

Qualifying Facility Maintenance Outage Scheduling Procedures

I. Applicability

The Qualifying Facility Maintenance Outage Scheduling Procedures (“Maintenance Procedures”) apply to the scheduling of an outage on a QF generating unit as a result of planned maintenance to keep the generating facility in suitable operating condition. A maintenance outage, whether full or partial, must be scheduled prior to the actual event and must be of a predetermined duration. These Maintenance Procedures are applicable only to firm capacity contracts with a provision for maintenance credit. Outages (whether planned or unplanned) which are not associated with a claim for firm capacity maintenance credits are covered by SCE’s Qualifying Facility General Outage Scheduling Procedures.

II. What’s New

Changes in the external environment, internal organization, and technology tools have required SCE to update the Maintenance Procedures. Revisions are summarized below:

- A. The Power Exchange is no longer referenced in the Maintenance Procedures.
- B. References to QF Resources, an organization within SCE, have been replaced with a general reference to SCE.
- C. The Maintenance Procedures now reflect the use of the web-based QF Outage Scheduling System as the tool for communicating maintenance outage requests to SCE.
- D. Finally, the contact number for SCE’s Realtime Generation Operations Center has been updated (See Section IV-F).

The updated Maintenance Procedures supersede all prior versions. Except for the aforementioned changes, the updated Maintenance Procedures remain materially the same as the ones dated December 11, 2000.

III. Contract Provisions

Presented in this section is a general overview of the standard contract provisions concerning scheduled maintenance, as well as some of SCE’s administrative principles derived from these provisions. The standard provisions may not be found in all QF contracts. The QF should always refer to its contract for any variations in the scheduled maintenance provisions.

- A. Many Standard Offer and negotiated firm capacity contracts establish the following notification requirements for scheduled outages:

<u>Outage Duration</u>	<u>Notification Required</u>
Less than 1 day	24 hours
1 day or more (except Major Overhaul)	1 week
Major Overhaul*	6 months

Notification requirements in each contract will be strictly enforced.

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**A Major Overhaul is a one-day-or-more maintenance outage that is scheduled six months or more in advance. During a Major Overhaul, the unit may not carry any load, except for testing purposes. A Major Overhaul may not be scheduled to occur during peak months, currently June, July, August, and September.*

- B. Many Standard Offer and negotiated firm capacity contracts provide for adjustments to firm capacity and bonus payments for scheduled maintenance. The adjustments may be summarized as follows:

$$\text{TOU Period Performance Factor} = \frac{\text{TOU Period kWhs}}{0.8 \times \text{Contract Capacity} \times (\text{TOU Period Hours} - \text{TOU Allowable Maintenance Hrs})}$$

and

$$\text{TOU Period Capacity Factor} = \frac{\text{TOU Period kWhs}}{\text{Contract Capacity} \times (\text{TOU Period Hours} - \text{TOU Allowable Maintenance Hrs})}$$

SCE calculates Allowable Maintenance Hours (maintenance credit) as follows, by TOU:

$$\text{Allowable Maint. Hrs} = \text{Hrs in Approved Credit Period} \times \left(\frac{\text{Avg Capacity Off-line During Approved Credit Period}}{\text{Contract Capacity}} \right)$$

For the purpose of calculation, Average Capacity Off-line cannot exceed Contract Capacity. Approved Credit Period is determined based on the criteria set forth in Section V-C.

- C. Many Standard Offer and negotiated firm capacity contracts also set the following allowances for scheduled maintenance:
1. Scheduled maintenance shall not exceed a total of 30 on-peak hours in a calendar year.
 2. Scheduled maintenance, not including Major Overhauls, shall not exceed a total of 840 hours in any 12-month period.
 3. Unused hours from the 840-hour allotment may be accumulated up to a maximum of 1080 hours to be used for Major Overhauls.

The hours from the 840-hour allotment may be used on a non-consecutive basis by scheduling separate maintenance outages. This is in direct contrast to the accumulated hours, which can only be used consecutively once a year. Moreover, all maintenance hours must be used in one-hour increments.

- D. Many Standard Offer and negotiated firm capacity contracts further require the QF to make reasonable efforts to scheduled routine maintenance outside the Peak Months, currently June, July, August, and September.

