

**National Electric Power Regulatory Authority**  
**Registrar Office**

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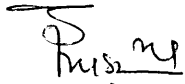
No. NEPRA/R/DL/LAG-03/ 7645

May 14, 2018

**Subject: Determination of the Authority in the matter of the Authority Proposed Modification in the Generation Licence of Northern Power Generation Company Limited (NPGCL) regarding its Gas Turbine Power Station, Faisalabad.**

Enclosed please find herewith determination of the Authority (14 Pages) in the subject matter to exclude Units No. 1 – 4 of GTPS, Faisalabad from the Generation Licence (No. GL/03/2002 dated July 01, 2002) of NPGCL, for information, record and necessary action.

Enclosure: As above

  
14 05 18  
**(Syed Safer Hussain)**  
Registrar

ADG (Licensing)

Mr. Zainuallah Khatak (for updating the database)  
Mr. Rizwan Piracha (to retain the original licence)  
Master File [w.r.t. ATC/CM # 2492 dated 11-05-2018]

**Information:**

1. Chairman
2. V. Chairman / Member (Consumer Affairs)
3. Member (Tariff)
4. Member (M&E)
5. Member (Licensing)

**Distribution:**

1. Senior Advisor (Tariff)-I
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3. Director General (Finance)
4. Deputy Director (IT)



(Please place it on the NEPRA Website)

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# National Electric Power Regulatory Authority Islamic Republic of Pakistan

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**Registrar**

No. NEPRA/R/LAG-03/ 7640-44

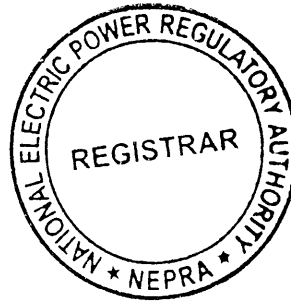
May 14, 2018

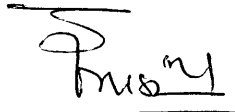
Chief Executive Officer,  
Northern Power Generation Company Limited,  
Mehmood Kot Road,  
TPS, Muzaffargarh.

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**Enclosure: As above**



  
14 05 18  
(Syed Safer Hussain)

Copy to:

1. Secretary, Power Division, Ministry of Energy, A-Block, Pak Secretariat, Islamabad.
2. Managing Director, NTDC, 414-WAPDA House, Lahore.
3. Chief Executive Officer, CPPA-G, ENERCON Building, Sector G-5/2, Islamabad.
4. Chief Executive Officer, Faisalabad Electric Supply Company (FESCO), Abdullahpur, Canal Bank Road, Faisalabad.

**National Electric Power Regulatory Authority**  
**(NEPRA)**

**Determination of the Authority**  
**in the Matter of the Authority Proposed Modification in the**  
**Generation Licence of Northern Power Generation Company**  
**Limited Regarding its Gas Turbine Power Station, Faisalabad**

**May , 2018**  
**Case No. LAG-03**

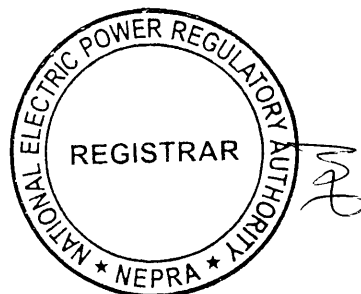
**(A). Background**

(i). The Authority in terms of Section-15 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (the "NEPRA Act") granted a generation licence (No. GL/03/2002, dated July 01, 2002 modified on April 18, 2014 and October 31, 2014) to Northern Power Generation Company Limited (NPGCL/GENCO-III).

(ii). According to above generation licence, NPGCL has a cumulative installed capacity of 2291.65 which include (a). 1350.0 MW Thermal Power Station Muzaffargarh (TPS Muzaffargarh), (b). 132.00 MW Steam Power Station Faisalabad (SPS Faisalabad), (c). 244.00 MW Gas Turbine Power Station Faisalabad (GTPS Faisalabad) and (d). 565.65 MW Combine Cycle Power Plant Nandipur (CCPP Nandipur).

