

National Electric Power Regulatory Authority
Registrar Office

No: NEPRA/R/TRF-100/GAEL/ 2620

February 14, 2019

Subject: Tariff Petition for Reference Generation Tariff –Gul Ahmed Energy Limited

Please find enclosed herewith the subject tariff petition submitted by Gul Ahmed Energy Limited (GAEL) vide letter dated 13.02.2019 (received on 14.02.2019) for determination of tariff for its 136.17 MW (Gross) MW RFO based Power Project at Korangi Industrial Township, Karachi, Sindh.

2. The deficient information in the subject tariff petition, if any, shall be classified that it is required under Rule 3(2) & (8) of NEPRA (Tariff Standards & Procedure) Rules, 1998 (Tariff Rules) or an additional information is required under Rule 4(2) of the Tariff Rules.

3. The Senior Advisor (Tariff-I), Senior Advisor (Technical), DG(M&E), ADG (Licensing) and Legal Advisor (KIP) are requested to provide their comments that whether the provided information / documents by GAEL are complete as per the requirements of Tariff Rules for admission or highlight / mention the shortcomings, if any, which may cause non-admission of the subject petition.

4. The requisite comments may kindly be provided by 16.02.2019 for further necessary action in the matter, please.

(Iftikhar Ali Khan)
Director

1. SA (Tech)
2. SA(T-I)
3. DG(M&E)
4. ADG (Licensing)
5. LA (KIP)

Dr. F. I. Khan
15/2
Comments provided on 5-3-19.

Copy for information:

1. Registrar
2. Assistant Registrar (Tariff) [to pursue]
3. Master File

Senior Advisor (Tariff-I)
No. 1546
Date: 14-2-19



Gul Ahmed Energy Limited

F-NEPRA-L19-00489

February 13th, 2019

To,

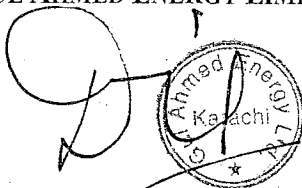
THE REGISTRAR,
NATIONAL ELECTRIC POWER REGULATORY AUTHORITY,
NEPRA Tower, Attaturk Avenue (East),
Sector G-5/1,
Islamabad,
Pakistan.

Re: GUL AHMED ENERGY LIMITED - TARIFF PETITION FOR REFERENCE GENERATION TARIFF

Dear Sir:

1. I, Danish Iqbal, the Executive Director of Gul Ahmed Energy Limited, being the duly Authorized Representative of **GUL AHMED ENERGY LIMITED** (a company duly established and existing under the laws of Pakistan with its Principle Office located at 7th Floor Al-Tijarah Centre, 32 - 1 - A, Block - 6, P.E.C.H.S, Main Shara-e-Faisal, Karachi, Pakistan) (the **Petitioner**), hereby submit the application for Reference Generation Tariff (the **Tariff Petition**), under the 'Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997' (the **NEPRA Act**) and the rules and regulations made thereunder including the NEPRA (Tariff Standards and Procedure) Rules, 1996 (the **NEPRA Rules**), before **NATIONAL ELECTRIC POWER REGULATORY AUTHORITY** (the **Authority**), for the Authority's kind consideration and approval.
2. A Pay Order No. 06048879 dated February 07th, 2019 amounting to PKR 1,639,200/- (Pakistani Rupees One Million Six Hundred and Thirty Nine Thousand Two Hundred only) drawn in favour of the Authority, issued by Bank Al-Habib Limited, is also enclosed herewith.
3. I certify that the documents-in-support attached with the Tariff Petition are prepared and submitted in conformity with the prevailing provisions of the NEPRA Act and NEPRA Rules. I further undertake and confirm that the information provided in the attached documents-in-support are true and correct to the best of my knowledge and belief.
4. In light of the submissions set out in the Tariff Petition and the information attached to the same, the Authority is kindly requested to process the Tariff Petition at the earliest, thereby enabling the Petitioner to proceed further with meeting the objectives, as set out in the therein.

Respectfully submitted,
FOR AND ON BEHALF OF:
GUL AHMED ENERGY LIMITED



MR. DANISH IQBAL
(EXECUTIVE DIRECTOR & AUTHORIZED REPRESENTATIVE)

For information & u/s

- DR-I/AR

- ME

copy to:

SAT-1

14/2/19

cc: VC/MCA

- MEI

- MLC

Received at Registrar's Office
13/2/19
14/2/19

REGISTRAR
13/2/19
14-02-19
Dy. No.:
Dated:

Account Payee Only

Bank AL Habib Limited

1003 SHAHRA-E-FAISAL
BUSINESS CENTRE, PLOT 19-1-A, BLOCK 6,
P.E.C.H.S. SHAHRA-E-FAISAL, KARACHI

Pay to NATIONAL ELECTRIC POWER REGULATORY AUTHORITY A/C GUL AHMED OF Order
ENERGY LTD

Rupees — PAKISTANI RUPEES ONE MILLION SIX HUNDRED THIRTY NINE THOUSAND TWO
HUNDRED ONLY

PAYABLE AT ANY BRANCH IN PAKISTAN

Valid for Twelve Months from the date of issuance

Please do not write below this line



B.C. No 06048879

Stationery/Ref No 00168552/2019 97

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PKR

*****1,639,200.00

Signature
PA/Attorney No

Signature
PA/Attorney No

0604887902388888

0201

Mirza M. Mousa
PA/Attorney

BEFORE
THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (NEPRA)

TARIFF PETITION
FOR
REFERENCE GENERATION TARIFF

PURSUANT TO
ENABLING PROVISIONS OF NEPRA ACT, 1997
READ WITH ENABLING PROVISIONS OF
RULES & REGULATIONS MADE THEREUNDER

ON BEHALF OF

GUL AHMED ENERGY LIMITED

FOR NEPRA'S APPROVAL OF REFERENCE GENERATION TARIFF
FOR
GUL AHMED ENERGY LIMITED

RELATING TO A THERMAL POWER GENERATION FACILITY OF 136.17 MW (GROSS)

LOCATED AT

KORANGI INDUSTRIAL TOWNSHIP, KARACHI, SINDH, PAKISTAN

DATED: FEBRUARY 13, 2019

LEGAL & REGULATORY CONSULTANT

HAIDERMOTABNR & Co.

KARACHI OFFICE
D-79, BLOCK 5, KDA SCHEME 5, CLIFTON
KARACHI, PAKISTAN
TEL: +92-21-111520000
FAX: +92-21-35871054
EMAIL: hmcobnr@hmcobnr.com

PETITIONER

GUL AHMED ENERGY LIMITED

PRINCIPLE OFFICE
7TH FLOOR, AL-TJARAH CENTRE, 32-1-A,
BLOCK 6, P.E.C.H.S, MAIN SHAHRA-E-
FAISAL ROAD, KARACHI, PAKISTAN
TEL: +92-21-34540270-73
FAX: +92-21-34540274
EMAIL: office@gaenergy.com

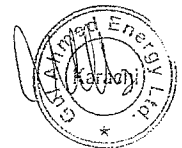


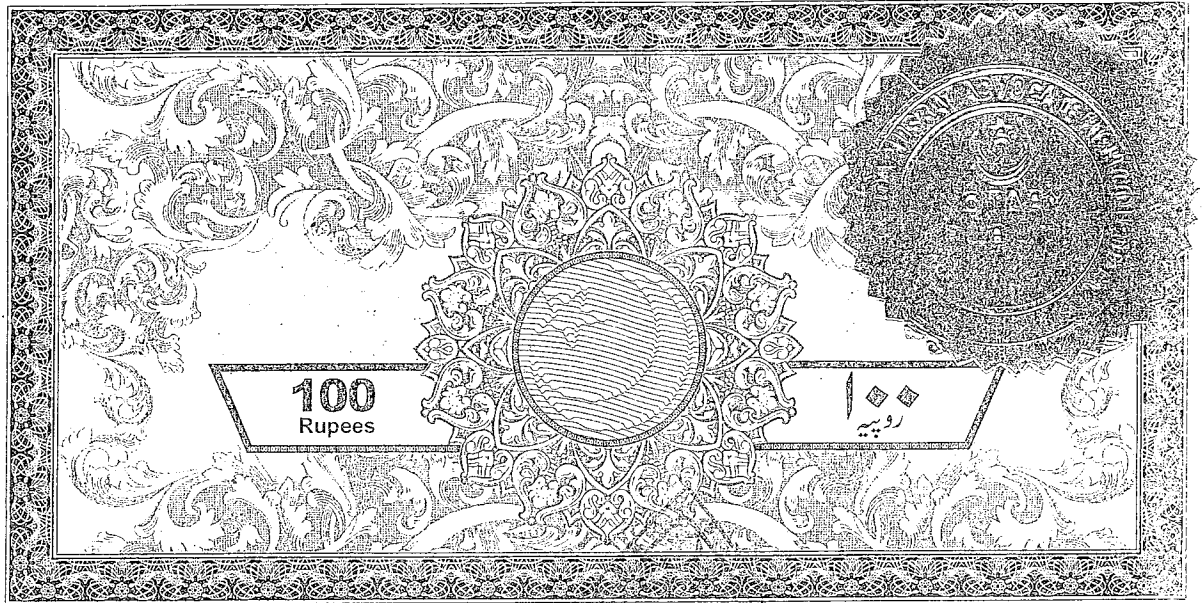
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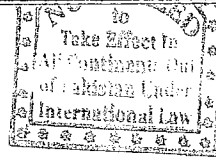
**COPY
OF
AFFIDAVITS OF AUTHORIZED REPRESENTATIVES OF
GUL AHMED ENERGY LIMITED**





ZAFAR ULLAHA KHAN Stamp Vendor
Licence No. 99 Shop No. 412
4th Floor Tahir Plaza, Near City Court Karachi.

SNCD 498 DATE 08 FEB 2019
ISSUED TO WITH ADDRESS Abdullah Ahmed
THROUGH WITH ADDRESS ADVOCATE
PURPOSE _____
VALUE RS. _____
STAMP VENDOR SIGNATURE _____
NOT USE FOR FREE WILL & DIVORCE PURPOSE



(RUPEES ONE HUNDRED ONLY)

BEFORE

THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

AFFIDAVIT of IQBAL ALIMOHAMED son of MR. ALIMOHAMED, resident of KDA Scheme 1 Extension, H.No. B-841-A, Karachi East, Pakistan and holding CNIC No. 42201-2214140-7 (the **Deponent**), being the Chief Executive Officer of GUL AHMED ENERGY LIMITED (a company duly established and existing under the laws of Pakistan with its principle office located at 7th Floor Al-Tijarah Centre, 32 - 1 - A, Block - 6, P.E.C.H.S, Main Shara-e-Faisal, Karachi, Pakistan and registered office located at Plot No. 8, Sector Model Village, Humak, Islamabad, Pakistan).

I, the above-named Deponent, do hereby solemnly affirm and declare that:

- I am the Chief Executive Officer of GUL AHMED ENERGY LIMITED (a company duly established and existing under the laws of Pakistan with its principle office located at 7th Floor Al-Tijarah Centre, 32 - 1 - A, Block - 6, P.E.C.H.S, Main Shara-e-Faisal, Karachi, Pakistan and registered office located at Plot No. 8, Sector Model Village, Humak, Islamabad, Pakistan) (the **Petitioner**).
- For the purposes of preparation, finalization, submission and filing (including all matters in respect of the same), on behalf of the Petitioner, of the accompanying tariff petition (including all supporting documents attached thereto) dated February 08th, 2019 (the **Tariff Petition**) before the NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (the **Authority**) and for the purposes of further representing the Petitioner and performing all acts and deeds, on behalf of the Petitioner in respect of the Tariff Petition, I am the principal authorized representative/attorney of the Petitioner in terms of the authority and powers vested in and conferred on ME, the Deponent, vide the duly passed resolution(s) of the board of directors (the **Board**) of the Petitioner dated 13th September, 2018.
- The contents of the accompanying Tariff Petition are true and correct to the best of my knowledge and belief, and nothing material or relevant thereto has been concealed or withheld therefrom.
- All further documentation and information to be provided by ME, the Deponent, on behalf of the Petitioner, in connection with the aforesaid Tariff Petition shall be true and correct to the best of my knowledge and belief.

VERIFICATION

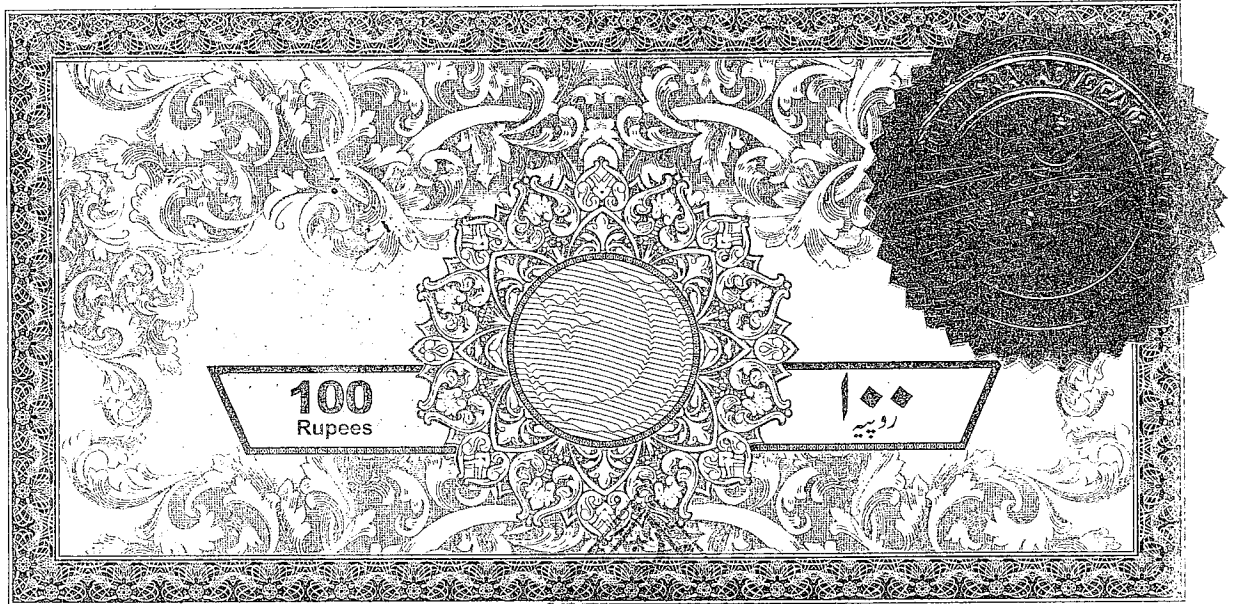
It is hereby verified on solemn affirmation at Karachi, Pakistan on this 08th day of February 2019, that the contents of the above Affidavit are true and correct to the best of MY knowledge and belief, and that nothing material or relevant thereto has been concealed or withheld therefrom to the best of MY knowledge and belief.



ATTESTED
[Signature]
KHALIDA NUSRAT
B.A. (HONORIS CAUSA) LL.B
ADVOCATE & NOTARY PUBLIC
KARACHI PAKISTAN

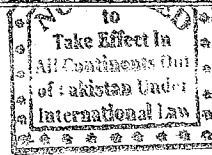


DEPONENT



JAFAR ULLAH KHAN Stamp Vendor
Licence No. 99 Shop No. 412
4th Floor Tahir Plaza, Near City Court Karachi
SNO. 14512 DATE. 08 FEB 2019

ISSUED TO WITH ADDRESS Muhammad Ahmed
THROUGH WITH ADDRESS ADVOCATE
PURPOSE NOT USE FOR FREE WILL & DIVORCE PURPOSE
VALUE RS. 100
STAMP VENDOR SIGNATURE [Signature]



ONE HUNDRED ONLY

BEFORE

THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

AFFIDAVIT of MR. DANISH IQBAL son of MR. IQBAL ALIMOHAMED, resident of KDA Scheme I Extension, H.No. B-84/1-A, Karachi East, Pakistan and holding CNIC No. 42201-4584613-1 (the Deponent), being the Executive Director of GUL AHMED ENERGY LIMITED (a company duly established and existing under the laws of Pakistan with its principle office located at 7th Floor Al-Tijarah Centre, 32 - 1 - A, Block - 6, P.E.C.H.S, Main Shara-e-Faisal, Karachi, Pakistan and registered office located at Plot No. 8, Sector Model Village, Humak, Islamabad, Pakistan).

I, the above-named Deponent, do hereby solemnly affirm and declare that:

- I am the Executive Director of GUL AHMED ENERGY LIMITED (a company duly established and existing under the laws of Pakistan with its principle office located at 7th Floor Al-Tijarah Centre, 32 - 1 - A, Block - 6, P.E.C.H.S, Main Shara-e-Faisal, Karachi, Pakistan and registered office located at Plot No. 8, Sector Model Village, Humak, Islamabad, Pakistan) (the Petitioner).
- For the purposes of preparation, finalization, submission and filing (including all matters in respect of the same), on behalf of the Petitioner, of the accompanying tariff petition (including all supporting documents attached thereto) dated February 08th, 2019 (the Tariff Petition) before the NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (the Authority) and for the purposes of further representing the Petitioner and performing all acts and deeds, on behalf of the Petitioner, in respect of the Tariff Petition, I am the principal authorized representative/attorney of the Petitioner in terms of the authority and powers vested in and conferred on ME, the Deponent, vide the duly passed resolution(s) of the board of directors (the Board) of the Petitioner dated 13th September, 2018.
- The contents of the accompanying Tariff Petition are true and correct to the best of my knowledge and belief, and nothing material or relevant thereto has been concealed or withheld therefrom.
- All further documentation and information to be provided by ME, the Deponent, on behalf of the Petitioner, in connection with the aforesaid Tariff Petition shall be true and correct to the best of my knowledge and belief.

[Signature]
GUL AHMED ENERGY LIMITED
Karachi
DEPONENT

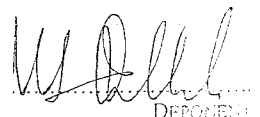
VERIFICATION

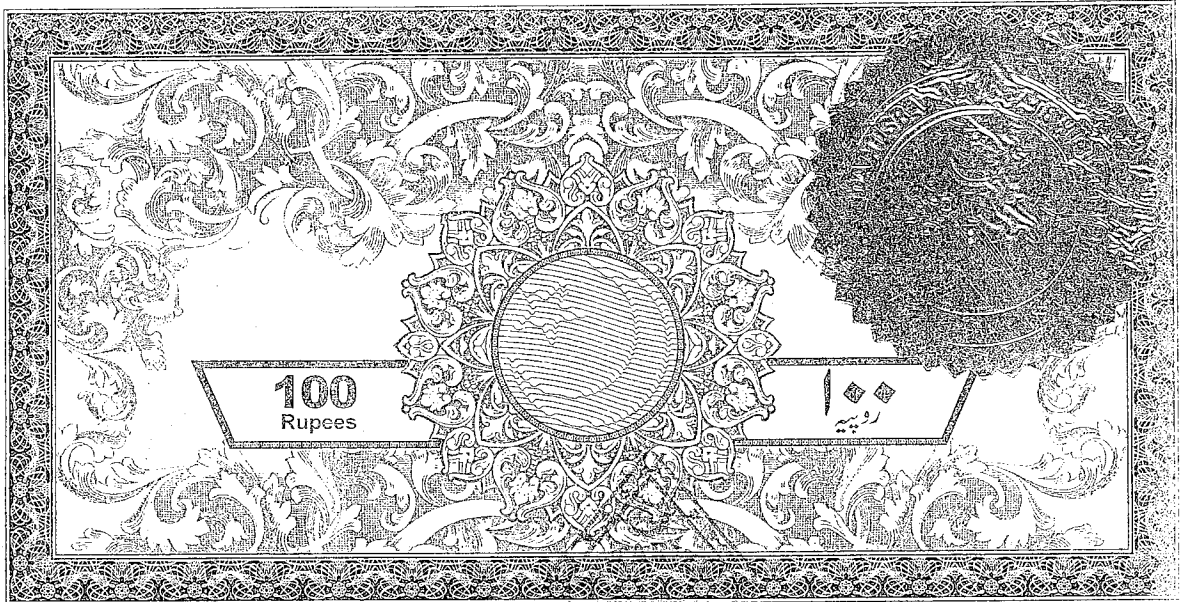
It is hereby verified on solemn affirmation at Karachi, Pakistan on this 08th day of February 2019, that the contents of the above Affidavit are true and correct to the best of MY knowledge and belief, and that nothing material or relevant thereto has been concealed or withheld therefrom to the best of MY knowledge and belief.



ATTESTED
Nusrat Ali
NUSRAT ALI
ADVOCATE & NOTARY PUBLIC
PUNJAB, PAKISTAN

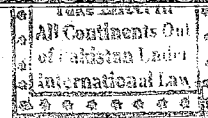
[Signature]
DEPONENT





ZAFAR ULLAH KHAN Stamp Vendor
Licence No. 22 Shop No. 412
4th Floor, Tamar Plaza, near City Court Karachi
SNO. 11206 DATE: 31 JAN 2019

ISSUED TO WITH ADDRESS: **Muhammad Ahmed**
THROUGH WITH ADDRESS: **ADVOCATE**
PLACE OF: _____
VALUE OF: _____
STAMP VENDOR SIGNATURE: _____
NOT USE FOR FREE WILL & DIVORCE PURPOSE



RUPEES ONE HUNDRED ONLY

BEFORE
THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

AFFIDAVIT of MUHAMMED AMIN BHIMANI son of MR. NOOR MUHAMMED Y. BHIMANI, resident of House No. E-31, Block No. 3, Mohalla Usman Plaza, Gulshan-e-Iqbal, Karachi, Pakistan and holding CNIC No. 42201-0545032-3 (the Deponent), being the Chief Financial Officer and Company Secretary of **GUL AHMED ENERGY LIMITED** (a company duly established and existing under the laws of Pakistan with its principle office located 7th Floor Al-Tijarah Centre, 32 - 1 - A, Block - 6, P.E.C.H.S, Main Shara-e-Faisal, Karachi, Pakistan and registered office located at Plot No. 8, Sector Model Village, Humak, Islamabad, Pakistan).

