



SDG&E 2017 DRP Demonstration Project C RFO Bidder's Conference

Century Park Bldg 6 Seminar Rooms

8326 Century Park Court
San Diego, CA 92123

By Phone: 844 621 8112

Audience link:

<https://intercall.webex.com/intercall/j.php?MTID=m2f7bca9daa80f5d55e0218b3c3927a83>

October 25, 2017

2:00 – 4 pm (PDT)



Agenda

Time	Presenter	Topic
2:00	Evan Bierman	Safety Moment, Legal Disclaimers, Q&A Guidance
2:05	Alan Dulgeroff	Welcome / Setting the Stage
2:10	Steve Read	SDG&E and Supplier Diversity
2:15	Alan Taylor	Overview of the Independent Evaluator's Role
2:20	Evan Bierman	High Level Solicitation Overview / Schedule / Conformance Requirements Overview of Bidding Protocol
3:00	-	Short Break (time permitting)
3:10	Evan Bierman	Solicitation Evaluation Overview
3:20	Ted Roberts	Term sheet / Pro Forma Overview
3:40	Mason Withers	Collateral Requirements / Credit Application
3:45	Mike Turner	Interconnection Overview – Rule 21 / WDAT
	All	General Q&A

Safety Moment

Safety first

- Emergency Evacuation Plan overview
- Assignments in the event of an emergency
 - Dial 911
 - CPR
 - AED

Logistics

- Restrooms
- Refreshments
- Housekeeping questions?

Legal Disclaimers: Anti-Trust Guidelines & 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 RFO Protocols. To the extent that there are any inconsistencies between the information provided in this presentation and the requirements in the RFO Protocols, the RFO Protocols shall govern.

General Q&A Guidance

- SDG&E posts questions and answers on the solicitation website: <http://www.sdge.com/2017DRPDemoProjCRFO>
- Questions from today will be written down; all questions received and answers provided will be posted on the RFO website
 - Goal is to make information available to all potential respondents at the same time
- Questions can be submitted to DRPDemoProjCRFO@semprautilities.com (and **MUST** cc the IE) at any time until the question submittal deadline
- Deadline to submit questions: November 7, 2017
- Answers will be posted to the website periodically. The final set of answers will be posted no later than November 10

Welcome / Setting the Stage

Alan Dulgeroff
Director – Electric System Planning

SDG&E and Supplier Diversity

Steve Read
Sr. Electric Fuels Trader

Background on Diverse Business Enterprises (DBE) Program

- *SDG&E encourages Women, Minority, Disabled Veteran, Lesbian, Gay, Bisexual and Transgender (LGBT) Business Enterprises (“Diverse Business Enterprises” or “DBE”) to participate in the Demonstration Project C RFO*
- *General Order (GO) 156*
 - GO 156 was adopted by the CPUC in 1986. Electric procurement reporting was added in 2012.
 - Sets rules governing the development of programs to increase participation of DBEs in procurement contracts from utilities as required by CPUC Code
 - Goal is to promote greater competition among utility suppliers by expanding the available supplier base and to encourage greater economic opportunity for women, minority, disabled veteran, and LGBT owned businesses historically left out of utility procurement
 - SDG&E encourages developers to utilize DBEs during various stages of project development and construction. SDG&E will require developers to identify and verify their DBE contractor and/or subcontractor spending, if any.

DBE Supplier Eligibility and Certification

- *SDG&E Support of DBE's*
 - Supplier diversity goals are part of every executives' department goals and are a component of every employee's compensation goals
 - 43% of SDG&E's total goods and services procurement dollars were spent with DBEs in 2016
 - 21.6% and \$68 million of our energy procurement dollars were spend with DBEs in 2016
- *For certification* and eligibility under GO 156, a DBE firm must meet the following requirements:*
 - Must be a business enterprise:
 - that is at least 51% owned by a Woman, Minority, Disabled Veteran, or LGBT individual or group(s), or
 - if a publicly owned business, at least 51% of the stock of which is owned by one or more DBE individual(s) or group(s); and
 - whose management and daily business operations are controlled by one or more of those DBE owners

**Certification does not guarantee any business enterprise the right to bid or receive a contract*



DBE Supplier Eligibility and Certification (continued)

- *Obtaining Certification**
 - *Minority, Woman or LGBT owned companies*
 - California Public Utilities Commission (CPUC) Supplier Clearinghouse
<http://www.thesupplierclearinghouse.com/>
 - *Service Disabled Veteran Business*
 - State of California, General Services Office of Small Business and Disabled Veteran Business Enterprise Services (OSDS)
<http://www.dgs.ca.gov/pd/Programs/OSDS.aspx>
 - *Others Offering Certification*
 - Regional affiliates of the National Minority Supplier Development Council (NMSDC)
 - Small Business Administration 8(a) (SBA)
 - Women Business Enterprise Council (WBEC-WEST)
 - State and municipal government agencies

**Certification does not guarantee any business enterprise the right to bid or receive a contract*

Supplier Diversity Contact Information

SDG&E Supplier Diversity Team Websites

<http://www.sempra.com/about/supplier-diversity/>

<http://www.cpuc.ca.gov/puc/supplierdiversity/>

Erica Beal

Supplier Diversity Program Manager

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Steve Taylor

E&FP DBE Ambassador/Generation & Supply Manager

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858-654-6361



Role of the Independent Evaluator

Alan Taylor
Sedway Consulting

Independent Evaluator Introduction and Role

- Alan Taylor of Sedway Consulting will be the Independent Evaluators (“IEs”) for this solicitation. Sedway has acted as SDG&E’s IE for various procurement efforts in the past (i.e.: 2015/16 CHP RFOs, 2013/14 GHG Offset RFO)
 - 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 oversees SDG&E’s Cost Development Team and Evaluation Team
 - 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, and performs a parallel evaluation

The IE provides advice to SDG&E on evaluation issues as they arise



Independent Evaluator Contact Information

Any emails sent to SDG&E at
DRPDemoProjCRFO@semprautilites.com
MUST also cc:

