



SIDI KRIR GENERATING COMPANY

شركة سيدى كرير لتوليد الكهرباء

(subsidiary of Powertek Energy Sdn. Bhd.)

17 El Ahram Street, Wing A, 8th Floor, Roxi, Heliopolis, Cairo, Egypt

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Issued capital: L.E. 142,402,880

Commercial reg.: 34248 Investment Cairo

Certificate of Completion

Sidi Krir Generating Company "SKGC" (2 x 360 Mw) certifies that **PESCO for Projects, Contracting and Industry SAE** has successfully accomplished and completed the following activities through the agreement for Major Overhaul "MOH" " Third-Party QA/QC Consultancy & Superintendents' Technical Advisory" for unit 4 Steam Turbine & Generator Major Overhaul carried out by PESCO's professional experts during SKGC's Unit 4 Major Overhaul from October to December 2020.

1. Preparation phase:

The Consultant provided the support to SKGC team during the Planning and the preparation phase as follow:

- Participated with Edra in the MOH preparation meetings with GE to define the requirements related to the scope of work, spare parts and the services requirements.
- Highlighted to GE the difficulties faced during the last MOH implementation this is to avoid the reoccurrence of such issues.
- Reviewed the adequacy of the MOH spare parts and advised for any missing parts.
- Reviewed GE offers and the issued purchase orders for services and spare parts and advised for any issues.
- Reviewed the lists/ condition of the special tools and general tools and advised for any additional requirements.
- Reviewed the last MOH reports and advised GE for any requirements.
- Reviewed unit operating data before its shutdown and advised GE for any activities required to be added to the schedule,
- Reviewed the MOH program and advised on how to improve it to complete the MOH in optimum timing.
- Reviewed and agreed with GE/EDRA on MOH Base line schedule.

2. Implementation phase:

The Consultant provided the support SKGC team during the implementation phase as following:

- Reviewed the QAQC of GE document for turbine and generator
- Reviewed the MOH record sheet during the disassembly and assembly and to compared the As-found reading and the design /nominal readings.
- Reviewed the dismantle/ assembling of turbine and generator sequence
- Followed up the MOH progress and advised with mitigation plans in case of delays.
- Checked all turbine parts before disassembly and after disassembly and advised for any abnormal findings.

- Reviewed and followed up with GE the issued Non-Conformity Report (NCR) / Interim Inspection Report (IIR) and the ways to rectify.
- Ensured the clearances and measurements are tally with the GE specification and notified EDRA in case control sheets show unacceptable values.
- Reviewed the blasting sequence, result and ensured the blasting is within the GE requirement
- Reviewed the NDE reports of the service provider for turbine and generator parts and ensure it is matching the GE requirement
- Followed up the MOH program and keen to inform the owner (SKGC & Edra) if any delay and to advised the action plan to catch up the schedule
- Participated in the day-to-day meeting with EDRA & GE to discuss and highlight the strong technical points and weak points of the work activities
- Participated in weekly progress meetings with GE and Edra to review the updated schedule/progress provided by EDRA planner, to review one week look ahead schedule and to review the agreed minutes of meetings.
- Reported immediately about the finding and highlight to Edra the way to correct it within the time frame of the outage
- Ensured with EDRA the implementation of the clean condition procedure.

3. MOH Completion/Startup phase:

- Reviewed with GE and SKGC team that the mechanical commissioning activities were completed successfully and the unit is ready for safe start up.
- Attended the first start up and advised EDRA on any issue affecting the prolonged operation of the Turbine/Generator.
- Shared with EDRA post overhaul meeting with GE to define all the issues and lessons learnt to have a smooth overhaul of the second unit.

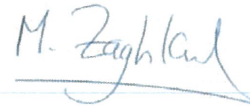
It is worth noting that PESCO personnel strictly followed the SKGC's plan for Major Overhaul (Shutdown & Start-Up) activities as well as Health and Safety procedures and instructions of the power plant and completing the outage with zero LTA.

“This Certificate has been issued upon PESCO request without any obligation to the Company.”

Best Regards



Ahmed Farouk
Edra Head of O&M



Mohamed Zaghloul
General Manager

