

1 Q. **B-4, Replace and Purchase of Stator Windings, \$4,687,100**

2 Please provide a general description of the techniques used to determine the
3 condition of the asphalt windings at the Bay D’Espoir plant.

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6 A. The condition of the asphalt windings is determined through a combination of
7 visual inspection, electrical testing and operational history. The visual inspection
8 looks to identify cracking of the insulation and seeping of the asphalt, as well as for
9 physical damage to the insulation. Electrical tests involve applying an increasing
10 test voltage to the stator winding while monitoring the current flow in the winding
11 insulation. Finally, the operational history is used to determine the stress that has
12 been put on the windings by identifying the number of times the generator has
13 been started and stopped, as well as the usual loading and operational temperature
14 of the generator.