Alan Taylor - Alan.Taylor@sedwayconsulting.com

Alan Taylor (phone): (303) 581-4172

High Level Solicitation Overview / Schedule / Conformance Requirements

Evan Bierman
Principal Origination Analyst

RFO Overview

- This RFO is the *DRP Demo C RFO located in the San Marcos area. 3rd party and IOU offers are eligible and this pilot is intended to help validate locational net benefits. In other words, this pilot will be used to help validate whether DERs can provide net benefits, compared to traditional alternatives, when providing electric distribution capacity*
 - This is **NOT** the *IDER Incentive Pilot RFO. SDG&E will issue that RFO shortly after the pilot is approved by the CPUC, which is expected to come later this year.*
- **Product: SDG&E is soliciting for Distribution Capacity only**
(as described in Appendix B of the RFO document)
 - Qualifying Distributed Energy Resources (DERs) as defined in the RFO
 - ▶ EE, DR, Renewables, Energy Storage and Distributed Generation¹
 - Other potential products / attributes (besides distribution capacity) may be sold to other parties

1 – See RFO, pgs 13 – 16 and the DRP guidance ruling of February 6, 2015, available here:
<http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=5108>

RFO Authorization / Overview

- D.17-02-007 (“Decision on Track 2 Demonstration Projects”) directs SDG&E to conduct the DRP Demonstration Project C solicitation and provides guidance
 - Approves the IOU’s applications to conduct the field demonstrations
 - Includes requirements for timing, data gathering and reporting
 - Contemplates IOU and third party participation for SDG&E’s demo C
 - Addresses and considers incrementality (e.g. NEM and SGIP)
- D.16-12-036 (the IDER Incentive Pilot Decision) also includes important guidance
 - Valuation components and evaluation discussion (appendix A)
 - Contracts
 - Outreach
- D.17-06-012 (“Decision on Revised Track 2 Demonstration Projects”) formally approved the new circuits that are the subject of the solicitation
 - Additionally, clarified timing

RFO Overview, continued

- Project size: the project / program / hybrid resource must be capable of providing the distribution capacity listed in the RFO appendix B
- Contract(s): SDG&E will sign a maximum of one (1) contract per circuit. SDG&E may contract for different parties for each circuit.
- Contract term: SDG&E will consider contract terms from 5 – 10 years*
- Number of offers: SDG&E is not setting a limit on number of offers

*Note that while the contract can be up to 10 years, the deferral value is only calculated to the end of the planning cycle through the end of 2026



RFO Schedule

Date / Time	Event
October 18, 2017	RFO issued
October 25, 2017	Bidder's conference
November 7, 2017	Deadline to submit questions
November 10, 2017	Answers posted to all questions received
November 16, 1pm	Closing date / Offers due
November 17, 2017	Deadline for flash drive submission of offer to IE
December 20, 2017	Shortlist notification
January 3, 2018	Deadline to accept shortlisted position and post shortlist acceptance fee
January 31, 2018	Target date to complete contract negotiations
February 16, 2018	SDG&E submits T3 Advice letter requesting contract approval
April 30, 2018	Potential CPUC Approval based on D.17-02-007 2-month timeline*

*CPUC Approval is not guaranteed by this date and the timeline is under the control of the CPUC, not SDG&E



RFO Eligibility: Location

San Marcos, North San Diego County

- Resources must interconnect to / provide distribution capacity on circuit 597, 295 and / or 298

SDG&E will sign a maximum of 1 contract per circuit



Customer Composition of San Marcos

- Residential: ~28,300 customers
- Commercial: ~2,885 customers
- Lighting: ~90 customers
- SDG&E provides customer information to companies under contract with SDG&E as required and in accordance with privacy rules. Companies must request such information through SDG&E's privacy office, must meet SDG&E's business requirements for needing and receiving the data (including system requirements for storing and protecting the data) must have a signed nondisclosure agreement in place with SDG&E for the work the data pertains to (or adequate nondisclosure language in their contract with SDG&E), and must destroy or return the data after a specified period. More information regarding this process can be found at <https://energydata.sdge.com/showAboutProcess>. Additionally, Demand Response Providers who are registered with SDG&E under SDG&E's Electric Rule 32 may have their customers submit Customer Information Service Request (CISR) – DRP forms to SDG&E to receive additional data.

Minimum Circuit Requirements and online dates

- These are minimum requirements, and do not reflect full value equivalency to traditional distribution projects. As such, alternatives should consider providing commitments above these minimums
 - Traditional distribution project would provide ~10 MW and 99.976% availability.
- Deferral Period Windows: the project shall be available during June through October, Monday through Sunday and for the hours set forth in Appendix B of the RFO Protocol.
- Exceptional Dispatch Windows: During all months, the maximum MW amount shown in Appendix B of the RFO Protocol is required to be available once per year for a two-hour dispatch.
- Please see the RFO Protocols for more information.
 - Quantities shown within the tables are in MW
 - Hours shown are ‘hour beginning’

Circuit 597

- Minimum Circuit Requirements (MW) and required online dates
 - ▶ June 1, 2018 OR
 - ▶ Between January 1 & March 19, 2019
 - Offer variations out to Feb 29, 2020 are allowed, but there is no guarantee that the CPUC will approve on-line dates beyond March 19, 2019

Circuit 597 online after June 1, 2018							
Hour	2020	2021	2022	2023	2024	2025	2026
12:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13:00	0.00	0.00	0.00	0.00	0.01	0.34	0.63
14:00	0.00	0.00	0.00	0.30	0.65	0.99	1.29
15:00	0.00	0.00	0.20	0.56	0.89	1.21	1.51
16:00	0.00	0.00	0.45	0.82	1.14	1.46	1.76
17:00	0.00	0.38	0.75	1.06	1.36	1.66	1.96
18:00	0.47	0.82	1.26	1.65	1.98	2.29	2.60
19:00	0.84	1.20	1.66	2.06	2.40	2.72	3.04
20:00	0.98	1.35	1.81	2.22	2.56	2.88	3.21
21:00	0.76	1.13	1.59	2.00	2.34	2.67	3.00
22:00	0.18	0.55	1.00	1.40	1.74	2.05	2.38
23:00	0.00	0.00	0.00	0.20	0.52	0.82	1.12
0:00	0.00	0.00	0.00	0.00	0.00	0.00	0.36

