## Exhibit D

# **Operations and Modifications Requirements**

of

**Atlantic City Electric Company** 

**Delmarva Power & Light Company** 

**Potomac Electric Power Company (Pepco)** 

**Companies of** 

Pepco Holdings, Inc

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#### **OPERATIONAL REQUIREMENTS**

References to Generation Equipment megawatt (MW) capacity in this document shall mean the sum total Generation Equipment capacity for all generation units <u>connected at a common Point of Interconnection</u> with the Pepco Holdings, Inc (PHI) System.

#### **Article 1 System Operations**

The following requirements pertain to Generation Equipment of all capacities:

- 1.1 Generator Notification of Synchronization and Disconnection. Facility Generation Equipment rated at 10 MW or less generally does not require approval for synchronization and disconnection from the PHI Transmission Control Center. PHI reserves the right to require certain generators of 10 MW or less to request approval for synchronization and disconnection as described in Article 1.8 on a case-by-case basis if the Facility Generation Equipment is located in a very critical part of the PHI System or if PHI System conditions warrant such coordination of operations for a specific period of time.
- 1.2 Operation of Equipment Connected to Other Party. Operation of any equipment directly connected to the PHI System shall not be undertaken without the direct involvement of, and coordination with, the PHI Transmission Control Center. PHI shall not operate any equipment directly connected to the Interconnection Customer without coordination with the Interconnection Customer.
- 1.3 Compliance with Operational Directives. Interconnection Customer shall be required to comply with the requests, orders, directives and requirements of PHI to the extent such requests, orders, directives or requirements are (a) issued pursuant to Good Utility Practice, (b) not unduly discriminatory, (c) otherwise in accordance with applicable tariffs, and (d) in Interconnection Customer's reasonable opinion would not result in damage to its property or violate safety rules or regulations. In the event Interconnection Customer believes that a request, order or directive of PHI exceeds the limitations in (a), (b) and (c) only, it shall nevertheless comply with the request, order or directive of PHI pending resolution of the Dispute under Article 8.12 in the Agreement. The Parties agree to cooperate in good faith to expedite the resolution of any Disputes arising under this Article 1.3.
- 1.4 <u>Coordination During System Emergencies.</u> Interconnection Customer shall coordinate its operation with the PHI Transmission Control Center during local emergency conditions so as to enable the PHI Transmission Control Center to operate within applicable reliability principles and standards in accordance with all applicable PJM Manuals
- 1.5 <u>Reliability in System Emergencies.</u> When PJM initiates emergency procedures, Interconnection Customer shall inform PHI's Transmission Control Center of any Exhibit D 101011.doc

- condition which inhibits the Facility from operating in a reliable manner. Such conditions include but are not limited to the availability of fuel, and inability to operate due to labor, equipment, environmental, and weather related problems.
- 1.6 <u>Data Requested by Authorized Organizations.</u> Interconnection Customer shall promptly provide PHI with all relevant information, documents, or data regarding the Facilities that would be expected to affect the PHI System, required to permit PHI to conduct operating and planning studies and determinations and that is reasonably requested by NERC, MAAC, any Governmental Authority, PHI, or PJM

The following additional requirements in Articles 1.7 through 1.12 pertain to Generation Equipment greater than 10 MW in capacity:

