

**Combined Cycle Unit**  
**In-Service Test Criteria**

1. Major construction work and pre-operational tests have been successfully completed such that the combined cycle unit may be operated and successfully complete criteria items 2 through 7.
2. All contract performance guarantee testing will be successfully performed in accordance with the contracts for the combustion turbines, the steam turbine, and the heat recovery steam generators.
3. The combined cycle unit will demonstrate its ability to startup from turning gear operation to nominal capacity on natural gas fuel when prompted by the operator.
4. The combined cycle unit will demonstrate its ability to shut down from minimum load resulting in turning gear operation when prompted by the operator.
5. The combined cycle unit will demonstrate its ability to operate at minimum load for one (1) hour on natural gas fuel.
6. The combined cycle unit will demonstrate its ability to operate at or above 95% of nominal capacity for four (4) continuous hours on natural gas fuel. During this test the unit will demonstrate its ability to operate at or above 98% of its nominal capacity for one (1) hour.
7. The combined cycle unit must be able to operate at a capacity factor equal to or greater than its design capacity factor for a reasonable period of time. If the design capacity factor is not specified it will be assumed to be 0.60 unless the utility can offer evidence justifying a lower value.

Capacity factor = energy generated for a continuous period of 168 hours / (design full load X 168 hours)

8. Sufficient transmission facilities shall exist to carry the total design net electrical capacity of the combined cycle unit into transmission/distribution system.