**(B). Authority Proposed Modification**

(i). At the time of grant of the generation licence, the remaining useful life of the generating units (8x25 MW gas turbines + 1x44 MW steam turbine) of GTPS Faisalabad was set to ten (10) years from the date of issuance of the licence which expired on June 30, 2012. In this regard, NPGCL did not apply the Authority for extension of useful live of the said units.



(ii). In this regard, the Authority in its different regulatory meetings deliberated upon the performance of these units and observed that due to lower efficiency of these units and non availability of the primary fuel (i.e. natural gas), the operation of these units on the alternate fuel (i.e. HSD) is becoming very costly to the Central Power Purchasing Agency (Guarantee) Limited (CPPA-G), which is resulting in increased overall basket price making these units uneconomical and unviable for operation.

(iii). In consideration of the above, it was decided to initiate the proceedings of APM to exclude these units from the generation licence of NPGCL. Accordingly, in terms of Regulation-10(1) of the NEPRA Licensing (Application and Modification Procedure) Regulations, 1999 (the "Licensing Regulations"), an APM was communicated to NPGCL on December 28, 2015.

(iv). In the text of the proposed APM it was stated that the existing Schedule-I & II of the generation licence of NPGCL indicating Unit No. 1-9 of the GTPS Faisalabad as generating units, would be replaced with new/modified Schedule-I & II excluding these units from the generation licence. In statement of the reasons in support of the APM, it was mentioned that the Unit No. 1-9 of GTPS Faisalabad use natural gas as the primary fuel and HSD as alternative fuel. Due to non availability of the natural gas, Unit No. 1-9 of GTPS Faisalabad are operated using HSD. The efficiency of these units has reportedly dropped to 24% which is very low as compared to other generation facilities operating/having efficiency of around 56%. Due to the said, these units are ranked at the bottom of the merit order lying at 70<sup>th</sup> position in a list of seventy three (73). The generation of electricity from the aforementioned units is costing CPPA-G an approximate cost of Rs. 22.20/kwh which is resulting in an increased consumer end tariff making these units uneconomical and unviable for operation.

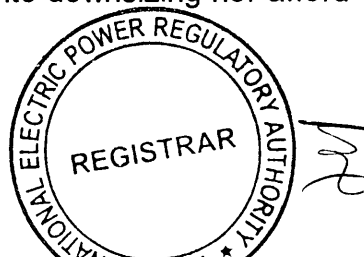
(v). In order to inform the general public and other stakeholders, as required under the Regulation-10(4) of the Licensing Regulations, the Registrar published a notice of the APM in one (01) English and one (01) Urdu newspaper (The News and Express), on December 30, 2015 inviting their comments in the matter within a period of fourteen (14) days from the publication.



(vi). Apart from the above, through letters dated December 31, 2015 relevant stakeholders were also informed about the communication of the APM and publication of its notice in the press. Further, the said stakeholders were directed to submit their views and comments to assist the Authority in the matter.

**(C). Comments of Stakeholders Regarding the APM**

(i). In response to the communicated, NPGCL through its letter dated February 12, 2016 did not agreed to the communicated APM. In this regard, NPGCL submitted that in order to enhance the performance of GTPS Faisalabad, the Unit No. 5-8 have been upgraded with advance technology parts due to which the reliability, efficiency and life of these units has enhanced. The Unit No. 4 was also up graded with advance technology parts in August, 2014. The functional group control system of combined cycle block was replaced with new distributed control system in 2012. The reliability of CCP has improved. Further, the Boiler Inspector in its report dated December 31, 2015 mentioned that all the essential components of the combined cycle block of GTPS Faisalabad are in healthy condition and these units should remain in operation to maintain healthiness of the boiler. The units of GTPS Faisalabad are performing well having overall efficiency of 31.42% during last operation. When operated on gas, these units are ranked at 10<sup>th</sup> position in the merit order, which is higher than many newly installed IPPs and had very low per unit cost. The actual generation cost from these units was Rs. 6.38/kwh during operation in May 2015. In the merit order, the plants are ranked on the basis of fuel cost and not on the basis of efficiency. Regarding, low plant factor, NPGCL submitted that these units are run by NPCC when gas is available. Moreover, NPGCL submitted that pursuant to the restructuring plan approved by the Council of Common Interest (CCI) in 1993, NPGCL has an in-built legacy of employees. The manpower transition under the restructuring plan continued within NPGCL during which the terms and conditions of the employees were secured by law. These employees have a legal and contractual safeguard to their employment, at least till age of superannuation. Even the Decommissioning of plant cannot invalidate their appointment rather at the minimum, owing to the stated affairs, NPGCL has to bear their cost and could neither enter into downsizing nor afford unwanted long litigation



