



engro powergen qadirpur

October 31, 2022

Registrar
National Electric Power Regulatory Authority ("NEPRA")
NEPRA Tower, Attaturk Avenue (East) Sector G-5/1,
Islamabad

Dear Sir

Subject: Engro Powergen Qadirpur Limited, formerly known as Engro Energy (Private) Limited ("Company") – Application for Modification of the Company's Generation License

The Company was granted Generation License No. IGSP/13/2017 on 26.07.2007 (the "Generation License") by NEPRA, under (then) section 15 of the Regulation of Generation, Transmission and Distribution of Electric Power Act 1997, for its thermal generation (combined cycle) power generation facility of 226.52 MW located at Qadirpur, District Ghotki, Sindh (the "Project").

As the Authority may be aware, the Project is a dual-fuel project, with its primary fuel of low BTU permeate gas made available from the Qadirpur gas field located at District Ghotki, Sindh ("Qadirpur Gas") and its secondary fuel being High-Speed Diesel ("HSD"). Since September 2018, the Qadirpur gas reserves have been rapidly depleting and the base load of Qadirpur Gas supplies are no longer available in sufficient supply for the Company to operate its Project. The Company has accordingly explored alternate indigenous gas options and is of the view that the low BTU natural gas extracted from Badar gas fields located at District Ghotki, Sindh by Petroleum Exploration (Private) Limited, (the "PEL Gas"), is a viable alternative to supplementing *inter alia* the supplies of Qadirpur Gas.

The Company, pursuant to Regulation 10(2) of the NEPRA Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations 2021, hereby seeks to apply for a modification of the Generation License granted to the Company so as to cater for the amendment of its fuel details of the Project.

In relation hereto, we certify that the documents-in-support attached with this modification application are prepared and submitted in conformity with the provisions of Regulation 10(2) of the NEPRA Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations 2021, and we undertake to abide by the terms and provisions of the aforementioned regulations. We further undertake and confirm that the information provided in the attached documents-in-support is true and correct to the best of our knowledge and belief.

ABL Bank Pay Order No. 14313941 in the sum of applicable fee, being the modification of generation license fee as provided in Schedule II to the NEPRA Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations 2021, is also attached herewith.

Sincerely,

SHAHAB QADER
CEO-EPQL



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List of Annexures and Schedules Accompanying Application for Modification of the Company's Generation License

1. **Annex A:** Extract of Resolution passed by the Board of Directors of the Company
2. **Annex B:** Affidavit of authorized officer of the Company
3. **Annex C:** Statement of Reasons in Support of the Proposed Modification to the Company's Generation License
4. **Annex D:** Statement of the Impact of the Proposed Modification on the Tariff, Quality of Service and the Performance by the Licensee of its Obligations under its Generation License
5. **Annex E:** Text of the Proposed Modification

Documents-in-Support of the Application for Modification of the Company's Generation License

6. **Schedule 1:** Detailed Brief regarding the Benefits of Local Fuel Supply, i.e. PEL Gas
7. **Schedule 2:** Heads of Terms as executed between the Company and Petroleum Exploration (Private) Limited ("PEL")
8. **Schedule 3:** In-Principle Consent/No Objection from CPPA-G
9. **Schedule 4:** Pipeline Layout from Badar Gas Field to EPQL Power Plant