Annual Two-hour MW Commitment

2020	2021	2022	2023	2024	2025	2026
0.98	1.35	1.81	2.22	2.56	2.88	3.21

Circuit 597 online by June 1, 2018									
Hour	2018	2019	2020	2021	2022	2023	2024	2025	2026
12:00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.42	0.69
13:00	0.00	0.00	0.00	0.00	0.09	0.44	0.78	1.11	1.40
14:00	0.00	0.00	0.00	0.29	0.76	1.12	1.47	1.81	2.12
15:00	0.00	0.00	0.22	0.59	1.05	1.41	1.74	2.07	2.36
16:00	0.00	0.21	0.51	0.88	1.33	1.70	2.02	2.34	2.64
17:00	0.00	0.72	1.04	1.38	1.78	2.12	2.45	2.77	3.10
18:00	0.81	1.14	1.42	1.78	2.22	2.61	2.94	3.24	3.56
19:00	1.21	1.55	1.83	2.19	2.65	3.05	3.39	3.71	4.03
20:00	1.36	1.69	1.98	2.35	2.81	3.22	3.56	3.88	4.21
21:00	1.10	1.44	1.73	2.11	2.57	2.98	3.32	3.65	3.98
22:00	0.49	0.83	1.12	1.48	1.93	2.33	2.67	2.99	3.31
23:00	0.00	0.00	0.00	0.26	0.68	1.04	1.36	1.66	1.96
0:00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.33	0.52

Annual Two-hour MW Commitment

2018	2019	2020	2021	2022	2023	2024	2025	2026
1.36	1.69	1.98	2.35	2.81	3.22	3.56	3.88	4.21



Circuit 295

- Minimum Circuit Requirements (MW) and required online dates
 - June 1, 2018

Circuit 295									
Hour	2018	2019	2020	2021	2022	2023	2024	2025	2026
13:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14:00	0.06	0.11	0.14	0.19	0.24	0.26	0.24	0.18	0.11
15:00	0.32	0.37	0.40	0.44	0.50	0.52	0.49	0.44	0.38
16:00	0.35	0.40	0.44	0.49	0.55	0.57	0.54	0.48	0.41
17:00	0.18	0.20	0.22	0.24	0.28	0.28	0.27	0.24	0.21
18:00	0.25	0.30	0.33	0.37	0.43	0.44	0.42	0.37	0.31
19:00	0.68	0.72	0.76	0.80	0.85	0.87	0.85	0.80	0.75
20:00	0.48	0.52	0.55	0.60	0.65	0.66	0.65	0.61	0.56
21:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual Two-hour MW Commitment

2018	2019	2020	2021	2022	2023	2024	2025	2026
0.68	0.72	0.76	0.80	0.85	0.87	0.85	0.80	0.75

Circuit 298

- Minimum Circuit Requirements (MW) and required online dates
 - June 1, 2018

Circuit 298

Hour	2018	2019	2020	2021	2022	2023	2024	2025	2026
9:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10:00	0.00	0.00	0.00	0.00	0.00	0.13	0.55	0.76	0.96
11:00	0.00	0.14	0.29	0.28	0.71	1.03	1.46	1.69	1.90
12:00	0.13	0.44	0.60	0.58	1.02	1.35	1.78	2.01	2.23
13:00	0.46	0.78	0.94	0.93	1.37	1.70	2.14	2.38	2.61
14:00	0.66	0.96	1.12	1.09	1.53	1.86	2.27	2.52	2.74
15:00	0.38	0.66	0.80	0.75	1.17	1.48	1.86	2.09	2.34
16:00	0.14	0.39	0.51	0.46	0.86	1.16	1.52	1.75	1.95
17:00	0.00	0.00	0.08	0.02	0.40	0.69	1.01	1.23	1.43
18:00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.40	0.60
19:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual Two-hour MW Commitment

2018	2019	2020	2021	2022	2023	2024	2025	2026
0.66	0.96	1.12	1.09	1.53	1.86	2.27	2.52	2.74

RFO Eligibility Requirements - Incrementality

- Not already sourced through another channel / fully incremental: these resources are fully incremental / fully conforming
 - Examples: New programs / EE technology not in SDG&E's portfolio
- Fully sourced through another channel / non-conforming
 - Examples: NEM/rooftop solar not providing new/different services. SGIP funded resources not providing new/different services. Programs / technologies / approaches largely identical to existing DR or EE programs
- Partially sourced through another channel / partially incremental
 - Portion not sourced under another channel may be deemed incremental

RFO Eligibility - Continued

- SDG&E requires that third party owned and operated facilities or programs will be operated and maintained in accordance with good industry practices, and all applicable requirements of law, the CAISO, NERC and WECC related to the project including those that are related to safety.
- Respondent will own and operate the facility(ies) associated with the offer and be responsible for development, land acquisition, fuel supply source and transportation, permitting, financing and construction for the facility(ies)
- For projects that require interconnection, SDG&E will accept either a Wholesale Distribution Access Tariff (“WDAT”) or a Rule 21 interconnection.
- ASC 810 (FIN46) Requirements: SDG&E will require access to financial records and personnel to determine if consolidated financial reporting is required.

RFO Product Type Eligibility

- All products must have the ability to deliver the required capacity every day; however, SDG&E may elect to not call on the resource every day (for those resources that are dispatchable)
 - Respondents are also responsible for detailing any cures for failing to meet the distribution capacity requirements
- EE and DR programs must submit a comprehensive M&V plan and description of their customer programs.
- Renewables, Energy storage, and Interconnected Facilities need to show reasonable progress towards project completion including permits, site control, and interconnection.
- Energy Storage must meet the energy storage definition included in PUC Code 2835
- The DRP Guidance Ruling defines three categories of natural gas fired facilities (fuel cells, Combined Heat & Power (“CHP”) and stationary internal combustion engines) as eligible DERs if these resources can show that they are able to “produce greenhouse gas (“GHG”) emissions reductions over its lifecycle.”

Overview of Bidding Protocol

Evan Bierman
Principal Origination Analyst

RFO Offer Requirements

- Respondents are required to submit the forms from the RFO Website (<https://www.sdge.com/2017DRPDemoProjCRFO>), and additional required documents as applicable, via PowerAdvocate ®.
- Offers may include multiple resource types for each circuit, however minimum distribution capacity and locational requirements must be achieved in aggregate for the resources included.
- Projects must be integrated. SDG&E will contract with one counterparty, one performance guarantee, one set of defaults, etc. for each circuit. SDG&E will not sign one contract with company X for a solar facilities and totally separate/unlinked contract with company Y for an energy storage facility both on one circuit (SDG&E does not consider such a situation as an ‘integrated project’ for these purposes).
- Respondents must fill out separate offer forms for each offer variation.

