Overview

On June 18, 2007, mandatory reliability standards adopted by the Federal Energy Regulatory Commission (FERC) and administered by the North American Electric Reliability Corporation (NERC) and the Western Electricity Coordinating Council (WECC) became effective. To facilitate an efficient process for implementation of these standards, PG&E is offering an optional service, for reporting information related to meeting the compliance standard, to "Generator Owner/Operators" for which PG&E is acting as the CAISO Scheduling Coordinator.

It should be noted that this is an optional service and that it is the responsibility of the "Generator Owner/Operator" to comply with the standards, regardless of whether this service is utilized or not. This service will provide receipt for information received by PG&E that, through a chain of communication, will be made available to the CAISO.

Please note that this service is not meant to be used for communications regarding all mandatory reliability standards, but only those in which PG&E plays a role through its obligations under the CAISO tariff while performing the Scheduling Coordinator function.

What is included in this procedure?

This procedure covers the use of a web based tool used for collecting reliability criteria information that will be passed by PG&E to the CAISO through the CAISO's "Scheduling and Logging for the CAISO of California" outage reporting application (SLIC), "Scheduling Interface" (SI), or their successor applications.

This procedure will also cover the timing and frequency of entering the reliability criteria information, and also how this information should be updated as changes occur.

Because the CAISO's SLIC application requires certain required fields to be entered, it is important that "Generator Owner/Operators" choosing to use this service fill out the mandatory fields of the web based tool. This will be described in more detail later in this document.
Accessing the Web Tool

The web tool can be accessed through the following web link:

- Go to:  http://www.pge.com/b2b/energysupply/qualifyingfacilities/whotocontact/
- Click on Link:  Power Procurement Information Center

Alternatively, to navigate to the tool from PG&E’s internet site go to: http://www.pge.com/ and follow the links:

Click on “For my business” > “Wholesale Power” > “Electric Procurement” > “Power Procurement Information Center”

Each “Generator Owner/Operator” has been given a username and password for logging in to the interface. Some “Generator Owner/Operators” have been using this tool for reporting outage information in the past; however the tool has been recently enhanced to better support reporting of other information required under the new reliability standards. For those “Generator Owner/Operators” who are already regular users of the tool, the username and password remains the same. For those “Generator Owner/Operators” who have not used the tool in the past, and do not remember or have misplaced their login information, please contact your contract administrator listed on your billing statement, or email the PG&E settlement analyst associated with your contract to request this information.

Use of the Web Tool

The Web Tool allows reporting of the following types of information used for fulfilling the reliability reporting criteria:

- Outages/Derates/NERC Event Reporting Affecting:
  - Energy
  - Reactive Power Equipment
  - Automatic Voltage Regulation Equipment (AVR)
  - Power System Stabilizer Equipment (PSS)

- Events & Other information
  - The CAISO’s SLIC system requires NERC Generation Availability Data System (GADS) cause codes to be entered to define the cause of the event
  - Reliability standards may require other information in additions to the GADS codes to further describe the event

- Generation Schedules (by unit)
  - Day Ahead Schedules
  - Hour Ahead Schedules
Outages/Derates/NERC Events:

If you are a generator selling power to PG&E, you can post scheduled maintenances, voluntary shutdowns, PG&E/grid outages (when PG&E conducts maintenance and/or when the grid, for a reason unconnected to the generator, isn’t available to accept deliveries from them), and forced outages by following the steps in Attachment 1.

Timing/Frequency/Update:
Outages, Derates and NERC events need to be conveyed to the Scheduling Coordinator as soon as possible.

This information is applicable to Reliability Standard Requirement:

