



Registrar

National Electric Power Regulatory Authority

Islamic Republic of Pakistan

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No. NEPRA/R/LAG-21/ 4719-26

April 01, 2024

Mr. Umar Shehzad Sheikh
Chief Executive Officer
Altern Energy Limited
DESCON Headquarters
18-KM, Ferozepur Road, Lahore

Subject: Renewal of Generation Licence No. IPGL/021/2004
Licence Application No. LAG-21
Altern Energy Limited (AEL)

Reference: AEL letter No. nil dated 30.08.2021

It is intimated that the Authority has approved to renew the Generation Licence No. IPGL/021/2004 dated September 22, 2004 in respect of Altern Energy Limited (AEL) pursuant to Section 26 of the NEPRA Act read with Rule-5(2) of the NEPRA Licensing (Generation) Rules, 2000.

2. Enclosed please find herewith determination of the Authority in the matter of Renewal of Generation Licence No. IPGL/021/2004 dated September 22, 2004 granted to AEL.

Enclosure: As Above

(Engr. Mazhar Iqbal Ranjha)

Copy to:

1. Secretary, Power Division, Ministry of Energy, 'A' Block, Pak Secretariat, Islamabad
2. Managing Director, Private Power & Infrastructure Board (PPIB), Ground & 2nd Floors, Emigration Tower, Plot No. 10, Mauve Area, Sector G-8/1, Islamabad
3. Managing Director, National Transmission & Despatch Company (NTDC), 414 WAPDA House, Lahore
4. Chief Executive Officer, CPPA(G), 73 East, A.K. Fazl-ul-Haq Road, Blue Area, Islamabad
5. Chief Executive Officer, Islamabad Electric Supply Company Ltd, IESCO Head Office Street 40, Sector G-7/4, Islamabad
6. General Manager, System Operation, NPCC-NTDC, Faiz Ahmed Faiz Road, H-8/1, Islamabad
7. Director General, Pakistan Environmental Protection Agency, Plot No. 41, Street No. 6, H-8/2, Islamabad

**National Electric Power Regulatory Authority
(NEPRA)
Islamabad – Pakistan**

GENERATION LICENCE

No. IPGL/021/2004

In exercise of the powers conferred under Section-26 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (Act No. XL of 1997) read with Rule-5(2) of the NEPRA Licensing (Generation) Rules, 2000, the Authority hereby renews the Generation Licence (No. IPGL/021/2004 dated September 22, 2004) granted to Altern Energy Limited, to the extent of changes mentioned hereunder:

- (a). As per Article-4, the Generation Licence was granted for a term of seventeen (17) years which is now extended for another term of about ten (10) years (i.e. up to June 05, 2031); and
- (b). On the Face Sheet of the Generation Licence, the Expiry Date may be read as June 05, 2031, instead of September 21, 2021.

This **Renewal/Extension** is given under my hand on this 01ST **day** of **April Two Thousand & Twenty Four.**



Registrar





National Electric Power Regulatory Authority
(NEPRA)

Determination of the Authority
in the Matter of the Application of Altern Energy Limited for
Renewal of its Generation Licence

April 01, 2024
Case No. LAG-21

(A). Background

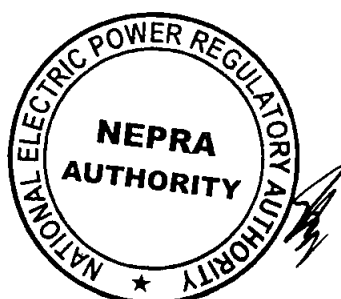
(i). The Authority in terms of Section-15 (now Section-14B) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (the "NEPRA Act") granted a Generation Licence (No. IPGL/021/2004 dated September 22, 2004) to Altern Energy Limited (AEL)/the "Licensee" for its 14.00 MW (with ultimate capacity of 29.00 MW) multi-fuel [flare gas and liquid fuel] based generation facility/thermal power plant.

(ii). According to the above generation licence, the generation facility/thermal power plant consists of four (04) gas engines (3.5 MW each) of MWM (Formerly Deutz, Germany). The generation facility is located at Kohat Road near Fateh Jang, District Attock, in the province of Punjab. The generation licence was granted for a term of seventeen (17) years from the date of its issuance (i.e. September 22, 2004).

(B). Filing of Application

(i). AEL in accordance with Regulation-13 of the NEPRA Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021 (the "Licensing Regulations"), applied for extension/renewal in the term of its Generation Licence on August 30, 2021.

