CONSOLIDATED COMMISSION ON UTILITIES

Guam Power Authority | Guam Waterworks Authority P.O. Box 2977 Hagatna, Guam 96932 | (671) 648-3002 | guamccu.org

GPA RESOLUTION NO. FY2023-24

RELATIVE TO THE APPROVAL TO PROCURE A HOT SECTION EXCHANGE & REPAIR GENERATOR FOR YIGO CT

WHEREAS, the Yigo CT current turbine has been running for 11,575 hours with 438 starts through end May 2023 and was operational up to 8:59PM on May 23, 2023 prior to the typhoon; and

WHEREAS, on May 27, 2023, post typhoon, Yigo CT was started up to support the Island Wide Power System (IWPS) reaching full speed with no load but failed to synchronize due to Exciter/Modular Automatic Voltage Regulator (MAVR) issue; and

WHEREAS, since the Yigo CT was not able to return the unit to service, the schedule generator overhaul commenced on July 8, 2023; and

WHEREAS, the Yigo CT generator rotor was determined to be grounded requiring further inspection and repairs which cannot be done locally and is necessary to ship the generator off-island; and

WHEREAS, the extent of the generator repair will not be known until it is disassembled and tested at the off-island facility where repairs may be a coil replacement or a full rotor rewind; and

WHEREAS, generator and exciter ground was likely caused by water intrusion into the generator from the typhoon as water was found coming from the panels during the generator disassembly; and

WHEREAS, on May 9, 2023 an annual borescope inspection performed on the Yigo CT revealed 3 cracks on the High Pressure Turbine (HPT) stage 1 nozzles and rotor; and

WHEREAS, the cracks are unserviceable and a Hot Section Exchange is required; and WHEREAS, Yigo CT had an operating capacity of 20 MW during its operation on May 23, 2023; and

WHEREAS, on May 23, 2023, prior to the typhoon, the total firm generation capacity was over 305MW;

WHEREAS, maintaining the current generation capacity is critical to meet the system demand until the commissioning of the Ukudu Power Plant; and

WHEREAS, the Ukudu Power Plant had sustained significant damage which has potentially delayed the new power plant commissioning to the end of 2025; and

WHEREAS, the estimated cost for the Generator Repair for a full rotor rewind with transportation is \$1.5 million and Hot Section Exchange is estimated at \$1.8 million, totaling \$3.3 million; and

WHEREAS, the Yigo CT is under the Performance Management Contract with TEMES who manages the procurement and contracts for the Yigo CT; and

WHEREAS, these costs require Public Utilities Commission (PUC) for approval prior to procurement under the Contract Review Protocol for GPA.

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following, subject to the approval from the Public Utilities Commission:

 The CCU authorizes the GPA General Manager to contract TEMES for the Hot Section Exchange and Generator Repair for the Yigo CT estimated to cost \$3.3 million.

RESOLVED, that the Chairman of the Commission certifies and the Secretary of the Commission attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 25th day of July 2023.

Certified by:

JOSEPH T. DUENAS

Chairperson

Attested by:

PEDRO ROY MARTINE

Secretary

I, **Pedro Roy Martinez**, Secretary of the Consolidated Commission on Utilities (CCU) as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES:	5
NAYS:	0
ABSTENTIONS:	0
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