particularly when the numbers of working employees are far below the then sanctioned strength.

(ii). Further, in response to the notice of APM published in the press, the Authority received comments from two (02) stakeholders including Anwar Kamal Law Associates (AKLA) and Faisalabad Electric Supply Company Limited (FESCO) which are summarized in the following Paragraphs:-

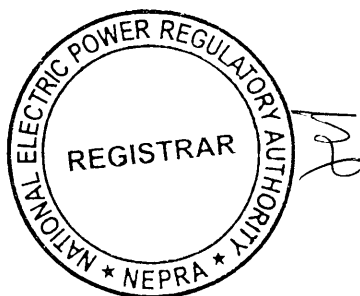
(a). AKLA in its comments supported the APM. However, AKLA raised concerns regarding delay in initiating the APM, expiry of useful life of different generating units, under-utilization of available power plants its adverse impact in the form of increased per unit cost to the consumers despite the fact that demand of power exists in the system. AKLA also objected the issue of making capacity payment to power producers without taking power from them;

(b). FESCO in its comments did not supported the APM and submitted that Faisalabad is an industrial hub and shortage of power has already been severe issue therefore, till alternate arrangement, these units should not be deleted from the licence of NPGCL. Further, in view of the import of LNG from Qatar, the availability of gas will be improved and these units will attain better position in the merit order. FESCO opined the power plants which are less efficient than GTPS Faisalabad are required to be considered for APM before it.

(iii). The Authority examined the above comments of stakeholders, response of NPGCL and observed that the licensee/NPGCL did not agree to the communicated APM. Therefore, the Authority decided to convene a public hearing in the matter, as stipulated in Regulation-10(6) of the Licensing Regulations.



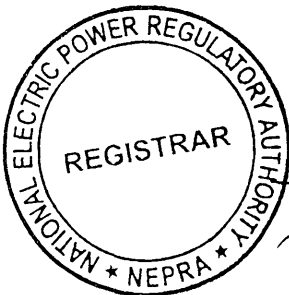




**(D). Public Hearing**

(i). In view of the above, the public hearing was scheduled for July 13, 2016. Accordingly, the following issues were framed for the said public hearing:-

- (a). Whether the operation of Unit 1-9 of GTPS Faisalabad is justified after useful life which expired on June 30, 2012 and in absence of extension in the term of Licence (for the said units) as envisaged in Rule 5(2) of the NEPRA Licensing (Generation) Rules, 2000 (the Rules)?
- (b). Why did the licensee (NPGCL/GENCO-III) not apply for extension in the useful life of these units if it considers that these plants can be operated for a further period?
- (c). Whether generation from these units economically viable and in the interest of consumers?
- (d). Whether retaining these units with low utilization factor merits?
- (e). According to the State of Industry Report 2015, various units of GENCO-III have remained off-bar since long due to their poor efficiency levels. The overall net efficiency of GENCO-III is also very low at 24.84%. Furthermore, due to various maintenance issues, forced outages and fuel constraints etc. resulting in annual capacity utilization of 38.44%. Whether the overall performance of GENCO-III is satisfactory in terms of aforementioned reasons/constraints?
- (f). Whether NPGCL/GENCO-III has taken any measures to rehabilitate these units and to make their operation economically viable? What will be the effect of the planned rehabilitation (if any), in terms of efficiency, unit cost and lives of the units?



