



SDG&E Experience with Advanced Generator Monitoring

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TECHNOLOGYEXCHANGE

LEARN. **CONNECT.** SOLVE.

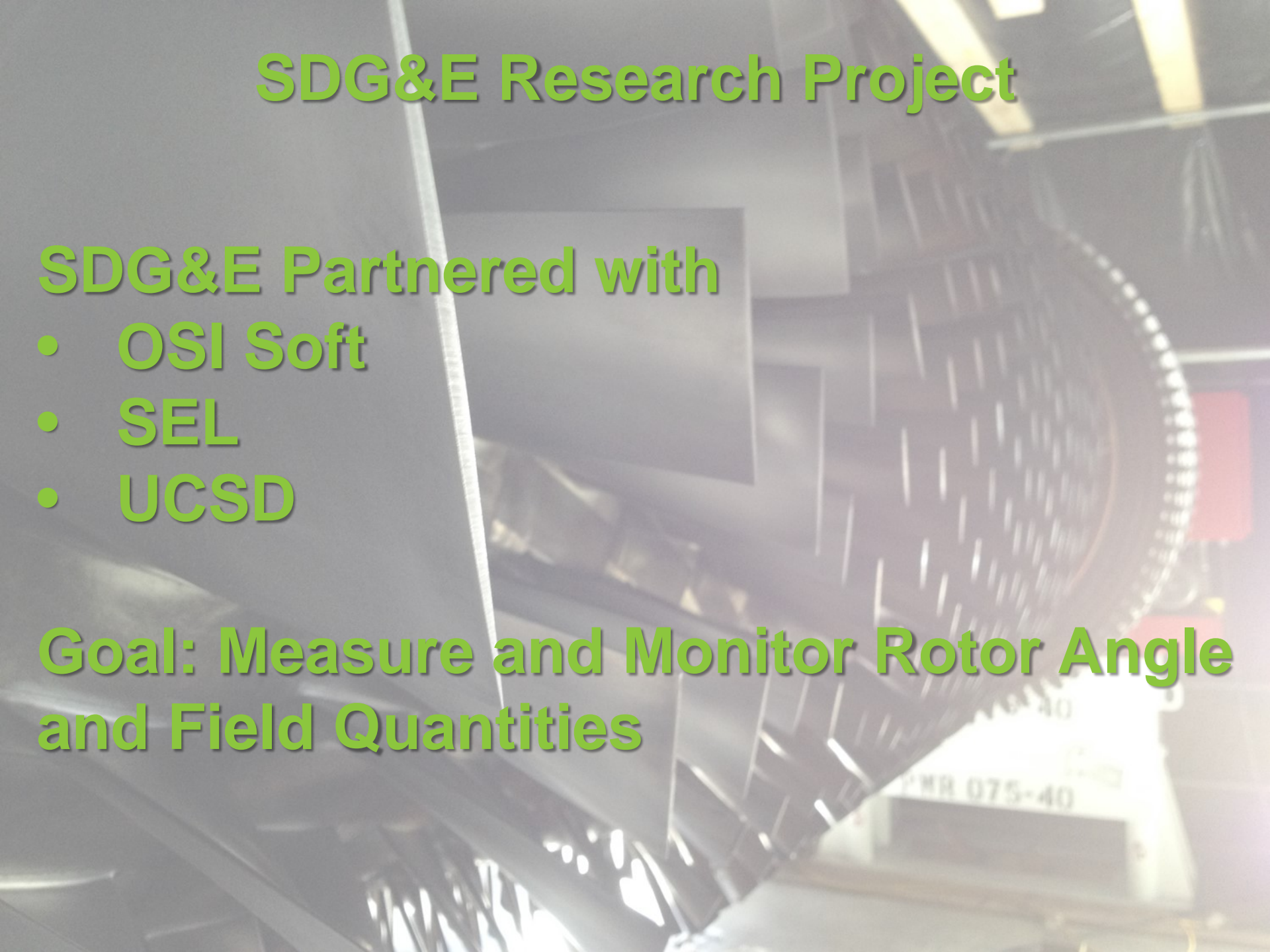
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SDG&E Research Project

