NASPI Update

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Situational awareness
Detect early voltage transformer failure

SRP C-PHASE PT FUSE FAILURE

Repellent C-phase voltage drops

A-phase

B-phase

C-phase
Detect early voltage transformer failure

SRP C-PHASE PT FUSE FAILURE

Voltage (kV)

C-phase
B-phase
A-phase

PT maintenance
Detect early voltage transformer failure

SRP C-PHASE PT FUSE FAILURE

![Graph showing voltage changes over time with phases A, B, and C marked and a return to normal at 17:40]
IBR performance monitoring
IBR performance monitoring

315 MW

1.26 seconds
IBR performance monitoring
Stream, archive, and trend 3K data
### All types of data

<table>
<thead>
<tr>
<th>Type</th>
<th>Format</th>
<th>Rate</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traveling wave</td>
<td>Triggered file</td>
<td>1,000,000 samples/second</td>
<td>0.5 seconds</td>
</tr>
<tr>
<td>Oscillography</td>
<td>Triggered file</td>
<td>240–24,000 samples/second</td>
<td>0.2–1.5 seconds</td>
</tr>
<tr>
<td>Streaming oscillography</td>
<td>Streaming</td>
<td>3,000–10,000 samples/second</td>
<td>Continuous</td>
</tr>
<tr>
<td>Synchrophasor</td>
<td>Streaming</td>
<td>60 samples/second</td>
<td>Continuous</td>
</tr>
<tr>
<td>SCADA</td>
<td>Polled</td>
<td>1 sample/second</td>
<td>—</td>
</tr>
</tbody>
</table>
Thank you