


Eastern Interconnection Planning Collaborative (EIPC)

**Update
PJM TOA-AC Meeting
January 20, 2011**



Topics for Discussion

- Schedule
- Baseline Infrastructure Case (BIC)
- Future scenarios selection
- Modeling efforts
- Upcoming Meetings

Schedule

● <u>Task 1:</u> Initiate Project	Complete
● <u>Task 2:</u> Integrate Regional Plans (Roll-Up Case)	Nearing Completion
● <u>Task 3:</u> Production Cost Analysis of Regional Plans	Sep 2010 -- Mar 2011
● <u>Task 4:</u> Macroeconomic Futures Definition	Aug 2010 -- Mar 2011
● <u>Task 5:</u> Macroeconomic Analysis	Nov 2010 -- Jul 2011
● <u>Task 6A:</u> Obtain Expansion Scenario Concurrence	Apr 2011 -- Oct 2011
● <u>Task 6B:</u> Prepare Phase I Report - Reference Case and Expansion Scenarios INTERIM REPORT	Mar 2011 -- Oct 2011
● <u>Task 7:</u> Interregional Transmission Options Development	Nov 2011 -- Jun 2012
● <u>Task 8:</u> Reliability Review—Transmission Analysis/Results	Jan 2012 -- Jul 2012
● <u>Task 9:</u> Production Cost Analysis of Each Scenario	Feb 2012 -- Aug 2012
● <u>Task 10:</u> Generation and Transmission Cost Development	Oct 2011 -- Jun 2012
● <u>Task 11:</u> Review of Results	Jan 2012 -- Sep 2012
● <u>Task 12:</u> Phase II Report FINAL REPORT	Sep 2012 -- Oct 2012

Base Infrastructure Case (BIC)

- The BIC is being developed from the solved 2020 Roll Up Case prepared by the Planning Authorities.
- EISPC has established a “challenge process” to include only generation and transmission projects that are “reasonably certain” to be built in the BIC.
- The facilities contained in the 2020 Roll Up Case were preliminarily divided into two listings: to be included within baseline infrastructure vs. to be excluded from baseline infrastructure. This division was done according to the following guidelines:
- Facilities between now and 12/31/2015: All facilities (generation and transmission) are initially included.

Base Infrastructure Case (BIC)

- Facilities between 1/1/2016 and 2020:
- Transmission
 - All facilities below 345 kV are initially included
 - Facilities 345 kV and above are initially excluded
- Generation
 - Facilities that are committed and under construction generation are initially included
 - Planned generation facilities are initially excluded.
- Fifty-three challenges for either project inclusion or exclusion were submitted for disposition during a January 11 EISPC webinar.
 - In addition to projects excluded by the above criteria, EISPC voted to remove five generation projects and twelve transmission projects from the 2020 Roll Up Case.
 - MAPP, PATH and Susquehanna – Roseland Projects remain as proposed by PJM.
 - Other projects have been added, e.g., generation in New England
- Next step is a final determination on the BIC by the SSC at a January 18 Webinar. Nine projects outside of the EISPC process (including three PJM generation projects) have been challenged. Verbal update to TODO on January 20.