SDG&E Partnered with

- OSI Soft
- SEL
- UCSD

Goal: Measure and Monitor Rotor Angle
and Field Quantities



Combined Cycle Plant



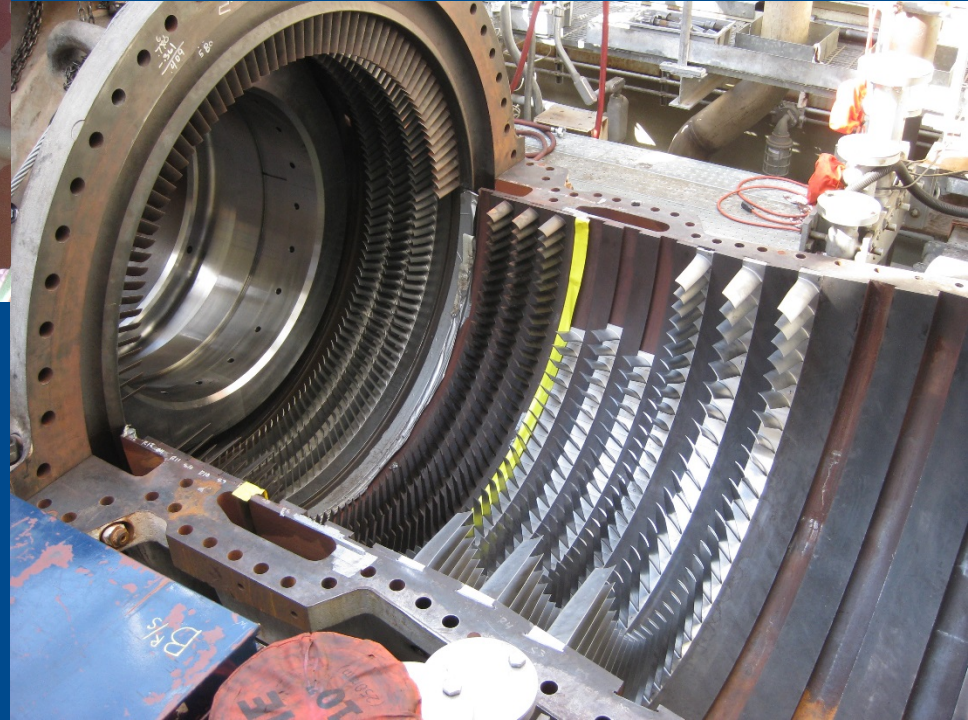
2 Gas Turbine Generators
1 Steam Turbine Generator