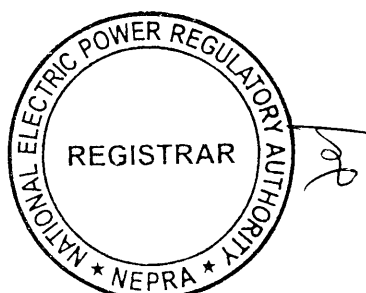
(g). What has been the impact of the import of Re-gasified Liquefied Natural Gas (RLNG) on operation of these units? Is allocation of precious resource (RLNG) to these low efficient units justified whereas power plants with higher efficiency are suffering from fuel constraints?

(ii). Regarding the public hearing, a notice was published in the press on June 29, 2016 inviting general public to participate in the public hearing. Further, separate letters were also sent to different stakeholders to inform about the public hearing and to depute well conversant representative(s) to attend the hearing.

(iii). In response to the above mentioned notice of public hearing, the Authority received comments from AKLA and All Pakistan WAPDA Hydro Electric Workers Union (APWHWU). AKLA reiterated its earlier comments and stated that the energy purchase price of these units is very high and their utilization factor is very low. Further, the useful life of these units has already expired and these units have no legal ground to operate beyond their useful lives. Therefore, the APM is supported. However, for any reason, if it is necessary to have these plants in the system, there tariff should be shifted from take or pay to take and pay basis. Whereas APWHWU submitted that the said units of GTPS are great asset, contributing about 125 MW to overcome the load-shedding and providing employment. Therefore, in the larger public interest, the life of these units may be extended and gas be made available to them on continuous basis.

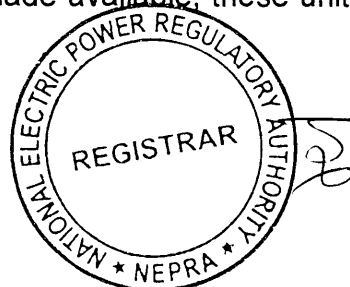
(iv). The public hearing was held on July 13, 2016 which was attended by representatives of NPGCL, CPPA-G, GENCO Holding Company Limited, Central Power Generation Company Limited (CPGCL), Ministry of Water and Power (MoW&P), Sui Northern Gas Pipelines Limited (SNGPL), Mari Petroleum Company Limited and other stakeholders and representatives of the general public.

(v). During the public hearing, NPGCL made a presentation before the Authority and presented its point of view on the communicated APM and the issue of hearing stating that:-





- (a). The generating units of GTPS Faisalabad have been upgraded and are operating efficiently. In this regard, the heat rates and efficiency of the GTPS Faisalabad determined by the Authority in 2006 have been maintained by the utmost efforts of the NPGCL team. The current efficiency of GTPS Faisalabad is around 30% which is significantly higher than what has been given in the communicated APM.
- (b). From the date of grant of the licence in 2002, the units of GTPS have operated from 2.0 years to 4.5 years maximum. Therefore, the units of GTPS Faisalabad have remaining useful life/operational life of about 5 to 8 years.
- (c). The generation is valid till 2027 and based on the said understanding it did not approach the Authority for the extension.
- (d). The generating units of GTPS Faisalabad are only being operated on natural gas on "as and when available" basis.
- (e). The system operator/NPCC operates these units as per the merit order. The current position of GTPS Faisalabad is 16 in the overall merit list for the last few months due to operation on gas.
- (f). When operated on gas, per unit cost of generation from GTPS Faisalabad is lower than many Thermal IPPs, solar and wind power plants.
- (g). These units were less utilized by the system operator in the last three years due to unavailability of natural gas in spite the availability factor of these units was above 90%.
- (h). During the months of March, April and May, 2016 when gas was made available, these units were operated by the system operator

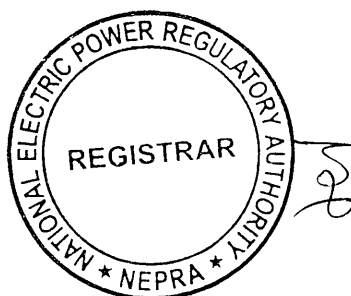


and the utilization factor of GTPS Faisalabad remained 67%, 84% and 61% for the said months;

- (i). Unit No. 4-8 have been upgraded with advanced technology parts and the function group control system of the CCPP has been replaced with new distributed control system in 2012.

