

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/DG(M&E)/LAG-01/5638

April 26, 2024

Chief Executive Officer, Central Power Generation Company Limited, GENCO-II, Guddu Thermal Power Station, Guddu, Tehsil Kashmore, District Jacobabad.

Subject:

Order of the Authority in the matter of Explanation issued to Central Power Generation Company Limited under Regulation 4(1) & 4(2) of the NEPRA (Fine) Regulations, 2021

Please find enclosed herewith the Order of the Authority (total 10 pages) in the subject matter for information and compliance.

Enclosure: As above

(Engr. Mazhar Iqbal Ranjha)

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National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/DG(M&E)/LAG-01/5640

April 26, 2024

Chief Executive Officer, Central Power Generation Company Limited, GENCO-II, Guddu Thermal Power Station, Guddu, Tehsil Kashmore, District Jacobabad.

Subject: SHOW CAUSE NOTICE UNDER REGULATION 4(8) & 4(9) OF THE NEPRA (FINE) REGULATIONS, 2021

WHEREAS, the National Electric Power Regulatory Authority (herein after referred to as the "Authority" or the "NEPRA") established under Section 3 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (herein after referred to as the "NEPRA Act") is mandated to regulate the provisions of electric power services; and

- 2. WHEREAS, pursuant to Section 15 of the NEPRA Act (now section 14B after promulgation of Regulation of Generation, Transmission and Distribution of Electric Power Amendment Act 2018), the Authority has granted a Generation License (No. GL/02/2002 dated 01.07.2002) to Central Power Generation Company Limited (hereinafter referred to as the "Licensee" or "CPGCL") for TPS Guddu to engage in the generation business as stipulated in its Generation License; and
- 3. WHEREAS, on April 26, 2013, amendments were made to the Generation License of the Licensee, incorporating the Guddu 747 CCPP (referred to as the "Plant"). This facility comprises Units 14, 15, and 16, operating in a combined cycle. Units 14 and 15 are equipped with Gas Turbines, each with a net capacity of 241.72 MW, whereas Unit 16 features a Steam Turbine with a net capacity of 237.35 MW; and
- 4. WHEREAS, the Authority issued an Explanation to the Licensee under Regulation 4(1) & 4(2) of the NEPRA (Fine) Regulations, 2021 (hereinafter referred to as the "Fine Regulations, 2021") on 18.07.2023. The basis of Explanation issued to the Licensee include the following:
 - 1. WHEREAS, the National Electric Power Regulatory Authority (hereinafter referred to as the "Authority" or the "NEPRA") established under Section 3 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (herein after referred to as the "NEPRA Act") is mandated to regulate the provisions of electric power services; and
 - 2. WHEREAS, pursuant to Section 15 of the NEPRA Act (now section 14B after promulgation of Regulation of Generation, Transmission and Distribution of Electric Power Amendment Act 2018), the Authority has granted a Generation License (No. GL/02/2002 dated 01.07.2002) to Central Power Generation Company Limited (hereinafter referred to as the "Licensee") for TPS Guddu to engage in the generation business as stipulated in its Generation License; and
 - 3. WHEREAS, the Generation License of the Licensee was modified on 26.04.2013 and Guddu 747 CCPP (hereinafter referred to as the "Plant") was included in it. The Plant consists of Units 14, 15 & 16 which operate on combined cycle. Units 14 & 15 are Gas Turbines having Net Capacity of 241.72 MW each, while Unit 16 is a Steam Turbine having Net Capacity of 237.35 MW; and

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WHEREAS, on 10.07.2022 at 01:15 hours, a fire incident occurred at the Plant which resulted into the tripping/damaging of ST 16. The Authority took serious notice of the above incident and constituted an Inquiry Committee (IC) to probe into the matter. The IC visited the Plant in the process of inquiry. During the course of inquiry, the matter was examined in detail by inquiring the concerned officials and in the process, relevant documents were also obtained to arrive at the right conclusion; and