Plant Shut Down - February 2014

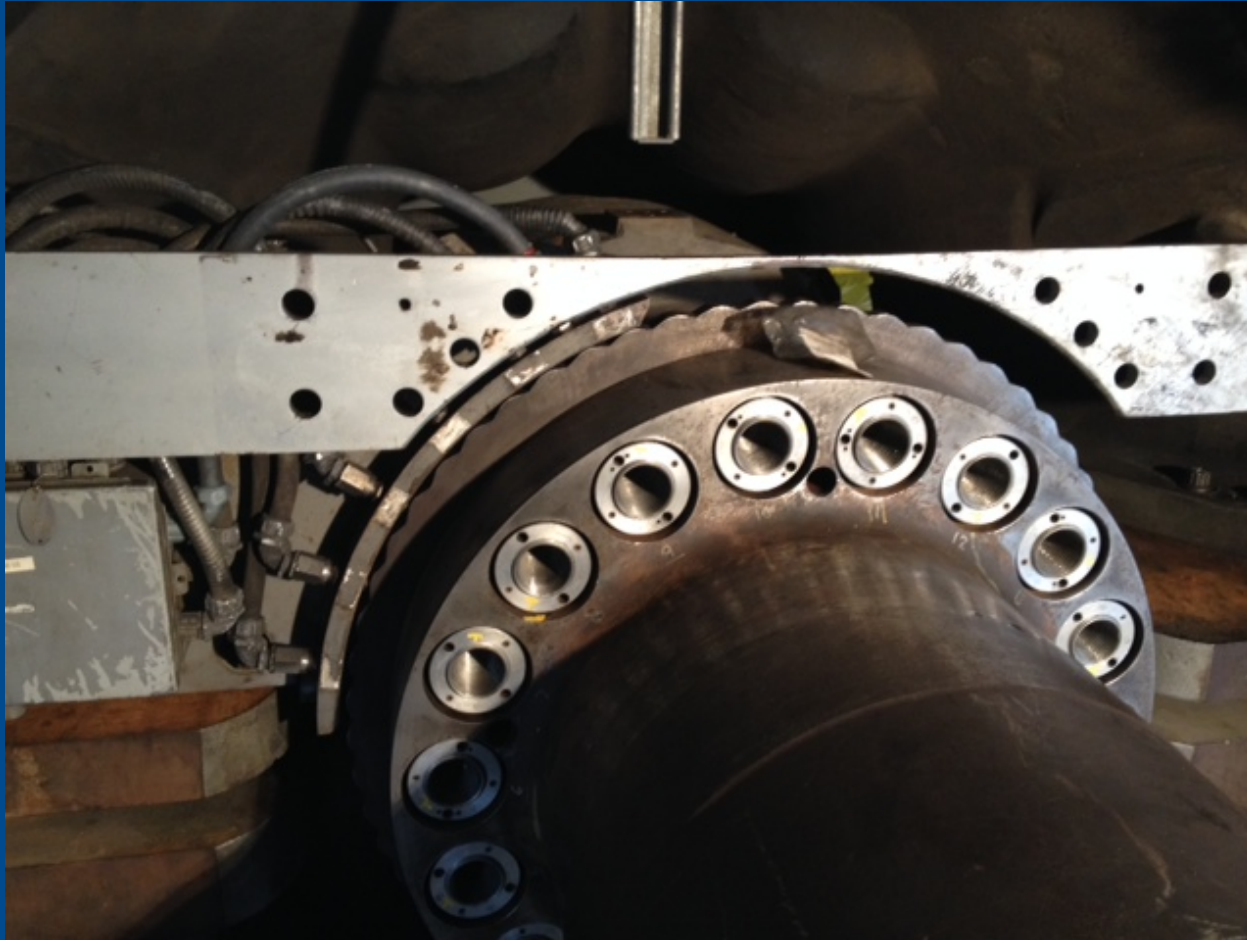
40,000 Hour
Maintenance



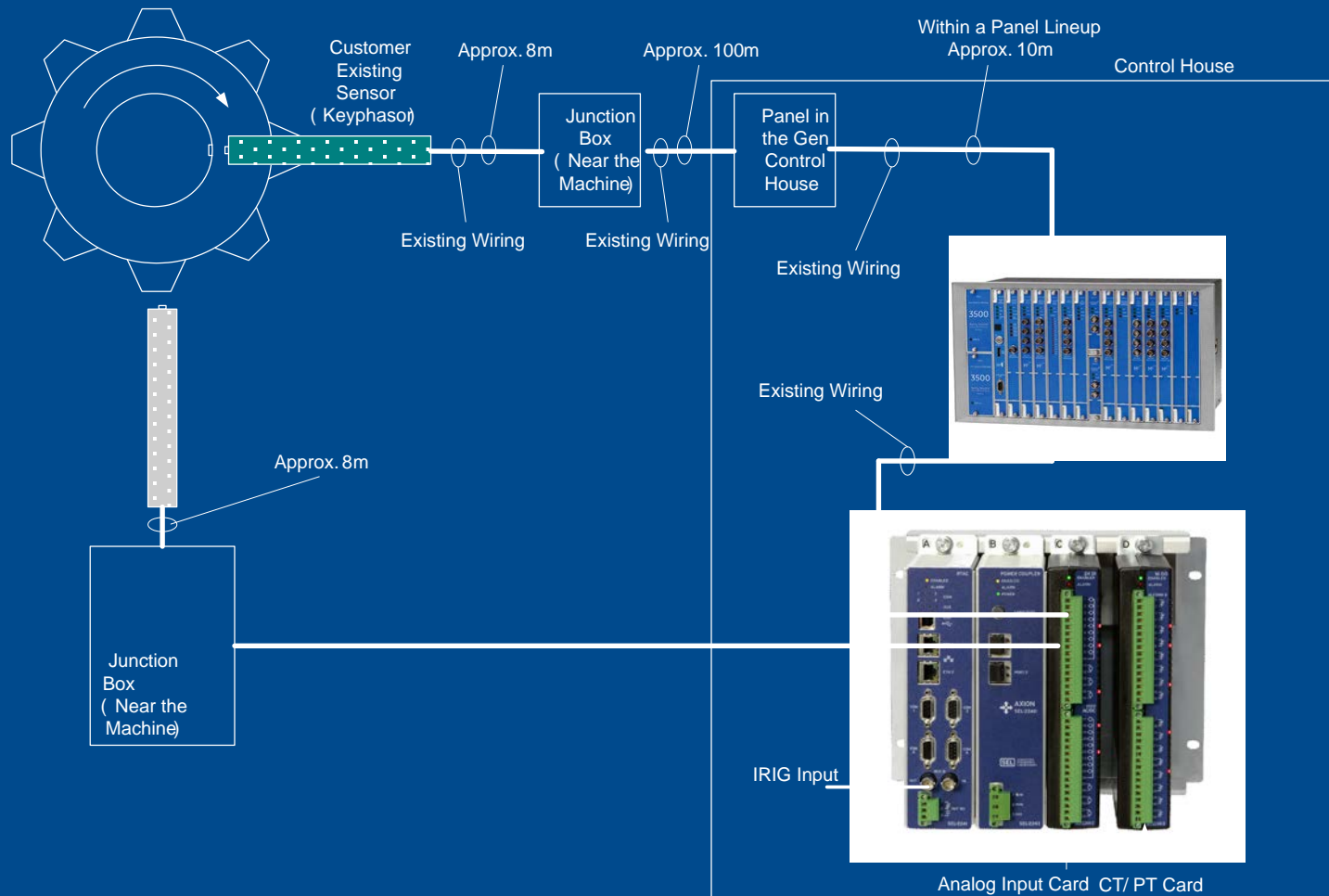
