

Matrix of Changes to SDG&E's Wholesale Distribution Open Access Tariff

| Article | Changes from pro forma LGIA | Justification for change |
|---------|--|---|
| 15.1 | <p>Added the bolded language:</p> <p>Interconnection. A Generator shall follow the SGIP or LGIA based on the maximum output megawatts as set forth in Attachment D and Attachment F, as applicable, to request Interconnection Service and Section 15.2 through 15.8 to request Distribution Service. If the Generator requests both Interconnection Service and Distribution Service at the same time, SDG&E shall process such requests concurrently in accordance with the SGIP. The Generator requesting Interconnection Service shall execute the SGIA or LGIA based on the maximum output megawatts pursuant to the terms of the SGIP or the LGIA.</p> | <p>These additions are intended to correct an inadvertent omission in the WDAT that was the subject of SDG&E's October 1, 2009 filing in Docket No. ER10-5-000. This filing added the Large Generator Interconnection Procedures and Large Generator Interconnection Agreement to SDG&E's WDAT. By letter order, dated November 19, 2009, the Commission accepted for filing SDG&E's proposed changes to its WDAT that incorporated the FERC's <i>pro forma</i> LGIP and LGIA as modified by SDG&E. These changes are purely ministerial - not substantive - in that the Commission-accepted LGIP clearly governs the interconnection of a Large Generator to the Distribution System. This change to Section 15.1 of the WDAT conforms Section 15.1 to the requirements of the LGIP.</p> |
| 15.2 | <p>Deleted reference to Pamela Mills as the contact person and inserted Ms. Mills' title.</p> | <p>This change is not substantive.</p> |
| 15.3 | <p>Added the bolded language:</p> <p>Completed Application. The desired points of interconnection to the Distribution System and the points on the CAISO Controlled Grid for: 1) LSE resource take out; or 2) Generator resource delivery, including requested deliverability status to the aggregate of Load on the CAISO Controlled Grid.</p> | <p>This change reflects the CAISO's revised Generator Interconnection Procedures (GIP) that was conditionally accepted the GIP in <i>California Independent System Operator Corporation</i>, 133 FERC ¶ 61,223 and provides the Interconnection Customer an option to request the CAISO to complete a Delivery Assessment if the applicable WDAT so provides.</p> |

Small Generator Interconnection Procedures

Matrix of Changes

| Section | Changes to Order 2006 <i>Pro Forma</i> SGIP | Justification |
|-------------------------------|--|---|
| Section 1.6.1 | Insert a new subsection to distinguish the "General" default use by the Distribution Provider of the serial queue from the new Section 1.6.2 described immediately below. | This change does not alter the language governing the use of a serial queue utilized in the <i>pro forma</i> SGIP. This is a Category 3 change and as such is consistent with or superior to the <i>pro forma</i> SGIP. |
| Section 1.6.2 | Inserted a new Section 1.6.2 pertaining to Clustering | This change is a Category 2 change and is consistent with or superior to the <i>pro forma</i> SGIP because it adds greater detail to the discretionary use, as provided in Section 1.6.1, of cluster studies. This detail is identical to the <i>pro forma</i> LGIP and is comparable to Section 4.2 of SDG&E's LGIP accepted by the Commission in its letter order, dated November 17, 2009 in Docket No. ER10-5-000. |
| Section 1.8 | Inserted a new Section 1.8 pertaining to Interconnection Studies. | This change is a Category 2 change and is consistent with or superior to the <i>pro forma</i> SGIP. It is identical to the <i>pro forma</i> LGIP and is comparable to Section 4.2 of SDG&E's LGIP accepted by the Commission in its letter order, dated November 17, 2009 in Docket No. ER10-5-000. |
| Sections 1.9, 1.9.1 and 1.9.2 | Inserted a new Section 1.9 title and pertaining to a deliverability assessment over the Distribution System (Subsection 1.9.1) and the CAISO's Controlled Grid (1.9.2). | <p>These additions are Category 2 changes and as such are consistent with or superior to the <i>pro forma</i> SGIP in that they track (with certain exceptions pertaining to the CAISO revised Generator Interconnection Procedures (GIP) that on December 16, 2010 the Commission conditionally accepted in Docket No. ER11-1830-000, 133 FERC ¶ 61,223) language in Section 3.2.3 of SDG&E's LGIP accepted by the Commission in its letter order, dated November 17, 2009 in Docket No. ER10-5-000 pertaining to this same subject matter involving deliverability studies.</p> <p>Moreover, based on discussions with the CAISO during late January 2011, the new Section 1.9.2 added the On-Peak Deliverability Assessment and Off-Peak Deliverability Assessment to be made by the CAISO pursuant to Section 6.5.2 of the GIP. This new section was further modified based on discussions with the CAISO to align the (i) the timing of the CAISO's GIP Deliverability studies with the timing of SDG&E proposed studies under its revised WDAT and (ii) the GIP's provisions of security with the WDAT SGIP and WDAT LGIA security provisions. This new Section 1.9.2 also obligates the Interconnection Customer to reimburse the Distribution Provider for that portion of the actual cost for the Deliverability Study attributable to such Interconnection Customer. These Category 3 changes are consistent with or superior to the <i>pro forma</i> LGIP because it clarifies the role of the CAISO in providing Deliverability Assessments at the Interconnection Customer's option.</p> |
| Section 1.9.3 | Inserted the following language: "Delivery Network Upgrades. Unless the Distribution Provider elects to fund the capital for Delivery Network Upgrades, they shall be solely funded by the Interconnection Customer pursuant to CAISO GIP Section 12.3.1." | This Category 2 addition tracks language in Section 3.2.2 of SDG&E's LGIP accepted by the Commission in its letter order, dated November 17, 2009 in Docket No. ER10-5-000 pertaining to this same subject matter involving deliverability studies. |

