



Eastern Interconnection Planning Collaborative

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# Revised Draft Phase 2 Report

SSC Meeting  
May 28, 2015

# Acknowledgement and Disclaimer

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## The EIPC appreciates and acknowledges the support of DOE for the Eastern Interconnections Studies Project

### Acknowledgement:

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### Disclaimers:

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# Outline

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- Background
  - Phase 1, Phase 2, G-E Study
- Gas-Electric System Interface Study results integration into the earlier draft Phase 2 Report
- Revised draft Phase 2 Report structure
- Discussion and feedback

# Background

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- Initial project work conducted between the spring of 2010 (SSC formation) and the end of 2012
- Phase 1 and Phase 2 reports developed
- Phase 1
  - Capacity expansion study under various energy policy options
  - 8 Futures and 72 sensitivities
- Phase 2
  - Transmission build-out for 3 scenarios

# Phase 1

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- Capacity expansion study under various energy policy options
- 8 Futures and 72 sensitivities
- Phase 1 Report finalized and submitted to DOE in December, 2011
- Posted on the EIPC website

# Phase 2

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- Transmission build-out for 3 scenarios
- Phase 2 Report advanced to the point of a final draft in December, 2012
- DOE provided feedback and guidance in January, 2013 leading to the start of the Gas-Electric System Interface Study
- The Phase 2 Report held in draft form waiting for the completion of the Gas-Electric Study results

# DOE Guidance: Gas-Electric System Study

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- “During review of the draft Phase 2 report submitted on December 22, 2012, a gap was identified regarding the interaction between electric and natural gas infrastructures.
- ... noteworthy changes have occurred regarding the natural gas market, including changes in source locations and an anticipated increased reliance on natural gas for power generation in the future.
- ... much of the work completed to date places significant reliance on natural gas as a power generation feedstock in the future. It is unknown if sufficient natural gas infrastructure exists to support the proposed increased need for natural gas for power production, as well as the impacts on transmission planning if the original assumptions about natural gas and its infrastructure are incorrect.
- ... to evaluate the interaction between natural gas and electricity from a planning perspective.”

