

Attachment 1

ATTACHMENT 1

**Agreement for Services Independent
Contractor**

AGREEMENT FOR SERVICES OF INDEPENDENT CONTRACTOR
(Energy Services Contract—California Government Code Section 4217.12)

THIS AGREEMENT (hereafter Agreement) is made by and between the County of Santa Barbara, a political subdivision of the State of California (hereafter COUNTY) and Endelos Energy, Inc., with an address at 593 Avenue of the Flags Suite #105, Buellton, CA 93427 (hereafter CONTRACTOR) wherein CONTRACTOR agrees to provide and COUNTY agrees to accept the services specified herein.

WHEREAS, CONTRACTOR represents that it is specially trained, skilled, experienced, and competent to perform the special services required by COUNTY and COUNTY desires to retain the services of CONTRACTOR pursuant to the terms, covenants, and conditions herein set forth;

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

1. DESIGNATED REPRESENTATIVE

Roy Hapeman at phone number (805) 568-2628 is the representative of COUNTY and will administer this Agreement for and on behalf of COUNTY. Marvin R. Arntson (contractor) at phone number (805) 886-4788 is the authorized representative for CONTRACTOR. Changes in designated representatives shall be made only after advance written notice to the other party.

2. NOTICES

Any notice or consent required or permitted to be given under this Agreement shall be given to the respective parties in writing, by personal delivery or facsimile, or with postage prepaid by first class mail, registered or certified mail, or express courier service, as follows:

To COUNTY: Roy Hapeman Energy Manager
 General Services
 1105 Santa Barbara Street
 Santa Barbara, Ca. 93101

To CONTRACTOR: Endelos Energy, Inc
 593 Avenue of the Flags, Suite #105
 Buellton, California 93427

or at such other address or to such other person that the parties may from time to time designate in accordance with this Notices section. If sent by first class mail, notices and consents under this section shall be deemed to be received five (5) days following their deposit in the U.S. mail. This Notices section shall not be construed as meaning that either party agrees to service of process except as required by applicable law.

3. SCOPE OF SERVICES

CONTRACTOR agrees to provide products and services to COUNTY in accordance with EXHIBIT A attached hereto and incorporated herein by reference. Services shall include design, fabrication, procurement, shipping, assembling, testing, startup, commissioning, and warranting and making ready for service, a fully functional turnkey Non-Lead-Acid Battery Energy Storage System (BESS) capable of operating in the grid peak load reduction and off-grid (microgrid) mode (the "Assets"); and balancing of system equipment at the County's Emergency Operations Center (EOC) located at 4408 Cathedral Oaks, Santa Barbara, California and other County locations as determined by the CONTRACTOR and the County of Santa Barbara.

4. **TERM and ASSET OWNERSHIP**

This Agreement will continue in effect for five (5) years plus one (1) day with a unilateral County option to extend an additional five (5) years, from the date that the assets are fully installed (“Effective Date”), as defined by a “Permission to Operate” letter issued by the Utility, unless earlier terminated under Section 19 (Termination). The Parties agree that as of the Effective Date, OWNERSHIP of the Assets will rest with CONTRACTOR for five (5) years plus one (1) day and, if the option to extend an additional five (5) years is exercised, OWNERSHIP will continue to rest with CONTRACTOR for that additional five (5) year period. CONTRACTOR may assign OWNERSHIP to third parties for the said term with approval from COUNTY, which COUNTY will not unreasonably refuse. CONTRACTOR shall commence performance on June 16, 2021 and end performance upon completion, but no later than 14 Months unless otherwise directed by COUNTY or unless earlier terminated.

5. **SGIP INCENTIVES AS COMPENSATION OF CONTRACTOR**

The BESS Assets will be financed by the California Self-Generation Incentive Program (“SGIP”), which provides an incentive payment to be paid over five (5) years, subject to certain conditions (the “SGIP Incentive”). As described further below, CONTRACTOR shall provide the BESS Assets to the COUNTY in exchange for an assignment of the SGIP Incentives and at no additional cost to COUNTY. For the avoidance of doubt, the SGIP Incentives shall be the sole compensation for the services to be rendered under this Agreement.

CONTRACTOR shall apply for the full Equity Resiliency rebate incentive by submitting all Reservation Request documents to the SGIP online application database. Specifically, CONTRACTOR shall apply for the full Equity Resiliency rebate of \$1,000/kWh. In accordance with the program terms of the SGIP, upon approval of the Reservation Request package, a Confirmed Reservation Letter will be issued. The Confirmed Reservation Letter will list the approved incentive amount and the reservation expiration date (12 months after the date of the Confirmed Reservation Letter). Upon the CONTRACTOR receiving notification of the approval for the full Equity Resiliency Rebate at \$1,000/kWh, COUNTY shall promptly assign/transfer SGIP incentives to CONTRACTOR and release any claim to the SGIP Incentive. COUNTY agrees to cooperate with CONTRACTOR’s efforts to obtain the SGIP Incentive, including signing necessary documents in support of CONTRACTOR’s application or to effectuate the assignment of SGIP Incentives, or both. CONTRACTOR shall be entitled to all Federal and State tax benefits. Should the CONTRACTOR not receive the full Equity Resiliency rebate of \$1,000/kWh, this agreement will be deemed Null and Void and the parties shall have no further obligations hereunder.

Upon project completion and prior to the reservation expiration date, CONTRACTOR shall submit the completed Incentive Claim Form along with all of the necessary documentation to request an incentive payment.

CONTRACTOR may further assign SGIP incentives and OWNERSHIP to third parties in order to obtain financing with approval from COUNTY. If CONTRACTOR assigns SGIP incentives and OWNERSHIP to new third party, the new System Owner must adhere to the terms of this Agreement. CONTRACTOR shall not assign its rights or delegate its duties without the prior written consent of Program Administrator (SCE) or its assignee, if any, except in connection with the sale or merger of a substantial portion of its assets. During its OWNERSHIP period, CONTRACTOR shall retain the rights to tax benefits, environmental attributes, and rights to use the BESS for ancillary grid benefits such as demand response all of which will be assigned to CONTRACTOR or at its option any third party. COUNTY shall retain any and all utility bill savings resulting from the operation of the BESS at all times. Should the COUNTY assume ownership of the BESS, it will simultaneously assume ownership of any BESS benefits as of that date. As a condition of receiving pricing based upon the SGIP Incentive, COUNTY agrees to notify CONTRACTOR and the SGIP Program Administrator, not less than ninety (90) days in advance, if it intends to sell or relocate the BESS assets within five (5) years and one day after the date they are installed. If COUNTY relocates the assets, it shall do so at its own cost.

6. INDEPENDENT CONTRACTOR

It is mutually understood and agreed that CONTRACTOR (including any and all of its officers, agents, and employees), shall perform all of its services under this Agreement as an independent contractor as to COUNTY and not as an officer, agent, servant, employee, joint venturer, partner, or associate of COUNTY. Furthermore, COUNTY shall have no right to control, supervise, or direct the manner or method by which CONTRACTOR shall perform its work and function. However, COUNTY shall retain the right to administer this Agreement so as to verify that CONTRACTOR is performing its obligations in accordance with the terms and conditions hereof. CONTRACTOR understands and acknowledges that it shall not be entitled to any of the benefits of a COUNTY employee, including but not limited to vacation, sick leave, administrative leave, health insurance, disability insurance, retirement, unemployment insurance, workers' compensation and protection of tenure. CONTRACTOR shall be solely liable and responsible for providing to, or on behalf of, its employees all legally-required employee benefits. In addition, CONTRACTOR shall be solely responsible and save COUNTY harmless from all matters relating to payment of CONTRACTOR's employees, including compliance with Social Security withholding and all other regulations governing such matters. It is acknowledged that during the term of this Agreement, CONTRACTOR may be providing services to others unrelated to the COUNTY or to this Agreement.

7. STANDARD OF PERFORMANCE

CONTRACTOR represents that it has the skills, expertise, and licenses/permits necessary to perform the services required under this Agreement. Accordingly, CONTRACTOR shall perform all such services in the manner and according to the standards observed by a competent practitioner of the same profession in which CONTRACTOR is engaged. All products of whatsoever nature, which CONTRACTOR delivers to COUNTY pursuant to this Agreement, shall be prepared in a first class and workmanlike manner and shall conform to the standards of quality normally observed by a person practicing in CONTRACTOR's profession. CONTRACTOR shall correct or revise any errors or omissions, at COUNTY'S request without additional compensation. Permits and/or licenses shall be obtained and maintained by CONTRACTOR without additional compensation.

8. DEBARMENT AND SUSPENSION

CONTRACTOR certifies to COUNTY that it and its employees and principals are not debarred, suspended, or otherwise excluded from or ineligible for, participation in federal, state, or county government contracts. CONTRACTOR certifies that it shall not contract with a subcontractor that is so debarred or suspended.

9. TAXES

CONTRACTOR shall pay all taxes, levies, duties, and assessments of every nature due in connection with any work under this Agreement and shall make any and all payroll deductions required by law. COUNTY shall not be responsible for paying any taxes on CONTRACTOR's behalf, and should COUNTY be required to do so by state, federal, or local taxing agencies, CONTRACTOR agrees to promptly reimburse COUNTY for the full value of such paid taxes plus interest and penalty, if any. These taxes shall include, but not be limited to, the following: FICA (Social Security), unemployment insurance contributions, income tax, disability insurance, and workers' compensation insurance.

10. CONFLICT OF INTEREST

CONTRACTOR covenants that CONTRACTOR presently has no employment or interest and shall not acquire any employment or interest, direct or indirect, including any interest in any business, property, or source of income, which would conflict in any manner or degree with the performance of services required to be performed under this Agreement. CONTRACTOR further covenants that in the performance of this Agreement, no person having any such interest shall be employed by CONTRACTOR. CONTRACTOR must promptly disclose to COUNTY, in writing, any potential conflict of interest. COUNTY retains the right to waive a conflict of interest disclosed by CONTRACTOR if COUNTY determines it to be immaterial, and such waiver is only effective if provided by COUNTY to CONTRACTOR in writing.

11. OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

COUNTY shall be the owner of the following items incidental to this Agreement upon production, whether or not completed: all data collected, all documents of any type whatsoever, all photos, designs, sound or audiovisual recordings, software code, inventions, technologies, and other materials, and any material necessary for the practical use of such items, from the time of collection and/or production whether or not performance under this Agreement is completed or terminated prior to completion. CONTRACTOR shall not release any of such items to other parties except after prior written approval of COUNTY.

Unless otherwise specified in Exhibit A, CONTRACTOR hereby assigns to COUNTY all copyright, patent, and other intellectual property and proprietary rights to all data, documents, reports, photos, designs, sound or audiovisual recordings, software code, inventions, technologies, and other materials prepared or provided by CONTRACTOR pursuant to this Agreement (collectively referred to as "Copyrightable Works and Inventions"). COUNTY shall have the unrestricted authority to copy, adapt, perform, display, publish, disclose, distribute, create derivative works from, and otherwise use in whole or in part, any Copyrightable Works and Inventions. CONTRACTOR agrees to take such actions and execute and deliver such documents as may be needed to validate, protect and confirm the rights and assignments provided hereunder. CONTRACTOR warrants that any Copyrightable Works and Inventions and other items provided under this Agreement will not infringe upon any intellectual property or proprietary rights of any third party. CONTRACTOR at its own expense shall defend, indemnify, and hold harmless COUNTY against any claim that any Copyrightable Works or Inventions or other items provided by CONTRACTOR hereunder infringe upon intellectual or other proprietary rights of a third party, and CONTRACTOR shall pay any damages, costs, settlement amounts, and fees (including attorneys' fees) that may be incurred by COUNTY in connection with any such claims. This Ownership of Documents and Intellectual Property provision shall survive expiration or termination of this Agreement.

12. NO PUBLICITY OR ENDORSEMENT

CONTRACTOR shall not use COUNTY's name or logo or any variation of such name or logo in any publicity, advertising or promotional materials. CONTRACTOR shall not use COUNTY's name or logo in any manner that would give the appearance that the COUNTY is endorsing CONTRACTOR. CONTRACTOR shall not in any way contract on behalf of or in the name of COUNTY. CONTRACTOR shall not release any informational pamphlets, notices, press releases, research reports, or similar public notices concerning the COUNTY or its projects, without obtaining the prior written approval of COUNTY.

