



SDGE 2025-2031 Phase 3 Integrated Resource Planning RFO Bidders' Conference

March 19, 2024





Welcome to SDGE's Phase 3 Integrated Resource Planning RFO Bidders' Conference!

Agenda



- Procedures
- Legal Disclaimers
- Independent Evaluator
- Supplier Diversity
- Solicitation Overview
- Offer Submission Process
- Bid Evaluation
- Collateral Requirements
- Final Questions and Answer

Procedures



- Audio
 - Microphones will be muted for all participants during the webinar
- Questions
 - Participants should use the Q&A function, and SDG&E will address the question(s) at the end of the presentation.
 - Questions can also be emailed to IRPReliabilityRFO@sdge.com with copy to SDGE_IE@paconsulting.com, which will be addressed in the FAQ document available on the IRP Reliability RFO website: <https://www.sdge.com/2025-2031-irp-reliability-rfo>.



Anti-Trust and Document Conflict

Legal

Anti-Trust and Document Conflict



Anti-trust:

- All participants in today's meeting shall comply with anti-trust guidelines. These guidelines direct meeting participants to avoid discussions of topics or behavior that would result in anti-competitive behavior, including restraint of trade and conspiracy to create unfair or deceptive business practices or discrimination, allocation of production, imposition of boycotts and exclusive dealing arrangements.

Document Conflict:

- This presentation is intended to be a summary level discussion of the information and requirements established in the IRP Reliability RFO documentation. To the extent that there are any inconsistencies between the information provided in this presentation and the requirements in the RFO documentation, the RFO documentation shall govern.



Independent Evaluator

PA Consulting

Role of the Independent Evaluator

- PA Consulting Group will be the Independent Evaluators (“IE”) for this solicitation. PA Consulting has served as the IE for previous SDG&E RFOs (e.g., RPS, all-source RFO, etc.)
 - The IE oversees the SDG&E Bid Evaluation Team and evaluation process.
 - The role of the IE is to ensure that SDG&E’s evaluation of bids is transparent and that all bidders are treated fairly and equitably.
 - The IE is expected to assure that affiliate and utility owned bids are not favored.
 - The IE will also ensure that bid compliance decisions are fair.
 - The IE oversees the modeling of the bids including how each bid is represented in the models.
 - The IE provides advice to SDG&E on evaluation issues as they arise.
 - The IE will also monitor contract negotiations to ensure fair and unbiased treatment across counterparties.

Independent Evaluator Contact Info

- Any emails sent to SDG&E at IRPReliabilityRFO@sdge.com MUST also cc the IE at: SDGE_IE@paconsulting.com



Supplier Diversity

Supplier Diversity

Diverse Business Enterprises (DBE) Goals:

- General Order (GO) 156
 - History: Adopted by the California Public Utilities Commission in 1986 and with Electric Procurement reporting added in 2012
 - Purpose: Promote greater competition among utility suppliers by expanding the available supplier base and to encourage greater economic opportunity for women, minority, and disabled veteran owned businesses historically left out of utility procurement
 - Qualitative Metric: In the event of a tie between two offers, SDG&E will consider a Respondent's status as a DBE and or a Respondent's plan to utilize the services of DBEs during project development
- California Public Utilities Commission (CPUC) Supplier Clearinghouse
 - Register to become a DBE supplier, <http://www.thesupplierclearinghouse.com/>

• Questions?