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ANNEX A

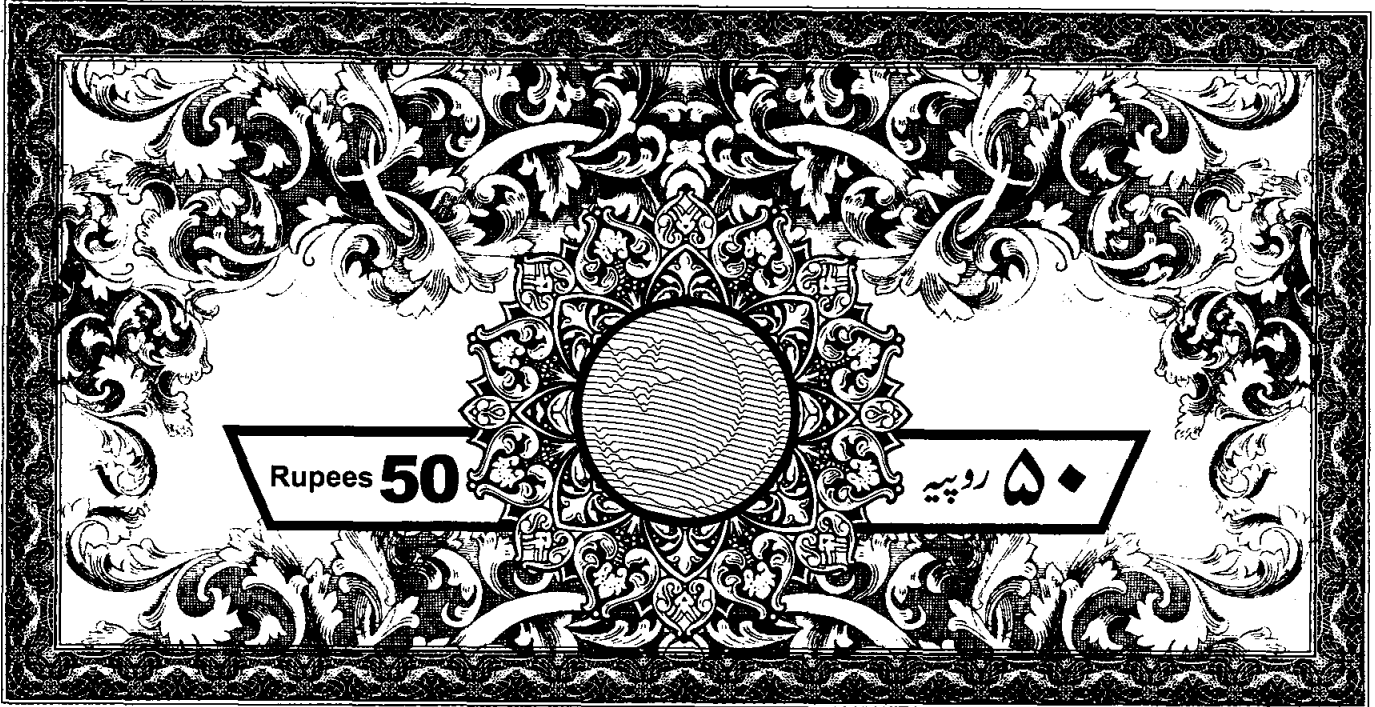
EXTRACT OF RESOLUTION PASSED BY THE BOARD OF DIRECTORS OF ENGRO POWERGEN QADIRPUR LIMITED IN THE MEETING HELD AT THE BUSINESS OFFICE (16th Floor, The Harbor Front Building, HC#3, Marine Drive, Block 4, Clifton, KARACHI-75600, PAKISTAN) OF THE COMPANY ON 28th October, 2022

RESOLVED that the Company may file applications for modification in the Generation License No. IGSP/L/13/2017 dated 26.07.2007 granted to the Company.

FURTHER RESOLVED, that Mr. Shahab Qader, Chief Executive Officer, is authorized to sign the necessary documentation, pay the necessary filing fees, appear before the Authority as needed, and do all acts necessary or incidental for completion and/or processing of these applications.

Certified that the above resolution (i) was duly passed on 28th October 2022 at Karachi, in a meeting of the Board of Directors of Engro Powergen Qadirpur Limited at which a quorum of directors was present; and (ii) has not been rescinded and is in operation and that this is a true copy of the said resolution.

