

# Settlement Treatment of RT-GCG Interacting with DA-PCG

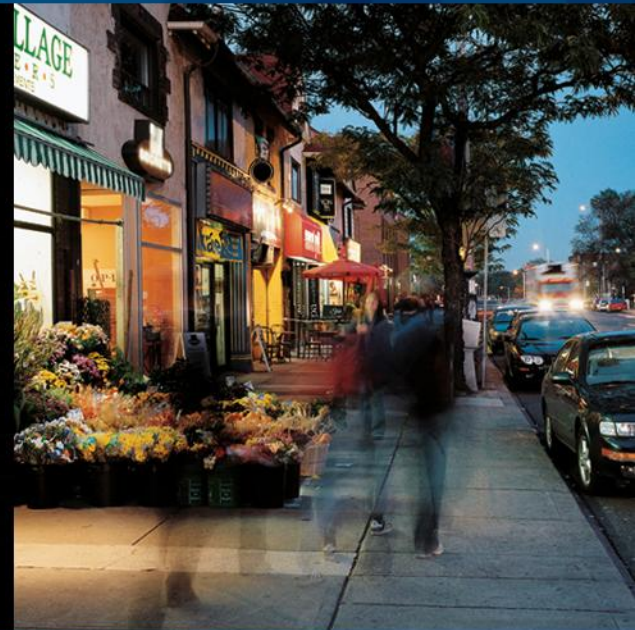
EDAC – Market Trials Working Group  
September 9<sup>th</sup>, 2011



Settlement treatment clarification for the following scenarios upon implementation of EDAC:

- RT-GCG event precedes DA-PCG event (i) with overlap of RT and DA events and (ii) without overlap of RT and DA events
  - eligibility
  - cost submissions
- RT-GCG event coincides in whole or in part with a withdrawn DA-PCG event
  - eligibility

# RT-GCG Precedes DA-PCG



- Current:

*'A real-time generation cost guarantee shall not be paid for a generation facility with respect to costs incurred or revenues accrued by that generation facility for which a day-ahead generation cost guarantee applies under section 4.7D'*

- EDAC (IESO Board approved MR-00375-R01):

*'A real-time generation cost guarantee shall not be paid for a generation unit with respect to costs incurred or revenues accrued by that generation unit for which a day-ahead production cost guarantee applies under section 4.7D'*

