



Eastern Interconnection Planning Collaborative

EIPC Interconnection-wide Webinar and Stakeholder Discussion

Scenario Study Discussion

March 25, 2014

Webinar Agenda

- Welcome, Overview of Agenda, and Introductions
- Scenario Suggestions
 - Submitted by Stakeholders
 - Original Samples Posted by EIPC
- Q&A, Discussion, Expected Benefits
- Discussion on Priorities
- Plan for Completing Scenario Studies and Schedule

Scenario Suggestions

1. Submitted by Stakeholders
 - a. Heat Wave and Drought
 - b. Updated Base Case
 - c. Increased Gas Generation
 - d. High Transmission Build-Out
2. Original Samples Posted by EIPC
 - a. Inter-Regional Capabilities and Constraints during Winter Conditions
 - b. Inter-Regional Capabilities and Constraints during Spring Peak Conditions

1.a. Heat Wave and Drought

- Submitted by: Eastern Interconnection States' Planning Council (EISPC)
- Study Case: 2023 Summer Peak
- Questions to be Answered Based on Power Flow Analysis:
 - “What new large transmission facilities over large geographic distances might be required?”

1.a. Heat Wave and Drought

General Description and Premise

- This scenario would assess the Eastern Interconnection's ability to transfer large amounts of power among regions of interest during a heat wave and drought under summer peak conditions.
- For transfer studies, the source would be the areas not as severely affected by the persistent high temperatures and protracted drought. The sink would be the areas that are severely affected.
- The addition or removal of resources should be identified as specifically as possible. The scenario should specify how a corresponding amount of generation in the base data should be removed or added, based on the assumption that the rolled up base case represents a balance between load and resources.
- Location, size, and mode of operation for storage technologies should be identified. Additional advanced technologies considered on case-by-case basis.
- Changes to peak demand forecast should be specified as a change to aggregate demand in the Base Plan.

1.b. Updated Base Case

- Submitted by: New York PSC
- Study Case: 2023 Summer Peak
- General Description
 - Addition of NY Transmission Owners' Transmission Solutions (“TOTS”)
 - Marcy South Series Compensation
 - Fraser – Coopers Corners 345 kV line reconductoring
 - Con Edison New 2nd Rock Tavern – Ramapo 345 kV line
 - Con Edison Staten Island Un-bottling
 - Updates in other Regions based upon firm resource additions/retirements

1.c. Increased Gas Generation

- Submitted by: New York PSC
- Study Case: 2023 Summer Peak
- General Description
 - Start with Case 1.b and then include:
 - Indian Point Closed
 - 1000MW of gas fired generation added in the Lower Hudson Valley
 - Increased gas fired generation in other Regions

1.d. High Transmission Build-Out

- Submitted by: New York PSC
- Study Case: 2023 Summer Peak
- General Description
 - Start with Case 1.b and then include:
 - 1000 MW of increased transfer capability over UPNY/SENY interface
 - 1000MW HVDC from Canada
 - Increased transmission build-out in other Regions

2.a. Inter-Regional Capabilities and Constraints during Winter Conditions

- Scenario Submitted by: EIPC as Sample Scenario 1
- Study Case: 2018 Winter Peak
- Questions to be Answered Based on Power Flow Analysis:
 - “What constraints arise when renewables, gas generation, etc. are transferred during winter conditions?”

2.a. Inter-Regional Capabilities and Constraints during Winter Conditions

General Description and Premise

- This scenario would assess the Eastern Interconnection's ability to transfer large amounts of power among regions of interest during winter peak conditions
- The 2018 model year would incorporate the generation retirements and other system changes associated with the implementation of the EPA MATS rules.
- Winter operations are growing in complexity as gas-fired generation, renewables, and demand-side options continue to increase as percentage of the overall generation mix.
- This scenario would provide both an assessment of inter-regional capabilities and constraints for 2018 winter conditions, and also would provide suitable modeling to enable independent analysis by transmission planners and other industry analysts.

2.b. Inter-Regional Capabilities and Constraints during Spring Peak Conditions

- Scenario Submitted by: EIPC as Sample Scenario 2
- Study Case: 2018 Spring Peak
- Questions to be Answered Based on Power Flow Analysis:
 - “What constraints arise when renewables, gas generation, etc. are transferred during spring conditions?”

2.b. Inter-Regional Capabilities and Constraints during Spring Peak Conditions

General Description and Premise

- This scenario would assess the Eastern Interconnection's ability to transfer large amounts of power among regions of interest during spring peak conditions.
- The 2018 model year would incorporate the generation retirements and other system changes associated with the implementation of the EPA MATS rules.
- Spring operations are growing in complexity as gas-fired generation, renewables, and demand-side options continue to increase as percentage of the overall generation mix.
- Generation resources are more likely to be off-line due to lower loads and due to maintenance outages. Wind resources generally have higher capacity factors while solar resources have shorter production hours than summer but higher than winter.

Q&A, Discussion, Expected Benefits

- Questions on particular scenarios
- Discussion
- Input on benefits expected by completing the analyses on each of the scenarios

Priorities

- If all the scenario suggestions cannot be completed with the EIPC resources available, which one(s) should come first?

Plan and Schedule

- Schedule posted on the EIPC website at eipconline.com. Look for updates there.

18	EIPC Webinar to discuss stakeholder feedback on scenario options and finalize scenarios to be studied in 2014	March 25, 2014 9:00am - 10:30am Eastern	
19	Stakeholder final comments on the scenarios due to regional process and in the alternative EIPC@tva.gov	March 28, 2014	
20	EIPC Consideration of comments on scenario selection and final determination of scenarios	April 2, 2014	
21	Final scenario descriptions & 2014 Schedule posted	April 4, 2014	
22	SSMLFWG Begins Work on Scenarios	April 7, 2014	

- Study results likely to be available during the summer of 2014 and extending into the fall of 2014.

Questions and Discussion