RFO Offer Documents Required

- 1) **Offer Form** – Respondents may provide offers for circuit 295, 298 and / or 597. Respondents should structure their offer and pricing such that SDG&E may choose to contract for deliveries on one, two or all three circuits. Respondents should fill out the offer form associated with their product / resource type (EE, DR, Energy Storage, Renewables, or DG). If a Respondent is providing an offer for multiple product types (e.g.: Renewables and Energy Storage), both offer forms should be completed with sufficient comments provided in the narrative spaces provided to allow SDG&E to understand the nature of the offer.
- 2) **Credit Application** – The Respondent is required to complete, execute and submit the RFO credit application as part of its offer. The application requests financial and other relevant information needed to demonstrate creditworthiness. If audited financial statements are not available then unsecured credit will not be granted and collateral will be required as described in Section 12.0.
- 3) **Redline of Term Sheet** – Respondents must download, populate, and redline the Term Sheet
- 4) **Electric Interconnection Information (as applicable)** – For offers that require an electrical interconnection, Respondents must provide an electronic copy of the proposed project's completed CAISO/WDAT or Rule 21 Interconnection Study if one exists.

The Credit Application and redlines to the Model agreement must be in Word or Word-compatible format (not in PDF). The Offer Form must be in Excel (not in PDF) and must not be altered in any way except for the designated field entries otherwise your offer may be non-conforming.



RFO Offer Documents Required

- 4) **Electric Interconnection Information (as applicable)** – For offers that require an electrical interconnection, Respondents must provide an electronic copy of the proposed project’s completed CAISO/WDAT or Rule 21 Interconnection Study if one exists.
- 5) **Resource Report (as applicable)** – Respondents that are providing renewable resources for valuation must submit a verifiable fuel resource plan (“solar resource” or “wind resource” etc.) for the duration of the contract based on historical actuals taken at the site with equipment maintenance and cleaning records, correlated to long term satellite data, with probabilities of different weather and productions scenarios for the site, range of equipment outputs, range of plant downtime and curtailments. For wind bids, you must submit the full AWS/GLGH or similar wind resource report.
- 6) **PVSyst Files (as applicable)** - For Solar bids, the full PVSyst file must be submitted by exporting the entire project that contains the prj, met, inv, pan, etc. files into a zip file and submitting that zip file through PowerAdvocate. The contract DC must match the PVsyst file and the output of the file must match the 8760 in the Offer Form. All future discussions about plant production will refer to this prj file, where this future prj file will govern. No changes to plant design that changes the PVSyst model will be allowed unless written approval is given by SDG&E.
- 7) **Measurement & Verification (M&V) plan (as applicable)** – For EE and DR offers, Respondents must provide a proposed M&V plan including a description of the calculation methodology.
- 8) **Workpaper(s) Associated with the Energy Savings per EE unit (as applicable)** – for EE offers, Respondents must provide workpaper(s) showing the energy savings associated with each proposed measure including MWh reduction per EE unit and the unit’s load profile. The workpapers must include details of the energy savings calculations. There is not a ‘standard’ workpaper, and Respondents may provide any excel file(s) necessary to allow SDG&E to understand the calculations included in the offer and may reference the DEER database of EE resources.
The Credit Application and redlines to the Model agreement must be in Word or Word-compatible format (not in PDF).

Websites and Offer Form Walk Through

- RFO website is <https://www.sdge.com/2017DRPDemoProjCRFO>
- Offers must be submitted through PowerAdvocate.com

PowerAdvocate Registration and Logging On

Ways to Register:

1. Receive an invitational email from SDG&E followed by a link to access PowerAdvocate®
2. Register as a first-time user on www.PowerAdvocate.com
 - Request for access using the Referral Information

Referral Information

Are you registering for a specific Event: * Yes No, I would simply like to register.

Who referred you to this Event: *

Name of that individual's company: *

Name or description of the Event: *

* Required Field

3. Request for access using the PowerAdvocate® link provided in the RFO documents <https://www.poweradvocate.com/pR.do?okey=68461&pubEvent=true>

Common Mistakes to avoid

1. Missing documents

- Any of the required documents that are not submitted before the RFO closing date could be declared non-conforming

2. Modifying the Offer Form File

- 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

3. Common Typos

- Make sure that the Project Information form describes the technology as “Solar PV” if it is solar photovoltaics, “Wind “ if the project is wind, etc. For projects that are a combination of technologies, enter “Hybrid”
- Offer form entries that are inconsistent with the units shown at the top of the pricing form column may be evaluated as is. For example: \$/MWh vs. cents/kWh
- 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 10 year terms that only have 7 years of pricing and deliveries, or any other mismatch that is not explained in the offer form, may be declared non-conforming and rejected

4. Making the utility fill out your bid form

- Creating ambiguities in a pricing form that forces the utility to “fill out” critical sections, either as additions or corrections, is not only a time-consuming process that can lead to inaccuracies, but can also be construed as special treatment of bidders, creating conflict of interest and jeopardizing the integrity of the RFO process

10 Minute Break
(time permitting)

RFO Evaluation Overview

Offer Evaluation – Quantitative Considerations

- SDG&E is procuring distribution capacity only. Attributes beyond distribution capacity will receive qualitative consideration; however, SDG&E intends to only procure (and therefore pay for) distribution capacity.
- An offer's value to customers is calculated by comparing the NPV of the capacity costs in the offer to the NPV of the distribution capacity deferral. The distribution capacity deferral value is determined by calculating the difference between SDG&E's revenue requirement for the 'status quo' distribution upgrade (or build out) and the deferred revenue requirement of the status quo upgrade. The deferral period is based on the offer's contract term, but in no case, will exceed 10 years nor be calculated beyond year-end, 2026.
- Therefore, capacity deferral value for all product types will be the same and evaluation of products will be technology neutral.
- For resources that require grid interconnection, upgrade costs that solely benefit the project and that are paid for by the Respondent (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 all customers will be considered in the quantitative evaluation of the offer (Network Upgrade Costs).