Signature
Hanan Batool,
Company Secretary



ANNEX B

**BEFORE THE NATIONAL ELECTRIC
POWER REGULATORY AUTHORITY**

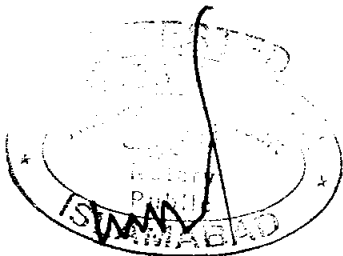
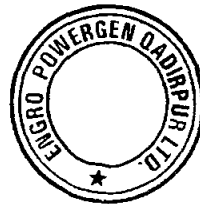
AFFIDAVIT

I, SHAHAB QADER Chief Executive Officer of Engro Powergen Qadirpur Limited, being the duly authorized representative of Engro Powergen Qadirpur Limited, hereby solemnly affirm and declare that the contents of the accompanying petition/application dated 28TH day of October 2022 including all supporting documents are true and correct to the best of my knowledge and belief and that nothing has been concealed.

I also affirm that all further documentation and information to be provided by me in connection with the accompanying petition shall be true to the best of my knowledge and belief.

Shahab Qader

DEPONENT





ANNEX C

STATEMENT OF REASONS IN SUPPORT OF THE PROPOSED MODIFICATION

The brief background to the proposed modification is that the Qadirpur gas fields, from where the Company has to date been receiving its permeate gas supplies, has entered a gas insufficiency phase, such that Sui Northern Gas Pipeline Limited, as the Project's current gas supplier, is unable to ensure a sufficient supply of gas to the Company for meeting the demands of its Project. The Company has initiated the necessary Gas Depletion Mitigation Option / Gas Depletion Mitigation Plan ("GDMO/GDMP") in accordance with its Implementation Agreement. RLNG has been proposed by the Projects' Committee of the Private Power Infrastructure Board ("PPIB") as the GDMO and the same is currently being processed for the requisite approvals by PPIB. The Company has, in parallel, also explored indigenous gas options that can supplement the use of RLNG and Qadirpur Gas in the Project.

The use of indigenous gas is vastly beneficial for Pakistan in numerous ways. The Company has provided a detailed brief of the advantages of using local fuel, such as PEL Gas, attached herewith as **Schedule 1**. As a summary, the Company notes that, first, the ready availability of additional permeate gas will help ensure that the Project would not be excessively despatched on HSD, a costly fuel that would unnecessarily increase the financial burden upon the GOP. Second, the Company, by procuring local gas, would contribute towards lessening the pressure upon Pakistan's scarce foreign reserves and ensuring energy security and independence for the country. Third, if approval is expeditiously granted for the use of PEL Gas as an alternate, supplementary fuel the Company can ensure the utilization of such permeate gas prior to peak winter season. This is because the Company's Project is already equipped to utilize permeate gas and no additional treatment of the same shall be required, with the exception of minor modifications. Additionally, the Company (as part of its exploration of indigenous gas resources) has assessed that PEL Gas would require a comparably shorter amount of time to set up the necessary physical infrastructure for the supply of gas from the Badar gas fields to the Company's Project. Fourth, in order to expedite the process of utilizing PEL Gas, the Company has written to the Central Power Purchasing Agency-Guarantee ("CPPAG"), the Purchaser under the Power Purchase Agreement of the Company, detailing the key terms of implementation of the PEL Gas option. These key terms are contained in an executed Heads of Terms between the Company and PEL Gas, attached herewith as **Schedule 2**. CPPAG has also issued its in-principle approval of the use of PEL Gas by the Company in its Project and the approval of CPPAG is attached herewith as **Schedule 3**.

The Company would like to take this opportunity to state that subsequent to receiving the in-principle approval from CPPAG, it has immediately commenced initiating the necessary preparations for the efficient procurement of PEL Gas including *inter alia* assessing the infrastructure required for laying down the pipeline for transmission of PEL Gas and the minor modifications to be made to the Company's Complex to start utilizing PEL Gas. Please see **Schedule 4** for a map indicating the proximity of PEL Gas to the Complex. As the Company has detailed above, the turnaround time for utilization of PEL Gas would be approximately thirty days from the date of this application and, if this modification to the Company's Generation License is granted as part of the process of utilizing indigenous fuel, the Complex would be able to produce 18 million units per month on PEL Gas which would be of immense benefit for the oncoming peak winter months from December to March.