I, the above-named Deponent, do hereby solemnly affirm and declare that:

- I am the Chief Financial Officer and Company Secretary of **GUL AHMED ENERGY LIMITED** (a company duly established and existing under the laws of Pakistan with its principle office located at 7th Floor Al-Tijarah Centre, 32 - 1 - A, Block - 6, P.E.C.H.S, Main Shara-e-Faisal, Karachi, Pakistan and registered office located at Plot No. 8, Sector Model Village, Humak, Islamabad, Pakistan) (the **Petitioner**).
- For the purposes of preparation, finalization, submission and filing (including all matters in respect of the same), on behalf of the Petitioner, of the accompanying tariff petition (including all supporting documents attached thereto) dated February 08th, 2019 (the **Tariff Petition**) before the **NATIONAL ELECTRIC POWER REGULATORY AUTHORITY** (the **Authority**) and for the purposes of further representing the Petitioner and performing all acts and deeds, on behalf of the Petitioner, in respect of the Tariff Petition, I am the principal authorized representative/attorney of the Petitioner in terms of the authority and powers vested in and conferred on ME, the Deponent, vide the duly passed resolution(s) of the board of directors (the **Board**) of the Petitioner dated 13th September, 2018.
- The contents of the accompanying Tariff Petition are true and correct to the best of my knowledge and belief, and nothing material or relevant thereto has been concealed or withheld therefrom.
- All further documentation and information to be provided by ME, the Deponent, on behalf of the Petitioner, in connection with the aforesaid Tariff Petition shall be true and correct to the best of my knowledge and belief.

Muhammad Amin Bhimani
DEPONENT

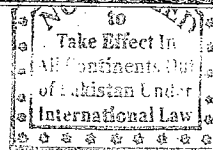
VERIFICATION

It is hereby verified on solemn affirmation at Karachi, Pakistan on this 08th day of February 2019, that the contents of the above Affidavit are true and correct to the best of MY knowledge and belief, and that nothing material or relevant thereto has been concealed or withheld therefrom to the best of MY knowledge and belief.



ATTESTED
Khaidanusrat
KHAIIDANUSRAT
MA (LAW) MA (B) LL.B
ADVOCATE & NOTARY PUBLIC
KARACHI PAKISTAN

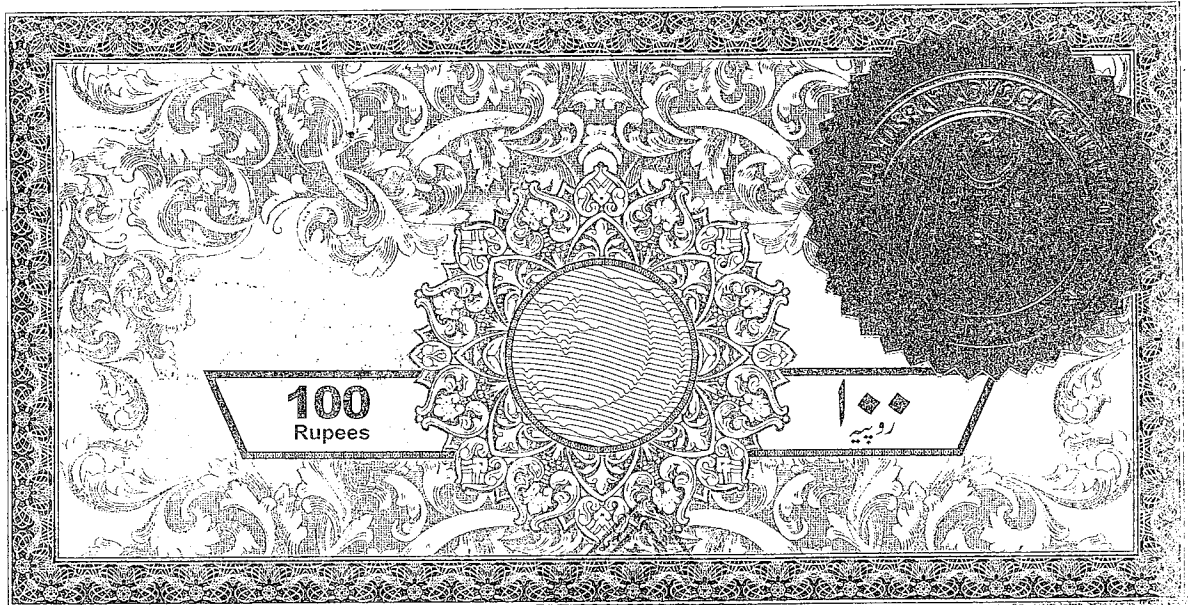
Muhammad Amin Bhimani
DEPONENT



NOT USE FOR FREE WILL & DIVORCE PURPOSE

IMHALEDA NUSRAT
MA (1980) BA (LR) LL.B
ADVOCATE & NOTARY PUBLIC
KARACHI PAKISTAN

DEPONENT



ZAFAR ULLA KHAN Stamp Vendor
Licence No. 99 Shop No. 412
4th Floor Tahir Plaza, Near City Court Karachi

SNO. 14516 DATE

ISSUED TO WITH ADDRESS

THROUGH WITH ADDRESS

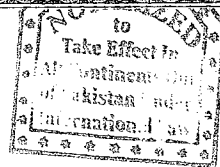
PURPOSE

VALUE RS.

STAMP VENDOR SIGNATURE

NOT USE FOR FREE WILL & DIVORCE PURPOSE

08 FEB 2019



ONE HUNDRED

BEFORE
THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

AFFIDAVIT of SULEMAN MODI son of MR. JUMA MODI, resident of House No. D-89/B, Beverly Homes, Block 7, Clifton, Karachi, Pakistan and holding CNIC No. 42000-0521009-5 (the Deponent), being the Attorney of GUL AHMED ENERGY LIMITED (a company duly established and existing under the laws of Pakistan with its principle office located 7th Floor, Al-Tijarah Centre, 32 - 1 - A, Block - 6, P.E.C.H.S, Main Shara-e-Faisal, Karachi, Pakistan and registered office located at Plot No. 8, Sector Model Village, Humak, Islamabad, Pakistan).

I, the above-named Deponent, do hereby solemnly affirm and declare that:

- I am the Attorney of GUL AHMED ENERGY LIMITED (a company duly established and existing under the laws of Pakistan with its principle office located at 7th Floor Al-Tijarah Centre, 32 - 1 - A, Block - 6, P.E.C.H.S, Main Shara-e-Faisal, Karachi, Pakistan and registered office located at Plot No. 8, Sector Model Village, Humak, Islamabad, Pakistan) (the Petitioner).
- For the purposes of preparation, finalization, submission and filing (including all matters in respect of the same), on behalf of the Petitioner, of the accompanying tariff petition (including all supporting documents attached thereto) dated February 08th, 2019 (the Tariff Petition) before the NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (the Authority) and for the purposes of further representing the Petitioner and performing all acts and deeds, on behalf of the Petitioner, in respect of the Tariff Petition, I am the principal authorized representative/attorney of the Petitioner in terms of the authority and powers vested in and conferred on ME, the Deponent, vide the duly passed resolution(s) of the board of directors (the Board) of the Petitioner dated 13th September, 2018.
- The contents of the accompanying Tariff Petition are true and correct to the best of my knowledge and belief, and nothing material or relevant thereto has been concealed or withheld therefrom.
- All further documentation and information to be provided by ME, the Deponent, on behalf of the Petitioner, in connection with the aforesaid Tariff Petition shall be true and correct to the best of my knowledge and belief.

VERIFICATION

It is hereby verified on solemn affirmation at Karachi, Pakistan on this 08th day of February 2019, that the contents of the above Affidavit are true and correct to the best of MY knowledge and belief, and that nothing material or relevant thereto has been concealed or withheld therefrom to the best of MY knowledge and belief.

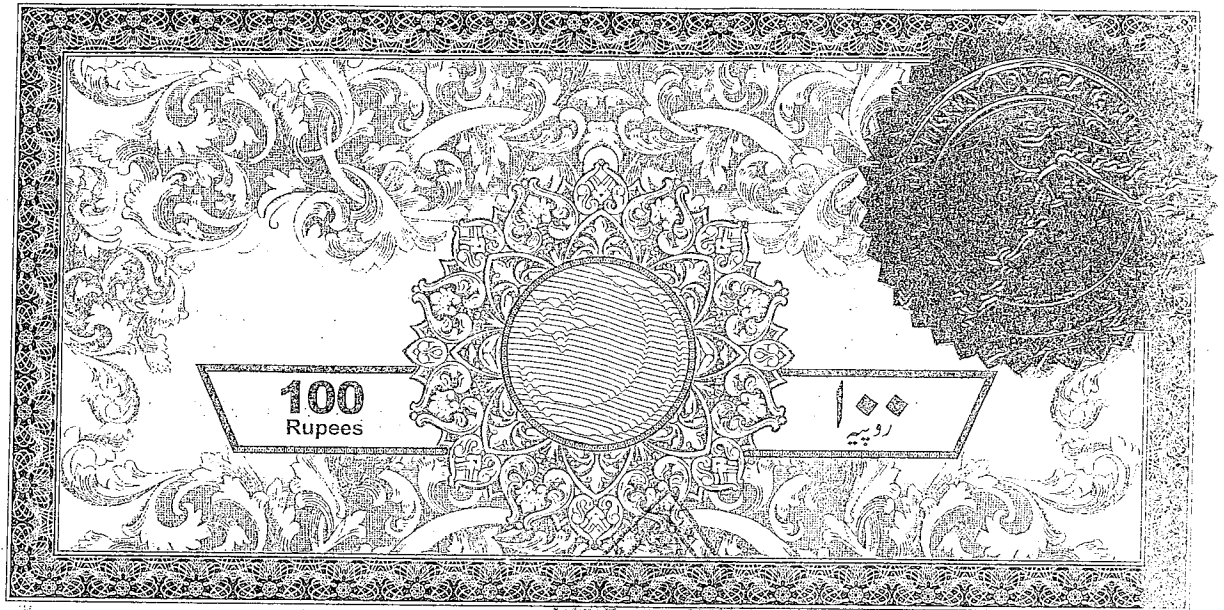


ATTESTED

KHAUDA NUSRAT
MA (HON) MA (HON) LL.B
ADVOCATE & NOTARY PUBLIC
KARACHI PAKISTAN



DEPONENT



ZAFAR ULLAH KHAN Stamp Vendor

Licence No. 99 Shop No. 412

4th Floor, 1st Floor, Near City Court Karachi

SAC 11202 DATE 13 1 JAN 2019

ISSUED TO WITH ADDRESS

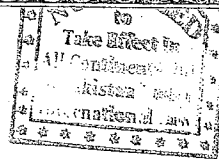
THROUGH WITH ADDRESS

PURPOSE

NAME OF

S. BANK DEPOSITOR SIGNATURE

DATE AND PLACE OF DEPOSIT



RUPEES ONE HUNDRED ONLY

BEFORE

THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

AFFIDAVIT of SAAD IQBAL son of MR. IQBAL ALIMOHAMED, resident of KDA Scheme 1 Extension, House No. B-24/1-A, Karachi East, Pakistan and holding CNIC No. 42201-9911226-5 (the Deponent), being the Attorney of **GUL AHMED ENERGY LIMITED** (a company duly established and existing under the laws of Pakistan with its principle office located 7th Floor Al-Tijarah Centre, 32 - 1 - A, Block - 6, P.E.C.H.S, Main Shara-e-Faisal, Karachi, Pakistan and registered office located at Plot No. 8, Sector Model Village, Humak, Islamabad, Pakistan).

I, the above-named Deponent, do hereby solemnly affirm and declare that:

- I am the Attorney of **GUL AHMED ENERGY LIMITED** (a company duly established and existing under the laws of Pakistan with its principle office located at 7th Floor Al-Tijarah Centre, 32 - 1 - A, Block - 6, P.E.C.H.S, Main Shara-e-Faisal, Karachi, Pakistan and registered office located at Plot No. 8, Sector Model Village, Humak, Islamabad, Pakistan) (the Petitioner).
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- All further documentation and information to be provided by ME, the Deponent, on behalf of the Petitioner, in connection with the aforesaid Tariff Petition shall be true and correct to the best of my knowledge and belief.

VERIFICATION

It is hereby verified on solemn affirmation at Karachi, Pakistan on this 08th day of February 2019, that the contents of the above Affidavit are true and correct to the best of MY knowledge and belief, and that nothing material or relevant thereto has been concealed or withheld therefrom to the best of MY knowledge and belief.

**ATTESTED**

KHALIDA NUSRAT
B.A. (HON) MA (H) LL.B
ADVOCATE & NOTARY PUBLIC
KARACHI PAKISTAN



DEPONENT

**COPY OF
EXTRACT OF
RESOLUTION PASSED BY
BOARD OF DIRECTOR OF
GUL AHMED ENERGY LIMITED**





Gul Ahmed Energy Limited

EXTRACT OF THE RESOLUTIONS PASSED IN THE MEETING OF THE BOARD OF DIRECTORS OF GUL AHMED ENERGY LIMITED (THE "COMPANY") HELD ON THURSDAY 13 SEPTEMBER 2018 AT 7TH FLOOR, AL-TIJARAH CENTRE, 32-1-A, BLOCK 6, PECHS, MAIN SHARAE FAISAL, KARACHI

Petition for Generation License and Tariff Determination

The Board was informed that the current Generation License is due to expire on 25 August 2019 shortly before the expiry of PPA which is 02 November 2019. Further extension in Generation License is also required as the Company is in the process of applying for Tariff Determination with NEPRA for further period of 10 years. The Board unanimously passed the following resolution.

"Unanimously Resolved, Gul Ahmed Energy Limited ("Company") be and is hereby authorized to file a Licensee Proposed Modification of Generation License Application, Power Sale Proposal & Tariff Petition for its 136.17 MW (Gross ISO) oil fired thermal power plant located at Korangi Industrial Area, Karachi, for submission to the National Electric Power Regulatory Authority ("NEPRA") for modification of the Company's Generation License, Power Sale Proposal & Tariff Petition and in relation thereto, through its authorized representative, enter into and execute all required documents, make all filings, attend all hearings, provide all required information and pay all applicable fees, of any nature whatsoever.

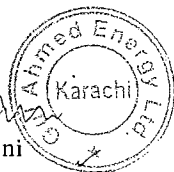
Further Resolved that, in respect of the Licensee Proposed Modification of the Generation License of the Company, Power Sale Proposal & Tariff Petition Mr. Iqbal Alimohamed, Chief Executive Officer of the Company, Mr. Ubaid Amanullah, Executive Director of the Company, Mr. Danish Iqbal, Executive Director of the Company, Mr. Amin Bhimani, Chief Financial Officer and Company Secretary of the Company, Mr. M. Yousuf Aziz, Senior Manager Accounts of the Company, Mr. Saad Iqbal, and Mr. Suleman Modi, Attorneys of the Company, be and are hereby singly empowered and authorized for and on behalf of the Company to:

- (i) Review, execute, submit and deliver the Licensee Proposed Modification of Generation License, Power Sale Proposal & Tariff Petition and any related documentation required by NEPRA for the award of a Modified Generation License & Tariff Petition including any contracts, documents, power of attorneys, affidavits, statements, letters, forms, applications, deeds, guarantees, undertakings, approvals, memorandums, amendments, letters, communications, notices, certificates, requests statements and any other instruments of any nature whatsoever;
- (ii) Represent the Company in all negotiations, representations, presentations, hearings, conferences and/or meetings of any nature whatsoever with any entity (including, but not limited to NEPRA, any private parties, companies, partnerships, individuals, governmental and/or semi-governmental authorities and agencies, ministries, boards, departments, regulatory authorities and/or any other entity of any nature whatsoever);
- (iii) Sign and execute the necessary documentation, pay the necessary fees, appear before NEPRA as needed, and do all acts necessary for completion and processing of the award of Modified Generation License & Tariff Petition of the Company from NEPRA;
- (iv) Appoint or nominate any one or more officers of the Company or any other person or persons, singly or jointly, in their discretion to communicate with, make presentations to and attend any hearings in connection with the Licensee Proposed Modification of the Company's Generation License & Tariff Petition; and
- (v) Do all such acts, matters and things as may be necessary for carrying out the purposes aforesaid and giving full effect to the above resolution(s) including to engage legal counsel to represent the Company before NEPRA in relation to the Company's 136.17 MW oil fired thermal power plant located at Korangi Industrial Area, Karachi and to undertake any matters necessary or incidental thereto.

'Further Resolved that, Mr. Iqbal Alimohamed, Chief Executive Officer of the Company, Mr. Ubaid Amanullah, Executive Director of the Company, Mr. Danish Iqbal, Executive Director of the Company, Mr. Amin Bhimani, Chief Financial Officer and Company Secretary of the Company, Mr. M. Yousuf Aziz, Senior Manager Accounts of the Company, Mr. Saad Iqbal, and Mr. Suleman Modi, Attorneys of the Company, be and are hereby singly authorized to delegate all or any of the above powers in respect of the foregoing to any other officials of the Company as deemed appropriate."

Certified to be true copy

Muhammed Amin Bhimani
Company Secretary





Gul Ahmed Energy Limited

EXTRACT OF THE RESOLUTIONS PASSED IN THE MEETING OF THE BOARD OF DIRECTORS OF GUL AHMED ENERGY LIMITED (THE "COMPANY") HELD ON THURSDAY 13 SEPTEMBER 2018 AT 7TH FLOOR, AL-TIJARAH CENTRE, 32-1-A, BLOCK 6, PECHS, MAIN SHARAE FAISAL, KARACHI

Petition for Generation License and Tariff Determination

The Board was informed that the current Generation License is due to expire on 25 August 2019 shortly before the expiry of PPA which is 02 November 2019. Further extension in Generation License is also required as the Company is in the process of applying for Tariff Determination with NEPRA for further period of 10 years. The Board unanimously passed the following resolution.

"Unanimously Resolved, Gul Ahmed Energy Limited ("Company") be and is hereby authorized to file a Licensee Proposed Modification of Generation License Application, Power Sale Proposal & Tariff Petition for its 136.17 MW (Gross ISO) oil fired thermal power plant located at Korangi Industrial Area, Karachi, for submission to the National Electric Power Regulatory Authority ("NEPRA") for modification of the Company's Generation License, Power Sale Proposal & Tariff Petition and in relation thereto, through its authorized representative, enter into and execute all required documents, make all filings, attend all hearings, provide all required information and pay all applicable fees, of any nature whatsoever.

Further Resolved that, in respect of the Licensee Proposed Modification of the Generation License of the Company, Power Sale Proposal & Tariff Petition Mr. Iqbal Alimohamed, Chief Executive Officer of the Company, Mr. Ubaid Amanullah, Executive Director of the Company, Mr. Danish Iqbal, Executive Director of the Company, Mr. Amin Bhimani, Chief Financial Officer and Company Secretary of the Company, Mr. M. Yousuf Aziz, Senior Manager Accounts of the Company, Mr. Saad Iqbal, and Mr. Suleman Modi, Attorneys of the Company, be and are hereby singly empowered and authorized for and on behalf of the Company to:

- (i) Review, execute, submit and deliver the Licensee Proposed Modification of Generation License, Power Sale Proposal & Tariff Petition and any related documentation required by NEPRA for the award of a Modified Generation License & Tariff Petition including any contracts, documents, power of attorneys, affidavits, statements, letters, forms, applications, deeds, guarantees, undertakings, approvals, memorandums, amendments, letters, communications, notices, certificates, requests statements and any other instruments of any nature whatsoever;
- (ii) Represent the Company in all negotiations, representations, presentations, hearings, conferences and/or meetings of any nature whatsoever with any entity (including, but not limited to NEPRA, any private parties, companies, partnerships, individuals, governmental and/or semi-governmental authorities and agencies, ministries, boards, departments, regulatory authorities and/or any other entity of any nature whatsoever);
- (iii) Sign and execute the necessary documentation, pay the necessary fees, appear before NEPRA as needed, and do all acts necessary for completion and processing of the award of Modified Generation License & Tariff Petition of the Company from NEPRA;
- (iv) Appoint or nominate any one or more officers of the Company or any other person or persons, singly or jointly, in their discretion to communicate with, make presentations to and attend any hearings in connection with the Licensee Proposed Modification of the Company's Generation License & Tariff Petition; and
- (v) Do all such acts, matters and things as may be necessary for carrying out the purposes aforesaid and giving full effect to the above resolution(s) including to engage legal counsel to represent the Company before NEPRA in relation to the Company's 136.17 MW oil fired thermal power plant located at Korangi Industrial Area, Karachi and to undertake any matters necessary or incidental thereto.

'Further Resolved that, Mr. Iqbal Alimohamed, Chief Executive Officer of the Company, Mr. Ubaid Amanullah, Executive Director of the Company, Mr. Danish Iqbal, Executive Director of the Company, Mr. Amin Bhimani, Chief Financial Officer and Company Secretary of the Company, Mr. M. Yousuf Aziz, Senior Manager Accounts of the Company, Mr. Saad Iqbal, and Mr. Suleman Modi, Attorneys of the Company, be and are hereby singly authorized to delegate all or any of the above powers in respect of the foregoing to any other officials of the Company as deemed appropriate."

