

SAN DIEGO GAS AND ELECTRIC COMPANY ELECTRIC AND FUEL PROCUREMENT DEPARTMENT 8315 CENTURY PARK COURT, CP21D SAN DIEGO, CA 92123

SDG&E'S 2016 ENERGY STORAGE SYSTEM ("ESS") RFO

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LOCAL CAPACITY REQUIREMENT

REQUEST FOR OFFERS ("RFO")

Seeking

ENERGY STORAGE SYSTEM

POWER PURCHASE TOLLING AGREEMENTS

ENERGY STORAGE SYSTEM TURN-KEY BUILD, OWN, TRANSFER AGREEMENTS

ENERGY STORAGE SYSTEM TURN-KEY ENGINEERING, PROCUREMENT & CONSTRUCTION AGREEEMENTS

VERSION 2 - ISSUED APRIL 8, 2016

ISSUED FEBRUARY 26, 2016

> **OFFERS DUE** JULY 1, 2016

RFO WEBSITE <u>http://www.sdge.com/2016PrefResourcesLCRRFO</u>

> EMAIL QUESTIONS/COMMENTS TO PrefResourcesRFO@semprautilities.com

RECORD OF CHANGES

Date	Description of Change	Section / Page of Document
4/8/2016	 Safety. Operation of third party owned project or programs must be in accordance with accepted electrical practices, applicable law and industry standards including those related to safety. If not, the offer will be considered nonconforming. 	1. 3.A.15, p. 12
	2. Encouragement for offers of various delivery terms.	2. 1., p. 5



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1.0 BACKGROUND

In accordance with Decision (D.) D. 14-03-004 – Decision Authorizing Long-Term Procurement for Local Capacity Requirements due to the Permanent Retirement of the San Onofre Nuclear Generation Station (the "Track 4 Decision") approved on March 13, 2014, and associated documents¹, D.13-10-040 – Decision Adopting Energy Storage Procurement Framework and Design Program (the "Energy Storage Decision") approved on October 17, 2013 and D.14-10-045 – Decision Approving SDG&E, PG&E and SCE's Storage Procurement Framework and Program Applications for the 2014 Biennial Procurement Period approved on October 16, 2014, San Diego Gas and Electric Company ("SDG&E") is issuing its 2016 Preferred Resources LCR Energy Storage System Request for Offers ("2016 Energy Storage RFO" or "ES RFO") to solicit offers from owners and operators of ES facilities, ES developers and ES developers / equipment suppliers.

SDG&E is issuing this 2016 ES RFO to achieve its megawatt ("MW") targets established in the Energy Storage Decision and to help meet its remaining Local Capacity Requirements ("LCR") established in the Track 4 Decision. As authorized in the Track 4 Decision, and following SDG&E's 2014 All Source RFO, SDG&E is seeking up to 140 MW in this solicitation². SDG&E will consider ESS offers ranging from 500 kW to 140 MW in size (more detail is provided in Section 3.0(A) of this RFO). To summarize, this RFO is intended to meet both the Track 4 Decision requirements and the Energy Storage Decision requirements.

This RFO solicits offers for both third party owned, contracted resources and two types of utility owned resources; more specifically, SDG&E is seeking:

- 1) Offers from owners and operators of Energy Storage System ("ESS") facilities to negotiate and enter into an Energy Storage System Power Purchase Tolling Agreement ("ESSPPTA"), or
- 2) Offers from ESS developers to negotiate and enter into an Energy Storage System Turnkey Build, Own, Transfer Agreement ("ESSBOT") under which the ESS developers would construct an ESS project on its land and SDG&E would acquire the ESS project from the ESS developer upon project completion, or
- 3) Offers from ESS developers / contractors / equipment suppliers to negotiate and enter into an Energy Storage System Turn-key Engineering, Procurement and Construction Agreement ("ESSEPC") under which the ESS developers / contractors / equipment suppliers would construct an ESS facility on SDG&E land.

ESSBOT and ESSEPC offers will be coordinated by an internal group at SDG&E that will be assembling offers for potential utility ownership ("SDG&E's Cost Development Team"). ESSBOT and ESSEPC Respondents must provide a formal written expression of interest as more

¹ For example, SDG&E filed Application (A.) 14-02-006 – the Energy Storage Procurement Application - in response to the Energy Storage Decision. A.14-02-006 can be found on SDG&E's website at: <u>http://www.sdge.com/regulatory-filing/10246/sdge%E2%80%99s-energy-storage-procurement-application</u>

² The Track 4 Decision authorizes SDG&E to procure up to 800 MW, at least 200 MW of which must come from preferred resources. Of this 200 MW of preferred resources, at least 25 MW must come from energy storage leaving up to 175 MW for other preferred resource types. In this solicitation, SDG&E is targeting up to 140 MW in aggregate from all product types.



fully described below in section 7 (RFO Website and Communications, in particular the section titled 'RFO Response Instructions') to SDG&E's Cost Development Team on or before March 11, 2016 to participate in this RFO. Additionally, ESSEPC Respondents are required to execute a nondisclosure agreement ("NDA") by March 18, 2016 that will be provided upon receipt of the formal expression of interest. Following NDA execution, ESSBOT and ESSEPC Respondents will receive additional information related to providing information to SDG&E's Cost Development Team (an "Addendum" to this RFO) that more precisely describes the process for ESSBOT and ESSEPC offers, including a detailed schedule, pre-bid process description, pre-evaluation and ranking process description, and process for submitting final offers on or before the Closing Date (July 1, 2016). Additionally, the Addendum will contain an Energy Storage Specification, pro forma contract, and for EPC respondents, site descriptions of utility owned land available for ESSEPC offers. While general instructions describing the ESSBOT and ESSEPT processes are included throughout this RFO (in particular in sections 2 (Procurement Process), 6 (RFO Schedule), 7 (RFO Website and Communication and the RFO Response Instructions portion of section 7), specific instructions including a detailed schedule are only available in the Addendum documents provided to ESSBOT and ESSEPC Respondents after formal written expression of interest and NDA execution.

This solicitation sets forth the terms and conditions of SDG&E's 2016 ES RFO. By responding to this RFO, the bidder agrees to be bound by all the terms, conditions, and other provisions of this RFO and any changes or supplements to it that may be issued by SDG&E, prior to the bidder's response. SDG&E encourages Respondents to provide offers of various delivery terms. For example, 3, 5 or 10 years for EE and DR related offers and 10, 15 or 20 years for other product types.

In this RFO, SDG&E will entertain offers for two of the three ES resource domains as defined in the Energy Storage Decision: transmission domain and distribution domain. Customer domain storage responsedents should refer to the demand response RFO also issued by SDG&E as part of its 2016 Preferred Resources LCR RFO.

Contract Term	Although SDG&E is not authorized to limit bids to any specific contract leng SDG&E prefers ESSPPTA contract terms of 3-20 years for ESS	
Contract / Agreement Type	ESSPPTA, ESSBOT or ESSEPC ³	
	ESSPPTA: $500 \text{ kW}^4 - 140 \text{ MW}$ ESSPOT: $10 \text{ MW} - 140 \text{ MW}$	
Nameplate /	ESSBOT: 10 MW – 140 MW ESSEPC: Varies by location. Additional information available upon formal	
Offer size	expression of interest and NDA execution.	

³ ESSBOT and ESSEPC will entail a range of agreements including equipment supply and maintenance agreements (among other agreements). The terms ESSBOT and ESSEPC are shorthand for the various agreements that will be necessary to enable these arrangements.

⁴ Note that SDG&E will consider the administrative burden/feasibility of negotiating a high volume of agreements when selecting its shortlist.