SDG&E Supplier Diversity Team

Email: vendorrelations@sdge.com

Phone: 1 (866) 616-5565



Solicitation Overview

Background

- In accordance with Decision (D.)21-06-035 of the California Public Utilities Commission, as modified by D.23-02-040 and D.24-02-047 (the “Decisions”), SDG&E is issuing this Phase 3 Integrated Resource Planning Request for Offers (“Phase 3 IRP RFO”) to solicit offers from owners and operators for the purchase of eligible system RA for certain to come online between June 1, 2025, and June 1, 2028, specifically in the following mandates:
 - 170-320 MW of Summer Reliability capacity with an online date by June 1, 2025
 - Min. 72 MW of non-fossil-fueled capacity with an online date by June 1, 2027
 - Long-lead Time (“LLT”) procurement with an online date by June 1, 2028*, as follows:
 - Min. 42 MW of Long-duration storage capacity
 - Min. 42 MW of Firm, zero emitting generation capacity
- Resources procured must be incremental to the baseline resource assumptions**

*D.24-02-047 provides for extensions up to June 1, 2031, for projects meeting certain criteria. As such, SDG&E will accept and consider offers for LLT resources that may come online by June 1, 2031.

**https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/d2106035_baseline_gen_list.xlsx

Total Procurement Targets (in NQC MW)

	2023	2024	2025	2026	2027	2028	Total
Firm zero-emitting resources*	-	-	-	-	-	41.4	41.4
Long-duration storage resources*	-	-	-	-	-	41.4	41.4
Any other type of non-fossil-fueled resource	82.7	247.6	62.3	72.0	72.0	82.7	536.6
Total	82.7	247.6	62.3	72.0	72.0	82.9	619.5
Zero-emitting resources required by no later than 2025**	-	-	103.1	-	-	-	103.1

* The LLT resource requirements are equally divided among long-duration storage and firm, zero-emitting generation resources.

** The zero-emitting resources required to replace Diablo Canyon must be procured by 2025 but may occur in any of the years 2023-2025; therefore, the columns do not add to the total.

Product Requirements

- Zero-emitting or generic, non-fossil fueled resources that intend to meet a June 1, 2025, through June 1, 2027, online date have the following characteristics:
 - Be from a standalone RPS generation resource, standalone storage, a generation resource paired with storage (physically or contractually), or a demand response resource;
 - Be available every day from 5 p.m. to 10 p.m. (the beginning of hour ending 1800 through the end of hour ending 2200), Pacific Time, at a minimum; and
 - For Diablo Canyon Power Plant replacement capacity to be online by June 1, 2025, be able to deliver at least 5 megawatt-hours of energy during each of these daily periods for every megawatt of incremental capacity claimed, or
 - Otherwise, be able to meet all applicable rules to count for RA.
- LLT resources that intend to come online on or before June 1, 2028, have the following characteristics:
 - long-duration storage is able to deliver at maximum capacity for at least eight hours from a single resource; or
 - Firm, zero-emitting capacity has no on-site emissions or is eligible under the requirements of the renewable portfolio standard program, has at least an 80 percent capacity factor, and must not be use limited or weather dependent. No storage projects shall qualify under this provision.

Product Requirements



- Firm energy imports that follow the eligibility and counting rules of the resource adequacy program in place at the time of contract execution and are associated with a new resource or an increase of capacity from an existing resource with a delivery start date after June 30, 2021.
 - Firm energy imports may count for any requirement of this procurement, including Summer Reliability, generic capacity and LLT resources, depending on the project that the firm energy import is sourced from.

Product Requirements

Category	Eligible Resources
Zero-Emissions Resources	Standalone RPS, Hybrid / Co-located storage plus RPS (either physically or contractually), Behind the Meter Resources (i.e., distributed energy resources and demand response)
Firm Zero Emission Resources	Geothermal, Biomass
Long-duration Storage Resources	Lithium-ion, Pumped Hydro Storage, Flow battery
Non-fossil Fueled Resources	Standalone Energy Storage, Standalone RPS, Hybrid / Co-located storage plus RPS, Behind the Meter Resources (i.e., distributed energy resources and demand response)
Firm energy imports	New Resource or an Increase of Capacity from an Existing Resource

