June 21, 2018

Advice Letter 3714-E

Russell G. Worden
Director, State Regulatory Operations
Southern California Edison Company
8631 Rush Street
Rosemead, CA 91770

SUBJECT: Southern California Edison Company’s Proposed Modifications to Electric Rule 21 to adopt an Expedited Interconnection Dispute Resolution process per Resolution ALF-347 and Assembly Bill 2861.

Dear Mr. Worden:

Advice Letter 3714-E is withdrawn as requested per your letter dated May 15, 2018.

Sincerely,

Edward Randolph
Director, Energy Division
May 15, 2018

Energy Division
Attn: Tariff Unit
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

Re: Withdrawal of Southern California Edison Company’s Advice 3714-E

Dear Energy Division Tariff Unit:

On December 11, 2017, Southern California Edison Company (SCE) filed Advice 3714-E requesting approval of the Proposed Modifications to Electric Tariff Rule 21 to adopt an Expedited Interconnection Dispute Resolution process per Resolution ALJ-347 and Assembly Bill 2861. Pursuant to conversations with the Energy Division, SCE is withdrawing this advice letter.

SCE submits this request for withdrawal in accordance with General Order 96-B, General Rule 5.3. SCE asks that a confirmation letter be returned regarding this withdrawal.

Should you have any questions, please contact me.

Sincerely,

/s/ Gary A. Stern
Gary A. Stern, Ph.D.

GAS:cm:cm

cc: Edward Randolph, Director, CPUC Energy Division
    Dorothy Duda, CPUC Energy Division
    General Order 96-B, R.11-09-011 and R.17-07-007 service lists
December 11, 2017

ADVICE 3714-E
(U 338-E)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA
ENERGY DIVISION

SUBJECT: Southern California Edison Company's Proposed Modifications to Electric Tariff Rule 21 to adopt an Expedited Interconnection Dispute Resolution process per Resolution ALJ-347 and Assembly Bill 2861

In compliance with the California Public Utilities Commission (CPUC or Commission) Resolution ALJ-347 (the Resolution),¹ Southern California Edison Company (SCE) hereby submits for filing the following changes to its tariffs. The revised tariff sheets are listed on Attachment A and are attached hereto.

PURPOSE

The purpose of this filing is to modify Electric Tariff Rule 21, Generating Facility Interconnections, to adopt the expedited interconnection dispute resolution process and provide a corresponding draft template pursuant to Exhibit A of ALJ-347 as authorized by Assembly Bill (AB) 2861.² The Resolution establishes an expedited dispute resolution process that will issue binding determinations to electric distribution grid interconnection disputes based on the recommendation of a technical panel within 60 days of the Commission receiving the Application regarding a particular dispute.

BACKGROUND

AB 2861, signed into law in September 2016, authorizes the CPUC to establish an expedited dispute resolution process that will issue binding determinations to electric distribution grid interconnection disputes based on the recommendations of a technical panel within 60 days of the Commission receiving the Application regarding a particular dispute. AB 2861 is intended to address the inadequacy of the existing interconnection

² AB 2861 “An act to add Section 769.5 to the Public Utilities Code, relating to electricity” http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB286.
dispute resolution process described in utility tariffs in Section K of Rule 21, which relies on protracted mediation and does not benefit from readily-leveraged technical expertise.

On October 12, 2017, the Commission issued the Resolution which orders that:

- The Expedited Interconnection Dispute Resolution Process set forth in Exhibit A is adopted.
- Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), and SCE must file Tier 2 advice letters to implement the changes to Tariff Rule 21 set forth in Exhibit A within 60 days of the effective date of this ALJ Resolution.
- As part of the Tier 2 advice letter required in Ordering Paragraph 2, PG&E, SDG&E, and SCE must include a draft template for applicants for the expedited process as described in Exhibit A at 9.
- Energy Division shall evaluate the performance of the Expedited Interconnection Dispute Resolution Process consistent with the evaluation framework described in Exhibit A, Section 3.
- PG&E, SDG&E, and SCE must support the Interconnection Discussion Forum through the in person attendance of at least one engineering representative from each utility at every quarterly meeting.
- The Executive Director shall take all necessary steps to provide resources to ensure that the Expedited Interconnection Dispute Resolution Process adopted may begin accepting applications no later than eight months from the effective date of this ALJ Resolution.

The Resolution notes specifically, that:

“To be eligible for the Expedited Process, an applicant must demonstrate they have made prior attempts to informally resolve the dispute with the utility using one of the following two procedures:

2. Expedited bilateral negotiations tracking the steps of Section K.2.a but with the following shortened deadline requirements: upon the applicant notifying the utility of the dispute, the utility shall have 10 business days to prepare its response instead of 21 calendar days, and 15 business days to meet to attempt to resolve the dispute instead of 45 calendar days.”

3 The Resolution was effective October 12, 2017.
PROPOSED TARIFF CHANGES

Consistent with the discussion above, SCE is proposing the following modifications to its Rule 21:4

Modification to Rule 21, Table of Contents Section K

SCE proposes to revise the following headings:

K.2 Informal Dispute Resolution Procedures
K.3 Expedited Interconnection Dispute Resolution Panel Process Performance During Dispute

SCE proposes to add new headings:

K.4 Formal Complaint
K.5 Performance During Dispute

SCE also proposes to update the associated sections

Modification to Rule 21, Definitions

SCE proposes to add the definition for Expedited Interconnection Dispute Resolution Process (EDP):

**Expedited Interconnection Dispute Resolution Panel Process (Expedited Process):** A process authorized by AB 2861 in which the CPUC’s Executive Director issues binding determinations or interconnection disputes within 60 days of receiving the dispute. Determinations are made based on the recommendations of the Interconnection Dispute Resolution Panel, pursuant to Resolution ALJ-347. See Section K.

Modification to Rule 21, Section F.1.d.ii. Compliance with Timelines

SCE proposes to add a new section c as follows:

**c. Initiate dispute resolution in accordance with Section K.**

---

4 Redlines of modifications to existing tariffs are available upon request. The redlines shown herein include new tariff language shown as underlined text and deleted tariff language shown as struck out text.
Modification to Rule 21, Section K.2.a

SCE proposes to add new subheading and text:

a. **Informal Dispute Resolution**

To initiate Informal Dispute Resolution, the aggrieved Party may submit a written notice ("notice") to the other party pursuant to either Section K.2.a.(i) (Bilateral Negotiations) or K.2.a.(ii) (Expedited Bilateral Negotiations).

This notice shall: (1) specify whether the aggrieved Party is invoking the Informal Dispute Resolution procedures pursuant to either Section K.2.a.(i) (Bilateral Negotiations) or K.2.a.(ii) (Expedited Bilateral Negotiations); (2) state the specific dispute and the relief sought; and (3) contain all relevant known facts pertaining to the dispute.

SCE proposes the following text change to Section K.2.a:

The dispute shall be documented in a written notice ("notice") by the aggrieved Party to the other Party containing the relevant known facts pertaining to the dispute, the specific dispute and the relief sought, and express notice by the aggrieved Party that it is invoking the procedures under this Section. The notice shall be sent to the Party’s email address and physical address set forth in the Generator Interconnection Agreement or Interconnection Request, if there is no Generator Interconnection Agreement. A copy of the notice shall also be sent to the Energy Division, Office of the Director, at the Commission.

SCE proposes to add new subheading, revised text and numeric formatting to Section K.2.a

i. **Bilateral Negotiations**

1. The receiving Party shall acknowledge the notice within five (5) Calendar Days of its receipt.

2. Upon the aggrieved Party notifying the other Party of the dispute, each Party must designate a representative with the authority to make decisions for its respective Party to review the dispute within seven (7) Calendar Days of receiving Party’s receipt of the notice.

3. The In addition, upon receipt of the notice, Distribution Provider shall provide the aggrieved Party with all relevant regulatory and/or technical details and analysis regarding any Distribution Provider interconnection requirements under dispute within twenty-one (21) Calendar Days of receiving Party’s receipt of the notice.
Modification to Rule 21, Section K.2.a

SCE continues under the prior subheading, numeric formatting and adds new text in Section K.2.a.i.5

4. Within forty-five (45) Calendar Days of the date of the notice, the Parties’ authorized representatives will be required to meet and confer to try to resolve the dispute. Parties are expected to operate in good faith and use best efforts to resolve the dispute.

5. Parties may by mutual agreement extend any deadline identified in this section.

SCE proposes new Section K.2.a.ii and text as follows:

ii. Expedited Bilateral Negotiations

1. The receiving Party shall acknowledge the notice within five (5) Calendar Days of its receipt.

2. Each Party must designate a representative with the authority to make decisions for its respective Party to review the dispute within seven (7) Calendar Days of receiving Party’s receipt of the notice.

3. Distribution Provider shall provide the aggrieved Party with all relevant regulatory and/or technical details and analysis regarding any Distribution Provider interconnection requirements under dispute within ten (10) Business Days of receiving Party’s receipt of the notice.

4. Within fifteen (15) Business Days of the date of the notice, the Parties’ authorized representatives will be required to meet and confer to try to resolve the dispute. Parties are expected to operate in good faith and use best efforts to resolve the dispute.

5. Parties may by mutual agreement extend any deadline identified in this section.

Modification to Rule 21, Section K.2.b.

SCE proposes a text change in Section K.2.b as follows:

b. If a resolution of a dispute raised as part of K.2.a is not reached in forty-five (45) Calendar Days from the date of the notice, either 1) a Party may request to continue negotiations for an additional forty-five (45) Calendar Days or 2) the
Parties may by mutual agreement make a written request for mediation to the ADR Coordinator in the Commission’s ALJ Division. The request may be submitted by electronic mail to adr_program@cpuc.ca.gov. Alternatively, both Parties by mutual agreement may request mediation from an outside third-party mediator with costs to be shared equally between the Parties.

SCE proposes to relocate the following text in Section K.2.c. to a new section K.4.

    c. At any time, either Party may file a formal complaint before the Commission pursuant to California PUC section 1702 and Article 4 of the Commission’s Rules of Practice and Procedure.

Nothing in this section shall be construed to limit the rights of any Party to exercise rights and remedies under Commission law.

Please see the new Section K.4, below.

SCE proposes the following new tariff language:

A revised heading as follows:

3. Expedited Interconnection Dispute Resolution Panel Process Performance During Dispute

The Expedited Interconnection Dispute Resolution Process (“Expedited Process”) may be used to resolve eligible disputes between the Distribution Provider and an Applicant according to the following procedures.

For a complete description of all Expedited Process rules and requirements, please refer to Resolution ALJ-347. Information can also be found on the Commission’s website at www.cpuc.ca.gov. In the event of a conflict between the terms of this section and the terms of Resolution ALJ-347, the terms of Resolution ALJ-347 shall govern.

New subsection K.3.a-g as follows:

a. Eligibility

    1. An Applicant may apply for Expedited Process at any stage of the interconnection process if it can demonstrate that: (i) it has in compliance with Section K.2 requirements invoked the Section K.2.a Informal Dispute Resolution procedures and has been unable to resolve the dispute in accordance with Section K.2.a.; (ii) the subject matter of the dispute at issue concerns whether one or both parties’ actions are compliant with established interconnection rules and/or are reasonable,
cost efficient and necessarily required under those rules to ensure safe and reliable interconnection.

2. The Energy Division has the authority to determine that a dispute is not eligible for this process in response to notices submitted in Section K.2.b.

b. Initiation of Expedited Process by Applicant

For information regarding format for the submission of a written notice, please see the Commission’s website at www.cpuc.gov.

1. The written notice shall additionally contain: (1) all relevant known facts pertaining to the dispute; (2) the specific dispute and the relief sought; (3) express notice by the Applicant that it is requesting resolution using the Commission’s Expedited Process; (3) a description of all efforts to date to resolve the dispute directly with the Distribution Provider, including at minimum a showing that the Applicant meets the eligibility requirements described above; and (4) names of all Interconnection Dispute Resolution Panel (as defined in Resolution ALJ-347) members who may have a conflict of interest as defined in Section 769.5(b)(1).

2. The written notice shall also attach all materials that may aid in review of the dispute, including a copy of the Interconnection Request, any interconnection study performed for that Interconnection Request, and all correspondence between the Applicant and the Distribution Provider relevant to the dispute. For treatment of confidential materials, please refer to Resolution ALJ-347.

3. The Applicant shall serve this written notice on: (1) Energy Division (Rule21.Disputes@cpuc.ca.gov); (2) the Distribution Provider’s email address and physical address set forth in the Generator Interconnection Agreement or Interconnection Request, if there is no Generator Interconnection Agreement; (3) the ombudsman designated by Distribution Provider; and (4) any other interested persons. “Interested persons” for the purposes of this section are defined as the applicant, utility, a person who has submitted comments on the recommendation of the Review Sub-Panel (as defined in Resolution ALJ-347), or a person who has demonstrable interest in the outcome of the dispute and has written Energy Division requesting to be added to the distribution list for the dispute.

Please refer to Resolution ALJ-347 for more information and instructions for applying to the Commission for the Expedited Process.
c. Eligibility Verification

1. The Energy Division will evaluate the submission of an Expedited Process written notice and notify the Applicant and the Distribution Provider of the dispute’s eligibility within three (3) Business Days of receiving the request.

2. The Energy’s Division’s notice shall contain specific instructions regarding how the Expedited Process will be resolved. Please refer to Resolution ALJ-347 for more information.

d. Distribution Provider Response

1. Upon receiving notice from the Energy Division of the dispute’s eligibility for the Expedited Process, the Distribution Provider shall have five (5) Business Days to serve its response to the Energy Division’s Review Sub-Panel assigned to the dispute, the Applicant, Energy Division and other interested persons identified on the dispute’s service list.

2. The Distribution Provider’s response shall include: (1) the relevant known facts pertaining to the dispute, including the dispute’s impact on safe and reliable grid operations; (2) its position on the dispute as presented by the Applicant; (3) a response to the relief requested by the Applicant; and (4) a description of the efforts to date to resolve the dispute directly with the Applicant.

3. The Distribution Provider shall also include in its response a copy of documentation in its possession that was not previously submitted in the Applicant’s written notice that requested the Expedited Process that Distribution Provider believes may aid in review of the dispute, including the Applicant’s Interconnection Request, any interconnection study performed for that Interconnection Request, and all correspondence between the Applicant and the Distribution Provider relevant to the dispute. For treatment of confidential materials, please refer to Resolution ALJ-347.

The Distribution Provider shall serve this written notice on: (1) Energy Division (Rule21.Disputes@cpuc.ca.gov); (2) the Applicant’s email address and physical address set forth in Applicant’s written notice requesting the Expedited Process; and (3) any other interested persons in accordance with the procedures outlined in Resolution ALJ-347.

e. Comments on Sub-Panel Recommendations
The Review Sub-Panel will issue recommendations to the Executive Director of the Commission’s Energy Division on how to resolve an Expedited Process’s dispute. Within five (5) Business Days of the issuance of a Review Sub-Panel’s recommendations, Applicant, Distribution Provider and any other interested persons may serve comments on those recommendations. The Applicant and Distribution Provider may serve a reply to any comments within three (3) Business Days of the last day for service of opening comments.