5. WHEREAS, the IC noticed that:

- i. Abnormal condition (exciter control changed from auto to manual) occurred at 0044 hours on 10.07.2022. However, the concerned shift staff of the Plant failed to trip ST-16 manually, resulting into the occurrence of fire incident at 01:15 hours and equipment failure/machine damage.
- ii. Poor condition of acoustic enclosure due to improper maintenance resulted in ingress of the rain water into the generator output bus conductor, resulting into the short circuit of CTs. Similarly, PTs were not properly sealed due to which the rain water penetrated into the PTs, resulting into their short circuit as well.
- iii. The fire erupted around 0115 hours and the same was completely extinguished about 0245 hours i.e. after a lapse of around 01:30 hours. This indicates that the fire squad of the Plant failed to extinguish the fire in a timely manner. Moreover, during visit of the Plant, few fire extinguishers were found completely filled since 2020, which indicates that the same were not used by the fire squad.
- iv. The Licensee has neither fixed the responsibility nor taken action against any of its officials/officers regarding the subject incident.
- v. The efforts made for restoration of ST-16 are not adequate. The Licensee has failed to rehabilitate the said unit till date despite a lapse of more than eleven (11) months. Moreover, the Licensee has not aggressively pursued the restoration of the damaged unit. Rather, there are delays in the entire process which led to the prolongation of the forced outage.
- vi. The Plant ranks within the top most economical plants in the Economic Merit Order. Moreover, it has a dedicated gas field which makes it one of the most optimal plants to cater to the system load demand. However, due to the prolonged forced outage of ST-16, the Plant is not being fully utilized since 10.07.2022. As a result, expensive/inefficient plants are being operated by the System Operator to meet the system load demand which is increasing the cost of generation and subsequently raising the consumer end tariff in terms of Fuel Price Adjustment. Similarly, due to the above incident, the Plant is currently operating in simple cycle mode since 10.07.2022 whose tariff is more than the combined cycle mode and this is also increasing the cost of generation and subsequently raising the consumer end tariff in terms of Fuel Price Adjustment.
- vii. The Licensee was directed to share the details of maintenance activities carried out in respect of the Plant since its commissioning. In response, the Licensee has submitted that scheduled maintenance has not been carried out; only routine maintenance activities were done. This is a serious lapse on part of the Licensee as scheduled maintenance is essential for the smooth operation of any machine, however, the Licensee has failed to do the same in respect of the Plant despite a lapse of more than eight (08) years of its commissioning. In this regard, it is pertinent to highlight that the OEM of any machine always recommends to carry out different scheduled maintenance activities after certain running hours of the machine. Moreover, the Authority, while determining the tariff of the Plant vide determination dated 26.04.2016,

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determined the O&M component for the Plant. Hence, failure of the Licensee to carry out scheduled maintenance of the Plant is causing the loss of millions of rupees to the national exchequer.

- viii. The Licensee has failed to get ST-16 insured despite a lapse of more than eight (08) years of its commissioning. In this regard, it is pertinent to highlight that the Authority, while determining the tariff of the Plant vide determination dated 26.04.2016, determined the insurance component for the Plant. Hence, failure of the Licensee to insure the said unit is causing the loss of millions of rupees to the national exchequer.
- AND WHEREAS, pursuant to Rule 8(3) of the NEPRA Licensing (Generation) Rules, 6. 2000, subject to the provisions of sub-rules (2) and (4), and without limiting the generality of sub-rule (1), the occurrence of the, inter alia, following events shall constitute failure of the licensee to comply with the corresponding obligations which shall, unless expressly excluded or modified, be deemed to have been incorporated in each generation license, namely:
 - breach of, or failure in compliance by the licensee with prudent utility (b) practices, any provision of the applicable documents, any instructions issued pursuant to the applicable documents or any codes, programs or manuals required to be prepared pursuant to the applicable documents which materially and adversely affect the standards, safety, reliability, integrity, price and quality of services, the reliability and integrity of the transmission system, a distribution system, a generation facility or the safe, reliable and efficient operation of the electric power industry except where such breach or failure of compliance occurs without the willful or negligent default of the licensee, including without limitation, because of the breach by any other party to a power acquisition contract between such party and the licensee where such breach could not have been prevented by the licensee through adoption of reasonable measures;
 - reduction in net capacity of the generation facilities for reasons other than a (f) planned or maintenance outage or supervening impossibility beyond the control of the licensee which is not remedied within the time specified in this behalf in the applicable documents;
- AND WHEREAS, pursuant to Rule 18 of the NEPRA Licensing (Generation) Rules, 7. 2000, the licensee shall obtain and maintain such types of policies of insurance as may be specified in the generation license or specified in this behalf by the Authority, by notification in the official Gazette, provided that the licensee shall not be obliged to obtain and maintain any insurance policy until such time the Authority makes and enforces a policy decision for obtaining insurance policies by the entire electric power industry; and
- 8. WHEREAS, in terms of observations given in Para 5 to 7 above, the Licensee has, prima facie, failed to perform its operations and discharge its responsibilities in accordance with the provisions of determined tariff, Rule 8(3)(b) & (f) & Rule 18 of the NEPRA Licensing (Generation) Rules, 2000 and the provisions of other applicable documents; and
- 9. WHEREAS, the Licensee is required to follow the provisions of NEPRA Act, Rules & Regulations made thereunder, generation license, tariff determinations and other applicable documents and any violation thereof attracts appropriate proceedings against the licensee including but not limited to the imposition of fines under NEPRA (Fine) Regulations, 2021; and