Certified to be true copy


Muhammed Amin Bhimani*
Company Secretary

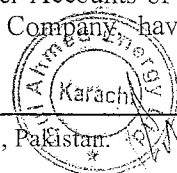




Gul Ahmed Energy Limited

EXTRACT OF THE RESOLUTIONS PASSED IN THE MEETING OF THE BOARD OF DIRECTORS OF GUL AHMED ENERGY LIMITED (THE "COMPANY") HELD ON THURSDAY 27 DECEMBER 2018 AT 7TH FLOOR, AL-TIJARAH CENTRE, 32-1-A, BLOCK 6, PECHS, MAIN SHARAE FAISAL, KARACHI

- (A) **RESOLVED THAT, GUL AHMED ENERGY LIMITED** (a private company duly established and existing under the laws of Pakistan with its Principle Office located at 7th Floor Al-Tijarah Centre, 32-1 - A, Block – 6, P.E.C.H.S, Main Shara-e-Faisal, Karachi, Pakistan registered office located at Plot No. 8, Sector Model Village, Humak, Islamabad, Pakistan) (the **Company**):
- (i) has engaged a third-party engineering consultant, i.e. the renowned engineering consultant, M/S CONTINENTAL MARINE ENERGY SDN. BHD. (the **RULA Consultant**), to carry out the detailed and exhaustive remaining useful life assessment (**RULA**) study of the technical installations of the Facility and subsequently provide the Company with a report stating their findings (the **RULA Report**);
 - (ii) having received the RULA Report from the RULA Consultant, the same shall be submitted with **NATIONAL ELECTRIC POWER REGULATORY AUTHORITY** (the **Authority**), for the purposes of extending the current term by five (5) years (the **PPA Term Extension**) (on such terms as are mutually agreed and subsequently approved by the board of directors of the Company (the **Board**) of its 'POWER PURCHASE AGREEMENT' dated June 7, 1995 entered into with **K-ELECTRIC LIMITED** (a public limited company duly established and existing under the laws of Pakistan with its registered office located at KE House, 39-B, Sunset Boulevard, Phase-II, Defence Housing Authority, Karachi, Pakistan) (**KE**) in respect of its 136.17 MW (Gross) thermal power generation facility located at Korangi Industrial Township, Karachi, Sindh, Pakistan, **BE AND IS HEREBY AUTHORIZED** to prepare, finalize, deliver, file, apply and submit, pursuant to the applicable laws of Pakistan, including the 'Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997' (the **NEPRA Act**) and the rules and regulations made thereunder (including regulation 10(2) of the 'National Electric Power Regulatory Authority Licensing (Application & Modification Procedure) Regulations, 1999' and the 'National Electric Power Regulatory Authority Licensing (Generation) Rules, 2000') (the **Applicable NEPRA Laws**), an application (together with all documents attached thereto) (the **Generation License Modification Application**) before the **NATIONAL ELECTRIC POWER REGULATORY AUTHORITY** (the **Authority**) for the Authority's approval of the modification (the **Generation License Modification**) of the Company's generation license No. IPGL/09/2003 (the **Generation License**) for a term of ten (10) years and three (3) months (the **Extension Term**) to cater for, *inter alia*, the extension of the term of the Company's generation license to match it to the term of its existing PPA and, in view of the remaining useful life of the Facility in light of the RULA Report, , enter into and
- (B) execute all required documents, make all filings, attend all hearings, provide all required information and pay all applicable fees, in each case, of any nature whatsoever.
- (C) **FURTHER RESOLVED THAT**, in respect of the matters relating to the Generation License Modification Application, Mr. Iqbal Alimohamed, Chief Executive Officer of the Company having CNIC No. 42201-2214140-7, Mr. Ubaid Amanullah, Executive Director of the Company having CNIC No. 42301-8209569-7, Mr. Danish Iqbal, Executive Director of the Company, having CNIC No. 42201-4584613-1, Mr. Amin Bhimani, Chief Financial Officer and Company Secretary of the Company, having CNIC No. 42201-0545032-3, Mr. M. Yousuf Aziz, Senior Manager Accounts of the Company, having CNIC No. 42201-2018137-5, Mr. Saad Iqbal, Attorney of the Company, having






CNIC No. 42201-9911226-5 and Mr. Suleman Modi, Attorney of the Company, having CNIC No. 42000-0521009-5 **BE AND ARE HEREBY** singly appointed as authorized representatives of the Company and are **HEREBY** authorized and empowered for and on behalf of the Company, as the Company duly appointed **AUTHORIZED REPRESENTATIVES**, to address, perform, negotiate, decide, execute, implement and/or undertake all matters of any nature whatsoever in relation to the Generation License Modification Application including, without limitation:

- (i) review, execute, submit, and deliver the Generation License Modification Application and any related documentation required by the Authority for its approval of the Generation License Modification including any contracts, documents, powers of attorney, affidavits, statements, letters, forms, applications, deeds, guarantees, undertakings, approvals, memorandum, amendments, letters, communications, notices, certificates, request statements and any other instruments of any nature whatsoever;
- (ii) represent the Company in all negotiations, representations, presentations, hearings, conferences and/or meetings of any nature whatsoever with any entity (including, but in no manner limited to the Authority, KE, any private parties, companies, partnerships, individuals, governmental and/or semi-governmental authorities and agencies, ministries, boards, departments, regulatory authorities and/or any other entity of any nature whatsoever);
- (iii) sign, execute and deliver, for and on behalf of the Company, all necessary documentation (including any contracts, documents, powers of attorney, affidavits, statements, letters, forms, applications, deeds, guarantees, undertakings, approvals, memorandum, amendments, letters, communications, notices, certificates, request statements and any other instruments of any nature whatsoever), pay the necessary fees, appear before any entity (including the Authority, KE, any private parties, companies, partnerships, individuals, governmental and/or semi-governmental authorities and agencies, ministries, boards, departments, regulatory authorities and/or any other entity of any nature whatsoever), as required from time to time, and do all acts necessary for processing and further approval of the Generation License Modification, as applied pursuant to the Generation License Modification Application, by the Authority;
- (iv) further sub-delegate any or all of the aforementioned powers and authorities to one or more officers of the Company or any other person or persons, singly and/or jointly; and
- (v) do all such acts, deeds and things as may be necessary for carrying out the purposes aforesaid and give full effect to the above resolutions.

Certified to be true copy


Muhammed Amin Bhimani
Company Secretary





Gul Ahmed Energy Limited

**CERTIFICATION
CERTIFIED TO BE TRUE COPY**

CERTIFIED, that, the above resolutions were duly passed by the board of directors of **GUL AHMED ENERGY LIMITED** (a company duly established and existing under the laws of Pakistan with its registered office located at Korangi Industrial Township, Karachi, Sindh, Pakistan) on September 13th 2018 and December 27th 2018.

FURTHER CERTIFIED, that the afore-stated resolutions have not been rescinded and are in operation and in full force and effect as at the date hereof and that this is a true copy of the same.


.....
COMPANY SECRETARY



COPY OF BANK DRAFT / PAY ORDER



Account Payee Only

Bank AL Habib Limited

1003 - SHAHRA-E-FAISAL
BUSINESS CENTR,PLOT 19-1-A,BLOCK 6,
P.E.C.H.S.,SHAHRA-E-FAISAL,KARACHI

Rs 1639200000

Pay to NATIONAL ELECTRIC POWER REGULATORY AUTHORITY A/C GUL AHMED or Order
ENERGY LTD

Rupees PAKISTANI-RUPEES ONE MILLION SIX HUNDRED THIRTY-NINE THOUSAND TWO
HUNDRED ONLY.

PAYABLE AT ANY BRANCH IN PAKISTAN

Valid for Twelve Months from the date of Issuance



Please do not write below this line.

060488790238888

B.C. No. 06048879

Stationery/Ref No. 00168552/2019 97

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PKR

*****1,639,200.00

Signatory/
PA/Attorney No

Signatory
PA/Attorney No

0201

SECTION 1
DETAILS OF PETITIONER



1. DETAILS OF PETITIONER

1.1 NAME & ADDRESS

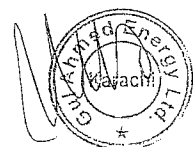
GUL AHMED ENERGY LIMITED
7th Floor Al-Tijarah Centre,
32 - 1 - A, Block - 6,
P.E.C.H.S, Main Shara-e-Faisal,
Karachi, Pakistan
TEL: +92-2134540270-73
FAX: +92-21-34540274

1.2 AUTHORIZED REPRESENTATIVES

- 1.2.1 **MR. IQBAL ALIMOHAMMAD**
Chief Executive Officer
Gul Ahmed Energy Limited
Email: iqbalalimohamed@gmail.com
- 1.2.2 **MR. DANISH IQBAL**
Executive Director
Gul Ahmed Energy Limited
Email: danish.iqbal@gaenergy.com
- 1.2.3 **MR. UBAID AMANULLAH**
Executive Director,
Gul Ahmed Energy Limited
Email: ubaid.amanullah@gaenergy.com
- 1.2.4 **MR. AMIN BHIMANI**
Chief Financial Officer / Company Secretary,
Gul Ahmed Energy Limited
Email: amin.bhimani@gaenergy.com
- 1.2.5 **MR. M. YOUSUF AZIZ**
Senior Accounts Manager
Gul Ahmed Energy Limited
Email: yousuf.aziz@gaenergy.com
- 1.2.6 **MR. SAAD IQBAL**
Attorney
Gul Ahmed Energy Limited
Email: saadiqbal@metro-group.com.pk
- 1.2.7 **MR. SULEMAN MODI**
Attorney
Gul Ahmed Energy Limited
Email: suleman.modi@gaenergy.com



SECTION 2
INTRODUCTION TO PETITIONER
AND
THE PROJECT



2. INTRODUCTION TO PETITIONER & THE PROJECT

2.1 THE PETITIONER & PROJECT DEVELOPMENT BACKGROUND

GUL AHMED ENERGY LIMITED (a company duly established and existing under the laws of Pakistan with its principle office located at 7th Floor Al-Tijarah Centre, 32 - 1 - A, Block - 6, P.E.C.H.S, Main Shara-e-Faisal, Karachi, Pakistan and registered office located at Plot No. 8, Sector Model Village, Humak, Islamabad, Pakistan) (the **Petitioner**), being the petitioner under this tariff petition (this **Tariff Petition**) for approval and grant of a reference generation tariff (the **Reference Generation Tariff**), was set up and established on July 20, 1994, for the purposes of undertaking the project (the **Project**) relating to the development, setting up, implementation, construction and operation of a 136.17 MW (Gross) thermal power generation facility (the **Facility**) located at Korangi, Industrial Township, Karachi, Sindh, Pakistan (the **Site**).

2.1.1 The following supporting documents relating to the Petitioner are attached herewith as follows:

- (a) ANNEXURE A (*Shareholding Pattern*);
- (b) ANNEXURE B (*Memorandum and Articles of Association*); and
- (c) ANNEXURE C (*Certificate of Incorporation*).

2.1.2 The Project was undertaken and implemented pursuant to Government of Pakistan's (the **GOP**) "Policy Framework and Package of Incentives for Private Sector Power Generation Projects In Pakistan" of March 1994 (the **1994 Power Policy**). Key milestones relating to the developmental phase of the Project are noted below:

MILESTONE	DATE OF ACHIEVEMENT
Date of Financial Closing	September 30, 1995
Commercial Operations Date	November 2, 1997

2.2 THE CONTRACTUAL ARRANGEMENTS

2.2.1 For the purposes of the Project, the Petitioner entered into various contractual arrangements, which included the following:

MILESTONE	DATE OF ACHIEVEMENT
IMPLEMENTATION AGREEMENT	June 29, 1995
POWER PURCHASE AGREEMENT	June 7, 1995
FUEL SUPPLY AGREEMENT	November 3, 1996
GOP GUARANTEE	March 20, 1996



2.2.2 In addition, the Petitioner also entered:

- (a) engineering, procurement and construction (EPC) arrangements for the Facility with world-class EPC contractors being a consortium of two companies, Tomen Corporation (Tomen Power Singapore PTE Limited) and Wartsila Diesel OY with the main OEM being Wartsila and ABB; and
- (b) long term operations and maintenance contractual arrangements with Wartsila Pakistan (Private) Limited.

2.3 THE PROJECT'S MAIN SPONSORS

The Project's sponsors consist of a highly skilled and experienced group of companies that are well-versed with in the energy sector and through the subject Project have brought their global skills and expertise to Pakistan. Their investment in Pakistan's energy sector under the first power policy i.e. the 1994 Power Policy and their continued work in Pakistan is a testament to their dedication to the continued growth of Pakistan's energy sector.

2.3.1 GUL AHMED ENERGY GROUP

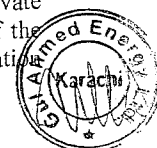
Gul Ahmed Energy Group holds 67.67% shareholding in the Project and is one of the largest groups in Pakistan, having diversified business portfolios in energy, textile, beverages, real estate and capital market. The Gul Ahmed Group has been in existence since 1948 and is one of the leading groups in the Pakistani business circle. The Gul Ahmed Energy Group's history mirrors the success story of power generation in Pakistan. The Group initiated its business as a thermal power producer almost two decades ago, being the brain child of Mr. Iqbal Alimohamed – the founder and Chairman of Gul Ahmed Energy limited, the pioneer in power producer in Pakistani markets with a significant number of assets under management. He currently serves as the Chairman of M/S. Thar Energy Limited and was formerly a director on the board of Hub Power Company Limited. Additionally, he has also formerly acted as the Chief Executive Officer and Chairman of the Gul Ahmed Textile Mills, Chairman of the Board of Directors of My Bank, Chairman of the Board of Directors of Excel Insurance Limited, Director of Faysal Asset Management Limited and Director of Kot Addu Power Company Limited.

2.3.2 TOYOTA TSUSHO / TOMEN CORP.

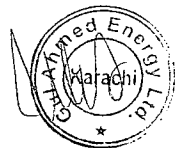
Tomen Corporation, a Japanese entity (now merged with Toyota Tsusho Corporation) (Toyota) holds 31.41% shareholding in the Petitioner and its projects include some of the world's largest wind powered plants. Presently, Toyota is involved in two private sector power projects in Pakistan. The Toyota comprises of more than a thousand subsidiaries and affiliated companies which have together expanded Toyota's business far beyond its limited focus to grain processing, power generation, agrochemicals and other business areas worldwide. This solid foundation of strong linkages has grown to become a network of companies that engage in business activities in a variety of fields across the globe and is able to build value on a global scale.

Toyota Tsusho acquired Tomen Corporation, a Japanese trading company, on April 1, 2006. Tomen Corporation operates as a trading company in Japan. It operates through five segments, which include chemical, energy, produce and food products, textiles, machinery, construction and real estate. Its chemical and energy segment offers petrochemical products, inorganic fine chemicals, agrochemicals, synthetic resins, crude oil, liquefied gas, and other petroleum products. This acquisition expanded Toyota's food, textiles, chemicals and energy business and caused it to leapfrog Sojitz to become the sixth-largest general trading company in Japan. The company also provides coal, lumber, plywood, construction materials, data processing, and logistics, while operating in North America, Europe, Asia, and Oceania.

Additionally, Toyota has successfully developed and retain ownership interests in private sector power projects in USA and the Philippines. These projects include some of the world's largest wind powered plants. Toyota in collaboration with Tomen Corporation acquired 31.41% of shares in Gul Ahmed Energy limited in 1996.



SECTION 3
BACKGROUND TO THIS TARIFF PETITION



3. BACKGROUND TO THIS TARIFF PETITION

3.1 THE POWER PURCHASE AGREEMENT

- 3.1.1 The Petitioner entered into a power purchase agreement dated June 7, 1995 (the **PPA**) with **K-ELECTRIC LIMITED** - formerly Karachi Electric Supply Corporation Limited (*a public limited company duly established and existing under the laws of Pakistan with its registered office located at KE House, 39-B, Sunset Boulevard, Phase-II, Defence Housing Authority, Karachi, Pakistan*) (**KE** or the **Power Purchaser**).
- 3.1.2 The current term of the Power Purchase Agreement, as stated in section 4.1(a) of the PPA, is twenty-two (22) years, unless terminated earlier (the **Current PPA Term**).
- 3.1.3 In addition, it is noted that section 4.1(c) of the PPA also contemplates a mechanism for renewal of the PPA prior to its expiry, which states as follows:

"Following the end of the twentieth (20th) Agreement Year, at the request of either Party, the Company and KESC agree to enter into good faith negotiations for a renewal of this Agreement for an additional term of five (5) Agreement Years on terms and conditions mutually agreed to by the Parties."

- 3.1.4 The Petitioner has a significant role in supply of power to the eastern side of KE transmission network. The entire power generated by the Petitioner is transmitted to KE grid stations of Korangi Town, Landhi Town and Airport Grid (area surrounding Jinnah International Airport) -- with KE being the power suppliers to major industrial and commercial customers. During the peak months, the Facility runs as a base load plant that dispatches as high as 100% of its Dependable Capacity.

3.2 THE CONTEMPLATED EXTENSION OF THE PPA TERM

- 3.2.1 The Petitioner has successfully operated its Facility for over twenty-one (21) years. In compliance with its PPA obligations, the Petitioner has generated approximately 790 GWH per annum of power, which has been supplied to KE, allowing KE, in turn, to meet its consumer demand. The Petitioner and KE, in pursuance of their rights emanating from section 4.1(c) of the PPA, have been engaged in discussions for extending the term of the PPA for an additional period of five (5) years (the **PPA Term Extension**), it being submitted that the PPA Extension Term shall commence on November 3, 2019 (the **Extension Commencement Date**). It is noted that the terms and conditions for the PPA Term Extension, as to be set out in a revised and amended power purchase agreement (the **Revised Power Purchase Agreement**) are still awaited from the Power Purchaser -- a matter (including its effects) are further discussed in latter Sections of this Tariff Petition.

3.3 POWER ACQUISITION REQUEST SUBMITTED BY KE TO THE AUTHORITY

- 3.3.1 The Petitioner submitted a Power Sale Proposal to KE on December 11, 2018 to which KE has provided its consent to the Petitioner, *vide* its letter dated January 28, 2019 (the **KE Consent for Tariff Application**) facilitating the Petitioner in respect of submission of its application to the Authority for the reference generation tariff for the PPA Term Extension. The KE Consent for Tariff Application is attached as **ANNEXURE H (KE Consent for Tariff Application)** for the Authority's ready reference.
- 3.3.2 Additionally, KE has also submitted a power acquisition request to the Authority *vide* its letter bearing Ref No. SBD/AR/NEPRA-0325/2019-1801 dated January 18, 2019 (the **Power Acquisition Request**) requesting the Authority to allow KE to acquire power from the Petitioner for the PPA Term Extension, while supporting the same with details such as the overview of the power sale proposal of the Petitioner. The Power Acquisition Request is attached as **ANNEXURE I (Power Acquisition Request)** for the Authority's ready

reference. The Petitioner take this opportunity to highlight that in the Power Acquisition Request, KE once again highlights as follows:

"to ensure adequate supply of power to meet the growing power demand of the city, in addition to the expected pipeline of planned projects which shall come online in next few years, the continuity of the existing sources of power supply in the next five year is an essential part of K-Electric's strategy to fulfill the increasing power demand".

- 3.3.3 The integral nature of the Facility's continued operation to KE's strategy in meeting its future demand and maintaining system stability is corroborated further by KE having filed a power acquisition request for acquisition of power from the Petitioner prior to submission by the Petitioner of its Reference Generation Tariff Petition. Summarily, the Petitioner and KE are committed to the PPA Term Extension and will satisfy all regulatory requirements to achieve the same.

3.4 **THIS APPLICATION FOR APPROVAL OF REFERENCE GENERATION TARIFF**

- 3.4.1 Based on the KE Power Purchase Consent, Power Acquisition Request and the submissions set out herein, the Petitioner has prepared and hereby submits before the Authority this Tariff Petition for approval of the Reference Generation Tariff that will apply during the PPA Term Extension.

3.5 **SUBMISSION**

- 3.5.1 **PURSUANT TO** the applicable laws of Pakistan, including the NEPRA Act and the rules and regulations made thereunder: **GUL AHMED ENERGY LIMITED HEREBY SUBMITS**, for the Authority's kind and gracious consideration, this Tariff Petition for approval of its Reference Generation Tariff applicable to the PPA Term Extension.
- 3.5.2 This Tariff Petition is submitted in triplicate.
- 3.5.3 This Tariff Petition is being submitted with the required fee (as communicated by the Authority) through a non-refundable bank draft/pay order No. 06048879 in the amount of PKR 1,639,200 (Pakistani Rupees One Million Six Hundred and Thirty Nine Thousand Two Hundred only) dated February 7, 2019, drawn in favor of the Authority.



SECTION 4

THE FACILITY



4. THE FACILITY

4.1 THE FACILITY TECHNICAL SUMMARY

- 4.1.1 The Facility owned, operated and maintained by the Petitioner has, over two (2) decades, been a source of supply of reliable power generation for the Power Purchaser and is exemplary in the country's power sector. Briefly, the salient technical features of the Facility, as certified and confirmed in the detailed and exhaustive remaining useful life assessment (RULA) study contained in the report titled "*Remaining Useful Life Assessment (RULA) Study Report*" dated February 4, 2019 (RULA Study Report) and authored by the renowned engineering consultant, M/S CONTINENTAL MARINE ENERGY SDN BHD (CME), MALAYSIA, are provided below for the Authority's reference:

FACILITY GROSS CAPACITY	136.17 MW
NET DEPENDABLE CAPACITY	127.50 MW
FUEL & TECHNOLOGY	Residual Furnace Oil (RFO)
FACILITY CONFIGURATION	9*15.128 MW DG sets, 3*Power Transformers, 1*Grid station and 4*Transmission lines
FACILITY DESIGN LIFE	32 Years

- 4.1.2 Further, it is highlighted that the Facility:

- was designed, engineered and constructed by a consortium of two companies, Tomen Corporation (Tomen Power Singapore PTE Limited) and Wartsila Diesel OY being the engineering, procurement and construction contractors;
- was designed for continuous operation on heavy fuel oil with start and stops on light fuel oil;
- is equipped with modern fuel handling, storage and purification system;
- has an operation method that is automatic, with automatic synchronizing and load sharing using a PLC based control system;
- generates power at 11 kV, which is stepped up to 132 kV through 3 main transformers and subsequently supplied to the power purchaser's grid system.