(ii). Regarding the proposed time period of extension, AEL informed that its existing Generation Licence had a term of seventeen (17) years which will expire on September 21, 2021. Therefore, AEL has requested to extend the



term of licence for another ten (10) years i.e. till June 05, 2031 to make it consistent with the term of the Power Purchase Agreement (the "PPA")

(iii). About "statement of the reason in support of extension", AEL submitted that the initial term of the Generation Licence (No. IPGL/021/2004) was seventeen (17) years, and corresponded with the terms and conditions of the PPA executed between AEL and the Water and Power Development Authority ("WAPDA"). The Company subsequently executed an Amendment Agreement to the PPA dated April 22, 2006 with WAPDA, and a Novation Agreement dated May 09, 2017 with WAPDA and the Central Power Purchasing Agency (Guarantee) Limited-CPPAG, (collectively, the "Amendments") whereby, inter alia, the term/duration of the PPA was extended, the structure of the Project was improved and CPPAG replaced WAPDA as the power purchaser. The term of the amended and novated PPA is valid till June 05, 2031.

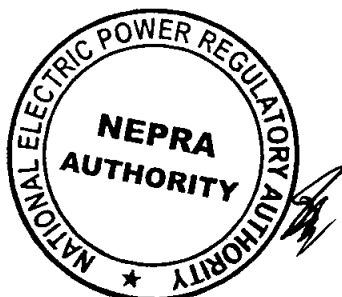
(C). Processing of Application

(i). After completion of all the required information/documentation as stipulated under Regulation-13(1) of the Licensing Regulations, the Authority published a notice on September 23, 2021 in one (01) English and one (01) Urdu newspaper to inform the general public, interested/affected parties, and different stakeholders about the proposed extension in the term of generation licence. The Authority invited comments from the said stakeholders in favor or against the said extension.

(ii). Apart from the above, separate letters were also sent to government ministries, their attached departments and representative organizations etc. on September 29, 2021. Through the said letters, the stakeholders were informed about the proposed extension and publication of notice in the press. Further, the said entities were invited for submitting their views and comments in the matter for assisting the Authority.

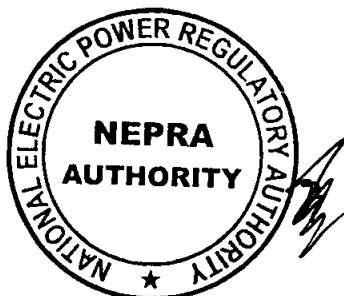
(D). Comments of Stakeholders

(i). In response to the above, the Authority received comments from four (04) different stakeholders including National Transmission &



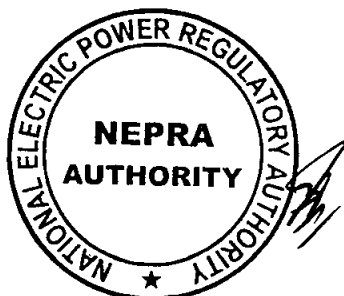
Despatch Company Limited (NTDC), Private Power and Infrastructure Board (PPIB), Petroleum Division of Ministry of Energy (PtDMoE) and CPPAG. The salient points of the comments offered by the above mentioned stakeholders are summarized in the following paragraphs.

- (a). NTDC commented that (i). the plant (28 MW) of AEL once used to be much cheaper while operating on indigenous gas and its utilization was quite substantial. However, after conversion from indigenous gas to RLNG, the plant dropped lower in the Merit Order and its despatch was drastically reduced and thus, experiencing significantly less utilization factor thereafter; (ii). AEL remained connected through 2x66 kV lines of IESCO network, 66 kV Fateh Jhang & Jand, however, IESCO upgraded the Jand grid station from 66 kV to 132 kV level with an understanding that AEL would also upgrade its switchyard and other equipment to 132 kV, but no progress has been made by AEL in this regard. Consequently, AEL has been left out with only one 66 kV circuit connected with the Fateh Jhang grid station. As IESCO is determined to upgrade the remaining 66 kV network to 132 kV so AEL will stay out, if it does not upgrade its switchyard accordingly; (iii). Since NTDC is in the process of strengthening its system in Islamabad by adding new transformers at New Rawat & ISPR Grid and completion of 500 kV grid station in Chakwal, there would be no more constraints in the area. Also, Attock Gen Limited (AGL) being the cheaper plant can be used to address the overloading constraint, if required; and (iv). As the Govt. of Pakistan (GoP) is stressing for cheaper generation through VRE in the country to reduce the electricity production cost,