Future scenarios selection

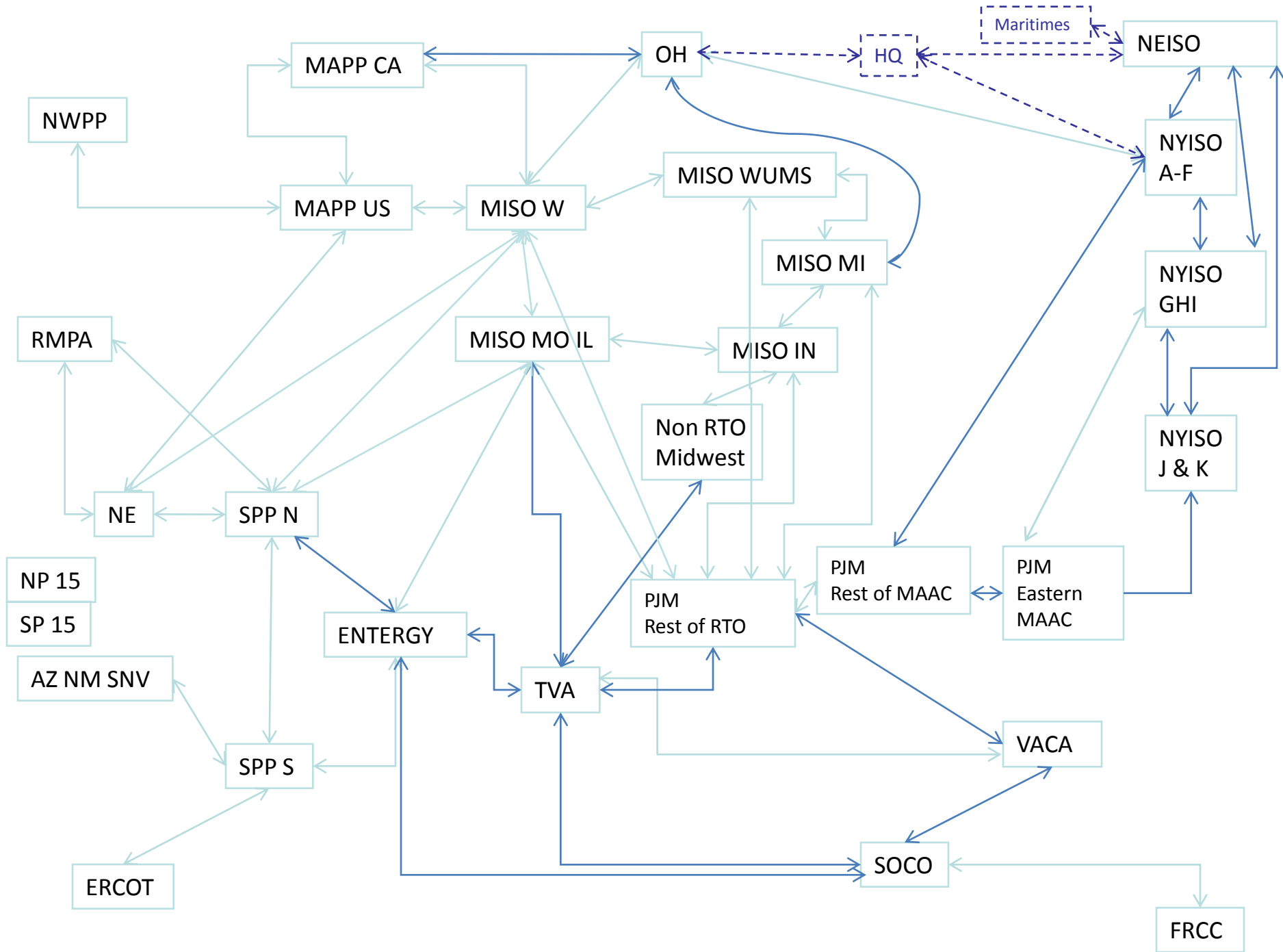
- As reported at the September 29, 2010 TODO meeting, a Scenario Planning Working Group (SPWG) has been formed to
 - Recommend to the EIPC Stakeholder Steering Committee (SSC) a set of diverse macroeconomic futures for selection, and if so directed by the SSC, **make recommendations as to the eight futures** to be employed and up to nine sensitivities to be used within each.
 - Fully develop the eight macroeconomic futures and the sensitivities selected by the SSC, so that they meet Charles River Associates' (CRA) needs for modeling.
 - Recommend to the SSC which three scenarios should be assessed in reliability studies.

Future scenarios selection

- The Eight future scenarios were approved by the SSC at its December 13-14, 2010 meeting. The scenarios are:
 - (1) Business as usual (including 3 scenarios to run as “Environmental moderation” – assuming no state REC’s, No EPA regs and no subsidies for renewables.
 - (2) Federal Carbon Constraint: National Implementation
 - (3) Federal Carbon Constraint: State/Regional Implementation
 - (4) Aggressive EE/DR/DG/Smart Grid
 - (5) National RPS: Top-Down Implementation
 - (6) National RPS: Regional Implementation
 - (7) Nuclear resurgence
 - (8) Combined Federal Climate and Energy Policy

Modeling efforts

- Modeling of the eight futures is being done by CRA.
- CRA is using the MRN – NEEM model to study the eight futures and sensitivities.
- Macroeconomic analyses of futures will provide useful information to the SSC in determining the 3 expansion scenarios to be selected for final transmission build out (Task 6).
- Analysis of Future 1 (the Business As Usual Case) is scheduled to start this month.
- Sensitivities for the BAU are being developed and will be presented at the February SSC meeting.
- EIPC's recommendation for NEEM Bubble Representation is shown on the following slide. The PJM model is structured to balance the necessity to keep the model simple and at the same time represent the major interregional and regional transmission limitations as well as the dominant internal energy and capacity market interfaces.



Modeling Efforts: PJM

EIPC Recommendation for PJM NEEM Bubble Representation		
PJM – Eastern MAAC	PJM – Rest of MAAC	PJM – Rest of RTO
Atlantic Electric Delmarva Power & Light Company Jersey Central Power & Light Company PECO Energy Company Public Service Electric & Gas Company Rockland Electric	Baltimore Gas & Electric Company Metropolitan Edison Company Potomac Electric Power Company PPL Electric Utilities Pennsylvania Electric Company	AEP Allegheny Energy Commonwealth Edison Dayton Power & Light Dominion Duquesne Light Company Toledo Edison Cleveland Electric Illuminating Company Ohio Edison Company Duke Energy Kentucky Duke Energy Ohio

Upcoming Meetings

- SSC
 - February 7 – 8
 - March 28 – 29

- EISPC
 - January 26 – 28
 - February 28 – March 2
 - March 21 – 23, tentative

QUESTIONS

