# *PJM Generator Interconnection Request*
# *Queue #X2-011*
# *Fair Lawn 138kV*
# *Feasibility/Impact Study Report*

**February 2012**
**#686042**

# Preface

The intent of the feasibility study is to determine a plan, with ballpark cost and construction time estimates, to connect the subject generation to the PJM network at a location specified by the Interconnection Customer. The Interconnection Customer may request the interconnection of generation as a capacity resource or as an energy-only resource. As a requirement for interconnection, the Interconnection Customer may be responsible for the cost of constructing: (1) Direct Connections, which are new facilities and/or facilities upgrades needed to connect the generator to the PJM network, and (2) Network Upgrades, which are facility additions, or upgrades to existing facilities, that are needed to maintain the reliability of the PJM system.

In some instances a generator interconnection may not be responsible for 100% of the identified network upgrade cost because other transmission network uses, e.g. another generation interconnection, may also contribute to the need for the same network reinforcement. The possibility of sharing the reinforcement costs with other projects may be identified in the feasibility study, but the actual allocation will be deferred until the impact study is performed.

The Feasibility Study estimates do not include the feasibility, cost, or time required to obtain property rights and permits for construction of the required facilities. The project developer is responsible for the right of way, real estate, and construction permit issues. For properties currently owned by Transmission Owners,

# X2-011 Fair Lawn 138kV Feasibility/Impact Study

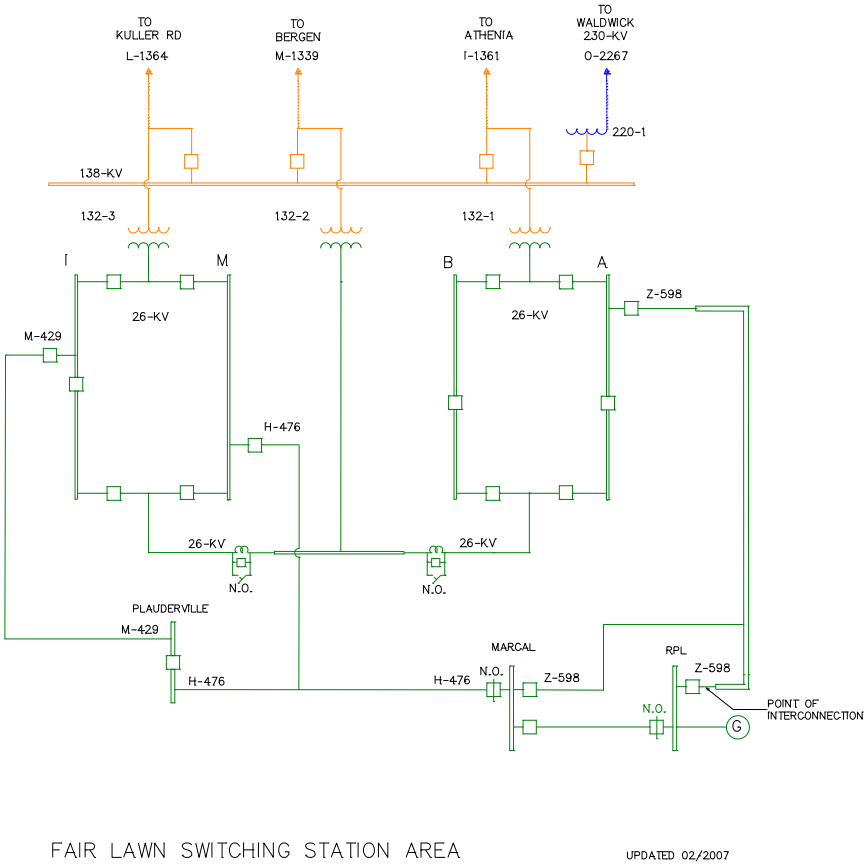
## General

Elmwood Energy Holdings, LLC proposes has submitted interconnection request for Project #X2-011, a 6 MW increase in the Elmwood Park Power Project, formerly Marcal, due to their no longer selling any electric output to Marcal. This will increase the plant output to 73 MW. The power plant located at 15 River Road, Elmwood Park, Bergen County, New Jersey. The projected in-service date is scheduled for June 1, 2012.

## Direct Connection

The maximun output of the Elmwood Park facility that can be accepted, when connected to the 26kV system, is 73 MVA. See figure #1. There are no upgrades required to increase the facility output by 6 MW to 73 MW.

**Figure #1**



## Network Impacts

The Queue Project #X2-011 was studied as a(n) 6.0MW(Capacity 6.0MW) injection at Fairlawn 138kV station in the PSEG area. Project #X2-011 was evaluated for compliance with reliability criteria for summer peak conditions in 2015. Potential network impacts were as follows:

### Generator Deliverability

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

No problems identified

### Multiple Facility Contingency

*(Double Circuit Tower Line, Line with Failed Breaker and Bus Fault contingencies for the full energy output)*

No problems identified

### Short Circuit

*(Summary form of Cost allocation for breakers will be inserted here if any)*

Not required since the generator constants did not change.

## System Reinforcements

None.

### 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.