

SCE Grid Interconnection Frequently Asked Questions – SCE’s WDAT

Frequently Asked Questions for SCE’s Wholesale Generation Interconnection

(Non Rule 21, Non-CAISO)

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Southern California Edison (SCE) offers these guidelines to help you understand our Generator Interconnection Procedures. However, in the case of discrepancies, SCE’s tariffs and interconnection documents prevail.

Note: The answers shown below were developed from the information found in the SCE’S Wholesale Access Distribution Tariff (WDAT) located at <http://on.sce.com/GridInterconnections>

A. Getting Started

1. I am a new customer with a proposed generation project. What do I need to do?

Response

To get started and learn more about the different options available for interconnecting a generation project, please visit the “Generation Project Types” heading on our [Grid Interconnections](#) webpage. The following links are available:

- [Generating Power for Sales](#) (start here if you plan to export your power for sale)
- [Programs for Self-Generation at Home or Business](#) (start here if you plan to generate power for use at the generating facility site)
- [Backup Systems](#) (start here if you are installing a backup system)

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2. Should a developer contact the CAISO or SCE for wholesale generation interconnections?

Response

If you are unsure about the right process to interconnect, please forward your questions to InterconnectionQA@sce.com. Please include your proposed project size (in MW) and your proposed Point of Interconnection. Alternatively, you may call the SCE Grid Interconnection helpline at: (626) 302-3688.

3. Before completing and submitting an application, how would I get some basic information about the viability of developing a generation facility at a specified site, and where to interconnect?

Response

Technical information about your project will be evaluated during the interconnection process. For some preliminary data, please see the [Distributed Energy Resource Interconnection Map \(DERiM\)](#) along with the [DERiM User Guide](#)

***Disclaimer:** While Southern California Edison makes every effort to ensure the accuracy of DERiM, the data provided is for information only. Southern California Edison makes no guarantee, expressly or implied, for the outcome of an interconnection request.*

You can access these maps by navigating through the following Grid Interconnection page shown below:

www.sce.com/gridinterconnection

- Scroll down the page to “ADDITIONAL INFORMATION”, then select [Distributed Energy Resource Interconnection Map \(DERiM\)](#)
- For further information on the data provided in DERiM, you may also select [DERiM User Guide](#).

Additional information may be provided by requesting an optional “Pre-Application Report”. This is an optional report that is described in Section 3.1 of the WDAT GIP*. A copy of the tariff can be found at the link shown under Question 1. The WDAT Pre-Application Report Request can be found at the following link:

<http://on.sce.com/GridInterconnections>

- Scroll down the page to “Rules and Regulation”, then click on [Wholesale Distribution Access Tariff \(WDAT\)](#)
- Scroll down the webpage, then select “WDAT Optional Pre-Application Report Request”. That folder will provide you with additional information about a Pre-Application Report Request.

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- The WDAT Optional Pre-Application Report Request, containing fee payment instructions, is available at the following link: [WDAT Optional Pre-Application Report Request](#)

*Note: A Pre-Application Report Request option is also available under the Rule 21 Tariff. This FAQ is limited to the WDAT.

4. What is distribution service? Will my project need it? If so, when will I need to submit a distribution service request? How much is the deposit?

Response

Projects connecting to SCE’s distribution system (either through the WDAT or the Rule 21), are required to obtain “distribution service” with SCE. “Distribution service” allows the customer to be able to use SCE’s distribution system to “transport” their energy from the point of interconnection with SCE’s electric system to the CAISO system (where most power sales are expected to be delivered and settled in accordance with the CAISO market rules).

- Please submit a [Distribution Service Request Form](#) and distribution service deposit “as far as possible in advance of the month in which service is to commence.” ([section 15.2, WDAT](#))
- The Distribution Service Deposit is \$2.00 per anticipated average monthly kilowatts of Generation or Wholesale Distribution Load.
 - To calculate the anticipated average monthly kW of Generation, take your generating facility size in kW, and multiply it times the capacity factor for your generator.

5. What’s the difference between applying under the WDAT vs. Rule 21 Tariff? What’s the right tariff for my project?

Response

The WDAT is a FERC jurisdictional tariff and Rule 21 is under the CPUC jurisdiction. There are some differences in the study processes under the two tariffs. Please refer to SCE’s WDAT and SCE’s Rule 21 for each tariff’s applicability.

Prior to applying for interconnection service under any of the tariffs above, consult with the entity you are negotiating a Power Purchase Agreement (PPA) to identify any requirements that may affect the selection of the interconnection process.