- 1.7 <u>Dispatch Schedule.</u> Interconnection Customer shall keep the PHI (Atlantic or Delmarva) Transmission Control Center informed of the Facility's dispatch schedule on a daily basis. Interconnection Customer, using reasonable efforts, shall directly inform and coordinate with the PHI Transmission Control Center before making any sudden significant changes in the Facility Output.
- Generator Notification of Synchronization and Disconnection. For Facility Generation Equipment rated at 10 MW or greater, synchronization with the PHI System requires the approval of PHI's Transmission Control Center prior to synchronization. Disconnection from the PHI System also requires prior notification to PHI's Transmission Control Center, except the Facility Generation Equipment may be disconnected from the system without prior notice to PHI to prevent injury to personnel or damage to equipment. The notifications above are also required for any group of generators totaling 10 MW or more either synchronized or disconnected from the system within one hour. The approval shall not unreasonably be withheld. In the event of disconnection of the Facility Generation Equipment from the PHI System without prior notice to PHI, Interconnection Customer shall immediately notify PHI of such disconnection. PHI will notify Interconnection Customer prior to any planned switching of the PHI substation facilities or the disconnection of transmission lines which, in the judgement of the PHI System Operator, may affect the operation of the Facility Generation Equipment.
- 1.9 Operations Center. Each Party shall maintain a 24-hour, 7 day per week operations center staffed by Qualified Personnel (individuals trained for their position pursuant to Good Utility Practice). Each Party shall provide the other Party with a list of the appropriate contact persons and telephone numbers at the respective operations centers.
- 1.10 Reporting of Outage Events or Limitations. Interconnection Customer shall, in the event of an unscheduled outage, limitation of generation facilities or anticipated unscheduled outage or limitation, report that event immediately to the PHI Transmission Control Center. Interconnection Customer shall notify the PHI Transmission Control Center as

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soon as possible in the event the Facility reaches any operating limit, including a var limit or a generator winding temperature limit, or there is a deviation from the voltage requirements, or if any voltage regulation or governor equipment is removed from or restored to service. Interconnection Customer shall notify the PHI Transmission Control Center when the unscheduled outage, limitation, or anticipated unscheduled outage or limitation has been remedied.

- 1.11 <u>Automatic Voltage Regulation.</u> Interconnection Customer shall install and have available automatic generator field excitation regulators and normally operate with such automatic voltage control equipment in service. Interconnection Customer shall regulate the reactive output of its generator(s) in accordance with PHI's "Technical Considerations" document contained in this Exhibit D.
- 1.12 <u>Notice to De-rate or Shutdown the Facility.</u> Interconnection Customer shall make a reasonable effort to provide a minimum one (1) year notice to PHI of its intent to de-rate the Facility by more than ten (10) percent or to remove, relocate or otherwise dispose of or retire the Facility.

#### **Article 2 Safety and Tagging Requirements**

- 2.1 <u>Safety Procedures.</u> Each Party will provide the other with its clearing/tagging/lockout procedures. For clearances involving only Interconnection Customer clearance points, Interconnection Customer procedures shall govern. For clearances involving PHI clearance points and for clearances involving the Point of Interconnection, the Parties shall observe PHI's procedures. Interconnection Customer may apply its own tags or locks to clearances involving the Point of Interconnection.
- 2.2 <u>Prior Authorization.</u> Interconnection Customer shall not, without prior PHI Transmission Control Center authorization, energize a de-energized PHI circuit, including line or bus elements.
- 2.3 <u>Disconnecting Devices.</u> To guarantee the safety of personnel and in accordance with OSHA Switching and Tagging Procedures, Interconnection Customer shall install a disconnecting device which can be visually checked to be in the open position electrically isolating Interconnection Customer's facilities from the PHI System. Said disconnecting device shall be accessible to PHI and Interconnection Customer personnel at all times and shall accept a standard PHI / Interconnection Customer padlock for locking purposes and when locked open shall not be operated or tampered with in any manner.
- 2.4 <u>Applying of Tags by PHI.</u> PHI shall also install on said disconnecting device, tags associated with its Protective Permit and Tag System. Interconnection Customer shall not

- disturb these tags in any manner, and they shall be removed only by PHI personnel or their assignees.
- 2.5 <u>Applying of Tags by Interconnection Customer.</u> Interconnection Customer shall also install on said disconnecting device tags associated with its Protective Permit / Tagging System. PHI shall not disturb these tags in any manner, and they shall be removed only by Interconnection Customer personnel or their assignees.

#### **Article 3 Metering**

3.1 <u>Metering.</u> Interval metering systems shall be installed consistent with Good Utility Practice and in compliance with PHI's "Technical Considerations" document contained in this Exhibit D.