NOW THEREFORE, in view of above, the Licensee is hereby called upon under 10. Regulation 4(1) and 4(2) of the NEPRA (Fine) Regulations, 2021 to either admit or

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deny the occurrence of the above-mentioned violations of the provisions of determined tariff, Rule 8(3)(b) & (f) & Rule 18 of the NEPRA Licensing (Generation) Rules, 2000 and the provisions of other applicable documents and in case of your failure to respond within fifteen (15) days of receipt thereof, the Authority shall proceed in accordance with law including but not limited to imposition of fine.

- 5. WHEREAS, the response of the "Explanation" was submitted by the Licensee vide its letter dated 05.09.2023, wherein, the Licensee has denied the said violations on account of the reasons mentioned therein; and
- 6. WHEREAS, the response of the Explanation submitted by the Licensee was duly examined and considered by the Authority in terms of Regulation 4(7) of the Fine Regulations, 2021 and the Authority observed that the Licensee has not submitted satisfactory response, therefore, the Authority hereby rejected the response of Explanation submitted by the Licensee and passed an Order on 26.04.2026 (copy attached), recording the reasons of such rejection; and
- 7. NOW THEREFORE, the Licensee is hereby served with a Show Cause as to why not an appropriate legal action may be initiated against the Licensee under relevant rules and regulations of the NEPRA Act for above-mentioned violations of the NEPRA Act, rules, regulations and license terms and conditions that may, inter alia, include a minimum fine of ten million Rupees which may extend to two hundred million Rupees and, in the case of a continuing default, with an additional fine which may extend to one hundred thousand Rupees for every day during which the contravention continues. You may also intimate us if you would like to be heard in person.
- 8. In event if no response is received from you within given time, it shall be presumed that the Licensee has nothing to say in its defense and the matter shall be decided in accordance with the rules and regulations on the basis of available record that may result in imposition of any penalties provided in the NEPRA Act.

Enclosure: As above

(Engr. Mazhar Iqbal Ranjha) Régistrar

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National Electric Power Regulatory Authority

In the matter of Explanation issued to Central Power Generation Company Limited under Regulation 4(1) & 4(2) of the NEPRA (Fine) Regulations, 2021

Order

- 1. Pursuant to Section 15 of the NEPRA Act (now section 14B after promulgation of Regulation of Generation, Transmission and Distribution of Electric Power Amendment Act 2018), the Authority has granted a Generation License (No. GL/02/2002 dated 01.07.2002) to Central Power Generation Company Limited (hereinafter referred to as the "Licensee" or "CPGCL") for TPS Guddu to engage in the generation business as stipulated in its Generation License.
- 2. On April 26, 2013, amendments were made to the Generation License of the Licensee, incorporating the Guddu 747 CCPP (referred to as the "Plant"). This facility comprises Units 14, 15, and 16, operating in a combined cycle. Units 14 and 15 are equipped with Gas Turbines, each with a net capacity of 241.72 MW, whereas Unit 16 features a Steam Turbine with a net capacity of 237.35 MW.
- 3. Pursuant to Rule 8(3) of the NEPRA Licensing (Generation) Rules, 2000, subject to the provisions of sub-rules (2) and (4), and without limiting the generality of sub-rule (1), the occurrence of the, inter alia, following events shall constitute failure of the licensee to comply with the corresponding obligations which shall, unless expressly excluded or modified, be deemed to have been incorporated in each generation license, namely:-
 - (b) breach of, or failure in compliance by the licensee with prudent utility practices, any provision of the applicable documents, any instructions issued pursuant to the applicable documents or any codes, programs or manuals required to be prepared pursuant to the applicable documents which materially and adversely affect the standards, safety, reliability, integrity, price and quality of services, the reliability and integrity of the transmission system, a distribution system, a generation facility or the safe, reliable and efficient operation of the electric power industry except where such breach or failure of compliance occurs without the willful or negligent default of the licensee, including without limitation, because of the breach by any other party to a power acquisition contract between such party and the licensee where such breach could not have been prevented by the licensee through adoption of reasonable measures;
 - (f) reduction in net capacity of the generation facilities for reasons other than a planned or maintenance outage or supervening impossibility beyond the control of the licensee which is not remedied within the time specified in this behalf in the applicable documents;