Interconnection / Delivery Point	Within the San Diego Local Subarea – as defined by the CAIS() ⁵	
Resource Adequacy (RA) Must be eligible to contribute to SDG&E's local RA requirements		
Technology Type	Any type of energy storage that meets the definition included in PU Code 2835	
Cycles	ESPPTA, ESSBOT or ESSEPC: Although SDG&E will not require a minimum for annual cycles, SDG&E has a preference for systems with a minimum of 50 cycles per year	
	ESPPTA, ESSBOT or ESSEPC: No charging duration requirements	
Charging/ Discharging Durations	ESPPTA, ESSBOT or ESSEPC: Discharging duration requirements must be based on qualification for local RA requirements (3 consecutive days, 4 hours per day); additionally qualitative consideration will be given to resources that can meet category 1 flexible RA. See section 5 'Evaluation Criteria' for further information	
System Efficiency	ESPPTA, ESSBOT or ESSEPC: No minimum system efficiency requirements	
Warranty/ Guarantee	ESPPTA: SDG&E does not require a capacity guarantee. ESSBOT and ESSEPC: SDG&E will require a capacity guarantee.	

The purpose of this document is to provide an overview of the process that SDG&E will use to implement this RFO. It will serve to set forth each bidder's obligations with respect to the RFO as well as describe the procedures that each bidder must adhere to.

To be considered in this RFO, an offer must be uploaded to the SDG&E RFO platform in accordance with this RFO Protocol no later than 1:00 PM Pacific Prevailing Time ("PPT"), on July 1, 2016. Note, for ESSEPC and ESSBOT offerors, cost and other information will be provided ahead of this deadline to SDG&E's Cost Development Team. The exact schedule is described in the Addendum documents available to ESSBOT and ESSEPC Respondents after formal expression of interest and NDA execution.

The RFO Schedule is subject to change at SDG&E's sole discretion at any time. All changes to the RFO Schedule will be posted to SDG&E's RFO website. The RFO Schedule may be affected by (but not limited to) issues such as: discussions with shortlisted bidders, proceedings before the CPUC, and efforts to obtain regulatory approval. SDG&E intends to notify bidders of any schedule change, but will not be liable for any change in schedule or for failing to provide notice of any change. A schedule detailing SDG&E's plans throughout the entire initial program period can be found in Section 6.

Once bidders have accepted their shortlisted position with SDG&E and remitted the Shortlist Acceptance Fee⁶, further ESSPPTA, ESSBOT or ESSEPC contract negotiations may

⁵ See the CAISO "Local Capacity Technical Analysis" –for 2015 available at:

http://www.caiso.com/Documents/Final2015LocalCapacityTechnicalStudyReportApr30_2014.pdf . To summarize, San Diego Local subarea projects are those located in SDG&E's service territory connecting to SDG&E owned transmission or distribution facilities at a point that is at or electrically west of the Miguel or Suncrest substations and electrically south of the San Onofre Nuclear Generating Station 230 kV switchyard.

⁶ See section 3.D.i. of this RFO for further details



commence and continue until mutual agreement has been achieved and a contract has been executed. Being short listed does not guarantee that an ESSPPTA, ESSBOT or ESSEPC will be negotiated or signed with the bidder.

SDG&E will seek CPUC approval of all executed agreements resulting from this RFO. SDG&E reserves the right to execute agreements with individual bidders at any time after short listing and to seek CPUC approval for individual agreements in order to expedite the approval process.



2.0 **PROCUREMENT PROCESS**

Respondents to this solicitation shall comply with the requirements described in this RFO document. ESSBOT and ESSEPC Respondents shall also comply with the requirements described in the Addendum documents to be provided following submission of a written expression of interest.

All offers shall meet the minimum eligibility requirements as set forth in Section 3.0. All conforming offers will be evaluated in accordance with the Evaluation Criteria described in Section 5.0 of the RFO. SDG&E will initially select a shortlist in pursuit of its ESS target for this RFO by selecting offers that are evaluated as most attractive via the quantitative and qualitative methodology described in Section 5.0. If SDG&E does not acquire the full target in this RFO or if it is not achieved through various other procurement alternatives available to it (such as a bi-lateral process), any shortfall will be carried over to the next biannual ESS RFO. SDG&E may select up to 140 MW in aggregate associated with all of the product types included in its 2016 Preferred Resources LCR RFO including Energy Storage.⁷

SDG&E is mindful of the impact that interconnection costs can have on successful project development. To ensure SDG&E can evaluate bids on an equitable basis -- and to ensure projects solicited through this solicitation can meet a year-end 2021 commercial operation date - SDG&E requires that ESSPPTA, ESSBOT, and ESSEPC offers can demonstrate the expected full deliverability status of the project and the expected interconnection costs through either a completed Phase I study or a repowering of a comparably sized existing facility in accordance with the CAISO Business Practice Manual for Generator Management (note that in the ESSEPC case, the SDG&E Cost Development Team is responsible for developing and submitting those estimated network upgrade and other deliverability costs). Gentie costs, those that benefit the project alone and are not reimbursable, should be included in the contract pricing. ESSPPTA or ESSBOT offers with completed interconnection studies or repowering opportunities shall include copies of those studies, descriptions of any repowering, and estimates of such costs. For offers associated with an ESSEPC, the SDG&E Cost Development Team will manage the interconnection study process and the third party Respondents need not include interconnection study and cost information; the SDG&E Cost Development Team will include the interconnection study and cost information that it develops in its ESSEPC bids.

SDG&E intends for projects selected from this RFO to count towards SDG&E's local Resource Adequacy ("RA") obligations. Respondents pursuing an ESSPPTA or ESSBOT must follow the appropriate process for obtaining a deliverability study from the CAISO so that the project(s) can become eligible for RA, if not already eligible. ESSPPTA or ESSBOT Agreements resulting from this RFO will require Respondents to perform all activities necessary to facilitate local RA recognition for the projects. Respondents pursuing an ESSPPTA or ESSBOT shall be responsible for all costs to facilitate local RA recognition, including any deliverability study fees or upfront funding of deliverability upgrade costs and should include these costs in the offer price.

⁷ Resources sought by SDG&E include Demand Response, Energy Efficiency, Renewables, Energy Storage and Distributed Generation.



In this RFO, SDG&E requires that ESSPPTA, ESSBOT, and ESSEPC projects seek and receive Full Capacity Deliverability Status ("FCDS") and that they will count towards SDG&E's RA obligations. In order to achieve FCDS, Respondents pursuing an ESSPPTA or ESSBOT must apply for a deliverability study to be conducted by the CAISO or be eligible as a repowering of a comparably sized existing facility. ESSPPTA or ESSBOT Respondents with winning bids for FCDS projects must demonstrate that the project has been assessed for deliverability or the project is eligible as a repowering of a comparably sized existing facility. This condition must be met for winning bids that will interconnect at either the distribution or transmission level. For winning FCDS project bids that result in an executed and approved ESSPPTA or ESSBOT, during the project development process, the project is required to obtain final interconnection studies (i.e. for transmission level projects, a final Phase II interconnection study report, or for distribution level projects, a final interconnection facilities study report (or equivalent)). All ESSEPC projects that the SDG&E Cost Development Team pursues will likewise need to establish FCDS.

On July 2, 2013, the CAISO published the 'Generator Interconnection and Deliverability Study Methodology Technical Paper' and Section One of the paper provides background information and an overview of the deliverability study methodology. Respondents may find this paper at: <u>http://www.caiso.com/Documents/TechnicalPaper-GeneratorInterconnection-DeliverabilityStudyMethodology.pdf</u> . For projects that will interconnect at distribution level, information on the interconnection process can be found at: <u>http://www.sdge.com/generation-interconnections/overview-generation-interconnections</u>

For ESSEPC Respondents: SDG&E requires that a formal expression of interest be provided to SDG&E no later than 5pm, March 11, 2016. This expression of interest shall be in written form (an e-mail to 2016ESSEPCBOTRFO@SempraUtilities.com) and should provide company and contact information. SDG&E will require additional bidding procedures for Respondents with ESSEPC offers, such as entering into a Nondisclosure Agreement ("NDA") with the SDG&E allowing the exchange of detailed and confidential information between the parties (such as site or technology specific information). This NDA must be executed on or before March 18, 2016. Further details regarding the NDA and other ESSEPC specific instructions/information will be given to those ESSEPC Respondents who provide the necessary expression of interest.

