed at a per day cost listed on the RFP Coversheet. All such liquidated damages shall be assessed for each day beyond the Construction Completion Date.

4.22 PERFORMANCE GUARANTEE REQUIREMENTS

The net campus electrical loads will be changing over the next five years as new buildings are constructed during the polytechnic transformation, and as the 3 Megawatts of solar PV are added to the campus grid as a result of the aforementioned Cal Poly Humboldt Solar Photovoltaic RFP. Due to the uncertainty of the net load growth, a performance guarantee is not a requirement of this RFP. A Performance Monitoring Agreement will be used instead, and a draft is included in Attachment 2, Draft Contract Documents, Rider C.

4.23 RESTORATION OF SITE

Proposer is responsible for repairing any damage to the existing facilities or grounds that occur as a result of the construction including but not limited to asphalt marking, stains, track marks, cracks, holes, or damage to any vegetation. Proposer shall document all existing conditions prior to the start of construction and executing repair and methods, which are to be reviewed and approved by the Trustees prior to implementation. Asphalt repair shall include two slurry coats and striping.

Contractor is responsible for maintaining the existing functionality of equipment and services impacted by the resulting work; including, but not limited to, existing irrigation functionality and control and lighting. Contractor will be responsible for maintaining current functionality of adjacent lighting that will not be replaced as part of the project.

4.24 TREES, LIGHT POLES AND BOLLARDS

Proposer's responsibilities for tree trimming and removal shall be as indicated in the RFP Coversheet. All trees requiring trimming or removal shall be identified in the 50% construction document set and shall be approved by the Trustees. Should the in-lieu fee option be selected in the RFP Coversheet, fees shall be calculated based on the number of trees identified in the 50% construction document set and the current in-lieu fee in effect at the time. Exposed finish should be patched smooth and flush with adjacent grade.

4.25 GUIDELINES

The following guidelines can be found at the following links:

1. CSU Access Compliance Design Guidelines
2. CSU Mechanical and Electrical Basis of Design Guidelines
3. Seismic Requirements

End of Section

SECTION 5 TECHNICAL PROPOSAL REQUIREMENTS AND EVALUATION

Proposals will be evaluated by the Trustees' Evaluation Team using a points system. The evaluators will examine each proposal to determine, through the application of uniform criteria, that the Proposer has met the proposal submission requirements. Proposals that have not followed the format, do not meet minimum content and quality standards, or take unacceptable exceptions to the terms and conditions shall be eliminated from further consideration. Proposers should focus on conveying project specific information, excluding generic process information; and editing for brevity. The Proposal shall be organized with tabs corresponding to Section 7.3 Proposal Format and Technical Proposal will be scored based on the Evaluation Criteria and Possible Points Table below.

Technical Proposal Evaluation Criteria and Possible Points Table:

The average of all quality points per category awarded by individual evaluators will be added together to compile a quality points total.

A maximum total of 600 points is available for each proposal as detailed below:

Criteria	Quality Points
Project Description and Understanding	70
System Locations and Layouts	40
Technical Description	65
Metering and Monitoring Description with Data Access	55
Project Schedule and Attestation	45
Project Team Organization	35
Qualifications of Key Personnel	50
Past Project Experience	55
References	50
Operations and Maintenance Plan	30
Billing Plan	20
Exceptions to ESSLSA	10
Capital Finance Structure	30
Sustainability Capabilities	45
Total	600
Cost Proposal Points	400
Total Possible Points	1,000

5.1 PROJECT DESCRIPTION AND UNDERSTANDING 70 POINTS

Proposer shall explain their understanding of the Cal Poly Humboldt Microgrid project and how their response to this RFP for a Battery Energy Storage System supports that effort. This explanation should touch on the suitability of the technology proposed, the capabilities and commitment of the Proposer's team to help meet the desired microgrid deployment schedule without budget exceedances, as well as any other information that demonstrates the Proposer's intent to be a supportive collaborator and partner for the term of the agreement.