Please refer to Resolution ALJ-347 for more information regarding the service requirements.

f. Appealing the Executive Director’s Order

Upon receipt of the Sub-Panel’s recommendations, the Executive Director of the Commission’s Energy Division will issue an order resolving the dispute within thirty (30) Calendar Days.

Within ten (10) Calendar Days of the issuance of the Executive Director’s Order, the Applicant, Distribution Provider or any interested person may appeal the Order and request Commission review. Such a request must set forth specifically the grounds on which the requester considers the Order to be unlawful or erroneous. Requests for review should be emailed to the Energy Division Director at Rule21.Disputes@cpuc.ca.gov.

g. Withdrawal

At any time following Applicant’s submission of a written notice under this Section, the Applicant may withdraw its notice. If the Applicant and Distribution Provider reach a settlement independent of the Commission, it is not necessary for the Commission to approve the settlement.

Notices of withdrawal should be sent to all interested parties. Please refer to Resolution ALJ-347 for more information regarding the service requirements.

SCE proposes to add new Section K.4. The text was previously K.2.c and has been revised as follows:

4. Formal Complaint

At any time, either Party may file a formal complaint before the Commission pursuant to California PUC section 1702 and Article 4 of the Commission’s Rules of Practice and Procedure. If the formal complaint contains allegations or requests for relief that are also the subject of an active K.2 or Section K.3 dispute, that Section K.2 or Section K.3 dispute is deemed withdrawn.
Nothing in this section shall be construed to limit the rights of any Party to exercise rights and remedies under Commission law.

SCE proposes to add new Section K.5. The text was previously K.3 and has been revised as follows:

5. Performance During Dispute

Pending resolution of any dispute under this Section, the Parties shall proceed diligently with the performance of their respective obligations under this Rule and the Implementing Agreements, unless the Implementing Agreements have been terminated.

Applicant and Distribution Provider may by mutual agreement suspend performance of their respective obligations under this Rule and any Implementing Agreements while the dispute is active.

Disputes as to the Interconnection Request and implementation of this Section shall be subject to resolution pursuant to the procedures set forth in this Section.

Pursuant to Ordering Paragraph No. 3 of Resolution ALJ-347, SCE has attached a draft template as Attachment B for applicants use when requesting resolution of a dispute via the Expedited Process.

**TIER DESIGNATION**

Pursuant to the Resolution, this advice letter is submitted with a Tier 2 designation.

**EFFECTIVE DATE**

This advice filing will become effective on March 31, 2018, the date that the Energy Division plans to launch the Expedited Process and begin accepting applications.

**NOTICE**

Anyone wishing to protest this advice filing may do so by letter via U.S. Mail, facsimile, or electronically, any of which must be received no later than 20 days after the date of this advice filing. Protests should be submitted to:

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Avenue  
San Francisco, California 94102  
E-mail: EDTariffUnit@cpuc.ca.gov

Copies should also be mailed to the attention of the Director, Energy Division, Room 4004 (same address above).
In addition, protests and all other correspondence regarding this advice letter should also be sent by letter and transmitted via facsimile or electronically to the attention of:

Russell G. Worden  
Managing Director, State Regulatory Operations  
Southern California Edison Company  
8631 Rush Street  
Rosemead, California 91770  
Telephone: (626) 302-4177  
Facsimile: (626) 302-6396  
E-mail: AdviceTariffManager@sce.com  

Laura Genao  
Managing Director, State Regulatory Affairs  
c/o Karyn Gansecki  
Southern California Edison Company  
601 Van Ness Avenue, Suite 2030  
San Francisco, California 94102  
Facsimile: (415) 929-5544  
E-mail: Karyn.Gansecki@sce.com

There are no restrictions on who may file a protest, but the protest shall set forth specifically the grounds upon which it is based and must be received by the deadline shown above.

In accordance with General Rule 4 of GO 96-B, SCE is serving copies of this advice filing to the interested parties shown on the attached GO 96-B, R.17-07-007 and R.11-09-011 service lists. Address change requests to the GO 96-B service list should be directed by electronic mail to AdviceTariffManager@sce.com or at (626) 302-3719. For changes to all other service lists, please contact the Commission’s Process Office at (415) 703-2021 or by electronic mail at Process_Office@cpuc.ca.gov.

Further, in accordance with Public Utilities Code Section 491, notice to the public is hereby given by filing and keeping the advice filing at SCE’s corporate headquarters. To view other SCE advice letters filed with the Commission, log on to SCE’s web site at https://www.sce.com/wps/portal/home/regulatory/advice-letters.

For questions, please contact Mary Brown at (626) 302-8103 or by electronic mail at mary.brown@sce.com.

Southern California Edison Company

/s/ Russell G. Worden  
Russell G. Worden

RGW:mb:cm  
Enclosures
**Company name/CPUC Utility No.:** Southern California Edison Company (U 338-E)

**Utility type:**
- ☑ ELC
- ☐ GAS
- ☐ PLC
- ☐ HEAT
- ☐ WATER

**Contact Person:** Darrah Morgan  
**Phone #:** (626) 302-2086  
**E-mail:** Darrah.Morgan@sce.com  
**E-mail Disposition Notice to:** AdviceTariffManager@sce.com

<table>
<thead>
<tr>
<th>EXPLANATION OF UTILITY TYPE</th>
<th>(Date Filed/ Received Stamp by CPUC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELC = Electric</td>
<td>GAS = Gas</td>
</tr>
<tr>
<td>PLC = Pipeline</td>
<td>HEAT = Heat</td>
</tr>
<tr>
<td>WATER = Water</td>
<td></td>
</tr>
</tbody>
</table>

**Advice Letter (AL) #:** 3714-E  
**Tier Designation:** 2

**Subject of AL:** Southern California Edison Company’s Proposed Modifications to Electric Tariff Rule 21 to adopt an Expedited Interconnection Dispute Resolution process per Resolution ALJ-347 and Assembly Bill 2861

**Keywords (choose from CPUC listing):** Compliance

**AL filing type:** ☑ One-Time

**If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #:** Resolution ALJ-347

**Does AL replace a withdrawn or rejected AL? If so, identify the prior AL:**

**Summarize differences between the AL and the prior withdrawn or rejected AL:**

**Confidential treatment requested?** ☑ Yes ☐ No

If yes, specification of confidential information:
Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/access to confidential information:

**Resolution Required?** ☐ Yes ☑ No

**Requested effective date:** 3/31/18  
**No. of tariff sheets:** -45-

**Estimated system annual revenue effect:** %

**Estimated system average rate effect:** %

**When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).**

**Tariff schedules affected:** See Attachment A

**Service affected and changes proposed:**

**Pending advice letters that revise the same tariff sheets:** 3647-E and 3705-E

---

1 Discuss in AL if more space is needed.
Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, California 94102
E-mail: EDTariffUnit@cpuc.ca.gov

Russell G. Worden
Managing Director, State Regulatory Operations
Southern California Edison Company
8631 Rush Street
Rosemead, California 91770
Telephone: (626) 302-4177
Facsimile: (626) 302-6396
E-mail: AdviceTariffManager@sce.com

Laura Genao
Managing Director, State Regulatory Affairs
c/o Karyn Gansecki
Southern California Edison Company
601 Van Ness Avenue, Suite 2030
San Francisco, California 94102
Facsimile: (415) 929-5544
E-mail: Karyn.Gansecki@sce.com
<table>
<thead>
<tr>
<th>Cal. P.U.C. Sheet No.</th>
<th>Title of Sheet</th>
<th>Cancelling Cal. P.U.C. Sheet No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revised 62711-E</td>
<td>Rule 21</td>
<td>Revised 61908-E</td>
</tr>
<tr>
<td>Revised 62712-E</td>
<td>Rule 21</td>
<td>Revised 62606-E</td>
</tr>
<tr>
<td>Revised 62713-E</td>
<td>Rule 21</td>
<td>Revised 62606-E</td>
</tr>
<tr>
<td>Revised 62714-E</td>
<td>Rule 21</td>
<td>Revised 62607-E</td>
</tr>
<tr>
<td>Revised 62715-E</td>
<td>Rule 21</td>
<td>Revised 62608-E</td>
</tr>
<tr>
<td>Revised 62716-E</td>
<td>Rule 21</td>
<td>Revised 60557-E</td>
</tr>
<tr>
<td>Revised 62717-E</td>
<td>Rule 21</td>
<td>Revised 62087-E</td>
</tr>
<tr>
<td>Original 62718-E</td>
<td>Rule 21</td>
<td>Revised 62087-E</td>
</tr>
<tr>
<td>Original 62719-E</td>
<td>Rule 21</td>
<td>Revised 62088-E</td>
</tr>
<tr>
<td>Original 62720-E</td>
<td>Rule 21</td>
<td></td>
</tr>
<tr>
<td>Original 62721-E</td>
<td>Rule 21</td>
<td></td>
</tr>
<tr>
<td>Revised 62722-E</td>
<td>Rule 21</td>
<td>Revised 62092-E</td>
</tr>
<tr>
<td>Revised 62723-E</td>
<td>Rule 21</td>
<td>Revised 62093-E</td>
</tr>
<tr>
<td>Revised 62724-E</td>
<td>Rule 21</td>
<td>Revised 62094-E</td>
</tr>
<tr>
<td>Revised 62725-E</td>
<td>Rule 21</td>
<td>Revised 62095-E</td>
</tr>
<tr>
<td>Revised 62726-E</td>
<td>Rule 21</td>
<td>Revised 62100-E</td>
</tr>
<tr>
<td>Revised 62727-E</td>
<td>Rule 21</td>
<td>Revised 62101-E</td>
</tr>
<tr>
<td>Revised 62728-E</td>
<td>Rule 21</td>
<td>Revised 62102-E</td>
</tr>
<tr>
<td>Revised 62729-E</td>
<td>Rule 21</td>
<td>Revised 62103-E</td>
</tr>
<tr>
<td>Revised 62730-E</td>
<td>Rule 21</td>
<td>Revised 62104-E</td>
</tr>
<tr>
<td>Revised 62731-E</td>
<td>Rule 21</td>
<td>Revised 62105-E</td>
</tr>
<tr>
<td>Revised 62732-E</td>
<td>Rule 21</td>
<td>Revised 62106-E</td>
</tr>
<tr>
<td>Revised 62733-E</td>
<td>Rule 21</td>
<td>Revised 62111-E</td>
</tr>
<tr>
<td>Revised 62734-E</td>
<td>Rule 21</td>
<td>Revised 62112-E</td>
</tr>
<tr>
<td>Revised 62735-E</td>
<td>Rule 21</td>
<td>Revised 62113-E</td>
</tr>
<tr>
<td>Revised 62736-E</td>
<td>Rule 21</td>
<td>Revised 62114-E</td>
</tr>
<tr>
<td>Revised 62737-E</td>
<td>Rule 21</td>
<td>Revised 62116-E</td>
</tr>
<tr>
<td>Revised 62738-E</td>
<td>Rule 21</td>
<td>Revised 62117-E</td>
</tr>
<tr>
<td>Revised 62739-E</td>
<td>Rule 21</td>
<td>Revised 62118-E</td>
</tr>
<tr>
<td>Revised 62740-E</td>
<td>Rule 21</td>
<td>Revised 62119-E</td>
</tr>
<tr>
<td>Revised 62741-E</td>
<td>Rule 21</td>
<td>Revised 62620-E</td>
</tr>
<tr>
<td>Revised 62742-E</td>
<td>Rule 21</td>
<td>Revised 62621-E</td>
</tr>
<tr>
<td>Revised 62743-E</td>
<td>Rule 21</td>
<td>Revised 62622-E</td>
</tr>
<tr>
<td>Revised 62744-E</td>
<td>Rule 21</td>
<td></td>
</tr>
<tr>
<td>Revised 62745-E</td>
<td>Rule 21</td>
<td></td>
</tr>
<tr>
<td>Revised 62746-E</td>
<td>Rule 21</td>
<td></td>
</tr>
<tr>
<td>Revised 62747-E</td>
<td>Rule 21</td>
<td></td>
</tr>
<tr>
<td>Revised 62748-E</td>
<td>Rule 21</td>
<td></td>
</tr>
<tr>
<td>Revised 62749-E</td>
<td>Rule 21</td>
<td></td>
</tr>
<tr>
<td>Revised 62750-E</td>
<td>Rule 21</td>
<td></td>
</tr>
<tr>
<td>Revised 62751-E</td>
<td>Rule 21</td>
<td></td>
</tr>
<tr>
<td>Revised 62752-E</td>
<td>Rule 21</td>
<td></td>
</tr>
<tr>
<td>Revised 62753-E</td>
<td>Rule 21</td>
<td></td>
</tr>
<tr>
<td>Revised 62754-E</td>
<td>Table of Contents</td>
<td>Revised 62621-E</td>
</tr>
<tr>
<td>Revised 62755-E</td>
<td>Table of Contents</td>
<td>Revised 62622-E</td>
</tr>
</tbody>
</table>
Rule 21
GENERATING FACILITY INTERCONNECTIONS

A. TABLE OF CONTENTS (Continued)

Hh. Smart Inverter Generating Facility Design and Operating Requirements (Continued)

2. Prevention of Interference (Continued)
   h. Direct Current Injection ................................................................. 147
   i. Power Factor .................................................................................. 148
   j. Dynamic Volt/Var Operations .......................................................... 148
   k. Ramp Rate Requirements .............................................................. 150
   l. Recommended Frequency-Watt Settings ........................................... 150
   m. Voltage-Watt Default Settings ....................................................... 151
   n. Default Activation States for Phase 1 Functions ............................. 151

3. Technology Specific Requirements ....................................................... 152

4. Supplemental Smart Inverter Requirements ........................................ 152
   a. Fault Detection ............................................................................... 152
   b. Transfer Trip ................................................................................ 153
   c. Reclose Blocking ......................................................................... 153

5. Communication Requirements ............................................................... 153

I. Third-Party Installations, Reservation of Unused Facilities, and Refund of Salvage Value ..... 155
   1. Interconnection Facilities and Distribution Upgrades ..................... 155
   2. Third-Party Installations ................................................................. 155
   3. Reservation of Unused Facilities ...................................................... 155
   4. Refund of Salvage Value ................................................................. 155

J. Metering, Monitoring and Telemetering ................................................... 156
   1. General Requirements ................................................................. 156
   2. Metering by Non-Distribution Provider Parties .............................. 156
   3. Net Generation Output Metering ..................................................... 156
   4. Point of Common Coupling (PCC) Metering .................................. 158
   5. Telemetering ............................................................................... 158
   6. Location ..................................................................................... 158
   7. Costs of Metering ....................................................................... 159
   8. Multiple Tariff Metering ................................................................. 159

K. Dispute Resolution Process ................................................................. 159
   1. Scope ....................................................................................... 159
   2. Informal Dispute Resolution Procedures ....................................... 165
   3. Expedited Interconnection Dispute Resolution Panel Process .......... 166
   4. Formal Complaint ...................................................................... 172
   5. Performance During Dispute ......................................................... 172

(Continued)
C. DEFINITIONS (Continued)

**Emergency**: Whenever in Distribution Provider’s discretion an Unsafe Operating Condition or other hazardous condition exists or whenever access is necessary for emergency service restoration, and such immediate action is necessary to protect persons, Distribution Provider’s facilities or property of others from damage or interference caused by Interconnection Customer’s Generating Facility, or the failure of protective device to operate properly, or a malfunction of any electrical system equipment or a component part thereof.