We note that per the Regulation of Generation Transmission and Distribution of Electric Power Act, 1997 (the "**NEPRA Act**") provides that "*In performing its functions under this Act, the Authority shall protect interests of consumers and companies providing electric power services in accordance with the principles of transparency*"



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*and impartiality*¹ and in relation to tariffs, shall also *“encourage efficiency in licensees, operations and quality of service.”*²

In view of the on-going energy crisis in the country, we believe that proceeding with the acquisition of PEL Gas is mutually beneficial for all stakeholders, including the end consumers who will benefit from the immediate addition of electricity generated at a more attractive price through the use of local fuel. In light thereof, we would request the Authority to proceed in accepting our application for the modification of the Generation License. We are confident that an expedited approval of the same would allow the Company to play a prominent role in ensuring the utilization of local fuel while bringing economically priced power to the end consumer.

¹ Section 7(6) of the NEPRA Act.

² Section 31(2)(c) of the NEPRA Act.



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ANNEX D

STATEMENT OF THE IMPACT ON THE TARIFF, QUALITY OF SERVICE AND THE PERFORMANCE BY THE LICENSEE OF ITS OBLIGATIONS UNDER THE GENERATION LICENSE

NEPRA vide its determination dated 19.07.2007 bearing reference number NEPRA/R/TRF-72/EEPL-2007/3062-64 issued the reference tariff for the Company, which was subsequently amended vide NEPRA determination dated 23.12.2007 bearing reference number NEPRA/R/TRF-140/EEPL-2009/1346-48. The decision of the Authority in the matter of adjustments at commercial operations date was issued by NEPRA vide its determination dated 03.11.2010 bearing reference number NEPRA/R/TRF-72/EEL-2007/3542-3544 (collectively, the “**Tariff Determinations**”).

The Tariff Determinations had calculated the fuel cost component of the Energy Charge of the Company on the basis of (a) permeate gas obtained from Qadirpur Gas and (b) HSD. Accordingly, the existing mechanism for calculating the fuel cost component contained in the Company’s Tariff Determinations would have to be modified to take into account the availability and use of PEL Gas and the Company shall be subsequently also seeking to amend its Tariff Determination(s) to reflect the amendments to the mechanism of fuel cost component of the Company. However, the Company would like to take this opportunity to clarify that it is not seeking an amendment to the principal terms and conditions of its Tariff Determinations but merely requesting that the existing mechanism of calculating the fuel cost component be updated to include the use of PEL Gas by the Company.

The Company further certifies that quality of service and the performance of the Company of its obligations under the Generation License will not be affected and that the supply of local gas would ensure the provision of cheaper electricity while encouraging energy security for Pakistan.



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ANNEX E

TEXT OF THE PROPOSED MODIFICATION (AS PROVIDED IN RED)

Schedule-I of the Generation License dated 26.07.2007

Plant Details

3. Fuel Details

i.	Primary Fuel	Indigenous Gas Fuels (Permeate, Badar Gas or any Other gas fuel) <ul style="list-style-type: none"> Low BTU Permeate Gas (565-625 btu/scf) from Qadirpur Gas Field Low BTU Gas 8-13 mmscfd (\pm 572 BTU/SCF) from Badar Gas Field
ii.	Alternate/Back-Up Fuel	High-Speed Diesel (HSD)
iii.	Fuel Source (Imported/Indigenous)	Indigenous (Qadirpur) Indigenous (Badar gas field)
iv.	Fuel Supplier	Permeate Gas - Sui Northern Gas Pipeline Limited (SNGPL) Badar Gas - Petroleum Exploration (Private) Limited (PEL)/Shahazad Processing Solutions (Private) Limited (SPS)
v.	Supply Arrangement	Permeate Gas - Through a gas pipeline with an approximate length of 2 kilometres from Qadirpur gas treatment facilities. Badar Gas - Through a gas pipeline with an approximate length of \pm 3 KMs from PEL's sales gas metering station Qadirpur (besides OGDCL Qadirpur gas treatment facilities).