Also provide a Performance Monitoring Agreement proposal that demonstrates that the Proposer's team has read and understood Rider C – Performance Monitoring Agreement of the ESSLSA and either agrees with the strategy therein or has an alternate strategy that can be negotiated after the Notice of Award for this RFP has been issued.

5.2 SYSTEM LOCATIONS AND LAYOUTS 40 POINTS

Provide drawings depicting the general arrangement of system installed locations. System locations shall reflect RFP requirements and indicate the type of system. See Rider A1 Map in Attachment 2: Draft Contract Documents for the available array locations on campus.

5.3 TECHNICAL DESCRIPTION 65 POINTS

Attach design documents and narrative that communicate the following information for each site.

A. System description including BESS nameplate power and energy capacity (kW/kWh)
B. Equipment details and description
   - Documentation that BESS meets requirements in Section 4.4 Battery Energy Storage System Specifications
   - Step-up transformer(s)
   - Outdoor pad mounted 12kV AC Disconnect on BESS Feeder (S&C PMH-3 or equal)
   - BESS Controller interface (Modbus or DNP3)
   - List of all major equipment provided
   - List of exclusions
C. Scaled Site Plan showing BESS and major equipment layout, conduit alignment and single point of connection to campus 12 kV at Feeder 4 circuit breaker in campus main switchgear
D. Single Line Diagram
E. Rendering, altered photo, etc. showing a clear visual of the system
F. Description of landscape, fencing, and/or aesthetic features, including landscape removal, lighting, etc.
G. BESS Warranty Documentation including any warranty enhancements being offered

Note: The Trustees will review and approve all system design and construction documents.

5.4 METERING & MONITORING DESCRIPTION WITH DATA ACCESS 55 POINTS

Proposer shall provide a description of the monitoring system that will be installed including:

1. Equipment/instrumentation – proposed system to monitor and track system electrical energy output and metrological data and diagnose system underperformance
2. Monitoring data points – power quality, revenue grade energy production, and metrological values being monitored will be stored by the system. Real time data in one (1) second intervals will be made available to a remote terminal unit for the prior two-week period. After this two-week period has elapsed, those data will be reduced to (1) minute intervals and archived in a historian system that is accessible to the Trustees
3. Format and storage of raw and reduced data – Provide the protocol and format of stored data.
4. Access to raw, reduced and stored data – Provide protocol for accessing real-time and archived data
5. Instrumentation maintenance and operation requirements including calibration frequency
6. Application Programming Interface for data visualization- Comprehensive data collection, effective data presentation, ease of data access, ease of integration
7. Demonstration and display features for educational, training and research purposes;
8. Proposer should assume that data storage, management and display shall be included within the proposal.
9. Systems shall be accessible by the Trustees with real time data that includes 15 minute demand intervals and energy totaled by the time of use periods in local utility company applicable tariff(s) rate noted on the RFP Coversheet.

Proposer shall provide a plan for metering, monitoring, diagnosing, and tracking the solar energy output of the photovoltaic systems consistent with the above requirements.

5.5 PROJECT SCHEDULE 45 POINTS

Proposer shall provide a detailed project schedule for each proposed installation as well as an overall completion schedule, showing all major events, planned start and finish dates, dependencies between tasks, proposed deliverable dates, and significant milestones. Proposer must also include proposed options for the continuation or removal of the system at the end of the contract term as specified in the ESSLSA (Attachment 2).

As indicated on the RFP Coversheet, the Successful Proposer shall be required to address failure to meet all installation deadlines in one of the two following ways: (1) make the site safe and return the site to its original use (e.g., parking spaces, and parking lot driveways are available for public parking); or (2) pay a per liquidated damages for each day a site is unavailable at a rate specified in the RFP Coversheet.

