



National Electric Power Regulatory Authority Islamic Republic of Pakistan

NEPRA Tower, Attaturk Avenue (East), G-5/1, Islamabad
Ph: +92-51-9206500, Fax: +92-51-2600026
Web: www.nepra.org.pk, E-mail: registrar@nepra.org.pk

No. NEPRA/TRF-100/6057-6059
May 3, 2016

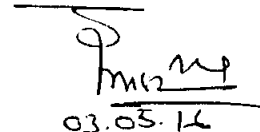
Subject: Decision of the Authority in the matter of Modification in the Existing Mechanism of Fuel Cost Component of Gas / HSD Based IPPs on account of Re-gasified Liquefied Natural Gas

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority (04 pages) in the matter of Modification in the Existing Mechanism of Fuel Cost Component of Gas / HSD Based IPPs on account of Re-gasified Liquefied Natural Gas.

2. The decision is being intimated to the Federal Government for the purpose of notification in the official Gazette pursuant to Section 31 (4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997) and read with Rule 16(11) of the National Electric Power Regulatory Authority Tariff (Standards and Procedure) Rules, 1998.

Enclosure: As above



03.05.16

(Syed Safeer Hussain)

Secretary,
Ministry of Water & Power,
Government of Pakistan
Islamabad.

CC:

1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad
2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad.



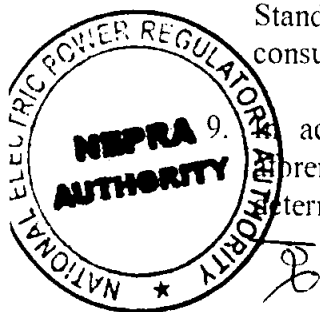
DECISION OF THE AUTHORITY IN THE MATTER OF MODIFICATION IN THE EXISTING MECHANISM OF FUEL COST COMPONENT OF GAS / HSD BASED IPPs ON ACCOUNT OF RE-GASIFIED LIQUEFIED NATURAL GAS

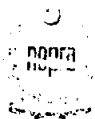
Background

There are currently four Independent Power Producers (IPPs), falling under the Power Policy 2002, running combined cycle thermal power plants based on dual fuel (Gas/HSD) with the primary source of fuel being pipeline quality gas namely Halmore Power Generation Company Limited (HPGCL), Orient Power Company Limited (OPCL), Saif Power Limited (SPL) and Sapphire Electric Company Limited (SECL). The fuel cost component of these plants is subject to adjustment in accordance with the prescribed fuel price adjustment mechanism as notified in the official Gazette.

2. With the shortage of natural gas and the cut in the supply of the primary fuel, these companies had no other option but to run their power plants on the alternate fuel i.e. HSD which led to the production of costly electric power.
3. The Government, being cognizant of the electric power crisis, decided to import Re-gasified Liquefied Natural Gas (RLNG) so that these plants could be supplied the fuel for their operations.
4. The mechanism of tariff adjustment on account of fuel price variation prescribed in the Tariff Determinations of these companies was based on the price of natural gas and there was a need for prescribing the adjustment mechanism for variation in prices of RLNG.
5. The Oil & Gas Regulatory Authority (OGRA) vide notification dated October 07, 2015 determined price of RLNG on a provisional basis.
6. As per Para 5.18 & 5.19 of the said determination the provisional price of R-LNG for consumers on transmission network tentatively works out to be 8.63682 \$ per MMBTU and it shall also be applicable on the previous and subsequent months till the issues highlighted in the determination are finally settled.
7. Pursuant to the OGRA notification, the four IPPs submitted request to NEPRA for approval and notification of the Fuel Cost Component based on RLNG prices with effect from March 2015.
8. The Authority considered the request and decided to initiate proceedings to prescribe adjustment mechanism for variation in prices of RLNG of the IPPs based on RLNG and also decided to allow the immediate application of the provisional price notified by OGRA for adjustment in the fuel cost component of Gas/HSD based IPPs as per Rule 4(7) of Tariff Standards & Procedure Rules, 1998 subject to an order of refund for the protection of the consumers while the proceedings are pending before the Authority.