| Section | Changes to Order 2006 <i>Pro Forma</i> SGIP | Justification |
|-------------------|--|--|
| Section 1.9.4 | <p>Inserted the following language: "Repayment of Amounts Advanced for Delivery Network Upgrades. The Interconnection Customer shall be entitled to a repayment for the cost of Delivery Network Upgrades in accordance with CAISO GIP Section 12.3.2."</p> | <p>This Category 2 addition tracks language in Section 3.2.2 of SDG&E's LGIP accepted by the Commission in its letter order, dated November 17, 2009 in Docket No. ER10-5-000 pertaining to this same subject matter involving deliverability studies.</p> |
| Glossary of Terms | <p>Added definitions for the following terms:</p> <p>CAISO shall mean the California Independent System Operator Corporation, a state chartered, nonprofit, corporation that controls certain transmission facilities of all Participating Transmission Owners and dispatches certain generating units and loads.</p> <p>CAISO Tariff shall mean the California Independent System Operator Corporation Operating Agreement and Tariff, dated March 31, 1997, as it may be modified from time to time.</p> | <p>These Category 3 added definitions are consistent with or superior to the <i>pro forma</i> SGIP because they acknowledge the roll of the CAISO with respect to Deliverability Studies performed pursuant to the GIP to determine the deliverability of energy from a Generating Facility for which an Interconnection Customer elects to obtain Full Deliverability Status.</p> |
| Glossary of Terms | <p>Substituted "CAISO" shown in bold for references to "ISO" as follows:</p> <p>Transmission System — Those transmission facilities owned by the Distribution Provider that have been placed under the CAISO's operational control and are part of the CAISO Grid.</p> | <p>This Category 1 change is consistent with or superior to the <i>pro forma</i> SGIP because it reflects a similar modification made to the CAISO Tariff.</p> |

| Section | Changes to Order 2006 <i>Pro Forma</i> SGIP | Justification |
|--|--|---|
| Attachment 2 Small Generator Interconnection Request | <p>Deleted the letter "s" after "New" shown in bold below:</p> <p>Application is for: New Small Generating Facility</p> <p>Deleted "wsh8ich" and substituted "which" as shown in bold below:</p> <p>For installations at locations with existing electric service to which the proposed Small Generating Facility will interconnect, provide:</p> <p>Inserted bolded text below:</p> <p>"Individual Generator Power Factor Rated Power Factor: Leading: _____ Lagging: _____</p> <p>Three phase winding configuration: __ 3 wire delta __ 3 wire wye __ 4 wire wye"</p> <p>Inserted bolded text below :</p> <p><u>"Small Generating Facility Characteristic Data (for inverter-based machines)"</u></p> <p>Max design fault contribution current: _____ Instantaneous _____ or RMS?</p> <p>Short circuit produced by generator _____ amps</p> <p>Wiring configuration __ Single phase __ Three phase</p> <p>Provide complete dynamic model in GE PSLF format</p> <p>(Provide equivalent impedance model of the Solar Collector System in GE PSLF format)"</p> | <p>This change conforms to the <i>pro forma</i> SGIP.</p> <p>This change conforms to the <i>pro forma</i> SGIP.</p> <p>This Category 3 change is consistent with or superior to the <i>pro forma</i> SGIP because the added electrical information is necessary for both the Distribution Provider to study the new Small Generation Facility and the CAISO to complete its Deliverability Assessment study under the GIP.</p> <p>This Category 3 change is consistent with or superior to the <i>pro forma</i> SGIP because the added electrical information is necessary both for the Distribution Provider to study the new Small Generation Facility and the CAISO to complete its Deliverability Assessment study under the GIP.</p> |