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- 4. Pursuant to Rule 18 of the NEPRA Licensing (Generation) Rules, 2000, the licensee shall obtain and maintain such types of policies of insurance as may be specified in the generation license or specified in this behalf by the Authority, by notification in the official Gazette, provided that the licensee shall not be obliged to obtain and maintain any insurance policy until such time the Authority makes and enforces a policy decision for obtaining insurance policies by the entire electric power industry; and
- 5. On July 10, 2022, at 01:15 hours, a fire incident occurred at the Plant, leading to the tripping and damage of ST-16. The Authority responded promptly by initiating a comprehensive inquiry into the incident and formed an Inquiry Committee (IC) to probe. The IC conducted an on-site visit to the Plant as part of the inquiry process. In the course of the inquiry, the matter was thoroughly examined by questioning the relevant officials. Additionally, pertinent documents were obtained to ensure a comprehensive analysis and arrive at an accurate conclusion.
- 6. The IC noted that an abnormal event occurred at 0044 hours on 10.07.2022, where the exciter control was manually switched from auto to manual, leading to a fire incident and equipment damage as the shift staff failed to trip ST-16. Additionally, inadequate maintenance of acoustic enclosures allowed rainwater to infiltrate the generator output bus conductor, resulting in short circuits in CTs and PTs. The IC highlighted a delayed response by the fire squad during the fire, which was extinguished after 01:30 hours, and identified outdated fire extinguishers. Furthermore, the IC noted the Licensee's failure to assign responsibility or take action, insufficient efforts to restore ST-16 after 11 months, and the resulting increase in generation costs impacting consumer tariffs. Despite being an economically optimal plant, the prolonged outage forced the use of expensive, inefficient plants, contributing to elevated costs. Neglect of scheduled maintenance by the Licensee caused financial losses, and the failure to insure ST-16 led to additional financial setbacks for the national exchequer.
- 7. In view of the foregoing, the Authority observed that the Licensee has, prima facie, failed to perform its operations and discharge its responsibilities in accordance with the provisions of determined tariff, Rule 8(3)(b) & (f) & Rule 18 of the NEPRA Licensing (Generation) Rules, 2000 and the provisions of other applicable documents. Therefore, the Authority decided to initiate legal proceedings against the Licensee under NEPRA (Fine) Regulations, 2021 (hereinafter referred to as the "Fine Regulations, 2021").

Explanation to CPGCL:

- 8. Accordingly, an Explanation dated 18.07.2023 was issued to the Licensee under Regulation 4(1) & 4(2) of the Fine Regulations, 2021. The salient features of the Explanation are as follows:
 - 1. WHEREAS, the National Electric Power Regulatory Authority (hereinafter referred to as the "Authority" or the "NEPRA") established under Section 3 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (herein after

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- referred to as the "NEPRA Act") is mandated to regulate the provisions of electric power services; and
- 2. WHEREAS, pursuant to Section 15 of the NEPRA Act (now section 14B after promulgation of Regulation of Generation, Transmission and Distribution of Electric Power Amendment Act 2018), the Authority has granted a Generation License (No. GL/02/2002 dated 01.07.2002) to Central Power Generation Company Limited (hereinafter referred to as the "Licensee") for TPS Guddu to engage in the generation business as stipulated in its Generation License; and
- 3. WHEREAS, the Generation License of the Licensee was modified on 26.04.2013 and Guddu 747 CCPP (hereinafter referred to as the "Plant") was included in it. The Plant consists of Units 14, 15 & 16 which operate on combined cycle. Units 14 & 15 are Gas Turbines having Net Capacity of 241.72 MW each, while Unit 16 is a Steam Turbine having Net Capacity of 237.35 MW; and
- 4. WHEREAS, on 10.07.2022 at 01:15 hours, a fire incident occurred at the Plant which resulted into the tripping/damaging of ST 16. The Authority took serious notice of the above incident and constituted an Inquiry Committee (IC) to probe into the matter. The IC visited the Plant in the process of inquiry. During the course of inquiry, the matter was examined in detail by inquiring the concerned officials and in the process, relevant documents were also obtained to arrive at the right conclusion; and
- 5. WHEREAS, the IC noticed that:
 - i. Abnormal condition (exciter control changed from auto to manual) occurred at 0044 hours on 10.07.2022. However, the concerned shift staff of the Plant failed to trip ST-16 manually, resulting into the occurrence of fire incident at 01:15 hours and equipment failure/machine damage.
 - ii. Poor condition of acoustic enclosure due to improper maintenance resulted in ingress of the rain water into the generator output bus conductor, resulting into the short circuit of CTs. Similarly, PTs were not properly sealed due to which the rain water penetrated into the PTs, resulting into their short circuit as well.
 - iii. The fire erupted around 0115 hours and the same was completely extinguished about 0245 hours i.e. after a lapse of around 01:30 hours. This indicates that the fire squad of the Plant failed to extinguish the fire in a timely manner. Moreover, during visit of the Plant, few fire extinguishers were found completely filled since 2020, which indicates that the same were not used by the fire squad.
 - iv. The Licensee has neither fixed the responsibility nor taken action against any of its officials/officers regarding the subject incident.
 - v. The efforts made for restoration of ST-16 are not adequate. The Licensee has failed to rehabilitate the said unit till date despite a lapse of more than eleven (11) months. Moreover, the Licensee has not aggressively pursued the restoration of the damaged unit. Rather, there are delays in the entire process which led to the prolongation of the forced outage.

