ABB has successfully commissioned a Symphony™ Plus turbine control upgrade at Dominion’s Mecklenburg Power Station at Clarksville, Virginia.

The Mecklenburg Power Station is a 2 x 69 MW coal-fired generating unit equipped with fluidized gas desulfurization equipment to reduce emissions of sulfur dioxide and with exhaust gas baghouses to trap fly ash. The plant began commercial operation in 1992.

As with many power plants, the operational requirements at Mecklenburg have changed significantly over the course of time. These units were originally designed as base load cogeneration units. Today, the cogeneration aspect is gone and they are deployed as “corner” units, which operate between moderate and peaking load. It is not unusual for them to cycle between full and minimum load three to four times a day.

ABB replaced the existing GE-Mark III+ control system with a Symphony Plus solution that would better handle the current operating environment and address specific plant requirements. The customized solution integrates the following automation features into a single control system: automatic start-up, automatic synchronization, automatic

### Project profile

**Symphony Plus matches the evolving requirements of Mecklenburg Power Station in Virginia**

ABB has upgraded the turbine control system at Dominion’s Mecklenburg Power Station, Virginia. The Symphony Plus solution will improve start-up and meet evolving operational requirements.

<table>
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<tr>
<th>Project name</th>
<th>Mecklenburg Power Station turbine control system upgrade</th>
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<tr>
<td>Location</td>
<td>Clarksville, Virginia, US</td>
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<tr>
<td>Customer</td>
<td>Mecklenburg Power Station</td>
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<td>Completion</td>
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**ABB solution**

- Complete upgradation of existing GE-Mark III+ turbine control system to state-of-the-art Symphony Plus solution

**System benefits**

- ABB’s customized solution integrates multiple automation features into a single control system, giving customer ease in operation
- The solution provides better stability and reliability for system to operate between moderate and full load

valve calibration, speed control, runback logic, load control, isochronous control, overspeed testing and vibration monitoring.

ABB provided a turnkey solution and shortened all aspects of the delivery schedule.

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