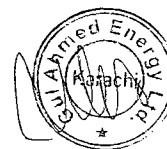
- 4.1.3 For the Authority's benefit and reference, without in any way limiting the comprehensive analysis presented in the RULA Study Report, key extracts from the RULA Study Report are set out below:

- "The overall condition of Engines is 'Good', and the expected remaining life is 10 years as a minimum with a very high degree of confidence."*
- "The power transformers are newly installed and are expected to have a full remaining useful life of greater than 12 years."*



- c) *"The utilities, storage tanks, vessels, boilers were also condition assessed and are found in very good condition with expected remaining life of 12 years."*

4.1.4 Considering the afore-stated, the matters set out herein and the conclusions drawn in the RULA Study Report, the Petitioner expects and intends to operate the Facility for at least another ten (10) years. Thus, the Petitioner submits to the Authority, so that the Petitioner may ensure utilization of the Facility for its remaining useful life continue to generate power for sale to KE, to approve the Reference Generation Tariff to ensure implementation of the PPA Term Extension – it being clearly evident, as confirmed by, *inter alia*, the RULA Study Report, that the remaining power generation life of the Facility is beyond the period contemplated by the PPA Term Extension.



SECTION 5
THE GENERATION LICENCE



5. THE GENERATION LICENCE

5.1 THE GENERATION LICENCE

- 5.1.1 On January 08, 1996, in exercise of the powers conferred by section 30 of the Electricity Act, 1930, the Government of Sindh, exempted the Petitioner from the application of the said provision, subject to the compliance of the provisions of the said Act. A copy of the aforementioned consent is attached herewith as **ANNEXURE G (Copy of the Electricity Act Exemption)** for the Authority's reference.
- 5.1.2 Following enactment of '*Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997*' (the **NEPRA Act**) and the rules and regulations made thereunder, the Petitioner applied to the **NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (the Authority)** for procurement of a generation licence for its Facility and on August 26, 2003, the Authority granted the Petitioner a generation licence No. IPGL/09/2003 (the **Generation Licence**). A copy of the Generation Licence is attached herewith at **ANNEXURE E (Copy of Generation Licence)** for the Authority's reference.

5.2 THE GENERATION LICENCE MODIFICATION

- 5.2.1 The Petitioner has also submitted an application dated February 8, 2019 (the **Generation Licence Modification Application**) for modification of its Generation Licence to the Authority on February 8, 2019. The reason for submission of the Generation Licence Modification Application was to request for an extension of the term of the Generation Licence in order to bring the same in line with the current full term of its PPA i.e. till November 2, 2019 along with requesting for an extension of the term Generation Licence to cater to the remaining useful power generation life of the Facility, a term much beyond the PPA Term Extension as per the RULA Study – a matter submitted in Section 4 (*The Facility*) above.
- 5.2.2 It is submitted that the Petitioner, in its Generation Licence Modification Application, has requested the Authority that the modifications requested in its Generation Licence Modification Application are construed in light of and read in conjunction with the modifications approved for an extension of the term of the Generation Licence in order to bring the same in line with the current full term of its PPA.



SECTION 6

KEY CONSIDERATIONS



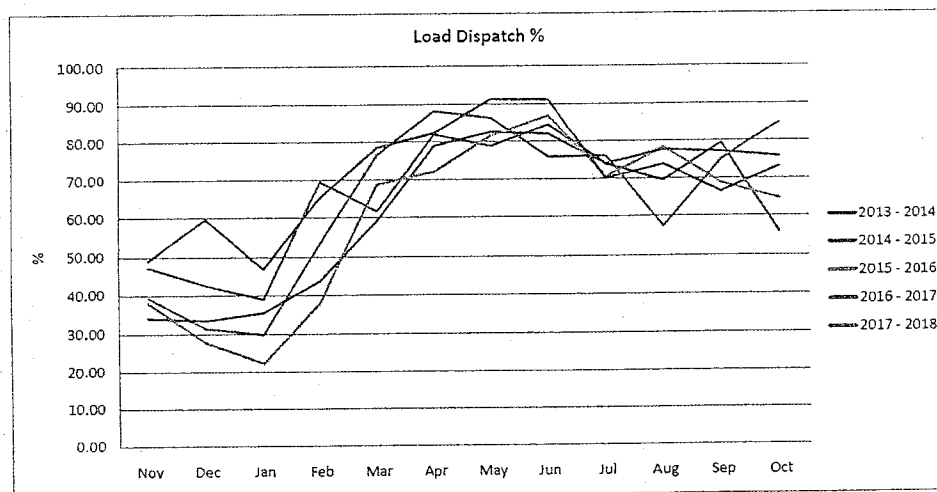
6. KEY CONSIDERATIONS

6.1 DEMAND FOR ELECTRICITY

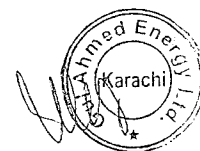
- 6.1.1 The power supply shortages in Pakistan over the years have resulted in extensive hours of power outages across the country. However, the power crisis has hit Karachi evidently more than other parts and the city faces an ongoing shortage of power supply with black-outs being prevalent time and time again. It is highlighted that KE, being the only distribution/transmission company having the capacity to distribute/transmit electricity in Karachi, continuously faces challenges in meeting the ever-growing electricity demands of the financial hub and economic lifeline of Pakistan.

6.2 THE PETITIONER – A RELIABLE SOURCE OF POWER GENERATION

- 6.2.1 Having successfully achieved commercial operations in 1997 the Petitioner has successfully operated its Facility for over two decades; has catered for KE's consumer requirements by generating approximately 790 GWh per annum; and continues to meet its obligations under the PPA. The Petitioner has a significant role in supply of power to the eastern side of KE transmission network as the entire power generated by the Petitioner is transmitted to KE grid stations of Korangi Town, Landhi Town and Airport Grid (area surrounding Jinnah International Airport) – the same being the power suppliers to major industrial and commercial customers of KE. It is a fact that during the peak months, the Facility runs as a base load plant that dispatches as high as 100% of its Dependable Capacity, necessitated by the high demand. The monthly load pattern of dispatch from the Facility is set out below for the Authority's reference, evidencing the Facility's contribution during the peak summer months and the Petitioner's role as part of the embedded generation projects of KE:



- 6.2.2 In the absence of the Petitioner continuing to supply electricity to KE, the KE distribution system will face a shortage in electricity supply, as there is insufficient generation capacity at present available to purchase. As per KE's estimates, there is currently a shortfall of approximately 500MW against the peak demand of KE. If the Petitioner did not supply electricity to KE, the result would be a shortfall of 128 MW, directly impacting the critical load clusters at Korangi Town, Landhi and area surrounding the Airport grid (area surrounding Jinnah International Airport).



6.3 THE PETITIONER – AN EXPERIENCED POWER PRODUCER & READILY AVAILABLE POWER GENERATION INFRASTRUCTURE

The Petitioner has been in the business of generating and selling electricity since 1997. The Petitioner, with its extensive experience of over two (2) decades, has not only satisfied its obligations under the PPA during such period but has also established itself as an experienced and reliable power producer in Pakistan's power generation industry. Being an established amongst the Independent Power Producers (IPPs) over the years, the Petitioner's excellence in power generation is widely recognized – with its business practices being considered as a gold standard in the industry.

- 6.3.1 The importance of continuous supply of electricity to KE and its consumers by the Petitioner, over supply from other sources cannot be over-emphasized. Unlike the complexities and long gestation periods involved in the development of a new power generation facility, the Project, being operational now for over two (2) decades, has all arrangements and infrastructure requirements in place to continue uninterrupted power generation for servicing the consumers of Pakistan's largest city. Continued supply of power for the PPA Term Extension shall not require additional lending from financiers in respect of any capital costs (and thus no new foreign or local debt shall be sought) nor shall valuable time and resources be used to procure financing and achieve financial close.
- 6.3.2 Moreover, the use of the Petitioner's Facility as a black start facility by KE, in case of wide spread power outage, has been provided in the past and shall continue to be provided to KE during the intended PPA Term Extension.
- 6.3.3 With an offtake arrangement already in place, and KE itself being strongly in favour of continuing the offtake arrangement with the Petitioner, the overwhelming advantages of the proposed PPA Term Extension are submitted to be duly considered by the Authority for the benefit of the consumers, and in the Authority's approval of the subject Reference Generation Tariff.

6.4 THE FACILITY

- 6.4.1 As highlighted in Section 4 (*The Facility*) of this Tariff Petition, the Facility's remaining useful life is more than ten (10) years, which is well beyond the PPA Term Extension. With highly efficient and reliable European equipment and machinery being fundamental to the Petitioner's success as a power producer for over two (2) decades.

6.5 LOCAL FUEL SOURCE

- 6.5.1 Given that the prevalent GOP policy does not permit the establishment of new RFO plants, nor the import of RFO, any new power generation facility would need to operate on an alternative fuel. In this regard it is highlighted that the Facility is currently operating on local RFO procured from local refineries which is more competitively priced than other raw materials used in thermal power plants (i.e. imported RFO and imported LNG).
- 6.5.2 It is also established that reliance on local gas is not a viable long term solution for thermal power generation. In this regard, it is emphasized that during the winter months of 2018-19 there was an extreme shortage of gas and in this lean period at times the Facility was operating at more than 90% capacity, with reliance on local RFO.
- 6.5.3 The Authority will also be aware that given the ban on import of RFO and the drive to produce more local RFO, there is currently a surplus of production of high quality local RFO, and relatively low exports and a limited storage capacity (of merely two to three weeks) for such fuel. The Facility, therefore, is directly benefiting local refineries by purchasing local RFO and reducing the outflow of foreign exchange.
- 6.5.4 Additionally, it is highlighted that the Petitioner is not breaching the GOP's policy of not allowing new RFO plants being developed, as it is only continuing operations of its existing Facility, which is essential in order to cater to Karachi's growing population and KE's



continued increase in the demand of electricity till new projects have been successfully established and commissioned, which will take several years.

6.6 THE PPA TERM EXTENSION – A HIGHLY COST-EFFECTIVE PROPOSITION

- 6.6.1 It is submitted that with the current state of the well-maintained and 'debt free' Facility and no major or extravagant capital expenditures required for the continued use of the Facility, KE's consumers will directly benefit from the low cost of electricity supplied by the Petitioner during the period of the PPA Term Extension.

6.7 DEVELOPMENT & CONTINUED DEPLOYMENT OF EXCEPTIONAL HUMAN RESOURCES

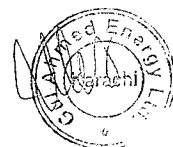
- 6.7.1 The Petitioner has, over the years, developed highly skilled, experienced and exceptional human capital, which continues to form the backbone of the Project's success and excellence. The Petitioner entered into an Amended and Restated Operations Management and Maintenance Agreement with WARTSILA PAKISTAN (PRIVATE) LIMITED (**Wartsila**) dated January 26, 1995 (the **O&M Contract**) for the operations and maintenance of the Facility.
- 6.7.2 Additionally, the Petitioner's in-house resources include experienced and highly skilled personnel capable of performing the operations and maintenance of the Facility (once the O&M Contract lapses) including services in relation to overhauls, major and routine maintenances with minimum input from the original equipment manufacturers. The performance of the Facility (including its efficiency and reliability) are evidence of the Petitioner's management team's excellence and, as a result, implementation of the PPA Term Extension will ensure continuation of such un-paralleled efforts.

6.8 INITIAL PROJECT COST & FINANCING

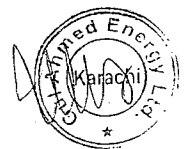
- 6.8.1 The initial cost of development and setting up the Project was funded on the basis of a debt to equity ratio of 70:30. Further, it is submitted that while the entire debt was retired by the Petitioner by February 2009, the initial equity of USD 43.513 million, considering the Project was set up on a Build Own Operate (**BOO**) basis, was never redeemed and still remains invested in the Project. The Petitioner, subject to approval of the Reference Generation Tariff and the execution of the Revised Power Purchase Agreement, aims to retain the equity in the Project and form, at the very minimum, the basis of continued operations during the PPA Term Extension. The benefits of retaining the exiting equity in the Project are elucidated for the Authority's benefit, below.
- 6.8.2 If the Petitioner is not permitted to supply electricity to KE, KE will need to procure electricity from a new power generation facility – currently there is no such facility available. In the unlikely event a facility becomes available prior to expiry of the current term of the PPA, given the constraints on the availability of local financing, the foreign debt would be major component of the new project's costs. It is highlighted that, as the Petitioner's Facility is already operating, no foreign debt component is involved.
- 6.8.3 Moreover, should the Facility continue generation of power, this will result in the existing foreign direct investment made in the Project being retained, minimizing the outflow of foreign currency, and thus being an indicator for the local economy and an example of investor confidence in the Pakistani market. Moreover, given the current balance of payments concern, the retention of foreign equity in the Project will be beneficial for the economy. In this regard it is to be noted that the Petitioner has repaid its foreign lenders and will not be receiving any further foreign funding during the PPA Term Extension.

6.9 SUMMARY OF KEY CONSIDERATIONS

- 6.9.1 The key considerations in respect of the granted of the Reference Generation Tariff, discussed in further detail in this Section 6, are summarized below for the Authority's ease of reference:



- **Shortfall Mitigation:** KE's own Power Acquisition Request reflects the fact that the Facility is an integral part of KE's plan for electricity supply for the next few years. The Authority's approval of the Reference Generation Tariff and the subsequent implementation by KE and the Petitioner of the PPA Term Extension will ensure uninterrupted and continuous supply of reliable electricity to the vital consumers (including industrial areas of Korangi and Landhi) of KE until, at least, November 2, 2024 (i.e. currently proposed PPA Term Extension) – a critical consideration in light of the current power generation capacity and demand in KE's distribution area.
- **Continuous and Uninterrupted Supply of Power:** Unlike the complexities and long gestation periods involved in the development of a new power generation facility, the Project, being operational now over two (2) decades, has all requisite arrangements and infrastructure requirements in place to continue uninterrupted power generation for servicing the consumers of Pakistan's largest city. Supply of power for the PPA Term Extension will neither require a financial close from lenders nor construction of any new transmission lines.
- **Lower Tariff Available from Existing Plant:** As mentioned above, in the absence of the Petitioner not operating the Facility at the end of the term of the Power Purchase Agreement, KE would be faced with the situation of having to enter into power purchase agreements with new power generation facilities. Any new facility will have higher capital costs, a debt financing component in respect such capital costs and consequently a higher tariff.
- **Reliance of Local Fuel Source:** The Facility is able to generate electricity based on locally produced RFO which is competitively priced, compared to other fuel sources used in thermal power generation and a more viable and sustainable fuel source than local gas. Moreover, given the demand-supply gap for local RFO, limited exports, and limited storage facilities of local RFO producers, the use of locally produced RFO by the Facility is benefiting the local RFO market.
- **Optimization of Human Resources:** Continued operation of the Facility will ensure optimization of the existing resources developed by the Petitioner. Such resources include continued use of the highly skilled, experienced and exceptional human capital.
- **No New Foreign Debt:** Given that there will no foreign debt servicing component in the Project, the consumers of KE will ultimately benefit from the continued use of the Facility, as compared to the untimely induction of a new, capital intensive, generation facility.
- **Retention of FDI:** The continued operation of the Facility will directly result in the existing foreign direct investment made in the Project being retained, resulting in a positive impact on the economy.
- **Consumer Benefit:** Given the combination of a well-maintained and 'debt free' Facility, with no major capital expenditures required for the continued use of the Facility, KE's consumers will directly benefit from the low cost of electricity supplied by the Petitioner during the period of the PPA Term Extension.



SECTION 7
REFERENCE GENERATION TARIFF SUMMARY



7. REFERENCE GENERATION TARIFF SUMMARY

7.1 THE REFERENCE GENERATION TARIFF COMPONENTS

7.1.1 In view of the Authority's previous tariff determinations and the prevailing take or pay regime for thermal IPPs in Pakistan, the Reference Generation Tariff is broken down in the following two key components:

(a) the energy purchase price component of the Reference Generation Tariff (the **Energy Purchase Price**); and

(b) the capacity purchase price component of the Reference Generation Tariff (the **Capacity Purchase Price**).

7.2 THE SUMMARY

7.2.1 Based on the residual fuel oil (the **RFO**) price of PKR 42,282.71/ton (including transportation cost of PKR 364.71/- subject to adjustment as per actuals), an output of 127.50 MW (net at reference conditions) and detailed financial analysis, the proposed Reference Generation Tariff is as follows:

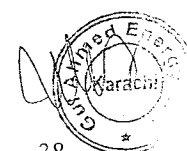
	ENERGY PURCHASE PRICE US CENTS/kWh	CAPACITY PURCHASE PRICE US CENTS/kW/h	TOTAL REFERENCE GENERATION TARIFF US CENTS/kWh	TOTAL REFERENCE GENERATION TARIFF PKR/kWh
LEVELIZED TARIFF	9.7368	1.1485	10.8853	12.0174
AVERAGE TARIFF	9.7368	1.1485	10.8853	12.0174

TOTAL REFERENCE GENERATION TARIFF	
LEVELIZED TARIFF	: US CENTS 10.8853/kWh (or PKR 12.0174/kWh)

7.3 REDUCTION IN TARIFF OFFERED BY THE PETITIONER

A comparison of the existing indexed tariff under the current expiring PPA with the Reference Generation Tariff (as requested under this Tariff Petition) is as below:

	ENERGY PURCHASE PRICE US ¢/kWh	CAPACITY PURCHASE PRICE US ¢/kW/h	TOTAL REFERENCE GENERATION TARIFF US ¢/kWh	TOTAL REFERENCE GENERATION TARIFF PKR/kWh
Existing indexed tariff under existing PPA	9.8132	1.3374	11.1506	12.3103
Proposed Reference Generation Tariff requested in this Tariff Petition	9.7368	1.1485	10.8853	12.0174
Reduction	(0.0764)	(0.1889)	(0.2653)	(0.2929)

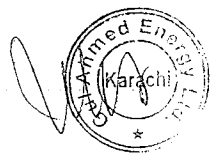


7.4 THE REFERENCE GENERATION TARIFF TABLE

- 7.4.1 For the Authority's benefit and approval, the detailed table setting out the Reference Generation Tariff (the **Reference Generation Tariff Table**) is attached hereto at ANNEXURE F (*Reference Generation Tariff Table*).



SECTION 8
ENERGY PURCHASE PRICE



8. ENERGY PURCHASE PRICE

8.1 SUMMARY

8.1.1 The Energy Purchase Price component of the Reference Generation Tariff is based on the actual kWh off-take, and consists of:

- (a) the fuel component (the **Fuel Cost Component**);
- (b) the local variable O&M component (the **Local Variable O&M Cost Component**); and
- (c) the foreign variable O&M component (the **Foreign Variable O&M Cost Component**).

8.1.2 A summary of the Energy Purchase Price is provided in the following table:

ENERGY PURCHASE PRICE - PKR/kWh				
PERIOD	FUEL COST COMPONENT	FOREIGN VARIABLE O&M COST COMPONENT	LOCAL VARIABLE O&M COST COMPONENT	TOTAL ENERGY PURCHASE PRICE
YEARS 1-5	9.6506	0.8491	0.2497	10.7494

8.1.3 It is noted that after factoring the impact of fuel cleaning, average plant aging and variation in plant load factor, 38.3% net complex efficiency (LHV) at mean site conditions, at 100% Load Factor, running on RFO, is guaranteed.

8.2 FUEL COST COMPONENT

8.2.1 ASSUMPTIONS

Based on the Facility's capacity on full load factor, about 690 tons of RFO (the **Fuel**) per day is required for power generation at the Facility, which is currently transported to the Site by tank lorries.

The cost of fuel consumption for the Facility, assuming thermal efficiency of 38.3% (LHV) at 100% capacity factor (subject to part load adjustment and temperature de-rating curve), represents the Fuel Cost Component of the Energy Purchase Price. The main assumptions used to derive at the Fuel Cost Component are provided below:

RFO PRICE:	PKR 42,282.71/ton (HHV) (including transportation cost of PKR 364.71/- subject to adjustments as per actuals). GST is not included in the RFO Price and shall be a pass-through to KE at actuals
HEAT RATE:	8779.7 BTU/kWh (LHV) at 100% capacity factor
OUTPUT CAPACITY:	127.50 MW (net at Site reference conditions)
CALORIFIC VALUE:	LHV 9,700 kcal/kg (Net)
GST ON FUEL	The actual GST charged on the Fuel Cost Component of Tariff is to be claimed at actuals from KE through monthly supplemental invoice.



8.2.2 INDEXATION & ESCALATION

The Fuel Cost Component shall be adjusted on account of:

- (a) Fuel price variation of Fuel consumed using FIFO method during period of PPA Term Extension; and
- (b) the actual transportation charges.

8.2.3 INDEXATION FORMULA

Fuel Cost Component will be varied over the term of the Power Purchase Agreement on the basis of the existing indexation formula provided in the Power Purchase Agreement:

$$FC_{(Rev)} = \text{Relevant Reference Generation Tariff Component} * FP_{(Rev)} / FP_{(ref)}$$

Where:

$FC_{(Rev)}$ = Revised Fuel Cost Component

$FP_{(Ref)}$ = PKR. 42,282.71 per ton (including transportation cost of PKR 364.71/- subject to adjustment as per actuals)

$FP_{(Rev)}$ = The new price of RFO per metric ton with transportation (as per actuals) excluding GST.

8.3 LOCAL VARIABLE O&M COST COMPONENT

8.3.1 ASSUMPTIONS

This component includes the cost of those lubricant and chemical consumed on generation of power and are directly related to the electricity actually generated. The rate will be indexed to the prevailing CPI of Pakistan. GST charged at prevailing rates on this component shall be pass-through at actuals and is to be claimed through separate monthly supplemental invoices.