(vi). In the said hearing, NPGCL also took a stance that generation licence was granted to it in 2002 for a term of twenty five (25) years which is valid till 2027. Subsequently, vide Modification October 31, 2014, the Authority has re-fixed the term of generation licence up to the year 2044 with the addition of Nandipur CCPP Block. Therefore, NPGCL understands that legally its generation licence is valid and based on the said understanding it did not approach the Authority for modification of licence with respect to extension in useful life of GTPS Faisalabad. However, this aspect was clarified during the hearing that term of generation licence commensurate with the maximum expected useful life of the units of a generation facility. GTPS Faisalabad is one set of units along with other units such as SPS Faisalabad, CCPP Nandipur and TPS Muzaffargarh comprising the generation facilities of NPGCL. Useful life of GTPS Faisalabad expired in 2012 and cannot be equated with the remaining term of licence which is based other power stations. In view of foregoing, the Authority observed that if NPGCL contends that units of GTPS Faisalabad have been upgraded and rehabilitated and have the capacity for further operation, it may apply for extension in useful life of GTPS Faisalabad through LPM. Later on, NPGCL communicated LPM on September 30, 2016 for extending the useful life of Unit No. 1-9 of GTPS Faisalabad for another ten (10) years i.e. upto 2026. LPM is a separate matter which has been dealt under Regulation 10(2) of the Licensing Regulations through separate proceedings.

(vii). After the proceedings of the public hearing, the Authority under Regulation-10(9) of the Licensing Regulations published a notice in the press on October 29, 2016 seeking comments regarding the proceedings of the public hearing. However, the Authority did not receive comments from any of the stakeholders.



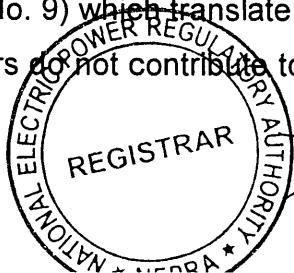
**(E). Evaluation/Analysis**

(i). The Authority has examined the entire case in detail including the already granted generation licence, the APM initiated by the Authority, response of NPGCL, comments of stakeholders, operational data of the units of GTPS Faisalabad, the framed Issues, response of NPGCL on the framed issues and relevant rules and regulations.

(ii). The Authority observes that in terms of Regulation-10(1) of the Licensing Regulations, it is empowered to modify a licence in accordance with an APM. In this regard, Regulation-10(5) of the Licensing Regulations prescribes the criteria to modify a licence through an APM subject to and in accordance with such further changes as it may deem fit if, in its the opinion such modification (a). does not adversely affect the performance by the licensee of its obligations; (b). does not cause the Authority to act or acquiesce in any act or omission of the licensee in a manner contrary to the provisions of the NEPRA Act or the rules or regulations made pursuant to it; (c). is or is likely to be beneficial to the consumers; (d). is reasonably necessary for the licensee to effectively and efficiently perform its obligations under the licence; and (e).is reasonably necessary to ensure the continuous, safe and reliable supply of electric power to the consumers keeping in view the financial and technical viability of the licensee.

(iii). During the public hearing NPGCL made submissions to present its point of view for retaining GTPS Faisalabad in its generation licence and the reasons in support of its claim.