The Plant ranks within the top most economical plants in the Economic Merit Order. Moreover, it has a dedicated gas field which makes it one of the most optimal plants to

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cater to the system load demand. However, due to the prolonged forced outage of ST-16, the Plant is not being fully utilized since 10.07.2022. As a result, expensive/inefficient plants are being operated by the System Operator to meet the system load demand which is increasing the cost of generation and subsequently raising the consumer end tariff in terms of Fuel Price Adjustment. Similarly, due to the above incident, the Plant is currently operating in simple cycle mode since 10.07.2022 whose tariff is more than the combined cycle mode and this is also increasing the cost of generation and subsequently raising the consumer end tariff in terms of Fuel Price Adjustment.

- vii. The Licensee was directed to share the details of maintenance activities carried out in respect of the Plant since its commissioning. In response, the Licensee has submitted that scheduled maintenance has not been carried out; only routine maintenance activities were done. This is a serious lapse on part of the Licensee as scheduled maintenance is essential for the smooth operation of any machine, however, the Licensee has failed to do the same in respect of the Plant despite a lapse of more than eight (08) years of its commissioning. In this regard, it is pertinent to highlight that the OEM of any machine always recommends to carry out different scheduled maintenance activities after certain running hours of the machine. Moreover, the Authority, while determining the tariff of the Plant vide determination dated 26.04.2016, determined the O&M component for the Plant. Hence, failure of the Licensee to carry out scheduled maintenance of the Plant is causing the loss of millions of rupees to the national exchequer.
- viii. The Licensee has failed to get ST-16 insured despite a lapse of more than eight (08) years of its commissioning. In this regard, it is pertinent to highlight that the Authority, while determining the tariff of the Plant vide determination dated 26.04.2016, determined the insurance component for the Plant. Hence, failure of the Licensee to insure the said unit is causing the loss of millions of rupees to the national exchequer.
- 6. AND WHEREAS, pursuant to Rule 8(3) of the NEPRA Licensing (Generation) Rules, 2000, subject to the provisions of sub-rules (2) and (4), and without limiting the generality of sub-rule (1), the occurrence of the, inter alia, following events shall constitute failure of the licensee to comply with the corresponding obligations which shall, unless expressly excluded or modified, be deemed to have been incorporated in each generation license, namely:-
 - (b) breach of, or failure in compliance by the licensee with prudent utility practices, any provision of the applicable documents, any instructions issued pursuant to the applicable documents or any codes, programs or manuals required to be prepared pursuant to the applicable documents which materially and adversely affect the standards, safety, reliability, integrity, price and quality of services, the reliability and integrity of the transmission system, a distribution system, a generation facility or the safe, reliable and efficient operation of the electric power industry except where such breach or failure of compliance occurs without the willful or negligent default of the licensee, including without limitation, because of the breach by any other party to a power acquisition contract between such party and the licensee where such breach could not have been prevented by the licensee through adoption of reasonable measures;
 - (f) reduction in net capacity of the generation facilities for reasons other than a planned or maintenance outage or supervening impossibility beyond the control of the licensee which is not remedied within the time specified in this behalf in the applicable documents;

AND WHEREAS, pursuant to Rule 18 of the NEPRA Licensing (Generation) Rules, 2000, the licensee shall obtain and maintain such types of policies of insurance as may be pecified in the generation license or specified in this behalf by the Authority, by