8.3.2 INDEXATION AND ESCALATION

The Local Variable O&M Cost Component of the Energy Purchase Price shall be quarterly indexed to the CPI of Pakistan, as notified by the Federal Bureau of Statistics.

8.3.3 INDEXATION FORMULA

The Local Variable O&M Cost Component shall be indexed based on the following formula:

$$VO\&M_{(LRev)} = \text{Relevant Reference Generation Tariff Component} * \frac{CPI_{(Rev)}}{CPI_{(Ref)}}$$

Where:

$VO\&M_{(LRev)}$ = the revised applicable Local Variable O&M Cost Component of the Energy Purchase Price, quarterly indexed to CPI of Pakistan.

$CPI_{(Rev)}$ = the revised CPI of Pakistan, as notified by The Federal Bureau of Statistics.

$CPI_{(Ref)}$ = the 220.27 CPI of in Pakistan for January 2018 as notified by the Federal Bureau of Statistics.



8.4 FOREIGN VARIABLE O&M COST COMPONENT

8.4.1 ASSUMPTIONS

This component primarily includes imported spare parts to be replaced on normal scheduled maintenance and unscheduled maintenance. Also, it includes specialized technical services from manufacturer during maintenance of the Facility. The generation sets, and associated equipment require overhauling as per manufacturer's recommendation schedules, which are based on actual running hours. The actual timing of the major overhauls depends on dispatch of the Facility. GST charged at prevailing rates on this component shall be pass-through at actuals and is to be claimed through separate monthly supplemental invoice

8.4.2 INDEXATION AND ESCALATION

The Foreign Variable O&M Cost Component of the Energy Purchase Price shall be quarterly indexed to both:

- (a) the USD/PKR exchange rate, based on the revised TT & OD selling rate of USD notified by National Bank of Pakistan; and
- (b) the US CPI, as issued by the US Bureau of Labor Statistics.

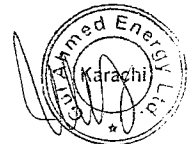
8.4.3 INDEXATION FORMULA

The Foreign Variable O&M Cost Component shall be quarterly indexed based on the following formula:

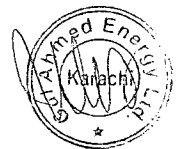
$$VO\&M_{(FRev)} = \text{Relevant Reference Generation Tariff Component} * \frac{US\ CPI_{(Rev)}}{US\ CPI_{(Ref)}} * \frac{USD_{(Rev)}}{USD_{(Ref)}}$$

Where:

- $VO\&M_{(FRev)}$ = the revised applicable Foreign Variable O&M Component of the Energy Purchase Price quarterly indexed to US CPI and USD/PKR exchange rate variation.
- $US\ CPI_{(Rev)}$ = the revised US CPI, as published by the US Bureau of Labor Statistics.
- $US\ CPI_{(Ref)}$ = the US CPI, 113.70 for January 2018 as published by US Bureau of Labor Statistics.
- $USD_{(Rev)}$ = the revised TT & OD selling rate of USD, as notified by the National Bank of Pakistan.
- $USD_{(Ref)}$ = PKR 110.40.



SECTION 9
CAPACITY PURCHASE PRICE



9. CAPACITY PURCHASE PRICE

9.1 SUMMARY

9.1.1 The Capacity Purchase Price component of the Reference Generation Tariff is payable on the basis of available capacity declared periodically from the Extension Commencement Date. This component is calculated on PKR/kW/h basis of available capacity including outage allowances allowed as per the PPA. The Capacity Purchase Price component of the Reference Generation Tariff comprises of the following components:

- (a) the fixed operations and maintenance cost (the **Fixed O&M Cost Component**);
- (b) the insurance cost (the **Insurance Cost Component**);
- (c) the cost of working capital (the **Cost of Working Capital Component**); and
- (d) the return on equity (the **ROE**).

9.1.2 A summary of the Capacity Purchase Price component of the proposed Reference Generation Tariff is provided in the table below:

PERIOD	LOCAL FIXED O&M COST COMPONENT	FOREIGN FIXED O&M COST COMPONENT	INSURANCE COST COMPONENT	COST OF WORKING CAPITAL COMPONENT	ROE COMPONENT
Years 1-5	0.3095	0.0574	0.0789	0.1712	0.6510

9.2 LOCAL FIXED O&M COST COMPONENT

9.2.1 ASSUMPTIONS

The Local Fixed O&M Component of the Capacity Purchase Price represents the fixed costs of the management and staff of the Project; fixed cost of staff for operations and maintenance and firefighting; plant administration; security; motor pool; transportation and its insurance; overheads; office costs; environmental monitoring fee, professional fees such as audit, tax and legal; as well as some minor fixed operational costs that are of recurring nature and do not change with dispatch levels.

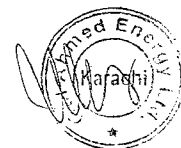
The Company has only claimed for local Fixed O&M component on the assumption that the operation and maintenance of the plant shall be carried out through Company's resources and third-party sub-contractors, as and when required. In light of the aforesaid, it is highlighted that in the absence of a 'turnkey' third party contractor being hired for the O&M, the claim being made is more competitive due to the Petitioner adopting a self-O&M mechanism, resulting in lower costs.

The Fixed O&M costs estimates claimed by the Petitioner are comparable to the Fixed O&M component allowed by the Authority to IPPs with similar technology.

9.2.2 INDEXATION & ESCALATION

The following indexation shall be applicable to the Local Fixed O&M Cost Component:

- (a) The Local Fixed O&M Cost Component shall be quarterly indexed to the CPI of Pakistan, as notified by the Federal Bureau of Statistics.



9.2.3 INDEXATION FORMULA

- **Local Fixed O&M Cost Component**

The Local Fixed O&M Cost Component shall be quarterly indexed based on the following formula:

$$\text{LFO\&M}_{(\text{LRev})} = \text{Relevant Reference Generation Tariff Component} * \frac{\text{WPI}_{(\text{Rev})}}{\text{WPI}_{(\text{Ref})}}$$

Where:

- $\text{LFO\&M}_{(\text{LRev})}$ = the revised Local Fixed O&M Component of the Capacity Purchase Price quarterly indexed to CPI of Pakistan.
- $\text{CPI}_{(\text{Rev})}$ = the revised CPI of Pakistan, as notified by the Federal Bureau of Statistics.
- $\text{CPI}_{(\text{Ref})}$ = the 220.27 CPI of in Pakistan for January 2018
Was as notified by the Federal Bureau of Statistics.

9.3 FOREIGN FIXED O&M COST COMPONENT

The Foreign Fixed O&M Component of the Capacity Purchase Price represents the foreign fees to be paid to the foreign OEM during the operations period.

The Foreign Fixed O&M Cost Component shall be quarterly indexed based on the following formula:

$$\text{FO\&M}_{(\text{FRev})} = \text{Relevant Reference Generation Tariff Component} * \frac{\text{US CPI}_{(\text{Rev})}}{\text{US CPI}_{(\text{Ref})}} * \frac{\text{USD}_{(\text{Rev})}}{\text{USD}_{(\text{Ref})}}$$

Where:

- $\text{FO\&M}_{(\text{FRev})}$ = the revised applicable Foreign Fixed O&M Component of the Capacity Purchase Price quarterly indexed to US CPI and USD/PKR exchange rate variation.
- $\text{US CPI}_{(\text{Rev})}$ = the revised US CPI, as published by the US Bureau of Labor Statistics.
- $\text{US CPI}_{(\text{Ref})}$ = the US CPI, 113.70 for January 2018 as published by US Bureau of Labor Statistics.
- $\text{USD}_{(\text{Rev})}$ = the revised TT & OD selling rate of USD, as notified by the National Bank of Pakistan.
- $\text{USD}_{(\text{Ref})}$ = PKR 110.40.

9.4 INSURANCE COST COMPONENT

9.4.1 ASSUMPTIONS

The Insurance cost component consists of the customary industry wide covers taken for all-risk insurance/reinsurance for the Project, as well as for business interruption insurance.

The Insurance component consists of all-risk in insurance/re- insurance for the Project, as well as business-interruption insurance amounting to 0.7% of the EPC cost. The Petitioner's Project is currently covered by the following insurance policies from



Adamjee Insurance Company Limited being reinsured with reputable A+ rated international underwriters:

- (a) Comprehensive Machinery Insurance;
- (b) Public, Product and Pollution Liability Insurance; and
- (c) Terrorism including Business Interruption.

9.4.2 INDEXATION & ESCALATION

The Insurance Cost Component shall be annually indexed. The actual insurance cost for the cover required under contractual obligations with the Power Purchaser, will be treated as pass-through.

9.4.3 INDEXATION FORMULA

Insurance component of reference tariff shall be adjusted annually as per actual cost paid by the Company according to the following formula:

$$AIC = \text{Ins (Ref)} / P (\text{Ref}) * P (\text{Act})$$

Where

AIC = Adjusted insurance component of tariff

Ins (Ref) = Reference insurance component of tariff

P (Ref) = Reference premium

P (Act) = Actual premium

9.5 COST OF WORKING CAPITAL COMPONENT

9.5.1 ASSUMPTIONS

A working capital financing (the **Working Capital**) of PKR 2,000,000,000/- (Pakistani Rupees Two Billion) as per the term sheet attached as **ANNEXURE D (Working Capital Term Sheet)** is assumed in order to finance:

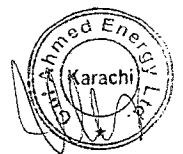
- (a) the inventory level of RFO equivalent to thirty (30) days of generation at 100% load factor;
- (b) energy payments' receivables along with GST for credit period of thirty (30) days allowed to the power purchaser from the date of invoicing; and
- (c) average of thirty (30) days cost taken for fuel required for one month of operation prior to invoicing.

The cost of Working Capital is (3 months KIBOR + 2% spread).

9.5.2 INDEXATION & ESCALATION

The Cost of Working Capital Component of the Capacity Purchase Price shall be quarterly indexed to both:

- (a) the average of Fuel price variation during the quarter; and
- (b) the quarterly changes in the 3-month KIBOR.



9.5.3 INDEXATION FORMULA

The Cost of Working Capital Component shall be indexed based on the following formula:

$$\frac{CWC_{(Rev)} = CWC_{(Ref)} * (FP_{(Rev)} / \text{Fuel Base Rate}) * (Kibor_{(Rev)} - Kibor_{(Ref)}) / 4}$$

Where:

$CWC_{(Rev)}$	=	Revised Cost of Working Capital component.
$CWC_{(Ref)}$	=	Reference Cost of Working Capital
Fuel Base Rate	=	PKR 42,282.71/ton (HHV) subject to adjustment as per actuals).
$FP_{(Rev)}$	=	The average of quarterly price of RFO per Metric Ton with GST and freight.
$Kibor_{(Rev)}$	=	The revised 3-month KIBOR rate at the end of each quarter.
$Kibor_{(Ref)}$	=	2%.

9.6 THE ROE

9.6.1 ASSUMPTIONS

The Reference Generation Tariff is based on the ROE calculated at a ROE rate of 15%, (net of withholding tax) on the equity of USD 43.513 million invested by the Petitioner that, considering that the Project was set up on the Build Own Operate (BOO) basis, has not been redeemed to date as also submitted previously herein. In addition, the Authority is also requested to consider the rationale for the ROE on the basis that the Petitioner (including the Project sponsors) will be bearing additional risks and exposure during the PPA Term Extension due to unavailability of the risk coverage previously provided by the Implementation Agreement dated June 29, 1995 (the **Implementation Agreement**) and the Government of Pakistan Sovereign Guarantee. It is highlighted that the 15% ROE being requested is a compromise from the 17% previously being obtained by the Petitioner under the existing tariff regime.

It is noted that the Authority allows (and has allowed) 15% ROE (net of withholding tax) to thermal IPPs supplying dedicated power to utilities over their entire project life varying between 20, 25 or 30 years. We understand that should there be a new IPP in the market, the same would also seek a 15% ROE. It is emphasized that such a new IPP would in fact be incurring debt, while the Petitioner during the PPA Extension Term will 'debt-free' and therefore should presumably be a more favourable position in seeking such ROE. Therefore, it is submitted that allowing similar IRR for the PPA Term Extension to the Petitioner will be consistent with the Authority's own determinations and established policy.

Further, needless to say, while the Authority also allows ROEDC to new projects, a component that is not requested by the Petitioner since its Project is already on ground - developed, constructed, established and implemented.

9.6.2 INDEXATION AND ESCALATION

The ROE Component shall be quarterly indexed to the USD/PKR exchange rate, based on the revised TT & OD selling rate of USD notified by the National Bank of Pakistan.



9.6.3 INDEXATION FORMULA

The ROE Component shall be indexed using the following formula:

$$ROE_{(Rev)} = \text{Relevant Reference Generation Tariff Component} * (USD_{(Rev)} / USD_{(Ref)})$$

Where:

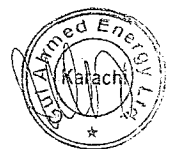
$ROE_{(Rev)}$ = the revised ROE Component of the Capacity Purchase Price, quarterly indexed to the USD/PKR exchange rate variation.

$USD_{(Rev)}$ = the revised TT & OD selling rate of US Dollar, as notified by the National Bank of Pakistan.

$USD_{(Ref)}$ = PKR 110.40/-.



SECTION 10
CRITICAL ADJUSTMENTS
&
PASS THROUGH ITEMS



10. CRITICAL ADJUSTMENTS & PASS THROUGH ITEMS

10.1 ADJUSTMENTS & PASS THROUGH ITEMS

10.1.1 The following adjustments and pass through items shall form an integral part of the basis on which the Reference Generation Tariff has been prepared:

- (a) The Reference Generation Tariff Table (attached as ANNEXURE F to this Tariff Petition) shall be reworked at the Extension Commencement Date to adjust the factors prevailing on the Reference Date to those prevailing on the Extension Commencement Date.
- (b) Cost of any delay in payments by the Power Purchaser beyond its due date has not been factored in the calculation of Reference Tariff and shall be allowed as additional payment according to agreed provisions for cost of delay in payments to be covered in the PPA.
- (c) Any taxes and levies etc., not factored in the Reference Generation Tariff calculation shall be treated as a pass-through item.

10.2 FORCE MAJEURE EVENTS

10.2.1 The Authority is submitted that in case of force majeure events that are triggered by a "Change in Law Event" or "Pakistan Political Event" (as defined in the standard Implementation Agreement) (the **Specific FMEs**) where such events:

- (a) lead to suspension of operations or inability to make partial/complete capacity available, then the capacity payments for the unavailable capacity is allowed as a pass-through item till the time normal operations of the Facility resume; and
- (b) lead to restoration to be undertaken, then the Authority is required to determine a supplemental tariff in relation to cost of restoration or cost of additional consumables, which, in each case, is then allowed as a pass-through.

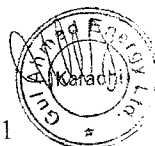
10.2.2 The Petitioner requests the Authority that the afore-stated are allowed to the Project during the PPA Term Extension since:

- (a) neither KE, being the power purchaser, nor the Petitioner have any control over such Specific FMEs; and
- (b) projects on the national grid, where the government is party to the project and has control over such Specific FMEs, are allowed these pass-through payments.

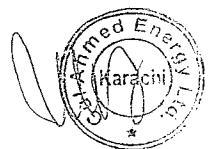
10.2.3 It is further submitted that if the Petitioner is able to recover from such Specific FMEs (including its related consequences) and is able to resume its power supply, then the consumers are the real beneficiary since an entire new facility is not required to make up for such energy deficit (caused by unavailability of the Petitioner's plant) and instead the power can be restored as soon as the Facility is restored or is able to restart.

10.3 AFFECTS RESULTING FROM THE REVISED POWER PURCHASE AGREEMENT

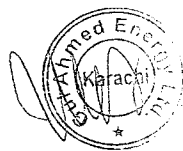
10.3.1 As noted in Section 3.2 (*The Contemplated Extension Of The Term Of The Power Purchase Agreement*) above, the terms and conditions for the PPA Term Extension to be set out in the Revised Power Purchase Agreement are still awaited from the Power Purchaser – terms that possibly, as a result of the risk allocation contained therein or from additional cost contemplated as a result of the Revised Power Purchase Agreement, may have an effect on the proposed Reference Generation Tariff.



- 10.3.2 Furthermore, it is assumed that as the Implementation Agreement of the Project shall not extend to the PPA Term Extension, that the risks presently covered by the Implementation Agreement shall be covered either (i) under the applicable laws (inter alia customs regime, tax regime, foreign exchange regime); or (ii) shall be commercially agreed under the Revised Power Purchase Agreement.
- 10.3.3 Therefore, it is submitted before the Authority that any cost or risks emanating from such Revised Power Purchase Agreement not already factored in the Reference Generation Tariff calculation will be, fundamentally, assumed to be a pass-through item and/or shall result in a supplemental tariff for the Petitioner.



SECTION 11
GENERAL ASSUMPTIONS



11. GENERAL ASSUMPTIONS

11.1 FOREWORD

- 11.1.1 The following have been assumed while calculating the Reference Generation Tariff and changes in any of these assumptions will result in changes in the Reference Generation Tariff.

11.2 THE ASSUMPTIONS

- 11.2.1 No corporate income tax and no minimum turnover tax have been assumed.
- 11.2.2 The key assumptions are based on actual information available on the Reference Date of January 2, 2018.
- 11.2.3 Base US CPI at the Reference Date is 113.7 as appearing in the US Bureau of Labor Statistics publication for the month of January 2018.
- 11.2.4 The Base CPI at the Reference Date for all Local Tariff Components is 220.27 as published by Federal Bureau of Statistics, Pakistan in their publication for the month of January 2018.
- 11.2.5 A minimum of five years extension in the term of the PPA commencing from November 2, 2019 with each Agreement Year completing on November 1st of the following year has been assumed.
- 11.2.6 GST on electricity output is assumed to be pass-through at actual and in accordance with the special procedure given in the Sales Tax Act 1990.
- 11.2.7 Any change in taxes/duties shall be adjusted as per actuals and will be pass-through to be paid by the Power Purchaser.
- 11.2.8 The prevailing statutory obligation to pay WPPF and WWF by the Company shall continue to be treated as a pass through and are to be claimed at actuals.
- 11.2.9 A constant USD based ROE is assumed, which results in an ROE of 15% (net of withholding tax) over the period of PPA Term Extension.
- 11.2.10 The Reference Generation Tariff is calculated based on a notional 100% plant load factor.
- 11.2.11 The price of RFO is assumed to be PKR 42,282.71/ton, (including transportation cost of PKR 364.71/- subject to adjustment at actuals).
- 11.2.12 The exchange rate has been assumed to be PKR 110.40 for PKR/USD.
- 11.2.13 All risks emanating from the Revised Power Purchase Agreement (considering that the Petitioner has not to date received any version of the same from the Power Purchaser) will be treated as pass-through items and/or shall result in a supplemental tariff for the Petitioner.
- 11.2.14 Anticipated average Site conditions that have been used in the calculation of net output and heat rate are at an altitude of 08m above sea level, average ambient temperature of 30 degrees centigrade and 80% average relative humidity. If there is any change in the foregoing assumptions, the same will have an impact on the de-rating curve.
- 11.2.15 Facility availability of 91.7% (335 Complex Days) p.a. is assumed.
- 11.2.16 Annual Scheduled and Maintenance Outages, excluding outages on account of Power Purchaser, shall be allowed up to 1,220 complex hours without any liquidated damages. Liquidated damages for outages in excess thereof and their computation shall be in accordance with the Revised Power Purchase Agreement.



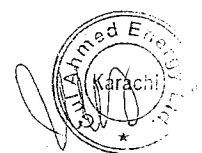
11.2.17 All invoicing and payment terms are assumed to be with a credit period of thirty (30) days subject to terms and conditions given in the Revised Power Purchase Agreement.

11.2.18 All of the above assumptions and terms and conditions shall be incorporated in the Revised Power Purchase Agreement between the Petitioner and KE.



SECTION 12

CONCLUSION

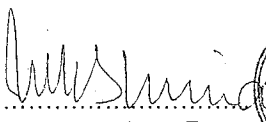


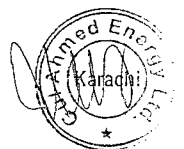
12. CONCLUSION

In light of the submissions, the financial analysis and information contained in this Tariff Petition, along with the Schedules attached hereto, and in the national interest of expediting the Petitioner's Facility, this Tariff Petition is submitted for NEPRA's approval of the Reference Tariff.

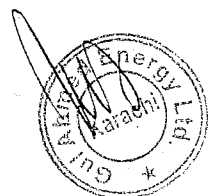
It is also hereby requested that the application of the Reference Generation Tariff be allowed / ordered in accordance with the NEPRA Act, the rules and regulations made thereunder, along with other enabling provisions of law.