(iv). Regarding the issues of expiry of useful life of the generating units of GTPS Faisalabad and failure to apply for extension in term in the useful life of these units, NPGCL submitted that tentatively the useful life of thermal power plant is considered as thirty years, based on its efficient operation and safety factors. If properly maintained and timely rehabilitated, these plants can be operated for more than hundred (100) years. Further, from the date of grant of the licence in 2002, the units of GTPS have operated in the range of 17,058 hours (Unit No. 2) to 40, 875 hours (Unit No. 9) which translate into 2.0 years to 4.5 years maximum, whereas the standby hours do not contribute to the life of the units. Therefore, the units of GTPS



Faisalabad have 5.50 to 8.0 remaining life/operational years. Further, the generation Licence was granted to NPGCL in 2002 for a term of twenty five (25) years which is valid till 2027. Subsequently, vide Modification October 31, 2014, the Authority has re-fixed the term of generation licence up to the year 2044 with the addition of Nandipur CCPP Block. So NPGCL understands that legally its generation licence is valid and based on the said understanding it did not approach the Authority for the extension.

(v). In this regard, the Authority observes that the normal operating life of a steam turbine is taken as 30-35 years based on round the year operation which can be extended based on actual operation hours and proper maintenance. According to the generation licence granted to NPGCL on July 01, 2002, GTPS Faisalabad consists of a total of nine (09) units including 8x25 MW gas turbines and 1x44.0 MW steam turbine. The gas turbines are of AEG Kanis Germany and were installed during the period from March to November 1975. The steam turbine is of HPEEC China and was installed in 1994. Unit No.1-4 of GTPS operate in open cycle mode whereas Unit No. 5-9 of GTPS Faisalabad operate in combined cycle mode. Further, at the time of grant of the generation licence, the remaining useful life of the generating units of GTPS Faisalabad was set to ten (10) years from the date of issuance of the licence. The said units of GTPS Faisalabad outlived their useful lives in June 30, 2012. In view of the said, the Authority considers that the operation of these units beyond their licenced useful life cannot be allowed. Further, life of GTPS Faisalabad expired in 2012 cannot be equated with the remaining terms of licence which is based on other units comprising the generation facility.

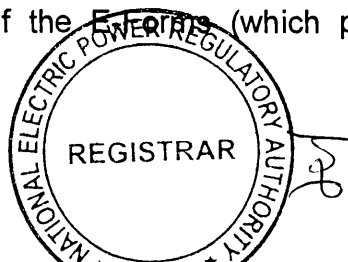
(vi). Regarding the issue of non availability of natural gas/operation of the units on costly alternate fuel (i.e. (HSD) and the impact of the import of RLNG on operation of these units, NPGCL submitted that the generating units of GTPS Faisalabad have never been operated on the alternate fuel (i.e. HSD) since their commissioning except for testing purpose or if demanded by system operator on the actual merit order, if deemed necessary by NPCC. However, no generation has been done on HSD in last few years. These units are only being operated on natural gas on "as and when available" basis. If gas is made available, the utilization factor of these units will be enhanced as evidenced during the months of March, April and



May, 2016 when gas was made available, the utilization factor of GTPS Faisalabad remained 67%, 84% and 61%. In this regard, the Authority has observed that Unit No. 1-9 of GTPS Faisalabad have natural gas as the primary fuel and HSD as alternative fuel. Due to non availability of the natural gas, the only option for the operation of the said units is the alternative fuel (i.e. HSD) which is very costly. Even if gas is available, its utilization in less efficient plant is not advisable. In view of the said, the Authority considers that the generation from these units is economically not viable nor it is in the interest of consumers.

(vii). Regarding the lower position of these units in the merit order and high per unit cost, NPGCL submitted that the exact ranking of units of GTPS Faisalabad is 16<sup>th</sup> on gas fuel as per merit order issued by NTDC in May 2016, which is higher than many newly installed IPPs. Further, per unit generation cost from GTPS Faisalabad less than many efficient IPPs. In consideration of the said, the Authority has observed that GTPS Faisalabad consists of 8 gas turbines and one steam turbine. These gas turbines are one of the oldest in the system and are of very low efficiency. Further, the Authority has observed that Unit No.1-4 of GTPS Faisalabad operate in open cycle mode and their net efficiency is very low (i.e. about 20%) and the use scarce resources like natural gas with very low efficiency is not justified. Even if operated on natural gas, the ranking of these units in the merit order is very low due to very high per unit generation cost therefore these units are not viable for operation any more. However, regarding Unit No. 5-9 of GTPS Faisalabad, the Authority has observed that these operate in combined cycle mode and if gas is made available, the units achieve relatively better position in the merit order.