13. COUNTY PROPERTY AND INFORMATION

All of COUNTY's property, documents, and information provided for CONTRACTOR's use in connection with the services shall remain COUNTY's property, and CONTRACTOR shall return any such items whenever requested by COUNTY and whenever required according to the Termination section of this Agreement. CONTRACTOR may use such items only in connection with providing the services. CONTRACTOR shall not disseminate any COUNTY property, documents, or information without COUNTY's prior written consent.

14. RECORDS, AUDIT, AND REVIEW

CONTRACTOR shall keep such business records pursuant to this Agreement as would be kept by a reasonably prudent practitioner of CONTRACTOR's profession and shall maintain such records for at least four (4) years following the termination of this Agreement. All accounting records shall be kept in accordance with generally accepted accounting principles. COUNTY shall have the right to audit and review all such documents and records at any time during CONTRACTOR's regular business hours or upon reasonable notice. In addition, if this Agreement exceeds ten thousand dollars (\$10,000.00), CONTRACTOR shall be subject to the examination and audit of the California State Auditor, at the request of the COUNTY or as part of any audit of the COUNTY, for a period of three (3) years after final

payment under the Agreement (Cal. Govt. Code Section 8546.7). CONTRACTOR shall participate in any audits and reviews, whether by COUNTY or the State, at no charge to COUNTY.

If federal, state or COUNTY audit exceptions are made relating to this Agreement, CONTRACTOR shall reimburse all costs incurred by federal, state, and/or COUNTY governments associated with defending against the audit exceptions or performing any audits or follow-up audits, including but not limited to: audit fees, court costs, attorneys' fees based upon a reasonable hourly amount for attorneys in the community, travel costs, penalty assessments and all other costs of whatever nature. Immediately upon notification from COUNTY, CONTRACTOR shall reimburse the amount of the audit exceptions and any other related costs directly to COUNTY as specified by COUNTY in the notification.

15. INDEMNIFICATION AND INSURANCE

CONTRACTOR agrees to the indemnification and insurance provisions as set forth in EXHIBIT B attached hereto and incorporated herein by reference.

16. NONDISCRIMINATION

COUNTY hereby notifies CONTRACTOR that COUNTY's Unlawful Discrimination Ordinance (Article XIII of Chapter 2 of the Santa Barbara County Code) applies to this Agreement and is incorporated herein by this reference with the same force and effect as if the ordinance were specifically set out herein and CONTRACTOR agrees to comply with said ordinance.

17. NONEXCLUSIVE AGREEMENT

CONTRACTOR understands that this is not an exclusive Agreement and that COUNTY shall have the right to negotiate with and enter into contracts with others providing the same or similar services as those provided by CONTRACTOR as the COUNTY desires.

18. NON-ASSIGNMENT

Except as otherwise provided in Section 5 above, CONTRACTOR shall not assign, transfer or subcontract this Agreement or any of its rights or obligations under this Agreement without the prior written consent of COUNTY and any attempt to so assign, subcontract or transfer without such consent shall be void and without legal effect and shall constitute grounds for termination.

19. TERMINATION

A. By COUNTY. COUNTY may, by written notice to CONTRACTOR, terminate this Agreement in whole or in part at any time, whether for COUNTY's convenience, for nonappropriation of funds, or because of the failure of CONTRACTOR to fulfill the obligations herein.

1. **For Convenience.** COUNTY may terminate this Agreement in whole or in part upon thirty (30) days written notice. During the thirty (30) day period, CONTRACTOR shall, as directed by COUNTY, wind down and cease its services as quickly and efficiently as reasonably possible, without performing unnecessary services or activities and by minimizing negative effects on COUNTY from such winding down and cessation of services. If the project is terminated by the COUNTY prior to final installation of the BESS assets but before the project comes on line, because the project was not finalized, CONTRACTOR will no longer be entitled to any of the SGIP incentives previously assigned by the COUNTY and therefore, COUNTY shall be required to reimburse the CONTRACTOR for all costs incurred from the start of the project to the date of termination by the COUNTY. CONTRACTOR will assign all SGIP incentives if any exist, back to the COUNTY and COUNTY would then retain ownership of the BESS assets that may have been partially installed. Should the COUNTY terminate the

agreement after completed installation of the BESS assets and acceptance of the project by the Program Administrator (SCE), but before the full 10 year term is complete (five (5) year initial term plus five (5) year option), COUNTY shall reimburse the CONTRACTOR the value of any Federal and State Tax benefits and SGIP payments that would have been claimed by the CONTRACTOR as System Owner for the remaining period of time between the termination date and the original contract end date (end of the second five (5) year term). After termination for convenience, COUNTY would retain ownership of the BESS assets. Termination by COUNTY for convenience shall release CONTRACTOR from any obligation to remove the BESS.

2. **For Nonappropriation of Funds.** Notwithstanding any other provision of this Agreement, in the event that no funds or insufficient funds are appropriated or budgeted by federal, state or COUNTY governments, or funds are not otherwise available for payments in the fiscal year(s) covered by the term of this Agreement, then COUNTY will notify CONTRACTOR of such occurrence and COUNTY may terminate or suspend this Agreement in whole or in part, with or without a prior notice period. Subsequent to termination of this Agreement under this provision, COUNTY shall have no obligation to make payments with regard to the remainder of the term, but CONTRACTOR would retain ownership of the BESS and have rights to remove its equipment.
 3. **For Cause.** Should CONTRACTOR materially default in the performance of this Agreement or materially breach any of its provisions prior to the completion of the installation of the BESS assets, COUNTY may after a fifteen (15) business day notice and cure period to CONTRACTOR, at COUNTY's sole option, terminate or suspend this Agreement in whole or in part by written notice. In order to complete the project with another qualified contractor, COUNTY shall be entitled to the remaining amount of the SGIP incentive, prorated based on the percentage of the completion of the project at the time of the breach by the CONTRACTOR. COUNTY'S original assignment of the SGIP incentive to the CONTRACTOR will be null and void and COUNTY shall be entitled to receive the prorated incentive. CONTRACTOR will assign all SGIP incentives back to the COUNTY, if any exist as may be required, and COUNTY will retain ownership of the BESS assets that may have been partially installed. Upon receipt of notice, CONTRACTOR shall immediately discontinue all services affected (unless the notice directs otherwise) and notify COUNTY as to the status of its performance. The date of termination shall be the date the notice is received by CONTRACTOR, unless the notice directs otherwise. Should CONTRACTOR materially default in the performance of this Agreement or materially breach any of its provisions after the completion of the installation of the BESS assets but before the BESS has been placed in service for five (5) years, COUNTY may after a fifteen (15) business day notice and cure period to CONTRACTOR, at COUNTY's sole option, terminate or suspend this Agreement in whole or in part by written notice, and COUNTY will be obligated to reimburse the CONTRACTOR the value of any Federal and State Tax benefits that would have been claimed by the CONTRACTOR as System Owner for the remaining period of time between the termination date and the original contract end date (end of the second five (5) year term). CONTRACTOR will assign all SGIP incentives back to the COUNTY and COUNTY will retain ownership of the BESS assets unless CONTRACTOR removes the BESS within sixty (60) calendar days from termination notice in which case CONTRACTOR will retain ownership of the BESS.
- B. Upon termination, CONTRACTOR shall deliver to COUNTY all data, estimates, graphs, summaries, reports, and all other property, records, documents or papers as may have been accumulated or produced by CONTRACTOR in performing this Agreement, whether completed or in process, except such items as COUNTY may, by written permission, permit CONTRACTOR to retain. In no event shall CONTRACTOR be paid an amount in excess of the full price under this Agreement nor for profit on unperformed portions of service. CONTRACTOR shall furnish to COUNTY such financial information as in the judgment of COUNTY is necessary to determine the reasonable value of the services rendered by CONTRACTOR. In

the event of a dispute as to the reasonable value of the services rendered by CONTRACTOR, the decision of COUNTY shall be final. The foregoing is cumulative and shall not affect any right or remedy which COUNTY may have in law or equity.

20. SECTION HEADINGS

The headings of the several sections, and any Table of Contents appended hereto, shall be solely for convenience of reference and shall not affect the meaning, construction or effect hereof.

21. SEVERABILITY

If any one or more of the provisions contained herein shall for any reason be held to be invalid, illegal or unenforceable in any respect, then such provision or provisions shall be deemed severable from the remaining provisions hereof, and such invalidity, illegality or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

22. REMEDIES NOT EXCLUSIVE

No remedy herein conferred upon or reserved to COUNTY is intended to be exclusive of any other remedy or remedies, and each and every such remedy, to the extent permitted by law, shall be cumulative and in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or otherwise.

23. TIME IS OF THE ESSENCE

Time is of the essence in this Agreement and each covenant and term is a condition herein.

24. NO WAIVER OF DEFAULT

No delay or omission of COUNTY to exercise any right or power arising upon the occurrence of any event of default shall impair any such right or power or shall be construed to be a waiver of any such default or an acquiescence therein; and every power and remedy given by this Agreement to COUNTY shall be exercised from time to time and as often as may be deemed expedient in the sole discretion of COUNTY.

25. ENTIRE AGREEMENT AND AMENDMENT

In conjunction with the matters considered herein, this Agreement contains the entire understanding and agreement of the parties and there have been no promises, representations, agreements, warranties or undertakings by any of the parties, either oral or written, of any character or nature hereafter binding except as set forth herein. This Agreement may be altered, amended or modified only by an instrument in writing, executed by the parties to this Agreement and by no other means. Each party waives their future right to claim, contest or assert that this Agreement was modified, canceled, superseded, or changed by any oral agreements, course of conduct, waiver or estoppel.

26. SUCCESSORS AND ASSIGNS

All representations, covenants and warranties set forth in this Agreement, by or on behalf of, or for the benefit of any or all of the parties hereto, shall be binding upon and inure to the benefit of such party, its successors and assigns.

27. COMPLIANCE WITH LAW

CONTRACTOR shall, at its sole cost and expense, comply with all County, State and Federal ordinances and statutes now in force or which may hereafter be in force with regard to this Agreement. The judgment of any court of competent jurisdiction, or the admission of CONTRACTOR in any action or proceeding against CONTRACTOR,

whether COUNTY is a party thereto or not, that CONTRACTOR has violated any such ordinance or statute, shall be conclusive of that fact as between CONTRACTOR and COUNTY.

28. CALIFORNIA LAW AND JURISDICTION

This Agreement shall be governed by the laws of the State of California. Any litigation regarding this Agreement or its contents shall be filed in the County of Santa Barbara, if in state court, or in the federal district court nearest to Santa Barbara County, if in federal court.

29. EXECUTION OF COUNTERPARTS

This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the parties shall preserve undestroyed, shall together constitute one and the same instrument.

30. AUTHORITY

All signatories and parties to this Agreement warrant and represent that they have the power and authority to enter into this Agreement in the names, titles and capacities herein stated and on behalf of any entities, persons, or firms represented or purported to be represented by such entity(ies), person(s), or firm(s) and that all formal requirements necessary or required by any state and/or federal law in order to enter into this Agreement have been fully complied with. Furthermore, by entering into this Agreement, CONTRACTOR hereby warrants that it shall not have breached the terms or conditions of any other contract or agreement to which CONTRACTOR is obligated, which breach would have a material effect hereon.

31. SURVIVAL

All provisions of this Agreement which by their nature are intended to survive the termination or expiration of this Agreement shall survive such termination or expiration.

32. PRECEDENCE

In the event of conflict between the provisions contained in the numbered sections of this Agreement and the provisions contained in the 1s, the provisions of the Exhibits shall prevail over those in the numbered sections.

33. SUBCONTRACTORS

CONTRACTOR is authorized to subcontract with the firms identified in Exhibit A-1 Contractor's Proposal. CONTRACTOR shall be fully responsible for all services performed by subcontractors. CONTRACTOR shall secure from all subcontractors all rights for COUNTY in this agreement, including audit rights. CONTRACTOR shall ensure subcontractors' compliance with California Labor Code, including but not limited to the payment of prevailing wage when required.

34. IMMATERIAL CHANGES

CONTRACTOR and COUNTY agree that immaterial changes to this Agreement such as time frame and mutually agreeable programmatic changes which will not result in a change to the total contract amount or to the scope of the Statement of Work may be authorized by the General Services Director, or designee in writing, and will not constitute an amendment to the Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement to be effective on the date executed by COUNTY.