For more information, please visit the [Generating Power for Sales](#) section of our [website](#).

6. What documents must be submitted with a WDAT Interconnection Request?

Response

In order to begin processing your WDAT Interconnection Request, we need the following:

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- Application form: [Appendix 1 - Interconnection Request for a Generating Facility](#).
- A single-line drawing; [sample drawings](#) are available
- Site/plot plan drawing
- Confirmation of payment of the application fee or deposit
- Proof of [Site Exclusivity](#)
- Diagrams, manufacturer’s data, and written descriptions of the generating facilities

Please refer to the WDAT for the specific application forms and requirements at the following links:

[WDAT Interconnection Request Application Form](#)
[Wholesale Distribution Service Request Form \(Application\)](#)

7. Is there a limit on the number of Interconnection Requests submitted by the same entity?

Response

No, there is no limit on the number of interconnection requests an entity can submit.

8. When can we submit an Interconnection Request?

Response

For projects submitting an interconnection request under the Cluster Study Process, there is one Cluster Application Window per year (April 1 to April 30).

Projects submitting an interconnection request under the Fast Track or Independent Study Process can do so at any time throughout the year.

For additional requirements for both WDAT and Rule 21, you can access the SCE Grid Interconnections web page located at:

<http://on.sce.com/GridInterconnections>

9. How do I know what’s the appropriate size my project should be for a particular location?

Response

It is the customer’s decision to propose the size of the generating facility. SCE will conduct studies based on the technical specifications provided in your Interconnection Request. The studies will identify any facilities necessary for such a project to interconnect to SCE’s distribution system. Please refer to Question 3 above for further details about maps and optional Pre-Application reports.

10. Can you provide more information about upgrade costs?

Response

For upgrade costs related to WDAT projects, below is the link to SCE’s unit cost guide on the CAISO website:

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<http://www.caiso.com/planning/Pages/GeneratorInterconnection/GeneratorInterconnectionApplicationProcess/Default.aspx>

- Please scroll down to the bottom of the page to find links to SCE and the other CAISO participants 2014 and 2015 unit cost guides.

11. I'm trying to find a qualified engineer to fill out the Interconnection Request (IR) and create the single line. Can SCE provide a referral to companies that understand this process?

Response

SCE is not able to provide references for qualified professional engineering firms.

12. Where do I find more general information about meters or switchboards?

Response

The Electrical Service Requirements (ESR) Handbook includes information about meters and switchboards. The ESR is located at SCE's Grid Interconnection page by completing the following steps:

Go to: <http://on.sce.com/GridInterconnections>

- Click on the "Wholesale Distribution Access Tariff (WDAT)" link toward the center of the page
- Click on "Information Available Prior to Requesting for Interconnection under SCE's WDAT" to expand it
- Click on "Electrical Service Requirements (ESR-PDF) to download and open the file.

In many cases, your local Service Planning Office may be of further assistance. A list of locations and phone numbers is available on Table 1-1 of the ESR.

B. Interconnection Request

1. When will we know where we are positioned in the interconnection queue after applying?

Response

The queue position date for each project (which determines its cost responsibility for upgrades) is established once the Interconnection Request is deemed complete (in accordance with the requirements of the WDAT).

SCE publishes the interconnection queue (updated monthly) for public viewing at the following link:

http://www.sce.com/nrc/aboutsce/regulatory/openaccess/wdat/wdat_queue.xls

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C. Fast Track or Independent Study Process (ISP), review for eligibility

1. What is a Fast Track?

Response

The “Fast Track” process is an expedited process to evaluate a request to interconnect eligible new generation to SCE’s electric system. The Fast Track process is intended for projects up to 5 MW for interconnection requests under SCE’s WDAT. The application can be completed at any time of the year and allows an *eligible* facility to bypass some interconnection studies *if* it meets a series of “screens”.

The Fast Track Process is intended for projects that can be interconnected without system upgrades: it allows for a faster review of an interconnection request against a set of predefined screens to determine whether the project can interconnect without the need for detailed engineering studies or upgrades to SCE’s electric system. The Fast Track Process is described thoroughly in Section 6 of the GIP.

To learn more about SCE’s WDAT Fast Track process please visit:

<https://www.sce.com/wps/portal/home/business/generating-your-own-power/Grid-Interconnections/Wholesale-Distribution-Access-Tariff/>

- Scroll down the page and select “Fast Track Process Under The GIP”

2. What are the Fast Track eligibility requirements?

Response

Fast Track eligibility is determined based upon the generator type, the size of the generator, voltage of the line and the location of and the type of line at the Point of Interconnection.