Schedule

NO.	ITEM	Date
1	RFO Issued	March 6, 2024
2	Pre-Offer Webinar Details available at https://www.sdge.com/2025-2031-irp-reliability-rfo	March 19, 2024
3	DEADLINE TO SUBMIT QUESTIONS. Question submittal cut-off date. Answers to all questions will be posted on the website no later than March 27, 2024.	March 27, 2024
4	DEADLINE TO REGISTER for PowerAdvocate access / to download RFO forms and documents	March 27, 2024
6	CLOSING DATE: Offers must be uploaded to and received on Power Advocate® no later than 12:00 PM Pacific Prevailing Time	April 19, 2024
7	SDG&E Begins Offer Evaluation Process	April 22, 2024
8	Shortlist determination	No later than July 19, 2024
9	SHORTLIST NOTIFICATION SDG&E notifies Shortlisted Respondents	July 22 – August 9, 2024
10	SHORTLISTED RESPONDENTS ACCEPTANCE/WITHDRAWAL Letter due from Shortlisted Respondents indicating: a. Withdrawal from SDG&E’s solicitation; OR b. Acceptance of shortlisted standing and including Shortlist Acceptance Fee SHORTLIST NOTIFICATION	5 Business Days after Shortlist Notification
11	SDG&E Begins contract negotiations	Q3 2024
12	Target date to complete contract negotiations*	Q4 2024
13	SDG&E Submits agreements to CPUC for approval	Q1 2025

Eligibility Requirements

Minimum Quantity / Term

- Offers shall be from a single resource for a minimum of 10 MW. Contracts offered to successful Respondents in this RFO shall be for a minimum (10) ten-year term.
- 6 bids per respondent per interconnection point.

Incrementality

- The resource must be 'demonstrably incremental' to the baseline resource assumptions

Interconnection and Deliverability

- Offers must demonstrate expected FCDS and expected interconnection costs through either a completed Phase II study or in accordance with the CAISO Business Practice Manual for Generator Interconnection.
- Transmission level projects must apply for interconnection through the CAISO LGIA/SGIA process. Distribution level projects must apply through SDG&E's WDAT process.

Eligibility Requirements

Permitting

- Respondent's project must, at a minimum, have achieved the "**application deemed complete**" (or equivalent) status under the land use entitlement process associated with the environmental review under the California Environmental Quality Act (CEQA) and/or under the National Environmental Policy Act (NEPA).

Site Control

- Respondents, and specifically the entity to the eventual contract, must have, at time of offering, site control for the duration of the contract term proposed in their offer. Site control may be evidenced by direct ownership, a lease, or an option to lease or purchase upon contract approval.

Safety

- 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.

Eligibility Requirements



Supply side resources

- Must go through the CAISO deliverability study process and receive a non-energy only deliverability status

Demand side resources

- Provide RA value by offering load reduction conforming to RA guidelines



Offer Submission Process

Offer Submission Process

- Any party interested in submitting an offer must register to receive access to the Phase 3 IRP RFO event on PowerAdvocate in order to submit an offer.
- To register, Respondents must follow the instructions outlined in Section RFO Website and Communications.
- All offers must be uploaded to the PowerAdvocate site no later than 12:00pm PPT, April 19, 2024.
- Relevant required bid forms can be found on the RFO Website (<https://www.sdge.com/2025-2031-irp-reliability-rfo>) or on the Phase 3 IRP Reliability RFO event on the PowerAdvocate® website (<https://www.poweradvocate.com/pR.do?okey=217784&pubEvent=true>).
- If the respondent is submitting offers for more than one project, each project must be submitted separately with its required forms. Forms must be clearly labeled to identify the project name and the submitted forms.