5.6 PROJECT TEAM ORGANIZATION 35 POINTS

The Trustees require that a Team Organizational Chart be developed and provided as part of the Proposal. Proposers shall identify all key personnel for each team component and describe how the team will be managed. Be advised that once accepted, any changes to the selected Proposer's proposed Project Team or Key Personnel must be approved by the Trustees. The Trustees reserve the right to interview each new team member to confirm its acceptance of the new team member and any new Key Personnel. If the Trustees do not accept a proposed new team member, Proposer will provide alternative team members of equal or better qualifications until such time that the Trustees accepts the proposed new team member. The Trustees expects the Successful Proposers Key Personnel to be committed to the Design and Installation portion of the Project for the duration of their role, and the Successful Proposer will not roll personnel on and off the Project without approval of the Trustees. The Trustees also reserve the right to ask Proposer to remove a person from the Project team at the Trustees discretion.

In addition to the Team Organizational Chart, Proposer shall identify any subcontractors Proposer intends to employ in execution of the program. Discuss their role and provide information on subcontractors' experience performing similar work. Provide information as to how Proposer plans to manage subcontractors to ensure

that the needs of the Trustees will be met and all subcontractors meet any and all applicable laws and campus procedures

5.7 QUALIFICATIONS OF KEY PERSONNEL 50 POINTS

Proposer shall include resumes of key personnel who will be assigned to this project. Key personnel are defined as, but not limited to the following: Project Manager, Project Engineer, Project Planner, Structural Engineer, Electrical Engineer, Civil Engineer, Project Architect, Construction Project Manager, and Construction Field Superintendent.

5.8 PAST-PROJECT EXPERIENCE 55 POINTS

Proposer shall provide a brief description of three (3) completed battery energy storage projects/programs that are similar in nature and size as those expected to result from this RFP. Completed projects that were incorporated into microgrids are preferred. The description for each project/program should include:

1. Project name
2. Location
3. Project size (total cost and project AC capacity in kW)
4. Project type – turnkey or third party energy sales
5. Project performance – expected vs. actual output
6. Year completed
7. Name of project manager
8. Name of client and contact information
9. Brief physical description of the project (equipment manufacturer, model, etc.)
10. Photographs, if available
11. A brief discussion of any specific challenges and how they were overcome
12. Review of project schedule – award date, installation completion date and date of commercial operation

Additionally Proposer shall indicate whether or not the projects were part of a microgrid.

5.9 REFERENCES 50 POINTS

For each of the projects in Section 5.8, above, Proposer shall provide client reference information - including name of client contact, company name, title, address, phone number, email address. At a minimum, at least three of the projects must have been completed within past five years and been for demand reduction on battery energy storage projects/programs. The references shall be for projects of comparable size to the proposed installation and for projects that were installed, owned, operated and maintained by Proposer.

5.10 OPERATION AND MAINTENANCE PLAN 30 POINTS

Proposers shall describe the proposed O&M procedures for the BESS and balance of systems equipment and shall describe its experience providing such services for similar solar installations and shall provide information on the personnel performing the O&M service.

The successful Proposer shall provide Operations and Maintenance (O&M) services for the full project term as set forth in the ESSLSA (Attachment 2).

5.11 BILLING PLAN 20 POINTS

Proposer shall submit a Billing Plan as described in Rider H in Attachment 2 to this RFP. The Billing Plan will be scored based on how responsive the plan is to the draft Performance Monitoring plan contained in Rider C of Attachment 2 and the description of how the performance data will be presented in the Billing Plan. Full points will be awarded for Billing Plans that enable Cal Poly Humboldt staff to quickly yet thoroughly assess how well the BESS performed its demand charge management function over the billing month.

5.12 EXCEPTIONS TO ESSLSA 10 POINTS

Proposer shall list any and all exceptions to the Energy Storage Site License Service Agreement (ESSLSA) on an item-by item basis and cross-referenced with ESSLSA document.* If no exceptions are taken, Proposer must expressly state there are no exceptions taken to receive full points. 1 points will be deducted from the 10 total points available for each minor exception, 2 points for exceptions to major items such as appropriations, indemnification, consequential damages, and insurance.

*NOTE: Proposers are reminded that unacceptable exceptions taken to RFP or ESSLSA provisions may render Proposer's submittal non-responsive and subject to disqualification.

