# PJM Generator Interconnection

# X1-084 Altavista

# 60 MW Capacity & Energy

# Combined Feasibility &

# System Impact Study Report

*May 2011*
*DMS #646053v1*

## Introduction

This combined Feasibility and System Impact Study (SIS) has been prepared in accordance with the PJM Open Access Transmission Tariff, Section 205, as well as the System Impact Study Agreement between Virginia Electric and Power Company, (Interconnection Customer (IC)) and PJM Interconnection, LLC (Transmission Provider (TP)). The Interconnected Transmission Owner (ITO) is Virginia Electric and Power Company.

## Preface

The intent of Combined Feasibility and System Impact Studies is to determine a plan, with cost and construction time estimates, to connect the subject generation interconnection project to the PJM network at a location specified by IC. As a requirement for interconnection, IC may be responsible for the cost of constructing Local and Network Upgrades, which are facility additions, or upgrades to existing facilities, that are needed to maintain the reliability of the PJM and the underlying system. All facilities required for interconnection of a generation interconnection project must be designed to meet ITO technical specifications.

The study estimates do not include the feasibility, cost, or time required to obtain property rights and permits for construction of the required facilities. IC is responsible for its right of way, real estate, and construction permit issues.

## General

Queue X1-084 requests to return the Altavista facility from retirement. The project converts the facility to a biomass fuel fired unit, but the turbine-generator and other electrical equipment remain unchanged. IC is transferring 60 MW of Capacity Interconnection Rights from the retired unit per §230 of the PJM Tariff. The requested in-service date is June 2013.

## Network Impacts:

### *Generator Deliverability*

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

Not required due to existing rights.

### *Multiple Facility Contingency*

*(Double Circuit Tower Line Contingencies only with full energy output. Stuck Breaker and Bus Fault contingencies will be applied during the Impact Study)*

Not required due to existing rights.

### *Contribution to Previously Identified Overloads*

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

Not required due to existing rights.

### *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)*

Not required due to existing rights.

### *Short Circuit*

*(Report Overdutied breakers here)*

Not required due to existing rights.

### *Stability*

Not required due to existing rights.

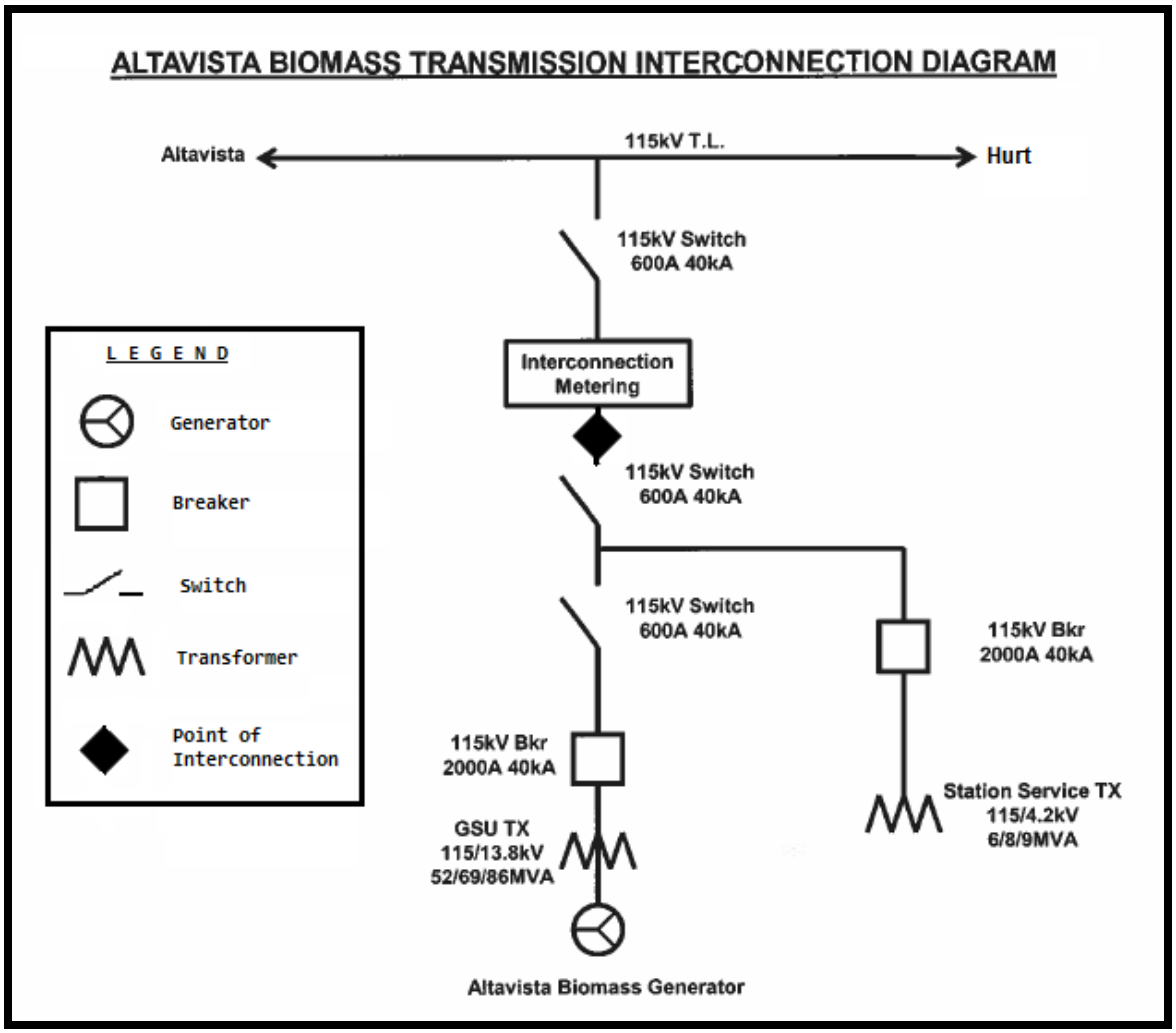


**Figure A: X1-084 Layout**