IV. Scheduling Procedure

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- A. All maintenance outages must be reported to SCE in advance. The QF is solely responsible for meeting the advance notice requirement.
- B. Any unit for which maintenance is to be scheduled must either be operating at the time SCE is notified of the scheduled maintenance or must operate between the time of the notification and the commencement of the scheduled maintenance.
- C. Notification of maintenance schedule and request for maintenance credit should be directed to SCE via the web-based QF Outage Scheduling System (“Outage Scheduler”):

<https://www3.sce.com/sscc/qf/qf.nsf>

For detailed instructions on using the Outage Scheduler, refer to **User's Guide for the Web-Based QF Outage Scheduling System** (“User’s Guide”), which can be found at:

www.sce.com/AboutSCE/Regulatory/qualifyingfacilities/dataanddocuments.htm

- D. Please have the following information ready when scheduling maintenance:

QFID

Passcode (supplied by SCE)

Unit Number (if applicable)

Outage Period*

Date and time the unit is expected to be taken off-line

Date and time the unit is expected to return to service

Capacity Output Level**

Estimated capacity output in kWh per hour (or kW) that will be on-line during Outage Period

Reason for Outage

Capacity Credit Period (optional)***

Date and time maintenance credit is requested to begin

Date and time maintenance credit is requested to end

Capacity Credit Type

Maintenance or Major Overhaul

**Outage Period can be different from Capacity Credit Period and should always reflect the actual outage schedule. This information is used by SCE to schedule QF production into the ISO.*

***For QFs which track Maintenance Hours separately for each generating unit, please provide the expected Capacity Output Level for the unit being scheduled for maintenance. To schedule an outage with more than one Capacity Output Level, refer to the User’s Guide for detailed instructions. The Capacity Output Level information, in conjunction with the Outage Period information, is used by SCE to schedule QF production into the ISO.*

****Capacity Credit Period can be different from Outage Period. The Capacity Credit Period information will be used in determining maintenance credit given. If this information is not specified, no credit will be given.*

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- E. After an outage has been scheduled through the Outage Scheduler, a confirmation of receipt may be printed from the website. Be sure to verify the outage information entered. The QF is solely responsible for data accuracy.
- F. SCE's Generation Operations Center and/or local switching center should also be informed of the maintenance outage. The Generation Operations Center telephone number is (626) 307-4453.

V. Maintenance Credit Request Processing

The following steps are taken by SCE in processing requests for maintenance credit:

- A. When a maintenance request is submitted, the information is recorded and stored in SCE's database system. A confirmation of receipt may be printed from the Outage Scheduler by the QF for record keeping.

Note: The confirmation of receipt is provided to the QF as a courtesy only. The QF is responsible for ensuring that the advance notice requirements are met. SCE's failure to alert a QF that it has not met the advance notice requirements shall not preclude SCE from contesting the validity of the outage schedule and the maintenance credit request.

- B. SCE uses its metered generation data to verify that the unit for which maintenance was scheduled (i) either was operating at the time SCE was notified of the scheduled maintenance or operated between the time of the notification and the commencement of the scheduled maintenance; and (ii) if applicable, operated between consecutive less-than-one-day maintenance outages.
- C. SCE also uses its metered generation data to verify the actual date and time the scheduled outage began and ended, and to calculate the Average Capacity Off-line during the Approved Credit Period. The Approved Credit Period is determined based on the following criteria:
 - 1. The Approved Credit Period for a properly scheduled outage commences at (i) the time, rounded to the nearest hour, maintenance credit is requested to begin, or (ii) the time, rounded to the nearest hour, the outage actually begins, whichever is later. An outage begins when the plant generation starts to ramp down from its pre-maintenance operating level.
 - 2. The Approved Credit Period for a properly scheduled outage terminates at (i) the time, rounded to the nearest hour, maintenance credit is requested to end, or (ii) the time, rounded to the nearest hour, the outage actually ends, whichever is earlier. An outage ends when the generating facility has carried a load for 6 consecutive hours above a reduced, steady output level, unless such increase in output reaches another reduced, steady output level in the case of more than one Capacity Output Level, as reflected in the Capacity Output Level information provided by the QF.

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Note: The reduced, steady output level would be zero if the entire plant was out of service.

- D. After confirming the above information, SCE then calculates Allowable Maintenance Hours (maintenance credit) based on the Average Capacity Off-line during the Approved Credit Period and taking into account such additional factors as the sufficiency of the notice given for the outage, the availability of unused maintenance credits as described in Section III-C, and other contract provisions pertinent to scheduled maintenance.