Complete overhaul
of all machines



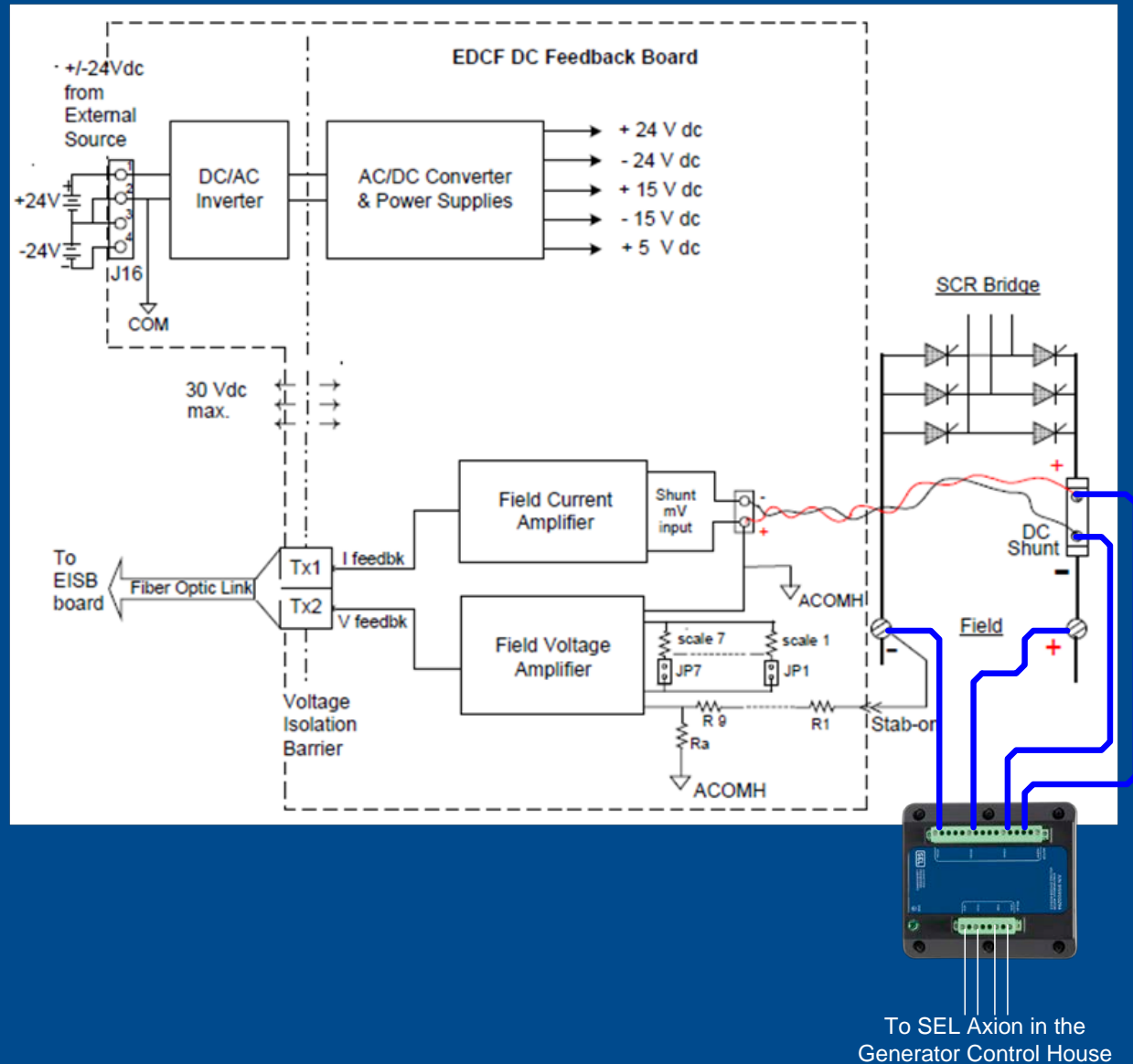
Equipment Installation for Rotor Angle Measurement