ATTEST:

Mona Miyasato
County Executive Officer
Clerk of the Board

COUNTY OF SANTA BARBARA:

By: _____
Deputy Clerk

By: _____
Bob Nelson
Chair, Board of Supervisors

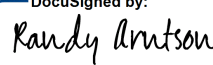
Date: _____

**RECOMMENDED FOR APPROVAL:
GENERAL SERVICES**

**CONTRACTOR:
Endelos Energy, Inc.
593 Avenue of the Flags, Suite #105, Buellton,
California 93427**

By: 

Janette D. Pell
Department Head

By: 

Authorized Representative

Name: Marvin R Arntson

Title: President and CEO

APPROVED AS TO FORM:

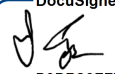
APPROVED AS TO ACCOUNTING FORM:

Michael C. Ghizzoni
County Counsel

Betsy Schaffer, CPA, CPFO
Auditor-Controller

By: 

Deputy County Counsel

By: 

Deputy

APPROVED AS TO FORM:

Risk Management

By: 

Risk Management

End of Agreement

EXHIBIT A
STATEMENT OF WORK

The following documents are incorporated by reference and shall constitute the Statement of Work for this contract.

Exhibit A-1, CONTRACTOR'S Proposal

Suspension for Convenience. COUNTY may, without cause, order CONTRACTOR in writing to suspend, delay, or interrupt the services under this Agreement in whole or in part for up to 365 days. COUNTY shall incur no liability for suspension under this provision and suspension shall not constitute a breach of this Agreement.

Summary of Scope:

CONTRACTOR shall design, fabricate, procure, ship, assemble, test, startup, commission, warrant and make ready for service a fully functional turnkey Non-Lead-Acid, cobalt free, lithium iron Battery Energy Storage System (BESS) capable of operating in the grid peak load reduction and off-grid (microgrid) mode; and balance of system equipment at the County's Emergency Operations Center (EOC) located at 4408 Cathedral Oaks, Santa Barbara, California and other County locations as determined by the CONTRACTOR and the County of Santa Barbara; CONTRACTOR shall complete this scope of work with No Cost to County, in consideration of any and all incentives obtained through California Self-Generation Incentive Program (SGIP) for the BESS, which County will promptly assign/transfer to CONTRACTOR. CONTRACTOR may further assign SGIP incentives to third parties in order to obtain financing with approval from County which County will not unreasonably refuse. Further, the OWNERSHIP of the Assets will rest with CONTRACTOR for five (5) years plus one (1) day and if the option to extend an additional five (5) years is exercised, OWNERSHIP will rest with CONTRACTOR for that additional five (5) year period. ~~SGIP vesting period~~ CONTRACTOR may assign OWNERSHIP to third parties for the said period with approval from County which County will not unreasonably refuse. If CONTRACTOR assigns SGIP incentives and OWNERSHIP to a third party, the new System Owner must adhere to the terms of this Agreement. During its OWNERSHIP period, CONTRACTOR shall retain the rights to tax benefits, environmental attributes and rights to use the system for demand response and other potential ancillary grid purposes, benefits of which will be assigned to CONTRACTOR or at its option any third party.

Removal of System at Expiration and fair market value sale:

CONTRACTOR shall, at CONTRACTOR's sole expense, remove all tangible property comprising the System from the Premises on a mutually convenient date, but in no event later than thirty (30) days after the Expiration Date. CONTRACTOR shall undertake such removal in such a manner as to not interrupt operation of the business at the Premises, including an interruption of electrical power. In connection with such removal, CONTRACTOR shall remove above ground and below ground support structures and repair any damage to the Site and any other area in which any portion of the System was installed and restore such areas to their original condition, excluding ordinary wear and tear. CONTRACTOR shall leave the Premises in neat and clean order. If CONTRACTOR fails to completely remove the System and repair the affected area as provided above, within thirty (30) days of the Expiration Date, County of Santa Barbara may, upon ten (10) business days prior written notice to CONTRACTOR, complete the necessary removal and/or restoration and CONTRACTOR shall reimburse County of Santa Barbara for the costs incurred by County of Santa Barbara within ten (10) days after presentation by County of Santa Barbara to CONTRACTOR of reasonable supporting documentation describing the work performed and the cost thereof. In addition, should

CONTRACTOR fail to remove the System within such thirty (30) day period, CONTRACTOR will be deemed to have abandoned the System and County of Santa Barbara may, either at CONTRACTOR's sole cost, remove and dispose of the System, including by sale or otherwise, as County of Santa Barbara sees fit in its discretion, provided that if County of Santa Barbara realizes any proceeds from the sale of the System (which may or may not occur) County of Santa Barbara will credit such proceeds against the cost of removal, or COUNTY may leave the system in place and continue to operate it. County of Santa Barbara reserves the right to purchase the BESS at fair market value any time prior to the expiration of this contract.

During the term of this contract, ~~vesting period~~ the CONTRACTOR will finance and shall perform annual Operation and Maintenance activities (O&M) of the BESS at no cost to the County. Financed O&M costs may be characterized as purchase of the BESS System at Fair Market Value at a date to be determined at least 6 years after the system is placed in service.

County shall provide a suitable space for the battery. County shall cooperate with any reasonable financing documents related to financing the BESS. COUNTY will grant the appropriate Real Estate instrument to allow the CONTRACTOR to place the BESS assets on COUNTY property. CONTRACTOR will apply for SGIP incentive in the appropriate incentive category. County will cooperate and sign SGIP forms as needed. CONTRACTOR work will be contingent on SGIP application approval both in timing and scope.

CONTRACTOR shall comply with and perform all contractor requirements set forth in ALL sections of COUNTY's Request for Proposals #835025 (RFP) and CONTRACTOR's proposal and any associated documents submitted to COUNTY in response to RFP, which are incorporated herein by this reference; but subject to California Self-Generation Incentive Program (SGIP) approval and further subject to any modifications made in this statement of work. In case of any conflict between this statement of work and the said documents, the County of Santa Barbara will decide on what is in their best interest.

CONTRACTOR will complete the work under this Agreement within 18 (eighteen) months of this Agreement being signed by COUNTY, extension subject to SGIP approval time.

CONTRACTOR shall not use more than 15% of the parking lot at a site location during COUNTY work hours, and shall ensure that the remainder of the parking lot(s) are kept accessible and available for COUNTY parking purposes during COUNTY work hours.

CONTRACTOR will move any and all solar generation interconnection at each location to the off-grid load side, so the solar will charge the batteries during a microgrid and off-grid event. CONTRACTOR provide all solar upgrades need achieve this.

The CONTRACTOR will install islanding, behind the meter Energy Storage Systems (ESS), Off Grid & Battery Backup (Micro Grid) capability. CONTRACTOR will install batteries on a new concrete pad at a suitable location as approved by County outside of building and interconnect the system in the electrical room of the EOC building and other County locations as determined by the CONTRACTOR and the County of Santa Barbara. CONTRACTOR will clean up any mud that comes off the new concrete pad. CONTRACTOR will provide security and is financially responsible for every part of the project until it is signed over and accepted by the COUNTY.

Description of Work:

CONTRACTOR will complete all work items, tasks, and support needed for installing and ensuring the operation of BESS, including but not limited to the following:

- All required equipment/ materials labor and tools required to install, test, and commission the BESS
- Design, install and make ready for the electrical connection from the BESS to the AC point of connection as determined by the CONTRACTOR. CONTRACTOR is responsible for the AC connections, cable, and protection, back to BESS

- Design, install and test a Human Machine Interface (HMI) onsite.
- Provide on-site training classes for County of Santa Barbara operators, engineers, technicians and maintenance personnel
- Supply any special equipment and tools required for the operation and maintenance of the project
- Provide one year's worth of commonly used spare parts to be stored on site for this project. Provide at minimum 10 (ten)-year warranty for all BESS components, and a separate cost breakdown for additional years
- Submit for County of Santa Barbara review and comment all design drawings, O&M manuals, and miscellaneous documentation required to provide a complete installation. Provide all as-built documentation including calculations, software, design drawings, equipment drawings required for the BESS
- Provide and maintain a Schedule for all design, fabrication, procurement, installation and testing activities for the project
- The CONTRACTOR shall be responsible for all costs of the energy systems including, but not limited to, planning, design, environmental including CEQA compliance and mitigation (environmental/historical/cultural issues/permits/studies etc.), permitting, engineering, labor, materials, parts, delivery, installation, commissioning, relocation of items as necessary to allow CONTRACTOR to complete the work, after hours/holiday work as may be necessary, site preparation, boring, grading, transportation, relocation, removal, storage, trenching, all lighting, (all lighting, fixtures, parts, sensors, wiring, converting, communications, etc., and items not included in lighting audits), upgrading/ addition to existing behind-the-meter (utility services, distribution panels, wires, transformers, breakers, disconnects, fuses, equipment, etc.), circumventing underground obstacles, circumventing above ground obstacles, equipment research and installation requirements, disposal fees (dump, hazardous material, transportation, etc.), plumbing, relays, wire, conduits, electrical boxes, collectors, inverters, steel, batteries, concrete, lights, surge protectors , power correctors, bracing, lugs, Polaris connectors, junction boxes, paint, blocks, connectors, switch gear, transformers, disconnects, panels, submeters, submeter commissioning CTs, Pts, breakers, Automatic transfer switches, testing, Solar upgrades, backup generators, lifts, backup water, fencing, system Requirements, security, equipment, components, moving furniture/ desks/ equipment/ vehicles/ plants/ rocks/ dirt/ items for any reason, applying/collecting rebates for the County, complying with all codes (Title24, Title24 part6, Title 24 part II, Title20, CalGreen 1&11, ADA, Building, Safety, etc.), warranties costs, PG&E/City of Lompoc/SCE Rule 21, all items mentioned in the mandatory pre-proposal conference and all costs and terms included in this document and all the attached documents. Front-of-meter upgrades, if any, are excluded from CONTRACTOR's scope.
- All electric wire, buses and fuses shall be copper only. No aluminum will be used.
- Protection: The BESS system shall contain protective relaying features, circuit breakers or fuses which self-protect the BESS in the case of internal electrical faults.
- Balance of System Components (BOS): CONTRACTOR shall procure and install BOS components with the following requirements:
 - Follow requirements described on three-line diagram of the Request for Proposals #835025 (RFP) incorporated herein by this reference
 - Make and Model of BOS components chosen by CONTRACTOR, but must be approved by the County of Santa Barbara.
 - Provide the functionality described elsewhere in the specification documents.
 - All electrical equipment shall be SquareD (distribution panels, disconnects, Breaker panels, ATS, Breakers, Fuses, Switches, and Transformers).

- **Labeling:** Install signage posted at site, including at least the following but also any signage required by the NEC or other applicable codes:
 - Placards Diagrams including:
 - AC and DC disconnect locations for the system indicated on a site plan. O
 - Electrical one-line diagram of system
 - All signage required shall be mounted in appropriate and visible locations
 - Fire suppression and all other placards required by the County.
 - All equipment shall be appropriately identified with permanent, self-adhesive labels.
 - Each DC disconnect shall be labeled with label material described above for operating DC current (I_{mp}), system operating DC voltage (V_{mp}), maximum string DC voltage (V_{oe}), and maximum system DC current (I_{sc}).
 - Updated Arc Flash labels on all equipment touched by the CONTRACTOR.
 - The ESS interconnection point (as described in Single Line Diagram, attachment #2) shall be labeled as such indicating the system AC voltage, current, and the ESS rating in kW-ac and kWh.
- **Grounding**
 - A suitable equipment grounding system shall be designed and installed for the BESS system. This system shall be tied to the Building grounding system. The grounding system shall provide personnel protection for step and touch potential in accordance with IEEE 80, NEC, CEC, County and State Codes. The system also shall be adequate for the detection and clearing of ground faults within the BESS. The CONTRACTOR shall determine, design and install the required interconnections between the BESS and grounding systems.
 - The CONTRACTOR shall perform the alterations needed to the existing building grounding and install the connections from the existing ground grid to the external grounding locations of the BESS. The appropriate external grounding locations for building BESS shall be determined and provided by the CONTRACTOR.
 - CONTRACTOR provided for each building on the load side a CITEL mds750E in addition to the BESS standard surge protection.
 - Contractor shall provide panel level Surge protection every electrical panel the CONTRACTOR touches.
- **Structural / Foundation Pads/ Conduit**
 - The CONTRACTOR shall furnish the design for the structural components of the BESS, concrete pads/foundations as required (concrete no more than 4000 PSI), and conduit required for the complete BESS. All BESS foundations and structures shall be designed by a qualified registered professional engineer licensed in the state of California. All final (Issued for Construction) drawings, specifications and calculations shall be wet stamped by a Registered Civil/Structural Engineer licensed in the state of California. The CONTRACTOR is responsible for Geotechnical surveying if required. Concrete pad/transformers/batteries/inverters/rectifiers will be located approximately 200 feet from the building.
 - CONTRACTOR shall bore when possible from new pad to inside the building. The bore must include a spare Feeder conduit and a spare 2" conduit. The bore must have a vault in the grass inside the fence, the vault shall be traffic rated and 3'x3'. Project manager will point out the locations.
 - CONTRACTOR shall file and pay for all County of Santa Barbara permits.

