PJM Generator Interconnection Request
Queue #R85
Tanners Creek #1 138kV
Feasibility/Impact Study

420017
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R85 Tanners Creek #1 138kV Feasibility/Impact Study

General

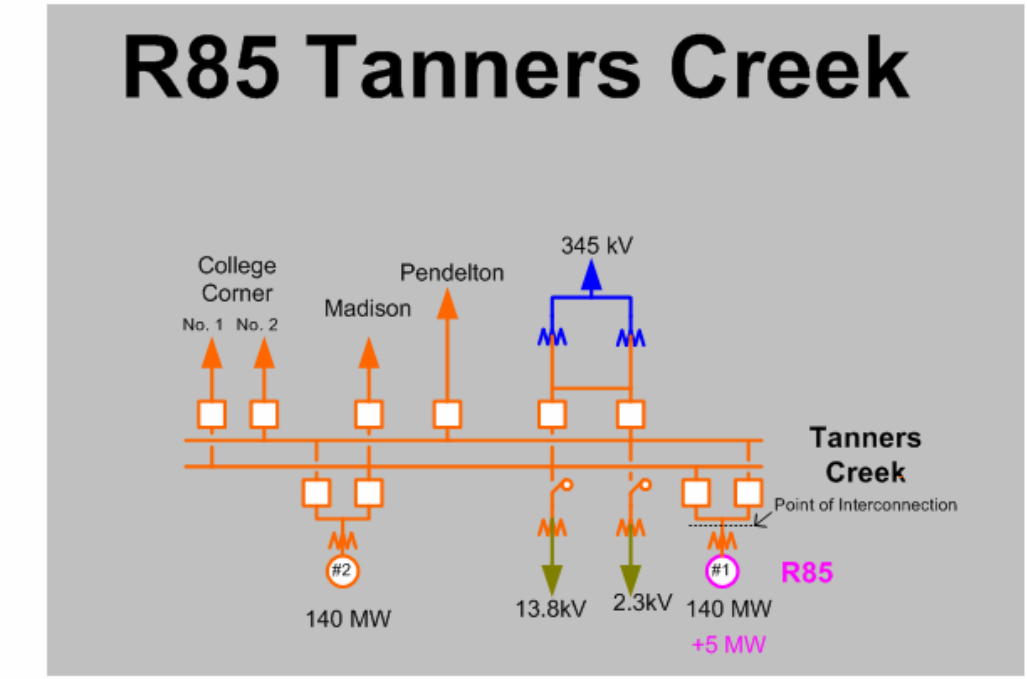
American Electric Power Service Corporation as agent for the operating companies of the American Electric power system (Interconnection Customer) has requested an increase of 5 MW to the Capacity Interconnection Rights for Unit #1 at the Tanners Creek station. The increase is requested so that the rights will reflect the demonstrated capability of the unit. The Tanners Creek plant is located at 800 AEP Drive, Lawrenceburg, Dearborn County, Indiana.

The intent of the Feasibility / Impact study is to determine system reinforcements and associated costs and construction time estimates required to facilitate the addition of the new generating plant to the transmission system. The reinforcements include the direct connection of the generator to the system and any network upgrades necessary to maintain the reliability of the transmission system.

Direct Connection

The existing direct connection facilities have sufficient capability to accommodate the additional 5 MW of output from the generating unit #1. Therefore there is no need to change the existing facilities. See Figure #1.

Figure #1



Network Impacts

The #R85 project was studied as a capacity increase of 5 MW at the Tanners Creek 138 kV substation. Project #R85 was evaluated for compliance with reliability criteria for summer peak conditions in 2011 to determine if Capacity Interconnection Rights can be granted. Potential network impacts were as follows:

Generator Deliverability

No problems identified

Multiple Facility Contingency

No problems identified

Contribution to Previously Identified Overloads

No problems were identified

Short Circuit

Not required, since there are no changes to the generating unit electrical characteristics.

New System Reinforcements

None

Contribution to Previously Identified System Reinforcements

None

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