

Eligibility Requirements

DA-PCG Calculation



Introduction

The day-ahead production cost guarantee (DA-PCG), assures eligible EDAC committed resources dispatched to produce in the real-time market cost recovery when the real-time revenue is insufficient to cover as-offered costs. As noted in the Market Design, eligible resources receiving day-ahead commitments and schedules that do not reach minimum loading point (MLP) by their EDAC commitment schedule start hour are not eligible to receive a DA-PCG. This is consistent with the existing DACP day-ahead generation cost guarantee (DA-GCG) program. The Market Design also noted that the definition of any dead-bands around achieving scheduled start time as it pertains to eligibility would be defined in the detailed design. This paper reviews the eligibility requirements for generators to be paid DA-PCG.

Proposed Eligibility Requirements

At the April 21st settlement design meeting, two eligibility requirements for DA-PCG were presented to the working group.

The eligible resource must meet both of the following requirements to be paid the DA-PCG:

1. Achieve minimum loading point within three intervals of the start time of the EDAC schedule.

Example: A resource that is scheduled to start in HE 8 is required to be at minimum loading point before the start of Interval 4 of HE 8.

2. Not go below the deadband of the minimum loading point for the entire EDAC schedule:

The deadband is the greater of 2% of the minimum loading point or 15 MW

consistent with Market Rule Interpretation Bulletin IMO_MKRI_0001.
(http://www.ieso.ca/imoweb/pubs/interpretBulletins/ib_IMO_MKRI_0001.pdf)

Market participants agreed to the IESO's rationale that there needs to be incentives to achieve MLP on time, however expressed concerns over the "all or nothing" intent of the requirement. Market participants also asked whether three intervals are sufficient. Such a narrow tolerance may incent synchronization well in advance of the requirement to be at MLP thereby exacerbating the impacts of MLP in low load times.

The following options were proposed by market participants for the calculation of the DA-PCG when a market participant does not meet the eligibility requirements:

1. A prorated system of reduction to PCG; or
2. A charge penalizing the market participant for the delay; or
3. A larger number of intervals before the loss of DA-PCG.

The IESO assessed the three proposed options and is proposing to move forward with Option 3. Option 1 does not support the intent of the DA-PCG, which is to ensure market participants perform in the real-time market in a manner consistent with their day-ahead schedules. Although Option 2 may incent market participants to meet their EDAC schedules, Option 2 would require the design and development of another new charge. The new charge would need to include the calculated cost to the Market for additional resources required to satisfy any shortfall due to the delay in achieving MLP. There may be operational challenges related to additional resources brought online to replace the committed resource which may not be dispatched off easily. Option 3 best supports the intent of the DA-PCG while providing market participants with some flexibility to meet their commitment schedule. Market participants asked whether three intervals was sufficient and as a result the IESO is proposing to increase the intervals from three to six, allowing generators 30 minutes in the commitment schedule start hour to reach MLP.

Revised Eligibility Requirements

The eligibility requirements have been updated as follows:

The eligible resource must meet the following requirements to be paid the DA-PCG:

1. Achieve minimum loading point within six intervals of the start time of the EDAC schedule

Example: A resource that is scheduled to start in HE 8 is required to be at minimum loading point before the start of Interval 7 of HE 8

2. Not go below the deadband of the minimum loading point for the entire EDAC schedule:

The deadband is the greater of 2% of the minimum loading point or 15 MW consistent with Market Rule Interpretation Bulletin IMO_MKRI_0001 (http://www.ieso.ca/imoweb/pubs/interpretBulletins/ib_IMO_MKRI_0001.pdf)

Withdrawals and Late Starts

As in the existing DACP DA-GCG program, eligible resources receiving day-ahead commitments and schedules that start later than their EDAC commitment schedule start hour are not eligible to receive a DA-PCG. In the case of an early withdrawal that is beyond the market participant's control, the DA-PCG is calculated for the committed hours that the unit was online.

A market participant noted that there appears to be a contradiction in the treatment of early withdrawal versus a late start. The market participant noted that a late start would most likely be due to equipment limitations or failures, in other words, beyond the market participant's control and questioned why equipment failure should be treated differently.

After synchronization, if a market participant asks to withdraw, the IESO will remove remaining EDAC constraints and expects the market participant to remove their real-time offers. The market participant did follow their EDAC schedule, injecting at the start of scheduled dispatch hour but for reasons out their control, as defined in the Market Rules¹, they must terminate their injection of power to the Market. As the failure to follow dispatch is out of the market participant's control and as the market participant made every attempt to meet their guaranteed schedule starting at the scheduled dispatch hour, a reduced DA-PCG is calculated for their EDAC schedule hours prior to withdrawal. With constraints and offers removed, the Market solves economically for any shortfalls. A start later than the EDAC commitment schedule start

¹ Compliance to dispatch instruction would endanger the safety of any person, damage equipment or violate any applicable law (MR Chapter 7, Section 7.5.3)

hour as noted above whether in or out of the market participant's control is not eligible for DA-PCG. A late start, no synchronization at the scheduled dispatch hour, requires real-time offers be removed as the generator cannot respond to dispatch instructions. As well, the IESO will remove EDAC constraints and commit other resources to replace the market participant's scheduled MWs. With the removal of the constraints, the EDAC guarantee is no longer applicable to remaining EDAC scheduled hours which is the same treatment as the generator that withdraws after synchronization.