- At the EOC location, CONTRACTOR will install a 4" conduit and a 2" conduit to the Fire Station from the concrete pad/foundation based on the design provided by the County.
- CONTRACTOR shall install fencing/bollards as per County requirements. Any landscaping is excluded from CONTRACTOR's scope.
- The enclosure shall be UL9540A rated, outdoor enclosure
- The enclosure shall be screen and painted to the requirements of the County of Santa Barbara Architect
- Audible Noise
 - The maximum sound level generated from the BESS system and any associated equipment supplied by the CONTRACTOR under any output level within the BESS operating range, shall be limited to 65 dBA at 50 feet in any direction.
- Mounting System
 - CONTRACTOR shall install BESS components per manufacturer requirements:
 - All components shall be secured to floor or walls.
 - Include structural load design calculations signed and sealed by a qualified professional engineer licensed in the state of California.
 - All structural components shall be installed in a manner commensurate with attaining a minimum 25-year design life.
- Spill Containment
 - The BESS design shall mitigate against chemical spills. The design shall include features that contain chemical spills {to be emptied by contracted chemical disposal company in the event of a spill) and prevent discharge to surrounding site soils.
- Personnel Safety
 - The BESS shall include eyewash stations in the battery area as applicable. In general, the BESS shall be designed with personnel safety as the top priority.
 - CONTRACTOR is responsible for all site security until the project is signed over and accepted by the County of Santa Barbara. County of Santa Barbara takes no responsibility for part/equipment/tools stolen/damage/etc. before sign off.
- Fire Protection
 - The CONTRACTOR shall design and install a fire protection system that conforms to national and County of Santa Barbara local codes. The fire protection system design and associated alarms shall take into account that the BESS will be unattended at most times. In the event that codes do not exist for the BESS, current industry-accepted best practices shall be employed. The fire system shall be an automatic self-extinguishing system (FM100). The system shall email the county when there is a fire.
 - CONTRACTOR shall train the County of Santa Barbara fire department on the operations and fire suppression of the BESS.
- Battery Management System (BMS)
 - The CONTRACTOR shall install BMS capable of protecting and monitoring individual battery modules.
 - CONTRACTOR shall install Heila EDGE Energy Management System or equal for Microgrid control and operations
- Factory Testing - Battery

- The CONTRACTOR shall test and submit test data for the cells designated for use on this project. At a minimum, the following tests shall be performed.
 - Capacities, Amp-hour and Watt-hour
 - Ramp rate
 - Heat Generated
 - Efficiencies
 - As applicable, maximum noxious and toxic material release rates
 - Application simulations as required by County of Santa Barbara
- The CONTRACTOR shall capacity test 100% of the production cells to ensure compliance with design requirements.
- The CONTRACTOR shall arrange for factory witness testing for up to three County of Santa Barbara representatives at the cost of the CONTRACTOR. County of Santa Barbara shall witness performance and modes of operation testing.
- Commissioning - Acceptance and Performance Testing
 - The CONTRACTOR shall develop and perform a commissioning program that will include but not be limited to procedures for design verification, operational acceptance testing, Start -up procedures, functional acceptance testing and safety testing. This commissioning program will assure that the BESS will perform as designed and that the system meets the performance criteria specified elsewhere in these specifications. All modes of operation as described in these specifications shall be tested. The CONTRACTOR shall determine that the BESS is fully operational and suitable for acceptance testing witnessed by County of Santa Barbara. The CONTRACTOR shall document all acceptance and performance tests performed. The CONTRACTOR shall submit documentation, analyses, and a summary in a test report for County of Santa Barbara's records. The commissioning program will be developed by the CONTRACTOR (approved by County of Santa Barbara) and shall demonstrate to County of Santa Barbara that the BESS is operational and performs as specified. These tests shall include, as a minimum:
 - Grounding and electrical resistance testing Verification of sensors, metering and alarms
 - Verification of all control functions, including automatic, local and remote control - Verification of performance criteria
- Warranty
 - CONTRACTOR warrants County of Santa Barbara that the equipment and materials furnished hereunder and the completed BESS project are fit for the purpose of producing and storing electricity in accordance with the requirements and are free from defects in workmanship and materials. CONTRACTOR makes all such warranties for a period of 10 (ten) years after the date of acceptance of the project by County of Santa Barbara. In addition, CONTRACTOR shall clearly indicate life expectancy given discharge profiles provided in this RFP.
- Utility Interconnection and Rates
 - CONTRACTOR should coordinate with Southern California Edison/ SGIP/ County of Santa Barbara and file all forms required for Interconnection between the utility grid and BESS.
 - CONTRACTOR shall coordinate with the Utility Company and the County of Santa Barbara to negotiate the rate that aligns best with BESS' capability to generate savings and/or revenue for the County of Santa Barbara. CONTRACTOR should immediately notify the County of Santa Barbara if

the BESS design limits the site's capability to switch between utility rates. County shall agree to sign permission forms designating CONTRACTOR and System CONTRACTOR as authorized third-parties to make inquiries to SCE on County's behalf.

- SCHEDULE: The CONTRACTOR shall provide schedule design, fabrication, delivery, on site construction and testing phases with subtasks as needed. The schedule will be discussed and finalized in conjunction with the CONTRACTOR's Project Manager Roy Hapeman prior to the final award of this project.
- Documentation Deliverables
 - The Contractor shall furnish complete documentation that will be used for determination of contract compliance, as well as, operation and maintenance of the BESS. The documentation shall be in English, well detailed and instructive.
 - At a minimum, the Contractor's documentation shall consist of the following:
 - Conceptual design package for County of Santa Barbara review
 - Stability and system integration study for the microgrid application
 - ESS performance specifications and application-specific specification/operation Complete design package, BOM and calculations for County of Santa Barbara review Complete design package, BOM and calculations issued for construction
 - Network diagram of the BESS system
 - Complete commissioning plan including test and startup procedures for County of Santa Barbara review
 - Complete set of as built drawings post construction Complete set of test results package for record Statement of completion
 - Installation manuals, instruction manuals and operation guides for all equipment and subsystems. Specific instruction manuals for operation of the BESS controller are required.
 - Other project documentation that would reasonably be required for County of Santa Barbara to document the construction of the BESS and operate the BESS in the future.
 - BESS Control and protective settings Maintenance Schedule
 - Project Schedule Software Documentation
 - As-built drawing and documentation upon final Project acceptance
 - All documentation shall be provided in:
 - Paper hard copy (two copies) and digital files emailed to the project manager.
 - All documents are to be provided in PDF format
 - Native file format when applicable, in addition to PDF format documents shall be provided in native file format. Drawing shall be provided in AutoCAD format. Documents that were created in Word or Excel, etc. shall also be provided in those formats in addition to PDF.

BESS Specifications

- At the EOC location, CONTRACTOR shall provide 90kW (ninety) BESS capable of operating at nameplate rating for 4 (four) hours, or as approved by SGIP for highest incentive rates possible (which may be for 2 hours). The system must maintain this capability over the expected lifetime of the battery.
- At the EOC location Full power discharge, of 90kw(ninety), Shallow discharge, 80% power for 10,000 cycles without damage or warranty violations BESS Efficiency- Minimum 90% AC round trip for Li-Ion technologies - THO< 5% as per inverter spec 519.

- Ambient temperature range of 32 to 120 degrees. It is the responsibility of the CONTRACTOR to design all components to operate at safe rated sustainable operating temperatures over the required ambient temperature range.
- Monitoring requirements to include Voltage, Current, Power, PF. Data Acquisition System shall have (30/60/90) days on site data storage and capability to be remotely accessed and data downloaded.
- The BESS must meet the harmonic specifications of IEEE 519.

Data Acquisition/ Monitoring/ Alarms

- The Data Acquisition/monitoring/alarm system or procedures shall have a minimum of the following capabilities that Alert County of Santa Barbara, when the number of failed or inadequately performing cells or other CONTRACTOR determined conditions indicate that;
 - Preventative maintenance should be performed to keep the BESS at the specified performance levels.
 - The BESS is in imminent danger of failing to meet specified performance levels or potential safety hazards exist.
 - The BESS can no longer meet the specified performance criteria or safety hazards exist.
 - The CONTRACTOR shall have the capability to remotely monitor the BESS and independently and automatically be alerted to BESS alarm conditions without relying on County of Santa Barbara personnel to communicate such an alarm condition exists. The CONTRACTOR shall have the capability to respond to alarm conditions and provide required service to correct such alarm conditions within four hours from the inception of the alarm condition.
- The CONTRACTOR shall include, in the Operation and Maintenance Manual, the recommended corrective action and maintenance procedures for each alarm level or observed condition provided.
- Monitor Points shall include but not be limited to: AC - Voltage, Current, Power factor, KW, KVA, KVAR; DC - DC voltage and current. Points of monitoring TBD during design. Also, system temperature shall be monitored at a minimum of 2 points (battery and inverter)
 - System should have the ability to remotely access and monitor the data as well as have a 30-day on-site memory storage capacity.
 - Data points shall have the ability be recorded at a minimum of 1 minute, with the capability for instantaneous collection of data when data is outside of set parameters.

Meet the existing County of Santa Barbara Cyber security Requirements, as they may be amended or updated from time to time.

- The BESS control system shall be designed to provide for automatic, unattended operation of the BESS. However, the control system design also shall provide for local manual operation, remote operation, or dispatch of the BESS from the County of Santa Barbara or remote access point. All modes of operation and its operational set-point functionality shall be remotely adjustable from the County of Santa Barbara offices to allow change in settings and to turn on/off all controls or modes when appropriate.
- Contractor shall be onsite ever 6(six) months or sooner to inspect and service the BESS system and all the equipment install in the contract.
- All equipment shall be rodent proof.
- All equipment shall be tamperproof (all exterior bolt tamperproof with County of Santa Barbara approved locks)

Transformer

When a transformer is needed, it shall be a DELTA WYE transformer (no DELTA-DELTA transformers). NO BUCK BOOSTERS of any kind allowed for any reason. NO open DELTAs allowed for any reason. All transformer shall have a minimum K factor of 9 or greater. If an oil transformer is being used, the fluid shall be FR3 or equivalent, or state why different and how it is better. Transformer efficiency 95%+. No aluminum wiring or windings for any reason. Vibration isolation padded. NEMA 3+.

Power Factor Equipment

CONTRACTOR shall provide and install power factor equipment after the utility meter that will automatically adjust with different demand levels. This shall be proven with the County Submeter. Power factor shall be from 0.95-1.0. The equipment installed on the lighting and plug load side of the building. COUNTY to approve installation location.

Meter

CONTRACTOR will Provide, commission and Install a facility "total utility energy meter" (2 (two) Square D pm5560 meter with CTs to tie to current County submeter software) that captures the total energy used by the facility and pm5560 with CTs to capture the power created by the building. COUNTY to select locations of the meters. The second meter will go post generator and post battery (load side). [The County currently uses Schneider StruxureWare. This will be an additional meter added to the system.] CONTRACTOR will further provide any meter required by SGIP.

Battery specifications

CONTRACTOR shall meet the specifications of SimpliPhi HI HIGH-VOLTAGE BATTERY 3.6 kWh Module 48 V or equal.

Operation and Maintenance

CONTRACTOR shall maintain the system and pay BMS subscription fee per the following maintenance and payment schedule, during the two five (5) year terms.