**Energy-Only Deliverability Status**: A condition elected by an Interconnection Customer for a Generating Facility interconnected to Distribution System, the result of which is that the Interconnection Customer is responsible only for the costs of Reliability Network Upgrades and is not responsible for the costs of Delivery Network Upgrades, but the Generating Facility will be deemed to have a Net Qualifying Capacity as defined in the CAISO Tariff of zero.

**Engineering and Procurement Agreement**: An agreement that authorizes Distribution Provider to begin engineering and procurement of long lead-time items necessary for the establishment of the Interconnection in order to advance the implementation of the Interconnection Request.

**Expedited Interconnection Dispute Resolution Panel Process (Expedited Process)**: A process authorized by AB 2861 in which the CPUC’s Executive Director issues binding determinations or interconnection disputes within 60 days of receiving the dispute. Determinations are made based on the recommendations of the Interconnection Dispute Resolution Panel, pursuant to Resolution ALJ-347. See Section K.

**Exporting Generating Facility**: Any Generating Facility other than a Non-Export Generating Facility, NEM Generating Facility, or uncompensated Generating Facility.

**Fast Track Process**: The interconnection study process set forth in Section F.2.

**Federal Energy Regulatory Commission**: Referred to herein as FERC.

**Field Testing**: Testing performed in the field to determine whether equipment meets Distribution Provider’s requirements for safe and reliable Interconnection.

**Function**: Some combination of hardware and software designed to provide specific features or capabilities. Its use, as in Protective Function, is intended to encompass a range of implementations from a single-purpose device to a section of software and specific pieces of hardware within a larger piece of equipment to a collection of devices and software.

(Continued)
C. DEFINITIONS (Continued)

Generating Facility: All Generators, electrical wires, equipment, and other facilities, excluding Interconnection Facilities, owned or provided by Producer for the purpose of producing electric power, including storage.

Generating Facility Capacity: The net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple Generators.

Generator: A device converting mechanical, chemical, or solar energy into electrical energy, including all of its protective and control functions and structural appurtenances. One or more Generators comprise a Generating Facility.

Generator Interconnection Agreement: An agreement between Distribution Provider and Producer providing for the Interconnection of a Generating Facility that gives certain rights and obligations to effect or end Interconnection. For the purpose of this Rule, Net Energy Metering or power purchase agreements authorized by the Commission are also defined as Generator Interconnection Agreements.

Good Utility Practice: Any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

Governmental Authority: Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Interconnection Customer, Distribution Provider, or any Affiliate thereof.

Gross Rating; Gross Nameplate Rating; Gross Capacity or Gross Nameplate Capacity: The total gross generating capacity of a Generator or Generating Facility as designated by the manufacturer(s) of the Generator(s).

Host Load: The electrical power, less the Generator auxiliary load, consumed by the Customer, to which the Generating Facility is connected.

Inadvertent Export: The unscheduled and uncompensated export of real power from a Generating Facility (GF) for a limited duration as specified in Sections M and Mm.
Rule 21
GENERATING FACILITY INTERCONNECTIONS

C. DEFINITIONS (Continued)


Initial Review: See Section F.2.a.

In-rush Current: The current determined by the In-rush Current Test.

In-Service Date: The estimated date upon which Applicant reasonably expects it will be ready to begin use of Distribution Provider’s Interconnection Facilities.

Interconnection; Interconnected: The physical connection of a Generating Facility in accordance with the requirements of this Rule so that Parallel Operation with Distribution Provider’s Distribution or Transmission System can occur (has occurred).

Interconnection Agreement: See Generator Interconnection Agreement.

Interconnection Customer: See Applicant.

Interconnection Facilities: The electrical wires, switches and related equipment that are required in addition to the facilities required to provide electric Distribution Service to a Customer to allow Interconnection. Interconnection Facilities may be located on either side of the Point of Common Coupling as appropriate to their purpose and design. Interconnection Facilities may be integral to a Generating Facility or provided separately. Interconnection Facilities may be owned by either Producer or Distribution Provider.

Interconnection Facilities Study: A study conducted by Distribution Provider for an Interconnection Customer under the Independent Study Process to determine a list of facilities (including Distribution Provider’s Interconnection Facilities, Distribution Upgrades, and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with Distribution Provider’s Distribution or Transmission System. The scope of the study is defined in Section G.3.c.


Interconnection Request: An Applicant’s request to interconnect a new Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Generating Facility that is interconnected with Distribution Provider’s Distribution or Transmission System.

Interconnection Study: A study to establish the requirements for Interconnection of a Generating Facility with Distribution Provider’s Distribution System or Transmission System, pursuant to this Rule.

Interconnection System Impact Study: An engineering study conducted by Distribution Provider for an Interconnection Customer under the Independent Study Process that evaluates the impact of the proposed interconnection on the safety and reliability of Distribution Provider’s Distribution and/or Transmission System and, if applicable, an Affected System. The scope of the study is defined in Section G.3.c.i.

Island; Islanding: A condition on Distribution Provider’s Distribution System in which one or more Generating Facilities deliver power to Customers using a portion of Distribution Provider’s Distribution System that is electrically isolated from the remainder of Distribution Provider’s Distribution System.
F. REVIEW PROCESS FOR INTERCONNECTION REQUESTS (Continued)

1. Overview of the Interconnection Review Process (Continued)

d. Compliance with Timelines

Distribution Provider shall use Reasonable Efforts in meeting all the timelines set out in this Rule, or mutually modified by Distribution Provider and Applicant pursuant to Section D.16. Each Distribution Provider shall designate an ombudsman with authority to resolve disputes over missed timelines. The identity, role, and contact information of the ombudsman shall be available on Distribution Provider’s website.

If at any time an Applicant is dissatisfied with the Reasonable Efforts of Distribution Provider to meet the timelines in this Section, Applicant may use the following procedures:

(i) Contact the ombudsman designated by Distribution Provider;

(ii) If the Distribution Provider ombudsman is unable to resolve the dispute within ten (10) Business Days, Applicant may either:

a) Contact the Consumer Affairs Branch (CAB) at the Commission.

b) Upon mutual agreement with Distribution Provider, make a written request for mediation to the Alternative Dispute Resolution (ADR) Coordinator in the Commission’s Administrative Law Judge (ALJ) Division. The request may be made by electronic mail to adr_program@cpuc.ca.gov, and shall state “Rule 21” in the subject line. The request shall contain the relevant facts of the timeline dispute. A copy of the request shall be sent to the Distribution Provider ombudsman. Provided that resources are available, the mediator assigned shall schedule a mediation with Applicant and Distribution Provider within ten (10) Business Days of receiving the request.

At any time, Applicant may file a formal complaint before the Commission pursuant to California PUC Section 1702 and Article 4 of the Commission’s Rules of Practice and Procedure.

c) Initiate dispute resolution in accordance with Section K. (N)
K. DISPUTE RESOLUTION PROCESS (Continued)

2. Informal Dispute Resolution Procedures

Any dispute arising between Distribution Provider and Producer (individually referred to in Section K as “Party” and collectively “the Parties”) regarding Distribution Provider’s or Producer’s performance of its obligations under its tariffs, the Implementing Agreements, and requirements related to the interconnection of Producer’s Facilities pursuant to this Rule shall be resolved according to the following procedures:

a. Informal Dispute Resolution

To initiate Informal Dispute Resolution, the aggrieved Party may submit a written notice (“notice”) to the other party pursuant to either Section K.2.a.(i) (Bilateral Negotiations) or K.2.a.(ii) (Expedited Bilateral Negotiations).

This notice shall: (1) specify whether the aggrieved Party is invoking the Informal Dispute Resolution procedures pursuant to either Section K.2.a.(i) (Bilateral Negotiations) or K.2.a.(ii) (Expedited Bilateral Negotiations); (2) state the specific dispute and the relief sought; and (3) contain all relevant known facts pertaining to the dispute.

The notice shall be sent to the Party’s email address and physical address set forth in the Generator Interconnection Agreement or Interconnection Request, if there is no Generator Interconnection Agreement. A copy of the notice shall also be sent to the Energy Division, Office of the Director, at the Commission.

i. Bilateral Negotiations

1. The receiving Party shall acknowledge the notice within five (5) Calendar Days of its receipt.

2. Each Party must designate a representative with the authority to make decisions for its respective Party to review the dispute within seven (7) Calendar Days of receiving Party’s receipt of the notice.

3. The Distribution Provider shall provide the aggrieved Party with all relevant regulatory and/or technical details and analysis regarding any Distribution Provider interconnection requirements under dispute within twenty-one (21) Calendar Days of receiving Party’s receipt of the notice.
K. DISPUTE RESOLUTION PROCESS (Continued)

2. Informal Dispute Resolution Procedures (Continued)

a. Informal Dispute Resolution (Continued)

i. Bilateral Negotiations (Continued)

1. Within forty-five (45) Calendar Days of the date of the notice, the Parties’ authorized representatives will be required to meet and confer to try to resolve the dispute. Parties are expected to operate in good faith and use best efforts to resolve the dispute.

2. Parties may by mutual agreement extend any deadline identified in this section.

ii. Expedited Bilateral Negotiations

1. The receiving Party shall acknowledge the notice within five (5) Calendar Days of its receipt.

2. Each Party must designate a representative with the authority to make decisions for its respective Party to review the dispute within seven (7) Calendar Days of receiving Party’s receipt of the notice.

3. Distribution Provider shall provide the aggrieved Party with all relevant regulatory and/or technical details and analysis regarding any Distribution Provider interconnection requirements under dispute within ten (10) Business Days of receiving Party’s receipt of the notice.

4. Within fifteen (15) Business Days of the date of the notice, the Parties’ authorized representatives will be required to meet and confer to try to resolve the dispute. Parties are expected to operate in good faith and use best efforts to resolve the dispute.

5. Parties may by mutual agreement extend any deadline identified in this section.
K. DISPUTE RESOLUTION PROCESS (Continued)

2. Informal Dispute Resolution Procedures (Continued)

b. If a resolution of a dispute raised as part of K.2.a is not reached in forty-five (45) Calendar Days from the date of the notice, either 1) a Party may request to continue negotiations for an additional forty-five (45) Calendar Days or 2) the Parties may by mutual agreement make a written request for mediation to the ADR Coordinator in the Commission’s ALJ Division. The request may be submitted by electronic mail to adr_program@cpuc.ca.gov. Alternatively, both Parties by mutual agreement may request mediation from an outside third-party mediator with costs to be shared equally between the Parties.

3. Expedited Interconnection Dispute Resolution Panel Process

The Expedited Interconnection Dispute Resolution Process (“Expedited Process”) may be used to resolve eligible disputes between the Distribution Provider and an Applicant according to the following procedures.

For a complete description of all Expedited Process rules and requirements, please refer to Resolution ALJ-347. Information can also be found on the Commission’s website at www.cpuc.ca.gov. In the event of a conflict between the terms of this section and the terms of Resolution ALJ-347, the terms of Resolution ALJ-347 shall govern.

a. Eligibility

1. An Applicant may apply for Expedited Process at any stage of the interconnection process if it can demonstrate that: (i) it has in compliance with Section K.2 requirements invoked the Section K.2.a Informal Dispute Resolution procedures and has been unable to resolve the dispute in accordance with Section K.2.a.; (ii) the subject matter of the dispute at issue concerns whether one or both parties’ actions are compliant with established interconnection rules and/or are reasonable, cost efficient and necessarily required under those rules to ensure safe and reliable interconnection.

2. The Energy Division has the authority to determine that a dispute is not eligible for this process in response to notices submitted in Section K.3.b.

---

1 The Commission’s Energy Division has the discretion to grant waivers to this requirement to demonstrate compliance with Section K.2.a if the Applicant and Distribution Provider have already engaged in a dispute resolution process equivalent to Section K.2.a. The Applicant or Distribution Provider must make a request to the Energy Division to waive the requirement.
K. DISPUTE RESOLUTION PROCESS (Continued)

3. Expedited Interconnection Dispute Resolution Panel Process (Continued)

b. Initiation of Expedited Process by Applicant

For information regarding format for the submission of a written notice, please see the Commission’s website at www.cpuc.ca.gov.

1. The written notice shall additionally contain: (1) all relevant known facts pertaining to the dispute; (2) the specific dispute and the relief sought; (3) express notice by the Applicant that it is requesting resolution using the Commission’s Expedited Process; (3) a description of all efforts to date to resolve the dispute directly with the Distribution Provider, including at minimum a showing that the Applicant meets the eligibility requirements described above; and (4) names of all Interconnection Dispute Resolution Panel (as defined in Resolution ALJ-347) members who may have a conflict of interest as defined in Section 769.5(b)(1).

2. The written notice shall also attach all materials that may aid in review of the dispute, including a copy of the Interconnection Request, any interconnection study performed for that Interconnection Request, and all correspondence between the Applicant and the Distribution Provider relevant to the dispute. For treatment of confidential materials, please refer to Resolution ALJ-347.

3. The Applicant shall serve this written notice on: (1) Energy Division (Rule21.Disputes@cpuc.ca.gov); (2) the Distribution Provider’s email address and physical address set forth in the Generator Interconnection Agreement or Interconnection Request, if there is no Generator Interconnection Agreement; (3) the ombudsman designated by Distribution Provider; and (4) any other interested persons. “Interested persons” for the purposes of this section are defined as the applicant, utility, a person who has submitted comments on the recommendation of the Review Sub-Panel (as defined in Resolution ALJ-347), or a person who has demonstrable interest in the outcome of the dispute and has written Energy Division requesting to be added to the distribution list for the dispute.

Please refer to Resolution ALJ-347 for more information and instructions for applying to the Commission for the Expedited Process.
K. DISPUTE RESOLUTION PROCESS (Continued)

3. Expedited Interconnection Dispute Resolution Panel Process (Continued)

c. Eligibility Verification

1. The Energy Division will evaluate the submission of an Expedited Process written notice and notify the Applicant and the Distribution Provider of the dispute’s eligibility within three (3) Business Days of receiving the request.

2. The Energy’s Division’s notice shall contain specific instructions regarding how the Expedited Process will be resolved. Please refer to Resolution ALJ-347 for more information.

d. Distribution Provider Response

1. Upon receiving notice from the Energy Division of the dispute’s eligibility for the Expedited Process, the Distribution Provider shall have five (5) Business Days to serve its response to the Energy Division’s Review Sub-Panel assigned to the dispute, the Applicant, Energy Division and other interested persons identified on the dispute’s service list.

