

Northeast Coordinated System Plan and Other Interregional Activities

IPSAC10

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Background on Interregional Planning

- Order 890 requires regional coordination over a large footprint
- An interregional planning structure is already in place
 - The Northeast ISO/RTO Planning Coordination Protocol
 - NPCC studies
 - Other regional agreements
 - The Eastern Interconnection Planning Collaborative
 - Quarterly Market Seams Report
- Stakeholders want more proactive interregional planning
- The Northeast Coordinated System Plan (NCSP) summarizes coordinated and proactive planning activities for ISO-NE, NYISO, and PJM
 - The NCSP includes summaries of studies conducted by other regional committees, such as NPCC, JCSP, NERC, etc.

Northeast Coordinated System Plan

Michael I. Henderson



Executive Summary and Introduction

- Executive Summary
- Introduction
 - Protocol
 - Content similar to NCSP08
- Summaries of RTO's system plans developed in 2009
 - PJM: RTEP08
 - NYISO: RNA 2009, CRP 2009
 - ISO-NE: RSP09
 - New Interconnections between the ISO/RTOs
 - Economic studies per 890
 - Links to regional plans

Summaries of Interregional Studies

- Loss of Source analyses
- Transmission Improvements with interregional impacts
 - PJM Backbone Expansion (765 kV, 500 kV, and HVDC)
 - Merchant Projects
 - Status of planned interconnections
 - Others
- Plattsburgh to Vermont tie
- NYISO/PJM Reliability Analysis
- Market Efficiency Analyses
 - NYISO/PJM
 - NYISO/ISO-NE
 - ISO-NE/NYISO/PJM

Additional Coordinated Planning Activities

- NPCC
 - Coordinated Planning
 - Resource Adequacy Analysis (CP-8)
 - Overall Transmission Assessment
 - Transmission Reviews
 - RFC 2013 Summer Long Term Reliability Study
- ISO/RTO Council (IRC)
- Eastern Interconnection Reliability Assessment Group (ERAG)
- Eastern Interconnection Planning Collaborative (EIPC)
- Fuel Diversity Issues
- Summary

Key Environmental Issues with Interregional Impacts

- EPA's Clean Air Interstate Rule (CAIR)
- OTC's High Electricity Demand Days (HEDD)
- CO2 Cap and Trade
 - Regional Greenhouse Gas Initiative (RGGI)
 - Proposed federal legislation
 - EPA's potential regulation of CO2
- Power Plant Cooling Water Issues
- Summary

Key Environmental Issues with Interregional Impacts, *cont.*

- Renewable Portfolio Standards
 - New England
 - New York
 - PJM
- Interconnection Queues (September 2009)
- Conclusions

Wind and Renewable Resource Studies

- North Country (NY) Wind Operating Studies
- DOE and NERC Wind Integration Activities
 - Eastern Wind Integration and Transmission Study (EWITS)
 - NERC's Integration of Variable Generation Task Force (IVGATF)
- RTO's wind development and integration issues
 - New York
 - New England
 - PJM
 - Generic wind integration issues
 - Summary

Demand Resources and Related Programs

- Describe Energy Efficiency and Demand Response programs
 - PJM
 - NYISO
 - ISO New England
- Conclusions

Plans for Additional JIPC Analysis

- Market efficiency analyses
- NE/NY Focused Analysis
 - Review Market Efficiency results for follow-up analyses
- PJM/NY Focused Analyses
 - Review Market Efficiency results for follow-up analyses
- Transmission Cost Allocation
- Conclusions

Final Remarks and Appendices

- Summary
- Conclusions
- Appendices
- References

Eastern Interconnection Planning Collaborative

John P. Buechler



Overview

- DOE FOA-68 Objectives & Requirements
- EIPC Proposal
- Schedule of Analysis
- Stakeholder Process