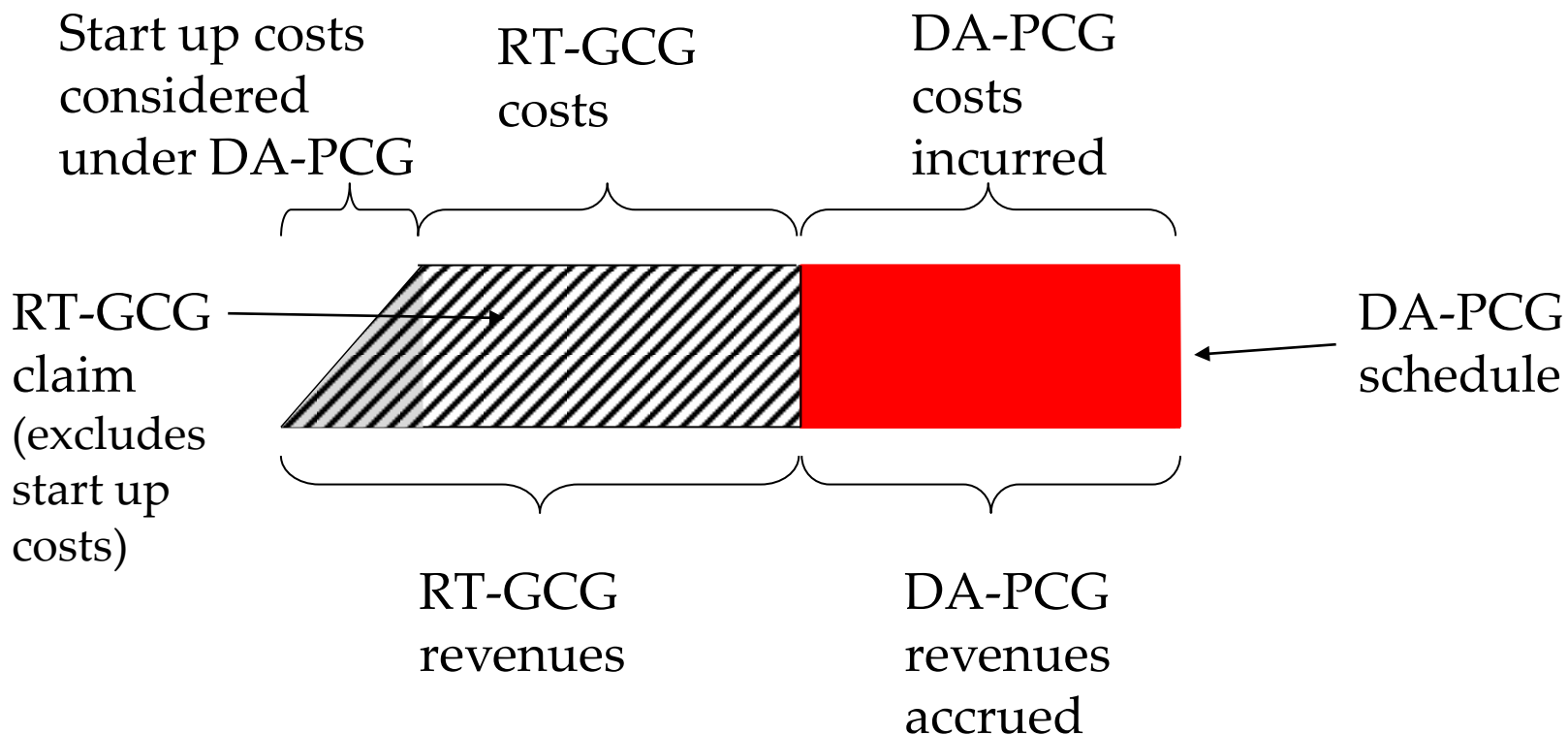
- Intent of Rule:
  - to ensure the market does not provide a double guarantee for costs related to the same start up event
  - day-ahead guarantee takes precedence over real-time guarantee

- Current settlement treatment:
  - revenues for current DA-GCG are accrued beginning at start up, therefore the day-ahead guarantee begins at start up, even where the facility starts ahead of schedule
  - since the day-ahead guarantee begins at start up, a RT claim is not possible preceding a DA-GCG
  - RT-GCG claim rejected if mapped to the same start up event as a DA-GCG pursuant to Sec 4.7B.4 because the day-ahead guarantee takes precedence

- Settlement treatment under EDAC:
  - DA-PCG revenues and costs are matched to the day-ahead schedule, not to the start event (Board approved settlement)
  - hours preceding the day-ahead schedule are therefore not subject to the DA-PCG
  - a RT-GCG claim is possible when a facility starts early preceding a DA-PCG event
  - RT-GCG claim excludes hour(s) in which there is overlap of the claims

- No Overlap
  - RT-GCG flows directly into DA-PCG schedule with no overlap between guarantees
  - facility continues on between RT-GCG and DA-PCG schedule without ramping below MLP
- Overlap
  - RT-GCG claim overlaps onto DA-PCG schedule