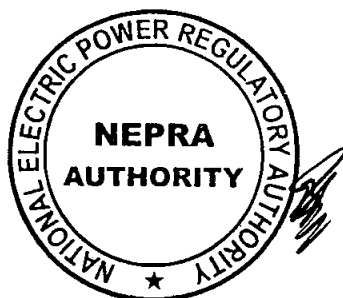
plants like AEL will no longer be viable as far as economic dispatch is concerned. Forgoing in view, it is clear that utilization of power from AEL would be quite less in the future. However, contractual, legal, financial and other modalities regarding the subject matter may be taken up with other Stakeholders;

- (b). PPIB stated that AEL is a 29 MW gas fired simple cycle Independent Power Producer (IPP) under the 1994 Power Policy. Phase-I (14 MW) and Phase-II (15 MW) of the complex achieved Commercial Operation Dated (COD) in April 2000 and September 2008, respectively. Implementation Agreement (IA) was signed on July 19, 1995 and renewed on September 09, 2005. The terms of both IA and PPA are for thirty years. Initially, the complex was operated on indigenous gas, however in the year 2017, due to the depletion of indigenous gas, the complex was shifted to RLNG on "As & When available basis" with a Take and Pay basis tariff. The complex is interconnected with a 66 kV transmission line network and IESCO is upgrading its network from 66 kV to 132 kV due to which AEL needs to upgrade its Grid from 66 kV to 132 kV for future operations. Since the terms of both IA and PPA are not aligned with the term of the Generation Licence which expired on September 21, 2021, hence in order to align it, PPIB supports the extension in the term of the Generation Licence of AEL till the expiry of IA and PPA, subject to the concurrence of stakeholders (i.e. CPPAG, NTDC and IESCO) while keeping in view future demand and supply projections, anticipated despatch and transmission constraints;



- (c). PtDMoE submitted that Sui Northern Gas Pipelines Limited (SNGPL) has been supplying RLNG to the tune of 6 MMCFD to AEL purely on "As & When Available" basis; and
- (d). CPPAG remarked that AEL is a 29 MW Gas fired simple cycle Independent Power Producer located at Fateh Jang District Attock commissioned under Power Policy 1994. Phase-I (14 MW) and Phase-II (15 MW) of the Complex achieved COD in April 2000 and September 2008, respectively. IA was signed on July 19, 1995 & amended on September 09, 2005. The PPA was signed on September 18, 1995 & amended on April 22, 2006. The term of both IA & PPA is for thirty (30) years. Initially, the Complex was operated on indigenous gas, however later due to the depletion of indigenous gas the Complex was shifted to RLNG in Year 2017 with Tariff on "Take & Pay Basis". Further, the Plant of AEL is interconnected with a 66 kV Transmission Line network and IESCO is upgrading its Grid Network from 66 kV to 132 kV for further operation. Since the terms of both IA and PPA are not aligned with the term of the Generation Licence, which expired on September 21, 2021, hence in order to align it, CPPAG supports extension in the term of Generation Licence till the expiry of IA and PPA, subject to the concurrence of all stakeholders i.e., PPIB, NTDC, IESCO and upgradation of 66 kV switchyard to 132 kV at the risk & cost of AEL, while keeping in view of future demand and supply projections, anticipated dispatch and transmission constraints.

- (ii). The Authority reviewed the above comments of stakeholders

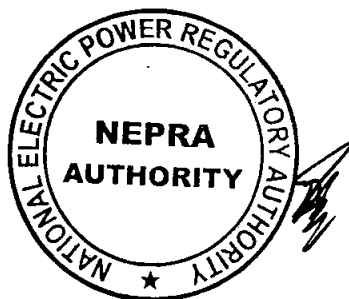


and considered it appropriate to seek the perspective of the licensee/AEL on the same. On the comments of NTDC regarding low dispatch and utilization factor of the plant, AEL submitted that the complex/generation facility had been delivering affordable and safe electric power to the national grid since its COD. In this regard, despite the fact of receiving low dispatch from the off-taker, the company/AEL had operated and maintained its power plant in accordance with the internationally complied safety and environmental standards.

(iii). AEL submitted that upgradation of relevant lines/network of IESCO from 66 kV to 132 kV and subsequent requirement to upgrade its switchyard and other equipment to 132 kV, it was submitted that AEL is aware of the fact that once upgradation has occurred on the side of the System Operator, a similar upgradation is required at the substation of the complex/generation facility to ensure the continued viability and workability of the existing interconnection facilities. AEL also assured that once NTDC/IESCO finalizes and completes the upgradation of the interconnection facilities, the Company/AEL will fulfil its obligations without any delay or exception.