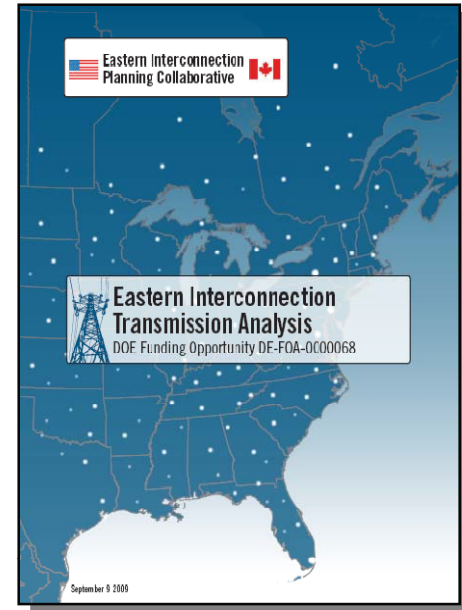
DOE Funding Opportunity Announcement & Objectives

DE-FOA-0000068: Issued June 15, 2009

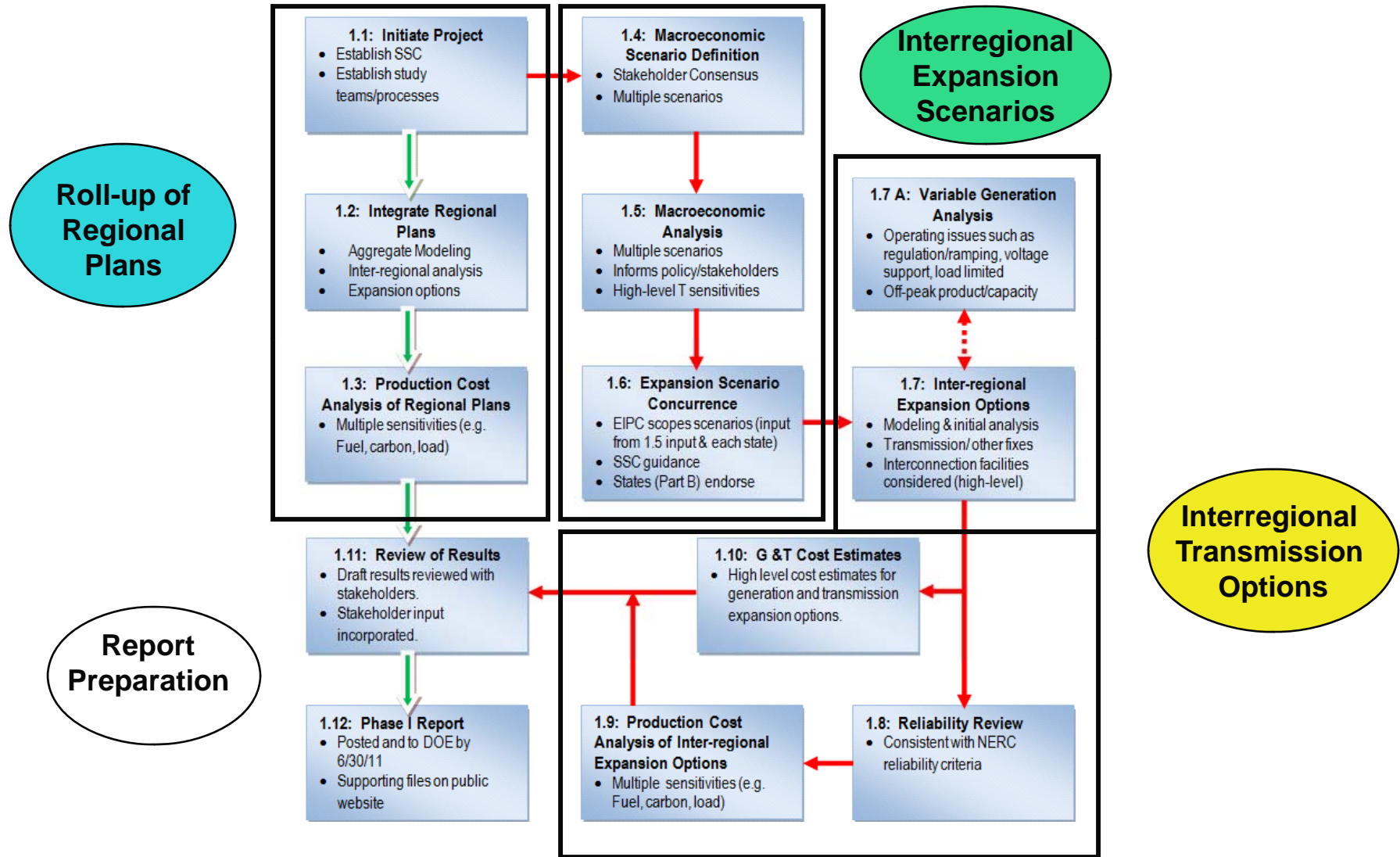
- Objective
 - To facilitate the development/strengthening of capabilities in each interconnection to prepare transmission analyses on an interconnection-wide basis under a broad range of alternative futures
- DOE solicited proposals on two “Topics” for each of the three Interconnections
 - Topic A: Interconnection-Level Analysis and Planning
 - Topic B: Grants to States