Respectfully submitted,
FOR AND ON BEHALF OF THE PETITIONER,
GUL AHMED ENERGY LIMITED


.....
MUHAMMED AMIN BHIMANI
CHIEF FINANCIAL OFFICER & COMPANY SECRETARY



ANNEXURE A
SHAREHOLDING PATTERN

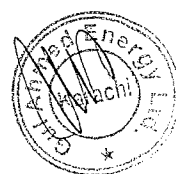


Gul Ahmed Energy Limited
Annexure – A (Shareholding Pattern)

SERIAL NO.	SHAREHOLDERS	NO. OF SHARES	SHAREHOLDING PERCENTAGE
1	GUL AHMED ENERGY GROUP	113,927,775	67.68
2	TOYOTA TSUSHO CORPORATION	31,350,105	18.62
3	TOMEN POWER (SINGAPORE) PTE. LTD.	21,495,733	12.78
4	WARTSILA FINLAND OY	1,554,813	0.92
	TOTAL NUMBER OF SHARES	168,328,426	100.00



ANNEXURE B
MEMORANDUM & ARTICLES OF ASSOCIATION



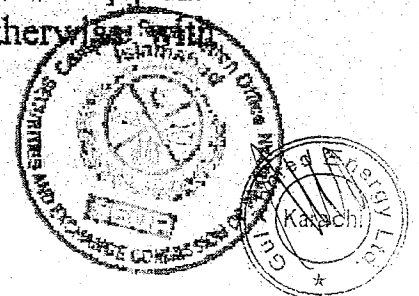
The Companies Ordinance, 1984
(Company Limited By Shares)

MEMORANDUM OF ASSOCIATION
OF
GUL AHMED ENERGY LIMITED

- I. The name of the Company is GUL AHMED ENERGY LIMITED.
- II. The Registered Office of the Company will be situated in the Federal Capital Territory of Islamabad.
- III. (A) The objects for which the Company is established is to set up and operate, whether directly or indirectly, itself or through a subsidiary or associated undertaking or any other company, electric power generating projects for generating and supplying of electric power and to carry out all necessary power stations, cables, wires, lines, accumulators, lamps and works and to generate accumulate distribute and supply electricity and to light industries and places, both public and private, cities, towns, streets, docks, markets, theatre, building and for all other purposes for which electric energy can be employed.
- (B) The Company shall be authorized:
 1. To own, purchase/acquire, hire, take on lease, build, erect, install, establish, operate, use, repair, maintain and dispose of factories, machineries, plants, laboratories, equipments, apparatus and other facilities.



2. To purchase, take on lease, or in exchange, or otherwise acquire, any land to sell, mortgage; to construct, alter, repair, pull down, decorate, maintain, furnish, fit up and improve buildings, and enter into contracts and arrangements of all kinds with building property owners, and any other party.
3. To purchase, acquire, take on lease or tenancy, sell, dispose of, mortgage and acquire options over any property, immovable/ movable, or rights of any kind, and develop, improve, turn to account, deal with, mortgage, sell or otherwise dispose of the same in such manner, as may be thought expedient.
4. To apply for, purchase, or otherwise acquire, and protect and renew in any part of the world any patents, patent rights, copyrights, trademarks, designs, licenses, concessions and the like, conferring any exclusive or non-exclusive or limited rights to their use, or any secret or other information as to any invention, process, matter or things which may seem capable of being used for the purpose of the Company, or the acquisition of which may seem calculated directly or indirectly to benefit the Company, and to use, exercise, develop to grant licenses in respect of, or otherwise turn to account the property, rights or information so acquired, and to expend money in experimenting upon, testing or improving any such patents, inventions or rights.
5. To enter into an agreement or any arrangement for sharing profits, union of interest, co-operation, joint-ventures, reciprocal concessions, or otherwise with



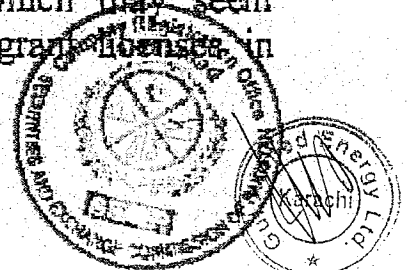
any company, association, firm or person for any purpose which the Company thinks expedient.

6. To open any current, overdraft, cash credit account or fixed account in any bank and to pay money into and draw money from any such account.
7. To borrow and secure payment of money borrowed by the Company or any of its subsidiaries or associated undertakings or any other company by (i) issue of perpetual or redeemable and convertible or non-convertible PTCs, TFCs, debentures and their stocks, bonds, promissory notes, bills of exchange, usance bills and such other securities; (ii) furnishing guarantees and undertakings, depositing securities, shares and documents of title; (iii) hypothecating, charging and mortgaging properties and assets (both present and future) of the Company and creating pledge on such properties and (iv) appointing attorneys, giving them powers of executing documents, having them registered, selling and managing the properties, undertaking any business of the Company and furnishing and creating such other securities as may be considered expedient or otherwise execute, complete and deliver agreements and such other documents as may be required.
8. To guarantee the payment of money and the performance of contracts or engagements of the Company or any of its subsidiaries or associated undertakings or any other company and to secure the payment of money and the performance of any contracts or engagements entered into by this Company or any of its subsidiaries or associated undertakings or any other company and to discharge



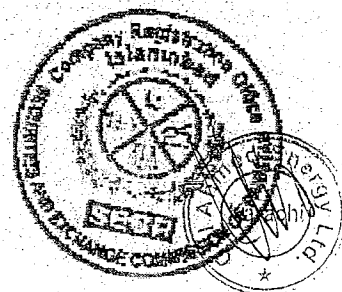
any debt or any obligations of or binding upon this Company or any of its subsidiaries or associated undertakings or any other company by a mortgage, pledge or charge upon all or any part of the undertaking, property and rights of the Company (either present or future or both), or by the creation or issue of bonds, debenture stock, or any other securities or by any other means.

9. To guarantee the payment of money unsecured or secured by or debenture stocks, contracts, mortgages, charges, obligations, instruments and securities of the Company and generally to guarantee to become sureties for the performance of any contracts or obligations concerning the business of this Company or any of its subsidiaries or associated undertakings or any other company.
10. To draw, make, accept, endorse, seal, execute, negotiate, purchase, hold and dispose of cheques, promissory notes, bills of exchange, drafts, charter parties, bills of lading, warrants and other negotiable documents and contracts, deeds and other instruments and to cancel and carry such instruments, relating to the business of the Company.
11. To apply for, purchase or otherwise acquire any patents, brevetted invention, licenses, concessions, and the like conferring any exclusive or non-exclusive or limited rights to use, or any secret or other information as to any invention which may seem capable of being used for the purposes of the Company or the acquisition of which may seem calculated, directly or develop or grant licenses in



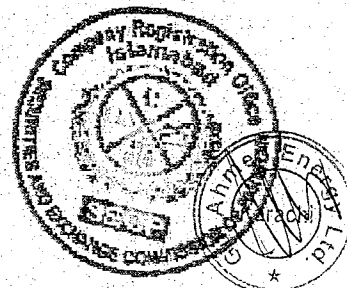
respect of or otherwise turn to account the property, rights or information so acquired.

12. To remunerate Directors, officials, agents, employees and servants of the Company and others and to benefit employees or ex-employees of the Company, and to grant pensions, gratuities and allowances and to provide bonuses, amenities and conveniences of all kinds and for the purpose of this paragraph the words "employees" and "ex-employees" shall include respectively, present and former directors and other officers, agents, employees, trainees, and servants.
13. To improve, develop, sell, exchange, taken on lease, mortgage, pledge, hypothecate, assign, transfer, or deal with all or any part of the property and assets, immovable/ movable, corporeal or incorporeal, tangible or intangible, and any right, title and interest therein of the Company, including rights, licenses, privileges, concessions and franchises as may seem expedient.
14. To payout of the funds of the Company all expenses which the Company may lawfully pay with respect to the formation, promotion and registration of the Company or the issue of its capital, including brokerage and commissions for obtaining applications for or taking placing or underwriting or procuring the underwriting of shares, debentures, other securities of the Company.
15. To pay for rights or property acquired by the Company and to remunerate any persons or company whether by cash payment or by the allotment of

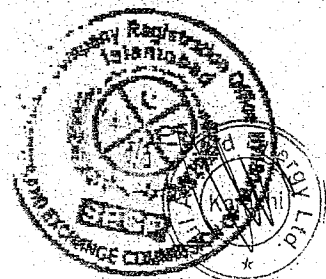


shares, debentures or other securities of the Company as fully paid up.

16. To adopt such means of making known the services and products of the company as may seem expedient and in particular by undertaking educational training and demonstration programmes and by advertising in the press, by circulars and exhibitions of works of art or interest, by publication of books and periodicals and by granting prizes, rewards and donations.
17. To aid, pecuniarily or otherwise, and association, body or movement having for an object the solution settlement, or surmounting of industrial or labor problems or troubles or the promotions of industry or trade.
18. To sell, improve, develop, exchange, take on lease, mortgage, dispose of, turn to account or otherwise deal with all or any part of the property and rights of the Company.
19. To distribute among the Members in specie any property of the Company, or any proceeds of sale of disposal of any property of the Company but so that no distribution amounting to a reduction of capital be made except with the sanction (if any) for the time being required by law.
20. To sell or dispose of the undertaking of the Company or any part thereof for such consideration as the Company may think fit.



21. To borrow or raise moneys, either against security or without security, in such manner as the Company or its directors may think fit and in particular by sale, negotiations, transfer, issue or against the security of bills of exchange, promissory notes and other negotiable, transferable or other instruments, debentures or issue of debentures, debenture-stocks, bonds, obligations, mortgages and securities of all kinds, either perpetual or otherwise, secured or unsecured and to secure the repayment of any moneys borrowed, raised or owing by the Company on any of the specific property, assets and rights (present and future) including the uncalled capital of the Company, and to secure similarly any other debt or obligation of the Company or its subsidiaries or associated undertakings and to guarantee the performance by the Company or any other body corporate or other person whatsoever of any obligation undertaken by the Company or by such body corporate or person.
22. To form, constitute, float, lend money to assist and control companies, associations or undertakings engaging in any industrial, commercial or business activities.
23. To invest in, subscribe to or acquire any shares, stocks, debentures, debenture stocks, bonds, mortgage, obligations and other securities by subscription, tender, purchase, exchange or otherwise out of the funds of the Company, either conditionally or unconditionally and to guarantee the subscription thereof.
24. To undertake any takeover bids, mergers, amalgamations, acquisitions, rehabilitation or

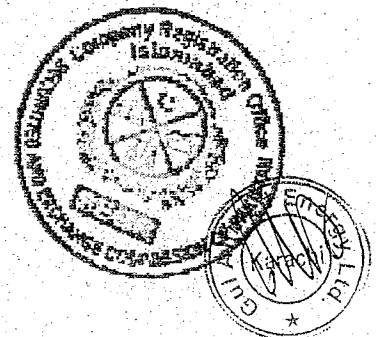


restructuring with or in respect of any business, company, body corporate or other person, whether incorporated or not by acquisition of its assets and liabilities, and whether as a going concern or as part of the concern, and to promote or procure incorporation, formation or setting up of concerns and undertakings for engaging in any industrial, commercial or business activities.

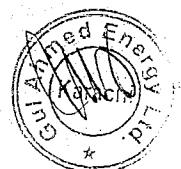
25. To negotiate, enter into and perform agreements and contracts of every kind and description with any company, firm or person whatsoever for any lawful purpose, without any limit as to amount, and to obtain from such company, firm or person any rights, privileges, contracts, concessions and dispose of them or turn to account the same.
26. To do all or any of the above things, either as principals, agents, contractors, or in conjunction with others, and either by or through agents, sub-contractors, trustees or otherwise, and either alone or in conjunction with others, and to do all such things as are incidental or conducive to the attainment of the objects as specified above.

It is hereby undertaken that the company shall not engage in banking business or business of any investment company or insurance or leasing or in any unlawful business and that nothing contained in the object clause shall be so construed to entitle it to engage in such business.

IV. The liability of the members is limited.



- V. The Authorised Capital of the Company is Rs. 1,850,000,000 (Rupees One Billion Eight Hundred Fifty Million only) divided into 185,000,000 Ordinary shares of Rs. 10/- (Rupees Ten) each with power to increase or reduce the said Capital and divide the Ordinary Shares into various classes in accordance with provisions of the Companies Ordinance, 1984.



We, the several person whose names and addresses are subscribed are desirous of being formed into a Company in pursuance of this Memorandum of Association, and we respectively agree to take the Number of shares in the capital of the Company set opposite our respective names:

Name and Surname (Present and former) in full (Block Letters)	Father's / Husband's Name in full	Nationality with any former Nationality	Occupation	Residential Address (in full)	Number of shares taken by each subscriber	Signature
MR IQBAL ALIMOHAMMED	Haji ALIMOHAMMED	Pakistani	Industrialist	112, Garden East, Karachi	One	
MR. BASHIR H. ALIMOHAMMED	Haji ALIMOHAMMED	Pakistani	Industrialist	B-17, K.D.A. Scheme No. 1, Karnaz Road, Karachi	One	
MR. ABDUL RAZZAK	Haji SATTAR	Pakistani	Industrialist	113, Garden East, Karachi	One	
MR. MOHAMMED ASIF	A. CHAFFAR	Pakistani	Industrialist	238, Garden East, Karachi	One	
MR. SIRAJ	Haji KASSAM TELI	Pakistani	Industrialist	117/1, Garden East, Karachi	One	
MR. YASIN	Haji KASSAM TELI	Pakistani	Industrialist	117/1, Garden East, Karachi	One	
MR. JUNAID	Haji LATIF	Pakistani	Industrialist	239/2, Garden East, Karachi	One	
MR. UBAID	AMANULLAH	Pakistani	Industrialist	219/1, Garden East, Karachi	One	

Dated: 11th day of July, 1994

Witnesses to the above Signature:

NAME: FATHER NAME: OCCUPATION: NATIONALITY: FULL ADDRESS:

Zabir Ahmed Mohammad Musa Chartered Accountant Pakistani

Sattar Chambers,

29-West Wharf Road Karachi

CERTIFIED TO BE TRUE COPY

No. ADI 9685

Dated 1/4/96

Joint Registrar
Company Registration Office Islamabad



The Companies Ordinance, 1984
(Company Limited By Shares)

ARTICLES OF ASSOCIATION
OF
GUL AHMED ENERGY LIMITED
PRELIMINARY

1. The regulations contained in Table A in the First Schedule to the Companies Ordinance, 1984, shall not apply to the Company except in so far as the same may be expressly incorporated or deemed to be incorporated in these Articles or made expressly applicable by the said Ordinance or any statutory modification thereof.
2. In these Articles, unless the context or subject matter otherwise requires:
 - i. "Board" means Board of Directors for the time being.
 - ii. "Chief Executive" means the Chief Executive for the time being of the Company as defined in Section 2 (1) (6) of the Ordinance.
 - iii. "Company" means the GUL AHMED ENERGY LIMITED.
 - iv. "Debenture" and "Debenture Holders" includes debenture/stock and debenture stock holder respectively.
 - v. "Director" means a director for the time being of the Company.
 - vi. "Dividend" includes bonus.
 - vii. "Executors" include administrators.
 - viii. "In Writing" and "Written" includes printing, lithography, typewriting and other modes of representing or reproducing words in a visible form.
 - ix. "Modaraba", "Modaraba company" and "Modaraba Certificate" have the meaning respectively assigned to them in the Modaraba Companies and



- x. Modaraba Floatation and Control Ordinance, 1980.
- xi. "Month" means calendar month according to the English Calendar.
- xii. The Office means Registered Office for the time being of the Company.
- xiii. The Ordinance means the Companies Ordinance, 1984.
- xiv. "PTC" and "TFC" means Participation Term Certificate and Term Finance Certificate respectively.
- xv. "Proxy" includes Attorney, duly constituted under a Power of Attorney.
- xvi. "The Register" means the register of members to be kept pursuant to Section 147 of the Companies Ordinance, 1984.
- xvii. "Seal" means the Common seal of the Company.
- xviii. "Special Resolution" has the meaning assigned thereto by Section 2 (1) (36) of the Companies Ordinance, 1984.
- xix. Security Sharing Agreement means the agreement dated 29 July, 1996, so entitled and entered into between the Company, International Finance Corporation (IFC), ING Bank NV (ING), Citibank N.A., Citicorp Trustee Company Limited as the Security Trustee for IFC and ING (herein referred to as the Security Trustee which expression shall include its successors in interest, transferees and assignees).
- xx. Securities include Shares, Modaraba Certificate, PTCs, TFCs and Debenture Certificate.

Words importing the Singular number also include the plural number and vice versa.

Words importing the masculine gender include all other genders.

Words importing persons include firms, associations, Companies and others.

Words and phrases defined in the Ordinance shall have the same meaning when used herein.

- 3. None of the funds of the Company shall be employed directly or indirectly in the purchase of or lent on the security of shares of the Company, and the Company, shall not except as authorised by Section 95 of the Ordinance, give any financial assistance for the purpose of or in connection with any purchase of shares in the Company.

SHARES

- 4. The authorised capital of the Company is Rs. 1,850,000,000 (Rupees One Billion

(Eight Hundred Fifty Million only) divided into 185,000,000 ordinary shares of Rs. 10/- (Rupees Ten) each. Minimum subscription at which the Directors shall proceed to allotment shall be Rs. 500,000.

5. The shares shall be under the control of the Directors, who may allot or otherwise dispose off the same to such persons on such terms and conditions as the Directors think fit.
6. If two or more persons are registered as joint holders of any share, any of such persons may give effectual receipts for any dividends or other moneys payable in respect of such share.
7. Save as herein otherwise provided, the Company shall be entitled to treat the registered holder of any share and shall not, except as ordered by a court of competent jurisdiction, or as by statute required, be bound to recognise any equitable or other claim or interest in such share on the part of any other person.

SHARE CERTIFICATES

8. Every person whose name is entered as a member in the register of members shall without payment be entitled to a certificate under the Seal specifying the share or shares held by him and the amount paid thereon including in particular and without limitation such legends as the Company shall be obligated to affix to certain of the certificates by law or as the Company shall have agreed to affix pursuant to any contractual arrangements in this respect. Provided that, in respect of a share or shares held jointly by several persons the Company shall not be bound to issue more than one certificate and delivery of a certificate for a share to one of several joint holders shall be sufficient delivery to all.
9. If a share certificate is defaced, lost or destroyed, it may be renewed on payment of such fee as may be prescribed if any and on such terms, if any as to evidence and indemnity as the Directors think fit.
10. As regards allotment from time to time, the Directors shall duly comply with the provisions of Section 67 to 73 of the Ordinance.
11. Each share in the Company shall have a distinctive number.

TRANSFER OF SHARES

12. The transfer of shares shall be effected by an instrument in Writing in the usual common form, modified so as to suit the circumstances of the parties.
13. The instrument of transfer of a share shall be duly stamped and shall be executed both by the transferor and the transferee whose execution shall be attested by at least one witness who shall add his address and occupation, and the transferor shall be deemed to remain the holder of such share until the name of the transferee shall have been entered in the Register of Members.
14. Wherever shares of different classes have been issued, a separate instrument of transfer shall be required for each class of shares unless the Directors resolve



otherwise.

15. The Directors may decline to recognize any instrument of transfer, unless the instrument of transfer is deposited at the office or such other place as the Directors may appoint, accompanied by the certificate or certificates of shares to which it relates, and such other evidence (if any) as the Directors may reasonably require to show the right of the transferor to make the transfer, and if the instrument of transfer is executed by some other person on his behalf, the authority of that person so to do.
16. If the Directors refuse to register a transfer they shall within 30 days after the date on which the transfer was lodged with the Company send to the transferee and the transferor notice of the refusal as required by the Ordinance.
17. The Directors may on giving seven days previous notice by advertisement in some newspaper circulating in the Province in which the office is situated and in the province in which the Stock Exchange on which the Company is listed is situate, close the transfer book and register of members during such time as the Directors think fit, not exceeding as a whole forty-five days in each year, and not exceeding thirty days at a time.
18. Neither the Company nor its Directors shall incur any liability for registering or acting upon a transfer of shares apparently made by sufficient parties, although the same may, by reason of any fraud or other cause not known to the Company or its Directors, be legally inoperative or insufficient to pass the property in the shares proposed or professed to be transferred, and although the transfer may as between the transferor and transferee be liable to be set aside, and notwithstanding that the Company may have notice that such instrument of transfer was signed or executed and delivered by the transferor in blank as to the name of transferee or the particulars of the shares transferred, or otherwise in defective manner, and in every such case the person registered as transferee, his executors, administrators and assignees alone shall be entitled to be recognized as the holder of such shares and the previous holder shall, so far as the Company is concerned, be deemed to have transferred his whole title thereto.
19. The instrument of transfer of any share shall be in writing in the usual common form or in the following form, or as near thereto as circumstances shall admit:

GUL AHMED ENERGY LIMITED

I _____ of _____ in consideration of the sum of Rs. _____ paid to me by of here in after called the said transferee, do hereby transfer to the said transferee share (or shares) numbered _____ to _____ (both inclusive) in the undertaking called GUL AHMED ENERGY LIMITED to hold unto the said transferee, his executors, administrators, and assigns, subject to the several conditions on which I held the same immediately before the execution hereof, and I, the said transferee, do hereby agree to take the said share (or shares) subject to the conditions aforesaid.



In witness whereof we have put our hands this _____ days _____ 19 _____

Witnesses:

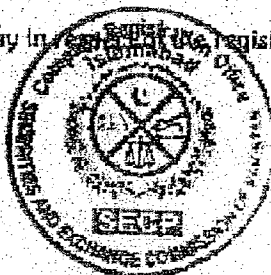
1. _____ Transferor

2. _____ Transferee

20. All instruments of transfer which shall be registered shall be retained by the Company, but any instrument of transfer which the Directors may decline to register shall be returned to the person depositing the same. Any instrument of transfer retained may be destroyed after three years from the date of registration.