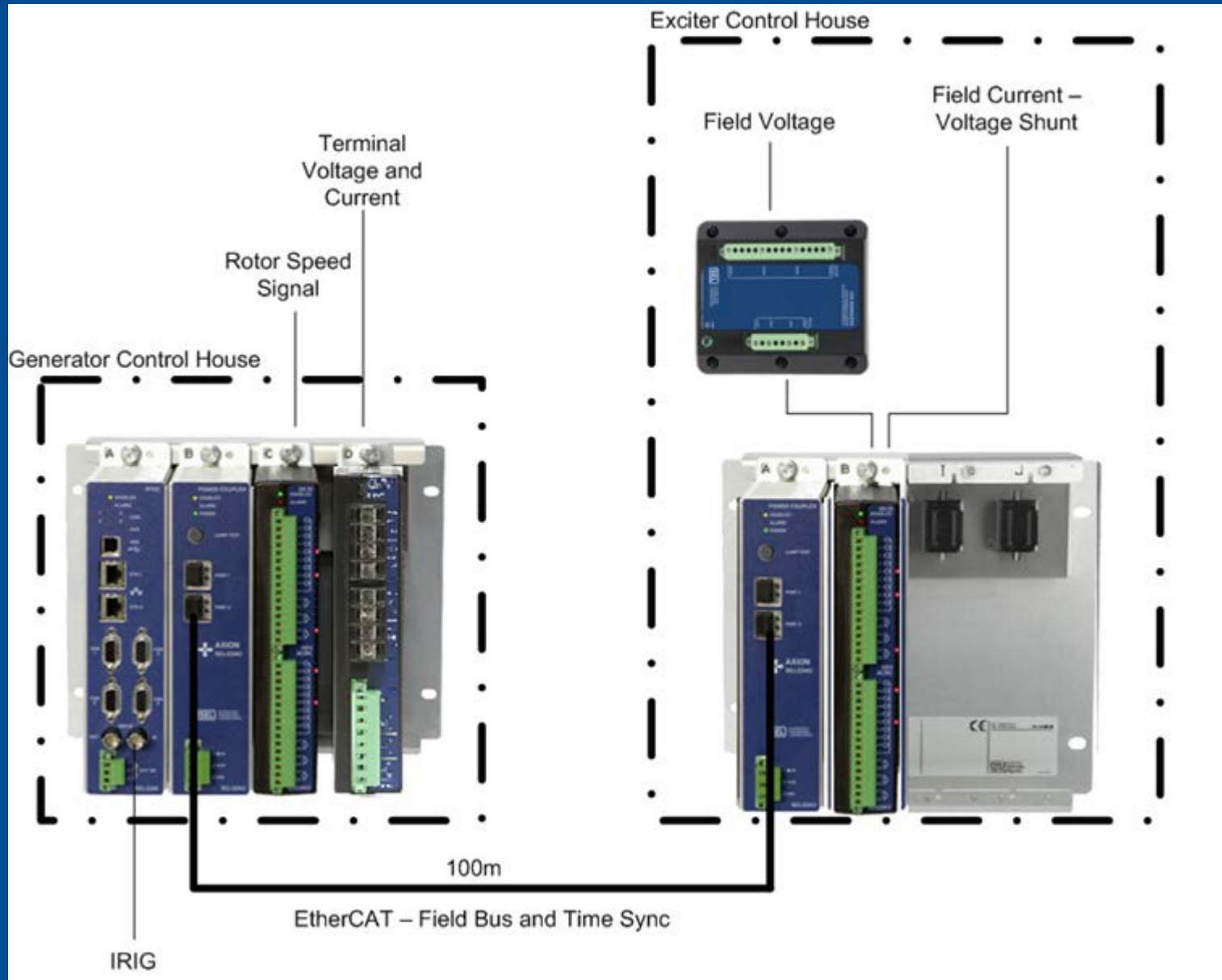
Solution Architecture – Rotor Speed/Angle



