606 GENERATOR OUTAGE COORDINATION

1. Purpose

To define the process to be used by the ISO, generation facility owners (GFOs) and Power Purchase Agreement (PPA) Buyers to coordinate outages to generation facilities on the Alberta Interconnected Electric System. Outage coordination is essential to maintain system reliability, reduce the number of hours of operation under constrained conditions, facilitate open and transparent operation of the electricity market and minimize customer interruptions.

2. Background

The process for managing the necessary coordination of outages and completing the associated risk assessments has evolved significantly since the first policy was issued in the form of a Transmission Administrator Operating Policy (TAOP) respecting outage coordination in September of 1998. Since then, a number of refinements have been made to clearly define the responsibilities of the various parties with regard to the coordination of outages and the associated risk analysis.

In the early part of 2001 an agreement was reached between the SC, the former TA (presently the ISO), GFOs and PPA Buyers regarding coordination of generation outage schedules. The fundamental underlying principle is that market forces should be the primary driver for generator maintenance coordination and that maintenance scheduling should not be centrally planned and controlled. Key to allowing the market to react as intended is the availability of information regarding planned generation outages for maintenance. Suppliers are therefore required to provide their outage information to the ISO on a confidential basis. The ISO aggregates the information and makes this information available, on the ISO web-site, including an assessment of supply adequacy. In instances where there is insufficient time for market forces to react, and when reliability of supply is threatened, the SC may contact those suppliers that have planned equipment outages and advise them of the concern respecting supply adequacy.

3. Policy

3.1 Generation Outage coordination and system reliability

- The ISO has the overall accountability for maintaining reliability of the AIES and to assess the risk associated with maintenance and commissioning activities. The ISO will work in cooperation with the other parties to resolve any issues that are identified.

- The generation outage reporting requirements as detailed in this OPP apply to generating units or plants with installed capacities of 5 MW or higher, and for de-rate changes of +/- 5 MW or greater.

- The Supply Transmission Service (STS) Contracting Parties, which have units as described above, will submit their generation outage schedules to the ISO as described in Section 4.2. Outage information provided by the STS Contracting
Parties will include scheduled dates and times, generating units affected and nature of the work.

- The ISO will combine the unit outage schedules received from STS Contracting Parties with the system load forecast and will estimate the adequacy of electricity supply on the AIES.

- The unit outage schedule information submitted by STS Contracting Parties will be kept confidential by the ISO and will not be made known to the public or to other competitors. Only the aggregated results will be published.

- STS Contracting Parties are expected to consider a number of factors when preparing the schedules for their unit outages, including the short-term to mid term AIES supply adequacy as noted on the ISO web site.

4. Responsibilities

4.1 ISO

The ISO will:

- Conduct assessments and analyses, incorporating the proposed outage schedule and other anticipated system conditions, to identify any risk or concerns regarding AIES supply adequacy and/or system reliability. The ISO will work in consultation with all parties to resolve any issues that are identified.

- Present, on its website, the results of its 14 days, three month and to-year-end assessment of supply adequacy for the AIES, at http://ets.aeso.ca/Market/Reports/Manual/AiesGraphs/process_description.html

  In addition, a seven day supply assessment is given on the ISO's secure Energy Trading System (ETS) supply forecast webpage at http://ets.aeso.ca/, then logon to ETS and choose Report>Supply Forecast.

- Present, on the ISO’s secure Energy Trading System (ETS), reports of aggregated outages by fuel type for one month and 15 month periods. To access the outage reports, go to http://ets.aeso.ca/, then logon to ETS and choose Report > Current, and from the pick list choose either “Short Term Outage” or “Monthly Outage”.

System Controller

The SC will:

- Coordinate generation facility outages with GFOs in real time, to ensure acceptable system risks to AIES reliability.

- Provide approval to GFO to re-synchronize a generator to the AIES after an outage.

4.2 STS Contracting Parties

The STS Contracting Parties will:
• Adhere to the following timelines when submitting their generation outage schedules to the ISO:
  − At the beginning of every month, submit the outage schedule for planned
    outages that will occur in the next 24 months. Revisions of the initial
    schedule should be submitted to the ISO as soon as the decision is made to
    change the initial schedule, but not later than 3 months before the outage is
    scheduled to start.
  − For planned outages that are identified to be required within the next 3
    months, submit the schedule to the ISO immediately after the decision is
    made, indicating the reason for the outage and why it was not identified
    earlier (i.e. why was it not submitted at least 3 months before the outage),
    impact to MW capability, and the outage date and duration.
  − For forced outages that do not require the immediate removal of the unit
    from service, submit the schedule to ISO immediately after the decision is
    made to correct an anomalous operating situation. Inform the ISO
    Operations Coordination group by email (outage.scheduling@aeso.ca)
    indicating the reason for the outage, impact to MW capability, and the
    outage date and duration.
  − If the unit has to be removed from service immediately, inform the SC at
    once. Immediately when the information is available, and not later than 24
    hours after the occurrence of the outage, the STS Contracting Party will
    submit to the SC the cause for the outage and an estimate of the length of
    the time period required for repairs.

• Submit each generator outage schedule by the revising the available capability (AC)
  amount for the outage/de-rate duration on the ISO Energy Trading System (ETS).

• Verify the submission by reviewing the AC receipt in a pop-up window, which may
  be printed or saved as a .csv or .doc file for record purpose.

• Provide the ISO a list of contact persons who will be involved in planning outages
  and resolving concerns with outage schedules, and update the list as required.

4.3 Generation Facility Owner (GFO)

• GFOs will coordinate real time operations with the SC in applying this OPP,
  including the following:
  − For any planned actions in real time, the GFO will advise the SC prior to
    the removal of a generator or generator element.
  − The GFO will obtain approval from the SC immediately prior to re-
    synchronizing a generator to the system.

5. System Controller Procedures

None specified.
### 6. Revisions and Approval

#### 6.1 OPP

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