Offer Evaluation – Qualitative Considerations

- Qualitative factors and benefits will be used to determine which projects are the “Best Fit” for SDG&E’s customers. SDG&E may use these factors to determine advancement onto the short list
 - A. Project Viability
 - B. Adherence to Term Sheet Terms and Conditions
 - C. Supplier Diversity
 - D. Load Order Ranking
 - E. Voltage and other power quality services
 - F. Equipment Life Extension
 - G. Societal Net Benefits
 - H. Portfolio Fit
 - I. Other factors may include, but are not be limited to, counterparty concentration, site diversity, technology / end-use diversity, market transformation and if the resource can help SDG&E achieve multiple mandates.

Term Sheet / Pro Forma Overview

Ted Roberts
Origination Manager

SDG&E Distribution Capacity Solicitation Term Sheet

Term sheet is for discussion purposes only

1.	Project	<i>[Seller to insert description of the specific distributed energy resource or combination of integrated distributed energy resources, including all generation intertie facilities.]</i>
2.	Transaction	<i>[counterparty name]</i> (“Seller”) shall sell and deliver, and SDG&E shall purchase and receive, the Product at the Contract Capacity, as listed in Section 4 below, from the Project. Seller may sell other products, including Product in excess of the Contract Capacity, to third parties or into the applicable market. Seller shall receive and retain any revenues from the sale of other products.
3.	Product	The Project’s ability to provide distribution level capacity by decreasing net load through [decreasing electrical consumption] or [increasing generation], to [insert purpose, i.e. reduce thermal load].
4.	Contract Capacity	Distribution capacity: <i>[X]</i> MW <i>[Seller to designate, at a minimum, an amount equal to the requirements in Appendix B of the RFO]</i>
5.	Contract Price	Capacity Rate = <i>[\$[X]/day [Seller to designate]</i>
6.	Operating Restrictions:	The Operating Restrictions are <i>[Seller to designate]</i>
7.	Scheduling/Dispatch	<i>[Seller to insert any limits on scheduling and dispatch (i.e. energy efficiency projects are not dispatched or any limitations on real-time dispatch)]</i>

SDG&E Distribution Capacity Solicitation Term Sheet

8.	Communications Systems and Equipment	<p>Seller shall install communications systems and equipment for the Project to enable Buyer to remotely monitor the status of the Project at all times during the Delivery Term on an aggregate and individual unit basis, and which permits Buyer to have real time information access to the operations of the Project, including the ability to measure the real-time load decrease and/or increase.</p> <p>During the Delivery Term, Buyer may implement energy resource management systems, allowing greater access to real-time monitoring of Distributed Energy Resources (DER), consistent with interconnection facilities requirements. If such system is implemented, Seller agrees to implement new or upgraded equipment to the Project to allow for such DER monitoring.</p>
9.	Reliability/Performance Guarantees	<p>Reliability Guarantees: <i>[Seller to insert proposal to ensure resource reliability (e.g. immediate load shedding in case generating facility does not generate) so that the Project meets the Minimum Availability in Section 14 of this Term Sheet].</i></p> <p>Performance Guarantees: <i>[Seller to insert performance guarantees, such as liquidated damages for failing to meet a dispatch or minimum monthly capacity.]</i></p> <p>NOTE: Reliability terms are paramount to any resulting agreements. During the Delivery Term, SDG&E expects performance de-rates of no more than 1 day annually for Deferral Period Windows (hours/months) and no more than one dispatch failure over the life of the contract for the Exceptional Dispatch Windows, as set forth in Section 14 of this Term Sheet (together, identified elsewhere in this Term Sheet as the Minimum Availability of the Project).</p>

SDG&E Distribution Capacity Solicitation Term Sheet

10.	Operational Control	Notwithstanding Seller's obligations to deliver the Product, Seller will have operational control of the Project and be responsible for operation and maintenance of the Project. Buyer will not bear any costs related to ownership, operation, scheduling, dispatch, or maintenance of the Project.
11.	Project Site and Customers	<p>Seller shall execute all necessary forms, documentation, and agreements in order to secure all Sites and/or Customers (as applicable) necessary to deliver Product to Buyer. The terms and conditions of the agreements Seller has for the Site and/or with Customers are independent of Buyer, and Buyer shall not have any responsibility or incur any liability pursuant to such agreements.</p> <p><i>[INSERT customer requirements (i.e. updates to customers signed up for EE program each month)]</i></p>
12.	Interconnection	<p>The Project is interconnected to circuits or loads or associated with load facilities that are electrically interconnected to circuits in the area of San Marcos, California, which are identified in the RFO Protocol. <i>[Seller to insert specific description of proposed interconnection arrangement]</i></p> <p>Seller shall be responsible for all delays, costs and expenses associated with such interconnection.</p>
13.	Initial Delivery Date (IDD)	<p><i>[Seller to designate a date defined in the RFO Protocol]</i></p> <p>Failure to meet the Initial Delivery Date will be an Event of Default.</p>

SDG&E Distribution Capacity Solicitation Term Sheet

14.	Delivery Term/Available Periods	<p>The Delivery Term will be <i>[XX] [Seller to designate 5 to 10]</i> years from the Initial Delivery Date.</p> <p>Available Periods for dispatch/operation (which shall be the Minimum Availability required of the Project):</p> <ul style="list-style-type: none">• <u>Deferral Period Windows</u>: the project shall be available during June through October, Monday through Sunday and for the hours set forth annually in Appendix B of the RFO Protocol.• <u>Exceptional Dispatch Windows</u>: During all months, the maximum MW amount shown in Appendix B of the RFO Protocol is required to be available once per year for a two-hour dispatch.
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SDG&E Distribution Capacity Solicitation Term Sheet

15.	Critical Milestones	<p>Seller shall cause the development and construction of the Project to meet each of the following (“Critical Milestones”) by the date set forth: <i>[Seller to designate milestone dates]</i></p> <ul style="list-style-type: none">(i) Filing application for Required Permits: <i>[Insert Date]</i>(i) Major equipment ordered: <i>[Insert Date]</i>(i) <i>[DR/EE: 50% of Customer acquisitions: [Insert Date]]</i>(i) <i>[DR/EE: 75% of Customer acquisitions: [Insert Date]]</i>(i) <i>[DR/EE: 100% of Customer acquisitions: [Insert Date]]</i>(i) Obtain site control: <i>[Insert Date]</i>(i) Execution of [interconnection agreement: <i>[Insert Date]</i>(i) Construction start: <i>[Insert Date]</i>(i) Completion of Interconnection Facilities: <i>[Insert Date]</i>(i) Initial Performance Test: <i>[Seller to designate date that is [X] months prior to IDD.]</i>(i) <i>[Other Critical Milestones to be inserted, as necessary, based on the specific distributed energy resource(s)]</i>
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SDG&E Distribution Capacity Solicitation Term Sheet