For ESSBOT Respondents: SDG&E requires that a formal expression of interest be provided to SDG&E no later than 5pm,March 11, 2016. This expression of interest shall be in written form (an e-mail to <u>2016ESSEPCBOTRFO@SempraUtilities.com</u>. SDG&E will require additional bidding procedures for Respondents with ESSBOT offers. Confidentiality for ESSBOT shall be in accordance with section 10.0 of this RFO document. Other ESSBOT specific instructions/information will be given to those ESSBOT Respondents who provide the necessary expression of interest.



3.0 ELIGIBILITY REQUIREMENTS

Respondents to this solicitation shall comply with the requirements herein. SDG&E, at its sole discretion, may change the terms, requirements and schedule of the solicitation. Respondents should monitor the RFO Website for announcements regarding any change.

A. PARTICIPATION CRITERIA

Terms of participation are listed below. Respondents not meeting all minimum participation criteria may be deemed ineligible / nonconforming and their offers may not be considered.

- 1. ESS Facilities must meet the definition included in PU Code 2835.8
- 2. Acceptable capacity range.
 - a. ESSPPTA Respondents -minimum size of 500 kW and maximum size of 140 MW.
 - b. ESSBOT Respondents minimum size of 10 MW and maximum size of 140 MW.
 - c. ESSEPC Respondents minimum and maximum ESS factility sizes vary by location. ESSEPC Respondents will receive additional details upon formal expression of interest and NDA execution as described in further detail, below.
- 3. The ESS facility shall be located and interconnected within the San Diego local subarea, as defined by the CAISO⁹.
- 4. The resource must meet all applicable RA counting rules in order to qualify as local RA. Qualitative consideration will be given to ESS facilities that can count as Category 1 Flexible RA, but the minimum conformance standard is to meet the local RA requirement.

NOTE: SDG&E is aware that the RA counting rules change frequently. If the capabilities of the system, facility or program that the Respondent is describing in its offer are currently non-conforming, specifically with regard to the local RA requirement, but the Respondent believes that the RA counting rules may change prior to SDG&E short-listing, the Respondent is instructed to submit their offer and note that it is currently non-conforming due to current RA rules. If and when the RA rules change resulting in the offer conforming to the new RA rules, the Respondent should notify SDG&E (via the RFO e-mail address - PrefResourcesRFO@semprautilities.com) and the IE (jon.jacobs@paconsulting.com and Barbara.Sands@PAConsulting).

5. SDG&E prefers start dates as early as 2018 but will consider later start dates. Some portion of the project's delivery term <u>must</u> include the entire calendar year of 2022.

⁸ See: <u>http://www.leginfo.ca.gov/cgi-bin/displaycode?section=puc&group=02001-03000&file=2835-2839</u>; of note, the definition specifically requires, among other things, that the technology be "commercially available."

⁹ See the CAISO "Local Capacity Technical Analysis" –for 2015 available at: http://www.caiso.com/Documents/Final2015LocalCapacityTechnicalStudyReportApr30_2014.pdf . To summarize, San Diego Local subarea projects are those located in SDG&E's service territory connecting to SDG&E owned transmission or distribution facilities at a point that is at or electrically west of the Miguel or Suncrest substations and electrically south of the San Onofre Nuclear Generating Station 230 kV switchyard.



- 6. ESS facility must be incremental to the assumptions used in the CAISO studies¹⁰ associated with the 2012 long term procurement plan proceeding that served as a basis for SDG&E's Track 4 authorized need.
- 7. ESSPPTA and ESSBOT Respondents must apply for interconnection and seek to be evaluated as a San Diego Sub-area local RA resource, which requires a CAISO deliverability study or the repowering of a comparably sized existing facility in accordance with the CAISO Business Practice Manual for Generator Management. Respondents pursuing an ESSPPTA or ESSBOT must demonstrate their expected deliverability and interconnection costs through either a completed Phase I interconnection study or a repowering of a comparably sized existing facility. Evidence of an existing interconnection agreement, study, application or explanation of interconnection status must be included in the offer, along with relevant cost estimates.
- 8. Respondents pursuing an ESSPPTA or ESSBOT must demonstrate how their project will meet the requirements of the current local RA counting rules¹¹. All ESSEPC projects that the SDG&E Cost Development Team pursues will likewise need to demonstrate compliance with the current local RA counting rules.
- 9. ESSPPTA, ESSBOT and ESSEPC offers must include a permitting plan, schedule, and progress report for permits that are necessary for the facility to operate for the entirety of the proposed contract term.
- 10. Respondents pursuing an ESSPPTA or ESSBOT must have, at time of bidding, site control. For ESSPPTA offers, site control must be for the duration of the term proposed within the ESSPPTA. Site control may be evidenced by documentation of:
 - a. direct ownership;
 - b. a lease; or
 - c. an option to lease or purchase upon ESSPPTA approval. The option must be an exclusive option to the Bidder that will last until the completion of the RFO cycle.

All ESSEPC projects that the SDG&E Cost Development Team pursues will likewise need to demonstrate site control.

- 11. ESSPPTA Respondents will own the facilities and have responsibility for development, land acquisition, permitting, financing, construction and operation of the ESS facilities.
- 12. ESSBOT Respondents will own the facilities and have responsibility for development, land acquisition, permitting, financing and construction of the ESS facilities. For ESSBOT facilities, SDG&E will take title, control, and risk of loss of the ESS facilities only upon successful completion and documentation of factory acceptance tests prior to equipment shipments, and pursuant to successful project commissioning. For the ESSEPC facilities, successful completion and documentation of factory acceptance tests are required prior to equipment shipments. SDG&E will take title to the equipment throughout the EPC process,

¹⁰ See ordering paragraph 6 of the Track 4 Decision.

¹¹ See the following CPUC decisions for guidance: D.10-06-036, D.11-06-022, D.12-06-025 and D.13-06-024 among others. Additionally, see the CAISO's "Flexible Resource Adequacy Criteria and Must-Offer Obligation", Market and Infrastructure Policy Revised Draft Final Proposal of March 7, 2014. To summarize, currently the requirement for energy limited resources is availability of the resource for three consecutive days for four hours per day.

but the ESSEPC shall be responsible for all sales tax. SDG&E will take control and risk of loss of the ESS facilities only upon commissioning.

13. For Respondents pursuing an ESSBOT or ESSEPC, the following high-level requirements and minimum performance specifications must be met by the ESS equipment being offered. ESSBOT and ESSEPC Respondents will receive additional, detailed requirements and performance specifications upon completing the formal expression interest outlined in Section 7, below.

SDGF

A Sempra Energy utility

- a. ESS must be commercially operational on or before December 31, 2021.
- b. Respondents will be required to guarantee/warrent capacity.
- c. Respondents shall price in Operations and Maintenance ("O&M") services through the end of the expected useful life of the equipment.
- d. ESSBOT and ESSEPC Respondents shall state exactly what equipment is included in the offer. For example, ESS modules, control systems, inverters (as applicable), etc.
- e. High level ESS performance requirements / specifications:
 - i. SDG&E will not require a minimun amount of annual cycles. However, SDG&E will give priority to ESS capable of at least 50 cycles per year.
 - ii. SDG&E will not specify charging duration requirements for the ESS. In terms of discharging duration, ESS must comply with the requirements for qualification as local RA.
- 14. The Respondent must state any affiliate relationship with Sempra Energy, if one exists.
- 15. Safety. SDG&E expects that third party owned and operated facilities will be operated and maintained in accordance with accepted electrical practices, applicable law and industry standards, including those related to safety. In the project / program description form that Respondents will provide as part of the offer package, SDG&E will ask respondents to confirm that this will be the case with their project or program. If the Respondent is unable to confirm these statements, the offer will be considered nonconforming.