Annual Inspection

Measure and record the micro-OHM resistance readings if necessary and re-torque any connections as you see fit to the standard 160 inch-pounds, see above

Annual Preventive Maintenance

- Visual Inspection of Battery
- Environmental Inspections
- Ambient Temperature
- Detailed Inspection of Battery
- String/Battery Bank Float Voltage with no load applied
- String/Battery Bank Resting Voltage when under load
- System Load Testing

Annual Maintenance Payment Schedule

Year	All maintenance and parts cost per year
1	\$1,200.00
2	\$1,236.00
3	\$1,273.08
4	\$1,311.27

5	\$1,350.61
6	\$1,391.13
7	\$1,432.86
8	\$1,475.85
9	\$1,520.12
10	\$1,565.73
Total	\$13,756.66

Exhibit A-1
CONTRACTOR'S Proposal



ENDELOS ENERGY, INC.
RFP #835025
PROPOSAL SUBMITTAL

**PROPOSAL
FOR
COUNTY OF SANTA BARBARA
RFP #835025
BATTERY ENERGY STORAGE SYSTEM**



JANUARY 13, 2021

PRIMARY CONTACT:

Randy Arntson
Endelos Energy, Inc.
593 Avenue of the Flags, Suite #105
Buellton, CA 93427
Cell: (805) 886-4788
Email: rarntson@endelosenergy.com

1. COVER LETTER

January 13, 2021

Mr. Roy Hapeman
County of Santa Barbara
General Services Department, Facilities Services Office
4555 Santa Barbara Street, 2nd Floor
Santa Barbara, California 93101

Subject: Endelos Energy Proposal for RFP #835025 Battery Energy Storage System

Dear Mr. Roy Hapeman

Endelos Energy, Inc. is pleased to submit our proposal in response to the County of Santa Barbara’s Battery Energy Storage System (BESS) RFP# 835025. Our proposed BESS solution provides the County of Santa Barbara General Services with an extremely competent and highly experienced clean energy “Local Contractor” who will finance, design, construct, and maintain the entire system utilizing 100% of the project’s resources residing within Santa Barbara Area.

Endelos Energy, Inc., (Endelos) www.endelosenergy.com is a California Electrical Contractor specializing in Hybrid Solar-Plus-Storage Microgrids, EV Charging Systems, and Energy Efficiency. Endelos is a “Local Contractor” located in Buellton and Goleta, California. Endelos combines energy efficiency technologies with renewable energy power generation sources to create a “Net-Zero” energy building solution, which provides our customers with highly energy efficient facilities which produces as much energy as they consume. Endelos’s primary business focus is in the engineering design, furnish, and installation of Commercial Solar-Plus-Storage Microgrids systems.

Our proposal utilizes the following local Santa Barbara Area businesses to provide an “All Santa Barbara Energy Solution” for the County’s BESS Project. Our local vendor approach will help sustain local existing businesses and or spur new jobs creation in the County of Santa Barbara. The following local businesses below will provide the majority of the project’s expertise, including project financing, labor, materials, environmental compliance, engineering, permitting, installation, and commissioning of the Battery Energy Storage System:

1. Endelos Energy Inc, EPC, Electrical Contractor (Buellton & Goleta, CA)
2. John Maloney JMPE, Solar PV Design and Electrical Engineering (Santa Barbara, CA)
3. Imperial Electric, Electrical Contractor (Goleta, CA)
4. SimpliPhi Power, Battery Energy Storage System Manufacturer (Oxnard, CA)
5. Sun Pacific Solar – Battery Installer (Santa Barbara, CA)

Endelos acknowledges receipt of this RFP and any and all amendments and accepts the terms and condition of this governing procurement.

Endelos proposal is contingent upon SGIP application and approval for the proposed system. Endelos anticipates that the proposed system will meet the “Equity Resiliency” category of SGIP and will be approved for \$1.00/Wh incentive rate. However, Endelos believes that the system size as specified in RFP will not meet the SGIP qualification criteria. Instead, a reduced system size will be approved by SGIP. Any size beyond SGIP approval will need to be paid for separately by the County. Please see our discussion of system sizing in section 34 of our proposal.

Endelos Point of Contact:

We look forward to assisting the County of Santa Barbara in meetings their Sustainability Goals. Please do not hesitate to contact me should you have any questions regarding our proposal at (805) 886-4788.

Sincerely



Randy Arntson

President & CEO

Endelos Energy, Inc.

CSLB: #767787

Email: rarntson@endelosenergy.com

Websites: www.endelosenergy.com

2. ENDELÓS ENERGY OWNERS NAME AND ADDRESS

Marvin Randall Arntson is 100% owner of Endelos Energy, Inc. Owners Name and address is provided below:

Marvin “Randy” Arntson

President & CEO

Endelos Energy, Inc.

593 Avenue of the Flags, Suite #105

Buellton, California 93427

Phone: (805) 886-4788

CACL# 767787

ISNetWorld #400-795824

Email: rarntson@endelosenergy.com

Websites: www.endelosenergy.com

3. BESS PROJECT KEY PERSONS

Endelos Energy has teamed up with JMPE Engineering, Imperial Electric AND Sun Pacific Solar to Engineer, Procure and Construct the County’s EOC BESS 90kW System. This is the same team that designed and constructed the County of Santa Barbara Calle Real 1MW Solar System and is currently constructing the County’s 1MW Hybrid Solar-Plus-Storage system in Santa Maria CA.

The following provides a breakdown of project responsibilities for each contractor:

4. Endelos Energy – Prime Contractor – Equipment and material purchases
5. John Maloney PE – Electrical Engineering
6. Imperial Electric- Electrical Installation
7. Sun Pacific Solar – SimpliPhi Battery Installation, integration and test
8. SimpliPhi Power (Oxnard, CA)

Marvin “Randy” Arntson, Endelos Energy President and Founder

Randy is an entrepreneur, electrical engineer and high technology renewable energy enthusiast with an impressive and diverse energy product development career history.

Randy has over 37 years of high technology product development engineering experience. His senior engineering and management experience includes business planning; marketing; sales; program management; project engineering; engineering management, supply chain and manufacturing operations, and facility administration all in high technology environment.

With a degree in electrical engineering, computer science and further qualifications in aerospace and military system product developments,



Randy spent his early life developing avionic and weapon control systems for the AH-64 Apache, SH-70B CV-Helo, F23 Stealth Fighter, and other black C4I airborne programs. Randy went on to work in the private sector developing products for gas, water and electric utility Smart Grid markets including renewable power generation electrical systems, advanced metering infrastructure, smart grid communication, and demand side management.

In 2007, Randy founded Endelos Energy, Inc. an energy efficiency and renewable energy Engineering and Construction Company specializing in “Zero Net Energy” energy efficiency and renewable power with the vision of leading the transformation of electrical power generation away from fossil fuel to 100% clean renewable energy future. Randy holds a Bachelor of Science in Electrical Engineering, Computer Systems and Computer Science degrees from Western Michigan University.

Praveen Jha – Endelos Energy Vice President of Energy Solutions

Praveen is an entrepreneur, mechanical engineer and renewable energy technology enthusiast with an impressive and diverse energy financial analysis career history. Praveen has over 8 years of hands-on experience in energy analysis and financial modeling of energy efficiency and Energy Storage projects (solar & wind). Praveen developed Endelos’s proprietary energy solutions modeling and solar PV design, analysis and estimating tool.



Praveen’s experience includes working with electric utility companies across USA in the definition and creation of their energy efficiency rebate programs. Praveen holds an MBA from UCLA Anderson School of Management and a BS in Mechanical engineering from IIT Kharagpur (India).

John Maloney, PE – JMPE Principal/Engineer

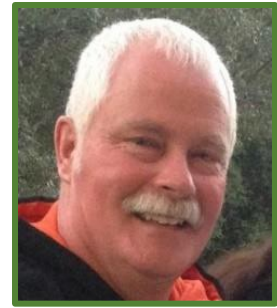
Since 1982, John Maloney has been committed to creating the most cost-effective, energy-efficient electrical and lighting design solutions for government, commercial, and residential projects. In 1994, John formed JMPE, his own electrical engineering and lighting firm. John’s areas of expertise include electrical design of power, lighting, and signal systems; distribution system design, short circuit analysis, coordination studies and Title 24 Lighting Calculations; as well as interior and exterior lighting design for K-12 schools,



universities, government buildings, retail stores, offices, and residences throughout California. John graduated with a Bachelor of Science in Electrical Engineering (BSEE) 1982. He was awarded his Master of Science in Systems Management (MSSM) from University of Southern California (USC) two years later. John served four years with the United States Air Force 4392 Civil Engineering Squadron, Vandenberg Air Force Base, California, where he designed electrical systems in support of the Space Shuttle and Peacekeeper operations. In 2002 John opened a branch office in Bakersfield. Another office was established in Orcutt, CA in 2013.

Mike Breyman, Imperial Electric, President and CEO

Mike has over 28 years' experience as an electrician with the IBEW. After having joined Imperial in 1993, he purchased the business in 2002. Mike has developed Imperial's contracting expertise in the highly specialized electrical sectors of Commercial, Industrial, Defense, Military, Aerospace, Medical/Healthcare, IT and Emerging Energy Applications. Mike continues to uphold Imperial's 43 year history of providing excellent, comprehensive customer service, working to the highest standard while achieving cost-effectiveness and maintaining an excellent safety record.



Imperial's safety program has been repeatedly recognized by the National Electrical Contractors Association, awarding Recognition of Achievement for Zero Injury and Safety Excellence. Imperial Electric is currently performing various energy and electrical construction projects for the County of Santa Barbara Fire Department and General Services. Additionally, Imperial is a highly respected company performing projects throughout Santa Barbara County for Vandenberg Air Force Base, Raytheon Cities of Santa Barbara, Montecito, Santa Maria Buellton, Solvang, Los Olivos and Carpinteria.

Wesly Johnson Sun Pacific Solar – SimpliPhi Battery Integration

Wesly has been working for Sun Pacific Solar for 12 years. He recently obtained his C-10 license and he has completed the Outback Power certification program, the LG battery certification, as well as other specialized certification programs. Wesly leads our battery back-up efforts with his extensive background in DC-Coupled, AC-Coupled, Grid-tied and Off-Grid battery systems. He graduated from the SBCC art program. Wesly is a fashion designer at Wesly Designs, a woodworker, photographer and an avid sailor.



Sun Pacific Solar SimpliPhi Project Experience

Sun Pacific Solar installed the Santa Cruz island Communications site off-grid solar system using SimpliPhi's Energy Storage system similar to system to be used on EOC BESS Project lead by Wesly Johnson.



Additionally, Sun Pacific Solar will be providing the Battery System Integration at Betteravia and Fire Station 12 Hybrid Solar-Plus-Storage. This task includes battery integration into four 20foot cargo containers that consists of 800kWh of SimpliPhi batteries similar to EOC BESS system.

Project References

County of Santa Barbara Project References

- **Scott Hoskins, County of Santa Barbara – Director General Services Facilities**
(805) 896-2902

In reference to the following companies currently doing work for County of Santa Barbara:
Endelos Energy, JMPE Engineering, Imperial Electric, MM Mechanical Plumbing, Falcon Roofing

- **Roy Hapeman, County of Santa Barbara, Energy Manager**
(805) 568-2628

In reference to the following companies currently doing work for County of Santa Barbara:
Endelos Energy, JMPE Engineering, Imperial Electric, Sylvania Lighting Solutions

Project References

- **COSB Calle Real 1MW Solar PV Project**

Endelos Project Managers: Randy Arntson & Jeff Bernardino
Address: 4410 Calle Real, Santa Barbara CA 93110
Contact: Roy Hapeman (805) 568-2628

- **COSB Hybrid Solar-plus-Storage 1MW PV Project**

Endelos Project Managers: Randy Arntson
Address: 4410 Calle Real, Santa Barbara CA 93110
Contact: Roy Hapeman (805) 568-2628

- **COSB Santa Cruz Communications Solar-Plus-Storage Off-Grid Power System**

Sun Pacific Solar Project Managers: Wesly Johnson
Address: 4410 Calle Real, Santa Barbara CA 93110
Contact: Roy Hapeman (805) 568-2628

5. CONTRACTOR PROJECT MANAGEMENT APPROACH

Endelos Energy has teamed up with JMPE Engineering, SimpliPhi Power, Imperial Electric and Sun Pacific Solar to Engineer, Procure and Construct the County's EOC BESS 90kW System. This is the same team that designed and constructed the County of Santa Barbara Calle Real 1MW Solar System and is currently constructing the County's 1MW Hybrid Solar-Plus-Storage system in Santa Maria CA.