9. In accordance with the decision of the Authority the Fuel Cost Component of the aforementioned IPPs, based on the RLNG price (provisional) notified by OGRA, was determined by the Authority on provisional basis vide decision dated December 31, 2015 for



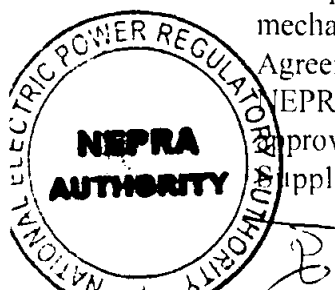


its immediate application, subject to an order of refund for the protection of the consumers while the proceedings are pending before the Authority.

10. Regarding the decision of the Authority to initiate proceedings to prescribe adjustment mechanism for variation in prices of RLNG of the existing Gas/HSD based IPPs, a hearing was held on January 19, 2016 in which representatives from the Central Power Purchasing Agency Guarantee Limited (CPPA-G), K-Electric, WPPO, NPCC, PPIB, Sui Northern Gas Pipelines Limited (SNGPL), PSO, Saif Power Limited, Sapphire Electric Company Limited, Halmore Power Generation Company Limited, Orient Power Company Limited, Descom, SINEW Associates and daily newspapers participated.

Proceedings of the hearing

11. CPPA-G submitted that keeping in view the existing gas reserves and future import of gas in Pakistan there is the need to redefine the term 'Gas' which may be Natural Gas, RLNG, Import of Gas from Iran and TAPI and gas obtained/extracted and imported through any source in Pakistan.
12. CPPA-G further submitted that the Fuel Cost Component (FCC) is calculated based on the Net Heating Value (LHV). The price of gas used in FCC should also be adjusted to net heating value while calculating the FCC which would save the end consumer a loss of 10%.
13. The representatives of concerned IPPs informed that all of the LNG that is imported is consumed in Karachi and they were receiving Natural Gas as a swap arrangement and were being charged the price of RLNG and there are no differences in the technical specifications. It was further informed that the issue of difference in technical specifications would arise when the new pipeline is constructed for the exclusive supply of RLNG for their plants. They were receiving the same gas as before on the technical parameters as well as the tariff set by NEPRA. Thus, technicalities are not involved at this stage.
14. The representative of K-Electric submitted that the issue is of the LHV-HHV factor. The current loss factor being given in the Power Purchase Agreements (PPAs) of IPPs is 10.93. The determination of whether the factor is to remain the same or not after utilizing RLNG is necessary.
15. A representative of the IPPs responded by stating that the difference in factor would arise once they start receiving RLNG. Unless they start getting imported RLNG exclusively this is not an issue.
16. Anwar Kamal Law Associates (AKLA) submitted written comments objecting to the Authority granting the Generation License and approving the Tariff for a term of 25-30 years without ensuring that the applicant company had entered into the basic contracts to operate its' Plants for the term of its License; how and why had NEPRA granted Generation Licenses to these four IPPs?; The low plant factor increases the per unit cost of electricity from these plants; before approving the mechanism, it is, therefore, necessary that the power plants should have firm Gas Supply Agreement (GSA) with a Gas Supply Company and these GSAs should be reviewed by NEPRA and should also be available in the public domain. AKLA requested NEPRA not to approve any Tariff and grant any Generation License to any IPP unless it has a valid Fuel Supply Agreement (FSA) for the term of the License. Furthermore, the responsibility of





procurement of fuel for power generation from the power plant, in all respects, like financial, legal, contractual etc., should be that of the Power Producer.