5.13 CAPITAL FINANCE STRUCTURE 30 POINTS

Proposer shall provide information regarding the capital finance structure of the privately-owned battery energy storage system, which should include:

1. Description of relevant financing structure for proposed project
2. Identification of funding sources including incentives that are applicable to the project
3. Examples of previously funded or financed third-party owned projects
4. Commitment letter from anticipated funding source and the credit rating of each funding source
5. For financing team members, provide Moody's, Fitch, or Standard & Poor credit rating and three years annual report or audited financial statements

5.14 SUSTAINABILITY CAPABILITIES 45 POINTS

Proposer shall complete Form 3 Sustainability Capabilities.

End of Section

SECTION 6 SECTION COST PROPOSAL

All proposals shall be submitted with the understanding that the prices quoted shall remain in effect for the entire term of the Energy Storage Site License Service Agreement (ESSLSA), which is contained in Attachment 2 to this RFP.

6.1 ALL-INCLUSIVE MONTHLY BESS LEASE FEE

The pricing for the All-Inclusive Monthly BESS Lease Fee will be a fixed price monthly rate over the 180 month contract term, rounded to the nearest dollar with no annual escalator.

6.2 BASIS FOR AWARD

The award shall be based on the highest combined point total for the Technical Proposal and the Cost Proposal, adjusted for the preferences and incentives described in Sections 3.4, 3.5, and Forms 1 and 2 of this RFP.

As mentioned previously, the Trustees prefer to award this RFP and the parallel Cal Poly Humboldt Solar Photovoltaic RFP to the same System Provider. This could reduce administrative burden, simplify the development process, and may reduce mobilization and construction management costs. To accommodate this possibility, this Cost Proposal form includes two sets of pricing inputs, one for the case where the Proposing System Provider is awarded one of the RFPs only (Case A) and the other for the case where they are awarded both (Case B).

For System Providers that submit proposals under both RFPs, both sets of pricing inputs will be evaluated and if their Case B bids achieve the highest Final Score on both RFPs, they will be awarded both projects. If their Case B bids achieve the highest Final Score on one RFP but not the other, then their Case A bids will be used to determine their applicable Final Scores, for determining whether or not they are to be awarded either RFP.

If a System Provider is only proposing under one of the RFPs, or if they are responding to both RFPs but their bids are the same whether or not they were to be awarded one or both RFPs, they shall indicate that they are not submitting a Case B bid as instructed under Item 2 on the Bid Form below.

6.3 ESTABLISHMENT OF SUCCESSFUL PROPOSAL

At the Cost Proposal opening the following steps will be followed to score each proposal:

1. Pass/Fail test: BESS nameplate rating must be at least 7.7 MVA with an energy storage capacity greater than or equal to two (2) hours and less than or equal to four (4) hours at full discharge rate.
2. The Monthly BESS Lease Fee will be scaled by the nameplate energy storage capacity of the proposed BESS.
3. The difference between the scaled lease fee for each proposal and the lowest scaled lease fee will be calculated.
4. The percentage variation from the lowest scaled lease fee for each proposal will be calculated.
5. The percentage from Step 4 will be multiplied by 400 (total possible cost proposal points) to determine the point deduction for each proposal
6. The Proposal Fee Score will be 400 minus the points total calculated in Step 5.

For example:

Proposal	BESS kWh Nameplate	Monthly BESS	Monthly BESS Lease Fee scaled by	Difference between the	% Variatio	Points to	Fee

	Rating (kWh)	Lease Fee ($)	kWh Nameplate Rating ($/kWh)	Lowest Scaled Lease Fee ($/kWh)	n from lowest	Deduct	Score
1- Case A	18,500	80,000	4.32	0.428	11%	43.96	356.04
1- Case B	18,500	75,000	4.05	0.158	4%	16.22	383.78
2	15,400	60,000	3.90	--	0%	0	400
3	16,000	70,000	4.38	0.479	12%	49.17	350.83

In this example, Proposing System Provider 1 is bidding on both RFPs and their lowest bid price is contingent on them being awarded both RFPs.