TRANSMISSION OF SHARES

21. In the case of death of a shareholder, the survivor where the deceased was joint holder, and the executors or administrators or nominees under Section 80 of the Ordinance of the deceased where he was a sole or only surviving holder, shall be the only persons recognized by the Company as having any title to his shares but nothing herein contained shall release the estate of a deceased holder (whether sole or joint) from any liability in respect of any share solely or jointly held by him.
22. Any person becoming entitled to a share in consequence of the death, bankruptcy or insolvency of a member may, subject as hereinafter provided, either be registered himself as holder of the share upon giving to the company notice in writing of such desire, or transfer such share to some other person. All the limitations, restrictions, and the provisions of these Articles relating to the right to transfer and the registration of transfers of shares shall be applicable to any such notice of transfer as aforesaid as if the death or insolvency of the member had not occurred and the notice of transfer was a transfer executed by such member.
23. The Company shall not be bound to recognize an executor or administrator unless he shall have obtained probate or letters of administration or other legal representation, as the case may be, provided nevertheless that it shall be lawful for the Directors in their absolute discretion to dispense with the production of probate or letters of administration or such other legal representation upon such terms as to indemnity or otherwise as the Directors may decide.
24. Save as otherwise provided by or in accordance with these Articles, a person becoming entitled to a share in consequence of the death or insolvency of a member shall be entitled to receive and may give a discharge for all dividends and other moneys payable in respect of the shares, and shall be entitled to attend and to vote at any general meeting as if he were the registered holder of such share, provided that seventy-two hours at least before the time of holding the meeting or adjourned meeting at which he proposes to vote he shall satisfy the Directors as to his right, or the Directors shall have previously admitted his rights, to vote at every meeting in respect thereof.
25. There shall be paid to the Company in respect of the registration of any probate,



letters of administration certificate of marriage or death, power of attorney or other document relating to or affecting the title to any shares, or for making any entry in the register affecting the title of any share, such fee, as the Directors may from time to time, require or prescribe.

26. Any committee or guardian of a lunatic or infant member or any person becoming entitled to transfer shares in consequence of the death or bankruptcy or insolvency of any member upon producing such evidence that he sustains the character in respect of which he proposes to act under this Article, or of his title, as the Directors think sufficient, may with the consent of the Directors (which they shall not be under any obligation to give) be registered as a member in respect of such shares, or may subject to the regulations as to transfer hereinbefore contained, transfer such shares. This Article is hereinafter referred to as "The Transmission Clause".
27. All instruments of transmission which shall be registered shall remain in the custody of the Company for such period as the Directors may determine but any instrument of transmission which the Directors may decline to register or act upon shall be returned to the person depositing the same.
28. The Directors shall have the same right to refuse to register a person entitled by transmission to any shares or his nominee, as if he were the transferee named in an ordinary transfer presented for registration.

ALTERATION OF CAPITAL

29. The Company in general meeting may from time to time by ordinary resolution increase its authorised capital by such sum to be divided into shares of such amounts as the resolution shall prescribe.
30. Unless otherwise determined by the Company in general meeting any original shares for the time being unissued and any new shares from time to time be created shall be offered to the members in proportion, as nearly as may be to the number of shares held by them. Such offer shall be made by notice specifying the number of shares to which the member is entitled, and stating a time within which the offer, if not accepted, will be deemed to be declined and after the expiration of such time, or on the receipt of an intimation from the member to whom the offer is made that he declines to accept the shares offered, the Directors shall dispose off such shares in accordance with the provisions of Section 86 of the Ordinance. The Directors may dispose off any such new or original shares as aforesaid which, by reason of the proportion borne by them to the number of persons entitled to such offer as aforesaid or by reason of any other difficulty in apportioning the same, cannot in the opinion of the Directors be conveniently offered in manner herein before provided.
31. All new shares shall be subject to the provisions of these Articles with reference to transfer, transmission or otherwise.
32. The Company may, by ordinary resolution:



- (a) consolidate and divide all or any of its share capital into shares of larger amounts than its existing shares (subject, nevertheless to the provisions to Section 92 of the Ordinance).
 - (b) cancel any shares which, at the date of passing of the resolution, have not been taken or agreed to be taken by any person and diminish the amount of its capital by the amount of the shares so canceled, or
 - (c) sub-divide its shares, or any of them into shares of smaller amount than is fixed by the Memorandum of Association (subject nevertheless, to the provisions to Section 92 of the Ordinance).
33. The resolution whereby any shares are sub-divided may determine that as between the holders resulting from such sub-division, one or more of such shares shall have some preference or special advantage as regards dividend, capital, voting, or otherwise over or as compared with the others or other, subject nevertheless to the provision of Section 92 of the Ordinance.
34. Subject to confirmation by the Court, the Company may by Special Resolution reduce its share capital in any manner authorised by the Ordinance.
35. Subject to the provision of the Ordinance whenever the capital is divided into different classes of shares all or any of the rights and privileges attached to each class (unless otherwise provided by the terms of issue of the shares of the class) may be modified, commuted, affected, abrogated or dealt with by agreement between the Company and any persons purporting to contract on behalf of that class, provided such agreements are (i) ratified in writing by the holders of at least three fourths in nominal value of the issued shares of the class or (ii) confirmed by a special resolution passed at a separate general meeting of the holders of shares of that class and all the provisions hereinafter contained as to general meetings shall, mutatis mutandis, apply to every such meeting, except that the quorum thereof shall be members holding or representing by proxy one-fifth of the nominal value of the issued shares of the class and that holders of shares of that class present in person or by proxy may demand a poll. This Article is not by implication to curtail the power of modification which the Company would have if this Article were omitted.

GENERAL MEETING

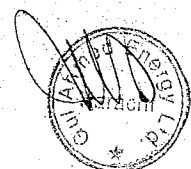
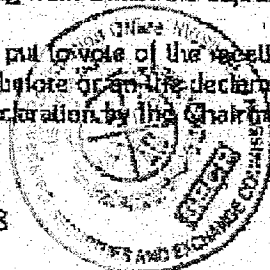
36. The Company shall hold its annual general meeting within eighteen months from the date of its incorporation and thereafter once at least in every calendar year within a period of six months following the close of the financial year and not more than fifteen months after the holding of its last preceding annual general meeting. The Company shall hold a statutory meeting in accordance with Section 157 of the Ordinance.
37. All general meetings of the Company, other than the annual general meeting, referred to in section 158 and the statutory meeting mentioned in section 157 of the Ordinance shall be called extraordinary general meetings.



38. The Directors may at any time call an extraordinary general meeting of the Company to consider any matter, which requires the approval of the Company in a general meeting, and shall, on the requisition of the members representing not less than one tenth of the voting power on the date of the deposit of the requisition, forthwith proceed to call an extraordinary meeting.

PROCEEDINGS OF GENERAL MEETINGS

39. Twenty-one day's clear notice at the least specifying the place, the day and the hour of meeting and, in case of special business the general nature of that business, shall be given in manner provided by the Ordinance for the general meeting, to such persons as are, under the Ordinance or the regulation of the Company, entitled to receive such notice from the Company; but the accidental omission to give notice by any member shall not invalidate the proceedings at any general meeting.
40. All business shall be deemed special that is transacted at an extraordinary general meeting, and all that is transacted at an annual general meeting with the exception of declaring a dividend, the consideration of the accounts, balance sheet and the report of the Directors and auditors, the election of Directors, the appointment of, and the fixing of the remuneration of the auditors.
41. No business shall be transacted at any general meeting unless quorum of members as specified in Section 160(2)(a) of the Ordinance i.e. not less than three members present personally who represent not less than twenty five percent of the total voting power either of their own account or as proxies.
42. If, within half an hour from the time appointed for the meeting, a quorum is not present, the meeting, if called upon the requisition of members, shall be dissolved; in any other case it shall stand adjourned to the same day in the next week at the same time and place, and if at the adjourned meeting, a quorum is not present within half an hour from the time appointed for the meeting, the member or members present shall be a quorum and may transact the business for which the meeting was called.
43. The Chairman of the Board of Directors, if any shall preside as Chairman at every general meetings of the Company, but if there is no such Chairman, or if at any meeting he is not present or is unwilling to act as Chairman, and if none of the Directors is present or unwilling to act as Chairman, the member or members present shall choose one of their number to be Chairman.
44. The Chairman may, with the consent in any meeting at which a quorum is present (and shall if so directed by the meeting), adjourn the meeting from time to time but no business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place.
45. At any general meeting a resolution put to vote of the meeting shall be decided on a show of hands unless a poll is (before or on the declaration of the result of the show of hands) demanded. A declaration by the Chairman that a resolution

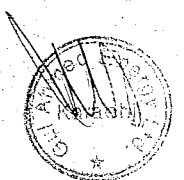


has, on the show of hands been carried or carried unanimously, or by a particular majority, or lost and an entry to that effect in the book of the proceedings of the Company shall be conclusive evidence of the fact, without proof of the number or proportion of the votes recorded in favour of, or against, that resolution.

46. Before or on the declaration of the result of the voting on any resolution on a show of hands, a poll may be ordered to be taken by the Chairman of a meeting of his own motion and shall be ordered to be taken by him on a demand made in that behalf by the persons or person specified in Section 167 of the Ordinance.
47. A poll demanded on the election of a Chairman or on a question of adjournment shall be taken forthwith and a poll demanded on any other question shall be taken at such time, not more than fourteen days from the day on which it is demanded, as the Chairman of the meeting may direct.
48. When a poll is taken, the Chairman or his nominee and a representative of the members demanding the poll shall scrutinize the votes given on the poll and the result shall be announced by the Chairman.
49. Subject to the provision of the Ordinance, the Chairman shall have power to regulate the manner in which a poll shall be taken.
50. The result of the poll shall be deemed to be the decision of the meeting on the resolution on which a poll was taken. The demand of a poll may be withdrawn. In case of any dispute as to the acceptance or rejection of a vote, the Chairman shall determine the same, and such determination made in good faith shall be final and conclusive.

VOTE OF MEMBERS

51. On a show of hands every member present in person or by proxy and entitled to vote shall have one vote for every share of which he is the holder and on a poll every member present in person or by proxy shall have one vote for every share of which he is the holder.
52. In the case of joint holders of a share the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint holders, and for this purpose seniority shall be determined by the order in which the names stand in the register of members.
53. A member of unsound mind, or in respect of whom an order has been made by any court having jurisdiction in lunacy may vote, whether on a show of hands or on a poll, by his committee, curator bonis or other person appointed by such court, and such committee, curator bonis or other person may on a poll vote by proxy, provided that such evidence as the Directors may require of the authority of the person claiming to have the right to vote shall have been deposited at the office or at such other place as the Directors may appoint not less than forty eight hours before the time for holding the meeting.

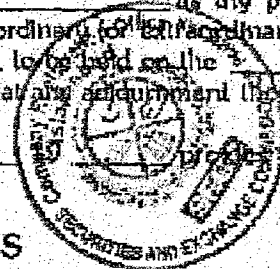


54. No objection shall be raised to the qualification of any voter except at the meeting or adjourned meeting at which the vote objected to is given or tendered, and every vote not disallowed at such meeting shall be valid for all purposes. Any objections made under the provisions of this Article shall be referred to the Chairman of the meeting whose decision shall be final and conclusive.
55. On a poll votes may be given either personally or by a proxy who need to be a member of the Company. A person entitled to more than one vote need not use all his votes or cast all the votes he uses in the same way.
56. The instrument appointing a proxy shall be in writing under the hand of the appointer or of his attorney duly authorised in writing, or if the appointer is a corporation either under the common seal or under the hand of an officer of an attorney so authorised. Members not resident in Pakistan may appoint and revoke proxies by telegram.
57. Any person duly appointed for that purpose shall be entitled to act at that meeting as the representative of a corporation under Section 162 of the Ordinance.
58. The instrument appointing a proxy and the power of attorney or other authority (if any), under which it is signed or a notarially certified copy of such power or authority, shall be deposited at the office or such other place as the Directors may appoint not less than forty-eight hours before the time appointed for holding the meeting or adjourned meeting at which the person named in the instrument proposes to vote and in default thereof the instrument of proxy may at the discretion of Directors be treated as invalid. The authority of the proxy shall be deemed to include the right to demand or join in demanding a poll, and generally to speak, vote and to act at the meeting in the same manner and extent as the member giving the proxy.
59. An instrument of proxy may be in the following form or in any other form which the Directors shall approve:

GUL AHMED ENERGY LIMITED

I, the undersigned, being a member of the above named Company hereby appoint _____ of _____ Whom
 calling _____ of _____ as my proxy
 to vote and act for me, and on my behalf, at the ordinary or extraordinary as
 the case may be) general meeting of the Company, to be held on the _____
 day of _____ 19 _____ and at any adjournment thereof.

Dated this _____ day of _____
 not be witnessed.

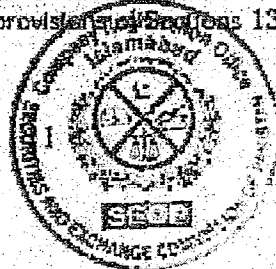


BORROWING POWERS

60. The Directors may borrow from members, Banks or Financial Institutions or other persons and may themselves lend any sum of money for purposes of the Company.



61. The Directors may secure payment of money in a manner and on terms and conditions as they think fit and in particular by (i) entering into Mudaraba contracts, (ii) issue of perpetual or redeemable and convertible or non convertible PTCs, TFCs debentures and their stocks, bonds, promissory notes, bills of exchange, usance bills and such other securities, (iii) furnishing guarantees and underwriting, depositing securities, shares and documents of title; (iv) hypothecating, charging and mortgaging properties and assets (both present and future) of the Company and creating liens on and pledging such properties; and (v) appointing attorneys, giving them powers of executing documents, having them registered, selling and managing the properties, undertaking any business of the Company and furnishing and creating such other securities as may be considered expedient; and for all the aforesaid purposes or otherwise execute, complete and deliver agreements and such other documents as may be required.
62. The Company may raise and secure payment of any sum by issue of TFCs or PTCs. The TFCs/PTCs may be issued at a discount, premium or otherwise with special privileges as to redemption, conversion into shares with voting rights and their subsequent reconversion into PTCs.
63. PTCs, TFCs, debentures, stocks thereof, bonds and other securities may be made assignable free from any equities between the Company and person to whom the same may be issued.
64. The Directors, shall cause a proper register to be kept in accordance with Section 125 of the Ordinance, of all mortgages and charges specially affecting property of the Company and shall comply with requirements of Section 121 and 122 of the Ordinance, in regard to registration of mortgages and charges therein specified and requirements of section 130 of the Ordinance, as to keeping a copy of every instrument creating mortgages or charge at the office, and requirements of Section 132 as to giving limitation of payment of satisfaction of charges or mortgages created by the Company.
65. Registers of holders of TFCs and debentures may be closed for any period not exceeding, in whole, thirty days in any year. Subject as aforesaid every such register shall be open to inspection of registered holders of PTCs, TFCs and debentures and of any member; but the Company may impose any reasonable restriction so that at least two hours in each day, when such register is open are appointed for inspection.
66. Subject to the provisions of Section 76 of the Ordinance, no transfer of PTCs, TFCs or debentures shall be registered unless a proper instrument of transfer duly stamped and executed by transferor and transferee has been delivered to the Company together with certificate of concerned securities.
67. If the Directors refuse to register transfers of PTCs, TFCs or debentures they shall within thirty days from the date on which instrument of transfer was lodged with the Company, send to the transferee and transferor a notice showing the reason of refusal as required under Section 78 of the Ordinance.
68. The Company shall comply with provisions of Sections 136 of the Ordinance for



allowing inspection of copies kept at the office in pursuance of Section 130 of the Ordinance and allowing inspection of Register of PTC, TFC or debenture holders, in pursuance of Section 136 of the Ordinance.

69. The Company shall comply with provisions of Section 136 of the Ordinance for supplying copies of Register of PTC, TFC and debenture holders or trust deed for securing issue of PTC, TFC or debenture.
70. Trustees for the PTC, TFC and Debenture Holders shall have the same right to receive and inspect balance sheet and profit and loss accounts of the Company and reports of Auditors and other reports as are possessed by holders of Ordinary Shares in the Company.
71. Subject to the provisions of the Ordinance, no loan or guarantee or security for loan shall be made directly or indirectly by the Company for or on behalf of any member of the Company unless the same shall have been approved by a three fourths majority of the Directors.

DIRECTORS

72. The number of Directors of the Company shall not be less than seven and more than twelve save as otherwise provided in the Ordinance, a Director shall be a member of the Company. The subscribers to the Memorandum of Association shall be the first Directors of the Company.
73. Any casual vacancy arising from the death, resignation or removal of a Director shall be filled by the remaining Directors Provided that no such vacancy shall be deemed to have occurred so as to require that it be filled where the provisions of Article 87(g) result in the vacation of office by a Director if and so long as the Security Trustee appoints pursuant to the provisions of Article 89 and the powers conferred by Clause 5.2(b)(ii) of the Security Sharing Agreement at least the same number of Directors as it names in the notice under Clause 5.02(b)(i) of the Security Sharing Agreement.
 - (a) Directors shall be entitled to be paid their reasonable traveling hotel and other expenses incurred in consequence of their attendance at Board meetings, and otherwise in the execution of their duties as Directors.
 - (b) If any Director, being willing, shall be called upon to render services, as Managing Director or otherwise for any of the purposes of the Company, the fixed sum or by a percentage of shares or profit or by remuneration shall be addition to his shares in the Company.

POWERS AND DUTIES OF DIRECTORS

74. The business of the Company shall be managed by the Directors who may pay all expenses incurred in promoting and registering the Company, and may exercise all such powers of the Company, and may exercise all such powers of the Company as are not by the Ordinance or any statutory modification thereof for the time



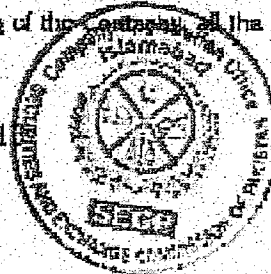
being in force, or by these regulations required to be exercised by the Company in the general meeting, subject nevertheless to the provisions of the Ordinance or to any of these regulations being not inconsistent with the aforesaid provision, as may be prescribed by the Company in general meeting but no regulation made by the Company in general meeting shall invalidate any prior act of the Directors which would have been valid if that regulation had not been made.

PROCEEDING OF DIRECTORS

76. The Directors may meet together for the dispatch of business, adjourn or otherwise regulate their meetings, and proceedings, as they think fit, and may determine the quorum necessary for the transaction of business. The quorum for Directors meeting shall be one third of total number of Directors or four whichever is greater.
77. Questions arising at any meeting shall be decided by a majority of votes.
78. A Director may, at any time summon a meeting of Directors. It shall be necessary to give notice of a meeting of Directors to any Director for the time being absent from Pakistan, at such facsimile number or other contact number or address as he shall from time to time provide to the Company.
79. The Chairman shall be elected amongst the Directors who shall preside at meetings of Directors as Chairman but if no such Chairman is elected or in any meeting the Chairman is not present or is unwilling to act as Chairman, the Directors present may choose one of their members to be Chairman of the Meeting.
80. A meeting of the Directors at which a quorum is present, shall be competent to exercise all or any of the authorities, powers, and directions by or under the Articles of the Company for the time being vested in or exercisable by the Directors generally.
81. The Directors may delegate all or any of their powers to the Chief Executive (by whatever name called) as they think fit and may from time to time, revoke such delegation subject to the agreement with the Chief Executive or Managing Director (by whatever name called).
82. Except for the matters specified in Section 196 of the Ordinance, a resolution in writing signed by all the Directors for the time being in office shall be as valid and effectual as if it had been passed at a meeting of the Board duly called and constituted. For this purpose, it shall be permissible to circulate the text of the proposed resolution duly signed by the Chief Executive and obtain the signatures of all the other Directors thereon separately by fax (the signed original whereof shall be sent in due course by mail or courier to the Company for its record) and such resolution shall be effective as soon as the text of the resolution signed by each of the other Directors shall have been faxed to and received by the Company.

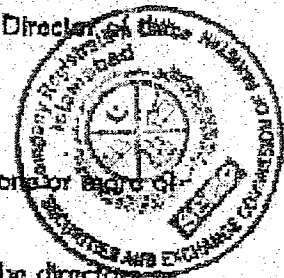
RETIREMENT & ELECTION OF DIRECTORS

83. At the first annual general meeting of the Company, all the first Directors shall



stand retired from office, and Directors shall be elected in their place in accordance with Section 178 of the Ordinance, for a term of three years. Notwithstanding that the number of persons offering themselves for election as Directors is not more than the number of Directors fixed under Article 72, the number of votes cast in favour of each candidate and the name of the member casting such votes shall be recorded in the minutes of the meeting.

84. A retiring director shall be eligible for re-election.
85. The Directors of the Company shall, subject to section 174 of the Ordinance, fix the number of elected directors of the Company not later than thirty-five days before the convening of the general meeting at which Directors are to be elected, and the number so fixed shall not be changed except with the prior approval by ordinary resolution of a general meeting of the Company.
86. No person shall be appointed as a Director of the Company if he:-
- (a) is minor;
 - (b) is found to be of unsound mind;
 - (c) is adjudged insolvent by a court of competent jurisdiction;
 - (d) has been convicted by a court of law for an offense involving moral turpitude;
 - (e) has been barred from holding such office under any provisions of the Ordinance;
 - (f) has betrayed lack of judicial behavior and a declaration of this effect has been made by the Court under section 217 of the Ordinance at any time during the preceding five years.
 - (g) is not a member of the Company; provided that clause (g) shall not apply in the case of:
 - (i) a whole-time Director who is an employee of the Company;
 - (ii) a Chief Executive;
 - (iii) a person representing one or more creditors as a Director of the Company.
87. A Director shall ipso facto cease to hold office if:
- (a) he becomes ineligible to be appointed a director on any one or more of the grounds enumerated in Articles 86; or
 - (b) he absents himself from three consecutive meetings of the directors or from all the meetings of the Directors for a continuous period of three



months whichever is the longer, without leave of absence from the Directors; or

- (c) The Directors by notice in writing to the Company resigns of his office; or
- (d) he is removed from office by resolution in general meeting, under Section 181 of the Ordinance; or
- (e) he or any firm of which he is partner or any private company of which he is a director:-
 - i) Without the sanction of the Company in general meeting accepts or holds any office of profit under the Company other than of Chief Executive (by whatever name called) or a legal or technical adviser or a banker; or
 - ii) accepts a loan or guarantee from the Company in contravention of Section 195 of the Ordinance.
- f) any other event mentioned in Section 108 of the Ordinance occurs; or
- g) he is named in any notice received by the Company from the Security Trustee pursuant to and under the terms of Clause 5.2(f)(i) of the Security Sharing Agreement.

