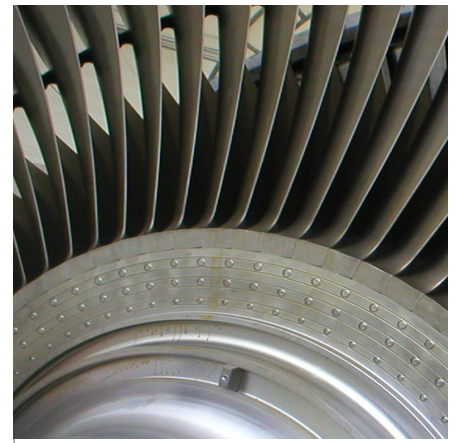


# GAS TURBINE GENERATOR INSPECTION

SMITH ENRON COMBINED CYCLE POWER PLANT  
PUERTO PLATA, DOMINICAN REPUBLIC



## DESCRIPTION:

NAES was selected to perform a major inspection on the GE Frame 7EA gas turbine generator and a minor inspection on the GE 145 MW steam turbine generator at the Smith Enron Cogeneration Facility of Puerto Plata, Dominican Republic. Due to power demand and economic considerations, the project was staffed around the clock in accordance with the plant outage schedule. Subsequently, NAES was selected to provide an ongoing predictive maintenance program for critical equipment, including the gas and steam turbine generators and other critical equipment at the plant.

## SERVICES PROVIDED:

The GE Frame 7EA gas turbine major inspection included the following:

- Complete disassembly and inspection of all components
- Field replacement of TPs, liners, fuel nozzles, 1st, 2nd and 3rd row buckets and nozzles, and 2nd and 3rd stage shroud blocks
- Disassembly and removal of generator bearings, generator, hydrogen seals, field and electrical test of stator and rotor
- Reassembly of the units, alignment and start up
- GE Mark V control system calibration

The GE 145 MW steam turbine minor inspection included the following:

- Disassembly, inspection and reassembly of bearings and seals
- Disassembly, inspection and reassembly of main stop valve and control valves
- Borescope inspection of turbine internals
- Disassembly and removal of generator bearings and hydrogen seals
- Electrical test of stator and rotor
- Reassembly of generator with new hydrogen seals

The Predictive Maintenance Program includes the following:

- Monthly collection of critical data
- Evaluation of data to predict component failure or to extend time between scheduled outages
- Formal monthly and annual reports with graphs of trend data



NAES is a global leader dedicated to adding value by optimizing the performance of energy related facilities. NAES and its divisions and subsidiaries offer a world of services to help make your energy facility work -- better.

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