2. The Distribution Provider’s response shall include: (1) the relevant known facts pertaining to the dispute, including the dispute’s impact on safe and reliable grid operations; (2) its position on the dispute as presented by the Applicant; (3) a response to the relief requested by the Applicant; and (4) a description of the efforts to date to resolve the dispute directly with the Applicant.

3. The Distribution Provider shall also include in its response a copy of documentation in its possession that was not previously submitted in the Applicant’s written notice that requested the Expedited Process that Distribution Provider believes may aid in review of the dispute, including the Applicant’s Interconnection Request, any interconnection study performed for that Interconnection Request, and all correspondence between the Applicant and the Distribution Provider relevant to the dispute. For treatment of confidential materials, please refer to Resolution ALJ-347.
K. **DISPUTE RESOLUTION PROCESS** (Continued)

3. Expedited Interconnection Dispute Resolution Panel Process (Continued)
   
d. **Distribution Provider Response (Continued)**

The Distribution Provider shall serve this written notice on: (1) Energy Division ([Rule21.Disputes@cpuc.ca.gov](mailto:Rule21.Disputes@cpuc.ca.gov)); (2) the Applicant’s email address and physical address set forth in Applicant’s written notice requesting the Expedited Process; and (3) any other interested persons in accordance with the procedures outlined in Resolution ALJ-347.

e. **Comments on Sub-Panel Recommendations**

The Review Sub-Panel will issue recommendations to the Executive Director of the Commission’s Energy Division on how to resolve an Expedited Process’s dispute. Within five (5) Business Days of the issuance of a Review Sub-Panel’s recommendations, Applicant, Distribution Provider and any other interested persons may serve comments on those recommendations. The Applicant and Distribution Provider may serve a reply to any comments within three (3) Business Days of the last day for service of opening comments.

Please refer to Resolution ALJ-347 for more information regarding the service requirements.

f. **Appealing the Executive Director’s Order**

Upon receipt of the Sub-Panel’s recommendations, the Executive Director of the Commission’s Energy Division will issue an order resolving the dispute within thirty (30) Calendar Days.

Within ten (10) Calendar Days of the issuance of the Executive Director’s Order, the Applicant, Distribution Provider or any interested person may appeal the Order and request Commission review. Such a request must set forth specifically the grounds on which the requester considers the Order to be unlawful or erroneous. Requests for review should be emailed to the Energy Division Director at [Rule21.Disputes@cpuc.ca.gov](mailto:Rule21.Disputes@cpuc.ca.gov).
K. DISPUTE RESOLUTION PROCESS (Continued)

3. Expedited Interconnection Dispute Resolution Panel Process (Continued)

g. Withdrawal

At any time following Applicant’s submission of a written notice under this Section, the Applicant may withdraw its notice. If the Applicant and Distribution Provider reach a settlement independent of the Commission, it is not necessary for the Commission to approve the settlement.

Notices of withdrawal should be sent to all interested parties. Please refer to Resolution ALJ-347 for more information regarding the service requirements.

4. Formal Complaint

At any time, either Party may file a formal complaint before the Commission pursuant to California PUC section 1702 and Article 4 of the Commission’s Rules of Practice and Procedure. If the formal complaint contains allegations or requests for relief that are also the subject of an active K.2 or Section K.3 dispute, that Section K.2 or Section K.3 dispute is deemed withdrawn.

Nothing in this section shall be construed to limit the rights of any Party to exercise rights and remedies under Commission law.

5. Performance During Dispute

Pending resolution of any dispute under this Section, the Parties shall proceed diligently with the performance of their respective obligations under this Rule and the Implementing Agreements, unless the Implementing Agreements have been terminated.

Applicant and Distribution Provider may by mutual agreement suspend performance of their respective obligations under this Rule and any Implementing Agreements while the dispute is active.

Disputes as to the Interconnection Request and implementation of this Section shall be subject to resolution pursuant to the procedures set forth in this Section.
L. CERTIFICATION AND TESTING CRITERIA

1. Introduction
This Section describes the test procedures and requirements for equipment used for the Interconnection of Generating Facilities to Distribution Provider’s Distribution or Transmission System. Included are Type Testing, Production Testing, Commissioning Testing, and Periodic Testing. The procedures listed rely heavily on those described in appropriate Underwriters Laboratory (UL), Institute of Electrical and Electronic Engineers (IEEE), International Electrotechnical Commission (IEC) documents—most notably UL 1741 (including UL 1741 – Supplement SA).

The tests described here, together with the technical requirements in Sections H and Hh of this Rule, are intended to provide assurance that the Generating Facility’s equipment will not adversely affect Distribution Provider’s Distribution or Transmission System and that a Generating Facility will cease providing power to Distribution Provider’s Distribution or Transmission System under abnormal conditions. The tests were developed assuming a low level of Generating Facility penetration or number of connections to Distribution Provider’s Distribution or Transmission System. At high levels of Generating Facility penetration, additional requirements and corresponding test procedures may need to be defined.

Section L also provides criteria for “Certifying” Generators, inverters or Converters. Once a Generator, inverter or Converter has been Certified per this Rule, it may be considered suitable for Interconnection with Distribution Provider’s Distribution or Transmission System. Subject to the exceptions described in Section L, Distribution Provider will not repeat the design review or require retesting of such Certified Equipment. It should be noted that the Certification process is intended to facilitate Generating Facilities Interconnections. Certification is not a prerequisite to interconnect a Generating Facility for Section H but it is a prerequisite for inverters installed after September 8, 2017, pursuant to Section Hh of this Rule.

2. Certified and Non-Certified Interconnection Equipment
a. Certified Equipment

Equipment tested and approved (i.e. “Listed”) by an accredited NRTL as having met both the Type Testing and Production Testing requirements described in this document is considered to be Certified Equipment for purposes of Interconnection with Distribution Provider’s Distribution or Transmission System. Certification may apply to either a pre-packaged system or an assembly of components that address the necessary functions. Type Testing may be done in the manufacturer’s factory or test laboratory, or in the field. At the discretion of the testing laboratory, field-certification may apply only to the particular installation tested. In such cases, some or all of the tests may need to be repeated at other installations.
L. CERTIFICATION AND TESTING CRITERIA (Continued)

2. Certified and Non-Certified Interconnection Equipment (Continued)

a. Certified Equipment (Continued)

When equipment is Certified by a NRTL, the NRTL shall provide to the manufacturer, at a minimum, a Certificate with the following information for each device:

Administrative:

1. The effective date of Certification or applicable serial number (range or first in series), and/or other proof that certification is current;

2. Equipment model number(s) of the Certified equipment;

3. The software version utilized in the equipment, if applicable;

4. Test procedures specified (including date or revision number); and

5. Laboratory accreditation (by whom and to what standard).

Technical (as appropriate):

1. Device ratings (kW, kV, Volts, amps, etc.);

2. Maximum available fault current in amps;

3. In-rush Current in amps;

4. Trip points, if factory set (trip value and timing);

5. Trip point and timing ranges for adjustable settings;

6. Nominal power factor or range if adjustable;

7. If the equipment is Certified as Non-Exporting and the method used (reverse power or underpower);

8. If the equipment is Certified as Non-Islanding

9. If the equipment is an AC/DC Converter it is the responsibility of the equipment manufacturer to ensure that Certification information is made publicly available by the manufacturer, the testing laboratory, or by a third party.

(Continued)
L. CERTIFICATION AND TESTING CRITERIA (Continued)

2. Certified and Non-Certified Interconnection Equipment (Continued)

   a. Certified Equipment (Continued)

   It is the responsibility of the equipment manufacturer to ensure that Certification information is made publicly available by the manufacturer, the testing laboratory, or by a third party.

   b. Non-Certified Equipment

   For non-Certified equipment, some or all of the tests described in this Rule may be required by Distribution Provider for each Generating and/or Interconnection Facility. The manufacturer or a laboratory acceptable to Distribution Provider may perform these tests. Test results for non-Certified equipment must be submitted to Distribution Provider for the Supplemental Review. Approval by Distribution Provider for equipment used in a particular Generating and/or Interconnection Facility does not guarantee Distribution Provider’s approval for use in other Generating and/or Interconnection Facilities.

3. Type Testing

   a. Type Tests and Criteria for Interconnection Equipment Certification

   Type testing provides a basis for determining that equipment meets the specifications for being designated as Certified equipment under this Rule. The requirements described in this Section cover only issues related to Interconnection and are not intended to address device safety or other issues.

   Table L.1 defines the test criteria by Generator or inverter technology. While UL 1741(1) and UL 1741 – Supplement SA were written specifically for inverters, the requirements are readily adaptable to synchronous Generators, induction Generators, as well as single/multi-function controllers and protection relays. Until a universal test standard is developed, Distribution Provider or NRTL shall adopt the procedures referenced in Table L.1 as appropriate and necessary for a Generating Facility and/or Interconnection Facilities or associated equipment performance and its control and Protection Functions. These tests shall be performed in the sequence shown in Table L.2.

   AC/DC Converters will be eligible under UL 1741, once UL-1741 has been revised to include non-export tests for converters. In the interim, the converter may be certified as described in Section L.7.a.v.
## Table L.1

<table>
<thead>
<tr>
<th>Type Test</th>
<th>Reference (1)</th>
<th>Inverter (6)</th>
<th>Smart Inverter (7)</th>
<th>Synchronous Generators</th>
<th>Induction Generators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility Interaction</td>
<td>UL 1741 - 39, 40</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Utility Compatibility (Required testing to 1547 and 1547.1)</td>
<td>UL 1741 - 46</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>DC Isolation</td>
<td>IEEE 1547.1(8) - 5.6</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dielectric Voltage Withstand</td>
<td>IEEE1547.1(8) - 5.5.3</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Harmonic Distortion</td>
<td>IEEE-1547.1(8) - 5.11</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>DC Injection</td>
<td>IEEE1547.1(8) - 5.6</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Distribution Provider Voltage Variations</td>
<td>IEEE1547.1 - 5.2</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Distribution Provider Frequency Variations</td>
<td>IEEE1547.1 - 5.3</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Abnormal Tests</td>
<td>UL 1741 - 47</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Loss of Control Circuit</td>
<td>UL 1741 - 47.8</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Short Circuit</td>
<td>UL 1741 - 47.3</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Load Transfer</td>
<td>UL 1741 - 47.7</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Surge Withstand Capability</td>
<td>L.3.e</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Anti-Islanding (Traditional)</td>
<td>L.3.b (2)</td>
<td>(2)</td>
<td>(2)</td>
<td>(2)</td>
<td>(2)</td>
</tr>
<tr>
<td>Non-Export</td>
<td>L.3.c (3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
</tr>
<tr>
<td>In-rush Current</td>
<td>L.3.d</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Synchronization</td>
<td>L.3.f (5)</td>
<td>(5)</td>
<td>(5)</td>
<td>X</td>
<td>(5)</td>
</tr>
<tr>
<td>Anti-islanding (Smart Inverters)</td>
<td>UL 1741 SA - SA8</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Low and High Voltage Ride-through</td>
<td>UL 1741 SA - SA9</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Low and High Frequency Ride-through</td>
<td>UL 1741 SA - SA10</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Normal and Soft-Start Ramp Rate</td>
<td>UL 1741 SA - SA11</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Specified Power Factor</td>
<td>UL 1741 SA - SA12</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Volt/Var Mode (Q(V))</td>
<td>UL 1741 SA - SA13</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Frequency-Watt (optional)</td>
<td>UL 1741 SA - SA14</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Volt-Watt (optional)</td>
<td>UL 1741 SA - SA15</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Markings and Instructions</td>
<td>UL 1741 SA - SA6, SA16</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Table Notes:**

1. References are to section numbers in either UL 1741 and/or UL 1741 – Supplement SA (Inverters, Converters and Charge Controllers for Use in Independent Power Systems) or this Rule. References in UL 1741 to “photovoltaics” or “inverter” may have to be adapted to the other technologies by the testing laboratory to appropriately apply in the tests to other technologies.
2. Required only if Non-Islanding designation
3. Required only if Non-Export designation is desired.
4. Required for Generators that use Distribution Provider power to motor to speed.
5. Required for all self-excited induction Generators as well as Inverters that operate as voltage sources when connected to Distribution Provider’s Distribution or Transmission System.
6. Inverters compliant with Section H
7. Inverters compliant with Section Hh
8. IEEE-1547.1 refers to the 2005 revision

X  =  Required
-  =  Not Required
Rule 21  
GENERATING FACILITY INTERCONNECTIONS

(Continued)

L. CERTIFICATION AND TESTING CRITERIA (Continued)

3. Type Testing (Continued)

   a. Type Tests and Criteria for Interconnection Equipment Certification (Continued)

      Table L.2
      Type Tests Sequence for Interconnection Equipment Certification

      Test No. Type Test
      1. Distribution Provider Voltage and Frequency Variation
      2. Synchronization
      3. Surge Withstand Capability
      4. Distribution Provider Voltage and Frequency Variation, including ride through
      5. Synchronization
      6. Other Required and Optional Tests

      Tests 1, 2, and 3 must be done first and in the order shown. Tests 4 and on
      follow in order convenient to the test agency.

   b. Anti-Islanding Test

      Devices that pass the Anti-Islanding test procedures described in UL 1741
      Section 46.3 and/or UL 1741 – Supplement SA Section SA8 will be considered
      Non-Islanding for the purposes of these Interconnection requirements. The test
      is required only for devices for which a Certified Non-Islanding designation is
      desired.

   c. Non-Export Test

      Equipment that passes the Non-Export test procedure described in Section L.7.a
      will be considered Non-Exporting for the purposes of these Interconnection
      requirements. This test is required only for devices for which a Certified Non-
      Export designation is desired.
Rule 21
GENERATING FACILITY INTERCONNECTIONS

(Continued)

L. CERTIFICATION AND TESTING CRITERIA (Continued)

3. Type Testing (Continued)

d. In-rush Current Test

Generation equipment that utilizes Distribution Provider power to motor up to speed will be tested using the procedure defined in Section L.7.b to determine the maximum current drawn during this startup process. The resulting In-rush Current is used to estimate the Starting Voltage Drop.

e. Surge Withstand Capability Test

The interconnection equipment shall be tested for the surge withstand requirement in Section H.1.c in all normal operating modes in accordance with IEEE Std C62.45-2002 for equipment rates less than 1000 V to confirm that the surge withstand capability is met by using the selected test level(s) from IEEE Std C62.41.2-2002. Interconnection equipment rated greater than 1000 V shall be tested in accordance with manufacturer or system integrator designated applicable standards. For interconnection equipment signal and control circuits, use IEEE Std C37.90.1-2002. These tests shall confirm the equipment did not fail, did not misoperate, and did not provide misinformation (IEEE 1547-5.1.3.2).