16.	Compensation/ Payments	Buyer shall pay to Seller a monthly payment for the Product: <i>[Insert payment based on achieving minimum capacity requirement]</i>
17.	Measurement and Verification	<p>The amount of Product the Project delivers will be measured based on the Project's technology, and will include for:</p> <ul style="list-style-type: none"> • <u>Energy storage</u>: revenue-quality interval meter • <u>Demand response</u>: Parties' agreed-upon baseline methodologies that incorporates metering against a baseline <i>[Seller to insert measurement and verification proposal]</i>; • <u>Distributed generation</u>: revenue-quality interval meter for generation, agreed upon forecast methodology for curtailable generation; or • <u>Energy efficiency or permanent load shift</u>: Parties' agreed upon methodology that incorporates metering against a baseline
18.	Performance Testing	<p>The Parties will develop test procedures, testing dates and parameters for the Critical Milestone schedule (Performance Test).</p> <p>Prior to the Initial Delivery Date, Seller will perform an Initial Performance Test to demonstrate to Buyer that the Project is capable of delivering Product at the Contract Capacity for the first Contract Year. The Initial Performance Test may need to take into account (1) that such Initial Performance Test is occurring outside a Delivery Month and (2) the Project's ability to test alignment with the Operating Parameters given the timing and duration of the Initial Performance Test. The Initial Delivery Date will occur if Seller reliably demonstrates the Project's delivery of Product at 100% of the Contract Capacity.</p>

SDG&E Distribution Capacity Solicitation Term Sheet

16.	Compensation/ Payments	Buyer shall pay to Seller a monthly payment for the Product: <i>[Insert payment based on achieving minimum capacity requirement]</i>
17.	Measurement and Verification	<p>The amount of Product the Project delivers will be measured based on the Project's technology, and will include for:</p> <ul style="list-style-type: none"> • <u>Energy storage</u>: revenue-quality interval meter • <u>Demand response</u>: Parties' agreed-upon baseline methodologies that incorporates metering against a baseline <i>[Seller to insert measurement and verification proposal]</i>; • <u>Distributed generation</u>: revenue-quality interval meter for generation, agreed upon forecast methodology for curtailable generation; or • <u>Energy efficiency or permanent load shift</u>: Parties' agreed upon methodology that incorporates metering against a baseline
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SDG&E Distribution Capacity Solicitation Term Sheet

19.	Seller Performance Assurance	<p>Seller shall deliver to Buyer and maintain Performance Assurance in a form acceptable to Buyer to secure its obligations under the agreement, as follows:</p> <ul style="list-style-type: none"> (i) Project Development Security. Seller shall post Project Development Security in the form of cash or letter of credit, equal to \$/[See RFO]. (ii) Construction Period Security. Seller shall post Construction Period Security in the form of cash or letter of credit equal to \$/[See RFO] until the Delivery Term Security is due. (iii) Prior to IDD, Seller shall post Delivery Term Security in the form of cash or letter of credit, in an amount equal to \$/[See RFO] until all amounts are indefeasibly paid in full. Seller may apply the Project Development Security toward the Delivery Term Security. <p>NOTE: Such Performance Assurance shall not be a limitation of damages.</p>
20.	Events of Default	<ul style="list-style-type: none"> (i) Failure to meet a Critical Milestone; (ii) Failure to meet Initial Delivery Date; (iii) Failure to meet the Minimum Availability in Section 14 of this Term Sheet, including failure to meet any Reliability Guarantee defined in Section 9 of this Term Sheet (e.g. customer load dropping immediately if generating resource is unavailable); (iv) Results of a Performance Test show that the Project provides Product at less than 100% of the Contract Capacity; (v) Failure to meet reliability guarantee (e.g. customer load dropping immediately if generating resource is unavailable); (vi) Failure to timely provide or maintain appropriate Performance Assurance; or (vii) <i>[Other events of default to be inserted, as necessary, based on the specific distributed energy resource(s)]</i>

SDG&E Distribution Capacity Solicitation Term Sheet

21.	Force Majeure	<i>[Seller to insert aggregate FM delays before termination during construction and delivery term.]</i>
22.	Termination Payment	Settlement Amount to Non-Defaulting Party.
23.	Safety	Seller will be required to meet certain safety standards with respect to the Project. Seller's safety obligations will reflect the agreement and Project structure, technology, and Product along with Seller's commercial relationship with the Site(s) and Customers.
24.	CPUC Approval	If CPUC Approval has not occurred on or before <i>[XXX] [Seller to insert]</i> days from the date on which Buyer files the agreement with the CPUC seeking CPUC Approval, then either Party may terminate the agreement. "CPUC Approval" means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to either of the Parties, pursuant to which the CPUC approves of this agreement and any requested relief in its entirety.
25.	Conditions Precedent	<i>[Seller to insert, including financing, permits, and network upgrade costs for interconnection exceeding [INSERT CAP]].</i>
26.	Confidentiality	Customary provisions
27.	Dispute Resolution	Binding Arbitration in San Diego County, California
28.	Governing Law/Venue	California/Exclusively in the Court located in the County of San Diego, California
29.	Insurance	<i>[Seller to insert proposed customary and non-customary insurance solutions Seller deems appropriate based on the Product being bid]</i>

Risk Management

Mason Withers
Quantitative Risk & Controls Manager

Big picture

- Determine risk of project
- SDGE reliability
- Fire Safety

Risk

- Electricity service reliability
 - Value of Service
 - Claim
- Equipment Damage
- Fire Safety

SDG&E Credit Application



CREDIT APPLICATION FOR 2017 DPR DEMONSTRATION PROJECT “C” RFO

General Information

Legal Company Name _____

Doing Business As (DBA) _____

Credit Support Provider (Legal company name of Guarantor) _____

Street Address _____

City _____

State _____

Zip Code _____

Federal Tax ID # _____

Organized & existing under the laws of: (State) _____ Year Incorporated/Established _____

Credit Issues Contact:

Name _____ Title _____ Phone _____ FAX _____ E-Mail _____

Please provide the following information with this application when applying for unsecured credit:

- Most recent three (3) fiscal years', CPA-audited, financial statements including notes to the financial statements.
- When using a credit support provider, include most recent three (3) fiscal years', CPA-audited, financial statements of the credit support provider.
- No need to attach financial statements when they are available in the web; provide address: _____
- When three (3) years of audited financial statements are not included or web address was not provided, it will be interpreted as Respondent not applying for unsecured credit. In this case, Security Collateral will be collected by SDG&E in an amount to be determined.