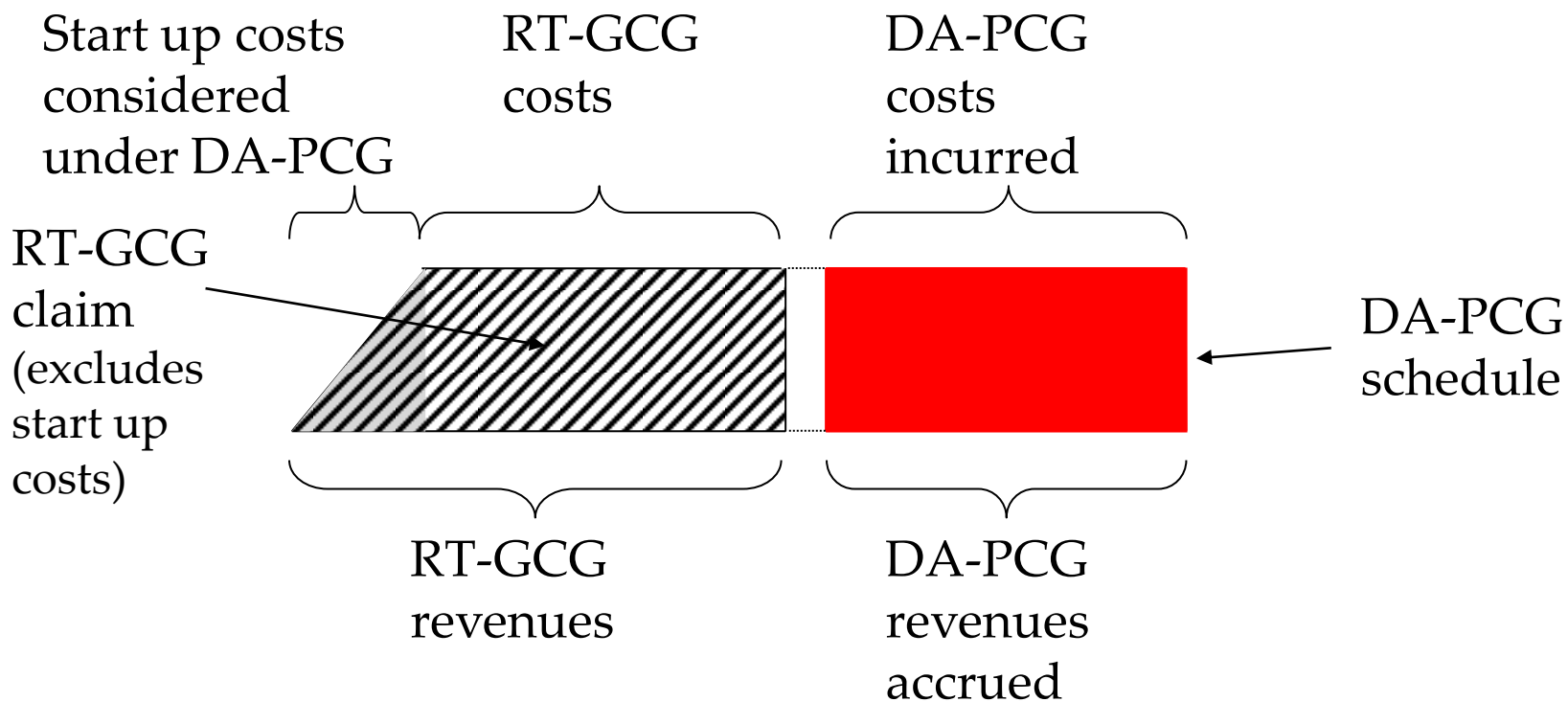
RT-GCG flows directly into DA-PCG schedule