The location/exposure category for which the equipment has been tested shall be clearly marked on the equipment label or in the equipment documentation. External surge protection may be used to protect the equipment in harsher location/exposure categories.
GENERATING FACILITY INTERCONNECTIONS

(Continued)

L. CERTIFICATION AND TESTING CRITERIA (Continued)

3. Type Testing (Continued)

f. Synchronization Test

This test is applied to synchronous Generators, self-excited induction generators, and inverters capable of operating as voltage-source while connected to Distribution Provider's Distribution or Transmission System. The test is also applied to the resynchronization Function (transition from standalone to parallel operation) on equipment that provides such functionality. This test may not need to be performed on both the synchronization and re-synchronization functions if the manufacturers can verify to the satisfaction of the testing organization that monitoring and controls hardware and software are common to both functions. This test is not necessary for induction generators or current-source inverters. Instead, the In-rush Current test Section L.3.d shall be applied to those generators.

This test shall demonstrate that at the moment of the paralleling-device closure, all three synchronization parameters in Table L.3 are within the stated limits. This test shall also demonstrate that if any of the parameters are outside of the limits stated in the table, the paralleling-device shall not close (IEEE 1547-5.1.2A). The test will start with only one of the three parameters: (1) voltage difference between Generating Facility and Distribution Provider's Distribution or Transmission System; (2) frequency difference; or (3) phase angle outside of the synchronization specification. Verify that the Generating Facility is brought within specification prior to synchronization. Repeat the test five times for each of the three parameters. For manual synchronization with synch check or manual control with auto synchronization, the test must verify that paralleling does not occur until the parameters are brought within specifications.

Table L.3

<table>
<thead>
<tr>
<th>Aggregate Rating of Generator Units (kVA)</th>
<th>Frequency Difference (Δf, Hz)</th>
<th>Voltage Difference (ΔV, %)</th>
<th>Phase Angle Difference (ΔΦ, °)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-500</td>
<td>0.3</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>&gt; 500-1,500</td>
<td>0.2</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>&gt; 1,500-10,000</td>
<td>0.1</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>

[1] – IEEE 1547-5.1.1B
Rule 21
GENERATING FACILITY INTERCONNECTIONS

(Continued)

L. CERTIFICATION AND TESTING CRITERIA (Continued)

3. Type Testing (Continued)

  g. Paralleling Device Withstand Test

  The dielectric voltage withstand test specified in Section L.1 shall be performed on
  the paralleling device to ensure compliance with those requirements specified in
  Section H.1.c (IEEE 1547-5.1.3.3).

  h. Back feed Test

  Equipment that passes the back feed test procedure and limits described in a new
  UL 1741 Non-Export CRD will be treated as if it is physically impossible for them to
  export for the purposes of these Interconnection requirements. This test is required
  only for devices for which a Certified AC/DC Converter is desired. In the interim, the
  converter may be certified as described in Section L.7.a.v.

4. Production Testing

  At a minimum, each interconnection system shall be subjected to Distribution
  Provider Voltage and Frequency Variation Test procedure described in UL1741
  under Manufacturing and Production Tests, Section 68 and the Synchronization test
  specified in Section L.3.f. Interconnection systems with adjustable set points shall
  be tested at a single set of set points as specified by the manufacturer. This test
  may be performed in the factory or as part of a Commissioning Test (Section L.5).

5. Commissioning Testing

  a. Commissioning Testing

  Commissioning Testing, where required, will be performed on-site to verify
  protective settings and functionality. Upon initial Parallel Operation of a Generating
  Facility, or any time interface hardware or software is changed that may affect the
  functions listed below, a Commissioning Test must be performed. An individual
  qualified in testing protective equipment (professional engineer, factory–certified
  technician, or licensed electrician with experience in testing protective equipment)
  must perform Commissioning Testing in accordance with the manufacturer’s
  recommended test procedure to verify the settings and requirements per this Rule.

  Distribution Provider may require written Commissioning test procedure be
  submitted to Distribution Provider at least 10 working days prior to the performance
  of the Commissioning Test. Distribution Provider has the right to witness
  Commissioning Test, Distribution Provider may also require written certification by
  the installer describing which tests were performed and their results. Protective
  Functions to be tested during commissioning, particularly with respect to non-
  Certified equipment, may consist of the following:

(Continued)
Rule 21
GENERATING FACILITY INTERCONNECTIONS

(Continued)

L. CERTIFICATION AND TESTING CRITERIA (Continued)

5. Commissioning Testing (Continued)

a. Commissioning Testing (Continued)

(1) Over and under voltage
(2) Over and under frequency
(3) Anti-Islanding function (if applicable)
(4) Non-Exporting function (if applicable)
(5) Inability to energize dead line
(6) Time delay on restart after Distribution Provider source is stable
(7) Distribution Provider system fault detection (if used)
(8) Synchronizing controls (if applicable)
(9) Other Interconnection Protective Functions that may be required as part of the Generator Interconnection Agreement

Commissioning Test shall include visual inspections of the interconnection equipment and protective settings to confirm compliance with the interconnection requirements.

b. Review, Study, and Additional Commissioning Test Verification Costs

A Producer shall be responsible for the reasonably incurred costs of the reviews, studies and additional Commissioning Test verifications conducted pursuant to Section E of this Rule. If the initial Commissioning Test verification is not successful through no fault of Distribution Provider, Distribution Provider may impose upon Producer a cost based charge for subsequent Commissioning Test verifications. All Costs for additional Commissioning Test verifications shall be paid by Producer within thirty days of receipt of Distribution Provider’s invoice. The invoice provided by Distribution Provider shall consist of the hourly rate multiplied by the hours incurred by Distribution Provider and will separately specify the amount of time spent on-site from that spent in roundtrip travel to the Commissioning Test site. Additional cost, if any, will be specified on the invoice. If the initial Commissioning Test verification is not successful through the fault of Distribution Provider, that visit will not be considered the initial Commissioning Test verification.

(Continued)
L. CERTIFICATION AND TESTING CRITERIA (Continued)

5. Commissioning Testing (Continued)

c. Other Checks and Tests

Other checks and tests that may need to be performed include:

(1) Verifying final Protective Function settings

(2) Trip test (L.5.g)

(3) In-service tests (L.5.h)

d. Certified Equipment

Generating Facilities qualifying for interconnection through the Fast Track process incorporate Certified Equipment that have, at a minimum, passed the Type Tests and Production Tests described in this Rule and are judged to have little or no potential impact on Distribution Provider’s Distribution or Transmission System. For such Generating Facilities, it is necessary to perform only the following tests:

(1) Protective Function settings that have been changed after Production Testing will require field verification. Tests shall be performed using injected secondary frequencies, voltages and currents, applied waveforms, at a test connection using a Generator to simulate abnormal Distribution Provider voltage or frequency, or varying the set points to show that the device trips at the measured (actual) Distribution Provider voltage or frequency.

(2) The Non-Islanding function shall be checked by operating a load break disconnect switch to verify the Interconnection equipment ceases to energize Distribution Provider’s Distribution or Transmission System and does not re-energize it for the required time delay after the switch is closed.

(3) The Non-Exporting function shall be checked using secondary injection techniques. This function may also be tested by adjusting the Generating Facility output and local loads to verify that the applicable Non-Exporting criteria (i.e., reverse power or underpower) are met.
Rule 21

GENERATING FACILITY INTERCONNECTIONS

(Continued)

L.  CERTIFICATION AND TESTING CRITERIA (Continued)

5.  Commissioning Testing (Continued)

d.  Certified Equipment (Continued)

The Supplemental Review or an Interconnection Study may impose additional components or additional testing.

e.  Non-Certified Equipment

Non-certified Equipment shall be subjected to the appropriate tests described in Type Testing (Section L.3) as well as those described in Certified Equipment Commissioning Tests (Section L.5.d). With Distribution Provider’s approval, these tests may be performed in the factory, in the field as part of commissioning, or a combination of both. Distribution Provider, at its discretion, may also approve a reduced set of tests for a particular Generating Facility or, for example, if it determines it has sufficient experience with the equipment.

f.  Verification of Settings

At the completion of Commission testing, Producer shall confirm all devices are set to Distribution Provider-approved settings. Verification shall be documented in the Commissioning Test Certification.

g.  Trip Tests

Interconnection Protective Functions and devices (e.g. reverse power relays) that have not previously been tested as part of the Interconnection Facilities with their associated interrupting devices (e.g. contactor or circuit breaker) shall be trip tested during commissioning. The trip test shall be adequate to prove that the associated interrupting devices open when the protective devices operate. Interlocking circuits between Protective Function devices or between interrupting devices shall be similarly tested unless they are part of a system that has been tested and approved during manufacturing.

(Continued)
Rule 21

GENERATING FACILITY INTERCONNECTIONS

(Continued)

L. CERTIFICATION AND TESTING CRITERIA (Continued)

5. Commissioning Testing (Continued)

h. In-service Tests

Interconnection Protective Functions and devices that have not previously been tested as part of the Interconnection Facilities with their associated instrument transformers or that are wired in the field shall be given an in-service test during commissioning. This test will verify proper wiring, polarity, CT/PT ratios, and proper operation of the measuring circuits. The in-service test shall be made with the power system energized and carrying a known level of current. A measurement shall be made of the magnitude and phase angle of each Alternating Current (AC) voltage and current connected to the protective device and the results compared to expected values. For protective devices with built-in Metering Functions that report current and voltage magnitudes and phase angles, or magnitudes of current, voltage, and real and reactive power, the metered values may be used for in-service testing. Otherwise, portable ammeters, voltmeters, and phase-angle meters shall be used.

6. Periodic Testing

Periodic Testing of Interconnection-related Protective Functions shall be performed as specified by the manufacturer, or at least every four years. All Periodic Tests prescribed by the manufacturer shall be performed. Producer shall maintain Periodic Test reports or a log for inspection by Distribution Provider. Periodic Testing conforming to Distribution Provider test intervals for the particular Line Section may be specified by Distribution Provider under special circumstances, such as high fire hazard areas. Batteries used to activate any Protective Function shall be checked and logged once per month for proper voltage. Once every four years, the battery must be either replaced or a discharge test performed.

7. Type Testing Procedures Not Defined in Other Standards

This Section describes the additional Type Tests necessary to qualify a device as Certified under this Rule. These Type Tests are not contained in Underwriters Laboratories UL 1741 Standard Inverters, Converters and Controllers for Use in Independent Power Systems, or other referenced standards.
Rule 21
GENERATING FACILITY INTERCONNECTIONS

(Continued)

L. CERTIFICATION AND TESTING CRITERIA (Continued)

7. Type Testing Procedures Not Defined in Other Standards (Continued)

a. Non-Exporting Test Procedures

The Non-Exporting test is intended to verify the operation of relays, controllers and inverters designed to limit the export of power and certify the equipment as meeting the requirements of Screen I, Options 1 and 2, of the review process. Tests are provided for discrete relay packages and for controllers and inverters with the intended Functions integrated.

i) Discrete Reverse Power Relay Test

This version of the Non-Exporting test procedure is intended for discrete reverse power and underpower relay packages provided to meet the requirements of Options 1 and 2 of Screen I. It should be understood that in the reverse power application, the relay will provide a trip output with power flowing in the export (toward Distribution Provider’s Distribution or Transmission System) direction.

Step 1: Power Flow Test at Minimum, Midpoint and Maximum Pickup Level Settings

Determine the corresponding secondary pickup current for the desired export power flow of 0.5 secondary watts (the minimum pickup setting, assumes 5 amp and 120V CT/PT secondary). Apply nominal voltage with minimum current setting at zero (0) degrees phase angle in the trip direction. Increase the current to pickup level. Observe the relay’s (LCD or computer display) indication of power values. Note the indicated power level at which the relay trips. The power indication should be within 2% of the expected power. For relays with adjustable settings, repeat this test at the midpoint, and maximum settings. Repeat at phase angles of 90, 180 and 270 degrees and verify that the relay does not operate (measured watts will be zero or negative).
(Continued)

L. CERTIFICATION AND TESTING CRITERIA (Continued)

7. Type Testing Procedures Not Defined in Other Standards (Continued)
   a. Non-Exporting Test Procedures (Continued)
      i) Discrete Reverse Power Relay Test (Continued)

Step 2: Leading Power Factor Test

Apply rated voltage with a minimum pickup current setting (calculated value for system application) and apply a leading power factor load current in the non-trip direction (current lagging voltage by 135 degrees). Increase the current to relay rated current and verify that the relay does not operate. For relays with adjustable settings, this test should be repeated at the minimum, midpoint, and maximum settings.

Step 3: Minimum Power Factor Test

At nominal voltage and with the minimum pickup (or ranges) determined in Step 1, adjust the current phase angle to 84 or 276 degrees. Increase the current level to pickup (about 10 times higher than at 0 degrees) and verify that the relay operates. Repeat for phase angles of 90, 180 and 270 degrees and verify that the relay does not operate.

Step 4: Negative Sequence Voltage Test

Using the pickup settings determined in Step 1, apply rated relay voltage and current at 180 degrees from tripping direction, to simulate normal load conditions (for three-phase relays, use I_a at 180, I_b at 60 and I_c at 300 degrees). Remove phase-1 voltage and observe that the relay does not operate. Repeat for phases-2 and 3.

Step 5: Load Current Test

Using the pickup settings determined in Step 1, apply rated voltage and current at 180 degrees from the tripping direction, to simulate normal load conditions (use I_a at 180, I_b at 300 and I_c at 60 degrees). Observe that the relay does not operate.
Rule 21
GENERATING FACILITY INTERCONNECTIONS

(Continued)

L. CERTIFICATION AND TESTING CRITERIA (Continued)

7. Type Testing Procedures Not Defined in Other Standards (Continued)

a. Non-Exporting Test Procedures (Continued)

i) Discrete Reverse Power Relay Test (Continued)

Step 6: Unbalanced Fault Test

Using the pickup settings determined in Step 1, apply rated voltage and 2 times rated current, to simulate an unbalanced fault in the non-trip direction (use $V_a$ at 0 degrees, $V_b$ and $V_c$ at 180 degrees, $I_a$ at 180 degrees, $I_b$ at 0 degrees, and $I_c$ at 180 degrees). Observe that the relay, especially single phase, does operate properly.

Step 7: Time Delay Settings Test

Apply Step 1 settings and set time delay to minimum setting. Adjust the current source to the appropriate level to determine operating time, and compare against calculated values. Verify that the timer stops when the relay trips. Repeat at midpoint and maximum delay settings.

Step 8: Dielectric Test

Perform the test described in IEC 414 using 2 kV RMS for 1 minute.

Step 9: Surge Withstand Test

Perform the surge withstand test described in IEEE C37.90.1.1989 or the surge withstand capability test described in L.3.e.

(Continued)
L. CERTIFICATION AND TESTING CRITERIA (Continued)

7. Type Testing Procedures Not Defined in Other Standards (Continued)
   a. Non-Exporting Test Procedures (Continued)
      ii) Discrete Underpower Relay Test

This version of the Non-Exporting test procedure is intended for discrete underpower relay packages and meets the requirements of Option 2 of Screen I. A trip output will be provided when import power (toward Producer’s load) drops below the specified level.

Note: For an underpower relay, pickup is defined as the highest power level at which the relay indicates that the power is less than the set level.

