SAC to DLE Upgrade

Product Description
- New DLE system lowers combustor flame temperature by using bleed air from 16th stage compressor discharge.
- Lower flame temperature means lower unburned hydrocarbon and NOx emissions.
- DLE system contains a three manifold fuel system with new electrically actuated DLE fuel metering valves with onboard drivers replacing electro-hydraulic actuated SAC fuel valves.
- New triple annular combustor configuration enables the combustor to burn fuel at a lower temperature over a larger cross sectional area, achieving the same bulk gas temperature rise as old SAC system.
- Gas fuel introduced through 75 air/gas pre-mixers packaged in 30 externally removable and replaceable modules, producing a very uniformly mixed, lean fuel/air mixture.
- Optional upgrade to Woodward MicroNetTM Plus control systems improves system flexibility, robustness, and many other benefits

Customer Value
- Triple angular configuration enables combustor premix to operate over entire power range, minimizing emissions at lower power.
- DLE system does not require nozzle water injection to lower NOx, eliminating possibility of water damage.
- No water or steam injection leads to increased plant savings.
- NOx emission is estimated to not exceed 25 ppm when using natural gas fuel.
- CO emission is estimated to not exceed 25 ppm when all rings are lit.
- Improved reliability, longevity, support and maintainability regarding the controls system.

Applicable Units:

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<thead>
<tr>
<th>LM6000</th>
<th>LM2500*</th>
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<tbody>
<tr>
<td>LMS100</td>
<td>LM5000</td>
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<tr>
<td>LM1600</td>
<td>TM2500</td>
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*Configure for LM2500 and LM2500+

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