

# Settlement Calculations for Steam Turbine Associated to PSUs

Reference: PAG Action Item #45

PAG Meeting  
February 24, 2011



- The IESO will review the formula for calculating settlement amounts for MGBRT over midnight for STs associated to PSUs (the example was discussed and presented on the flip chart during the meeting).

# Example Discussed on the Flip Chart

- 3-on-1 combined cycle plant
- All CT have same MGBRT of 5 hours (hence the PSU MGBRT is also 5h)
- PSU 1 and PSU 2 receive a start in D-1 and must run in D0 to satisfy their MGBRT
- PSU3 receives a start in D0

	HE21	HE22	HE23	HE24	HE1	HE2	HE3	HE4	HE5	HE6
PSU1		X	X	X	X	X	X	X		
PSU2			X	X	X	X	X	X	X	X
PSU3						X	X	X	X	X
CT1		X	X	X	X	X	X	X		
CT2			X	X	X	X	X	X	X	X
CT3						X	X	X	X	X
ST		X	X	X	X	X	X	X	X	X

- CT1 IHO = 3
- CT2 IHO = 2
- CT3 IHO = 0

	HE21	HE22	HE23	HE24	HE1	HE2	HE3	HE4	HE5	HE6
Current Design										
CT1		1	1	1	2	2	3	3		
CT2			1	1	2	2	2	3	3	3
CT3						1	1	1	1	1
ST		1	1	1	2	2	2	2	2	2
Revised Design										
CT1		1	1	1	2	2	3	3		
CT2			1	1	2	2	2	3	3	3
CT3						1	1	1	1	1
ST		1	1	1	2	2	2	3	3	3

- Variant Calculations for a ST associated with a PSU
  - The formula for determining the variant for the ST needs to be modified to exclude PSUs where the PSU IHO is equal to zero. Also where the PSU IHO is null, we will assume the PSU IHO to be zero.
- Start-up cost (Component 5) for an ST associated a PSU
  - To determine the ST start-up cost, we will ignore the variant for the ST and use the variants from each of the associated CTs
  - This will ensure the ST start-up cost for starting CT 2 in D-1 and CT3 in D0 will be accounted for as part of the ST start-up overall cost