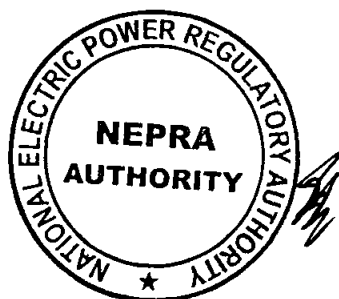
(iv). AEL submitted that it is the only IPP with a take-and-pay tariff agreed with the off-taker, which is best suited for the Power Purchaser and the consumers as they can benefit from the generated electric power on their demand, without any liability to pay capacity revenue in case of no generation for any of the reasons. Further to the said, AEL clarified that the extension in the term of the Generation Licence does not entail any additional obligations on the part of the GoP, the off-taker, or the consumer(s). AEL acknowledged that there had been a reduction in demand due to the pandemic which affected the economic activities all around the world including Pakistan but things have improved considerably and a positive turn-around has started which is expected to lead to improved economic activities requiring more electric power for which the company is geared up and willing to play its role in the changing power sector environment.

(v). AEL submitted that in terms of Rule-5(2) of the NEPRA Licensing (Generation) Rules 2000 (the "Generation Rules") and Regulation-



13(2) of the Licensing Regulations, the Authority is empowered to extend or renew the term of a license in accordance with an application duly filed under sub-regulation (1), subject to and in accordance with such further changes as it may deem fit, if in the opinion of the Authority such extension (a). is in the interests of the consumers and the electric power industry as a whole; (b). is reasonably necessary to ensure the continuous, safe and reliable supply of electric power to consumers, keeping in view the financial and technical viability of the Licensee; (c). is suitable on environmental grounds; and (d). is justified keeping in view the performance of the Licensee during the expiring term. In this regard, AEL/the company has demonstrated the reliability, financial and technical viability of the generation facility and has also submitted that extension of the licence is suitable on environmental grounds considering the fact that all the relevant approvals were obtained before the commissioning of the generation facility and these approvals continue to be effective. Further to the said, AEL submitted that the IA between AEL and the GoP was signed under the Policy Framework and Package of Incentives for Private Sector Power Generation Projects, 1994 (the "Power Policy 1994"), prior to the promulgation of the NEPRA Act and there was no requirement of a generation licence under the relevant laws. In this regard, after the enactment of the NEPRA Act, all those IPP(s) who had earlier signed the IA(s) were required to apply for a generation licence. Accordingly, AEL submitted the application and the Authority granted it the Generation Licence. Article-2(2) of the said licence provides that during the subsistence of the Concessional Agreements that the parties had executed prior to the enactment of the Act, nothing in the relevant rules on generation and the licence shall be applied in a manner which is inconsistent with the Agreements and materially increases the obligations or impairs the rights of the Licensee under the Agreements. In view of the said, it is clear that the contractual commitment of the GoP prior to the enactment of the NEPRA Act is to be honoured. In view of the said, it is a legitimate expectation of AEL that its Generation Licence is extended to correspond to the term of its IA which is valid till June 05, 2031.

(vi). Further to the above, AEL submitted that in the event its application for extension in the term of its Generation Licence is not allowed, it



will constitute a "Lapse of Consent" under the IA, which in turn will be a Pakistan Political Force Majeure Event, which if continued for a period exceeding one hundred and eighty (180) days (not including the effects thereof), either of the Party shall have the option to terminate the IA. In this regard, once the IA is terminated, the GoP will have to pay compensation to the company/AEL as stipulated in Schedule-2 of the IA. Therefore, AEL expects that the Authority shall duly consider such financial implications while evaluating the comments of the stakeholders that may result from the termination of the IA.

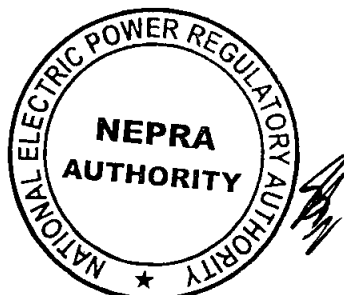
(vii). Further to the above, AEL submitted that being on a take-and-pay arrangement under the PPA, it has faced serious commercial challenges the time its operation was shifted to RLNG in 2017, due to the depletion of indigenous gas. Despite the fact that the Company received exceedingly reduced dispatch demand from NPCC, the Company has fulfilled its contractual and national responsibility by maintaining its power plant complying with internationally applied safety and environmental standards.

