# *PJM Generator Interconnection*
# *V1-028 North Wales 2 MW*
# *Feasibility / Impact Study*

**May 2009**

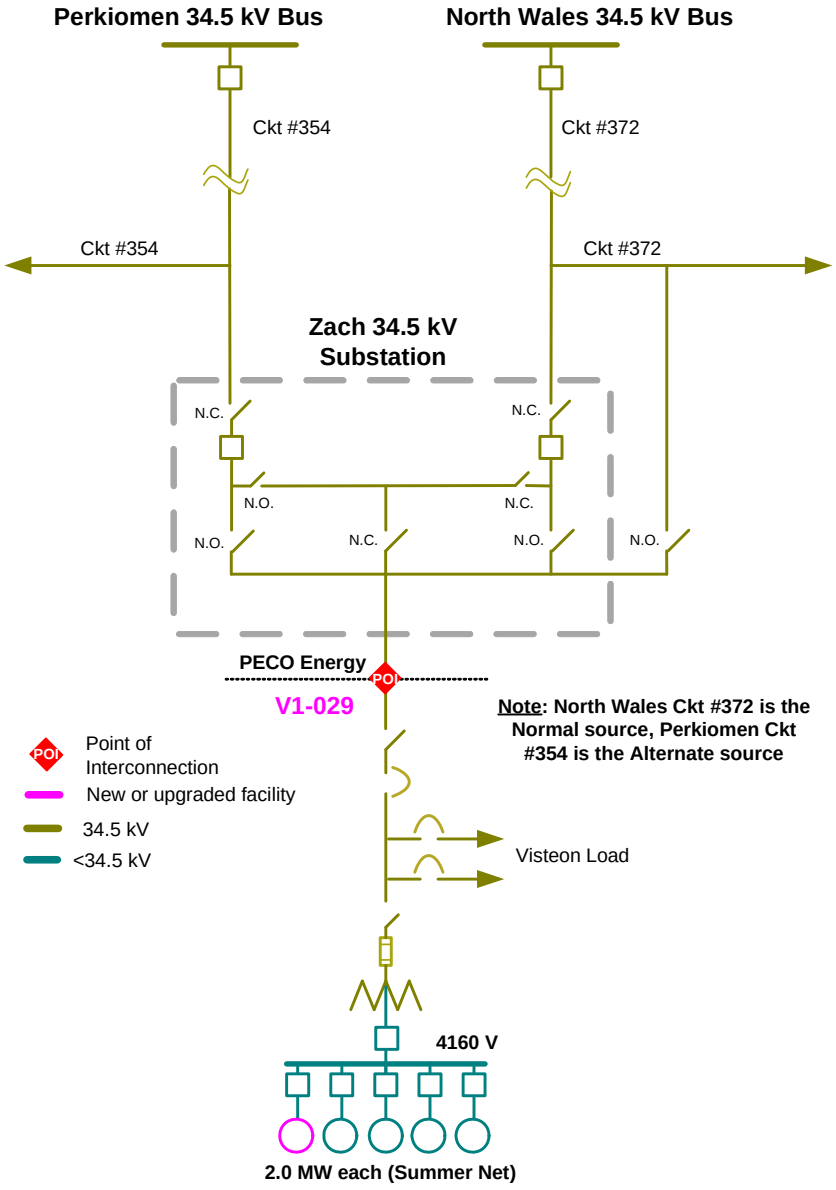
DMS # 538598

## *General*

Queue V1-028 is a Visteon Systems, LLC 2 MW (net Capacity) interconnection request consisting of five 2.0 MW diesel generators, 8 MW of which are Behind-the-Meter units and 2 MW of which has grandfathered Interconnection Rights to export into the PECO system pursuant to an Interconnection Agreement between PECO Energy Company and Visteon Corp. issued and effective on July 18, 2002 and filed with FERC on July 17, 2002 with Docket No. ER02-2341-000. Queue V1-028 is located at 2750 Morris Road, Worcester, Pennsylvania. V1-028 Capacity is already connected and available.

## *Direct Connection*

The Queue V1-028 generation is already connected to PECO's Zach 34.5 kV substation as shown on the one line diagram below.



**Interconnection Customer (Visteon Systems, LLC)**
**Scope of Direct Connection Work**

Visteon is responsible for construction of all facilities on its side of the POI (Point of Interconnection).

Metering / telemetering for PJM - Interconnection Customer will be required to install the necessary equipment to provide "Revenue Metering (KWH, KVARH)" and real time data (KW, KVAR) for the Interconnection Customer's Customer Facility. See PJM Manuals M-01 and M-14D available at http://www.pjm.com, and Sections 8.1 through 8.5 of Appendix 2 to the pro forma ISA (Interconnection Service Agreement) Schedule O of the PJM Tariff. For additional PJM metering / telemetering information contact Ryan Nice at 610-666-4777 or nicer@pjm.com

**Interconnected Transmission Owner (PECO Energy Company)**
**Direct Connection Scope of Work**

Queue V1-028 generation is already connected, no additional PECO Energy Direct Connection work is required.

## *Network Impacts*

Queue V1-028 was studied as a 2 MW Capacity injection into the North Wales 34.5 kV Feeder 352. Project V1-028 was evaluated for compliance with reliability criteria for summer peak conditions in 2013. Network impacts were as follows:

NETWORK IMPACTS

**Generator Deliverability**
*(Single or N-1 contingencies for the Capacity portion only of the interconnection)*

No problems were identified.

**Multiple Facility Contingency**
*(Double Circuit Tower Line contingencies only for the full energy output. Stuck breaker and bus fault contingencies will be performed for the Impact Study)*

No problems were identified.

**Contribution to Previously Identified Overloads**
*(This project contributes to the following contingency overloads, i.e. "Network Impacts", identified for earlier generation or transmission interconnection projects in the PJM Queue)*

No problems identified.
**Short Circuit**

Not required because generation was already connected pursuant to an earlier Interconnection Agreement.

**Stability Analysis**

Not required because generation was already connected pursuant to an earlier Interconnection Agreement.

## NETWORK UPGRADE REQUIREMENTS

**New System Reinforcements**

*(Upgrades required to mitigate reliability criteria violations, i.e. "Network Impacts", initially caused by the addition of this project generation)*

None required.

**Contribution to Previously Identified System Reinforcements**

*(Overloads initially caused by prior Queue positions with additional contribution to overloading by this project. This project may have a % allocation cost responsibility which will be calculated and reported for the Impact Study)*

None required.