EIPC DOE Bid: Proposed Approach

- Filed on September 14
 - Covers the entirety of “Topic A”
- Objective
 - Establishment of a Multi-Constituency Stakeholder Process
 - Roll Up and Analysis of Approved Regional Plans
 - Development of Interregional Resource Expansion Scenarios
 - Development of Interregional Transmission Expansion Options (Not specific design, siting or cost allocation)
 - Prepare/Submit Reports to DOE



EIPC DOE Bid: Process Flow Chart



EIPC DOE Bid: Resources

- Principal Investigators
 - PJM, NYISO, ISO-NE, MISO, TVA, Southern, Entergy, MAPPCOR
- Other EIPC Planning Authorities
 - Contribute technical personnel and data
- Charles River Associates
 - Production Cost Modeling
- Oak Ridge National Laboratory
 - Reliability Review
- The Keystone Center
 - Stakeholder Facilitation

EIPC DOE Bid: Schedule of Analysis

- **Phase I (Jan 2010 – June 2011)**
 - Jan 2010 - Start of Project (subject to DOE Award)
 - May 2010 - Establishment of the Stakeholder Steering Committee (SSC)
 - Sept 2010 - Integration of Regional Plans
 - Concurrence on Resource Expansion Scenarios
 - March 2011 - Transmission Scenario/Reliability Analysis Results
 - April 2011 - Scenario/Production Cost Results
 - May-June 2011 - Review of Draft Phase I Report
 - June 30, 2011 - Phase I Report Filed with DOE
- **Phase II (July 2011 – June 2013)**
 - Dec 2011 - Review Lessons Learned from Phase I; Adjust Phase II Schedule as needed
 - Jan 2012 - Jun 2013 - Repeat Phase I Tasks with updated information provided by stakeholders and updates to regional plans
 - June 30, 2013 - Phase II Report Filed with DOE

EIPC DOE Bid: Organization

- Stakeholder Steering Committee
 - Process facilitated by The Keystone Center with stakeholder input
 - At least 1/3 of Steering Committee to be made up of state representatives (as specified in the FOA)
 - Funding available for NGO participation
- EIPC Analysis Team
 - Made up of NERC-certified Planning Authorities
 - Technical consultants retained by Planning Authorities
 - Potential funding for complementary university work
- Project Manager

EIPC ORGANIZATION

Eastern Interconnection Planning Collaborative (EIPC)
(Open Collaborative Process)

Project Manager for
DOE Project Award

EIPC Analysis Team
Principal Investigators
Planning Authorities

Stakeholder Steering Committee
(SSC)

Stakeholder
Work Groups

Executive
Leadership

Technical
Leadership &
Support Group

Stake-
holder
Groups

States

Provinces

Federal

Owners
Operators
Users

DOE Project Award Subcontractors

EIPC: Next Steps

- Initial Stakeholder Webinars held on October 13 and 16
- EIPC Website has been established
 - <http://eipconline.com/index.html>
- DOE Award
 - Initial selection anticipated by November 2
 - Final Contract by December 31
- Reach-out to states, provinces, and other policymakers
- Advance the stakeholder process over the next three months
- Additional Meetings/Webinars