B. MODIFICATIONS TO THE PRO-FORMA ESSPPTA

ESPPTA Bidders may modify the Pro Forma ESPPTA submitted as part of their offer package to the extent such modifications add value to the offer. However, SDG&E discourages extensive modifications and will consider materiality of such changes on a qualitative basis as it evaluates the offers received. Form agreements associated with ESSBOT and ESSEPC will be provided following completion of the expression of interest process outlined in section 7, below.

C. CREDIT SUPPORT TERMS AND CONDITIONS

Winning bidders will be required to comply with the credit support requirements set forth in their relevant agreement. The amount of such requirements will be determined by SDG&E at the time of shortlisting and will be based on product, deliveries, price, and term, among other variables. For clarity, bidders should <u>not</u> include credit costs within their bid price (note: respondents are required to provide information regarding the added cost of collateral per \$100,000 increment to satisfy the initial collateral requirement if SDG&E decides not to extend unsecured credit – this information will be gatered via the credit application form. This information will be included in the



credit application, available on the RFO Website and the Power Advocate ® site. These costs will be considered as discussed in the quantitative evaluation section within this document).

1) SHORTLIST ACCEPTANCE FEE

The Shortlist Acceptance Fee is the greater of \$100,000 or \$2 per kW of project nameplate (ESSPPTA) or aggregate ESS size (ESSBOT or ESSEPC) and shall be required to be paid to SDG&E within ten (10) business days of notification by SDG&E that the offer has been shortlisted. The Shortlist Acceptance Fee shall be refunded (with interest for cash deposits) to Respondent if Respondent and SDG&E fail to reach an agreement and such failure is not due to Respondent's withdrawal of its offer or a material misrepresentation of pricing or non-pricing information provided by Respondent.

For questions regarding credit terms, please contact Ms. Judy Delgadillo at (213) 244-4343. Project-specific questions and answers will not be disclosed to other Respondents.

D. ASC 810 (FIN46(R), CONSOLIDATION OF VARIABLE INTEREST ENTITIES) REQUIREMENTS

Generally Accepted Accounting Principles and SEC rules require SDG&E to evaluate whether or not SDG&E must consolidate a Seller's financial information. SDG&E will require access to financial records and personnel to determine if consolidated financial reporting is required. If SDG&E determines at any time that consolidation is required, SDG&E shall require the following during every calendar quarter for the term of any resultant agreement:

- a) Unaudited financial statements with footnotes, within 15 calendar days of the end of each quarter;
- b) Audited financial statements with footnotes within 90 calendar days of the end of the year,
- c) Financial schedules underlying the financial statements, within 15 calendar days of the end of each quarter;
- d) Access to records and personnel, so that SDG&E's internal or independent auditor can conduct financial audits (in accordance with generally accepted auditing standards) and internal control audits (in accordance with Section 404 of the Sarbanes-Oxley Act of 2002)) and SDG&E can meet its SEC filing requirements. The rights and obligations under the agreement shall survive the termination of this agreement for a period of two years;
- e) Certifications by duly authorized representatives as may be reasonably requested by SDG&E; and
- f) Such other information as reasonably requested by SDG&E.
- g) If consolidation is required and considered material by the buyer to buyer's financial statements or its parent company's financial statements and buyer reasonably determines seller's internal controls over financial reporting are considered to be significantly deficient or a material weakness, then seller is to remediate within 30 calendar days;
- h) Seller to provide to buyer any SEC Form 8K disclosures, two calendar days after the occurrence of the SEC Form 8K event; and



i) Seller to notify buyer at any time during the term of the agreement of any consulting (non-independent) services proposed to be provided to seller by the buyer's independent auditor.

Any information provided to SDG&E shall be treated as confidential, except that it may be disclosed for financial statement purposes. Full details of SDG&E's requirements in connection with consolidation are set forth in the Model PPA.



4.0 FACILITY INTERCONNECTION

ESSPPTA and ESSBOT Respondents must either have:

- Completed a Phase I interconnection study, or have passed the Wholesale Distribution Access Tariff ("WDAT") or California Independent System Operator ("CAISO") Fast Track screen and provide a copy of the most recent completed study or evidence of having passed the Fast Track screening process with their offer, or
- 2) Provide evidence that the project is a repowering of a comparably sized existing facility in accordance with the CAISO Business Practice Manual for Generator Management.

Transmission level projects are required to apply for interconnection through the CAISO Large Generator Interconnection Agreement/Small Generator Interconnection Agreement process. Distribution level projects will be required to apply through SDG&E's WDAT process. Respondents may visit: <u>http://www.sdge.com/business/interconnection.shtml</u> or <u>https://bpmcm.caiso.com/Pages/BPMDetails.aspx?BPM=Generator%20Management</u> for additional information. Respondents pursuing an ESSPPTA and ESSBOT are responsible for all non-reimbursable interconnection costs that are allocated to the project and these costs should be incorporated into the ESSPPTA or ESSBOT offer's contract pricing. Reimbursable network upgrade costs borne by SDG&E customers will be included in the evaluation and ranking of offers.

SDG&E intends that ESS projects count towards SDG&E's local RA obligations. In order to become RA eligible, Respondents pursuing an ESSPPTA or ESSBOT must apply for a deliverability study to be conducted by the CAISO or be pursuing a repowering of a comparably sized existing facility in accordance with the CAISO Business Practice Manual for Generator Management. ESSPPTA and ESSBOT Respondents must demonstrate that the project has been assessed for deliverability or the project is eligible as a repowering of a comparably sized existing facility. This condition must be met for ESSPPTA and ESSBOToffers that will interconnect at either the distribution or transmission level. For offers that result in an executed and approved ESPPTA or ESSBOT, during the project development process, the project is required to obtain final interconnection studies (i.e. for transmission level projects, a final Phase II interconnection study report, or for distribution level projects, a final interconnection facilities study report (or equivalent)). All ESSEPC projects that the SDG&E Cost Development Team pursues will likewise need to establish FCDS.

For more information:

SDG&E Interconnection Website: http://www.sdge.com/business/interconnection.shtml

- Download and review SDG&E Interconnection Handbook,
- Links to CASIO interconnection queue, tariffs and websites,
- Links to SDG&E interconnection queue, tariffs and websites,
- Link to NERC/WECC Reliability Standards,
- Links to Process Summaries,
- Link to SDG&E Self Generation Technologies site.

CAISO Generation Interconnection Process Contact:

- Project Manager: Judy Brown (916) 608-7062; JBrown@caiso.com SDG&E Contact:



- Transmission level Gen. Interconnection Project Manager: Marlene Mishler (858) 654-8640 ; <u>MMishler@semprautilities.com</u>
- Distribution level Customer Generation Manager: Ken Parks (858) 636-5581; KParks@semprautilities.com



5.0 EVALUATION CRITERIA

All incoming offers will be assessed for conformance based on the requirements outlined in Section 3 (Eligibility Requirements). Respondents' offers shall conform with minimum participation criteria and eligibility requirements in order to be considered.

SDG&E will utilize all the information provided in the required forms and narratives to evaluate all offers. Respondents are responsible for the accuracy of all discussions, figures and calculations. Errors discovered during evaluation may impact a Respondent's potential short-list status.

As required by the Track 4 Decision, SDG&E is soliciting a broad range of resources including energy efficiency, demand response, renewables, distributed generation and energy storage. SDG&E has provided a separate RFO document outlining instructions and requirements for each resource type (and in the case of energy storage, contract type as well). SDG&E's valuation and selection approach is intended to evaluate the different resource (and contract) types on as equal a footing as possible. Initially, all offers will go through a conformance check to ensure that the project meets the requirements outlined in the RFO document for that particular resource type. Conforming offers will then go through a Least-Cost / Best-Fit (LCBF) / Net Market Value ("NMV") analysis.