Current settlement = DA-GCG only

EDAC settlement = DA-PCG + RT-GCG (excluding RT start up costs) 9

Continue on between RT-GCG and DA-PCG schedule without ramping below MLP



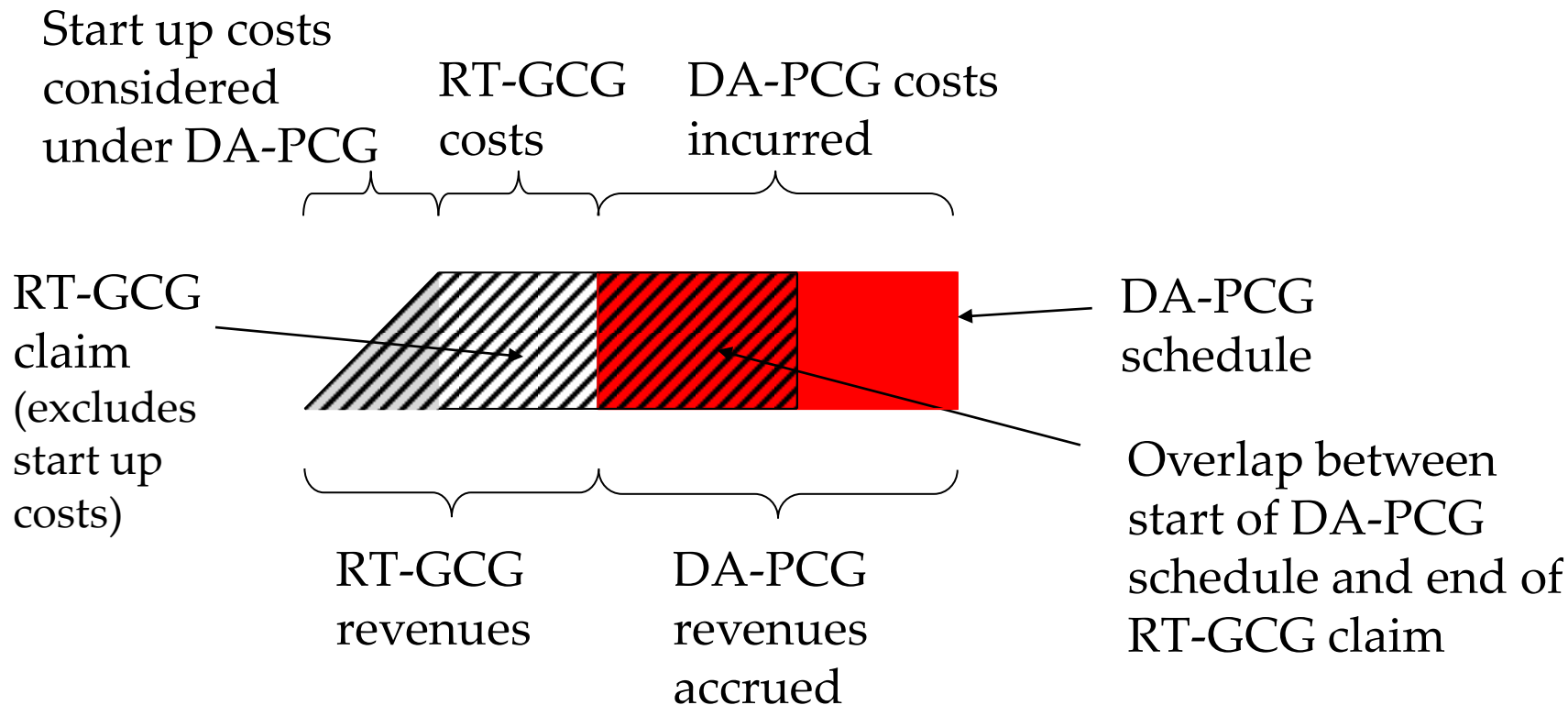
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## RT-GCG claim subject to

- Ch 7, sec 2.2, 5.7 and 6.3A; and Ch 9, 4.7B
- scheduling requirements in Ch 7, sec 5.7.1.3
  - in pre-dispatch schedule determined within 3 hours of the dispatch hour (PD-3, -2, -1);
  - for the dispatch hour for at least 1 MW; and
  - for at least  $\frac{1}{2}$  the MGBRT hours at MLP or more during the period from the dispatch hour until the earlier of a) the end of the period representing MGBRT or b) the end of the period representing MRT
- reasonable cost submissions as per Ch 7, sec 2.2B.1.4

## RT-GCG claim overlaps onto DA-PCG schedule



Current settlement = DA-GCG only

EDAC settlement = DA-PCG + non-overlap RT-GCG (excluding RT start up costs)

## RT-GCG claim subject to:

- Ch 7, sec 2.2, 5.7 and 6.3A; and Ch 9, 4.7B
- Ch 9, sec 4.7B.4: the RT-GCG will not be paid for overlapped hours. Costs and revenues associated with the RT-GCG apply only to non-overlapped hours.
- reasonable cost submissions as per Ch 7, sec 2.2B.1.4
- clarification of Ch 7, sec 5.7.1.3