Step 1: Power Flow Test at Minimum, Midpoint and Maximum Pickup Level Settings

Determine the corresponding secondary pickup current for the desired power flow pickup level of 5% of peak load minimum pickup setting. Apply rated voltage and current at 0 (zero) degrees phase angle in the direction of normal load current.

Decrease the current to pickup level. Observe the relay’s (LCD or computer display) indication of power values. Note the indicated power level at which the relay trips. The power indication should be within 2% of the expected power. For relays with adjustable settings, repeat the test at the midpoint, and maximum settings. Repeat at phase angles of 90, 180 and 270 degrees and verify that the relay operates (measured watts will be zero or negative).
7. Type Testing Procedures Not Defined in Other Standards (Continued)
   a. Non-Exporting Test Procedures (Continued)
      ii) Discrete Underpower Relay Test (Continued)

      Step 2: Leading Power Factor Test

      Using the pickup current setting determined in Step 1, apply rated voltage and
      rated leading power factor load current in the normal load direction (current
      leading voltage by 45 degrees). Decrease the current to 145% of the pickup
      level determined in Step 1 and verify that the relay does not operate. For
      relays with adjustable settings, repeat the test at the minimum, midpoint, and
      maximum settings.

      Step 3: Minimum Power Factor Test

      At nominal voltage and with the minimum pickup (or ranges) determined in
      Step 1, adjust the current phase angle to 84 or 276 degrees. Decrease the
      current level to pickup (about 10% of the value at 0 degrees) and verify that the
      relay operates. Repeat for phase angles 90, 180 and 270 degrees and verify
      that the relay operates for any current less than rated current.

      Step 4: Negative Sequence Voltage Test

      Using the pickup settings determined in Step 1, apply rated relay voltage and
      25% of rated current in the normal load direction, to simulate light load
      conditions. Remove phase 1 voltage and observe that the relay does not
      operate. Repeat for Phases-2 and 3.

      Step 5: Unbalanced Fault Test

      Using the pickup settings determined in Step 1, apply rated voltage and two
      times rated current, to simulate an unbalanced fault in the normal load
direction (use $V_a$ at 0 degrees, $V_b$ and $V_c$ at 180 degrees, $I_a$ at 0 degrees, $I_b$ at
      180 degrees, and $I_c$ at 0 degrees). Observe that the relay (especially
      single-phase types) operates properly.
Rule 21
GENERATING FACILITY INTERCONNECTIONS

(Continued)

L. CERTIFICATION AND TESTING CRITERIA (Continued)

7. Type Testing Procedures Not Defined in Other Standards (Continued)
   a. Non-Exporting Test Procedures (Continued)
      ii) Discrete Underpower Relay Test (Continued)

      Step 6: Time Delay Settings Test

      Apply Step 1 settings and set time delay to minimum setting. Adjust the current source to the appropriate level to determine operating time, and compare against calculated values. Verify that the timer stops when the relay trips. Repeat at midpoint and maximum delay settings.

      Step 7: Dielectric Test

      Perform the test described in IEC 414 using 2 kV RMS for 1 minute.

      Step 8: Surge Withstand Test

      Perform the surge withstand test described in IEEE C37.90.1.1989 or the surge withstand test described in Section L.3.e.

      iii) Tests for Inverters and Controllers with Integrated Functions

      Inverters and controllers designed to provide reverse or underpower functions shall be tested to certify the intended operation of this function. Two methods are acceptable:

      Method 1: If the inverter or controller utilizes external current/voltage measurement to determine the reverse or underpower condition, then the inverter or controller shall be functionally tested by application of appropriate secondary currents and potentials as described in the Discrete Reverse Power Relay Test, Section L.7.a.i of this Rule.
Rule 21
GENERATING FACILITY INTERCONNECTIONS

(Continued)

L. CERTIFICATION AND TESTING CRITERIA (Continued)

7. Type Testing Procedures Not Defined in Other Standards (Continued)
   a. Non-Exporting Test Procedures (Continued)
      iii) Tests for Inverters and Controllers with Integrated Functions (Continued)

Method 2: If external secondary current or voltage signals are not used, then
unit-specific tests must be conducted to verify that power cannot be exported
across the PCC for a period exceeding two seconds. These may be factory
tests, if the measurement and control points are integral to the unit, or they
may be performed in the field.

Inverters and controllers designed to provide reverse or underpower functions
shall be tested to certify the intended operation of this function. Two methods
are acceptable:

Method 1: If the inverter or controller utilizes external current/voltage
measurement to determine the reverse or underpower condition, then the
inverter or controller shall be functionally tested by application of appropriate
secondary currents and potentials as described in the Discrete Reverse
Power Relay Test, Section L.7.a.i of this Rule.

Method 2: If external secondary current or voltage signals are not used, then
unit-specific tests must be conducted to verify that power cannot be exported
across the PCC for a period exceeding two seconds. These may be factory
tests, if the measurement and control points are integral to the unit, or they
may be performed in the field.

vi) Tests for Inadvertent Export Inverters

Test requirements for certified inverters with integrated functions for
Inadvertent Export shall verify the performance requirements specified in
Section Mm of this Rule.

v) Tests for AC/DC Converters

Step 1: Limitation of Back-feed Under Steady State Conditions

Apply the nominal DC operating voltage of the Converter across its DC
terminals with a battery source or simulated equivalent of a battery source.
Vary the battery source by 100%, 75%, 50%, 25%, and 10% of Converter
rated output power. The measured steady-state DC current component at
each of the AC terminals of the Converter is required to be less than 0.5% of
the Converter's rated RMS AC current. This test is to be repeated for 80%
nominal DC operating voltage and for 125% nominal DC operating voltage.
Testing requirements can be modified upon mutual agreement of the
Distribution Provider and the Applicant.

(Continued)
L. CERTIFICATION AND TESTING CRITERIA (Continued)

7. Type Testing Procedures Not Defined in Other Standards (Continued)

a. Non-Exporting Test Procedures (Continued)

v) Tests for AC/DC Converters (Continued)

Step 2: Back-feed Under Fault Conditions – DC Output Shorted
With a battery source or simulated equivalent of a battery source connected to the DC terminals, apply rated conditions of the Converter then short its DC terminals for 200 milliseconds. After 5 cycles of inducing the short circuit, record the measured peak current at each of the AC terminals of the Converter. These peak currents within this time interval are each required to be less than 0.5% of the Converter’s rated RMS AC current. Testing requirements can be modified upon mutual agreement of the Distribution Provider and the Applicant.

Step 3: Back-feed Under Fault Conditions – AC Input Shorted: Phase-Ground, Phase-Phase, and 3-Phase
With a battery source or simulated equivalent of a battery source connected to the DC terminals, apply rated conditions of the Converter then apply a short between any two phases on the grid side of the Converter for 200 milliseconds. After 5 cycles of inducing the short circuit, record the measured peak current at each of the AC terminals of the Converter. These peak currents within this time interval are each required to be less than 0.5% of the Converter’s rated RMS AC current. This test is to be repeated for phase-ground and 3-phase shorts. Testing requirements can be modified upon mutual agreement of the Distribution Provider and the Applicant.

Step 4: Back-feed Under Fault Conditions – Component Faults
Distribution Provider can elect to test for back-feed under the condition of a short circuit across certain components which are internal to the Converter. Potential tests can include inducing a short circuit across different terminals for electronic switches and/or across different terminals for internal transformers. Ultimately, the components used for testing will be chosen on a case-by-case basis and will depend on the Converter’s circuit topology. Testing requirements can be modified upon mutual agreement of the Distribution Provider and the Applicant.

Step 5: Harmonics Testing
Under normal loading conditions at 10%, 25%, 50%, 75%, and 100% of the Converter’s rated power output, conduct harmonic current distortion measurements on each of the AC terminals. Measurements should be below the maximum harmonic current distortion requirements given in IEEE 1547-4.3.3.
L. CERTIFICATION AND TESTING CRITERIA (Continued)

7. Type Testing Procedures Not Defined in Other Standards (Continued)

   b. In-rush Current Test Procedures

       This test will determine the maximum In-rush Current drawn by the Generator.

       (i) Locked-Rotor Method

           Use the test procedure defined in NEMA MG-1 (manufacturer’s data is acceptable if available).

       (ii) Start-up Method

           Install and set up the Generating Facility equipment as specified by the manufacturer. Using a calibrated oscilloscope or data acquisition equipment with appropriate speed and accuracy, measure the current draw at the Point of Interconnection as the Generating Facility starts up and parallels with Distribution Provider’s Distribution or Transmission System. Startup shall follow the normal, manufacturer-specified procedure. Sufficient time and current resolution and accuracy shall be used to capture the maximum current draw within 5%. In-rush Current is defined as the maximum current draw from Distribution Provider during the startup process, using a 10-cycle moving average. During the test, Distribution Provider source, real or simulated, must be capable of maintaining voltage within +/- 5% of rated at the connection to the unit under test. Repeat this test five times. Report the highest 10-cycle current as the In-rush Current. A graphical representation of the time-current characteristic along with the certified In-rush Current must be included in the test report and made available to Distribution Provider.

M. INADVERTENT EXPORT

   Under certain operating conditions, an Applicant may choose to completely offset their facility load by installing generation systems which are optimally sized to meet their peak demand with load following functionality on the Generator controls to ensure conditional export of electrical power from the Generating Facility to Distribution Provider’s Distribution or Transmission System. In situations where the loading changes rapidly and/or the Generator cannot ramp down quickly enough, the Generating Facility may need to export small amounts of power for limited duration. The event of exporting uncompensated power for a short time is referred to as Inadvertent Export.

(Continued)
M.  INADVERTENT EXPORT (Continued)

It is proposed that the following criteria be the minimum requirements for Inadvertent Export systems. It should be understood that other factors relevant to the interconnection study process (15% screen results, short circuit current ratio, etc.) may necessitate additional technical requirements (e.g. reclose block, transfer trip, ground bank, etc.) that are not explicitly noted here. Also, it should be noted that Inadvertent Export may not be available for interconnections to Networked Secondary Systems.

1) If a Generating Facility is proposed with Inadvertent Export, additional Protective Functions and equipment to detect Distribution or Transmission System faults (per Distribution Providers standard practices) may be required over and above the basic Protective Functions and equipment associated with the four options in the Export Screen. Protective Functions may include, but are not limited to, directional overcurrent/voltage-restraint overcurrent Protective Functions for line-to-line fault detection and overcurrent/overvoltage Protective Functions for line-to-ground detection. The addition of a ground bank or ground detector may also be necessary.

2) The effect on equipment ratings can be mitigated by limiting the amount of inadvertent export allowed. To a large degree, Voltage Regulation may be similarly handled. The amount of Inadvertent Export is dependent on specific Distribution Provider requirements and should be limited to the lesser of the following values:

   a. 50% of the Generating Facility Capacity, or
   b. 10% of the continuous conductor rating in watts at 0.9 power factor for the lowest rated feeder conductor upstream of the GF (i.e. 200kW @ 12kV), or
   c. 110% of the largest load block in the facility, or
   d. 500kW or some other maximum level indicated by Distribution Provider

   To govern this quantity, a reverse power Protective Function will be provided to trip the connected Generator(s) within two seconds if the proposed amount of Inadvertent Export is exceeded.

3) Similarly, to ensure limited impact to the Distribution or Transmission System, the expected frequency of Inadvertent Export occurrences should be less than two occurrences per 24-hour period. Additionally, a separate reverse power or underpower Protective Function will be required (in addition to the reverse power Protective Function described in 2) above) to trip the connected Generator(s) if the duration of reverse power or underpower (i.e. ANY export) exceeds 60 seconds.
INADVERTENT EXPORT UTILIZING UL-1741 OR UL-1741 SA-LISTED GRID SUPPORT (NON-ISLANDING) INVERTERS

The following are the minimum requirements for Inadvertent Export systems that meet the criteria specified below. Other factors relevant to the interconnection study process (e.g., 15% screen results, short circuit current ratio, etc.) may necessitate additional technical requirements (e.g., reclose block, transfer trip, ground break, etc.) that are not explicitly noted here. This option may not be available for interconnections to Networked Secondary Systems.

The certified control functions internal to the inverter control or external control systems may be used to replace the discrete reverse/under power relay functions described in Section M provided the requirements outlined below are met.

1. All of the following requirements must be met by the Generating Facility to be eligible for Inadvertent Export under this Section.
   a. The Generating Facility must utilize only UL-1741 certified or UL-1741 SA-listed grid support non-islanding inverters; and,
   b. The Generating Facility must have an aggregate maximum nameplate capacity of 500 kVA or less; and,
   c. The Generating Facility must limit export to not exceed its nameplate rating (kVA-gross) multiplied by 0.1 hours per day (e.g., for a 100 kVA-gross nameplate Generating Facility, the maximum energy allowed to be exported for one day is 10 kWh and the maximum energy allowed to be exported for a 30-day period is 300 kWh); and,
   d. Export from the Generating Facility across the PCC to the Distribution System is less than 100 kVA.

2. To govern the level of Inadvertent Export allowable under this Section, the Generating Facility must utilize a NRTL-certified control system or NRTL-certified inverter system that meets all of the following requirements.
   a. Must result in the Generating Facility disconnecting from the Distribution System, ceasing to energize the Distribution System or halting energy production within two (2) seconds after either:
      i. The period of continuous export exceeds 30 seconds; or,
      ii. The level of export exceeds 100 kVA.
GENERATING FACILITY INTERCONNECTIONS

(Continued)

Mm. INADVERTENT EXPORT UTILIZING UL-1741 OR UL-1741 SA-LISTED GRID SUPPORT (NON-ISLANDING) INVERTERS (Continued)

2. (Continued)

b. Must limit the total energy export within the allowable energy export outlined above in 1.c in a 30-day period and issue a notification (e.g., electronic notification, alarm, etc.) if that energy export limit is exceeded.

c. Failure of the control or inverter system for more than thirty (30) seconds, resulting from loss of control signal, loss of control power or a single component failure or related control sensing of the control circuitry, must result in the Generating Facility entering Non-Export operation whereby no energy is exported across the PCC to the Distribution System.

Interim approval of the control or inverter system may be permitted upon mutual agreement of SCE and the Producer.


Inadvertent Export systems that meet the requirements described herein are processed under Initial Review Screens A through J as described in Section H. If these systems fail Screen J, they then bypass Screens K and L and are processed under Screens M and M1 as described below.

Screen M: Is the aggregate Generating Facility capacity on the Line Section less than 15% of Line Section peak load for all line sections bound by automatic sectionalizing devices?

- If Yes (pass), Initial Review is complete.
- If No (fail), continue to Screen M1.

Screen M1: Is the aggregate of all distributed energy resources (DER) causing reverse power flow (1) at a line section with a voltage regulator device(s) or (2) at a protection device, including the circuit breaker / field recloser?**

- If No (pass), existing DER does not cause reverse power flow at (1) or (2) and Initial Review is complete.
- If Yes (fail), existing DER causes reverse power flow at (1) or (2); fail Initial Review and Supplemental Review is required.