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- notification in the official Gazette, provided that the licensee shall not be obliged to obtain and maintain any insurance policy until such time the Authority makes and enforces a policy decision for obtaining insurance policies by the entire electric power industry; and
- 8. WHEREAS, in terms of observations given in Para 5 to 7 above, the Licensee has, prima facie, failed to perform its operations and discharge its responsibilities in accordance with the provisions of determined tariff, Rule 8(3)(b) & (f) & Rule 18 of the NEPRA Licensing (Generation) Rules, 2000 and the provisions of other applicable documents; and
- 9. WHEREAS, the Licensee is required to follow the provisions of NEPRA Act, Rules & Regulations made thereunder, generation license, tariff determinations and other applicable documents and any violation thereof attracts appropriate proceedings against the licensee including but not limited to the imposition of fines under NEPRA (Fine) Regulations, 2021; and
- 10. NOW THEREFORE, in view of above, the Licensee is hereby called upon under Regulation 4(1) and 4(2) of the NEPRA (Fine) Regulations, 2021 to either admit or deny the occurrence of the above-mentioned violations of the provisions of determined tariff, Rule 8(3)(b) & (f) & Rule 18 of the NEPRA Licensing (Generation) Rules, 2000 and the provisions of other applicable documents and in case of your failure to respond within fifteen (15) days of receipt thereof, the Authority shall proceed in accordance with law including but not limited to imposition of fine.

CPGCL's Response:

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- 9. In response, the Licensee vide letter dated 27.07.2023 (received on 03.08.2023), requested to grant an extension of one month for submitting its response to the subject Explanation. Subsequently, the Licensee vide letter dated 05.09.2023 (received on 11.09.2023), submitted its reply to the subject Explanation. Moreover, the Licensee vide letter dated 31.10.2023 (received on 07.11.2023), submitted the chronological events and days spent by different firms for restoration of ST-16. The salient features of the response received from the Licensee are summarized as follows:
 - i. The change in the exciter control mode from auto to manual was within the knowledge of concerned CPGCL staff and was in fact being observed under directions given to the shift operator to perform manual operation with vigilance. As a further precaution, the concerned shift engineer made a physical round and inspection along with other concerned staff, and upon examining the exciter as well as the generator, they did not find any abnormal operation (such as abnormal variation in parameters, smell, sound, etc.). After the incident, the concerned maintenance engineer and plant management were involved in a thorough investigation, the result of which was that the events that followed were not due to human error. The mere fact that the exciter control went from auto to manual does not by itself indicate a problem.
 - ii. The IC has changed its stance from "abnormal condition of the exciter control" to "improper maintenance resulted in ingress of the rain water" which is not true. The fire incident occurred due to the excessive and unprecedented rain, which otherwise

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was beyond the control of CPGCL staff despite reasonable vigilance and maintenance done. CPGCL is supported in its view from the technical audit of ST-16 carried out by an independent international consulting firm, M/s VA Consultancy (the "Independent International Consultant" or "IIC"), which in its report found that the main cause of the fire incident was the abnormal/extreme rain shower.

- iii. The fact that it took almost 90 minutes to control the fire does not indicate the incompetence of the fire squad, but rather, the extent and severity of the fire itself. The fire-fighting team of the plant responded well, and extinguished the fire in the minimum possible time, as also acknowledged by the IIC in its report. The IC pointed out that during its visit, it noted that a few extinguishers available at site were filled in 2020, thus implying that they had not been utilized during the fire incident. This is a misrepresentation of the facts since as per the safety protocols, the empty fire extinguishers after use during the fire incident, were replaced with the spare fire extinguishers.
- iv. CPGCL conducted an internal inquiry with regards to the incident. This was initiated against seven (07) of its officers/officials. However, in the absence of any concrete evidence of any human error, as well as in view of the findings of the ICC assigning the abnormal/severe rainfall as the root cause of the incident, no one was found guilty.
- v. Since CPGCL is a public sector company bound by PPRA Rules, it has taken reasonable steps within the framework of these Rules towards restoration of ST-16. It cannot directly assign the huge restoration task to any international firm, or engage foreign consultancy due to the constraints under the Rules. Nevertheless, the following steps have been taken after the fire incident for rehabilitation of ST-16:
 - a. The Physical Assessment work was completed in May 2023 and finalization of the technical report has been in final stages with consultant M/s NESPAK. CPGCL will submit the final report to its Board and in the light of directions from Board, further action will be undertaken for rehabilitation of ST-16.
 - b. The OEM, M/s HEI China has agreed to conduct the integrity assessment of ST-16 in order to arrange/process the parts required for restoration. It is noteworthy in this respect that CPGCL vigorously pursued HEI to carry out this work against Pak Rupee payment, which is against their usual practice.
 - c. The overhead crane has been restored.
- vi. CPGCL is well-aware of its position and importance of the ST-16 in the overall power generation setup. Thus, CPGCL has taken steps for the rehabilitation of ST-16 on a priority basis despite heavy financial constraints. However, CPGCL does not agree with the observation that, to the extent of 747MW, "simple cycle tariff is more than combined cycle tariff", as the added costs have been absorbed by PGCL to date, since the Capacity Purchase Price (CPP) has not been allowed by