QUANTITATIVE EVALUATION

SDG&E evaluates and ranks offers based on Least-Cost/Best-Fit ("LCBF") principles. The LCBF analysis evaluates both quantitative and qualitative aspects of each offer to estimate its value to SDG&E's customers and its relative value in comparison to other offers. The valuation of an offer takes into account both benefits and costs. The primary quantitative metric used in SDG&E's LCBF process is a Net Market Value ("NMV") calculation. The NMV calculation is a quantification of the value of an offer when compared to a set of price benchmarks for capacity, electrical energy, ancillary services, natural gas, and Green House Gas ("GHG") compliance. Additionally, SDG&E may consider portfolio effects (costs or benefits) associated with the offer on the portfolio. These benefit and cost components are netted and discounted to yield a NMV for each offer. The NMV of an offer is compared to the NMV of other offers to determine whether that offer is one of the highest ranked. The initial evaluation will be done without regard to credit costs. Once an initial listing of the highest ranked offers is determined, a credit analysis will be conducted and credit costs will be considered. The economic evaluation normalizes the MW size differences of offers by finding the most attractive NMV per MW of capacity ("Least Cost"). In the case of ESSEPC and ESSBOT offers, SDG&E's Cost Development Team will estimate and include utility related costs alongside the costs provided by the Respondent (for ESSEPC offers, the Respondent will include equipment and installation costs, O&M costs, and other costs as appropriate - SDG&E will include site costs, permitting and interconnection costs --- see the offer form (excel file) for more detail. For ESSBOT offers, the Respondent will include all development costs through commissioning, and SDG&E will include post commissioning utility related costs).

SDG&E evaluates the quantifiable attributes of each offer individually. These individual attributes will include: capacity benefits, energy benefits, ancillary service benefits, contract payments (or anticipated SDG&E equipment ownership (ESSBOT or ESSEPC offers) and project



development costs – for siting, permitting and interconnection – (ESSEPC offers)), GHG emissions and costs, congestion costs, and transmission losses and costs.

A. NET CAPACITY BENEFITS

Capacity benefits are calculated by comparing the capacity costs in the offer to the capacity value to SDG&E.

B. NET ENERGY AND ANCILLARY SERVICES BENEFITS

The net energy benefit valuation includes an optimized energy and A/S dispatch profile multiplied by the corresponding energy forward price curves, less the variable costs associated with generating that energy.

C. TRANSMISSION/DISTRIBUTION SYSTEM IMPACTS

Upgrade costs that solely benefit the project and are paid for by the developer (Gen-tie Costs) should be reflected in the offer pricing, and reimbursable network upgrade costs that benefit the grid broadly and are ultimately borne by customers will be considered in the economic evaluation of the offer (Network Upgrade Costs). SDG&E requires that Respondants have either completed Phase 1 or Phase 2 study results or be the repowering of a comparably sized existing facility as the basis for including appropriate interconnection cost estimates in its evaluation.

D. RESIDUAL CAPACITY AND ENERGY BENEFITS

For all ESSEPC and ESSBOT offers, SDG&E will require that bidders guarantee the rated capacity of the ESS for some term (10 years or expected useful life). At the end of the capacity guarantee period, the ESS will have 100% of its rated capacity, and can be operated for some additional period; providing residual benefits without incurring additional capacity guarantee costs. SDG&E will require ESSEPC and ESSBOT Respondents to state manufacturer's degradation using an agreed-upon post-maintenance period use profile, and will use this information to quantify residual capacity and energy benefits for these offers.

E. RESOURCE SPECIFIC BENEFITS AND COSTS

Any quantifiable benefits or costs that are unique to a particular resource type, will be added to the NMV calculation. For example, renewable resources that offer Renewable Energy Credits will have the value of those credits added as a benefit to the NMV.

QUALITATIVE EVALUATION

Qualitative factors and benefits will be used to determine which projects are the "Best Fit" for SDG&E's portfolio. SDG&E may use these factors to determine advancement onto the short list. Qualitative factors may include, but are not limited to:

A. PROJECT VIABILITY

SDG&E is seeking experienced companies and development teams to develop and operate facilities utilizing commercially available, known and proven technology. Another aspect of project



viability will include its ability to contribute to meeting the Local Capacity Requirement. SDG&E works with the CAISO in modeling resource and program portfolios to ensure SDG&E's LCR is met.

B. ADHERENCE TO ESSPPTA TERMS AND CONDITIONS

ESSPPTA Respondents may modify the ESSPPTA as part of their submittal package to the extent that modifications add value to the offer. SDG&E will review modifications to any terms and conditions proposed in the offer and consider the materiality of these changes.

C. SUPPLIER DIVERSITY

SDG&E strongly encourages Diverse Business Enterprises ("DBEs"), "Women-Owned Businesses" or "Minority-Owned Businesses" or "Disabled Veteran Business Enterprises" as defined in G.O. 156¹², to participate in this RFO. Furthermore, SDG&E strongly encourages developers to utilize DBEs during various stages of project development and construction. As a part of G.O. 156, SDG&E will require developers to identify, verify and report their DBE contractors/subcontractor spending if any. Additional information on SDG&E's DBE program can be found at:

http://www.sempra.com/about/supplier-diversity/ http://www.cpuc.ca.gov/puc/supplierdiversity/

SDG&E's DBE Program representatives will provide a presentation during the pre-bid conference. DBEs can request additional information by contacting SDG&E at vendorrelations@semprautilities.com.

D. LOADING ORDER RANKING

SDG&E seeks resources in accordance with the loading order described in the Energy Action Plan (see footnote 2, above). SDG&E will give preference to higher loading order ranked resources.

E. CATEGORY 1 FLEXIBLE RA CAPABILITIES

SDG&E will give preference to resources that are able to meet the CAISO's prevailing Flexible Resources Availability Criteria and Must Offer Obligations ("FRAC-MOO")¹³ and obtain an Effective Flexible Capacity ("EFC") greater than zero. In addition, SDG&E will differentiate flexible attributes based on their Flexible Resource Categories, with Base Ramping (Category 1 Flex)

¹² See <u>http://www.thesupplierclearinghouse.com/eligibility/default.asp</u> for the definition of a DBE.

¹³ A must-offer obligation, or MOO, is a commitment to be available for dispatch by the CAISO. The MOO is distinct from the four hour capability requirement for continuous operation upon dispatch. System and Local RA resources, whether DR or storage, may either bid into the CAISO markets or self-schedule. The proposed MOO for Flexible RA resources (FRAC-MOO) aims to ensure that flexible resources will be available to contribute to the times of greatest system ramping. The proposed FRAC-MOO requirements can be found at https://www.caiso.com/informed/Pages/StakeholderProcesses/FlexibleResourceAdequacyCriteria-MustOfferObligations.aspx



providing the greatest benefit. More information on EFC and current resource category requirements can be found in section 10 of the CAISO Business Practice Manual for Reliability Requirements located here:

https://bpmcm.caiso.com/Pages/BPMDetails.aspx?BPM=Reliability%20Requirements.

Respondents providing Flexible RA value will be presented with contracts reflecting those requirements and this value.

BID CONFORMANCE EVALUATION

In addition to the elements described above, SDG&E may also reject an offer if:

- 1. SDG&E uncovers evidence of market manipulation in the bid preparation and offer process;
- 2. the Respondent does not provide adequate evidence that it meets minimum participation criteria;
- 3. the Respondent cannot fulfill the terms and conditions of the ESSPPTA; and/or,
- 4. the Respondent is unable to comply with RFO timing and other solicitation requirements.

SDG&E WILL NOT REIMBURSE RESPONDENTS FOR THEIR EXPENSES UNDER ANY CIRCUMSTANCES, REGARDLESS OF WHETHER THE RFO PROCESS PROCEEDS TO A SUCCESSFUL CONCLUSION OR IS ABANDONED BY SDG&E IN ITS SOLE DISCRETION.



6.0 **RFO SCHEDULE**

The following schedule and deadlines apply to this RFO. SDG&E reserves the right to revise this schedule at any time and in SDG&E's sole discretion. Respondents are responsible for monitoring the RFO Website for updated schedules and possible amendments to the RFO or the solicitation process.

