ABB successfully delivered Symphony Plus HMI solution for a 600 MW fast-track gas-fired power plant project owned by Cairo Electricity Production Company (CEPC), located at Cairo’s satellite 6th of October City, which is home to one of the largest industrial zones of Egypt.

CEPC is one of Egypt’s largest electric utilities, producing 20 percent of the country’s electrical energy. In order to meet the increasing demand for power in the capital, the company constructed a new gas-fired power plant which consist of four numbers of 150 MW capacity units.

Construction of this fast-track project began in September 2011 and was completed within 10 months only, in June 2012. This rapid delivery met CEPC’s requirement to have the plant producing power in time for the peak demand period in summer where the use of air conditioning was expected to soar.

CEPC awarded Ansaldo Energia the engineering, procurement and construction (EPC) contract to design and construct the plant, which consists of four units equipped with four gas turbines plus the relevant generators and auxiliary systems.

Ansaldo Energia selected ABB for its ability to meet this very challenging deadline and for the speed and simplicity with which the S+ Operations solution can be configured and commissioned. The solution controls the four units of turbines, the wastewater treatment control system as well as the demineralization control systems. ABB supplied complete system design, engineering, hardware, installation and commissioning of the entire distributed control system, including Symphony Harmony rack hardware.

<table>
<thead>
<tr>
<th>Project name</th>
<th>6th October Open cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>6th of October City, Egypt</td>
</tr>
<tr>
<td>Customer</td>
<td>Ansaldo Energia</td>
</tr>
<tr>
<td>Completion</td>
<td>June 2012</td>
</tr>
</tbody>
</table>

**ABB solution**

- Complete system design, engineering, hardware supply, installation and commissioning of the entire distributed control system with Symphony Plus, including Symphony Harmony rack hardware
- Integrated historian and remote monitoring

**System benefits**

- Boost the energy production to be in time for summer of 2012 in Egypt where energy demand was peak
- Unlimited data storage capacity and self-maintenance historian for business archiving
- Seamless multi-device integration and remote monitoring
- Remote turbine control, configuration and monitoring, reducing maintenance time and cost
including the Symphony Harmony rack hardware.

Other customer requirements include a large capability for data storing and archiving, separate historians for each of the four units, remote monitoring of the turbines and seamless multi-device integration.

ABB provided unlimited storage capacity, with self-maintained historian and separate servers for handling historical data. Multiple interfaces which consists of serial and IEC870-5-104 interfaces, were provided for external device integration.

Remote turbine monitoring was a mandatory requirement by customer and ABB’s solution allowed them better, safer and more reliable access, control and monitoring of activities for the turbines.

Speedy project execution was facilitated by S+ Composer, which made it possible to configure all the HMI workstations from one station at the same time, thereby reducing commissioning costs.

For more information, please contact:

**ABB Inc.**
Power Generation
Wickliffe, Ohio, USA
Phone: +1 440 585 30 87
Fax: +1 440 585 30 87
E-Mail: powergeneration@us.abb.com

[www.abb.com/powergeneration](http://www.abb.com/powergeneration)

**ABB S.p.A.**
Power Generation
Genova, Italy
Phone: +39 010 6073 512
E-Mail: powergeneration@it.abb.com

[www.abb.com/powergeneration](http://www.abb.com/powergeneration)

**ABB Pte. Ltd.**
Power Generation
Singapore
Phone: +65 6776 5711
Fax: +65 6776 5711
E-Mail: powergeneration@sg.abb.com

[www.abb.com/powergeneration](http://www.abb.com/powergeneration)