| Section | Changes to Order 2006 <i>Pro Forma</i> SGIP | Justification | | | | | | | | | | | | | | | | | | |
|---|---|---|-------|--|-------|-----|--------------|------------------------|-------|--|-------|-----|--------------|-----------------------|-------|-------|-----|--------------|--|---|
| Attachment 2 Small Generator Interconnection Request | <p>Revised the text “Small Generating Facility Characteristic Data (for rotating machines)</p> <p>RPM Frequency: _____ (*) Neutral Grounding Resistor (If Applicable):”</p> <p>as follows:</p> <p>“Small Generating Facility Characteristic Data (for rotating machines)</p> <p>Neutral Grounding System Used ____ undergrounded ____ solidly grounded ____ neutral grounding Resistor (If Rated RPM: (If Applicable):”</p> <p>Revised “Wve” to “Wye” in the following text:</p> <p>“If Three Phase:</p> <table border="0"> <tr> <td>Transformer Primary:</td> <td>Volts</td> <td></td> </tr> <tr> <td>Delta</td> <td>Wye</td> <td>Wye Grounded</td> </tr> <tr> <td>Transformer Secondary:</td> <td>Volts</td> <td></td> </tr> <tr> <td>Delta</td> <td>Wye</td> <td>Wye Grounded</td> </tr> <tr> <td>Transformer Tertiary:</td> <td>Volts</td> <td>Delta</td> </tr> <tr> <td>Wye</td> <td>Wye Grounded</td> <td></td> </tr> </table> <p>Corrected the spelling in the word “Applicable” shown in bold below:</p> <p>“Transformer Fuse Date (If Applicable. For Interconnection Customer-Owned Fuse):”</p> <p>Corrected the spelling in the word “Interconnecting” shown in bold below:</p> <p>“Interconnecting Circuit Breaker (If Applicable):”</p> | Transformer Primary: | Volts | | Delta | Wye | Wye Grounded | Transformer Secondary: | Volts | | Delta | Wye | Wye Grounded | Transformer Tertiary: | Volts | Delta | Wye | Wye Grounded | | <p>This change conforms to the <i>pro forma</i> SGIP.</p> <p>This change conforms to the <i>pro forma</i> SGIP.</p> <p>This change conforms to the <i>pro forma</i> SGIP.</p> <p>This change conforms to the <i>pro forma</i> SGIP.</p> |
| Transformer Primary: | Volts | | | | | | | | | | | | | | | | | | | |
| Delta | Wye | Wye Grounded | | | | | | | | | | | | | | | | | | |
| Transformer Secondary: | Volts | | | | | | | | | | | | | | | | | | | |
| Delta | Wye | Wye Grounded | | | | | | | | | | | | | | | | | | |
| Transformer Tertiary: | Volts | Delta | | | | | | | | | | | | | | | | | | |
| Wye | Wye Grounded | | | | | | | | | | | | | | | | | | | |
| Appendix A to Attachment 2 Small Generator Interconnection Request | Added specified additional Generating Facility data if requested by Distribution Provider | This Category 3 change involving additional requested Generating Facility data is consistent with or superior to the <i>pro forma</i> SGIP in that it tracks the CAISO revised Generator Interconnection Procedures (GIP) Attachment A to GIP Appendix 1 Interconnection Request that on December 16, 2010 the Commission conditionally accepted in <i>California Independent System Operator Corporation</i> , 133 FERC ¶ 61,223). This additional information pertinent to small generators is consistent with the level of generating facility information requested in SDG&E’s LGIP, Attachment A to Appendix 1 Interconnection Request that was accepted by the Commission in its letter order, dated November 17, 2009 in Docket No. ER10-5-000 pertaining to this same subject matter. | | | | | | | | | | | | | | | | | | |