Fast Track eligibility requirements are described in Section 6.1.1 of the GIP. Please see the following link for more information on the Fast Track process:

To learn more about SCE’s WDAT Fast Track process please visit:

<https://www.sce.com/wps/portal/home/business/generating-your-own-power/Grid-Interconnections/Wholesale-Distribution-Access-Tariff/>

- Scroll down and select “Fast Track Process Under the GIP”

3. What is the difference between an Initial Review and Supplemental Review? Does every project need both?

The Initial Review and Supplemental Review are both parts of the Fast Track process. All Fast Track Applications will undergo the Initial Review process, which essentially is a high-level assessment of whether or not the project may cause any potential issues to the SCE’s

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existing system (with the existing queue of generators). Initial Review is 10 screens. When the engineers have completed the review, the results will be forwarded to you.

If required, your project may need a Supplemental Review. A Supplemental Review includes 3 additional screens. These screens may indicate that your project may be interconnected under the Fast Track projects when only minor modifications are needed. The Supplemental Review could also reveal that additional study is needed. It takes 20 business days after you provide a \$2500 deposit. Projects that successfully pass initial review screens will be allowed to interconnect without a supplemental review.

Projects that pass the supplemental review will be allowed to interconnect without further engineering studies. Failure to pass Fast Track evaluation (after the initial review and the supplemental review have been performed) means that the project needs further review (or study) before it can interconnect to SCE’s electric system. It does not mean that the project cannot be interconnected.

To learn more about SCE’S WDAT Fast Track process please visit:

[Wholesale Distribution Access Tariff \(WDAT\)](#)

- Then scroll down and “Fast Track Process Under The GIP”

4. How can a project qualify for processing under the Independent Study Process?

Response

As described in the WDAT (GIP, Section 1, Objectives and Applicability), the Independent Study Process (ISP) is available to any Interconnection Customer that is either (1) proposing to interconnect a proposed generating facility with the SCE's Distribution System or is seeking to increase the capacity of a generating facility that has achieved Commercial Operation, and (2) that is electrically independent of Interconnection Requests from any earlier-queued Generating Facilities. The ISP process, study deposits, and requirements are described in Section 5, and specific criteria for ISP eligibility and electrical independence test are described in Sections 5.4 and 5.5 of the WDAT GIP.

After a project has requested to interconnect to SCE’s distribution system through the ISP, it must pass the Electrical Independence Test as described in Section 5.5 of the WDAT to proceed with further engineering studies. An ISP project has no size limitations, but its proposed size may affect the results of the Electrical Independence Test.

For further information, please click on the following link:

<https://www.sce.com/wps/portal/home/business/generating-your-own-power/Grid-Interconnections/Wholesale-Distribution-Access-Tariff/>

- Then scroll down and select the “Independent Study Process under the GIP”

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D. Study Process

1. Is there any way for a project that uses the Fast Track Process to attain Full or Partial Capacity Deliverability Status?

Response

Yes. Fast Track projects are initially studied as “Energy-Only” projects. A Generating Facility previously studied as Energy-Only may submit a request for an Annual Full Capacity Deliverability Study under WDAT GIP, Section 4.7.2. The assessment will determine whether it can be designated for Full or Partial Deliverability Status using expected upgrades to the transmission capacity following a Phase II study.

In addition, the CAISO conducts the Distributed Generation Deliverability process to allocate deliverability currently supported by existing transmission capacity. Please refer to the CAISO website to learn more about this process. Please visit the following site for more information:

<https://www.sce.com/wps/portal/home/business/generating-your-own-power/Grid-Interconnections/The-California-Independent-System-Operator--CAISO----Wholesale-Markets>

2. Does SCE have to perform the interconnection studies or can the developer (or its contractor) perform the interconnection studies and have SCE review and approve the results?

Response

The WDAT GIP provides that SCE performs all interconnection studies.

3. In instances where more than one project affects the grid in such a way that Network Upgrades or Distribution Upgrades are required, how are the costs allocated?

Response

Cost allocation is described in Attachment I to the WDAT (GIP).

Generally, for projects studied together under the Cluster Study Process:

- Reliability Network Upgrades costs are allocated per MW for all generation in the cluster that requires the upgrades.
- Delivery Network Upgrades costs are allocated based on the flow impact of each generating project requesting deliverability.
- Distribution upgrades costs are allocated pro-rata per MW.

The responsibility to finance Network Upgrades is subject to a cap. Please refer to the WDAT for additional information.