- **NERC-PRC-001-1 R2.1** - To the extent a protective relay or equipment failure at the Generator Operator facility reduces system reliability, the Generator Operator shall inform the Scheduling Coordinator of their status such conditions.
- **NERC-CIP-001-1 R2** - The Generator Operator shall have procedures for the communications of information concerning Sabotage events to their Scheduling Coordinator
- **NERC-TOP-001-1 R7.1 & 7.3** - The Generator Operator shall notify and coordinate with the Scheduling Coordinator of any unit outages or derates for the Generator Operators facilities.
- **NERC-TOP-002-2 R3** - The Generator Operator shall provide the Scheduling Coordinator its current-day, next-day and seasonal unit status and outage plans.
- **NERC-TOP-002-2 R15** - The Generator Operator shall upon request provide notification of estimates of projected outages or derates to their Scheduling Coordinator.
- **NERC-TOP-003-0 R2** - The Generator Operator shall notify the Scheduling Coordinator of any outages of system voltage regulating equipment, or derates for the Generator Operators facilities in a timely manner in accordance with the CAISO tariff.
- **NERC-TOP-003-0 R3** - The Generator Operator shall notify the Scheduling Coordinator of any scheduled outages of telemetering and control equipment and associated communication channels in a timely manner in accordance with the CAISO tariff.
- **NERC-VAR-002-1 R3, 3.1, and 3.2** - Each Generator Operator shall notify their Scheduling Coordinator as soon as practical, but within 30 minutes of any of the following: A status change on any generator Reactive Power resource, including the status of each automatic voltage regulator and power system stabilizer and the expected duration of the change in status. A status change on any other Reactive Power resources under the Generator Operator’s control and the expected duration of the change in status or capability.
Event Descriptions & Other Information:

The description of events is captured in two places via the Web Tool. As stated earlier, the CAISO SLIC application requires the use of the NERC Generation Availability Data System (GADS) cause codes to be entered to define the cause of the event when known (see Appendix A).

For some events that may not be captured or adequately described by the NERC GADS cause codes, additional information may be necessary to meet the Reliability Standard Requirements. An example of this might be “Sabotage”. The Outages and Scheduled Maintenances Posting screen the Web Tool provides a notes field (see “Plant Shut-Down Comments”) for adding additional information that you may feel necessary to include.

To enter this information into the Web Tool, follow the steps in Attachment 1.

Generation Schedules:

If you are a generator selling power to PG&E, you can post weekly generation schedules by following the steps in Attachment 2.

Timing/Frequency/Update:
Day Ahead generation schedules should be submitted at least 36 hours prior to the operating hour. Hour Ahead generation schedules should be scheduled at least 3 hours prior to the operating hour.

This information is applicable to Reliability Standard Requirement:

- **NERC-IRO-004-1 R4**-The Generator Owner/Operator shall provide the Scheduling Coordinator with projected next day unit status information per the procedure for notification provided by the Scheduling Coordinator.
- **NERC-TOP-002-2 R14 and R14.1**- The Generator Operator shall, without any intentional time delay, notify the Scheduling Coordinator of any changes in real output capabilities.
- **NERC-TOP-002-2 R15**-The Generator Operator shall upon request provide notification of estimates of projected outages or derates to their Scheduling Coordinator.

Important Note:

*It is very important that the information provided in the “Post Generation Schedules” screen be consistent with any planned or forced outage information entered into the “Post Outages” screen. If you post an outage after you have entered generation schedules, please make sure you modify those schedules where necessary.*
# APPENDIX A

## List of NERC GADS Cause Codes* & Other Descriptions

<table>
<thead>
<tr>
<th>Cause Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance of Plant</td>
<td>3999</td>
</tr>
<tr>
<td>Boiler</td>
<td>1999</td>
</tr>
<tr>
<td>Diesel Engine</td>
<td>5999</td>
</tr>
<tr>
<td>Expander Turbine</td>
<td>7960</td>
</tr>
<tr>
<td>External</td>
<td>9320</td>
</tr>
<tr>
<td>Gas Turbine</td>
<td>5299</td>
</tr>
<tr>
<td>Generator</td>
<td>4899</td>
</tr>
<tr>
<td>Hydro Turbine/Pump</td>
<td>7299</td>
</tr>
<tr>
<td>Jet Engine</td>
<td>5699</td>
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<tr>
<td>Performance Testing</td>
<td>9999</td>
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<tr>
<td>Personal Operator Failure</td>
<td>9900</td>
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<tr>
<td>Plant and Auxiliaries</td>
<td>6460</td>
</tr>
<tr>
<td>Pollution Control Equipment</td>
<td>8699</td>
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<tr>
<td>Regulatory</td>
<td>9590</td>
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<tr>
<td>Safety</td>
<td>9720</td>
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<tr>
<td>Steam Turbine</td>
<td>4499</td>
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<tr>
<td>Automatic Voltage Regulation</td>
<td>4700</td>
</tr>
<tr>
<td>Power System Stabilizer</td>
<td>4710</td>
</tr>
</tbody>
</table>

For detailed explanations on NERC GADS Cause Codes and how they are applied, please refer to the NERC website documentation: [http://developnerc.nerc.net/page.php?cid=4|43|45](http://developnerc.nerc.net/page.php?cid=4|43|45)