

Eastern Interconnection Planning Collaborative's (EIPC) Gas -Electric System Interface Study



Project Update

Mark Babula

PRINCIPAL ENGINEER – SYSTEM PLANNING



Table of Contents

- Legend
- History
- Participating Planning Authorities (PPAs) / Study Region
- PPA Stakeholders / Stakeholder Steering Committee (SSC)
- The Four Study Targets
- Project Administration Timeline *
- **Status Update ***

** All dates are identified as either actual or preliminary*

Legend

- Information (text) in dark color was previously delivered to the PAC at these meetings:
 - 2013
 - June 19, August 13, September 17, October 16, November 20, December 18
 - 2014
 - January 22, February 19, March 17, April 29, May 21, June 19, July 15, August 14, and September 17
- Information (text) in red color is an update to the previously published information/dates
 - Prior updates can be found on the PAC Materials web site; by meeting date
 - This update starts at Page 10

History

- The New York ISO originally developed a Statement of Work (SOW) to study the natural gas–electric interface and infrastructure within New York State; ISO-NE, PJM, MISO, TVA, and Ontario were also interested in performing similar studies
- At the same time, the U.S. DOE recognized a gap in its review of the EIPC Reports on Phase 1 and 2 of the DOE funded eastern interconnection transmission analysis work, which prompted them to extend the interconnection studies grant to include further analysis of the interaction of the natural gas and electric industries
- Many of the alternative futures studied within Phase 1 and 2 of the EIPC analysis involved retiring coal-fired power plants and replacing them with natural gas-fired generation
- During the period of the EIPC study, noteworthy changes have occurred regarding the natural gas markets that would result in an increased dependence on new gas-fired resources
 - Recent shale gas development and changes in location of new gas supplies also factor in

PPAs / Study Region

- The six Participating Planning Authorities (PPAs) are a subset of EIPC members that include:
 - 1 ISO New England (ISO-NE)
 - 2 New York ISO (NYISO)
 - 3 PJM Interconnection (PJM)
 - 4 Midcontinent ISO (MISO) (including the MISO South/Entergy system)
 - 5 Tennessee Valley Authority (TVA) Areas
 - 6 Ontario's Independent Electricity System Operator (IESO)
- The Study Region encompasses the major natural gas supply, pipelines, storage and distribution systems and regional electric systems serving the PPAs. In metropolitan areas, the inclusion of local gas distribution companies (LDCs) is an important consideration because such a large number of generating plants are served directly off the LDC systems in those areas



PPA Stakeholders / Stakeholder Steering Committee (SSC)

- The PPA Stakeholder Groups are the assembly of stakeholders created by each PPA to provide input to the PPA on its activities and to fulfill any requirements it may have under FERC Order No. 890. Since this Gas-Electric System Interface Study will be performed in a transparent and collaborative manner, the study processes will be open to participation by state and federal officials, representatives from ISOs, RTOs, electric utilities, transmission and generation owners, end-users and relevant stakeholder bodies or non-government organizations (NGO's), including appropriate entities in Canada. Representatives from the North American natural gas industry are also included
- To meet these aforementioned requirements, the EIPC previously established the Stakeholder Steering Committee (SSC), a multi-constituency steering committee, to provide strategic guidance on the scenarios and sensitivities to be modeled, suggest modeling tools, suggest key assumptions for the scenarios and sensitivities, and other activities. The EIPC and SSC Charter and its membership and activities are posted on the EIPC web site which is located at: <http://www.eipconline.com/>

Study Targets

The four Targets of the Statement of Work (SOW) are:

Target 1 - Develop a baseline of the electric and natural gas systems, including their planning, operation and interactions

Target 2 - Determine the adequacy of the regional gas systems to satisfy generation needs over five- and 10-year horizon

Target 3 - Identify contingencies on the gas and electric systems that could negatively affect the other

Target 4 - Examine the pros and cons of dual fuel capability for generation versus expanding gas system infrastructure

Project Administration Timeline *(All dates are actual)*

- 1 The EIPC advised the SSC of the continuation of the Phase II work with the Gas-Electric System Interface Study on June 7, 2013
- 2 The PPA Stakeholder Groups were introduced to the SSC and its process for interaction with the PPA Stakeholder Groups via two Webinars held on June 20 and 26, 2013
 - Reconvene the SSC and review its membership
 - Update the final SSC Roster by September 30, 2013
- 3 The EIPC invites comments from the SSC and PPA Stakeholder Groups on the draft SOW – comments were due by July 12, 2013
- 4 The SSC structure was adjusted to include natural gas industry representation on July 27, 2013
- 5 The PPAs compiled stakeholder feedback on the proposed SOW thru August 2, 2013

Project Administration Timeline – cont'd

(All dates are actual)

- 6 Prior to issuance of the Request for Proposals (RFP), the PPAs review, post and incorporate appropriate Stakeholder comments into a revised SOW thru August 2, 2013
- 7 The PPAs finalized the Project Management Plan (PMP) and SOW by August 2, 2013
- 8 The RFP process was initiated with the publishing of the final Statement of Work, along with the formal announcement of the RFP on the EIPC website, an EIPC Media Release, and advertisements in both Platts MW Daily and Gas Daily publications on August 3, 2013
- 9 Responses to the RFP were required to be completed by midnight on August 30, 2013
- 10 The contract was awarded to Levitan & Associates, Inc. (LAI) of Boston, MA

Project Update – October 23, 2014

153 Target 1

- Complete - The final Draft Report and exhibits have been posted to the EIPC website, along with the matrix of comments from stakeholders.

154 Target 2 – AURORA Production Simulation Update

- All Aurora production simulations to support the project have been performed.

155 Target 2 – Gas Pipeline Competition Model (GPCM) Update

- GPCM analysis has been completed for all three scenarios and all sensitivities.

156 Target 2 – Draft Report

- The Draft Target 2 Report for Stakeholder review was targeted for publication on September 30, 2014. Its posting has been delayed for additional review.



Project Update – October 23, 2014 – cont'd

157 Target 3

- FERC Staff has delivered all of the 62 requested Exhibit G pipeline data forms.
- **This delay has introduced a 4-6 week delay in the Target 3 milestones - PPAs & LAI are re-assessing the project schedule.**
- PJM, NYISO and IESO continue to work with local gas LDCs for contingency identification and modeling.
- All PPAs have submitted their lists of electrical contingencies to be modeled.

158 Target 4

- The Draft Target 4 Report was delivered to the PPAs for review on October 10, 2014.
- A total of 27 locations have been chosen by the PPAs for the T4/t5 analysis – the incremental firm gas versus dual fuel “benefits” assessments.
- Scheduled completion of Target 4 Draft Report for Stakeholder review is October 24, 2014.

159 Project Timeline - The remaining project timeline is currently under review.

Questions