Post hearing proceedings

17. Comments were sought from the Sui Northern Gas Pipelines Limited and Sui Southern Gas Company Limited regarding the stance of the IPPs that they were getting Natural Gas as swap arrangements and paying the price of RLNG. The Sui Northern Gas Pipelines Limited had communicated that LNG is delivered at the EETPL Terminal Flange and subsequently re-gasified in to RLNG. Equivalent MMBTUs to the RLNG re-gasified are then delivered to SNGPL through Swap by SSGCL at mutually agreed points. The gas delivered to the IPPs is, therefore, RLNG and is billed accordingly to the consumer.
18. The Authority also considered the question as to whether or not the efficiency of power plants will be affected by the utilization of RLNG and whether or not the adjustment of LHV-HHV factor is applicable in the case of utilization of RLNG by the power plants on similar parameters as in the case of Natural Gas wherein LHV-HHV factor of approximately 1.108 is taken into account. Comments were also sought on the submissions of CPPA-GL.
19. The Authority after detailed deliberations on the issues during the proceedings concluded that by utilizing RLNG instead of natural gas the efficiency of the power plants will slightly increase. As per the present scenario of the gas system, RLNG will be supplied to the power plants by using the existing distribution network of SNGPL/SSGC. At present, SSGCL receives RLNG and transmits it to SNGPL under SWAP arrangement. Till the installation of dedicated RLNG pipelines, efficiency and adjustment of LHV-HHV factor will remain the same and change will be considered when dedicated RLNG lines are commissioned after evaluating the specifications of RLNG (imported).
20. The Authority is of the view that the competent Authority to define the word gas is OGRA and the Ministry of Petroleum and Natural Resources. For the purpose of adjustment, irrespective of how the word gas is defined, RLNG will be taken in the category of Gas. In future the Government may decide a composite rate of gas from all sources.
21. Regarding the submission of AKLA the Authority is of the view that all the requirements of law provided in the NEPRA Act, Rules and Regulations were complied with while granting the Generation Licenses. Therefore, the arguments raised regarding the grant of Generation Licenses do not merit any consideration.
22. After detailed deliberations the Authority decided to adopt the following fuel price adjustment mechanism:



$$FCC_{RLNG} (Rev) = FCC_g (Ref) (Rs./ kWh) * FP_{RLNG} (Rev) \text{ per MMBTU} / FP_g (Ref) \text{ per MMBTU}$$

Where:

$FCC_{RLNG} (Rev)$ = Revised fuel cost component of variable charge on RLNG. $FCC_g (Ref)$ = Reference fuel cost component of variable charge on gas.

$FP_g (Ref)$ = The reference price of gas as notified by the relevant Authority per MMBTU



Modification in the Existing Mechanism of FCC of Gas / HSD based IPPs on account of RLNG

$FP_{RLNG} (Rev) =$ The new price of RLNG as notified by the relevant Authority per MMBTU

Order

25. The prescribed fuel price adjustment mechanism on account of gas price variation in the tariff notification of Halmore Power Generation Company Limited (HPGCL), Orient Power Company Limited (OPCL), Saif Power Limited (SPL) and Sapphire Electric Company Limited (SECL) shall be modified to include the following RLNG price adjustment mechanism:

$$FCC_{RLNG} (Rev) = FCC_g (Ref) (Rs./ kWh) * FP_{RLNG} (Rev) \text{ per MMBTU} / FP_g (Ref) \text{ per MMBTU}$$

Where:

$FCC_{RLNG} (Rev)$ = Revised fuel cost component of variable charge on RLNG. $FCC_g (Ref)$ = Reference fuel cost component of variable charge on gas.

$FP_g (Ref)$ = The reference price of gas as notified by the relevant Authority per MMBTU

$FP_{RLNG} (Rev)$ = The new price of RLNG as notified by the relevant Authority per MMBTU

26. The Decision of the Authority is to be notified in the official Gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997) read with Rule 16(11) of the National Electric Power Regulatory Authority Tariff (Standards and Procedure) Rules, 1998.

AUTHORITY

(Maj (R) Haroon Rashid)
Member

(Syed Masood-ul-Hassan Naqvi)
Member

(Himayat Ullah Khan)
Vice Chairman

(Brig (R) Tariq Sadozai)
Chairman



03.05.16