SDG&E Credit Application, continued

General Certification

The undersigned declares that the statements set forth herein are true and complete. The undersigned on behalf of Applicant hereby authorizes Utility to obtain verification from any source named herein as to the accuracy of the information provided and to obtain credit information regarding Applicant as part of its approval process.

The undersigned on behalf of Applicant hereby releases, discharges, exonerates and covenants not to sue any person, company or governmental organization providing information to Utility in connection with its approval process, any recipient of such information conducting a review of such information in connection with this application, including Utility or its representatives, and its officers, agents, employees and independent contractors, from any and all liability of every nature and kind arising from or in connection with the furnishing, receipt and review of such information.

Official Signature: _____
(Must be signed by an officer of the Applicant)

Typed Name: _____ Title: _____ Dated: _____

Cost of Credit

Please provide the cost of credit per \$100,000 of requested security¹: _____



General Q&A Session

Wholesale Distribution Open Access Tariff (WDAT) and Rule 21 Generator Interconnection Processes

Michael Turner | Customer Generation

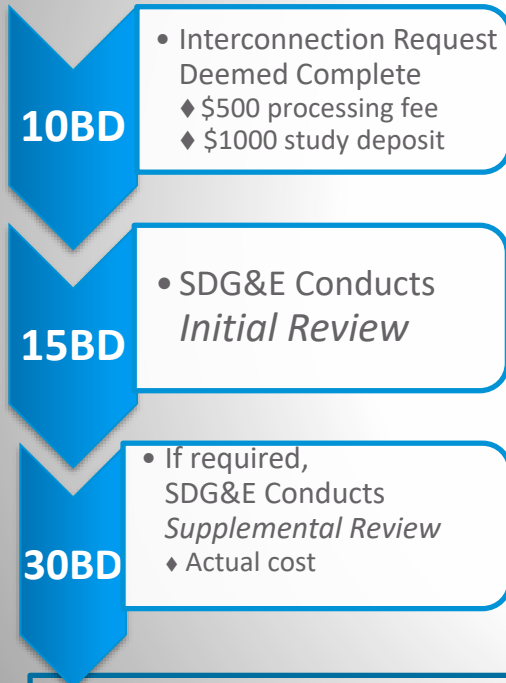
Safety

- Safety is a core value at SDG&E.
- The generator interconnection studies are intended to ensure no adverse impacts to the safety and reliability of the electric grid.
- Generator interconnection customers are expected to comply with all applicable federal, state, and local laws, ordinances and regulations, and to ensure the safety of their employees, SDG&E employees, and the public.

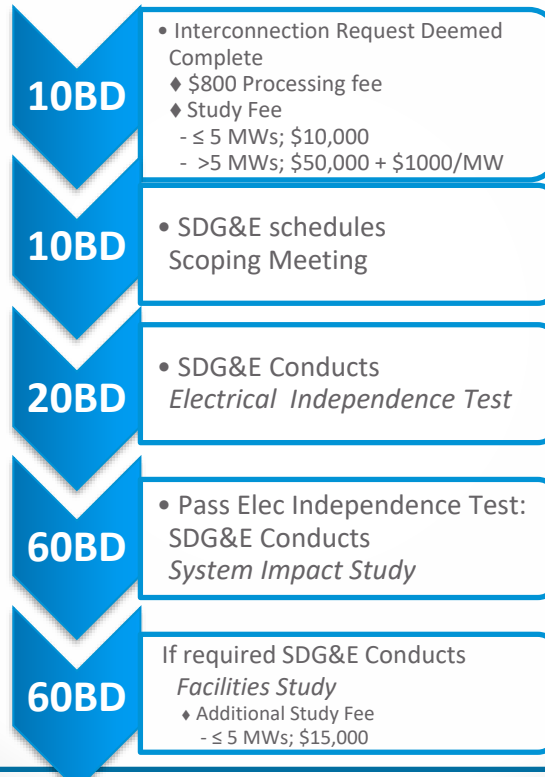
WDAT Flow Charts & Timing

Fast Track

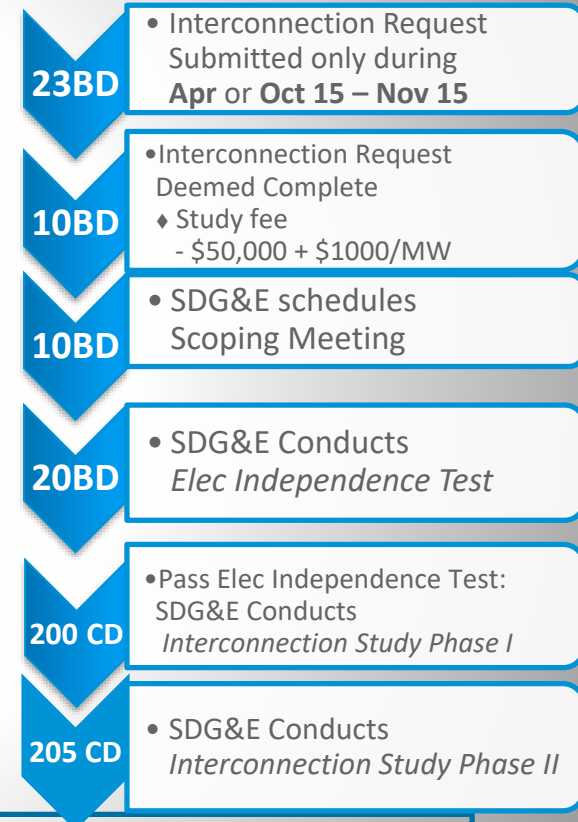
2 MW or less: any location
3 MW or less: 2.5 mi from sub and feeder conductor



Independent Study Process (Energy only)



Cluster Study Process (Energy only)



Interconnection Agreement

WDAT Application Form and Location

WDAT Application Location - <http://sdge.com/wdat>
[Interconnection Request in Appendix 1 is on pages 329-345](#)