Required Forms

Track	Product Description	Offer Requirements
Track 1 - Projects that qualify as zero-emitting or generic, non-fossil fueled resources that intend to meet online dates by and June 1, 2027.	Energy Storage or Hybrid / co-located Storage plus RPS Generation Resources	<ol style="list-style-type: none"> 1. Credit Application 2. DBE Subcontracting Goal and Reporting (if applicable) 3. Energy Storage or Hybrid Project Description Form 4. Energy Storage or Hybrid Offer Form 5. Applicable Pro Forma agreement (i.e., Energy Storage Pro Forma Agreement, Hybrid RPS Generation plus Storage Pro Forma Agreement, or Long-term RA-only Capacity Agreement (for RA-only offers)) with suggested edits 6. Energy Storage or Hybrid Confidentiality Agreement with suggested edits
	Stand-alone Renewable Resources	<ol style="list-style-type: none"> 1. Credit Application 2. DBE Subcontracting Goal and Reporting (if applicable) 3. Renewable Resource Project Description Form 4. Renewable Resource Offer Form 5. Renewable Portfolio Standard Power Purchase Pro Forma Agreement with suggested edits
	Distributed Energy Resource	<ol style="list-style-type: none"> 1. Credit Application 2. DBE Subcontracting Goal and Reporting (if applicable) 3. Distributed Energy Resource Project Description Form 4. Distributed Energy Resource Offer Form 5. Distributed Energy Resource Pro Forma Agreement with suggested edits
	Demand Response	<ol style="list-style-type: none"> 1. Credit Application 2. DBE Subcontracting Goal and Reporting (if applicable) 3. Demand Response Project Description Form 4. Demand Response Resource Offer Form 5. Demand Response Pro Forma Agreement with suggested edits

Required Forms (continued)

Track 2 – Long lead-time resources	Long-Duration Energy Storage	<ol style="list-style-type: none"> 1. Credit Application 2. DBE Subcontracting Goal and Reporting (if applicable) 3. Energy Storage or Hybrid Project Description Form 4. Energy Storage or Hybrid Resource Offer Form 5. Energy Storage Pro Forma Agreement or Long-term RA-only Capacity Agreement (for RA-only offers) with suggested edits 6. Energy Storage or Hybrid Confidentiality Agreement with suggested edits
	Firm Zero-Emitting	<ol style="list-style-type: none"> 1. Credit Application 2. DBE Subcontracting Goal and Reporting (if applicable) 3. Renewable Resource Project Description Form 4. Renewable Resource Offer Form 5. Renewable Portfolio Standard Power Purchase Pro Forma Agreement with suggested edits
Track 3 – Firm energy imports.	For non-resource-specific RA imports, an “energy product” that “cannot be curtailed for economic reasons” shall self-schedule into the California Independent System Operator markets, consistent with the timeframe established in the governing contract.	<ol style="list-style-type: none"> 1. Credit Application 2. DBE Subcontracting Goal and Reporting (if applicable) 3. Import Energy Offer Form 4. Transactions will be confirmed using either the Edison Electric Institute master contract or Western Systems Power Pool agreement to execute any agreement(s) that may result from this RFO (to be provided)

PowerAdvocate



How to Register:

1. Register as a first-time user on www.PowerAdvocate.com
 - Request for access using the PowerAdvocate® link provided in the RFO documents

<https://www.poweradvocate.com/pR.do?okey=217784&pubEvent=true>

How to Log On:

1. Launch a web browser and go to: www.poweradvocate.com, and then click on the orange **Login** button
2. Enter your account **Username** and **Password** (both are case-sensitive)
3. Click **Login**

Common Mistakes to Avoid

- Inconsistent contract terms between worksheets or documents
 - Prices and deliveries should start at the same date as the contract start date.
 - Deliveries and prices should stop in the final contract year.
 - Offer forms for contracts of 20-year terms that only have 10 years of pricing and deliveries, or any other mismatch that is not explained in the offer form, may be declared non-conforming and rejected.
- Missing documents
 - Any of the required documents that are not submitted before the RFO closing date could be declared non-conforming.
- Using incorrect units
 - Offer form entries that are inconsistent with the units shown at the top of the pricing form column may require corrections. For example: \$/kW-yr vs. \$/kW-mo.

