#P43 - Trowbridge 115 kV (62.5 MW)
Generation Interconnection

Network Impacts

The **#P43 project was studied as a total injection of 90.9 MW (62.5 MW of Capacity) into Weyerhaeuser 115kV substation.** Project #P43 was evaluated for compliance with reliability criteria for summer peak conditions in 2010. Potential network impacts are as follows:

Generator Deliverability
No problem identified.

Multiple Facility Contingency
No problem identified.

Contribution to Previously Identified Overloads
None

New System Reinforcements (Dominion Assessment Results)

Dominion has assessed the impact of injecting the #P43 existing 13.8 kV generation at Weyerhaeuser Substation onto the local transmission network. Both customer load and existing generation output flow through three 33.6 MVA 115/13.8 kV transformers, which are connected in parallel. The existing "in" and "out" meters on each of the three transformers are totalized for billing.

Dominion concurs with PJM's findings that the existing 115 kV transmission system can accommodate the proposed output as stated in PJM Queue #P43. However, Dominion is concerned that the transformers may be overloaded, and may not be able to accommodate a continuous load flow of the requested 90.9 MW under a "no plant load" condition when the generation power factor is below approximately 90 percent.

For the purpose of this analysis, it is assumed that there will be sufficient customer plant load, and that the transformers will not be expected to handle the full 90.9 MW power outflow. The Interconnection Customer's ultimate power flow decision will affect the existing metering and system protection requirements. Dominion reserves the right to perform additional studies and assessments should it be determined that the Interconnection Customer's operating procedures result in the loading scenario described above.

Contribution to Previously Identified System Reinforcements
None.

Short Circuit
Under Study.

Stability
Stability Analysis to be performed in System Impact Study.