Having calculated each proposals Fee Score, the following steps will be taken to determine each proposal's Final Score:

7. The Fee Score will be added to the Technical Proposal Score to calculate the Pre-Incentive Total Score for each Proposal
8. The total bonus percentages will be summed for the preferences and incentives described in Sections 3.4, 3.5, and Forms 1 and 2.
9. To calculate the Final Score, the Pre-Incentive Total Score for each proposal will be multiplied by the quantity (1+X) where X = the decimal percent value calculated in Step 8.

6.4 AWARD

The Final Score for each proposal will be compared and the proposal with the highest Final Score will be selected. In the event the highest Final Score is achieved using Case B pricing for the Cost Proposal, then further evaluation will occur as described below.

For example:

Proposer	Fee Score	Technical Proposal Score	Small Business Preference Credit (Per Section 3.4 and Form 1, 5% or 0%)	DVBE Credit (Per Section 3.5 and Form 2, 1, 2, or 3% bonus)	Final Score
1-A	356.04	540	5%	1%	949.80
1-B	383.78	540	5%	1%	979.21
2	400	450	-	2%	867.00
3	350.83	580	-	3%	958.76

In the example above, Proposing System Provider 1 would be awarded the contract if their Case B bid for the Cal Poly Humboldt Solar Photovoltaic RFP achieved the highest Final Score amongst the proposals received under that parallel RFP process.

In the event that Proposing System Provider 1's Case B bid under the solar PV RFP did not achieve the highest score, then their Case A bid would be used to score this RFP instead. In that case, using the hypothetical example above, Proposing System Provider 3 would receive the award under the Cal Poly Humboldt Battery Energy Storage System RFP. Projects will be awarded by Campus as indicated in the RFP Coversheet.

The Trustees will provide the Technical Score in whole numbers. The Trustees will calculate the Fee Score to two decimal places and will add it to the technical score. In the event of a tie for first place in the Final Score, the winner will be the tied Proposer with the lowest All-Inclusive Monthly BESS Lease Fee. If the proposed fees are equal the winner will be selected by a coin toss in the presence of both parties and managed by the Trustees. The Trustees require that the tied Proposers agree to the coin toss procedure in writing before the toss. The proposal offering the highest point score will be recommended for award. The CSU are under no obligation to award this project to the Proposer whose proposal represents the lowest cost. **THE DECISION OF THE TRUSTEES IS FINAL.**

6.5 NOTICE OF INTENT TO AWARD

A "Notice of Intent to Award" (Attachment 1) will be emailed to all Proposers effective for a time period of three (3) working days prior to award.

BID FORM - PAGE 1

To: Campus Contact: Addie Dunaway **Date:** California State Polytechnic University, Humboldt

1. Are you also submitting a proposal under the Cal Poly Humboldt Solar Photovoltaic RFP.

(Check one box below)

Yes ☐

No ☐

If you answered YES, then proceed to Item No. 2.

If you answered NO then skip Item Nos. 2 and 4 and enter your bid price into Item No 3.

All bidders shall complete Item No. 5, attest to Item Nos. 6, 7, and 8, and complete Item 9.

2. Are you submitting two bid prices under this RFP, one that is contingent on you winning both this RFP and the Cal Poly Humboldt Solar Photovoltaic RFP, and one that is applicable if you are only awarded this RFP?

(Check one box below)

Yes ☐

No ☐

If you answered YES, then enter your Case A bid price in Item No. 3 and your Case B bid price in Item No. 4.

If you answered NO, then enter your bid price into Item No. 3 and skip Item No. 4.

All bidders shall complete Item No. 5, attest to Item Nos. 6, 7, and 8, and complete Item 9.

3. In compliance with your Request for Proposal, our bid is as follows:

Case A: All-Inclusive Monthly BESS Lease Fee for Trustees Sites $_____per month

4. In compliance with your Request for Proposal, our bid is as follows:

Only Proposers who answered YES to Items 1 and 2 above should add pricing information in this box.

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5. In compliance with your Request for Proposal, our cash price bid is as follows:

Cash Price option for Cal Poly Humboldt Campus $_____.

Cash Price excludes transaction fee, excludes M&O.