			Date	
NO.	ITEM	ESSPPTA	ESSBOT	ESSEPC
1	RFO Issued		2/26/2016	
2	Pre-Bid Conference / Bidder Outreach Event		April 13, 2010	ó
3	DEADLINE for Respondents to provide a written expression of interest to SDG&E (e-mail to <u>2016ESSEPCBOTRFO@semprautilities.com</u> or other written correspondence) containing company name and contact information by 5:00PM	N/A	3/11/2016	3/11/2016
4	Nondisclosure Agreements (NDAs) sent out to Respondents expressing interest.	N/A	N/A	3/11/2016
5	DEADLINE to receive Executed NDA. This information should be e-mailed to <u>2016ESSEPCBOTRFO@semprautilities.com</u> by 5:00pm to receive PowerAdvocate registration details required for Commercial Viability Details submission.	N/A	N/A	3/18/2016
6	DEADLINE TO SUBMIT QUESTIONS. Question submittal cut-off date. Answers to all questions will be posted on the website no later than June 24, 2016.		2016 – date ap , ESSEPC and	
7	DEADLINE TO REGISTER for PowerAdvocate access / to download RFO forms and documents	6/24/2016	See Addendum	See Addendum
8	CLOSING DATE: For ESSPPTA offers: offers must be uploaded to and received on Power Advocate ® no later than 1:00 PM Pacific Prevailing Time on July 1, 2016 For ESSEPC and ESSBOT Offers: SDG&E's Cost Development Team will submit final offer documents on or before the CLOSING DATE.	For ESSE SDG&E's will submit	date applies t PC and ESSB Cost Develop the final offer re the CLOSI	OT Offers, ment Team documents
9	SDG&E Begins Bid Evaluation Process		7/2/2016	
10	Shortlist determination		10/24/2016	
11	SHORTLIST NOTIFICATION SDG&E notifies Shortlisted Bidders		10/28/2016	
12	SHORTLISTED BIDDERS ACCEPTANCE/WITHDRAWAL Letter due from Shortlisted Bidders indicating: a. Withdrawal from SDG&E's solicitation; OR b. Acceptance of shortlisted standing and including Shortlist Acceptance Fee SHORTLIST NOTIFICATION		+10 Days Shortlist Notif es to ESSPPT and ESSBOT	A, ESSEPC
13	SDG&E issues appreciation notices to unsuccessful Respondents	a	+3 Weeks Shortlisted Bi ccept/withdra es to ESSPPT and ESSBOT	w A, ESSEPC



	14	SDG&E commences with ESSPPTA, ESSBOT, and ESSEPC negotiations	+11 Days after Shortlist Notification Date applies to ESSPPTA, ESSEPC and ESSBOT
	15	Target date to complete contract negotiations	End of Q1, 2017
	16	SDG&E Submits agreements to CPUC for approval ¹⁴	Q2 2017 Date applies to ESSPPTA, ESSEPC and ESSBOT
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* Negotiation time will vary depending on proposal specifics including proposed contract modifications. SDG&E Submits Advice letters with ESSPPTAs or applications with ESSBOTs and ESSEPCs to CPUC for approval

PRE-BID CONFERENCE / BIDDER OUTREACH EVENTS

SDG&E will host a bidder outreach event for all respondents on April 13, 2016. This event will be an in-person event for all resource types (with dial-in / webinar available for those that cannot attend in-person). Participation in this event is NOT mandatory in order to submit an offer.

In addition, the Cost Development Team will host one outreach event to describe the the ESSBOT and ESSEPC pre-offer and pre-evaluation processes and timelines. More information about this event, including the date, is described in the Addendum documents that will be provided to ESSBOT and ESSEPC Respondents once their formal expression of interest has been provided and, for ESSEPC Respondents, an NDA has been executed.

Please monitor the RFO Website for further details (such as conference presentation materials and final arrangements for the events (dates, times and location)). SDG&E will make efforts to notify bidders of outreach event details via e-mail as well as provide this information via the RFO Website.

Any party interested in attending these events should email the following information to <u>PrefResourcesRFO@semprautilities.com</u>

- Company name, and
- Attendees' names, titles and contact information

¹⁴ D.14-10-045 – Decision Approving the IOU's Storage Procurement Framework and Program Applications for the 2014 Biennial Procurement Period – section 6.5.4.3, p. 92 discusses the one year timing requirement for filing of applications requesting approval of energy storage contracts.



7.0 **RFO WEBSITE AND COMMUNICATION**

The RFO and all subsequent revisions and documents are available for download from the RFO Website (<u>http://www.sdge.com/2016PrefResourcesLCRRFO</u>) and the 2016 ENERGY STORAGE SYSTEM (ESSPPTA) RFO event on the PowerAdvocate® website. Potential Respondents are responsible for monitoring the RFO Website and PowerAdvocate® for subsequent updates, notices and postings.

Logging In

You access the PowerAdvocate platform via a web browser.

To log in

1. Open a web browser and go to www.poweradvocate.com.

PowerAdvocate functions in most web browsers; however, using browsers other than Internet Explorer (IE) version 6 or higher may cause certain functionality to work unexpectedly. Should you encounter problems, PowerAdvocate support may be unable to provide assistance until the issue has been replicated in a supported version of Internet Explorer.

2. Click Login.

The Login page appears; you may wish to bookmark it for quick access.

3. Enter your account User Name and Password.

Both are case-sensitive.

If you do not have an account, go to poweradvocate.com and click the **Registration** link at the top of the page. If you have an account but do not remember your user information, click **Forgot User Name** or **Forgot Password** and they will be emailed to you.

4. Click Login.

The 2016 ENERGY STORAGE SYSTEM (ESSPPTA) RFO event on the PowerAdvocate® website contains the following: required RFO forms, documents, and schedule. Respondents intending to bid but who do not yet have an existing account with PowerAdvocate® must first register to create a username/password in order to receive access to the event. See below for instructions to log in/register: First-time users must register as a Supplier using the instructions above and the Referral information below to access the RFO event:



ENERGY STORAGE SYSTEM (ESSPPTA)

Referral Information				
Are you registering for a specific Event: *	● Yes ◯ No, I would simply like to register.			
Who referred you to this Event: *	PrefResourcesRFO@semprautilities.com			
Name of that individual's company: *	San Diego Gas & Electric			
Name or description of the Event: *	56973 : 2016 ENERGY STORAGE SYSTEM (ESSPPTA) RFO			
* Required Field				

Users with an existing PowerAdvocate® account may request access to the event using the link below:

https://www.poweradvocate.com/pR.do?okey=56973&pubEvent=true

For ESSEPC and ESSBOT Respondents: Upon providing the required formal expression of interest, ESSEPC and ESSBOT Respondents will be provided with information regarding how and when Respondent's must provide cost and other offer information to SDG&E's Cost Development Team. SDG&E's Cost Development Team will then provide the final ESSBOT and ESSEPC offers via the Power Advocate ® platform on July 1, 2016. This process will be described in the Addendum documents available to ESSBOT and ESSEPC Respondents after formal expression of interest (and NDA execution in the case of ESSEPC Respondents).

The RFO website contains RFO forms and documents, the RFO Schedule, and a Question and Answer forum. All questions or other communications regarding this RFO must be submitted via email to <u>PrefResourcesRFO@semprautilities.com</u> by the DEADLINE TO SUBMIT QUESTIONS as specified in Section 6.0 RFO Schedule. SDG&E will not accept questions or comments in any other form, except during scheduled bidders conferences.

RFO RESPONSE INSTRUCTIONS

Respondents are required to submit the below files / forms / documents in response to this solicitation. Forms are available on the RFO Website and through the PowerAdvocate site. Failure to provide the listed information may result in the proposal being deemed non-conforming and may disqualify the proposal from further consideration.