VI. Other Procedures and Administrative Principles

- A. A maintenance outage, except for a Major Overhaul, may be rescheduled if the request to reschedule is received by SCE via the Outage Scheduler no later than 5:00 a.m. on the day before the outage was previously scheduled to begin. For example, if the outage was previously scheduled to begin on Monday, the request to reschedule must be received by SCE no later than 5:00 a.m. on Sunday. The new outage must also meet the notification requirements stated in Section III-A. An outage may be rescheduled more than once.
- B. A Major Overhaul may be rescheduled provided:
 - 1. The scheduling requirements for the original outage have been met;
 - 2. The rescheduled outage begins six months or more after the original (first) outage notification date and time;
 - 3. The notification to reschedule is made at least one week before the outage was previously scheduled to begin; and
 - 4. There is at least a one-month period between the notification to reschedule and the commencement of the rescheduled outage.

A Major Overhaul may be rescheduled more than once.

- C. All maintenance outages may be extended by notifying SCE of the extension via the Outage Scheduler no later than 5:00 a.m. on the day before the outage was previously scheduled to end. For example, if the outage was previously scheduled to end on Monday, the request for extension must be received by SCE no later than 5:00 a.m. on Sunday. An outage may be extended more than once.

Note: For less-than-one-day outages, the extension cannot result in a total outage duration greater than 23 hours.

- D. If the scheduled maintenance is canceled, a cancellation notice is required and must be received by SCE via the Outage Scheduler no later than 5:00 a.m. on the day before the outage was scheduled to begin.
- E. If the maintenance work is completed ahead of schedule and the generating unit is back in service significantly earlier than expected, the QF should advise SCE of the situation via the Outage Scheduler.

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- F. If a non-minor change in the Capacity Output Level is anticipated or occurs during a maintenance outage prior to 5:00 a.m. on the day before the outage is scheduled to end, the change should be reported as soon as possible to SCE via the Outage Scheduler. Multiple updates should be submitted if necessary.
- G. SCE's Generation Operations Center and/or local switching center should also be informed of any changes in the outage schedule.
- H. A less-than-one-day maintenance outage may not be scheduled to occur before or after another less-than-one-day maintenance outage if the unit being maintained will not operate between said outage periods, unless such non-operation is due to a properly scheduled, one-day-or-more maintenance outage.
- I. A QF may not schedule maintenance on a daily or regular basis as a precaution against a forced outage, with no actual intention to remove the generating unit from service for scheduled maintenance. SCE reserves the right to deny such maintenance requests.
- J. A maintenance outage must not overlap another outage already scheduled on the same unit.
- K. Maintenance credit will be given from the 840-hour allotment unless the QF notifies SCE of the outage (Major Overhaul) six months or more in advance. If notice is given at least six months in advance, the credit will be given from the Accumulated Account. Should the QF use up all of its available hours in the Accumulated Account during a Major Overhaul, additional credit may be taken from the 840-hour allotment, up to the allowable limit, provided a written request has been submitted to SCE.
- L. In determining the beginning and ending of an outage, all times are rounded to the nearest hour. For examples, 11:29 = 11:00 and 11:30 = 12:00. For a less-than-one-day outage, the rounding shall never result in a duration of more than 23 hours. Also, 24:00 will be treated as 00:00 of the following day. For example, 1/1/2000 24:00 will become 1/2/2000 00:00.
- M. Maintenance credit does not apply to forced outages. Forced outages are covered by the Forced Outage provisions in most contracts. For firm capacity contracts, a 20% allowance for forced outages is typically incorporated into the Period Performance Factor calculation. Provided certain conditions are met, capacity credit may be earned in the event an outage is the result of an Uncontrollable Force or unplanned interruption on the utility's transmission system. Please refer to the Qualifying Facility General Outage Scheduling Procedures for more information.

VII. Failure to Comply With Procedures

A material failure to comply with the Maintenance Procedures will result in loss of claimed maintenance credits. SCE also reserves the right to seek recovery of any and all losses it incurs as a result of a QF's failure to comply with these Maintenance Procedures, including, but not limited to, recovery of imbalance charges paid by SCE. In addition, repeated failure to comply

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with the Maintenance Procedures may be deemed a material breach of contract justifying contract termination.