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the Authority during open cycle operation for not only Steam Turbine, but also for the Gas Turbines of the 747 MW CCPP. Resultantly, CPGCL is bearing all the expenses such as establishment charges, insurance, foreign and local loan repayments, fixed O&M costs, etc. As a result of these, CPGCL is facing huge financial constraints which has had a direct impact on CPGCL's finances and capacity to carry out the repair/rehabilitation works. The comparison of Combined Cycle and Open Cycle Tariff of 747 MW is tabulated as under:

Operation Mode	EPP (Rs./kWh)	CPP (Rs./kWh)	Total (Rs./kWh)
CC	8.3719	4.0151	12.3870
OC	11.9587		11.9587

- vii. 1st contractual inspection was carried out on February 18th 2016. Moreover, the case for major overhauling of ST-16 was, in fact, under process, and CPGCL had been corresponding on this issue and finalizing the details with the OEM i.e., M/s HEI in progress, when the unfortunate fire incident took place on 10.07.2022.
- viii. As per the requirements of Insurance Ordinance, 2000, CPGCL being wholly-owned by the Federal Government, is bound to get insurance from M/s National Insurance Company Limited (NICL). Since then, CPGCL remained in process to get the All-Risk Insurance and submitted all the requisite documents to NICL as well as to Pakistan Reinsurance Company Limited time and again, in consequence of which the tender for insurance of 747MW was floated and opened thrice by NICL on 03.03.2020, 02.03.2021 and 24.11.2022, but every time remained unsuccessful.

Moreover, prior to the damage of ST-16, CPGCL also tried to obtain "Hold Cover" insurance till the finalization of the final insurance tender vide letter dated 07.06.2022. However, NICL refused to issue Hold Cover insurance for 747 MW CCPP Guddu vide email dated 15.06.2022.

Analysis/Findings of the Authority:

10. The Licensee has submitted that the change in the exciter control mode from auto to manual was within the knowledge of its concerned staff, who, after physical inspections, found no abnormalities, and subsequent investigations concluded that the transition itself did not contribute to the incident, emphasizing that the shift was not a result of human error. In this regard, the Authority observes that the exciter control mode cannot be changed from auto to manual without any reason. The non-detection of abnormal variation in parameters by the concerned shift staff of the Plant during the physical round/inspection may be due to malfunctioning of sensors. It does not mean that the abnormal condition did not occur at all. Had this been the case, the turbine would not have been tripped and damaged suddenly. Hence, the stance adopted by the Licensee is unjustified. Had the concerned shift staff of the plant been vigilant, not taken any risk, alerted once the exciter control mode changed from auto to manual and tripped the turbine manually, the machine would not have been damaged.

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- Moreover, the Licensee has submitted that the IC has shifted its position from attributing 11. the fire incident to the "abnormal condition of the exciter control" to alleging "improper maintenance leading to rainwater ingress," a claim disputed by the Licensee, asserting that the fire resulted from an exceptionally heavy rain, supported by an independent international consulting firm's technical audit, which identified the abnormal/extreme rain shower as the primary cause. In this regard, the Authority observes that the IC has not changed its stance. Instead, the IC has highlighted multiple lapses of the Licensee which resulted into the said incident. Otherwise, the extent of damage could have been reduced. However, the Licensee has not submitted any technical argument in support of its defence in this regard. The Licensee has only referred to the technical audit of ST-16 carried out by M/s VA Consultancy which in its report found that the main cause of the fire incident was the abnormal/extreme rain shower. In this behalf, it is commented that damaging of turbine due to extreme rain is not a usual phenomenon. Extreme rain can happen any time. The Licensee should have adopted prudent utility practices and best international practices to protect its assets/equipment from failure/damage in the event of extreme rain. However, the Licensee failed to do so. Therefore, the argument put forward by the Licensee does not merit consideration.
- 12. The Licensee has further submitted that the extended duration of fire control, approximately 90 minutes, is attributed to the severity of the fire, not the fire squad's incompetence, with the plant's firefighting team responding effectively, as affirmed by the IIC, while the IC's observation about fire extinguishers' dates is countered by clarifying that, following safety protocols, used extinguishers were promptly replaced with spares during the incident. In this regard, the Authority observes that on one hand, the Licensee has submitted that the substantial time i.e. 90 minutes taken by its fire squad to control the fire does not indicate the incompetence of the fire squad, but rather, the extent and severity of the fire itself. Whereas, on the other hand, the Licensee has admitted that there were some spare fire extinguishers as well (filled in 2020) which were not utilized by its fire squad during the fire extinguishing process. In this regard, the Authority observes that if the extent and severity of the fire was colossal, then why did the Licensee's fire squad not use all the fire extinguishers at their disposal to control the fire in minimum possible time? Hence, the stance adopted by the Licensee is unjustified, & is rejected.
- In addition to this, the Licensee has submitted that it conducted an internal inquiry involving seven officers/officials regarding the incident, but due to the absence of concrete evidence of human error and in alignment with the Independent International Consultant's (IIC's) conclusion attributing the incident to abnormal/severe rainfall, no one was found guilty. In this regard, the Authority observes that the findings of the inquiry conducted by the IC constituted by NEPRA (as shared with the Licensee through the subject Explanation) clearly reveal the negligence on the part of concerned shift staff, maintenance staff and fire squad of the Plant in the wake of subject incident. However, the Licensee has neither fixed the responsibility nor taken punitive action against any of its officials/officers involved in the said incident. Therefore, the argument put forward by the Licensee does not merit consideration.

