

10-Year Assessment An annual report summarizing proposed additions and expansions to ensure electric system reliability.

2011

September 2011 10-Year Assessment www.atc10yearplan.com

Zone 4 - 2016 study results

Refer to Table ZS-2 and Figure ZS-14

Summary of key findings

- Zone 4 is an active study area for potential wind generation additions,
- Zone 4 is an active area for asset renewal type projects, and
- For the 2016 study model, the remainder of zone 4 is free of system limitations largely due to the reduced load forecast.

The Sunset Point – Pearl Avenue 69-kV line continues to overload and the magnitude of the overload continues to increase in the 2016 summer peak models. To see the impact of this overload and to verify the overload is getting progressively worse over time, the rebuild project planned to reinforce this circuit was not included in the base case models analyzed for this assessment. Hence, the reason the overload appears in models past its anticipated in-service date. The current in-service date for this reinforcement project is April 2012. Once complete, the limitation will be addressed. See <u>Zone 4 – 2012 study results</u> section for additional details.

To improve reliability, ensure safety and comply with current code requirements, an Asset Management driven rebuild of the Dyckesville – Sawyer 69-kV circuit is proposed for 2016. ATC is currently performing a detailed study of structure integrity and conductor-to-ground clearances of this 69-kV circuit.

For a variety of reasons, we will be considering the installation of a second 345/138 kV transformer at the Fitzgerald Substation. Because this project is in the very early stages of project development, it is currently not listed in the project tables.

No performance limits were exceeded for Category A conditions for all 2016 analysis.

The lead times necessary to implement the corrective plans that are scheduled for 2012 through 2016 were considered and taken into account prior to assigning an in-service date for each associated project. All of the projects scheduled for the near term planning horizon have an "In-service date" that matches the "Need date", except the following projects:

Projects whose "Need date" precedes the "In-service date"

None

Projects whose "In-service date" precedes the "Need date"

None