Our team approach provides for a successfully On-Time, On Budget delivery of the County Emergency Operation Center Battery Energy Storage System (BESS). Endelos has highly experienced Construction Management Team and Methodology for managing our subcontractors. Endelos will manage the entire SGIP submittal and EOC BESS Installation, integration, test and commissioning of the project. Weekly Project Status meetings will be held with the County to keep them up to date on all project activities. We

will be working with each subcontractor to coordinate all project job site activities including moving labor and materials, on and off jobsite. Perform daily safety meetings which includes subcontractor notification of any County activities that will be going on during the day.

Upon Contract Award Endelos will work with the County Energy Manager to finalize a project plan and schedule for this project. Our approach will be to immediately start the engineering/permitting process along with immediate long-lead material procurement.

6. COMPLETION OF CERTIFICATION – EXHIBIT A.

Endelos completed Exhibit A is provided in Appendix A of this proposal.

7. ADDITIONAL INFORMATION CONTRACTORS EXPERIENCE.

Endelos Energy, JMPE, Imperial Electric and Sun Pacific Solar has been a successful contractor for the County of Santa Barbara - General Services, Fire Sherriff, Social Services and Health Departments for twelve (12)plus years.

8. LIST OF PROJECT EXCEPTIONS

Endelos Energy will be providing 100% of the cost for SGIP Application. Upon SCE SGIP Application Acceptance and Execution, Endelos request the County reimburse Endelos for all project costs to date should the County decide not to go forward and cancel the EOC BESS Project for whatever reason.

9. PROJECT SCHEDULE

Endelos Energy has provided a Project Milestone table highlighting a preliminary project schedule. A Microsoft Project Detailed Project schedule will be provide to the county upon Contract award. Endelos estimates SCE’s SGIP Acceptance process will take approximately 3 months from start.

Project Risks:

The following provides several potential risks that will delay this project:

The County Project Permitting process is a high project management task for Endelos. Our Project Manager will start the County permitting process on day one of the project to mitigate any schedule risk associated with this project task.

County Project Support:

Endelos assumes that the City will provide the following support for this project:

Endelos will require County project management support for clearing any project permitting process issues associated with the County.

The following provides a summary of major project milestones:

Milestone	Planned Date
MILESTONE I – CONTRACT AWARD SGIP SUBMITTAL	
County Notice to Proceed	1/22/2021
SGIP Submittal and SCE Acceptance	1/ 22/2021 thru 4/22/2021
Project Kick-off Meeting	4/23/2021
MILESTONE II – SYSTEM DESIGN & ENGINEERING	
Final Engineering Design Review	4/28/2021
Engineering Design Submitted to SCE	4/30/2021
Endelos Procures 90kW System Material	4/28/2021
County Plans & Permitting Sign-off	5/15/2021
MILESTONE III – EOC BESS SITE CONSTRUCTION	
Endelos/Sun Pacific System Installation	6/15/2021 thru 7/9/2021
County Witness System Testing	7/12/2021 thru 7/14/2021
MILESTONE IV – SYSTEM INTERCONNECTION	
Grid System Check- Interconnect	6/28/2021 thru 7/1/2021
SCE Final Interconnect Inspection	7/2/2021
Pre-SCE System Test Run	7/15/2021
MILESTONE V – SYSTEM COMMISSIONING	
SCE SGIP Commissioning Test	7/19/2021
EOC BESS System On-Line	7/22/2021

10. PROJECT SCHEDULE TRACKING

Endelos and its subcontractors will track and try to expedite SimpliPhi's manufacture of Batteries, SCE Engineering delays etc.. Weekly Project status meetings and Schedule reviews will be provide to County.

11. COUNTY BESS DESIGN LIST OF INFORMATION

Endelos and JMPE has already completed SimpliPhi BESS engineering design for SGIP Application. This application is ready for submittal upon County Approval

12. SIMPLIPHI BESS TYPICAL DEGRADATION CURVE

Over SimpliPhi's 10 year Limited Warranty Period, SimpliPhi warrants the High Voltage Battery product at 80% or greater of its original-rated capacity. In uniform cycling, degradation tends to be fairly linear, but slightly faster at the beginning of the timeframe. Real-world degradation is very dependent on the specifics of the actual use case.

13. SIMPLIPHI RECOMMENDED BATTERY REPLACEMENT

No such replacement will be required with our proposed solution within the warranty period. Failure of any cells will be covered under warranty and will incur no cost to the County.

14. ENDELOS ENERGY WARRANTY

Warranty documents for the Battery system and EMS (Energy Management System) are attached in this proposal (Appendix B). In brief, at 80% DoD, the batteries are warrantied for 10 years with a cycle life of 10,000. If battery is cycled once every day, this means that in 10 years, only 3,650 cycles will be completed. In other words, 10,000 cycles will be exhausted in 27 years. Over the ten-year Limited Warranty Period, SimpliPhi warrants the SimpliPhi Product at 80% or greater of its original-rated capacity. Heila EDGE EMS is warrantied for two years of performance. In addition, Endelos Energy will provide 1 year workmanship warranty.

15. ENDELOS BESS SPARE PARTS

The PHI High Voltage Battery product has no spare parts that are generally required or recommended.

16. BESS MAINTENANCE REQUIRED

SimpliPhi batteries are maintenance free. However, Endelos recommends minimal preventive maintenance in terms of inspections and testing. Please see #36 for details.

17. BESS ROUND TRIP EFFICIENCIES

AC/AC round trip efficiency depends on C-rate (rate at which the battery is discharged) and inverter efficiency. A C/2 rate means battery discharged in 2 hours. Since batteries will operate at varying C rates during its lifetime, the efficiency will stand in the range of 87% to 95% as shown below.

Battery efficiency C/2	90%	A
Battery efficiency C/3	93%	B
Battery efficiency C/5	95%	C
Max Battery Efficiency	98%	D
Inverter Charging and discharging efficiency	98.50%	E
AC-AC Round Trip Efficiency C/2	87.32%	A x E x E
AC-AC Round Trip Efficiency C/3	90.23%	B x E x E
AC-AC Round Trip Efficiency C/5	92.17%	C x E x E
AC-AC Round Trip Efficiency Max	95.08%	D x E x E

18. BESS CONSTANT OUTPUT LENGTH OF TIME

The battery modules' maximum continuous discharge rate is C/2. Discharge times increase proportionally at discharge rates less than the maximum. That is, a module discharging at a C/2 rate maintains its C/2 output for 2 hours, a module discharging at a C/3 rate maintains its C/3 output for 3 hours, etc. Please also refer to the attached battery specification sheet.

19. BESS LENGTH OF TIME OF OUTPUT AT REDUCE STATE OF CHARGE

Discharge duration decreases proportionally at lower State of Charge (SoC). That is, modules at 100% SoC can discharge their maximum continuous discharge amps for 2 hours, and modules at 50% SoC can discharge their maximum continuous discharge amps for 1 hour (half the max continuous discharge time), and modules at 25% SoC can discharge their maximum continuous discharge amps for a 1/2 hour (a quarter of the max continuous discharge time), etc. Please also refer to the attached battery specification sheet.

20. BESS GUARANTEED LIFE EXPECTANCY

Expected Cycle Life is outlined in Table 1.0 of the attached SimpliPhi Power High Voltage Warranty. Note that warranty coverage is according to years and not cycle life.

Expected Cycle Life: 10,000 cycles @ 80% DOD / 5,000 cycles @ 90% DOD / 3,500 cycles @ 100% DOD

21. BESS LIFE EXPECTANCY CONTROLLING PARAMETERS

Operating Parameters are listed in section 6.1 of the attached PHI High Voltage Battery Manual. It is reproduced below:

Recommended Operating Conditions for 10 Year Warranty						
Depth of Discharge (DoD)	80%		90%		100%	
Cycle Life at Correlated Dod	10,000 cycles		5,000 cycles		3,500 cycles	
Operating Temperature °F (°C)	32 to 120 (0 to 49)					
Programming Settings for Ancillary Equipment	24V module	48V module	24V module	48V module	24V module	48V module
Low Battery Cut- Off Voltage (V) per HV Module at Correlated DoD	25.1	50.2	24.8	49.6	24	48
Absorb / Charging Voltage per HV Module	28V	56V	28V	56V	28V	56V
Absorb End Amps	2% of the PHI Battery bank's total Ah capacity					
Absorb Time (if Absorb End Amps parameter is unavailable)	1 Hour					

Recommended Operating Conditions for 10 Year Warranty				
Limitations by Model	PHI 4.3		PHI 3.6	
	24V	48V	24V	48V
Continuous Charge & Discharge Rate (ADC)	86.4	43.2	72	36
Surge Discharge Rate (ADC) - 10 minutes maximum	100	100	100	100

NOTE: The PHI HV Battery's paired BMS will not ensure that the battery operates according to the above listed parameters. Therefore, it is imperative that all Balance of System equipment paired with the HV battery include programmed values that match the parameters listed in Tables 9.0 and 10.0 above.

22. BESS REQUIRED ENVIRONMENTAL CONDITIONS

Environmental Considerations are listed in section 4.1 of the attached PHI High Voltage Battery Manual (Appendix B). No maintenance procedures are necessary. Some highlights are reproduced below:

The PHI HV Battery ideally operates between 41° and 113° F (5° ~ 45° C). The PHI HV Battery is not ignition protected. To prevent fire or explosion, do not install this product in locations that require ignition-protected equipment. PHI HV Battery modules do not vent any harmful gasses and do not require special ventilation or cooling. For more details, please refer to the section 4.1 of the attached installation manual.

23. BESS MANUFACTURERS POWER CONVERSION SPECIFICATION (PCS)

Dynapower MPS-125 EHV Inverter specification document is attached (Appendix B)

24. BESS CHARGING CYCLE CHANGES

The charging cycle is not innately changed by lower-demand applications. The charging cycle is influenced by reduced charging rates. The slower the charge rate, the higher the SOC reached by a given voltage. In the broad sense, if demand is sufficiently low that any charging from the grid or similar source can be done at lower C-rates, that will make for more efficient operation and better system longevity.

25. BESS STATE OF CHARGE (SOC)

The PHI High Voltage Battery has a maximum C/2 charge rate; at that rate, the battery takes 2 hours to charge from 0% to 100% SoC.

26. BESS MODES OF OPERATIONS TESTING

Testing and commissioning will be performed per the attached PHI High Voltage Battery Manual (Appendix B).

27. BESS PERFORMANCE CURVE #CYCLES VS. DEPTH OF DISCHARGE

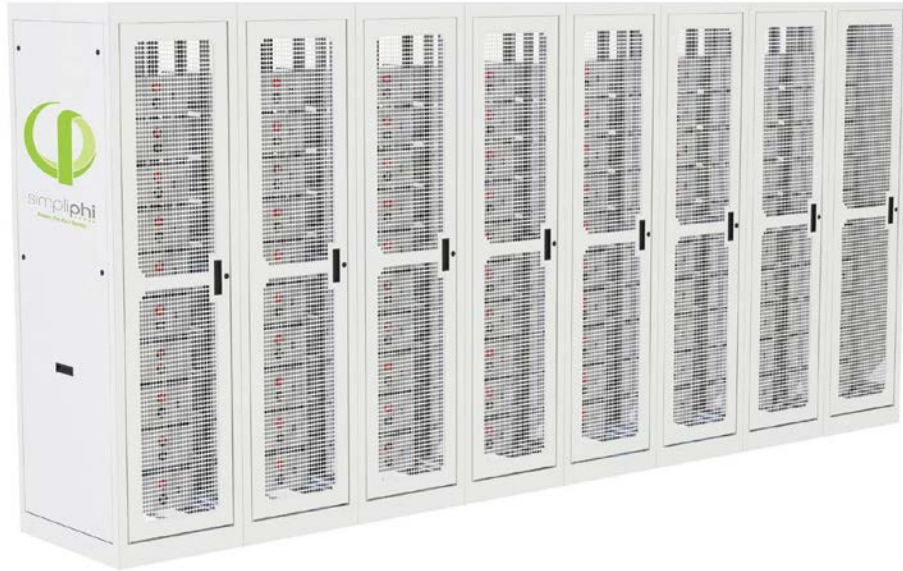
Expected Cycle Life at various correlated Depths of Discharge is outlined in Table 6.0 of the attached PHI High Voltage Battery Manual. See answer to #21 above. A Cycle Life VS. DOD Curve is currently unavailable.