Formal expression of interest: ESSBOT and ESSEPC Respondents shall contact SDG&E's Cost Development Team via e-mail (at <u>2016ESSEPCBOTRFO@semprautilities.com</u>) to provide their formal expression of interest. This e-mail shall be provided to SDG&E's Cost Development Team no later than March 11, 2016. Upon receipt of this formal expression of interest, SDG&E's Cost Development Team will provide further instructions regarding documents, files and other information that must be provided in order to complete the offer.



Limit on Number of Bids

A MAXIMUM OF SIX (6) OFFERS PER RESPONDENT PER PROJECT OR PROGRAM WILL BE ACCEPTED.

Defining what a separate project entails: Variation of significant project details, including the following, will constitute a separate 'project' or 'program':

- Differing commercial operation dates or delivery start dates
- Differing delivery terms
- Differing energy deliveries or dispatchable configurations
- Differing maximum capacity
- Differing points of interconnection
- Differing operational constraints
- Differing equipment suppliers

Fill out separate offer forms for each offer. Only one Project Description Form is required per Respondent (per project) to the extent that all bids can be adequately summarized in the space provided.

If the respondent has questions or concerns regarding bid limits, please contact SDG&E at: <u>PrefResourcesRFO@semprautilities.com</u>

Required Participation Forms:

NOTE: ESSPPTA Respondents will complete all forms and submit via Power Advocate®. ESSEPC and ESSBOT Respondents will provide all required forms and information to SDG&E's Cost Development Team pursuant to the processes and timelines set forth in the Addendum documents that will be provided upon receipt of a formal expression of interest. SDG&E's Cost Development Team will submit final offer packages on or before the CLOSING DATE. ESSEPC and ESSBOT Respondents will receive detailed process information upon completing the formal expression interest process outlined in Section 7, above.

- 1) Energy Storage Offer Form Note that Bidders must include in their offer form proposed pricing and if multiple pricing or capacity or other options are contemplated, multiple offer forms should be submitted. There are additional / separate tabs within the workbook for ESSPPTA offers, and utility owned offers (ESSBOT and ESSEPC). SDG&E's Cost Development Team may gather additional information and in different forms ahead of the closing date in support of final Offer Form submission.
- 2) **Project Description Form**
- 3) Electric Interconnection / Repowering Information Please provide copies of either (1) completed interconnection studies (and provide the name of the substation and interconnection voltage applicable to the facility as well as the nearest substation (if known) in the offer form (listed above), or (2) Information regarding the



repowering of a comparably sized existing facility in accordance with the CAISO Business Practice Manual for Generator Management.

- 4) **Credit Application** Changes to credit terms and conditions within either the ESSPPTA may render the offer non-conforming and disqualify the project from further consideration.
- Diverse Business Enterprise Subcontracting Commitment and Reporting Requirements (DBE) Form (optional) - Provide a copy of certification documents received from the California Public Utilities Commission. An application can be made before submission of the offer and referenced in the offer.
- 6) **Redline forms of the ESSPPTA Pro Forma Agreement** ESSPPTA Respondents only.

The Participation Summary, Project Description Form, Credit Application, and redlines to the Model ESSPPTA must be in Word or Word-compatible format (not in PDF). The offer form must be in Excel or Excel-compatible format (not in PDF).

Submissions containing unsolicited materials or submissions of individual bid documents in file formats other than the formats of the original bid forms may be rejected. This RFO is an electronic only Solicitation; Respondents need not submit paper documents, or e-binders.

ESSPPTA Respondents interested in submitting an offer must register to receive access to the 2016 ENERGY STORAGE SYSTEM (ESSPPTA) RFO event on PowerAdvocate® in order to submit an offer. To register, Respondents must follow the instructions outlined in Section 7, RFO Website and Communications. All offers must be uploaded to the PowerAdvocate® no later than 1:00 p.m., Pacific Prevailing Time, on the CLOSING DATE (see RFO Schedule). If Respondents encounter technical difficulties with the uploading process, they should provide evidence of such difficulties (e.g. a screen shot of the error message) and email the bid to:

The RFO mailbox: <u>PrefResourcesRFO@semprautilities.com</u> Carbon Copy (CC) to: <u>Jon.Jacobs@paconsulting.com</u> and <u>Barbara.Sands@PAConsulting</u>

Emails shall be received by 1:00 p.m., Pacific Prevailing Time, on the Closing Date.

All offer materials submitted in accordance with the above Response Instructions shall be subject to the confidentiality provisions of Section 10 Confidentiality of this RFO.

SDG&E will review and may utilize all information, if any, submitted by a Respondent that is not specifically requested as a part of any forms. During all stages of the RFO process, SDG&E reserves the right to request additional information from individual Respondents or to request any Respondent to submit supplemental materials in fulfillment of the content requirements of this RFO or to meet additional information needs. SDG&E also reserves the unilateral right to waive any technical or format requirements contained in the RFO.



8.0 **REJECTION OF OFFERS**

SDG&E SHALL TREAT ALL RESPONDENTS FAIRLY AND EQUALLY AND SHALL EVALUATE ALL OFFERS IN GOOD FAITH. WHILE SDG&E IS MINDFUL OF THE BENEFITS OF ENERGY FROM ESS FACILITIES AND IS VIGOROUSLY PURSUING THE GOALS OF THE ENERGY STORAGE DECISION AND TRACK 4 DECISION, IT MAKES NO GUARANTEE THAT A CONTRACT AWARD SHALL RESULT FROM THIS RFO, EVEN AFTER AN OFFER HAS BEEN SHORTLISTED. SDG&E RESERVES THE RIGHT AT ANY TIME, AT ITS SOLE DISCRETION, TO ABANDON THIS RFO PROCESS, TO CHANGE THE BASIS FOR EVALUATION OF OFFERS, TO TERMINATE FURTHER PARTICIPATION IN THIS PROCESS BY ANY PARTY, TO ACCEPT ANY OFFER OR TO AGREEMENT, ENTER INTO ANY DEFINITIVE TO EVALUATE THE QUALIFICATIONS OF ANY RESPONDENT OR THE TERMS AND CONDITIONS OF ANY OFFER, OR TO REJECT ANY OR ALL OFFERS, ALL WITHOUT NOTICE AND WITHOUT ASSIGNING ANY REASONS AND WITHOUT LIABILITY OF SEMPRA ENERGY, SDG&E, OR ANY OF THEIR SUBSIDIARIES, AFFILIATES, OR REPRESENTATIVES TO ANY RESPONDENT. SDG&E SHALL HAVE NO OBLIGATION TO CONSIDER ANY OFFER.



9.0 CONFIDENTIALITY

EXCEPT WITH THE PRIOR WRITTEN CONSENT OF SDG&E, RESPONDENTS MAY NOT DISCLOSE (OTHER THAN BY ATTENDANCE ALONE AT ANY MEETING TO WHICH MORE THAN ONE RESPONDENT IS INVITED BY SDG&E) TO ANY OTHER RESPONDENT OR POTENTIAL RESPONDENT THEIR PARTICIPATION IN THIS RFO, AND RESPONDENTS MAY NOT DISCLOSE, COLLABORATE ON, OR DISCUSS WITH ANY OTHER RESPONDENT, OFFER STRATEGIES OR THE SUBSTANCE OF OFFERS, INCLUDING WITHOUT LIMITATION THE PRICE OR ANY OTHER TERMS OR CONDITIONS OF ANY INDICATIVE OR FINAL OFFER.