*For the purposes of applying Screen M1 herein, Distribution Provider shall utilize a zero coincidence factor when considering the impact of other Inadvertent Export systems that meet the requirements of Section Mm (i.e., projects that qualify for Option 6 under Section G.1.i) such that those Inadvertent Export systems do not impact Screen M1’s aggregate analysis determination for the individual Inadvertent Export project being evaluated.

**The presence of existing non-certified DER on the line section may require additional review to ensure safe and reliable grid operation.
Rule 21
GENERATING FACILITY INTERCONNECTIONS

(Continued)

N. EXPEDITED INTERCONNECTION PROCESS FOR NON-EXPORT ENERGY STORAGE GENERATING FACILITIES

Upon implementation by Distribution Provider, Applicants with Interconnection Requests for Non-Export Energy Storage Generating Facilities who meet the requirements outlined below are eligible for expedited interconnection, as provided herein, in accordance with the Fast Track Process technical review requirements of Section F.2.

1. Eligibility Requirements.

Applicants seeking to interconnect a Generating Facility under the provisions of this Section N must meet the following eligibility requirements.

a. Applicant must submit a completed Interconnection Request in which the expedited interconnection option is selected, including completing all application fields and submitting all supporting documentation necessary to facilitate the expedited review as required by Distribution Provider. Such documentation may include, but is not limited to, single line diagrams with specific details, manufacturer data sheets for proposed equipment, description of control systems, validation of the right to do business in the state, etc. Distribution Provider shall clearly communicate these requirements as part of the application process.

b. Applicant’s Generating Facility must meet the requirements outlined in Section N.2 below.

c. Applicant’s Interconnection Request must be eligible for and select the Fast Track Process.

d. Applicant’s Interconnection Request must pass Fast Track Initial Review and not require any Interconnection Facilities, Distribution Upgrades or Network Upgrades to remain eligible under this Section. As such, Interconnection Requests that select the Cost Envelope Option are not eligible.

2. Generating Facility Eligibility Criteria.

An Applicant’s Generating Facility must meet and adhere to the following criteria.

a. The Generating Facility must be comprised solely of the following specific categories of generation technology: Non-Exporting inverter-based energy storage.

b. The Generating Facility must have an aggregate maximum inverter nameplate rating of no greater than 500 kW. There is no limitation on an energy storage device’s kWh capacity rating.

---

1 Implementation is targeted for no later than the end of Q2 2017. In accordance with Advice 3493-E/E-A/E-B, the provisions provided for herein are being implemented under a pilot-like approach with a July 1, 2017 through June 30, 2018 reporting period. As such, the provisions may be continued, modified and/or withdrawn as determined by the Commission.
Rule 21

GENERATING FACILITY INTERCONNECTIONS

Sheets 198 (T)

N. EXPEDITED INTERCONNECTION PROCESS FOR NON-EXPORT ENERGY STORAGE GENERATING FACILITIES (Continued)

2. Generating Facility Criteria. (Continued)
   c. The Generating Facility must be located behind an existing single retail meter and Point of Common Coupling with a single, clearly marked and accessible disconnect.\(^1\) No other Generators, other than isolated back-up Generators, may be at the same Point of Interconnection or Point of Common Coupling.
   d. The Generating Facility must utilize Option 3 or Option 4 to meet the non-export protection requirements of Screen I in Section G.1.i.
   e. The Generating Facility must have a single or coordinated control system for all charging functions if utilizing multiple inverters. The control system must also ensure that there is no increase in the Interconnection Customer’s existing peak load demand.
   f. The Generating Facility must be inverter-based and utilize only UL 1741 and UL 1741 SA-listed equipment. Additionally, all installed equipment must meet Distribution Provider’s current electric service requirements with no violations or variances.

   a. Applicants with Interconnection Requests that meet the requirements specified in Sections N.1 and N.2 above shall be issued a draft Generator Interconnection Agreement within 15 Business Days of Distribution Provider providing written notice that the Interconnection Request is deemed complete and valid, pursuant to the requirements of Sections E.5.a and E.5.b, and of Distribution Provider's receipt of all applicable fees.\(^{ii}\) In accordance with Section D.16, if Distribution Provider is unable to meet this timeline, Distribution Provider shall notify Applicant.
   b. For otherwise eligible Interconnection Requests that require additional information from Applicant as identified by Distribution Provider during the Fast Track Initial Review, Distribution Provider shall request such additional information from Applicant. When such a request is made by Distribution Provider, additional time shall be added to the 15 Business Days applicable under Section N.3.a above on a Business Day-for-Business Day basis (but not less than 1 Business Day) from the date Distribution Provider issues the request to the date the Applicant provides the necessary information.

\(^1\) For Generating Facilities interconnecting at 120/240V service, Distribution Provider may utilize the meter to satisfy the disconnect requirement if the Interconnection Customer’s panel is equipped with a main breaker.

\(^{ii}\) To facilitate this process, Distribution Provider may provide Applicant with a preliminary Generator Interconnection Agreement that uses information from Applicant’s Interconnection Request. Applicant shall communicate any requested changes to the Generator Interconnection Agreement to Distribution Provider prior to the issuance of the draft Generator Interconnection Agreement.

(Continued)
N. EXPEDITED INTERCONNECTION PROCESS FOR NON-EXPORT ENERGY STORAGE GENERATING FACILITIES (Continued)

3. Expedited Processing Provisions. (Continued)

   c Any Interconnection Request that fails to meet the requirements specified in Section N is no longer eligible for processing under the provisions of this Section N. Such Interconnection Requests shall continue to be processed in accordance with the applicable provisions and timelines of Rule 21, unless the Applicant chooses to withdraw the Interconnection Request.

O. AC/DC CONVERTER ELIGIBILITY CRITERIA

   a. The AC/DC Converter must have an aggregate maximum inverter nameplate rating of no greater than 500 kW. There is no limitation on an energy storage device’s kWh capacity rating.

   b. Applicant’s Interconnection Request must be eligible for and select the Fast Track Process.

   c. Applicant’s Interconnection Request must Fast Track Initial Review and not require any Interconnection Facilities, Distribution Upgrades or Network Upgrades to remain eligible under this Section.

   d. Applicant’s selecting this section shall use the corresponding interconnection agreement type provided for AC/DC Converters eligible under this Section. As such, Interconnection Requests that select the Cost Envelope Option are not eligible.

   e. Applicant’s AC/DC Converters must meet the certification requirements in the Section C Definition of AC/DC Converters.
**Form Number** | **Title**                                                                 | **Associated Tariffs** | **Use Guidance**                                                                 |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14-922</td>
<td>Rule 21 Pre-Application Report Request</td>
<td>Rule 21</td>
<td>For Generator Developer to request basic info about local distribution circuit</td>
</tr>
<tr>
<td>14-926</td>
<td>Rule 21 Detailed Study Agreement</td>
<td>Rule 21</td>
<td>Independent Study and Distribution Group Study Process Study Agreement</td>
</tr>
<tr>
<td>16-344</td>
<td>NEM-1 and NEM-2 Interconnection Agreement for ≤1 MW Generating Facilities</td>
<td>NEM, Rule 21</td>
<td>Used with Application Form 14-957</td>
</tr>
<tr>
<td>14-974</td>
<td>NEM-2 Interconnection Agreement for &gt;1 MW Generating Facilities</td>
<td>NEM, Rule 21</td>
<td>Used with Application Form 14-957</td>
</tr>
<tr>
<td>14-750</td>
<td>Biogas Digester Electrical Generating Facility Net Energy Metering and Interconnection Agreement</td>
<td>NEM, Rule 21</td>
<td>Used with Application Form 14-957</td>
</tr>
<tr>
<td>14-923</td>
<td>NEM-1 and NEM-2 Solar and Wind ≤10 kW Generating Facility Interconnection Agreement</td>
<td>NEM, Rule 21</td>
<td>Used with Application Form 14-957</td>
</tr>
<tr>
<td>14-755</td>
<td>Fuel Cell Electrical Generating Facility Net Energy Metering and Interconnection Agreement</td>
<td>NEM, Rule 21</td>
<td>Used with Application Form 14-957</td>
</tr>
<tr>
<td>14-773</td>
<td>Generating Facility Interconnection Agreement (NEM-1 and NEM-2 Multiple Tariff for ≤1 MW Generating Facilities)</td>
<td>NEM, Rule 21</td>
<td>Used with Application Form 14-957 or 14-732</td>
</tr>
<tr>
<td>14-972</td>
<td>Generating Facility Interconnection Agreement (NEM-2 Multiple Tariff for &gt;1 MW Generating Facilities)</td>
<td>NEM, Rule 21</td>
<td>Used with Application Form 14-957 or 14-732</td>
</tr>
<tr>
<td>14-653</td>
<td>Multifamily Affordable Solar Housing – Virtual Net Metering Interconnection Agreement for ≤1 MW Generating Facilities (NEM-1 and NEM-2)</td>
<td>NEM, Rule 21</td>
<td>Used with Application Form 14-957</td>
</tr>
<tr>
<td>14-971</td>
<td>Multifamily Affordable Solar Housing – Virtual Net Metering Interconnection Agreement for &gt;1 MW Generating Facilities (NEM-2)</td>
<td>NEM, Rule 21</td>
<td>Used with Application Form 14-957</td>
</tr>
<tr>
<td>14-909</td>
<td>Virtual Net Energy Metering For Multi-Tenant and Multi-Meter Properties Interconnection Agreement for ≤1 MW Generating Facilities (NEM-1 and NEM-2)</td>
<td>NEM, Rule 21</td>
<td>Used with Application Form 14-957</td>
</tr>
</tbody>
</table>

*The forms can be accessed at the following SCE website: https://www.sce.com/wps/portal/home/regulatory/tariff-books/filed-forms*
## NEM, RES-BCT and Non-Export Interconnection Forms (Continued)

<table>
<thead>
<tr>
<th>Form Number</th>
<th>Description</th>
<th>Rule</th>
<th>Used With</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-973</td>
<td>Virtual Net Energy Metering For Multi-Tenant and Multi-Meter Properties Interconnection Agreement for &gt;1 MW Generating Facilities (NEM-2)</td>
<td>Rule 21</td>
<td>Used with Application Form 14-957</td>
</tr>
<tr>
<td>14-788</td>
<td>Local Government Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT) Interconnection Agreement</td>
<td>Rule 21</td>
<td>Used with Application Form 14-732</td>
</tr>
<tr>
<td>14-731</td>
<td>Generating Facility Interconnection Agreement (Non-Exporting)</td>
<td>Rule 21</td>
<td>Used with Application Form 14-732</td>
</tr>
<tr>
<td>14-957</td>
<td>Net Energy Metering (NEM) Generating Facility Interconnection Application</td>
<td>Rule 21</td>
<td>Used with Interconnection Agreements 16-344, 14-923, 14-750, 14-755, 14-773, 14-653, 14-909, 14-971, 14-972, 14-973, 14-974</td>
</tr>
<tr>
<td>14-732</td>
<td>Generating Facility Interconnection Application</td>
<td>Rule 21</td>
<td>Application typically used for Non-NEM Generation Interconnection Agreements 14-731, 14-742, 14-743, 14-744, 14-745, 14-972</td>
</tr>
<tr>
<td>14-742</td>
<td>Generating Facility Interconnection Agreement (3rd Party Non-Exporting)</td>
<td>Rule 21</td>
<td>Used with Forms 14-732 &amp; 14-744</td>
</tr>
<tr>
<td>14-744</td>
<td>Customer Generation Agreement</td>
<td>Rule 21</td>
<td>Used with Forms, 14-732 &amp; 14-743 or 14-742</td>
</tr>
<tr>
<td>14-745</td>
<td>Generating Facility Interconnection Agreement (Inadvertent-Export)</td>
<td>Rule 21</td>
<td>Used with Form 14-732</td>
</tr>
<tr>
<td>14-931</td>
<td>Export Addendum to Generating Facility Interconnection Agreement for Non-Export Generating Facilities (Form 14-731 or Form 14-742) Exporting One MW or Less</td>
<td>Rule 21</td>
<td>Used with form 14-731 or 14-742</td>
</tr>
</tbody>
</table>

(Continued)
### Rule 21

#### GENERATING FACILITY INTERCONNECTIONS

(Continued)

Appendix A (Continued)

Forms Associated with Rule 21 Generating Facility Interconnections

Other NEM Forms

<table>
<thead>
<tr>
<th>Form Number</th>
<th>Description</th>
<th>NEM/Rule 21 Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-903</td>
<td>NEM / NEMV / NEMVMASH Inspection Report (NEM-1 Only)</td>
<td>NEM, Rule 21</td>
</tr>
<tr>
<td></td>
<td>Customer with an existing generating facility who enters into a new NEM contract, unless the facility was installed or inspected within the last 3 years.</td>
<td></td>
</tr>
<tr>
<td>14-935</td>
<td>Renewable Energy Credits Compensation (NEM-1 and NEM-2)</td>
<td>NEM</td>
</tr>
<tr>
<td></td>
<td>Information required to receive Renewable Energy Credits</td>
<td></td>
</tr>
<tr>
<td>14-654</td>
<td>MASH Allocation Request Form (NEM-1 and NEM-2)</td>
<td>NEM</td>
</tr>
<tr>
<td></td>
<td>Designate accounts to receive allocated kWh</td>
<td></td>
</tr>
<tr>
<td>14-910</td>
<td>NEM-V Allocation Request Form (NEM-1 and NEM-2)</td>
<td>NEM</td>
</tr>
<tr>
<td></td>
<td>Designate accounts to receive allocated kWh</td>
<td></td>
</tr>
<tr>
<td>14-912</td>
<td>Eligible Customer-Generator Warranty (NEM-1 and NEM-2)</td>
<td>NEM</td>
</tr>
<tr>
<td></td>
<td>Warrant that Generating Facility meets NEM eligibility requirements</td>
<td></td>
</tr>
<tr>
<td>14-936</td>
<td>NEM One-Time Relevant Period Change Request (NEM-1 and NEM-2)</td>
<td>NEM</td>
</tr>
<tr>
<td></td>
<td>Change the start date of the Customer's NEM Relevant Period</td>
<td></td>
</tr>
<tr>
<td>14-937</td>
<td>NEM-A Account Information Form (NEM-1 and NEM-2)</td>
<td>NEM</td>
</tr>
<tr>
<td></td>
<td>Designate accounts to receive allocated kWh</td>
<td></td>
</tr>
<tr>
<td>16-345</td>
<td>NEM Monthly Billing Option Request Form (NEM-1 and NEM-2)</td>
<td>NEM</td>
</tr>
<tr>
<td></td>
<td>Request monthly billing option</td>
<td></td>
</tr>
</tbody>
</table>

### Export for Sale Interconnection Forms

<table>
<thead>
<tr>
<th>Form Number</th>
<th>Description</th>
<th>NEM/Rule 21 Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-918</td>
<td>Rule 21 Exporting Generator Interconnection Request</td>
<td>Rule 21</td>
</tr>
<tr>
<td></td>
<td>To be used with the GIA For Exporting GFs Interconnecting Under The Detailed Study Process</td>
<td></td>
</tr>
<tr>
<td>14-919</td>
<td>Rule 21 Generator Interconnection Agreement for Exporting Generating Facilities Interconnecting Under the Fast Track Process</td>
<td>Rule 21</td>
</tr>
<tr>
<td></td>
<td>Used with Form 14-918</td>
<td></td>
</tr>
<tr>
<td>14-925</td>
<td>Rule 21 Generator Interconnection Agreement (GIA) For Exporting Generating Facilities Interconnecting Under The Detailed Study Process</td>
<td>Rule 21</td>
</tr>
<tr>
<td></td>
<td>Used with Form 14-918 Interconnection Agreement to be used for Interconnecting Under The Independent Study, Distribution Group Study, or Transmission Cluster Study Process</td>
<td></td>
</tr>
</tbody>
</table>

(Continued)
Unit Cost Guide

Distribution Provider shall publish a Unit Cost Guide for facilities generally required to interconnect generation in Distribution Provider’s Distribution System. The Unit Cost Guide shall not be binding for actual facility costs and is provided only for additional cost transparency, developer reference, and Distribution Provider’s reference when preparing the study estimate. The Unit Cost Guide shall not replace the estimated cost provided by Distribution Provider in an Interconnection Study or an initial or supplemental review under the Fast Track Process.