28. BESS EOC SERVER ROOM AESTHETIC

Various PHI High Voltage Battery renderings and photos are included in the PHI High Voltage Battery Manual and Specification sheet. A rendering of a rack is given below:



Endelos proposes the BESS integrated racking system will be located in the EOC current server room. The following provides a picture of this racking system. The 90kW system consist of four racks as opposed to the eight racks shown in the picture below.



29. BESS PLANS, COMPONENTS, MOUNTING DETAILS

Please refer to the attached PHI High Voltage Battery Manual (Appendix B). Endelos will provide detailed plans upon contract award.

30. BESS EQUIPMENT ASSEMBLIES

SimpliPhi Battery fabrication is company proprietary information and will be provided in appropriate detail upon contract award.

31. BESS FABRICATION DETAILS

SimpliPhi Battery fabrication is company proprietary information and will be provided in appropriate detail upon contract award.

32. BESS INSTALLATION AND INTEGRATION ISSUES

Endelos and Sun Pacific Solar do not foresee any BESS installation nor integration issues at this time.

33. BESS DIAGRAMS FOR POWER SIGNAL AND CONTROLLING WIRING

Please see Single Line Diagram provided in paragraph 38 below. Further drawings will be developed during engineering upon contract award.

34. BESS POWER DC-KW CAPACITY MEASURED AT INVERTERS

Given the requirement of RFP (90 kW, 360kWh throughout the expected life), our solution will require 161 PHI 3.6 kWh modules. This will provide a maximum kWDC at inverter of 296 kWDC and output of 291 kWAC. However, SGIP rules require that kWAC cannot exceed the last 12 months maximum demand which appears to be 90 kW. SGIP also does not permit battery capacity more than two hour discharge rate. Which means that maximum capacity of battery can be only $90 \text{ kW} \times 2 = 180 \text{ kWh}$. A 360 kWh system will not qualify for SGIP incentive. SGIP also calculates rating based on maximum DoD possible (which for this battery is 100%), not 80%. To qualify for SGIP incentive, the following configuration will be needed:

Manufacturer: SimpliPhi

Model: PHI 3.6 – 48V

No. of modules: 50

Max DC output: 90.7775 kW

Max AC Output: 89.416 kW

kWh-AC Capacity: 181.555

If the County desires to go beyond this capacity, then we recommend installing the SGIP qualified system first with SGIP incentive and then installing additional capacity later (if utility allows) at additional cost.

35. POWER CAPACITY (AC KW), MEASURED AT THE ELECTRICAL INTERCONNECTION POINT

AC Inverter output per RFP requirement: 291 kWAC

AC Inverter output per SGIP Qualification: 89.416 kW (we recommend this, see above).

AC kW at the interconnection point will be slightly less than the Inverter output due to wiring losses and will be determined during engineering and permitting phase.

36. OPERATIONS AND MAINTENANCE

a. Discuss your operations and maintenance offering

Our solution does not require extensive maintenance. It only requires periodic inspections and testing. We recommend an Annual Preventive Maintenance with the following activities:

Annual Inspection

Measure and record the micro-OHM resistance readings if necessary and retorque any connections as you see fit to the standard 160 inch-pounds, see above

Annual Preventive Maintenance

Visual Inspection of Battery

Environmental Inspections

Ambient Temperature

Detailed Inspection of Battery

String/Battery Bank Float Voltage with no load applied

String/Battery Bank Resting Voltage when under load

System Load Testing

The cost of this maintenance will be \$1,200 per year increasing @3.0% per year. It includes \$60/year for Heila EDGE subscription (In case County does not choose a maintenance offer, County will directly pay subscription fee to Heila EDGE).

We also offer a quarterly maintenance schedule with the following activities:

Quarterly Preventive Maintenance

- Test Battery Bank Resting SOC Voltage
- Charger Output Voltage (not specific to batteries, this is ancillary equipment test)
- Voltage of each battery module (*not* each cell, as you cannot test cell voltage with lithium batteries)
- Momentary Load Test
- Test at each battery parallel terminal connection, micro-OHM resistance readings and re-torque to 160 inch-pounds if necessary
- Room Ambient Temperature
- Temperature Inside Battery Cabinet

The cost of quarterly maintenance is \$2,000 per year including Heila EDGE subscription fee of \$60/year.

b. Provide details regarding any uptime guarantee you provide

Our batteries are always on throughout their expected life provided they are operated under recommended conditions. We do not provide any uptime guarantee.

37. ENERGY SERVICES PROVIDED

a. Discuss the ability of you proposed solution to reduce demand charges.

This functionality may be programmed in a paired EMS controller sold through SimpliPhi (see section 1.4.1 of the attached PHI High Voltage Battery Manual).

b. Discuss the ability of your proposed solution to shift energy consumption from peak to off peak.

This functionality may be programmed in a paired EMS controller sold through SimpliPhi (see section 1.4.1 of the attached PHI High Voltage Battery Manual).

c. Discuss how your solution works with solar PV to maximize solar self-consumption.

This functionality may be programmed in a paired EMS controller sold through SimpliPhi (see section 1.4.1 of the attached PHI High Voltage Battery Manual).

d. Discuss the monitoring platform you provide, and how that can be used to verify the benefits the system will provide.

The paired EMS controller (from Heila Technologies, see attached specifications) includes monitoring capabilities.

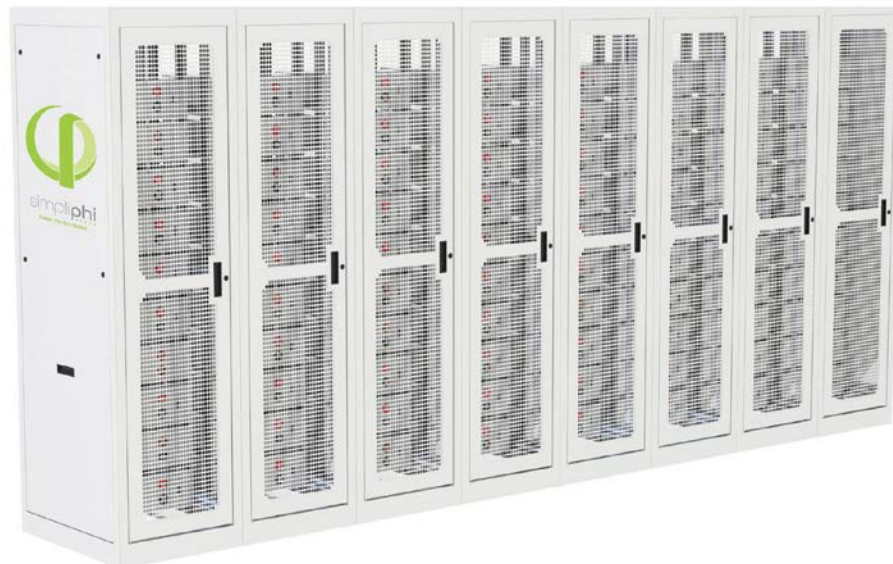
38. ENERGY STORAGE TECHNOLOGY

Battery Energy Storage - SimpliPhi 3.6kWh

Endelos will use SimpliPhi Power' PHI 3.6V kWh High Voltage Batteries for the 180kWh battery design. SimpliPhi is located in Oxnard CA. The PHI deep-cycle Lithium Ferro Phosphate (LFP) High Voltage (HV) Battery utilizes the safest Lithium Ion chemistry available, omitting cobalt and minimizing risk of thermal runaway and fire propagation. The modular design scales in series and (if applicable) in parallel to produce a PHI HV Battery that meets the energy capacity and voltage requirements of a wide range of applications. The PHI High Voltage Battery module includes a built-in breaker, detailed in section 1.3.2 of the attached PHI High Voltage Battery Manual. The PHI High Voltage Battery product is rated for indoor deployment. Quality Control documents are attached in Appendix B.



The 360 kWh battery system will be integrated and installed in Emergency Centers Center server room. The following provides a sample layout of the battery installation.



Battery Inverter



MPS®-125 EHV

125kW ENERGY STORAGE INVERTER

The **MPS®-125 EHV** is a transformerless, air-cooled compact inverter that has been optimized for behind-the-meter energy storage applications. Featuring a highly efficient three level topology, the MPS®-125 EHV is easily integrated into customer supplied energy storage systems or can be supplied as a part of Dynapower's fully-integrated MPS-i®-EHV energy storage system.

Multiple **MPS®-125 EHV** inverters can be paralleled together.

FEATURES INTEGRATED:

- + AC Breaker with Shunt Trip
- + DC Disconnect
- + DC Input Fuses
- + Black Start
- + Dynamic Transfer™



DYNAMIC TRANSFER TO OFF GRID MODE

Dynapower's proprietary, patent-pending Dynamic Transfer algorithm monitors grid stability, and upon detecting a grid disturbance, disconnects from the grid. The equipment seamlessly transitions critical loads to stand-alone mode on the load connection and supports 100% phase imbalance in UF mode.



INTEGRATED INVERTER SOLUTION

Dynapower's MPS® inverters are an integrated solution containing all required protective features, as well as an AC output breaker, and DC disconnect switch. This creates a cost savings for end users and integrators when compared with other inverters that require additional add-on items needed for battery integration.



E COMP: AUTONOMOUS VOLT/VAR SUPPORT

A Volt Var function that provides immediate and automatic voltage support to the grid.



F COMP: AUTONOMOUS Hz/WATT SUPPORT

A Hz-Watt function that provides immediate and automatic frequency support to the grid.

East Coast/Headquarters 85 Meadowland Drive South Burlington, Vermont 05403

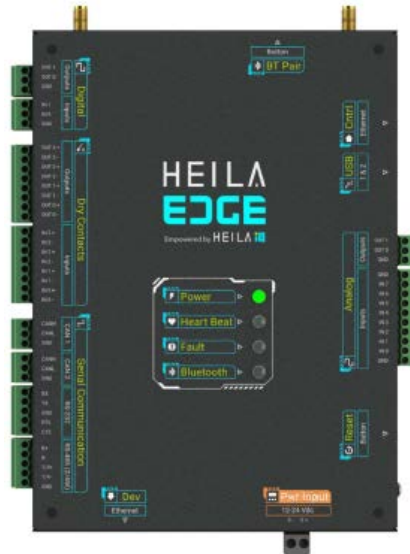
West Coast 2913 Whipple Road Union City, California 94587

Heila EDGE Monitoring, Data Acquisition and Reporting System

Endelos will use Heila EDGE Data Acquisition Systems (DAS) that will enable the City to track the performance of the PV and Battery Systems as well as environmental conditions through an online web-enabled graphical user interface and information displays. Contractor shall provide equipment to connect the DAS via existing hardline, Wi-Fi network, or cellular data network at all locations. The means of data connection will be determined during design.

The Heila EDGE device runs the Heila IQ software, designed to simplify the monitoring, control, and aggregation of Distributed Energy Resources (DERs) into well-coordinated and optimized systems. The device can be installed and operated on its own to provide individual DERs with advanced capabilities or as part of a Heila network to achieve multi-agent optimization.

The Heila EDGE was designed to extend the management and monitoring coverage to the entire energy infrastructure by pairing with assets such as battery systems, controllable solar arrays, and dispatchable loads, among many others.



Key Capabilities

Compatible with system-level controllers and aggregators

The Heila EDGE is configurable to use standard industrial protocols (e.g. DNP3, Modbus, Multispeak, IEC-61850, OpenADR, etc.) and follows the SunSpec information models, to simplify the integration with Energy Management Systems such as microgrid controllers, aggregators, DERM platforms, and SCADAs, etc. It can be connected to wired, wireless, and cellular networks.

Decentralized optimization capabilities

The Heila EDGE has built-in algorithms to provide an optimal response to price signals which enables decentralized decision making for microgrids and other coordinated systems.

Automatic asset and network characterization

The Heila EDGE continuously implements machine learning techniques to obtain its asset's most important characteristics and optimize its performance over time. It also uses the active injection of signals and perturbation theory to measure the power network parameters around it for a safer operation.

Secure communication network

The Heila EDGE protects the DER components by placing them inside an individual subnet and implementing intrusion detection techniques, creating a clean hierarchical communication topology with a secure barrier between the DERs and the internet.