6. Proposer's legal department has reviewed Attachment 2: Draft Contract Documents and finds these terms generally agreeable, so as to facilitate good faith negotiations and timely contract execution.
7. Proposer attests to their ability and good faith intent to complete construction by the Construction Completion Date shown in the RFP Coversheet.
8. Proposer's submission is in compliance with Section 2.8: Non-Collusion Affidavit.
9. I hereby agree to perform said work in accordance with the terms and conditions set forth in the above-referenced Request for Proposal and executed ESSLSA.

Name/Title	Signature
Name of Company as Licensed	Contractor License Number (if applicable)
Address	City, State, Zip
Telephone Number	Federal I.D.
Email	

_____

Signature

SECTION 7 PREPARATION AND FORMAT

All proposals shall be submitted in the format identified in this section. All requirements and requested information shall be addressed. The Trustees reserve the right to request information deemed missing from a Proposer's submittal or request clarifying information as necessary to ensure that each Proposal is complete according to the requirements of this RFP.

7.1 NUMBER OF COPIES

Proposer shall provide one set of proposals digitally signed.

7.2 PROPOSAL FORMAT

Proposals shall adhere to the format identified in this Section. Proposals must be divided into the individual sections listed below, indexed and tabbed.

Request for Proposal Requirements

Cover Letter

Proposer is required to submit a signed cover letter with the proposal response. The signature on the cover letter shall be from a duly-authorized officer representing the Proposer's firm having legal authority in such transactions. **Unsigned proposals shall be rejected.**

The cover letter shall include the following:

A. Company name, address, telephone, email address, fax number and Federal ID number
B. Acknowledgement of receipt of any RFP addenda
C. Name, title, address, phone and email address of contact person
D. A statement, in accordance with Section 5.5 of this RFP, attesting to the Proposers ability and intent to meet the project schedule provided contracting is completed in a timely manner.
E. A statement that you have read and complied with Section 2.8, Non-Collusion Affidavit

Tab 1 Table of Contents

Proposer shall provide a table of contents in a format consistent with the proposal requirements and format set forth herein.

Tab 2 Exceptions to RFP Terms and Conditions

Proposer shall list any and all exceptions to the RFP on an item-by-item basis and cross-referenced with the RFP document.* If there are no exceptions, Proposer must expressly state that no exceptions are taken.

Tab 3 Exceptions to ESSLSA Terms and Conditions

Proposer shall list any and all exceptions to the Energy Storage Site License Service Agreement (ESSLSA) on an item-by item basis and cross-referenced with ESSLSA document.* If no exceptions are taken, Proposer must expressly state there are no exceptions taken.

*NOTE: Proposers are reminded that unacceptable exceptions taken to RFP or ESSLSA provisions may render Proposer's submittal non-responsive and subject to disqualification.

Technical Proposal

Tab 4 Small Business, DVBE, and Incentives
Reference Section 3, Paragraph 3.4 and Paragraph 3.5

Tab 5 Project Description and Understanding
Reference Section 5, Paragraph 5.1

Tab 6 System Location and Layouts

Reference Section 5, Paragraph 5.2

Tab 7 Technical Description
Reference Section 5, Paragraph 5.3

Tab 8 Metering and Monitoring Description with Data Access
Reference Section 5, Paragraph 5.4

Tab 9 Project Schedule
Reference Section 5, Paragraph 5.5

Tab 10 Project Team Organization
Reference Section 5, Paragraph 5.6

Tab 11 Qualifications of Key Personnel
Reference Section 5, Paragraph 5.7

Tab 12 Past-Project Experience
Reference Section 5, Paragraph 5.8

Tab 13 References
Reference Section 5, Paragraph 5.9

Tab 14 Operation and Maintenance Plan
Reference Section 5, Paragraph 5.10

Tab 15 Billing Plan
Reference Section 5, Paragraph 5.11

Tab 16 Capital Finance Structure
Reference Section 5, Paragraph 5.13

Tab 17 Sustainability Capabilities (Form 3)
Reference Section 5, Paragraph 5.14

Tab 18 Cost Proposal Bid Form
Reference Section 6

End of Section