The Unit Cost Guide shall include the anticipated cost of procuring and installing Interconnection Facilities and Distribution Upgrades generally utilized by Applicant. An annual adjustment shall be performed within the Unit Cost Guide for five (5) years to account for the anticipated timing of procurement to accommodate a potential range of Commercial Operation Dates.

The Unit Cost Guide shall be updated annually in accordance with the process set forth in D.16-06-052.
TABLE OF CONTENTS

Sheet 1

(Continued)

Preliminary Statement:

A. Territory Served ......................................................................................................... 22909-E
B. Description of Service ................................................................................................ 22909-E
C. Procedure to Obtain Service ..................................................................................... 22909-E
D. Establishment of Credit and Deposits ....................................................................... 22909-E
E. General .................................................................................................................. 45178-45179-45180-53818-45182-E
F. Symbols ................................................................................................................... 45182-E
G. Gross Revenue Sharing Mechanism ......................................................................... 26584-26585-26586-26587-27195-27196-54092-E
H. Baseline Service ...................................................................................................... 52027-52028-52029-52030-52031-E
I. Charge Ready Program Balancing Account ........................................................... 58633-58634-E
J. Not In Use ................................................................................................................. 22909-E
K. Nuclear Decommissioning Adjustment Mechanism ................................................. 36582-57779-E
L. Purchase Agreement Administrative Costs Balancing Account ............................ 55207-51922-55208-E
M. Income Tax Component of Contributions ................................................................. 58419-58420-E
N. Memorandum Accounts ............................................................................................ 21344-61163-61164-58221-49492-61165-61166-61167-53821-E
O. California Alternate Rates for Energy (CARE) Adjustment Clause ..................... 34705-41902-E
P. Optional Pricing Adjustment Clause (OPAC) .......................................................... 27670-27671-27673-27674-E

(To be inserted by utility) Issued by (To be inserted by Cal. PUC)
Advice 3714-E Caroline Choi Date Submitted Dec 11, 2017
Decision Senior Vice President Effective May 15, 2018
Resolution ALJ-347
### TABLE OF CONTENTS

Sheet 11

(Continued)

<table>
<thead>
<tr>
<th>Rule No.</th>
<th>Title of Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Definitions .................................................................................................................. 55539-55559-E</td>
</tr>
<tr>
<td>2</td>
<td>Description of Service .............................................................................................. 55564-55565-E</td>
</tr>
<tr>
<td>3</td>
<td>Application for Service ......................................................................................... 55566-55567-E</td>
</tr>
<tr>
<td>4</td>
<td>Contracts .............................................................................................................. 55568-55569-E</td>
</tr>
<tr>
<td>5</td>
<td>Special Information Required on Forms ................................................................ 55570-55571-E</td>
</tr>
<tr>
<td>6</td>
<td>Establishment and Re-establishment of Credit ....................................................... 55572-55573-E</td>
</tr>
<tr>
<td>7</td>
<td>Deposits .............................................................................................................. 55574-55575-E</td>
</tr>
<tr>
<td>8</td>
<td>Notices .............................................................................................................. 55576-55577-E</td>
</tr>
<tr>
<td>9</td>
<td>Rendering and Payment of Bills ........................................................................... 55578-55579-E</td>
</tr>
<tr>
<td>10</td>
<td>Disputed Bills ..................................................................................................... 55580-55581-E</td>
</tr>
<tr>
<td>11</td>
<td>Discontinuance and Restoration of Service .............................................................. 55582-55583-E</td>
</tr>
<tr>
<td>12</td>
<td>Rates and Optional Rates ..................................................................................... 55584-55585-E</td>
</tr>
<tr>
<td>13</td>
<td>Temporary Service .................................................................................................. 55586-55587-E</td>
</tr>
<tr>
<td>14</td>
<td>Shortage of Supply and Interruption of Delivery ....................................................... 55588-55589-E</td>
</tr>
<tr>
<td>15</td>
<td>Distribution Line Extensions .................................................................................. 55590-55591-E</td>
</tr>
<tr>
<td>16</td>
<td>Service Extensions ................................................................................................ 55592-55593-E</td>
</tr>
<tr>
<td>17</td>
<td>Adjustment of Bills and Meter Tests ...................................................................... 55594-55595-E</td>
</tr>
<tr>
<td>18</td>
<td>Supply to Separate Premises and Use by Others ..................................................... 55596-55597-E</td>
</tr>
<tr>
<td>19</td>
<td>Replacement of Overhead With Underground Electric Facilities ............................. 55598-55599-E</td>
</tr>
<tr>
<td>20</td>
<td>Generating Facility Interconnections ................................................................... 55600-55601-E</td>
</tr>
<tr>
<td>21</td>
<td>(Continued) ......................................................................................................... 55602-55603-E</td>
</tr>
</tbody>
</table>

(To be inserted by utility)  
Advice 3714-E  
Issued by Caroline Choi  
Date Submitted Dec 11, 2017  
Decision Senior Vice President  
Effective May 15, 2018  
Resolution ALJ-347
Attachment B
Expedited Interconnection Dispute Resolution Process

Assembly Bill (AB) 2861 (Stats. 2016, Ch. 672),\(^1\) signed into law in September 2016, authorized the California Public Utilities Commission (CPUC, or Commission) to establish an expedited dispute resolution process that will issue binding determinations to electric distribution grid interconnection disputes based on the recommendations of a technical panel within 60 days of the Commission receiving the Application regarding a particular dispute.

CPUC Resolution ALJ-347

On October 12, 2017, the CPUC issued Resolution ALJ-347 which sets forth an expedited interconnection dispute resolution process as authorized by Assembly Bill 2861.\(^2\) The “Expedited Process” is explained at length in Exhibit A of Resolution ALJ-347 and described below.

Public Access to Documents

Per Resolution ALJ-347,\(^3\) all written notices requesting resolution using the Expedited Process, Energy Division notices confirming or denying eligibility, Sub-Panel recommendations, comments, replies, Orders from the Executive Director, and requests for CPUC review of an Order, are public records and open to public inspection, except as provided under statute or CPUC’s order. All such notices will be posted to the dispute’s Docket Card (at the CPUC’s e-filing system).

If you need help with or have any questions about filing your dispute for Expedited Process, contact the CPUC Public Advisor's Office

The Public Advisor - CPUC
505 Van Ness Avenue, Room 2103
San Francisco, CA 94102
(866) 849-8390 (toll free); (415) 703-2074
public.advisor@cpuc.ca.gov

---

\(^1\) Assembly Bill 2861 codified Public Utilities Code Section 769.5 available at https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB2861

\(^2\) http://docs.cpuc.ca.gov/publisheddocs/published/g000/m197/k421/197421608.pdf

\(^3\) Resolution ALJ-347, Exhibit A, page 16.
Expedited Interconnection Dispute Resolution Process

For detail regarding the requirements for this dispute resolution process, please refer to Distribution Provider’s Rule 21, Section K.3 and the Commission’s Resolution ALJ-347.

Applying for Expedited Dispute Resolution

To request resolution of a dispute via the Expedited Process, the applicant shall document the dispute in a written notice from the applicant to the Energy Division Director using the template provided in this document.

The applicant is required to provide enough documentation regarding the dispute including the following information:

- All relevant known facts pertaining to the dispute
- Specific dispute and the relief sought
- Express notice by the applicant that it is requesting resolution using the Commission’s Expedited Process as described in Section K.3 of Distribution Provider’s Rule 21
- Efforts to date to resolve the dispute directly with the utility, including at minimum a showing that the applicant meets the informal dispute resolution requirement for eligibility pursuant Section K.3 of Distribution Provider’s Rule 21
- Names of Interconnection Dispute Resolution Panel members who may have a conflict of interest as defined in Section 769.5(b)(1)2

The written notice shall also attach all materials that may aid in review of the dispute, including a copy of the Interconnection Request, any interconnection study performed for that Interconnection Request, and all correspondence between the Applicant and the Distribution Provider relevant to the dispute.

The Applicant shall serve this written notice on: (1) Energy Division (Rule21.Disputes@cpuc.ca.gov); (2) the Distribution Provider’s email address and physical address set forth in the Generator Interconnection Agreement or Interconnection Request, if there is no Generator Interconnection Agreement; (3) the ombudsman designated by Distribution Provider; and (4) any other interested persons in accordance with the procedures outlined in Resolution ALJ-347.
What Will Happen Next

Eligibility Verification, Sub-Panel Selection, and Utility Response

Eligibility Verification

Energy Division will evaluate the submission and notify the applicant and utility of the dispute’s eligibility within three business days of receiving the request. For eligible disputes, the notice will contain the following:

- Express notice that Energy Division has deemed the dispute eligible for the Commission’s Expedited Process.
- The date Energy Division deemed the dispute eligible (this is the “start” date for the 60-day expedited procedures defined in AB 2861).
- A unique dispute identification number.
- The names of the Interconnection Dispute Resolution Panel (“Panel”) members chosen by Energy Division to serve on the individual dispute’s Review Sub-Panel (“Sub-Panel”).
- A copy of the applicant’s written application requesting resolution of the dispute, and any supplementary materials submitted.
- Notice to the utility to submit a response and any remaining documents in its possession to the Sub-Panel within five business days (see “Utility Response” below).
- Notice to the applicant and utility that the Sub-Panel will complete its recommendation within 30 days of the date the Commission received the dispute, and there will be an opportunity to submit comments and/or reply comments on the recommendation.
- Notice to the applicant and utility that the Executive Director will issue an order resolving the dispute within 30 days of the Sub-Panel’s recommendation, and there will be an opportunity to request Commission review of the order via a Draft Resolution within 10 days of the order’s issuance.
- Notice that pending resolution of the dispute, the applicant and utility shall proceed diligently with the performance of their respective obligations under Rule 21, with the exception that the applicant shall not be obligated to post interconnection financial securities (see “Suspension of Rule 21 Process during Dispute Review” immediately following.)
Expedited Interconnections
Dispute Resolution Process

Request Form
BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

(A)

COMPLAINANT(S)

vs.

(B)

DEFENDANT(S)

(Include Utility “U-Number”, if known)

(C) Eligibility Verification

Are you requesting to resolve a dispute pursuant to Section K.3 of Distribution Provider’s Rule 21?

☐ YES  ☐ NO

Have you tried to resolve this matter informally with the utility in accordance with Section K.2.a of Distribution Provider’s Rule 21?

☐ YES  ☐ NO

Note: If you have not yet initiated an informal dispute resolution under Rule 21 Section K.2.a, you must complete that process prior to submitting this Expedited Interconnection Dispute Resolution Process Request Form.
EXPEDITED DISPUTE RESOLUTION PROCESS WRITTEN NOTICE

(D) The complaint of (Provide name, address and phone number for each complainant)

<table>
<thead>
<tr>
<th>Name of Complainant(s)</th>
<th>Address</th>
<th>Daytime Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Project number, utility ID or queue number of the facility related to the dispute ______
Site address ______________________________________
Interconnection Request customer name(s)_____________________

(E) Utility Representatives(s) (Provide name, address and phone number for each representative)

<table>
<thead>
<tr>
<th>Name of Utility Representative(s)</th>
<th>Address</th>
<th>Daytime Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(F) Interested person(s) (Besides the Complainant or Utility Representatives, provide name, address and phone number for each person who has a demonstrable interest in the outcome of the dispute)

<table>
<thead>
<tr>
<th>Name of Interested Person(s)</th>
<th>Address</th>
<th>Daytime Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(G) Panel Members(s) (provide names of Interconnection Dispute Resolution Panel members who may have a conflict of interest as defined in Section 769.5(b)(1))

<table>
<thead>
<tr>
<th>Name of Panel Member(s) with Conflict of Interest</th>
<th>Address</th>
<th>Daytime Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(H) Provide a brief statement summarizing the dispute and the specific relief that you seek
(I)
Explain fully and clearly the details of your dispute. Include all known alleged facts pertaining to your dispute. (Attach additional pages if necessary and any supporting documentation)

(J)
Describe the efforts performed by the complainant in trying to resolve the dispute by bilateral negotiation process (as described in Section K.2.a of Rule 21).
(K) Please include materials that may aid in the review of the dispute. These include.

- Copy of the Interconnection Request
- Any studies or reviews performed by the utility regarding the related project(s)
- All correspondence between the applicant and the utility relevant to the dispute

(L) SIGNATURE

Dated _________________, California, this ___________ day of ______________, ___________

(city) (date) (month) (year)

Signature of each complainant

(MUST ALSO SIGN VERIFICATION AND PRIVACY NOTICE)

(M) REPRESENTATIVE’S INFORMATION:

Provide name, address, telephone number, e-mail address (if consents to notifications by e-mail),
and signature of representative, if any.

<table>
<thead>
<tr>
<th>Name of Representative:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
</tr>
<tr>
<td>Telephone Number:</td>
</tr>
<tr>
<td>E-mail:</td>
</tr>
<tr>
<td>Signature</td>
</tr>
</tbody>
</table>
PRIVACY NOTICE

This message is to inform you that the Energy Division of the California Public Utilities Commission (“CPUC”) intends to file the above-referenced Request for Expedited Process electronically instead of in paper form as it was submitted.

Please Note: Whether or not your Request for Expedited Process is filed in paper form or electronically, Request for Expedited Process filed with the CPUC become a public record and may be posted on the CPUC’s website. Therefore, any information you provide in the Request for Expedited Process, including, but not limited to, your name, address, city, state, zip code, telephone number, E-mail address and the facts of your case may be available on-line for later public viewing.

Having been so advised, the Undersigned hereby consents to the filing of the referenced Request for Expedited Process.

_________________________________________
Signature of Complainant

_________________________________________
Printed Name