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SCHEDULE 1

Benefits of Fuel Supply from PEL

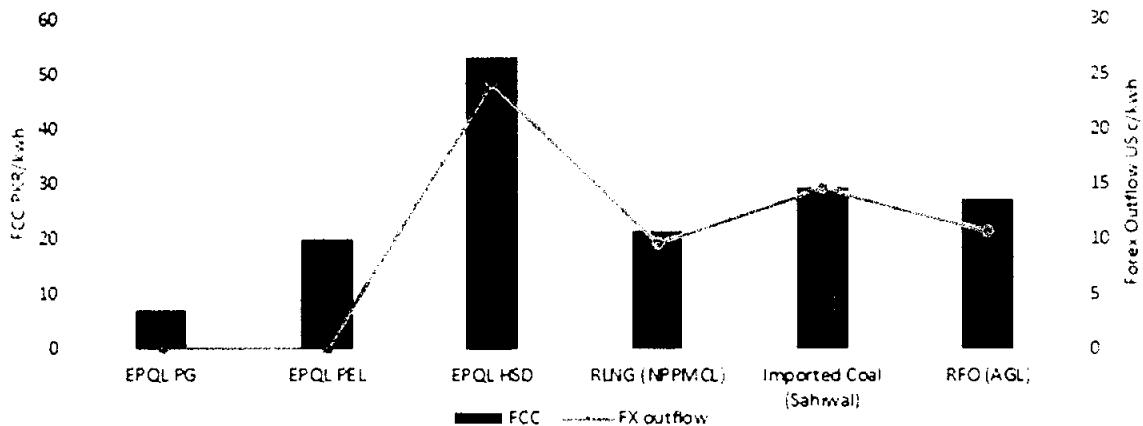
1. EPQL has been exploring additional local fuel sources to supplement its existing Permeate Gas supply, to reduce the burden on the economy due to forex outflow associated with power generation from imported fuels. A feasible indigenous source of fuel as identified by EPQL is gas supply from Badar gas fields operated by PEL.
2. Per the Head of Terms executed between EPQL and PEL, the latter has agreed to supply to EPQL 8 – 13 mmcf/d of gas, which has a heating value of approximately 572 btu/scf. PEL Gas will be available for three years, although the term may be extended subject to the mutual consent of both PEL and EPQL.
3. Since PEL Gas is available in the vicinity of EPQL plant, the Company will be able to guarantee a very quick turn-around time of utilization, effective immediately. The required modifications, in the form *inter alia* of laying down a pipeline and associated cost of implementation, will be incurred by both PEL and EPQL, thereby generating significant returns for the economy without any additional cost burden on end consumers. In the interest of time, both parties have initiated work on the required modification as endorsement from CPPA-G has also been received vide its letter dated 17th October 2022.
4. PEL Gas is priced at a discount of 30% to the prevailing RLNG price being paid to National Power Parks Management Company (Private) Limited (NPPMCL). The prevailing RLNG price is a blended price of spot cargoes and long-term contract-based procurement. EPQL will buy the PEL Gas on “Take and Pay” basis and will not be under any obligation to buy any quantum of fuel at any time from PEL.
5. The indigenous gas supply from PEL will also enable the Company to produce additional power of over 20 MW, translating into generation of ~ 600 million units over the period, which will substitute power generated from imported fuels. At prevailing RLNG prices applicable in Pakistan (USD 15.7/mmBtu), the fuel cost component of EPQL on PEL Gas will be ~PKR 20/ kwh, which will place EPQL higher in the Economic Merit Order as compared to imported fuel-based projects. Please find below a tabular format of the estimated fuel cost component (FCC) of EPQL on various fuels and a chart showing comparative FCC of other alternatives.

