

## TECHNICAL SPECIFICATIONS

### 1.1 Combustion Inspection (CI) on GE gas turbine (General Electric Frame 6 type; model PG-6541 (B))

A visual inspection of the leading edge of the first-stage turbine nozzle partitions and buckets should be made during the combustion inspection to note any wear or deterioration of these parts. The inspection report shall establish the schedule for the Hot Gas Path inspection.

The combustion liners, transition pieces, crossfire tubes, and fuel nozzles shall be inspected and if it is necessary removed and replaced with new or repaired liners, transition pieces, crossfire tubes and new or cleaned fuel nozzles.

After the combustion inspection is completed and the turbine has been returned to service, the supplier must investigate the removed lines, transitions and fuel nozzles.

The supplier shall make recommendations to EVK regarding the required repair level.

The combustion inspection (CI) is completed by preparing a sufficient report with documentation.

### 1.2 The borescope inspection of the Gas Turbine

The borescope inspection is part of the recommended maintenance plan from GE.

At the earlier borescope inspection, it was observed that the condition of the gas turbine was satisfactory.

The borescope inspection comprises approx. 30 inspections on the following positions on the gas turbine: air intake, compressor, and combustor and exhaust system.

These inspections are to uncover the general condition of the unit, taking the below into account:

- Foreign object damage
- Corrosion
- Tip erosion
- Trailing edge bowing
- Foreign object damage
- Blisters
- Erosion cracks
- Missing metal
- Stator blade root erosion
- Carbon build up
- Bulging
- Wear
- Missing thermal barrier coating
- Tip clearance

- Dirt buildup
- Blocked cooling holes Cracks
- Trailing edge bowing
- Burning
- Hot spots
- Cracking

The boroscope inspection is completed by preparing a sufficient report with picture documentation.

**Note:** Re the performance of the boroscope inspection and the replacement of number two bearing, reference is made to GE's general recommendations for repair and maintenance of gas turbines.