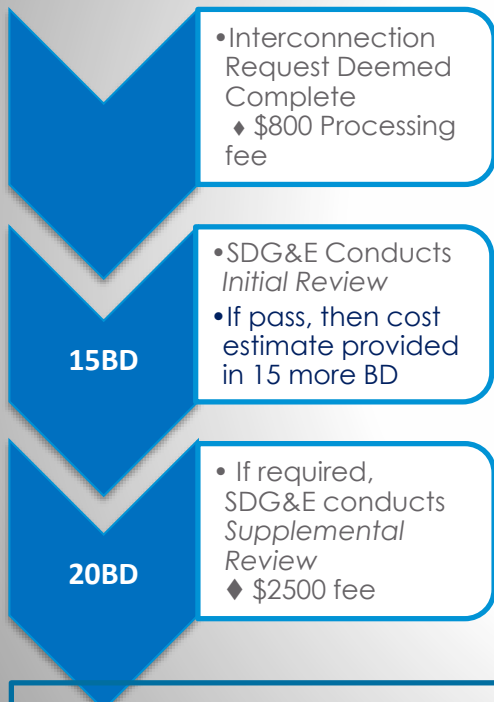
WDAT Interconnection Package submitted to:
WDATSGIPAPPLICATIONS@semprautilities.com

Or mail hardcopy application package to:
Customer Generation - CP52F
San Diego Gas & Electric
8316 Century Park Court
San Diego, CA 92123-1582

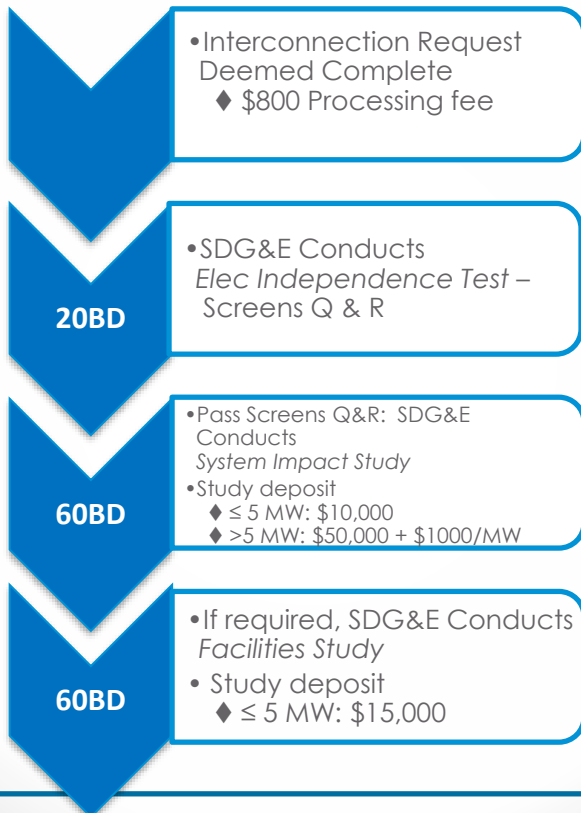
Instructions will be provided where to
send application fee

Rule 21 Study Process Timelines

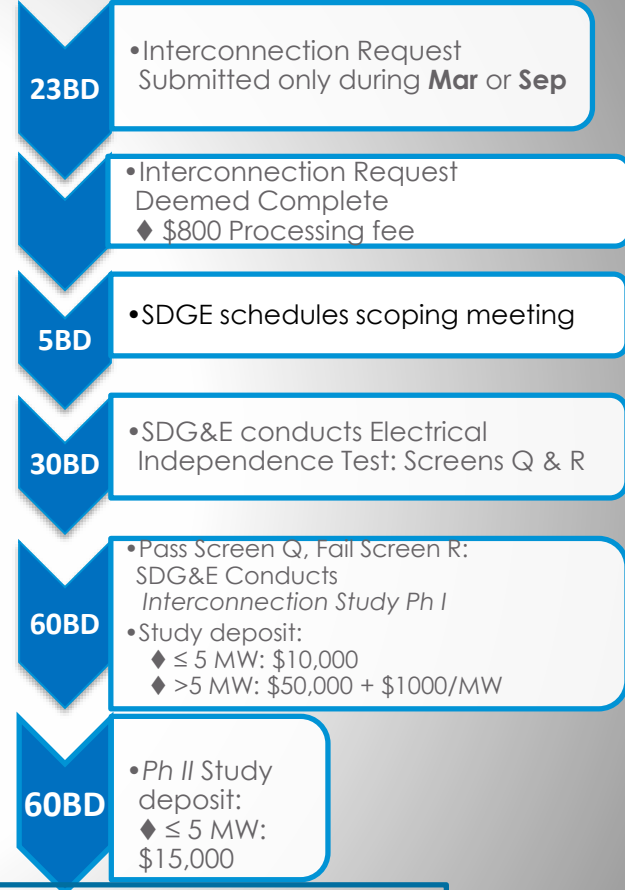
Fast Track Process 1.5 MW or Less or Any Size Non-exporting



Independent Study Process



Distribution Group Study Process



Interconnection Agreement



Rule 21 Application Form and Location

Rule 21 Application Location:

http://regarchive.sdge.com/tm2/pdf/ELEC_ELEC-SF_142-05203.pdf

WDAT Interconnection Package submitted to:

DGAPPLICATIONS@semprautilities.com

Or mail hardcopy application package to:

Customer Generation - CP52F

San Diego Gas & Electric

8316 Century Park Court

San Diego, CA 92123-1582

Instructions will be provided where to send application fee

SDG&E Distribution Interconnection Process

Additional Resources available at www.sdge.com

Go to: CUSTOMER GENERATION in lower right corner

- Pre-Application Report (\$300)
- SDG&E WDAT and Rule 21 Interconnection Queue
- WDAT tariff
- Rule 21 tariff
- Interconnection Interactive Map (shows line capacity and available capacity after existing and queued generators)
- Generator Interconnection Handbook

SDG&E Distribution Interconnection Process

Questions:

Ken Parks - Customer Generation Manager

kparks@semprautilities.com

858-636-5581

Mike Turner - Principal Engineer

mturner@semprautilities.com

858-654-8326

***Please submit your questions by
November 7, 2017***

to

DRPDemoProjCRFO@semprautilities.com

Please cc the IE at:

Alan Taylor – AlanTaylor@sedwayconsulting.com