Fuel Cost Component EPQL	PKR Per Unit	Merit Order Position excl Gencos on Gas (wrt merit order for Oct 2022)
Permeate Gas	7.1	8
PEL (70% of RLNG Price)	20.1	18 (Above NPPMCL)
RLNG	28.7	29
HSD	53	83

*Exchange rate: 220



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³Based on FCC from August 2022

- If EPQL generates electricity from PEL, the country will be able to substitute forex ranging from USD 19 – 30 million per annum, depending on gas supply and at prevailing RLNG price in Pakistan. It should be noted that due to market dynamics, the current international spot price for RLNG is over twice that of the prevailing contract price applicable for Pakistan and, based on expected RLNG spot rates, forex substitution can be as high as USD 36 – 59 million⁴ per annum.
- Currently, EPQL is available on HSD to the extent of shortfall in Permeate Gas, while RLNG has been narrowed down as the most feasible option for GDMO. Gas supply from PEL will also displace RLNG and HSD in EPQL plant, amounting to USD 26 Mn and USD 48 Mn, respectively.
- The global commodity super cycle (which has resulted in historic high fuel prices) is expected to persist for at least another two years. It is therefore vital that Pakistan reduce the dependence of its growing power sector on imported fuel and to seriously consider EPQL’s readiness and ability to quickly and effectively utilize gas from local sources.

⁴ Spot RLNG of USD 30/mmbtu based on 8-13 mmcf/d @100% load



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SCHEDULE 2

EXECUTED HEADS OF TERMS BETWEEN THE COMPANY AND PEL GAS

PAGE 1

GSA HEAD OF TERMS

STRICTLY CONFIDENTIAL

This GSA Head of Terms (HOT) is executed at Islamabad on 27th day of July 2022

Seller	Petroleum Exploration (Private) Limited or its duly authorized and legally empowered nominee.
Buyer	Engro Powergen Qadirpur Limited (EPQL).
Transaction	Sale and purchase of 8 to 13 MMSCFD of Specified Gas for the purpose of power generation at EPQL's 226 MW Gas-based Power Project at Qadirpur, District Ghotki, Sindh.
Specified Gas	See Annex-A hereto.
Gas Price	70% of the prevailing RLNG price (fuel cost component) being paid to National Power Parks Management Company (Private) Limited under its PPA with CPPA.
Term	Three years from the Effective Date, which will occur when the following conditions have been satisfied: <ol style="list-style-type: none"> 1. Each party has obtained its board of directors' approval. 2. NEPRA has issued the necessary consents to the Buyer to enter into this HOT. 3. PPA has been amended to incorporate the new gas pricing and terms.
Basis of Supply	As and when the Specified Gas is available; on best efforts basis.
Take & Pay Basis	The Buyer shall not be obligated to buy any fixed quantum of Specified Gas at any time. The Buyer shall buy the Specified Gas as and when it requires it.
Payment	The Seller shall submit an invoice at any time after expiry of the calendar month in which any amount of Specified Gas has been supplied. The Buyer shall pay such invoice within 30 days of receipt thereof.
Payment Security	The Buyer shall cause to be issued an SBLC by a reputable bank in Pakistan to secure the Gas Price for 60-days equivalent supply (i.e. 6MMSCFD x 60 x Gas Price applicable on the Effective Date).
Failure to Supply & LDs	The Seller shall indemnify the Buyer in case the Seller is unable to supply the Specified Gas following receipt of the Dispatch Instructions under the PPA. Such indemnification shall be in the form of PKR two million per each event of failure to supply Specified Gas.
Right of First Refusal	The Buyer shall have the right of first refusal in case the Seller finds a potential buyer which offers the Seller a better price. The Seller shall not commit to sell the Specified Gas to a third party if the Buyer is willing to match the price



[Handwritten Signature]

[Handwritten Signature]

PETROLEUM EXPLORATION (PVT) LTD



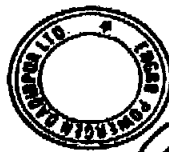
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SCHEDULE 2

