

Western and Central Massachusetts (WCMA) – 2029 Study Update

Planning Advisory Committee

Sarah Lamotte

ASSISTANT ENGINEER | TRANSMISSION PLANNING

Purpose

Provide an update on the WCMA 2029 study effort

Overview

- Background
- Study update
- Conclusion
- Next steps

Background

- The <u>WCMA 2029 Needs Assessment Results</u> presentation was discussed with the PAC on February 20, 2020
- The <u>Final Western and Central Massachusetts (WCMA) Area</u>
 2029 <u>Needs Assessment</u> report was posted on May 5, 2020
- The WCMA 2029 Needs Assessment identified:
 - Time-sensitive, N-1 and N-1-1 PTF voltage violations under peak load conditions along the A-1 & B-2 69 KV line corridor between Vernon station in Vermont and Pratts Junction station in Massachusetts (A-1 & B-2 corridor)
 - No other thermal or voltage violations in the WCMA study area

Background, Cont.

- The <u>Notice of Initiation of the WCMA 2029 Solutions Study</u> was posted to the ISO website on February 24, 2021
- The <u>WCMA 2029 Solutions Study Scope of Work Update</u> presentation was presented to PAC on March 17, 2021
 - National Grid's asset condition projects would be included in the cases before solution alternatives would be developed
 - A-1 & B-2 69 kV Line Asset Condition Project
 - Deerfield #4 Substation Asset Replacements
 - Chestnut Hill #702 Substation Asset Replacements
 - Vernon Hill #13 Substation Asset Replacements

Study Update

- Since the March 2021 PAC meeting, the ISO re-ran an analysis with the inclusion of the A-1 & B-2 Line Asset Condition Project to determine the status of the criteria violations observed in the WCMA 2029 Needs Assessment
 - The new analysis is referred to as the WCMA 2029 Needs Assessment Addendum (Addendum)
 - Out of the four asset condition projects, the A-1 & B-2 Line Asset Condition Project was selected to be added to the Addendum cases because
 - The project has the greatest potential impact on the criteria violations observed in the WCMA 2029 Needs Assessment
 - The Deerfield #4, Vernon and Chestnut Hill station rebuild layouts were unknown at the time the analysis was performed
 - National Grid communicated their plans to the ISO to update the PAC regarding the A-1 & B-2 Line Asset Condition Project so that it would be moved from Concept to Proposed. The PAC presentation was presented at today's meeting
- The updated testing showed that all of the criteria violations identified along the A-1 and B-2 Line corridor in the WCMA 2029 Needs Assessment were no longer observed
- A short circuit analysis was also performed with the A-1 & B-2 Line Asset Condition Project included in the short circuit case and no over-dutied breakers were identified

Conclusion

- Since there are no criteria violations observed in the Addendum analysis, there is no need to conduct a WCMA 2029 Solutions Study
- The WCMA 2029 study effort is concluded as there are no remaining criteria violations in the study area

Next Steps

- Post the draft Addendum and study files October 2021
 - A 15 day period will be provided for stakeholders to review and provide written comments to <u>pacmatters@iso-ne.com</u> on the posted materials
- Post the final Addendum October 2021

Questions



