PG&E and Fujitsu: A Success Story
Who is Pacific Gas & Electric Company?

- Headquarter: San Francisco, CA
- Employees: 19,424 (2012)
- 5.2 million electricity customers and 4.3 million natural gas customers
- Power Generation operates Hydro, Fossil and Solar generation providing 5300 MW, DCPP operates Nuclear generation providing 2200 MW.

PROVIDING SAFE, RELIABLE AND AFFORDABLE POWER.
## Working with PG&E

### CASE STUDY

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<th>THE CHALLENGE</th>
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<td>- Labor intensive business process</td>
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<td>- Not one system that meets business process requirements</td>
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<td>- Inability to identify and quickly access real time information negatively impacts day to day decision making</td>
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<td>- Generated reports are unintuitive, labor intensive, incomplete and not real time</td>
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<th>THE SOLUTION</th>
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<td>Enterprise Optimization &amp; Maintenance</td>
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<tr>
<td>- Centralized repository for asset health information, reports, and asset mitigation strategies</td>
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<td>- Real time SAP Interface links Asset condition data to SAP Functional Location Structure, Equipment Master (&amp; Characteristics)</td>
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<td>- Automated and standardized asset health scoring based on multisystem condition data</td>
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<td>- Provide graphical reports: condition data trending, health score trending, asset risk plotting, and asset comparison reports</td>
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<th>BUSINESS BENEFITS</th>
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<td>- Business process improvement and standardization</td>
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<td>- Reduced labor, standardized reporting, and trending improves work prioritization and decision making</td>
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<td>- Improved business process would require ~ 3000 hours annually ($450,000)</td>
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<td>- Risk avoiding benefits estimated at 2M over next 4 years</td>
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SAP MII Out-of-the-Box

**Visualization Services**
- Charts, grids, tickers, UI controls
- Dashboard components

**Analytic Services**
- SPC/SQC (Six Sigma) analyses
- Statistical and other mathematical analyses

**Web Services**
- All services exposed as web services
- Includes user-defined composite services

**Data Services**
- Bi-directional data access
- Metadata browsing
- XML-based data abstraction
- Connectors to external systems

**Business Logic Services**
- Logic
- Integration services
- Notification services
- Calculation and data transformation
- Content creation
What does MII do for your operations backbone?
What does MII do for your operations backbone?

- Fossil (coal)
- Fossil
- Nuclear
- PV
- Hydro
- Wind

- Plant Dashboard
- Asset Monitoring
- Performance Management
- Unit Health Indexing
Lessons Learned by PG&E

- **Pilot** a solid use case, show the fast value then expand the project. Focus on critical pieces which support the long term strategy.
- Don’t be afraid to do a Small Proof of Concept as possibilities are endless.
- Involve **business** as early as possible and review deliverables often.
- Learn the best practice from other **industry**.
- **Plan** and coordinate resources as early as possible, it is an integration project.