Multi-protocol and I/O capabilities for DERs

The Heila EDGE can communicate using the most prevalent protocols and standards in the industry, making it compatible with most inverters, battery management systems, power meters, relays, etc. Compatible protocols include Modbus RTU and TCP, BACnet MS/TP and IP, CAN Bus, SNMP, and others. Heila EDGE also provides analog and digital inputs and outputs.

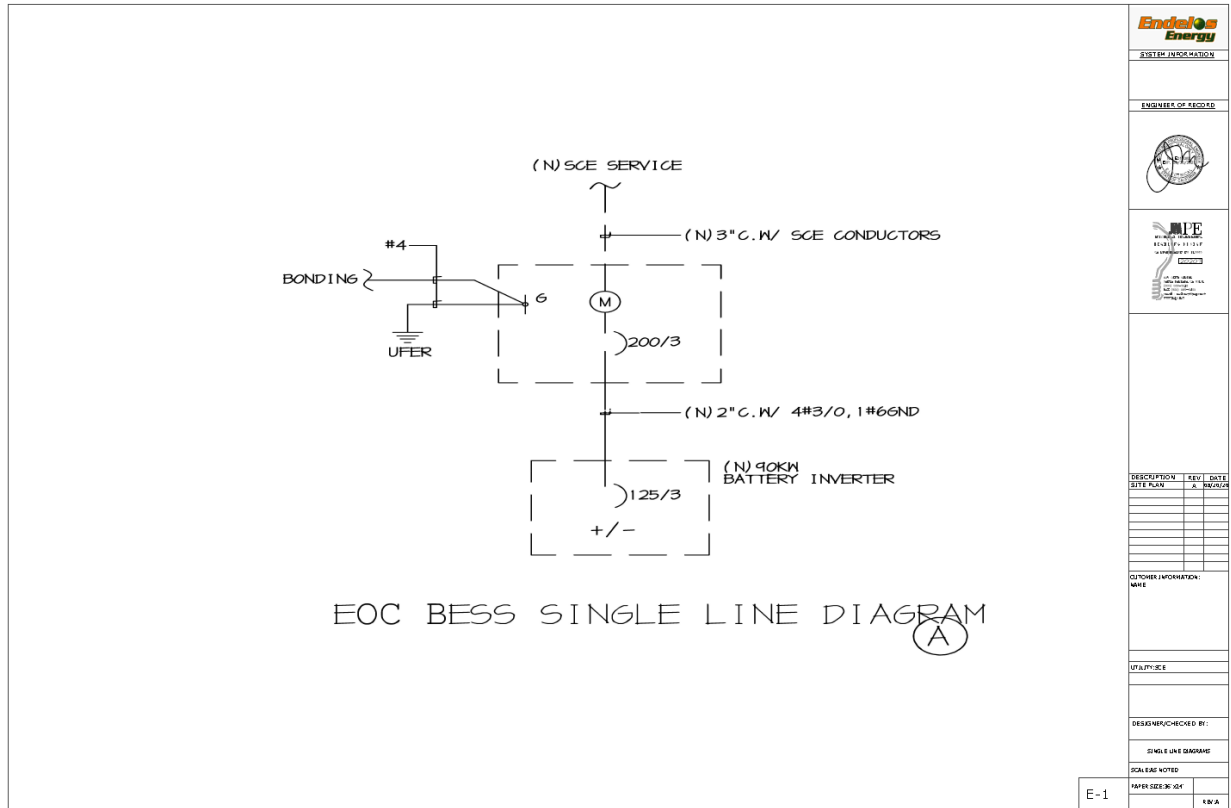
Data storage

Each Heila EDGE device serves as a database for the asset it is connected to, storing high-resolution data, which is accessible remotely, both in real-time and for post-processing.

Fan-less operation

The Heila EDGE has no moving parts, which significantly increases reliability and reduces maintenance.

BESS System Single line Diagram



39. ENDELOS PROVIDED EQUIPMENT

Endelos will Provide and Install a facility "total utility energy meter" (2 (two) Square D pm5560 meter with CTs to tie to current County submeter software) that captures the total energy used by the facility and pm5560 with CTs to capture the power created by the building. COUNTY to select locations of the meters. The second meter will go post generator and post battery (loadside). [The County currently uses Schneider StruxureWare. This will be an additional meter added to our system.]

APPENDIX A

Exhibit A Worksheet

Exhibit A - Cost Proposal Worksheet

The CONTRACTOR is to address the items below and submit data as part of the cost proposal. The information is to be provided in hard copy and MS Excel format. It is expected that not all line items will be required for this project by all CONTRACTORS. It is acceptable and expected to have \$0 cost line items. A \$0 cost line item does not equal a formal exception taken of a requirement of this RFP. All exceptions must still be listed in a separate exceptions section.

Energy Savings Calculations and Energy Consumptions

Assume the following information for the EOC For all energy saving/demand response/Etc.

- The building has two peaks to shave every day for the month of August.
 1. 1pm 30kW for one hour
 2. 4pm 20kw for 3 hours
 3. At no time can the battery exceed 80% depth of discharge.
 4. 90 degree outside temperature all day.
- Provide the calculation for the energy kW and kWhs consumption for operating the battery. (per day and the total for the month) (then do the calculation for each year for 10 years}
- What will be the maintenance costs and parts that will be changed for each year assuming all the months are the same as this month? Provide a cost for every year for ten years.
 Maintenance cost to cover all maintenance a repair cost of a ny kind except lighling strike, theft and vandalism.
- Do NOT Include any offsets of any kind (like Demand response, sale of kW's or peak shaving).
 Use a 3% cpi.
- Failure to complete this section will automatically disqualify the CONTRACTOR.

	All maintenance and parts cost per year	kwh consumption per year	max kw consumed by cooling system
2021	\$ 1,200.00	32,850	0
2022	\$ 1,236.00	32,850	0
2023	\$ 1,273.08	32,850	0
2024	\$ 1,311.27	32,850	0
2025	\$ 1,350.61	32,850	0
2026	\$ 1,391.13	32,850	0
2027	\$ 1,432.86	32,850	0
2028	\$ 1,475.85	32,850	0
2029	\$ 1,520.12	32,850	0
2030	\$ 1,565.73	32,850	0
Total	\$ 13,756.66	328,500	

Cost for Contractor to remove and replace all batteries at the end of year 10

\$ 160,000.00

Note:

1. Cooling system is detached from the storage and will not consume any additional energy up until the temperature of 120 degrees.
2. The year 10 cost is based on current projections of cost and may change in future depending on market conditions and new research & development.



EXHIBIT B

Indemnification and Insurance Requirements (For Endelos Energy Contract)

INDEMNIFICATION

A. Indemnification pertaining to other than Design Professional Services:

CONTRACTOR agrees to indemnify, defend (with counsel reasonably approved by COUNTY) and hold harmless COUNTY and its officers, officials, employees, agents and volunteers from and against any and all claims, actions, losses, damages, judgments and/or liabilities arising out of this Agreement from any cause whatsoever, arising out of or related to the CONTRACTOR'S work or activities for the COUNTY and for any costs or expenses (including but not limited to reasonable attorneys' fees) incurred by COUNTY on account of any such claim except where such indemnification is prohibited by law. CONTRACTOR's indemnification obligation does not apply to the COUNTY's sole negligence or willful misconduct.

B. Indemnification pertaining to Design Professional Services:

CONTRACTOR agrees to fully indemnify and hold harmless COUNTY and its officers, officials, employees, agents and volunteers from and against any and all claims, actions, losses, suits damages, costs, expenses, judgments and/or liabilities that arise out of, or pertain to, or relate to the negligence, recklessness, or willful misconduct of the CONTRACTOR and its employees, subcontractors, or agents in the performance of services under this Agreement but this indemnity does not apply to liability for damages arising from the sole negligence, active negligence, or willful acts of the COUNTY. The indemnity includes the cost to defend COUNTY to the extent of the CONTRACTOR's proportionate percentage of fault. Should one (or more) defendants be unable to pay its share of the defense costs due to bankruptcy or dissolution of the business, CONTRACTOR shall meet and confer with other parties regarding unpaid defense costs and CONTRACTOR shall pay County's cost of defense to the fullest extent permitted by law.

NOTIFICATION OF ACCIDENTS AND SURVIVAL OF INDEMNIFICATION PROVISIONS

CONTRACTOR shall notify COUNTY immediately in the event of any accident or injury arising out of or in connection with this Agreement. The indemnification provisions in this Agreement shall survive any expiration or termination of this Agreement.

INSURANCE

CONTRACTOR shall procure and maintain for the duration of this Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the CONTRACTOR, its agents, representatives, employees or subcontractors.

A. Minimum Scope of Insurance

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office (ISO) Form CG 00 01 covering CGL on an "occurrence" basis, including products-completed operations, personal & advertising injury, with limits no less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate.

2. **Automobile Liability:** ISO Form Number CA 00 01 covering any auto (Code 1), or if CONTRACTOR has no owned autos, hired, (Code 8) and non-owned autos (Code 9), with limit no less than \$1,000,000 per accident for bodily injury and property damage.
3. **Workers' Compensation:** as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
4. **Professional Liability (Errors and Omissions) Insurance** appropriate to the CONTRACTOR'S profession, with limit of no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate.

If the CONTRACTOR maintains higher limits than the minimums shown above, the COUNTY requires and shall be entitled to coverage for the higher limits maintained by the CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the COUNTY.

B. Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions:

1. **Additional Insured** – COUNTY, its officers, officials, employees, agents and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the CONTRACTOR including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the CONTRACTOR's insurance at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10 and CG 20 37 if a later edition is used).
2. **Primary Coverage** – For any claims related to this Agreement, the CONTRACTOR's insurance coverage shall be primary insurance as respects the COUNTY, its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the COUNTY, its officers, officials, employees, agents or volunteers shall be excess of the CONTRACTOR's insurance and shall not contribute with it.
3. **Notice of Cancellation** – Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the COUNTY.
4. **Waiver of Subrogation Rights** – CONTRACTOR hereby grants to COUNTY a waiver of any right to subrogation which any insurer of said CONTRACTOR may acquire against the COUNTY by virtue of the payment of any loss under such insurance. CONTRACTOR agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation, but this provision applies regardless of whether or not the COUNTY has received a waiver of subrogation endorsement from the insurer.
5. **Deductibles and Self-Insured Retention** – Any deductibles or self-insured retentions must be declared to and approved by the COUNTY. The COUNTY may require the CONTRACTOR to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

6. **Acceptability of Insurers** – Unless otherwise approved by Risk Management, insurance shall be written by insurers authorized to do business in the State of California and with a minimum A.M. Best's Insurance Guide rating of "A- VII".
7. **Verification of Coverage** – CONTRACTOR shall furnish the COUNTY with proof of insurance, original certificates and amendatory endorsements as required by this Agreement. The proof of insurance, certificates and endorsements are to be received and approved by the COUNTY before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the CONTRACTOR's obligation to provide them. The CONTRACTOR shall furnish evidence of renewal of coverage throughout the term of the Agreement. The COUNTY reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.
8. **Failure to Procure Coverage** – In the event that any policy of insurance required under this Agreement does not comply with the requirements, is not procured, or is canceled and not replaced, COUNTY has the right but not the obligation or duty to terminate the Agreement. Maintenance of required insurance coverage is a material element of the Agreement and failure to maintain or renew such coverage or to provide evidence of renewal may be treated by COUNTY as a material breach of contract.
9. **Subcontractors** – CONTRACTOR shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and CONTRACTOR shall ensure that COUNTY is an additional insured on insurance required from subcontractors.
10. **Claims Made Policies** – If any of the required policies provide coverage on a claims-made basis:
 - i. The Retroactive Date must be shown and must be before the date of the contract or the beginning of contract work.
 - ii. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of contract work.
 - iii. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the CONTRACTOR must purchase "extended reporting" coverage for a minimum of five (5) years after completion of contract work.
11. **Special Risks or Circumstances** – COUNTY reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Any change requiring additional types of insurance coverage or higher coverage limits must be made by amendment to this Agreement. CONTRACTOR agrees to execute any such amendment within thirty (30) days of receipt.

Any failure, actual or alleged, on the part of COUNTY to monitor or enforce compliance with any of the insurance and indemnification requirements will not be deemed as a waiver of any rights on the part of COUNTY.