EXECUTED HEADS OF TERMS BETWEEN THE COMPANY AND PEL GAS

PAGE 2

	offered by such third party. The Seller shall give 30 days to consider such better offer from the third party and shall disclose the name of such party.
Discount Offer	The Seller shall have the discretion to offer a price discount at any time to ensure maximum sale of the Specified Gas.
Delivery Point	The Seller shall deliver the Specified Gas at the Buyer's powerhouse.
Pipeline	The Seller shall, at its own cost, lay the pipeline from its gas field to the Buyer's powerhouse, within 30 days from the Effective Date. The Seller shall be responsible for all consents and approvals including the right of way to construct, own and operate such pipeline.
Representations & Warranties	Each party represents and warrants that it has all the necessary approvals, consents and licenses (the "Consents") that it may require to enter into this HOT. The Seller has in particular represented that it has already obtained the Consents required by it under law to perform its obligations herein. If a party suffers any loss on account of breach of the aforesaid, the other party shall indemnify the first party for the loss suffered by such party on account of breach of representation.
Governing Law	This HOT shall be governed by the laws of Pakistan.
Dispute Resolution	In case of a dispute of any nature whatsoever, which cannot be amicably settled within 30 days, the courts at Islamabad shall have the exclusive jurisdiction to decide such dispute.
GSA	At the request of the Buyer, this document shall be converted into a gas-supply-agreement (GSA) with such details as are required for a transaction of this nature per the market norm and keeping in view the Buyer's PPA.



PT/2020/01/01/01/01/01



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SCHEDULE 2

EXECUTED HEADS OF TERMS BETWEEN THE COMPANY AND PEL GAS

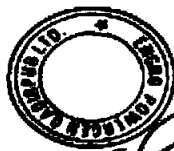
PAGE 3

Annex-A

Gas Specifications:

- Heating Value = ± 572 BTU /SCF
- Moisture Content = < 7 Lbs / MMSCF
- Sp. Gravity = ± 0.7

Gas Composition: Component	Mol%
Carbon dioxide CO ₂	0.54
Nitrogen N ₂	43.86
Hydrogen Sulphide H ₂ S	0
Methane C ₁	54.51
Ethane C ₂	0.70
Propane C ₃	0.18
n-Butane nC ₄	0.05
i-Butane IC ₄	0.05
n-Pentane nC ₅	0.03



POWERGEN QADIRPUR LTD



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SCHEDULE 3

CPPAG IN-PRINCIPLE APPROVAL/NO OBJECTION OF THE USE OF PEL GAS BY THE COMPANY



Central Power Purchasing Agency (Guarantee) Limited



A Company of Government of Pakistan

Office of Chief Executive Officer

No. CTO/DGMT-C/MT-R&G/EPQL/18060-63

Date: 17-10-2022

The Chief Executive Officer
Engro Powergen Qadirpur Limited
The Harbor Front Building, 16th Floor
HC#3, Marine Drive, Block-4, Clifton, Karachi

226 MW CCPP – EPQL Qadirpur

Additional Gas Supply to

Subject: Engro Powergen Qadirpur Limited from Petroleum Exploration Private Limited (PEL)

Reference: EPQL No. Nil dated 29-09-2022

While appreciating EPQL's efforts to explore possibilities of arranging local gas options for its project, we take this opportunity to intimate that CPPA-G shall endorse any option of using local gas at the project for power generation purposes, as it is bound to reduce the pressure on national foreign exchange reserves.

However, if any change is required in the existing tariff of EPQL as a result of proposed use of gas from PEL, NEPA shall have to be approached by EPQL with complete details and relevant comparative analysis for the purposes of Tariff Determination afresh on comingling principles. Moreover, the determination of gas price for aforesaid purpose, we understand, is the sole prerogative of OGRA, as such, requisite regulatory synchronization may also please be coordinated accordingly.


Chief Technical Officer
CPPA-G Islamabad

Copy to:

1. Chief Executive Officer, CPPA-G Islamabad.
2. Chief Financial Officer, CPPA-G Islamabad.
3. Chief Legal Officer, CPPA-G Islamabad.
 - Master File.

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