For projects studied individually, they are 100% responsible for the costs they trigger.

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Generally, Interconnection Facilities costs are allocated 100% to the generating facility that requires the facilities.

4. Is there an additional interconnection study deposit required for Phase II Interconnection Study of the Cluster Study Process?

Response

For projects studied under the Cluster Study Process, there is a one-time study deposit made at the time the Interconnection Request is submitted. However, you will be responsible for the actual costs to perform these studies. If your study costs exceed your deposit, you will be billed for the difference following the completion of the studies.

5. Will the allocations increase over time if some developers in a cluster drop out once they see their upgrade allocations?

Response

Cost allocation as described in the GIP, section 4.5.4, the interconnection customer’s “maximum financial responsibility” is determined by the interconnection studies. The “maximum financial responsibility” is defined as the lower of the Phase I Interconnection Study or Phase II Interconnection Study costs allocated to each customer. Therefore, financial responsibility can go down in Phase II but cannot increase from Phase I. This is often referred to as the Phase I cost cap. The "maximum financial responsibility" cost allocation only applies to a project's Network Upgrades; Distribution Upgrades and Interconnection Facilities are based on actual costs.

In addition, section 5.9.6 of the GIP explains the maximum cost responsibility and may be helpful.

6. Is one of the results of the Cluster Study the granting of Full Capacity Deliverability Status for projects in that cluster?

Response

Yes, to the extent the customer originally requests Full Capacity or Partial Capacity Deliverability Status on its Interconnection Request, and that the CAISO determines that deliverability can be granted to that request.

7. Are there any additional requirements to proceed from Phase I to Phase II in the Cluster Study Process (i.e., what might stop a project getting into Phase II)?

Response

The requirements to proceed to a Phase II study are set forth in Section 4.6 and 4.8 of the WDAT GIP. These include: posting the required Interconnection Financial Security, and

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completing the data form (Attachment B to Appendix 3 of the WDAT GIP) prior to the commencement of the Phase II Interconnection Study.

E. Material Modification Assessment

1. Can I modify my Interconnection Request after I submit it?

Response

For projects that have submitted an interconnection request in the Cluster Study Process certain modifications may be allowed if agreed upon and acceptable to SCE and CAISO as applicable, and the Interconnection Customer. The tariff describes permitted modifications in GIP Section 4.5.7.2. Likewise modifications for projects requesting interconnection under the Independent Study Process may be allowed and must be agreed upon, as provided in GIP Section 5.8.1.6.

Please note that similar modifications are not permitted in Fast Track process under the WDAT (although some minor modifications may be permitted). In addition, Material Modifications are those modifications that have a material impact on the cost or timing of any Interconnection Request with a later queue priority date. If your proposed changes are considered to be a “Material Modification” you will be required to withdraw the modification or the interconnection request.

For additional details, please reference the WDAT, GIP, section 4.5.7.2.3 (for the Cluster Study Process) and section 5.8.1.6 (for the Independent Study Process).

F. Interconnection Agreement

1. At what point in time is the money spent on Network Upgrades refunded back to the entity that paid for them?

Response

Section 10.4 of the GIP describes the funding of Network Upgrades. Section 10.4.1.2 further describes the repayment to Interconnection Customer upon the Commercial Operation Date of the Generating Facility, in accordance with the methodology set forth in Article 11.4 of the GIA, for the Interconnection Customer’s contribution to the cost of (a) Reliability Network Upgrades up to a maximum of \$60,000 per MW of generating capacity as specified in the GIA, and (b) Local Delivery Network Upgrades, with some exceptions. The money collected from the customer for Network Upgrades refunds (plus interest) are typically made on a straight-line basis over the five years after achieving commercial operation. There may be some additional exceptions as outlined in the project’s Interconnection Agreement.

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2. Can I see a copy of the WDAT GIA?

Response

The pro forma GIA for the Cluster Study Process is found in [Appendix 5](#) to the WDAT GIP; the pro forma GIA for the Independent Study Process is found in [Appendix 6](#) to the WDAT GIP; and the pro forma GIA for the Fast Track Process is found in [Appendix 7](#) to the WDAT GIP. The appendices (which are blank) will be developed and completed after completion of the last study.

G. For Additional Assistance

1. Please utilize one of the three vehicles shown below to get your additional questions answered:

Email: InterconnectionQA@sce.com

Phone: (626) 302-3688

Mail: Grid Interconnection & Contract Development
Southern California Edison
2244 Walnut Grove Ave
PO Box 945
Rosemead, CA 91770