Common Mistakes to Avoid (continued)

- Adding or renaming worksheets
 - If the bid has multiple options for pricing/COD/deliveries/etc., fill out separate offer forms for each option. Adding worksheets, or renaming worksheets, create problems with interpretation and processing, and the bid may be declared non-conforming and rejected.
- Pricing form data inconsistent with project description form
 - The Project Description Form and the Offer Forms should describe the same project and pricing options. If options are submitted that are inconsistent with the Project Description Form, the options may be declared non-conforming and rejected. If none of the submitted offer forms match the Project Description Form, the bids may be rejected.
- Annual contract capacity associated with pricing for battery storage should be entered based on NQC counting rules, taking into account any known derates, degradation, or other factors that may limit the contract capacity.



Bid Evaluation

Evaluation Process



- Valuation and Selection Process
 - Least-Cost/Best-Fit (LCBF)
- Conformance Screening & Qualitative Evaluation
- Quantitative Evaluation
 - Net Market Value (NMV)
 - Each conforming offer is valued using this discounted cash flow analysis
- Shortlisted Offers

Evaluation Process (continued)

- **Quantitative Valuation Process**

$$\text{Net Market Value} = \text{Benefits} - \text{Costs}$$

Typical Benefits	Typical Costs
Capacity (RA)	Contract Payments
Energy	Variable Energy Costs (Fuel, VOM, GHG Compliance)
Ancillary Services (A/S) – Spin, Non-Spin, Reg Up, Reg Down	Transmission Interconnection

Evaluation Process (continued)

- **Qualitative Valuation Process**

Interconnection Status

- Consideration will be given to the project's position in the CAISO interconnection queue or WDAT process along with its deliverability status.

Resource Prioritization

- Demand side resources shall be eligible if they meet the incrementality qualifications and otherwise meet the qualifications laid out for the various categories of capacity.

Resource Adequacy Attributes

- Facilities in the San Diego-Imperial Valley Local Area will be given a higher qualitative value if they benefit SDG&E's local capacity position.
- SDG&E will give preference to resources that meet CAISO's prevailing Flexible Resources Availability Criteria and Must Offer Obligations ("FRAC-MOO") and obtain an Effective Flexible Capacity ("EFC") greater than zero. SDG&E will differentiate flexible attributes based on their Flexible Resource Categories, with Category 1 \geq Category 2 \geq Category 3.

Evaluation Process (continued)

• Qualitative Valuation Process

Supplier Diversity

- Consideration will be given to the project's position in the CAISO interconnection queue or WDAT process along with its deliverability status.

Modifications to PPA

- SDG&E discourages extensive modifications and will consider materiality of such changes on a qualitative basis as it evaluates the offers received.

Commercial Online Dates

- SDG&E prefers offers for LLT Resources with an online date on or before June 1, 2028, and will accept and consider the impact of offers for LLT resources with online dates up to June 1, 2031, which includes evaluating the availability of and cost associated with other capacity options to bridge the 2028 target requirements pursuant to D.24-02-047.

Other Considerations

- SDG&E seeks experienced companies utilizing proven technology. Site control, required permits and major equipment orders will be considered. SDG&E will seek to mitigate single-technology risk, preferring a mixed portfolio as well as consider demonstrable resiliency benefits.



Seller's Collateral Requirements

Seller's Collateral Requirements



- Shortlisted Offers
 - Shortlist Acceptance Fee = greater of \$100K or $\$2/\text{kW} * \text{Highest Delivered Capacity}$
 - To be paid no later than 10 business days from shortlisted notice
- Pre-COD Collateral Requirements
 - Amount of potential exposure due to Seller's default or non-performance from Effective Date to project COD
 - Includes Development Period Security and Construction Period Security
- Delivery Period Collateral Requirements
 - Amount of potential market exposure if Seller defaults or fails to perform
- Forms of Seller Performance Assurances
 - Unsecured Credit based on seller's credit worthiness (credit application)
 - Secured Credit, in the form of cash or letter of credit posted by the Seller



Final Q&A

Thank you for attending