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- 14. The Licensee has also submitted that it, as a public sector company adhering to PPRA Rules, faced constraints in directly assigning the restoration task for ST-16 to an international firm but has taken significant steps, including completing the Physical Assessment with consultant M/s NESPAK, engaging M/s HEI China for integrity assessment and parts procurement, and successfully restoring the overhead crane after the fire incident, with further actions pending Board approval. In this regard, the Authority observes that the response received from the Licensee indicates that the Licensee has not even finalized the technical report regarding rehabilitation of ST-16 with its consultant i.e. M/s NESPAK despite a lapse of more than 14 months of the subject incident. Similarly, the physical assessment work was completed in May, 2023 i.e. after 10 months of the said incident. All this indicates that the Licensee has not made adequate efforts for restoration of ST-16 and this also shows the seriousness & attitude of the management of licensee for restoration of ST-16. Hence, the stance adopted by the Licensee is unjustified.
- 15. Furthermore, the Licensee has submitted that despite recognizing the crucial role of ST-16 in power generation, the Licensee, facing financial constraints, has prioritized its rehabilitation efforts, while disagreeing with the observation that the simple cycle tariff is more economical, highlighting the financial burden borne by the Licensee due to disallowed Capacity Purchase Price during open cycle operation, impacting the company's ability to fund repair/rehabilitation works. In this regard, the Authority observes that simple cycle tariff is approved by the Authority and despatch is as per merit order. Therefore, the argument put forward by the Licensee does not merit consideration.
- 16. Additionally, the Licensee has submitted that the first contractual inspection of ST-16 occurred on February 18, 2016, and preparations for a major overhaul with the OEM M/s HEI were underway when an unforeseen fire incident transpired on July 10, 2022. In this regard, the Authority observes that the Plant was commissioned in December, 2014. Major overhauling of any unit is normally due after every 4 years as per prudent utility practices. Whereas, the Licensee has submitted that the case for major overhauling of ST-16 was under process and the Licensee had been corresponding on this issue and finalizing the details with the OEM i.e., M/s HEI when the subject incident took place. In this regard, the Authority observes that the said incident occurred on 10.07.2022 i.e. after more than 8 years of the Plant's commissioning which indicates that major overhauling of ST-16 was not carried out despite a lapse of more than 8 years of its commissioning/as per prudent utility practices. Hence, the stance adopted by the Licensee is unjustified.
- 17. Likewise, the Licensee has submitted that the Licensee, being a government-owned entity, is obligated by the Insurance Ordinance, 2000, to obtain insurance from M/s National Insurance Company Limited (NICL); despite multiple attempts and tender openings, obtaining All-Risk Insurance for the Plant remained unsuccessful, and efforts to secure Hold Cover insurance were declined by NICL prior to the damage of ST-16. In this regard, the Authority observes that the Authority, vide tariff determination dated 26.04.2016, determined the insurance component for the Plant. However, the Licensee has failed to insure the same despite a lapse of more than 8 years of its commissioning and more than 7 years of the above-mentioned tariff determination which is causing the loss of millions of

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rupees to the national exchequer. Therefore, the argument put forward by the Licensee does not merit consideration.

Decision of the Authority:

18. In view of the above, the Authority is of the considered opinion that the Licensee has failed to provide satisfactory reply to the Explanation issued to it, therefore, decides to issue a Show Cause Notice to the Licensee in terms of Regulation 4(8) & 4(9) of the Fine Regulations, 2021.

Authority

Rafique Ahmed Shaikh Member (Technical) Engr. Maqsood Anwar Khan Member (Licensing) Mathar Niaz Rana (nsc) Member (Tariff and Finance) Amina Ahmed Member (Law) Waseem Mukhtar Chairman Announced on 24/2024 at Islamabad.

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