(viii). The Authority considered the above submissions of AEL and decided to proceed further in the matter with the submission of the company on its request for extension in the term of its Generation Licence as stipulated in the Generation Rules, the Licensing Regulations, and other applicable documents.

(E). Observation/Findings

(i). The Authority has examined the entire case in detail including the already granted Generation Licence of AEL, submitted application for extension, comments of stakeholders, rejoinders from the Licensee and provisions of relevant rules & regulations. In this regard, the observations of the Authority are summarized in the following paragraphs.

(ii). In light of the explanation given in the preceding Paragraphs the Authority granted a Generation Licence (No. IPGL/021/2004, dated September 22, 2004) to AEL for its generation facility/thermal power plant, located at Kohat road near Fateh Jang, district Attock, in the province of Punjab. The said

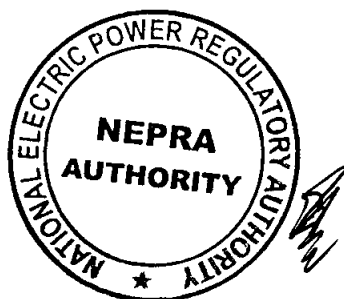


Generation Licence was granted for an existing installed capacity of 10.50 MW consisting of three (03) Gas Engines of MWM (Formerly Deutz, Germany) with 3.5 MW Capacity each.

(iii). The Authority has observed the abovementioned Generation Licence envisaged an ultimate capacity of 29.00 MW, with existing as well as proposed installed capacity, operating on flare gas as the primary fuel and light distillate oil as secondary/alternate fuel. The Authority fixed the initial term of the licence to seventeen (17) years from the date of its issuance (i.e. September 22, 2004) which expired on September 21, 2021 and before the expiry of the term, AEL submitted an application for extension of the term for another period to make it consistent with its PPA and IA.

(iv). The Authority observed that at the time of the grant of the Generation Licence, AEL indicated the Existing/Installed Capacity of Phase-I to be 10.50 MW and the ultimate Installed capacity to be 29.00 MW. Further, the Authority also observed that AEL/company had been paying Annual Licence Fee based on the installed capacity of 10.50 MW only. The Authority considered and reviewed the different provisions of the concessional agreement that AEL, Power Purchaser and the GoP had executed and amended from time to time. The Authority observed that the project was set up under Power Policy 1994 and the GoP accepted a proposal from the original sponsors of AEL and issued a Letter of Intent (LoI) for setting up an approximately 14.00 MW generation facility. In this regard, GSA and PPA were executed on April 11, 1995 and September 18, 1995 respectively with OGDCL and WAPDA. The project achieved COD on June 06, 2001 but had to restrict the installed capacity of 10.50 MW consisting of 3 x 3.50 Gas engines.

(v). In this regard, the Authority has observed that the power plant/generation facility faced different problems in its operation due to the composition of the flare gas and availability of it in the required quantity resultantly, the Power Purchaser imposed penalties on the AEL and the company registered its counterclaims on the gas supplier/OGDCL. The matter

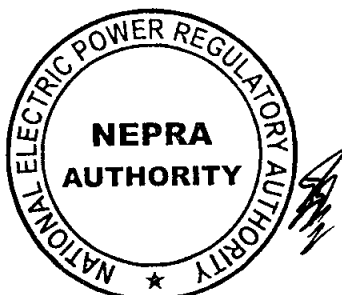


remained unresolved till the parties decided to settle the matter mutually by entering into amendments in IA and PPA.

(vi). In consideration of the above, the parties executed amendments in IA and PPA on September 09, 2005 and April 02, 2006 and the said amendments envisaged that the complex/power plant/generation facility would have two Phases with a cumulative capacity of approximately 29.00 MW (Gross ISO). Phase-I was supposed to have a gross capacity of 14.00 MW (from the then-present capacity of 10.50 MW and the additional unit was to be added by June 30, 2008) whereas, Phase-II of gross capacity of 15.00 MW was to be commissioned independent of Phase-I.

