Features and Benefits

- **Information Management**
  Collecting, archiving and consolidating data from various production facilities, control systems, and commercial systems.

- **Remote Diagnosis**
  Conducting remote diagnostics on numerous plant components.

- **Intuitive User Interface**
  Visualizing and analyzing process parameters with a convenient easy to use user interface.

- **Open Interface**
  Making data available to other evaluating applications e.g. for performance calculation, operation schedule optimization, EXCEL reporting.

- **Connect to Business Data**
  Delivering process parameters, status variables and counter readings to maintenance and financial systems.

- **Open Client/Server architecture**
  PGIM operates on a distributed, open client/server architecture supporting an unlimited number of Tags per system

- **Mature technology**
  PGIM is based on Microsoft Technology, such as ActiveX and .NET and uses the Microsoft Windows operating system for its clients and servers.

- **IndustrialIT enabled**
  PGIM is a product of ABB's IndustrialIT family, integrated in System 800xA and designed for long-term protection of asset investment.

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Turning data into information improving the decision making process

Information is a key asset of today's business. To achieve a sustainable competitive advantage, utilities must be able to quickly adapt to changes. Reduced time to decisions and actions is critical for improving quality and productivity. This makes the timely collection, transformation and distribution of reliable information a significant issue. In today's business environment, one of the barriers to increased productivity is aggregating data from a myriad of disparate sources, transforming it into meaningful information, and presenting it to operations, maintenance, engineering, and management in the context most meaningful to them. Information Management functions are inherent to ABB's IndustrialIT 800xA system.

Historical, process and business data is collected from available sources and stored securely. The data is transformed into meaningful information, which is presented to each decision maker in a manner that is easy to understand. This provides support at every level in the organization to improve efficiency and profitability.
Overview

Power Generation Information Manager (PGIM) offers a company-wide architecture that performs these functions:
- Collecting, archiving and consolidating data from production facilities, control systems, and commercial systems.
- Conducting remote diagnostics on numerous plant components.
- Visualizing and analyzing process parameters with a convenient user interface.
- Making data available to other evaluating applications (e.g. for performance calculation, operation schedule optimization, EXCEL reporting).
- Delivering process parameters, status variables and counter readings to maintenance and financial systems.

PGIM operates on a distributed, open client/server architecture. The various elements of the system can run on Microsoft Windows operating systems. PGIM is a product of ABB's IndustrialIT family, integrated in System 800xA and designed for long-term protection of asset investment.

System Structure

Integrated as an 800xA component or as a stand alone information management System, the PGIM system collects process and other relevant data from connected control systems, PLCs or even from other commercial databases and data providers such as ERP systems.

The PGIM Server stores all information, such as:
- Signal descriptions.
- Current and historical values.
- Messages.
- Detailed status information coming from subordinate systems in a process database.

All this is accomplished on a millisecond basis over a period of years. PGIM's powerful database is fail-safe due to a redundant design with buffered control system connections. Data can also easily be archived on media such as DVDs. Many standarized tools such as switch-cycle counting or manual data entries make it a flexible solution to comply with todays requirements.
PGIM provides a flexible and scalable structure suitable for building up any type of solution: from single computer configurations to large-scale, distributed cross-plant systems.

Operator Trend Display
800xA Process Portal users can see all real-time and historical data using the standard operator trend displays.

The PGIM Clients provide an advanced user interface. Clients retrieve process data from databases, and then offer comprehensive functions for evaluating process status information. PGIM Clients can connect to any connected PGIM server. Protection and access rights are formulated in an access protection mechanism, which defines several access levels and signal-specific rights.

Configuration

The SignalExplorer is a centralized tool designed for quick and responsive configuration. An intuitive layout allows you to easily create customized trend
displays, dynamic graphical reports, and comprehensive data calculations.

Reports and Logs

PGIM supports the generation of Microsoft Excel-based reports, either custom-built or using a template. EXCEL add-ins enable immediate or programmed initiation of hourly, shift-specific, daily, monthly or yearly reports. Reports can be scheduled automatically by time or can be initiated by signal values or even events (trip reports).

In addition, balance and maintenance reports can be generated in a familiar EXCEL environment. Data from any connected site can be combined and presented in spreadsheet format.

Graphics and Trend Displays

Another powerful feature is performance-based trend representation. You can integrate an unlimited number of signals quickly with tools that automate scaling, legends and database functions. User and application defined graphics can easily be configured through an integrated graphics editor. A user-friendly development environment supports simple Drag & Drop configuration procedures. Different National languages are supported.
Performance Calculations

The integrated technical calculations of PGIM range from simple addition via water-steam table calculations to characteristic value calculation modules compiled beforehand. Technical calculation tools are available to perform basic arithmetic functions, water/steam chart calculations and other common functions. These tools include a variety of both standardized and prepared performance calculation modules.

Event and Alarm Management

The Event Management module can be used on PGIM to analyze disturbances based on process messages.

Event Management offers an extensive array of analysis possibilities, such as message filters in alarm/event lists, and frequency statistics for defined time-ranges.

The view of messages can be set individually, and you can customize the view at any time using menu-driven commands. Messages can be viewed in a list format or in an alarm page format. For continuous monitoring of alarms and events reports such as required by EEMUA 192 can be generated via an easy to use EXCEL add-in or by using standardized templates included in PGIM.
Web Access to PGIM

PGIM provides a Thin-Web Client to access all relevant information of the PGIM server by standardized web services. The Thin Web Client can read all configurations made for the normal PGIM clients. It supports graphics, trends, reports and all Event Management functions. No extra extra software needs to be installed on your computers.

Summary

PGIM is a powerful information management system for the Power Generation industry. Use PGIM to:

• Save costs through company-wide access to critical information.
• Accelerate business processes. Detect potential bottlenecks quickly. Prevent disturbances before they become problems.
• Increase productivity by eliminating effort needed to condition data.
• Deliver new quality standards by comparing past and present operational processes.
• Support decision-taking processes by extending data access to all relevant information. Make information available to anyone who is interested, at any time from anywhere.

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