#### **Article 4 Telemetry**

4.1 <u>Telemetry.</u> The telemetering system shall be consistent with Good Utility Practice and in compliance with the requirements of PHI's "Technical Considerations" document contained in this Exhibit D. Such telemetry systems shall be in operation prior to the Facility being interconnected with the PHI System.

#### **Article 5 Protective Relay Systems**

5.1. Protective Systems Requirements. Each Party agrees to install and maintain mutually beneficial protective relay schemes on its side of the Point of Interconnection. in accordance with this Article 5 and PHI's "Technical Considerations" document in this Exhibit D. Interconnection Customer agrees to operate such schemes in compliance with PHI-approved settings. Each Party agrees to test such schemes during scheduled generator unit maintenance outages, or at such other times as the Parties mutually agree, to ensure that they are in good operational order, properly adjusted and consistent with Good Utility Practice. Upon completion of each test, the results of the test shall be provided to the other Party. Each Party will notify the other in writing as soon as practicable of any setting or design changes to such relay protective schemes. Each Party shall bear the cost of all relay calibration and functional testing associated with the protective relay schemes and equipment on its side of the Point of Interconnection.

- 5.1.1 Any protective relay control system that causes any PHI breaker or Interconnection Customer breaker connected to a PHI bus to operate shall be maintained and tested in accordance with the provisions of Article 5.1.
- 5.2 PHI Right to Review and Approve. PHI shall have the right, using Good Utility Practice, to (a) review and approve all subsequent Modifications to protective relaying logic equipment, including equipment settings, drawings, and functionality associated with equipment which reasonably may be expected to have a permanent material impact on the Point of Interconnection, (b) review and approve all synchronization procedures necessary to establish and maintain proper and safe connection between the Facility and the PHI System, and (c) allow PHI to witness all testing of subsequent Modifications to protective equipment. Any deficiencies or defects identified by PHI shall be corrected by Interconnection Customer prior to the Facility Generation Equipment being interconnected or re-interconnected after Modifications to protection systems equipment. The Parties shall as necessary upgrade their respective protective relay systems, inclusive of any synchronization system equipment associated with Point of Interconnection, in accordance with Good Utility Practice. Each Party shall provide the other Party with access to copies of operation and maintenance manuals and test records for all relay equipment, inclusive of any synchronization system equipment.
  - 5.2.1 PHI's review, approval, or witness of testing of protective relaying schemes and settings shall not relieve Interconnection Customer of its full responsibility for the design, installation, operation and maintenance of its protective systems in accordance with this Article 5 and PHI's "Technical Considerations" document in this Exhibit D and Good Utility Practice.
- 5.3 <u>Upgrade Requirements.</u> PHI shall upgrade its protection systems in accordance with Good Utility Practice, if necessary to maintain safe and reliable operation of the PHI System. Interconnection Customer shall upgrade, at its own expense, its protective relaying systems to the same technological standards as that installed by PHI if necessary to maintain compatible Facility Generation Equipment operation with the PHI System.

#### MODIFICATION REQUIREMENTS

#### **Article 1 Modifications**

- 1.1 <u>Inspection of Modifications.</u> PHI, within ten (10) working days of Interconnection Customer notification of readiness for inspection, reserves the right to inspect the Facility Modification affecting Interconnection Service prior to interconnection (pre-energization) and again at the interconnection of the Modification to the PHI System.
- 1.2 Compliance Notification. Within five (5) working days after an inspection pursuant to Article 1.1, PHI shall notify Interconnection Customer in writing of whether PHI finds the Facility Modification to be in compliance with Good Utility Practice and the PHI "Technical Considerations" document and, if applicable, of the reasons why the Facility Modification is not in compliance. If such Facility Modification is determined to be in non-compliance, PHI may deny the interconnection or disconnect the Facility Modification from the PHI System until Interconnection Customer takes appropriate corrective action and provides to PHI written confirmation that the Facility Modification is in compliance. Acknowledgement within five (5) working days by PHI after receiving written confirmation by the Interconnection Customer, will not be unreasonably delayed, withheld or conditioned.