SDG&E WILL USE THE HIGHER OF THE SAME STANDARD OF CARE IT USES WITH RESPECT TO ITS OWN PROPRIETARY OR CONFIDENTIAL INFORMATION OR A REASONABLE STANDARD OF CARE TO PREVENT DISCLOSURE OR UNAUTHORIZED USE OF RESPONDENT'S CONFIDENTIAL AND PROPRIETARY INFORMATION THAT IS LABELED AS "PROPRIETARY AND CONFIDENTIAL" ON THE OFFER PAGE ON WHICH THE PROPRIETARY INFORMATION APPEARS ("CONFIDENTIAL INFORMATION"). RESPONDENT SHALL SUMMARIZE ELEMENTS OF THE OFFER(S) IT DEEMS CONFIDENTIAL. THE SUMMARY MUST CLEARLY IDENTIFY WHETHER OR NOT PRICE, PROJECT NAME, LOCATION, SIZE, TERM OF DELIVERY AND TECHNOLOGY TYPE (EITHER COLLECTIVELY OR INDIVIDUALLY) ARE TO BE CONSIDERED CONFIDENTIAL INFORMATION. CONFIDENTIAL INFORMATION MAY BE MADE AVAILABLE ON A "NEED TO KNOW" BASIS TO SDG&E'S DIRECTORS, OFFICERS, EMPLOYEES, CONTRACTORS, CONSULTANTS, THE INDEPENDENT EVALUATOR, AGENTS AND ADVISORS ("REPRESENTATIVES"), BUT SUCH REPRESENTATIVES SHALL BE REQUIRED TO OBSERVE THE SAME CARE WITH RESPECT TO DISCLOSURE AS SDG&E.

NOTWITHSTANDING THE FOREGOING, SDG&E MAY DISCLOSE ANY OF THE CONFIDENTIAL INFORMATION TO COMPLY WITH ANY LAW, RULE, OR REGULATION OR ANY ORDER, DECREE, SUBPOENA OR RULING OR OTHER SIMILAR PROCESS OF ANY COURT, SECURITIES EXCHANGE, CONTROL AREA OPERATOR, GOVERNMENTAL AGENCY OR GOVERNMENTAL OR REGULATORY AUTHORITY AT ANY TIME EVEN IN THE ABSENCE OF A PROTECTIVE ORDER, CONFIDENTIALITY AGREEMENT OR NON-DISCLOSURE AGREEMENT, AS THE CASE MAY BE, WITHOUT NOTIFICATION TO THE RESPONDENT AND WITHOUT LIABILITY OR ANY RESPONSIBILITY OF SDG&E TO THE RESPONDENT.

IT IS EXPRESSLY CONTEMPLATED THAT MATERIALS SUBMITTED BY A RESPONDENT IN CONNECTION WITH THIS RFO WILL BE PROVIDED TO THE CPUC, ITS STAFF, THE CEC, ITS STAFF, SDG&E'S INDEPENDENT EVALUATOR, SDG&E'S PRG, AND THE COST ALLOCATION METHODOLOGY ("CAM") GROUP. ADDITIONALLY, SDG&E MAY PROVIDE LIMITED INFORMATION SUCH AS (BUT NOT LIMITED TO) ON-LINE DATE, INTERCONNECTION POINT, TECHNOLOGY AND OTHER OPERATIONAL CHARACTERISTICS TO THE CAISO FOR MODELING PURPOSES. SDG&E WILL SEEK CONFIDENTIAL TREATMENT PURSUANT TO



PUBLIC UTILITIES CODE SECTION 583 AND GENERAL ORDER 66-C OF THE CPUC, WITH RESPECT ΤO ANY RESPONDENT CONFIDENTIAL INFORMATION SDG&E TO THE CPUC. SUBMITTED BY SDG&E WILL ALSO SEEK CONFIDENTIALITY PROTECTION FROM THE CALIFORNIA ENERGY COMMISSION ("CEC") FOR RESPONDENT'S CONFIDENTIAL INFORMATION AND WILL SEEK CONFIDENTIALITY AND/OR NON-DISCLOSURE AGREEMENTS WITH THE PROCUREMENT REVIEW GROUP ("PRG"). SDG&E CANNOT, HOWEVER, ENSURE THAT THE CPUC OR CEC WILL AFFORD CONFIDENTIAL TREATMENT TO A RESPONDENT'S CONFIDENTIAL INFORMATION OR THAT CONFIDENTIALITY AGREEMENTS OR ORDERS WILL BE OBTAINED FROM AND/OR HONORED BY THE PRG, CEC, OR CPUC.

SDG&E, ITS REPRESENTATIVES, SEMPRA ENERGY, AND ANY OF THEIR SUBSIDIARIES DISCLAIM ANY AND ALL LIABILITY TO A RESPONDENT FOR DAMAGES OF ANY KIND RESULTING FROM DISCLOSURE OF ANY OF RESPONDENT'S INFORMATION.



10.0 ESS PROGRAM PARAMETERS

THIS RFO'S ROLE IN THE STATE OF CALIFORNIA'S ENERGY STORAGE PROGRAM

In early 2010, AB 2514 (titled "Energy Storage Systems") was introduced in the state legislature and subsequently signed into law by the Governor. This resulted in the addition of Public Utilities Code sections 2835, 2836 and associated sections and the passage of the Energy Storage Decision. The Energy Storage Decision sets a goal for SDG&E to procure 165 MW of energy storage to be installed no later than year-end, 2024. This RFO is the first of four ESS RFOs that SDG&E will issue in pursuit of this goal. Additionally, the Track 4 Decision requires that SDG&E procure at least 25 MW of energy storage as part of its LCR requirement. The ESS resources that SDG&E is seeking via this RFO are intended to meet both the requirements of the Energy Storage Decision and the Track 4 Decision.

PROCUREMENT REVIEW GROUP

The Procurement Review Group (PRG) and Cost Allocation Mechanism (CAM) PRG are CPUC-endorsed entities and are composed of non-market participants such as ratepayers' advocacy groups, state energy and water commissions, power authorities, utility-related labor unions and other non-commercial, energy-related special interest groups. Each IOU has its own PRG and CAM PRG. The PRG and CAM PRG are charged with overseeing the IOU's procurement process, reviewing procedural fairness, examining overall procurement prudence and providing feedback during all stages. From RFO language development to offer evaluation to contract negotiation, IOU's brief the PRG and/ or the CAM PRG on a periodic basis during the entire process.

Respondents are hereby notified that revealing confidential offer information to the PRG and/or CAM PRG is required during briefings in accordance with Section 11 ("Confidentiality"). Each Respondent must clearly identify, as part of its offer, what type of information it considers to be confidential.

INDEPENDENT EVALUATOR

The CPUC requires each IOU to use an Independent Evaluator ("IE") to evaluate and report on the IOU's entire solicitation, evaluation, and selection process. The IE will review SDG&E's implementation of the RFO process and final selections. The IE also makes periodic presentations regarding its findings to the IOU and the IOU's PRG, including the CPUC Energy Division staff. The intent of these IE presentations is to preserve the independence of the IE by ensuring free and unfettered communication between the IE and the CPUC, as well as an open, fair, and transparent process that the IE can affirm.

SDG&E is committed to ensuring an open and transparent solicitation, and to providing a fair, reasonable and competitive process.

The Independent Evaluator ("IE") for this solicitation is PA Consulting.



11.0 SDG&E BACKGROUND

SDG&E provides electric service to approximately 1.3 million customers in San Diego County and the southern portion of Orange County. SDG&E also provides natural gas service to approximately 775,000 gas customers. The electric customer base comprises 89% residential and 11% commercial and industrial customers.

SDG&E's electric transmission network is comprised of 130 substations with 884 miles of 69-kV, 265 miles of 138-kV, 349 miles of 230-kV, and 215 miles of 500-kV transmission lines. Local ("on system") generating resources include the Encina plant (connected into SDG&E's grid at 138 kV and 230 kV), the Palomar Energy Center (connected at 230kV) and a number of combustion turbine facilities located around the service area (connected at 69 kV). Imported resources are received via the Miguel Substation as the delivery point for power flow on the Southwest Power Link, which is SDG&E's 500-kV transmission line that runs from Arizona to San Diego along the U.S./Mexico border as well as the Sunrise Power Link – a second 500kV transmission line that runs from the Imperial Valley substation and ending in San Diego's north county.

The figure below shows a simplified diagram of existing SDG&E's service area, which encompasses an area of 4,100 square-miles and spans 2 counties and 25 communities.





For a map California IOU service territories please visit: http://www.energy.ca.gov/maps/serviceareas/electric_service_areas.html