(viii). Regarding the issue of less utilization factor the units of GTPS Faisalabad, NPGCL submitted that these units were less utilized by the system operator in the last three years due to unavailability of natural gas despite the availability factor of these units was above 90%. However, during the months of March, April and May, 2016 when gas was made available, these units were operated by the system operator and the utilization factor of GTPS Faisalabad remained 67%, 84% and 61% for the said months which is very high as compared to solar power plants which is less than 30%. In this regard, the Authority has observed that review of the Energy (which provide information regarding the



operational performance of the generating units) submitted by NPGCL on monthly and annual basis reveals that the utilization factor of Unit No. 1-4 GTPS Faisalabad for the FY-2014-15, FY-2015-16 and FY-2016-17 remained less than 2% which is on very low side. Whereas, the average utilization factor of Unit No. 5-9 GTPS Faisalabad remained 2.58.0%, 23.85% and 18.80% for the FY-2014-15, FY-2015-16 and FY-2016-17 respectively, which is also on lower side.

(ix). On the issue of lower efficiency of the generating units of GTPS Faisalabad, NPGCL submitted that the said units have been upgraded and rehabilitated and being operated efficiently. The heat rates and efficiency of the GTPS Faisalabad were determined by the Authority in 2006. The same has been maintained through the utmost efforts. The efficiency of GTPS Faisalabad is about 30% which is well above the efficiency set by the Authority. In this regard, the Authority has observed that the designed efficiency of Unit No. 1-4 of GTPS Faisalabad is 27.60%, the net efficiency approved by the Authority in the tariff determination of 2006 is 22.21 % and the revised net efficiency for these units as approved by the Authority in the tariff determination dated January 22, 2016 is 24.58%. Whereas, the reported net efficiency of these units remained 19.05%, 19.92% and 17.37%, for the FY-2014-15, FY-2015-16 and FY-2016-17 respectively which is on very low side. Similarly, for Unit No. 5-9 (combined cycle block) the net efficiency approved by the Authority in the tariff determination of 2006 is 39.71 % and the revised net efficiency for these units as approved by the Authority in the tariff determination dated January 22, 2016 is 38.32%. Whereas, the reported net efficiency of these units remained 28.97%, 29.07% and 29.46% for the FY-2014-15, FY-2015-16 and FY-2016-17 respectively, which is also far below the efficiency approved by the Authority.

(x). Regarding, the issue of rehabilitation of the generating units of GTPS, Faisalabad, NPGCL submitted that the Unit No. 5-8 GTPS Faisalabad have been upgraded with advance technology parts in recent years due to which the reliability, efficiency and life of these units has enhanced. The Unit. No. 4 was also up rated with advance technology parts in August, 2014. The functional group control system of combined cycle block was replaced with new distributed control system in 2012. The reliability of combined cycle block has improved. Further, according to the Boiler Inspector Report dated December 31, 2015 all the essential components like HP heater, HP evaporator, Economizer and LP heater of the combined cycle block

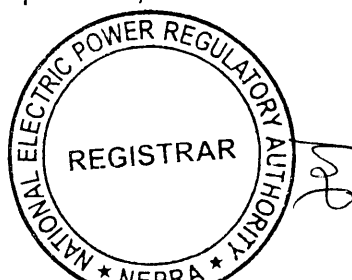


of GTPS Faisalabad are in healthy condition and these units should remain in operation to maintain healthiness of the boiler. In this regard, the Authority has observed that after expiry of the useful life in 2012, no proper rehabilitation, up-gradation or major overhauling has been carried out to make the units feasible for further operation except some partial rehabilitation i.e. replacement of functional group control system with new distributed control system which has not contributed to any efficiency gain and even the efficiency of the combined cycle block is far below the NEPRA approved efficiency.

