

Triennial Review Process: Education

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CONE Settlement

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• Filed November 21, 2012 in ER12-513-003

C. Stakeholder Process on Triennial Review Changes

The Settlement Agreement provides at Section II.F that PJM shall conduct a stakeholder process to identify any desired changes in the CONE triennial review process in light of lessons learned from the most recent triennial review process, including an assessment of the current effective Tariff's Handy-Whitman Index adjustment method for Gross CONE, with a PJM filing of any resulting tariff changes with FERC in sufficient time to govern the 2014 triennial review, or the filing of a status report at such time if there is no stakeholder consensus on such changes.

• Accepted by the Commission January 30, 2013

2



Tariff Sections Pertaining to the "Triennial Review"

- Attachment DD
 - Section 5.10(a)(iii) addresses the review of the shape of the VRR Curve
 - Section 5.10(a)(vi)(C) and (D) addresses the review of the parameters of the VRR Curve
 - CONE Calculation
 - Net Energy and Ancillary Service Offset
 - Beginning with 2018/2019 Delivery Year the period between reviews goes to 4 years from 3 years.



Timelines in the Tariff Governing Review and Recommended Changes

- PJM staff propose revisions to the shape of the VRR Curve or changes to the parameters of the curve by July 15 of the year prior to the BRA for the first Delivery Year for which the parameters apply
- 2. PJM Members review proposed changes
- 3. PJM Members can by October 31 of the year prior to the BRA for the first Delivery Year for which the parameters apply
 - a) Vote to endorse the changes
 - b) Propose alternative values or shapes
 - c) Recommend no modification
- PJM Board shall consider and PJM staff file any approved changes by December 1 of the year prior to the BRA for the first Delivery Year for which the parameters apply



Current CONE Values

Attachment DD, Section 5.10(iv)(A) PJM Region CONE value is \$128,000/MW-year

Geographic Location Within the PJM Region Encompassing These Zones	Cost of New Entry in \$/MW-Year
PS, JCP&L, AE, PECO, DPL, RECO ("CONE Area 1")	140,000
BGE, PEPCO ("CONE Area 2")	130,600
AEP, Dayton, ComEd, APS, DQL, ATSI, DEOK, EKPC ("CONE Area 3")	127,500
PPL, MetEd, Penelec ("CONE Area 4")	134,500
Dominion ("CONE Area 5")	114,500

•CONE values have a base year of 2015/2016 based on a GE 7FA combustion turbine

•CONE values are to be adjusted by the Handy-Whitman Index each year for which a review is not done

•Most recent 12 month change for the applicable to the region

5

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Key Parameters in Determining CONE Values

- Choice of reference technology
- Cost of Capital
 - Debt/equity ratio
 - Cost of debt
 - Cost of equity
 - Risk free rate
- Cost of plant and equipment
- Gas and electric interconnection costs
- Inflation rate
- Levelization methodology
 - Currently nominal levelized is used

6



Current Net EAS Methodology

- Backward looking...use previous three calendar prior to the BRA
 - For the 2017/2018 BRA held in 2014, using information from 2011-2013
 - Fuel and power prices from these three historic years
- Assumes availability for DA commitment and RT dispatch
- Variable O&M component is defined as \$6.47/MWh and Ancillary Service revenues of \$2,199/MW-year
- Heat rate of the Reference Resource is 10.096 mmBtu/MWh
 - Based on a GE 7 FA combustion turbine