(vii). In view of the said, the Authority considered it appropriate seeking clarification from AEL on the configuration of the complex specially the changes that were made after the grant of the Original Generation Licence. In consideration of the above, AEL submitted that the complex was set up under the Power Policy of 1994 and was initially planned to have an Installed Capacity of 14.0 MW but the capacity was restricted to 10.50 MW consisting to 3 x 3.50 MW gas engines of MWM make. Later on, the complex faced serious issues with regard to the quantity and quality of the flare gas and resultantly the sponsors of the project and Power Purchaser were involved in contractual disputes by lodging claims and counterclaims until the parties decided to resolve the matter for which Memorandum of Understanding (MoU) was executed. In order to materialize the MoU amendments were made in the PPA and IA on September 09, 2005 and April 02, 2006, respectively. The said amendments envisaged that the complex will have two Phases with a cumulative capacity of approximately 29.00 MW (Gross ISO). Phase-I will have a gross capacity of 14.00 MW (from the present capacity of 10.50 MW and an additional unit will be added by June 30, 2008). Whereas, Phase-II of gross capacity of 15.00 MW will be commissioned independent of Phase-I.

(viii). Further to the above, AEL clarified that the amendment(s) in the IA/PPA did not explicitly envisage replacing the old engines but duly considered the change in installed capacity. In this regard, the sponsors of the complex

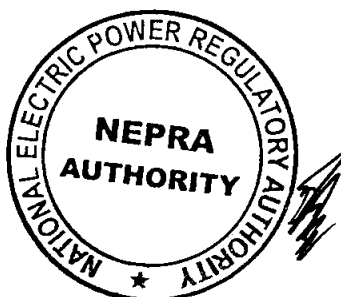


considering the operational record of the generation facility concluded that the initially installed Gas Engines did not perform well therefore, once the opportunity came the way of AEL, it replaced the old engines of Phase-I at its own cost and also installed one additional Gas Engine. Further, AEL also installed Phase-II of the project in terms of the amendment(s) of IA/PPA.

(ix). Further to the above, AEL clarified that the amendment(s) to PPA/IA it was authorized to increase the size of the project to approximately 29.00 MW meaning that the size was not exactly fixed. In view of said, AEL installed 8 Gas Engines each of 3.904 MW as had it installed 7 Gas Engines the installed capacity would have been restricted to 27.32 MW, which would have been less than the authorized increase, as required under the amendment(s) of IA/PPA.

(x). AEL submitted that at the time of filing of the application for Generation Licence on May 14, 2003, AEL represented to the Authority that its ultimate gross capacity would be approximately 29.00 MW which was accordingly reflected in Generation Licence that the Authority later granted. It is pertinent to mention that at the time of the application for the Generation license, the installed capacity of AEL was 10.50 MW which was accordingly mentioned and given in the Granted Licence. After installation of the full capacity and due to the use of 8 Gas Engines with a fixed capacity of 3.904 MW each, any deviation in the gross capacity (i.e. from 29.00 MW to 31.232 MW) is merely due to the limitation of the selection of size of the Gas Engines which is beyond the control of sponsors. The installation of the higher capacity, AEL ensured that it is in line with the approval of the GoP as stipulated in the amendment(s) of IA/PPA.

(xi). AEL submitted that the change in installed capacity is in accordance with firm agreements (IA and PPA) and that GoP/PPIB and Power Purchaser approved the same. Due to the increase in capacity from 29.00 MW to 31.00 MW, there was no additional revenue for AEL however, the fuel cost component was reduced which is a pass-through item. In this regard, AEL highlighted that as the agreements of projects of Power Policy 1994 were

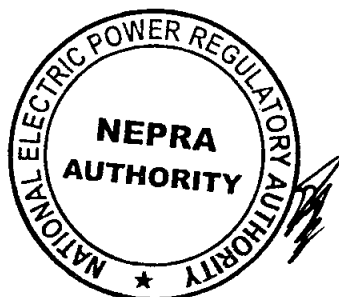


executed prior to the promulgation of the NEPRA Act, therefore, the Authority unequivocally established precedence of contractual agreements in the event of any inconsistency with NEPRA laws as stated in the Generation Licence. On the issue of making lesser payments for the Licence fee, AEL clarified that the Authority raised the invoices based on the initial installed capacity of the generation facility of 10.50 MW instead of the ultimate size which was accordingly paid in a timely manner.

(xii). As explained in the preceding paragraphs, in the current request AEL/the Licensee intends to extend the term of its Generation Licence for another ten (10) years from the date of its expiry i.e. from September 21, 2021, to make it consistent with its PPA and IA. In this regard, Rule-5(2) of the Generation Rules provides that unless revoked earlier, upon the expiry of the term of the generation licence, the Authority may renew the term of the generation licence for such further period as it may deem appropriate in the manner provided for in the generation licence keeping in view the remaining maximum expected useful life of the units comprised in the generation facility, the performance of the Licensee during the then expiring term and the interests of the consumers and the electric power industry as a whole.

