Synchrophasors Update

TOA-AC: April 7, 2015

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PJM Interconnection, LLC
<table>
<thead>
<tr>
<th>Goal Item</th>
<th>Goal Summary</th>
<th>Status</th>
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<tbody>
<tr>
<td>EIDSN Implementation</td>
<td>Implement a new Eastern Interconnection Data Sharing Network (EINet) to replace the existing NERCnet Network</td>
<td>PJM has begun to schedule dates for installations with our service providers to install the circuits and other hardware received. The team anticipates installation and configuration will be completed before the end of April.</td>
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## 2015 PJM PMU Goal Updates

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<td>Data Quality</td>
<td>Implement an enhanced real-time Phasor data quality conditioning application. Evaluate the Linear State Estimator.</td>
<td>PJM is working with our vendor to implement a data conditioning tool. The in-house developed Linear State Estimator is also being evaluated for data conditioning.</td>
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PJM Compliance Bulletin

CB019 NERC CIP002-5.1 R1: CIP Assessment of Phasor Measurement Units

Purpose
The purpose of this Compliance Bulletin is to provide Transmission Owners and Generation Owners that own Phasor Measurement Units guidance regarding PJM’s role in determining if these PMU assets are Critical Infrastructure Protection (CIP) critical.

• Once final, to be shared with stakeholders:
  – Phasor Data Quality Task Force
  – System Information Subcommittee
  – Operations Committee
  – Reliability Standards & Compliance Subcommittee
  – System Operations Subcommittee
  – TOA-AC
Compliance Bulletin Summary

Road map on PMU integration into Operations

PJM’s CIP application evaluation method

High-level diagram showing areas PJM is responsible for securing

Resources for additional information

Phasor Applications
Key
A. Telecommunications Infrastructure including PJM and member border equipment. This equipment is excluded from CIP as recommended by FERC Order 761, page 81 (http://www.ferc.gov/whats-new/comm-meet/2013/112113/E-2.pdf)
B. PJM’s Electronic Security Perimeter. This area contains the servers that consume data sent from the member over the telecom link.
C. Member’s Electronic Security Perimeter. This area (presumably) contains servers and equipment that send telemetry data to PJM.

In this diagram: A is not in scope for the CIP requirements. PJM is responsible for evaluating, implementing and maintaining compliance for B. The respective member companies are responsible for evaluating, implementing and maintaining compliance for C.