## Updated CONE Values

- o PJM/Brattle should include fuel oil in the estimate for a CT in RTO;
- Entities are not building dual-fuel combined cycle facilities. Rather, PJM/Brattle should include firm gas transportation in all of the estimates for combined cycles (and not include dual fuel).
- The firm gas transportation rate assumed for SWMAAC is low. For example, VEPCO entered into firm transportation contracts for its Warren and Brunswick plants at rates of \$0.20-\$0.25/Dth-day (Warrren) or ~ \$0.45/Dth-day (Brunswick). This information is publicly available in VEPCO's SCC filings. Using this range, the cost for firm gas transportation should be ~ \$10 \$20 million annually. This is compared to \$3.1 million identified by Brattle for SWMAAC.
- o The weighted average cost of capital (WACC) is confusing
  - Brattle describes the assumption as 13.8% ROE and a 7% cost of debt with a 60/40 debt/equity ratio. This would translate to a WACC of 9.72%. However, Brattle indicates the WACC used is 8%.
  - The assumption for debt is low relative to market for a new, merchant investment. The current forward LIBOR curves (2017) indicate LIBOR to be ~ 3%; coupled with a spread of 500-600 basis points, would indicate a more appropriate debt rate of 8-9%. This matches the debt rates for Calpine and Dynegy. It is unclear why Brattle would choose the debt rate for NRG as more appropriate; especially given a single, merchant asset is not going to achieve comparable debt rates to portfolios that include contracted assets.
- Level-real versus Level-nominal values for gross CONE
  - o Based on the history of capacity pricing, an investor is not going to base its investment off an assumption for escalating capacity revenues. This has not been the case since the inception of RPM. As such, an assumption of flat capacity pricing (i.e. level-nominal) is more appropriate.
- Make E&AS more realistic
  - PJM/Brattle should investigate the appropriate gas pricing index and adders for the various regions.
- Stretch the VRR curve
  - PJM/Brattle should consider expanding "point c" on the VRR further to the right and/or increasing the 0.2 x Net CONE value at that point; i.e. further flatten the curve between "point b" and "point c".
- Right-shifting the curve
  - Supportive of shifting the VRR curve to the right by 2% as an alternative to further stretching of the curve
- Minimum width of 25% of CETL for LDAs
  - PJM/Brattle should consider increasing the minimum curve width (i.e. 35%) to limit yearover-year CETL impacts
- Other
- PJM/Brattle should evaluate Limited and Extended Summer DR reliability caps in winter peaking LDAs for potential separation. These products are not as worthwhile in winter peaking LDAs and, as it currently stands, are being otherwise over-procured.