(xiii). Further, Regulation-13 of the Licensing Regulations stipulates that the Authority may extend or renew the term of a licence in accordance with an application duly filed under sub-regulation (1), subject to and in accordance with such further changes as the Authority may deem fit, if in the opinion of the Authority such extension: (a). is in the interests of the consumers and the electric power industry as a whole; (b). is reasonably necessary to ensure the continuous, safe and reliable supply of electric power to consumers, keeping in view the financial and technical viability of the licensee; (c). is suitable on environmental grounds; and (d). is justified keeping in view the performance of the licensee during the expiring term.

(xiv). As explained in the preceding paragraphs, the Authority granted a Generation Licence for a term of seventeen (17) years from the date of its issuance till September 21, 2021. In this regard, the Authority has observed that

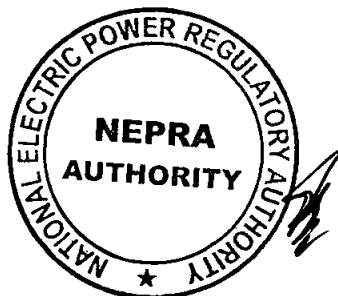


the Generation Facility/Power Plant of AEL consists of thermal generating units (gas engines of Model-TCG 2032 V16 of MWM). The useful life of the units has also been considered as 30 years in the PPA of the Licensee/AEL. Phase-I of the generation facility was commissioned in June 2001 whereas Phase-II was commissioned in September 2008.

(xv). According to the International benchmarks available and general practice in vogue, the useful life of a thermal generating unit is normally taken as thirty (30) years from its COD. The useful life of the units has also been considered as thirty (30) years in the PPA of the AEL. In view of the said, it is considered, it is can be broadly construed that if properly maintained, the units comprised in Phase-I and Phase-II of the generation facility can be extended/operated till June 2031 and September 2038 respectively. However, AEL has requested an extension in the term of its licence till June 05, 2031 only, to make it consistent with the PPA.

(xvi). In order to firm up the remaining life of the units for operation in the proposed period of time, the Authority directed the company/AEL to carry out a Remaining Useful Life Assessment (RULA) through some renowned third party. In this regard, AEL submitted that in order to carry out RULA, it consulted various consultants/experts from the market. However, the minimum time required by the consultant is ten (10) weeks and charges/fees are very high which is not possible for a small company like AEL. In consideration of the said, AEL submitted that it regularly inspects and evaluates the condition of its engines and all related equipment as per the Original Equipment Manufacturer (OEM) maintenance schedule. In this regard, the company conducted its own survey/inspection for the remaining useful life of the complex to conduct boroscopic inspections of engines. The said survey/inspection involved the following critical parts of the engines (a). Cylinder Heads; (b). Intake and exhaust valves; (c). Valve seats; (d). Cylinder Liners; (e). Pistons; (f). Charge Air coolers; (g). Turbochargers and (h). Alternators etc.

(xvii). In this regard, the Authority considered the operation record of the complex and it was concluded that Phase-I (Unit 1-4) of the Complex was

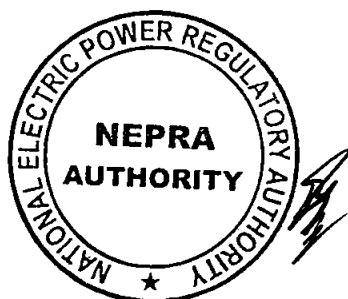


commissioned in June 2001 whereas Phase-II (5-8) was commissioned in September 2008. The units (1 to 8) have been operated for 62495 h, 64307 h, 61587 h, 62618 h, 59267 h, 61264 h, 61424 h, and 60928 h respectively. Which can be translated into 7.13 years, 7.34 years, 7.03 years, 7.15 years, 6.77 years, 6.99 years, 7.01 years, and 6.96 years of continuous operation respectively against total useful life of thirty (30) years. In consideration of the above and based on the data on operational hours of each unit so far, the Authority considers that the generation facility/complex of AEL can be operated for at least a further period of twenty (20) years.

(xviii). The Authority has duly considered the performance of the Licensee/AEL and has observed that for the last five years (2017 to 2021), the average plant availability was around 96.38% whereas for the said period the average utilization was about 43%. It is also pertinent to mention that the gross efficiency of the plant is 34-35%. In consideration of the performance during the last ten (10) years of the expiring term, the Authority concludes that the power plant/generation facility of AEL has significantly contributed to the grid with an average utilization factor of 68% with an availability factor of 96%.