# RT-GCG Precedes DA-PCG: Clarification of Ch 7, sec 5.7.1.3

- Facility must be scheduled for at least  $\frac{1}{2}$  the MGBRT hours at MLP or more. IESO believes that schedules resulting from constraints applied by the IESO (manual or associated with a DA-PCG schedule) should be excluded from the validation test.
- Facility must be scheduled in the hours preceding the overlap for at least  $\frac{1}{2}$  the total MGBRT hours at MLP or higher. (example: 6 hr MGBRT, 2 hr overlap. Facility must be scheduled for at least 3 of the hours preceding the overlap)
- RT-GCG claim is not valid if more than  $\frac{1}{2}$  the MGBRT hours overlap the DA-PCG event
- IESO shall pursue market rule amendments to provide this clarification to Ch 7, sec 5.7.1.3

- Intent of Ch 9, sec 4.7B.4 ensures the market does not provide a double guarantee for the same start up event and costs
- Start up costs will not be considered twice for one start up event which includes both a RT-GCG and DA-PCG
- Start up costs are considered through the three part offers associated with the DA-PCG

- Ch 7, sec 2.2B.1.4
  - RT-GCG submitted fuel costs and incremental O&M costs associated with the facility for start up and ramp to MLP must be accepted by the IESO as reasonable
  - IESO defines reasonable as zero since these costs have been considered under the DA-PCG
  - the RT-GCG claim is denied by the IESO if the submitted costs are not zero

# RT-GCC event coincides with a withdrawn DA-PCG event



## Issue

- A facility may withdraw from a DA-PCG event in order to participate in the RT-GCG program
- Depending on the timing of the withdrawal, constraints applied day-ahead may appear in the applicable pre-dispatch schedule used for determining eligibility for a RT-GCG
- Facility may attempt to validate a RT-GCG claim based on manual constraints or the constraints associated with a DA-PCG schedule

## Solution

- Clarification of Ch 7, sec 5.7.1.3 such that schedules resulting from constraints applied by the IESO (manual or associated with a DA-PCG schedule) are excluded from the validation test
- IESO shall pursue market rule amendments to provide clarification

- RT-GCG claim possible preceding DA-PCG event
- Manual constraints or constraints associated with a DA-PCG are excluded from the RT-GCG validation test
- Start up costs will not be paid for RT-GCG preceding DA-PCG
- RT-GCG not paid where it overlaps a DA-PCG event
- RT-GCG possible over period of withdrawn PCG, however constraints will not be used towards validation
- IESO shall pursue market rule amendments to provide clarification
- Applicable market manuals will be updated - target December baseline

- The IESO will continue to monitor the RT-GCG scenarios upon implementation of EDAC, to determine if further rule amendments are required

# Conclusion of Presentation



# Additional Slides



the *generation facility* is scheduled in any *pre-dispatch schedule* determined within 3 hours ahead of the *dispatch hour*:

- a. for the *dispatch hour*; and
- b. for at least half of *minimum generation block run-time*, rounded up, at *minimum loading point* or higher, during the period from *dispatch hour* until the earlier of:
  - the end of the period representing *minimum generation block run-time*; or
  - the end of the period representing *minimum run-time*;

The *registered market participant* has, according to the timelines and in the form specified in the applicable *market manual*, submitted to the IESO the following data for the *generation facility*: fuel costs for start up and ramp to *minimum loading point*; the *minimum run-time*; the *minimum loading point*; the *minimum generation block run time*; and any incremental operating and maintenance costs associated with the *facility* for start-up and ramp to *minimum loading point* for that *facility*, and that the IESO accepts the data as reasonable.

The *IESO* may, at any time, audit the data submitted in accordance with section 2.2B.1.4 if the *market participant* receives a generation cost guarantee payment pursuant to section 4.7B.3 of Chapter 9 on the basis of that data. If, as a result of such an audit, the *IESO* determines that the actual costs differed from the submitted data, the *IESO* shall recover any resulting over-payments made to the *market participant*.