Maximizing Operational Performance at National Grid

Challenge
The combination of vast amounts of data and varying degrees of IT knowledge made it difficult to access consistent, reliable information across National Grid's different business areas (executives, engineering, operations, environmental) and distributed asset base. National Grid needed a solution that would extend team and departmental boundaries to increase collaboration for improved productivity and ROI on their existing technology investments.

Experience
Leveraging National Grid's investment in the OSIsoft PI System, Transpara's Visual KPI on-demand dashboards aggregate data from multiple, existing data sources and deliver actionable, role-based information to employees' cell phones and PDAs. Because Visual KPI is also accessed on standard desktop and laptop computers, real-time data is available from any device and consistent across the organization, leading to more efficient and timely decision making.

Competitive Edge with Lowered Risk
National Grid realized ROI in less than six months.

The utility has saved more than $11 million – thanks in part to its role-based data display tools – mostly in heat-rate savings, ISO penalty disputes and testing, DCS historical database improvements, and identifying critical points on a fluid drive. Additionally, Visual KPI increased corporate transparency, off-site connectivity, peak asset performance and team collaboration, while decreasing environmental sanctions, lost generation costs and energy replacement costs.
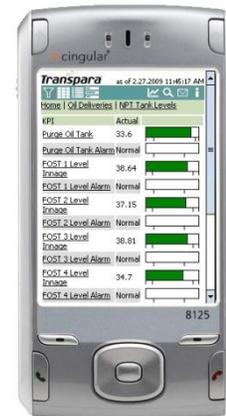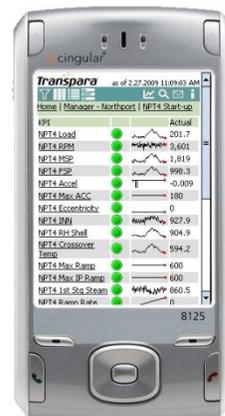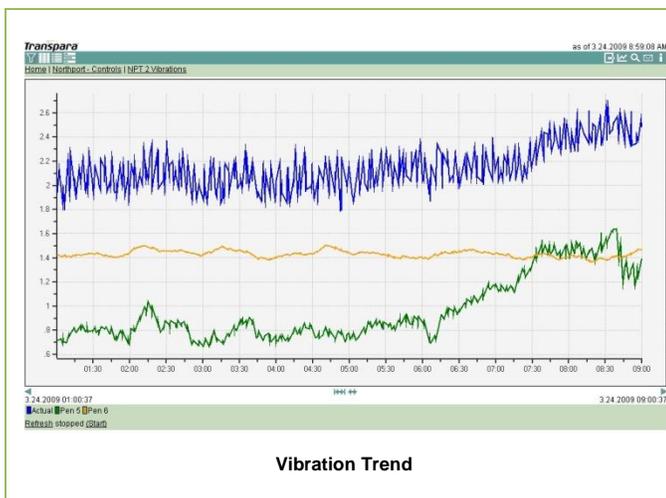
> *"It's about as simple as you can get. Because Visual KPI has good connectors to the OSIsoft PI System, the deployment took only a day.*
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> *With Visual KPI, it's all about team collaboration and the data is as close as a cell phone. Organizations can timeshare all the skill sets of subject matter experts at a fraction of the cost to have them available to you exclusively…. home run!"*
>
> - John Ragone, plant process optimization manager, Electric Production at National Grid

Visual KPI Implementation
National Grid users spanning 14 different roles rely on Visual KPI software to get real-time operations information and intuitive, actionable KPIs. Users navigate between desktop view and mobile view depending on their immediate need.

Vibration Trend

Unit Start-up Screen

Oil Deliveries

National Grid is also expanding use of Visual KPI to gas turbine users, energy traders, mobile turbine start-up monitor, document retrieval and print access.

National Grid is the largest utility in the U.K., and following its acquisition of KeySpan Energy, is now the second largest utility in the U.S. National Grid has 6,650 megawatts of generating capacity, about 4.4 million electricity customers in New England and New York State, and more than 3.4 million gas customers in the U.S. National Grid was awarded the 2007 Aberdeen Innovation in Technology Award for its strategic use of Visual KPI.