(xix). Regarding the suitability of the power plant on environmental grounds, it was observed that representatives/monitoring team of the Environmental Protection Department, Punjab (EPD, Punjab) regularly visit the plant and inspect/review and confirm that all emissions of air, water and noise relating to plant operations are within the established environmental standards. In this regard, EPD has not reported any violation of the relevant requirements by the plant of AEL.

(xx). In addition to the above, the Authority has observed that the PPA and IA of the complex of AEL are valid till June 05, 2031 and the same is protected under the Law and under the said agreements, AEL is required to have a valid generation licence. Further, not allowing the proposed extension in the term of its Generation Licence would constitute a "Lapse of Consent" under the IA, and will result in financial and other complications as explained in Para D(vi) & (vii) above. Further, the PPA is on "Take and Pay" basis and the power



plant/complex will be operated only when it comes in the merit order otherwise, it will not have any legal and financial burden on the consumers.

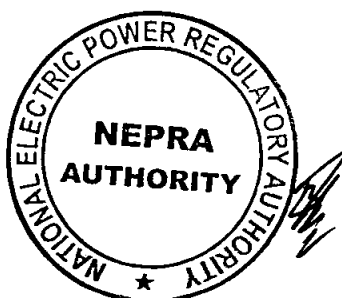
(xxi). In view of the above, the Authority considers that extension in term of the Generation Licence of AEL; (a) is in the interests of the consumers and the electric power industry as a whole; (b) is reasonably necessary to ensure the continuous, safe and reliable supply of electric power to consumers, keeping in view the financial and technical viability of the licensee; (c) is suitable on environmental grounds; and (d) is justified keeping in view the performance of the licensee during the expiring term as explained above. The extension in term will allow the sponsors to smoothly operate the project, subject to making place in the merit order.

(F). Decision of the Authority

(i). In view of the above, the Authority is satisfied that AEL has complied with all the requirements of the Generation Rules and Licensing Regulations pertaining to renewal in the term of its generation licence therefore, it has a case for it to be considered. The Authority has observed that the internal report of the company on the purpose of assessment of the remaining useful life of the generation facility has concluded that the plant and the other related equipment can be used for another period of twenty (20) years.

(ii). In consideration of the above, the Authority has deliberated the issue at length and has observed that most of the important relevant stakeholders including NTDC, PPIB, PtDMoE, and CPPAG have in principle supported the proposed extension in the term of generation licence of AEL.

(iii). Regarding the change in the installed capacity, the Authority has observed that AEL has made significant changes in the installed capacity and details of generating units. In view of the said, the Authority hereby directs AEL to file a Licensee Proposed Modification under Regulation-10 of the Licensing Regulations, for incorporation of the changes/correction in the installed capacity and interconnection facility, etc. in its Generation Licence.

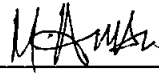


(iv). Regarding the discrepancy in payment of the Annual Licence Fee on account of the difference between installed capacity and invoiced capacity (i.e. 31.232 MW vs.10.50 MW), AEL is directed to pay the balance amount on account of the Annual License Fee for the accumulative amount of Rs. 4,511,413 from 2008-09 to 2020-21.

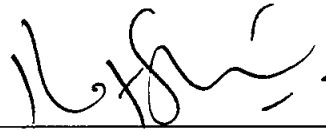
(v). In consideration of the above, the Generation Licence (No. IPGL/021/2004 dated September 22, 2004) is hereby renewed for a term of ten (10) years from the date of expiry of the original licence. The changes made in the Generation Licence are attached as an annexure to this determination. The said renewal will be subject to the provisions contained in the NEPRA Act, relevant rules and regulations framed there under, terms & conditions of the Generation Licence and other applicable documents.

Authority:

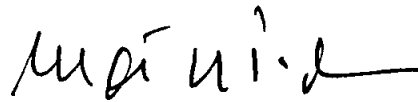
Maqsood Anwar Khan
(Member)



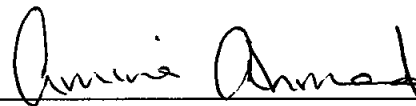
Rafique Ahmed Shaikh
(Member)



Mathar Niaz Rana (nsc)
(Member)



Amina Ahmed
(Member)



Waseem Mukhtar
(Chairman)

