NERC CIP for Phasor Systems

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Background

- ARRA will cause step-change in phasor investment
- ARRA has a NERC-CIP (cyber security) expectation
- Second-hand information implies that in some areas a significant amount of $ is being spent on CIP for PMUs
- Recommending an objective process or tool to determine CIP risk

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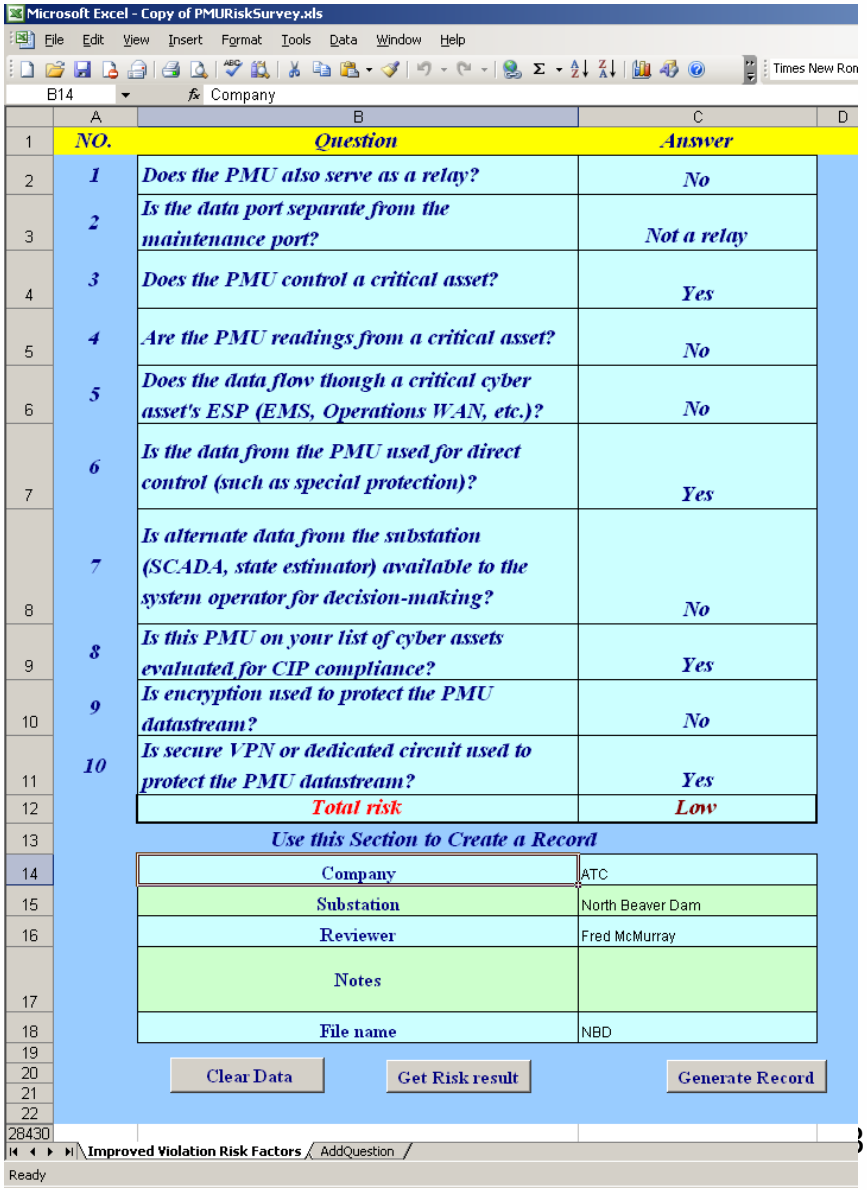
Recommendation

- Objective tool or process to assess risk
- Example questions on next slides



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Risk Questions

- Is the PMU a relay?
  - If yes, is the data port separate from the maintenance port?
  - If yes, are other mitigation steps taken?
- Does the PMU monitor a critical asset?
- Does the data flow through a CIP electronic security perimeter?
- Is the data used for direct control (such as special protection)?

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Risk Questions (continued)

- Is there alternative data available to your operators for decision-making (SCADA, state estimation) for the same facility?
- Is the PMU/PDC in your list of evaluated systems for CIP risk?
- Is encryption used to protect the data stream?
- Is secure VPN or dedicated circuit used to protect the data stream?

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Summary

- Should phasor data have more CIP overhead than SCADA or ICCP data?
- Is the approach in this presentation workable?
- Are there other risk questions that should be asked?
- How do we communicate this to the Industry?
- Send suggestions to tbilke@midwestiso.org

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