Transmission Expansion Advisory Committee
Market Efficiency Update

February 12, 2015

Market Efficiency Long Term Proposal Window Update

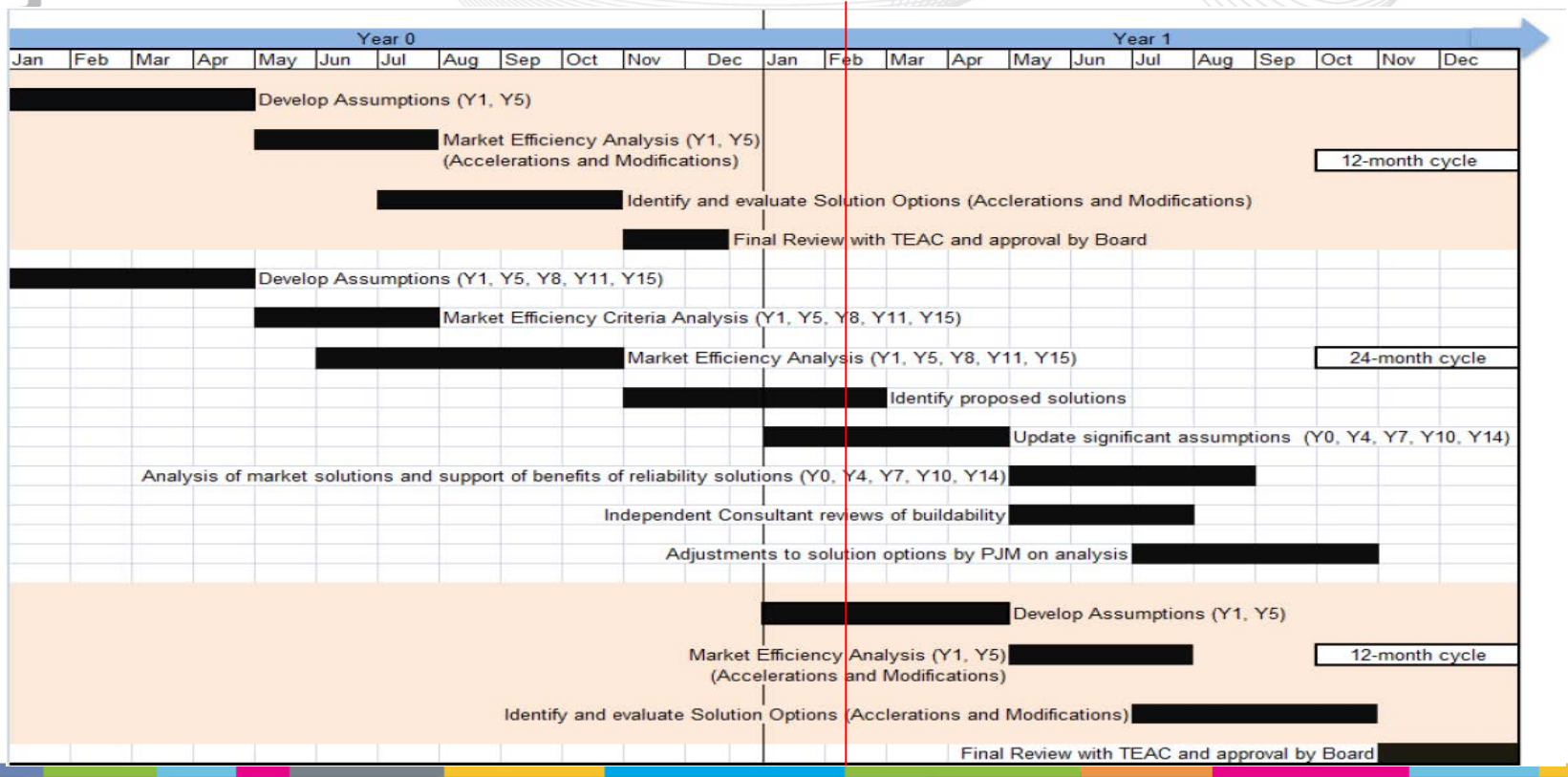
2014 RTEP Long Term Proposal Window: Market Efficiency

- Long Term Proposal Window closes on Friday, February 27,2015.
  - Proposals and pre-qualification documents

- Reactive Interfaces
  - Market Reactive Interfaces are used in PJM markets as thermal proxies for voltage control.
  - Market Efficiency posted modeling document was updated with more details of the calculation used to determine the Market Efficiency Reactive Interface ratings.
    - Reactive Interface ratings calculated from PV analysis, Historical data, and PJM market/operations input.
    - Actual operational ratings change every 5 minutes
    - Market Efficiency only uses summer/winter ratings.
  - Most important for participants to measure the Incremental impact of proposed projects on Reactive Interfaces.
  - Power flow used for PV analysis added to secure site.

  http://www.pjm.com/planning/rtep-development/powerflow-cases/base-line-cases.aspx

Market Efficiency Timeline



2014-2015 24-Month Market Efficiency Cycle Timeline

- Long Term proposal window: November 2014 - February 2015

- Analysis of proposed solutions: March 2015 - November 2015
  - Determination of major assumptions (i.e. Load forecast, Fuel prices, Generators) that are significantly different in 2015 and can be used in sensitivity analysis for proposed projects: March 2015
  - Independent consultant review of cost and ability to build
  - Review of analysis with TEAC: June 2015-November 2015

- Determination of Final projects: December 2015
  - Final review with TEAC and Board approval
    - Projects may be approved earlier if analysis and review complete

2015 12-Month Market Efficiency Cycle

- 12 month cycle used to complete near-term (year 1 through year 5) analysis to identify approved RTEP projects that can be accelerated or modified based on Market Efficiency criteria.
- PJM only effort and requires no stakeholder effort.
  - Comments are always welcomed

Timeline

- Develop Market Efficiency 2016 and 2020 cases: January 2015-April 2015
  - Update of 2015 and 2019 Long Term Proposal Market Efficiency cases
- Analysis of approve RTEP projects for accelerations and modifications: May 2015-August 2015
- Determination of final candidates: August 2015-November 2015
- Recommendation to PJM Board: December 2015
  - Projects may be approved earlier if analysis and review complete

Questions?

Email: RTEP@pjm.com