**Matrix of Changes to FERC's Orders 2003, 2003-A, 2003-B, 2003-C, 661, and 661-A
Pro forma Large Generator Interconnection Procedures (LGIP)**

| Section | Changes from pro forma LGIA | Justification for change |
|---------------------|---|--|
| 1 | <p>CAISO shall mean the California Independent System Operator Corporation, a state chartered, nonprofit, corporation that controls certain transmission facilities of all Participating Transmission Owners and dispatches certain generating units and loads.</p> <p>CAISO Controlled Grid shall mean the transmission lines and associated facilities of the Participating TOs that have been placed under the CAISO's operational control.</p> <p>CAISO Grid shall mean the system of transmission lines and associated facilities of the Participating Transmission Owners that have been placed under the CAISO's operational control.</p> | The pre-existing defined terms in the WDAT LGIP are modified to replace "ISO" with "CAISO" because the term "ISO" in the CAISO Tariff has been changed. |
| 1 | CAISO Generator Interconnection Procedures (GIP) shall mean the procedures included in Appendix Y to the CAISO Tariff to interconnect a Generating Facility as such procedures may be modified from time to time, and accepted by the Commission. | This addition reflects the CAISO's revised Generator Interconnection Procedures (GIP) that on December 16, 2010 the Commission conditionally accepted in Docket No. ER11-1830-000, 133 FERC ¶ 61,223. |
| 1 | CAISO Tariff shall mean the California Independent System Operator Corporation Operating Agreement and Tariff, dated March 31, 1997, as it may be modified from time to time. | This added definition is consistent with or superior to the <i>pro forma</i> LGIP because it reflects the regional differences in California and the roll of the CAISO with respect to the effects a Large Generating Facility may have on the CAISO Controlled Grid as well as with respect to Deliverability Studies performed pursuant to the GIP to determine the deliverability of energy from a Generating Facility for which an Interconnection Customer elects to obtain Full Deliverability Status. |
| 3.2.3.2 | Modified Section 3.2.3.2. | Based on discussions with the CAISO during late January, further changes to Section 3.2.3.2 have been made and are now fully consistent with or superior to the <i>pro forma</i> LGIP because it better reflects the CAISO's revised Generator Interconnection Procedures (GIP) that on December 16, 2010 the Commission conditionally accepted in Docket No. ER11-1830-000, 133 FERC ¶ 61,223. |
| 3.2.3.3 and 3.2.3.4 | Modified Sections 3.2.3.3 and 3.2.3.4. | These changes to Sections 3.2.3.3 and 3.2.3.4 are consistent with or superior to the <i>pro forma</i> LGIP because they reflect the CAISO's revised Generator Interconnection Procedures (GIP) that on December 16, 2010 the Commission conditionally accepted in Docket No. ER11-1830-000, 133 FERC ¶ 61,223. |
| Appendix 3 to LGIP | <p>Modified the sixth bullet in Section 5 as follows:</p> <p>"if requested by the Interconnection Customer, a Deliverability Assessment on the CAISO Grid pursuant to the CAISO Generator Interconnection Procedures."</p> | This change to Appendix 3 to the LGIP is consistent with or superior to the <i>pro forma</i> LGIP because they reflect the CAISO's Generator Interconnection Procedures (GIP) that on December 16, 2010 the Commission conditionally accepted in Docket No. ER11-1830-000, 133 FERC ¶ 61,223. |

| | | |
|--|--|--|
| <p>Attachment B to Appendix 4 of LGIP Interconnection Facilities Study Agreement</p> | <p>Modified the following text shown in bold:</p> <p>“For purposes of the Deliverability Assessment pursuant to Sections 6.5 and 8.3 of the CAISO Generator Interconnection Procedures, the level of CAISO Grid Deliverability. Choose one of the following:</p> <p>_____ Deliverability with no Network Upgrades</p> <p>_____ Full Capacity Deliverability Status, as defined in the CAISO Tariff</p> | <p>This change to Attachment B to Appendix 4 of the LGIP is consistent with or superior to the pro forma LGIP because it reflects the CAISO’s Generator Interconnection Procedures (GIP) that on December 16, 2010 the Commission conditionally accepted in Docket No. ER11-1830-000, 133 FERC ¶ 61,223.</p> |
|--|--|--|