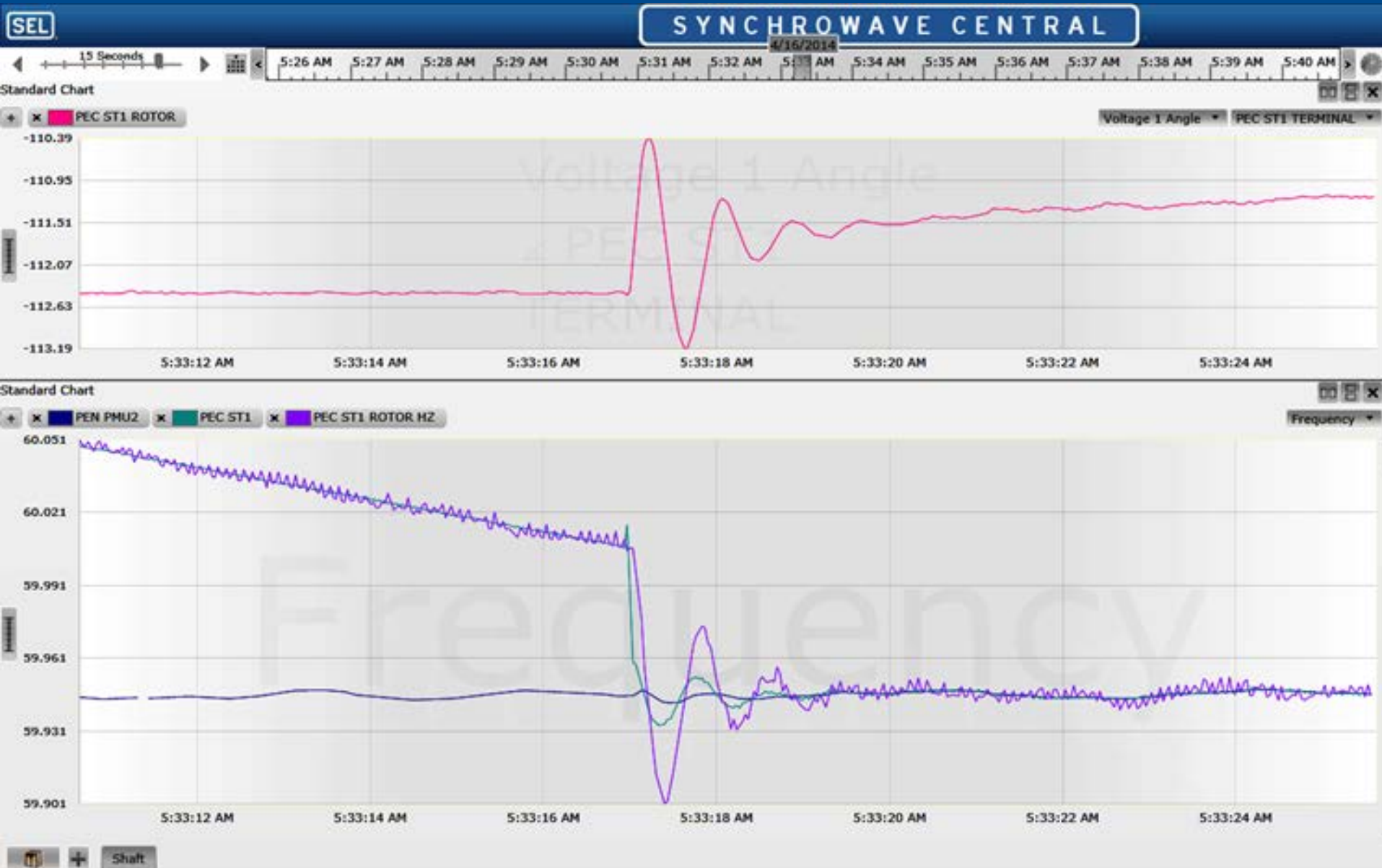
Solution Architecture – Field Quantities



Solution Architecture – As Installed



Initial Results



Future Plans

Continued Monitoring and Data
Gathering

Model Validation

Parameter measurement