(xi). In order to further assess the matter, the Authority also carried out detailed unit wise/block wise performance analysis of GTPS Faisalabad based on the parameters of efficiency (designed, approved and reported/actual), unit make/model, utilization factor, load factor, availability factor, per unit cost, availability of fuel/fuel constraint, energy produced throughout the years under consideration, previous performance of the units, rehabilitation carried out, optimal use of scarce resource, useful life of the units as per the generation licence, remaining life of the units based on operational hours, possibility of extension in term of the units, number of employees etc. In order to ascertain the physical condition of GTPS Faisalabad, a site visit was also carried out by the relevant professionals deputed by the Authority.

(xii). In consideration of the above, the Authority concluded that the Unit No. 1-9 of GTPS Faisalabad are operating quite below their designed efficiency as well as the net efficiency determined by the Authority. Further, due to non availability of natural gas, GTPS Faisalabad is mostly not operative or required to be operated on alternate fuels (i.e. HSD), which makes these units un-economical due to higher per unit cost.

(xiii). Foregoing in view, the Authority considers that Unit No.1-4 of GTPS are not viable for further operation any more, therefore the same may be excluded from the generation licence of NPGCL. However, keeping in view the relatively better position in merit order, report of Boiler Inspector, operational record and combined cycle mode operation, Unit No. 5-9 of the GTPS Faisalabad can be



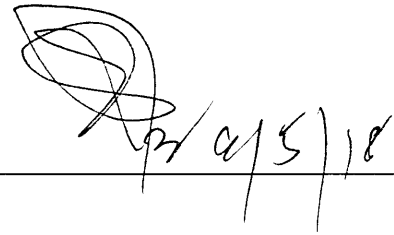
- considered for further operation for another five (05) years, subject to availability of gas.

**(F). Decision of the Authority**

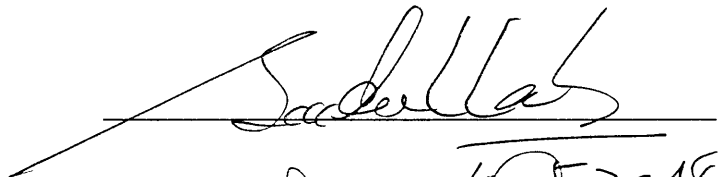
In view of the above analysis, the Authority hereby decides to exclude Unit No.1-4 of the GTPS Faisalabad from the generation licence of NPGCL. The Authority further decides to retain the Unit No. 5-9 of GTPS Faisalabad (operating in combined cycle mode) in the generation licence of NPGCL and to extend their useful life till June 30, 2022. Accordingly, the generation licence of NPGCL (No. GL/03/2002 dated July 01, 2002) stands modified. For the changes made in the generation licence through this APM and other parallel proceedings, the annexure attached to the determination of the Authority dated May 02, 2018, in the matter of LPM of NPGCL may be referred. The approval of the APM is subject to the provisions contained in the NEPRA Act, relevant rules framed thereunder, terms & conditions of the generation licence and other applicable documents.

**Authority**

Rehmatullah  
(Member)

  
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Saif Ullah Chattha  
(Member)

  
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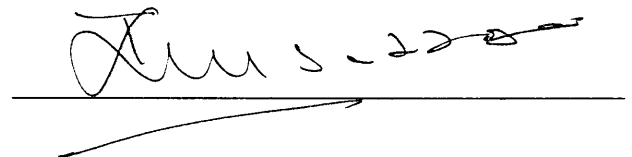
Himayat Ullah Khan  
(Member)

  
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Syed Masood-ul-Hassan Naqvi  
(Member/Vice Chairman)

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Tariq Saddozai  
(Chairman)

  
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