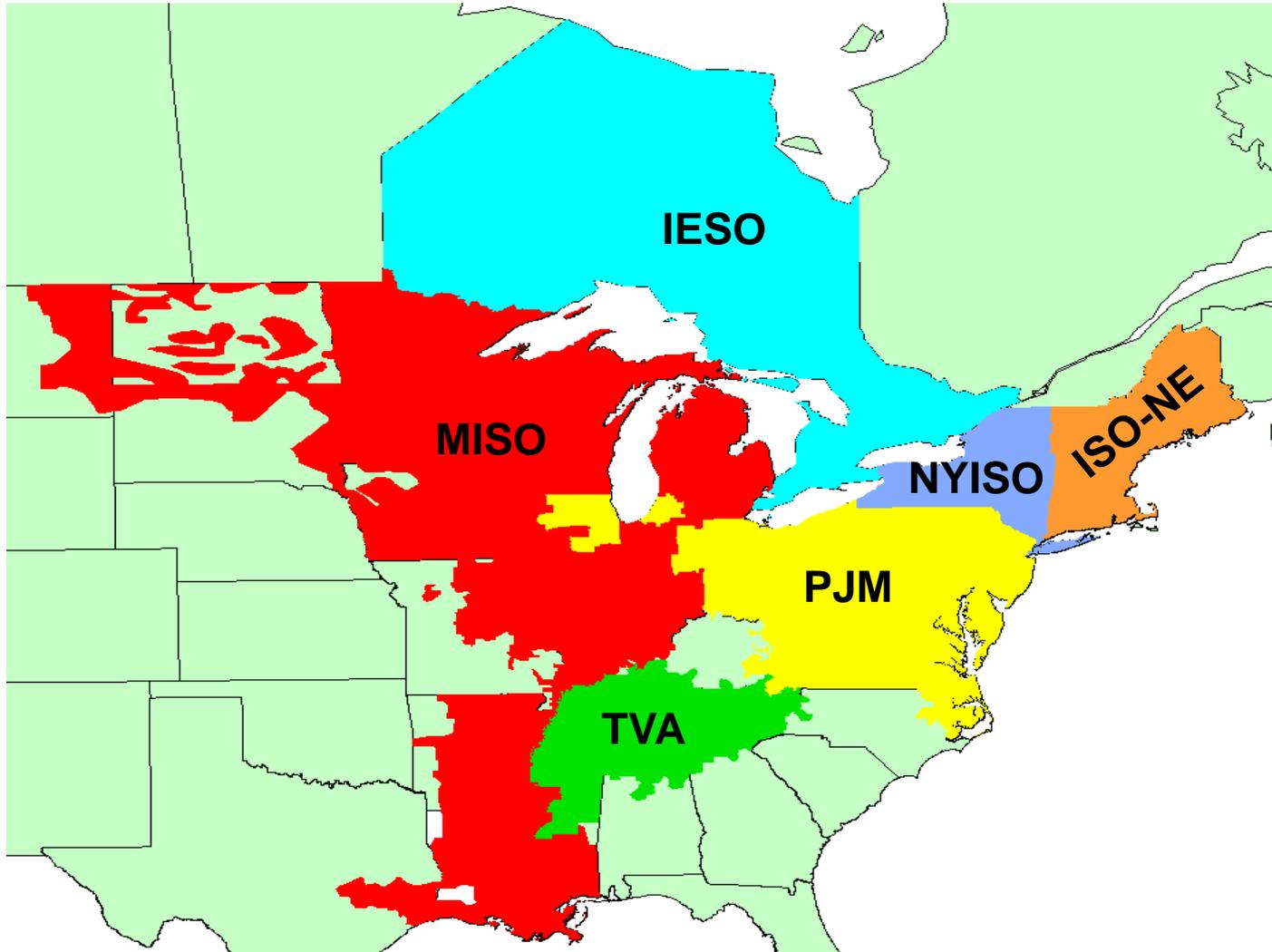
# Gas-Electric System Interface Study

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- Four Target Areas to be Analyzed
  - Target 1: Baseline assessment and description of the natural gas-electric system interface (final draft report complete)
  - Target 2: Evaluate the capability of the natural gas system(s) to supply the fuel requirements of the electric power sector
  - Target 3: Identify contingencies on the natural gas system that could adversely affect electric system reliability and vice versa
  - Target 4: Review the availability or non-availability of dual fuel capability at electric generating stations

# Study Region

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# Gas-Electric Study Results

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- Four Target reports
  - Complete/standalone reports
- Analysis supplements work in earlier Phase 1 and Phase 2 effort
  - Does not alter the earlier results
- Integration into the earlier draft Phase 2 Report
  - Add sections for each Target report
  - Incorporate the results of each Target report into the Executive Summary and Condensed Report

# Revised draft Phase 2 Report Structure (1)

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- Acknowledgement
- Disclaimers
- Executive Summary
- Condensed Report
  - Phase 1
  - Phase 2
  - Gas-Electric System Interface Study
    - Target 1, 2, 3, and 4 Summary
- Observations and Guidance



These parts of the original draft Phase 2 Report have been changed

# Revised draft Phase 2 Report Structure (2)

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## Report

[These sections are unchanged]

- 1.0 Introduction and Background
- 2.0 Developing Transmission Options for Reliability – Tasks 7 and 8
- 3.0 Reliability Results – Task 8
- 4.0 Base Scenarios: Production Cost Analysis and Cost Estimates
- 5.0 Task 10 Process and Results

# Revised draft Phase 2 Report Structure (3)

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- 6.0 Identification of Sensitivities for Production Cost Analysis
- 7.0 Observation and Guidance

Gas-Electric System Interface Study [New sections added]

- 8.0 Target 1: Existing Natural Gas-Electric System Interfaces

# Revised draft Phase 2 Report Structure (4)

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- 9.0 Target 2: Evaluate the Capability of the Natural Gas Systems to Satisfy the Needs of the Electric System
- 10.0 Target 3: Natural Gas and Electric System Contingency Analysis
- 11.0 Target 4: Fuel Assurance: Dual Fuel Capability and Firm Transportation Alternatives

# Discussion and Feedback

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- Comments on individual Target Reports provided during earlier webinars and submission of written comments – those have been incorporated
- Now seeking comments on the revised Executive Summary, Condensed Report, and Observations and Guidance

# Questions and Discussion

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