88. The Company shall keep at its registered office a register of its Directors and officers including the Chief Executive (by whatever the name called), secretary, Chief accountant, auditors and legal adviser, containing with respect to each of them the following particulars, that is to say:-

- a) In the case of an individual, his present name in full, any former name or surname in full his father's name, in the case of a married woman or a widow, the name of her husband or deceased husband, his usual residential address, nationality and if that nationality is not the nationality of origin, his nationality of origin, and his business occupation, if any, and if he holds any other directorship or other office the particulars of such directorship or office;
- b) In the case of a corporation, its corporate name and registered or principal office, and full name, address and nationality of each of its directors; and
- c) In the case of a firm, the full name, address, and nationality of each partner, and the date on which each became a partner.

The Company shall otherwise comply with the provisions of Section 205 of the Ordinance, as regards returns to the Registrar and giving inspection of the register.

In addition to the Directors elected or deemed to have been elected by shareholders, the Company may have Directors nominated by or on behalf of the "Company's



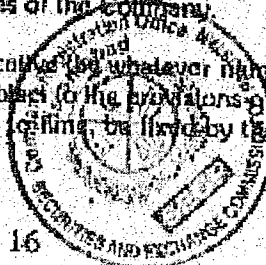
creditors or other special arrangements by virtue of any contractual arrangements and any such contractual arrangements with respect to the appointment of Directors by creditors or other special interests approved by the Board shall be binding on the Company and every person then or at any time thereafter holding the office of Director.

ALTERNATE DIRECTORS

89. A Director may, with the approval of the Board, appoint any person (including another Director) to be his alternate Director and such an alternate Director shall be entitled to notice of meetings of the Directors and to attend and vote thereat accordingly and generally to exercise all the rights of such absent Director subject to any limitations in the instrument appointing him. For the purpose of the proceedings at such meetings, the provisions of these Articles shall apply as if any alternate Director (instead of his appointer) were a Director. An alternate Director shall not require any share qualification and he shall ipso facto vacate office as and when his appointer (a) vacates office as a Director, (b) removes the appointee from office, or (c) returns to Pakistan. Provided upon each occasion upon which the appointer thereafter leaves Pakistan again, and unless the appointer shall have informed the Company to the contrary, he shall be deemed to have reappointed the appointee as his alternate Director and no further approval of the Board shall be required unless the appointer desires to appoint another person not previously approved by the Board as his alternate. If an alternate Director shall be himself a Director, his voting rights shall be cumulative but he shall not be counted more than once for the purposes of quorum. Any appointment or removal under this Article shall be effected by notice in writing under the hand of the Director making the same.

CHIEF EXECUTIVE OR MANAGING DIRECTOR

90. The Directors shall appoint a Chief Executive (by whatever name called in accordance with the provisions of Sections 198 & 199 of the Ordinance).
91. A Chief Executive shall while he continues hold that office subject to the terms of any contract between him and the Company, be subject to the same provisions as to resignations and removal as the other Directors of the Company and if he ceases to hold the office of Director from any cause he shall ipso facto and immediately cease to be Chief Executive.
92. With a view to enable the smooth and efficient functioning of the Company it is clarified that the Chief Executive (by whatever name called) shall be responsible subject to the supervision and control of the Board for the general day-to-day management of the Company and of its business transactions and in the best interests of the Company and do all such actions as may be required, and shall have control over all the employees of the Company.
93. The remuneration of a Chief Executive (by whatever name called) or a Director holding an office of profit shall, subject to the provisions of any contract between him and the Company, from time to time be fixed by the Directors, and be by



way of fixed salary, or percentage of profit, or by both, as provided in such contract.

MINUTES

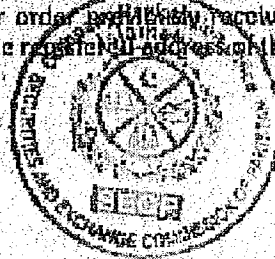
94. The Directors shall cause minutes to be duly entered in books provided for the purpose:
- a) of all names of the Directors present at each meeting of the Directors and committee of Directors, if any;
 - b) of all orders made by the Directors and committee of Directors;
 - c) of all resolutions and proceedings of general meetings and of meetings of the Directors and Committee. Any such minutes of any meeting of the Directors, or any committee, or of the Company, if purporting to be signed by the Chairman of such meeting, or by the Chairman of the next succeeding meeting shall be receivable as prime evidence of the matters stated in such minutes.
95. Until the contrary is proved, every general meeting of the Company or meeting of Directors or committee of Directors in respect of the proceedings whereof minutes have been so made shall be deemed to have been duly called and held, and all proceedings had thereat to have been duly held, and all appointments of Directors or any liquidators made thereat shall be deemed to be valid.
96. The books containing the minutes of proceedings of the general meetings of the Company and those of the meetings of the Directors and committee of Directors shall be kept at the registered office of the Company and shall be open to inspection by members between each hours of working as the Directors may prescribe.

SEAL

97. The Directors shall provide for the safe custody of the Seal, and the Seal shall never be used except by the authority of the Directors, previously given, and in the presence of the Chief Executive (by whatever name called) or anyone of the Directors duly authorised by the Board who shall sign every instrument to which the Seal is affixed.

DIVIDEND AND RESERVES

98. Clause 63 to 70 of Table A shall apply.
99. Notice of the declaration of any dividend, whether Interim or otherwise shall be given to the holders of registered shares in the manner hereinafter provided. Unless otherwise directed, any dividend may be paid by cheque or warrant sent through the post to the registered address of the member or other person entitled pursuant to any directions or order previously received by the Company, or in the case of joint holders, to the registered address of that whose name stands first



in the register in respect of joint holding; and every cheque or warrant so sent shall be made payable to the order of the person to whom it is sent.

ACCOUNTS

100. Clauses 71 to 77 of Table A shall apply.

AUDITORS

101. Auditors shall be appointed and their duties regulated in accordance with Section 252 & 255 of the Ordinance. The Company shall at each annual general meeting appoint an auditor to hold office till the conclusion of the next annual general meeting.

NOTICE

102. Clauses 79 to 83 of Table A shall apply, save that any Director or member resident out of Pakistan shall be entitled to receive notices and such notices shall be delivered by facsimile or courier at the facsimile number or address provided to the Company from time to time by such Director or member.

WINDING UP

103. Clause 84 of Table A shall apply.

104. Clause 85 of Table A shall apply.



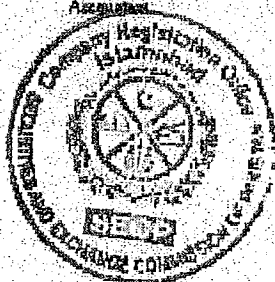
We, the several person whose names and addresses are subscribed are desirous of being formed into a Company in pursuance of this Articles of Association, and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names:

Name and Surname (Sole and Joint) (In full except letters)	Father's/Husband's Name (In full)	Nationality (i.e. any former Residence)	Occupation	Residential Address (In full)	Number of Shares taken by each subscriber	Signature
MR. IQBAL ALMOHAMMED	HAJI ALMOHAMMED	Pakistani	Industrialist	118, Garden East, Karachi.	One	
MR. BASHIR H. ALMOHAMMED	HAJI ALMOHAMMED	Pakistani	Industrialist	B-27, K.I.A. Scheme No. 1, Mansoor Road, Karachi.	One	
MR. ABDUL RAZZAK	HAJI SATTAR	Pakistani	Industrialist	115, Garden East, Karachi.	One	
MR. MOHAMMED ASIF	A. GHAFFAR	Pakistani	Industrialist	738, Garden East, Karachi.	One	
MR. SIRAJ	HAJI KASSAM TELI	Pakistani	Industrialist	117/1, Garden East, Karachi.	One	
MR. YASIN	HAJI KASSAM TELI	Pakistani	Industrialist	117/1, Garden East, Karachi.	One	
MR. JUNAID	HADI LATIF	Pakistani	Industrialist	235/2, Garden East, Karachi.	One	
MR. USAMA	AMANULLAH	Pakistani	Industrialist	239/1, Garden East, Karachi.	One	

Dated: 11th day of July, 1984

Witnesses to the above Signature:

<u>NAME:</u>	<u>FATHER NAME:</u>	<u>OCCUPATION:</u>	<u>NATIONALITY:</u>	<u>RESIDENTIAL ADDRESS:</u>
Zahoor Ahmed	Mohammad Musa	Chartered Accountant	Pakistani.	Seifur Chambers, 25-4th Wharf Road, Karachi.



CERTIFIED TO BE TRUE COPY

Joint Registrar
Companies Registration Office, Islamabad

No. ADI 9685

Dated 11/4/86



ANNEXURE C
CERTIFICATE OF INCORPORATION



GOVERNMENT OF PAKISTAN



CERTIFICATE OF INCORPORATION

(Under section 11 of the Companies Ordinance, 1984 (XLVII of 1984))

Company Registration No. K-05482 OF 1984-95

I hereby certify that GUL AHMED ENERGY LIMITED

is

the

company

is

the

company

is this day incorporated under the Companies Ordinance, 1984 (XLVII of 1984) and that

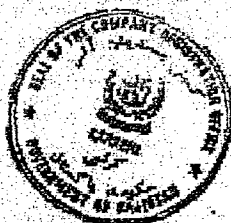
the company is limited by SHARES AS A PUBLIC COMPANY

Given under my hand at KARACHI

this 20TH day of JULY

one thousand nine hundred and NINETY FOUR

Fee Rs. 13,370/-



(NISAR AHMED KAKEPOTA)
JOINT REGISTRAR
OF COMPANIES

CRC-1

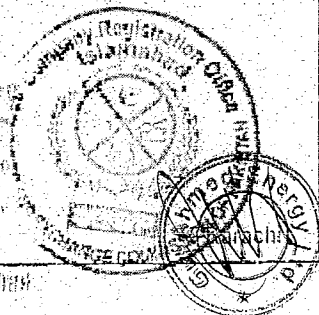

TRUE COPY

Company Secretary

Joint Registrar

No. ADL 9685

Dated 1/4/16



ANNEXURE D
WORKING CAPITAL TERM SHEET



SYNDICATED RUNNING FINANCE FACILITY FOR

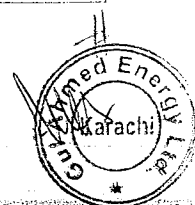
GUL AHMED ENERGY LIMITED

Summary of Indicative Terms & Conditions

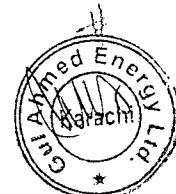
February 08, 2019

The terms and conditions outlined below are not a comprehensive statement of all terms and conditions that will be contained in the definitive legal documentation for the Facility and Transaction contemplated herein, and are subject to change with changes in your or the market conditions. Matters not covered or made clear are subject to the parties' mutual agreement. This Indicative term sheet ("Proposal Document") is for discussion purposes only and does not constitute a legal commitment of the Financial Advisor & Lead Arranger to provide any financing (such that neither yourselves nor any other person may rely on this term sheet). It is for your confidential use only and is subject to detailed due diligence and internal approvals, including, but not limited to credit and capital approvals, and does not give rise to any liability on the part of the Financial Advisor & Lead Arranger. This document is strictly confidential and your obligations hereunder with respect to confidentiality shall survive the expiration or termination of this proposal.

Borrower/Obligor	Gul Ahmed Energy Limited (herein after referred to as "GAEL" or the "Company").
Sponsors	Iqbal Alimohamed and Family
Transaction/Facility	<p>Syndicated Running Finance Facility of up to PKR 2,000 Million ("RF Facility" or the "Facility").</p> <ul style="list-style-type: none"> The Facility is being offered on a best-efforts basis, and is subject to satisfactory due diligence results and internal credit approvals of the participating lending institutions. The Facility to be advanced will be in terms and subject to the conditions of the facility agreements and all other related facility documents, each in form and substance acceptable to the Financiers (the "Facility Documents").
Complex/Plant	136 MW power plant at Korangi Industrial Area in Karachi, set up under the 1994 Power Policy of the Government of Pakistan.
Purpose	The proceeds of the facility shall be utilized to finance the working capital requirements of the Company including but not limited to procurement of fuel for the Company.
Financial Advisor & Lead Arranger/Agent Bank	Allied Bank Limited ("ABL").
Financiers	Banks and DFIs including, but not limited to Financial Advisor & Lead Arranger.
Currency	Pakistani Rupee ("PKR").
Facility Effective Date (FED)	The date, to be specified in the Facility Documents, by which Conditions Precedent to the first disbursement of the Facility are either satisfied or waived.
Tenor	Up to one (1) year from the Facility Effective Date.
Pricing	<p>Base Rate plus 200 bps per annum with no floor or cap.</p> <p>The Base Rate is defined as the 3-month Karachi Inter Bank Offer Rate ("KIBOR"). KIBOR is defined as the Average rate, Ask Side, for the relevant tenor, as published on Reuters page "KIBR" or as published by the Financial Markets Association of Pakistan in case the Reuters page is unavailable.</p> <p>The Base Rate will be set on the last business day before the first drawdown date and subsequently on the last business day prior to the beginning of each quarterly period for the mark-up due at the end of that period ("Rate Setting Date").</p> <p>The Facility agreements shall stipulate a mechanism for replacement of KIBOR in the event that KIBOR is either discontinued or ceases to be a realistic representation of the prevailing cost of funds in the money markets.</p> <p>In the event the parties fail to agree on an instrument or an alternate basis for determining the Base Rate within fifteen (15) days of receipt of a notice ("Notice") by Obligor from the Financiers/Agent Bank, the Obligor shall prepay the entire outstanding amount of the Facility within ninety (90) days of the receipt of Notice along with any accrued mark-up and other charges and expenses.</p>



Arrangement Fee	Arrangement Fees of 100 bps (non-refundable) to be charged flat on the Facility Amount, and will be paid by the Company in the following manner: <ul style="list-style-type: none"> 25% of this fee is payable on the acceptance of this term sheet, and; 75% to be paid on the signing of the Facility Documents.
Agency Fee	PKR 1,750,000 aggregate payable upfront by the Company to the Agent Bank and then on each anniversary thereof over the Tenor of the Facility.
Transaction Legal Counsel	To be appointed in consultation with the Company if applicable.
Legal Charges	To be borne by the Obligor and will be payable at actuals whether or not the Transaction proceeds to signature (if applicable).
Security	<p>The security for the RF Facility shall be finalized after detailed due diligence by the Financiers, however, it will likely include but not be limited to the following:</p> <ul style="list-style-type: none"> 1st Parri Passu hypothecation charge on all present and future current and fixed assets (including land and building) of GAEL with 25% margin; Assignment over all receivables from K-Electric (in its capacity as the Power Purchaser); Personal guarantees from Sponsors of Gul Ahmed Energy Group securing the entire RF Facility amount; Assignment/mortgage over all rights and benefits of the Company under any and all Project insurances and cut-through agreements/clauses for reinsurance (as applicable); and Assignment/mortgage over the Company's rights and benefits (including liquidated damages) under all project documents, including Power Purchase Agreement, Operation and Maintenance Agreement, Equipment Supply Agreement, Fuel Supply Agreement, any performance guarantees/warranty bonds issued thereunder and any amendments thereto, and other rights/benefits/entitlements in relation to the Project. <p>Any other security as deemed necessary by Transaction Legal Counsel and Financiers/Agent Bank.</p>
Government Excise, Levies, Surcharges	Obligor shall pay all excise, levies, stamp duties, other duties or surcharges payable in connection with the Facility.
Out-of-pocket Expenses	To be billed at actual.
Material Adverse Change	<p>If, on or prior to the signing of the Facility Documents, in the Financiers'/Agent Bank's reasonable judgment, any material adverse change occurs in:</p> <ol style="list-style-type: none"> Any of the business, financial condition, operations, performance, properties, concession, consents or prospects of the Obligor that has a consequent material adverse effect on the repayment capability of the Obligor; or Any circumstance, change or condition (including the continuation of any existing condition) in the commercial bank, Islamic bank, loan syndication, financial or capital markets generally, or adverse political or regulatory developments at the country level, occurs and materially impairs the syndication of the Facility; <p>The Financiers shall have the right to renegotiate the terms hereof, or else, return the mandate.</p>
Indemnification	The Company shall indemnify and hold harmless the Financiers and each of their subsidiaries and affiliates and each of their respective officers, directors, employees, agents, advisors & representatives (each an "Indemnified Party") from and against any and all claims, damages, losses, liabilities, costs & expenses (hereinafter collectively referred as "Claim"), joint and several, that may be made against, incurred by or awarded against any Indemnified Party, in each case arising out of or in connection with or relating to performance of the Indemnified Party under the Facility Documents. Facility Documents shall incorporate usual and appropriate indemnities in favor of the Financiers.

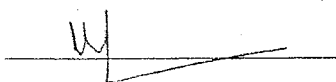
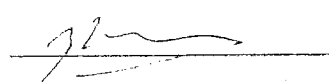


Payments	Payments by the Obligor of all dues under the offer will not be subject to counterclaim or setoff for, or be otherwise affected by, any claim or dispute relating to any matter whatsoever and all such payment shall be made in immediately available free and clear funds without deduction for or on account of any present or future taxes, charges, deductions or withholdings except the withholding of tax in the event it is required by applicable law.
Taxes and Payments	<p>The Obligor shall make all payments under these Proposal Documents without any setoff or counterclaim and free and clear of, and without any deduction or withholding for or on account of, any taxes, duties, costs or expenses.</p> <p>In the event, that any Financier/Agent Bank is required to pay withholding tax in respect of the Facility, the Facility Documents and or any security created by the Obligor to secure the Facility, the Obligor shall reimburse the whole amount of the tax so paid by such party, within a period of seven (7) business days of receiving a demand from such party in this respect.</p> <p>In the event, the Obligor is required by any applicable law, to deduct any tax from such payment on behalf of the Financier(s), the Obligor shall provide to Agent Bank the original copies of the tax challans, duly made out in the name of such party as applicable, in respect of the tax so deducted within a period of fourteen (14) days from the date on which such deduction is made by the Obligor.</p>
Co-Option	The Financiers reserve the right to co-opt any individual and/or financial institution(s) of their own choice in order to successfully close the mandate. The co-option would be at the expense of the Financiers and would not affect the overall cost of the transaction to GAEL.
Market Flex	The Financiers may, at any time up to the signing of the Finance Documents, change any or all of the terms, structure, tenor and pricing of the Facility in consultation with the Company if they feel such alterations are necessary for successful closure of the Transaction. The discussions will be held for a period of ten (10) days. In case the discussions fail to produce an agreement, the Financiers will have the right to return this proposal.
Conditions Precedent	<p>Conditions Precedent(s) to the disbursement of the Facility must be satisfied or deferred for a specified time before the Facility will become effective. The Conditions Precedent to disbursement of the Facility shall include, but shall not be limited to, the Conditions Precedent specified below and such other Conditions Precedent as may be mutually agreed upon in the Facility Documents and:</p> <ol style="list-style-type: none"> All authorizations required by the Obligor in connection with the execution, delivery, validity or enforceability of the Facility Documents, the granting of authority to an authorized officer or officers to execute and deliver the Facility Documents or any other document or notice in connection therewith, and the performance of the Obligor of all of its obligations under the Facility Documents have been obtained; Execution and delivery of the Facility Documents or amendments thereto in form and substance satisfactory to the Financiers and the Obligor; All required insurances are in full force and effect; Creation and perfection of security to the satisfaction of the Financiers; Receipt of necessary consents, approvals, NOCs from all lenders (if applicable) and relevant regulatory authorities as may be required for availing the Facility; Execution and delivery of all "Project Documents" (which will include but be not limited to Power Purchase Agreements, Operations and Maintenance Agreement, Equipment Supply Contract, Fuel Supply Agreement and any performance guarantees/warranty bonds issued thereunder and any amendments thereto, and other rights/benefits/entitlements, including but not limited to liquidated damages, in relation to the Project, and necessary consents, and all insurances/reinsurances required for the Project) in form and substance satisfactory to the Financiers and their legal counsel;

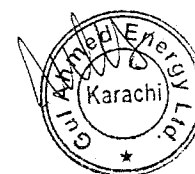
	<p>g. Company has provided all the information for the Project enabling Financiers to carry out their due diligence and arrange their internal approvals for the Facility;</p> <p>h. Annual audited accounts of the Company for the previous two years;</p> <p>i. Submission of the documents including but not limited to the following to the Agent for circulation amongst the Financiers:</p> <ol style="list-style-type: none"> SECP certified Memorandum & Articles of Association of the Obligor; SECP certified Certificate of Incorporation; SECP Certified Form 29; CNIC copies of all directors duly attested by the Company Secretary; SECP certified Form A; Company Secretary certified List of Authorized Signatories; Company Secretary certified List of Directors; Duly filled, signed and stamped Borrowers Basic Fact Sheet; Duly filled, signed and stamped Loan Application Form; Duly filled, signed and stamped Undertaking for Appropriate Utilization of Funds; <p>j. Receipt of a latest valuation report of the Company from a SBP approved valuator and acceptable to the Financiers;</p> <p>k. Compliance with Financial and other Covenants as finalized in the Facility Documents;</p> <p>l. Comprehensive insurance/takaful of all assets to be hypothecated as security shall be placed in favour of the Financiers/Facility Agent throughout the Facility tenor;</p> <p>m. Receipt of latest Stock Report of the Company as acceptable to the Financiers;</p> <p>n. CIB clearance to be obtained such that the Company is not a defaulter of any Bank/DFI or otherwise the Company shall obtain SBP waiver/approval;</p> <p>o. Compliance by Obligor of the Prudential Regulations to the extent pertaining to and in the control of the Obligor;</p> <p>p. Obligor to ensure that all consents, approvals, registrations and authorizations, both government and corporate, that are required to be in place, are in place, and in full force and effect; and</p> <p>Other conditions precedent to be advised and agreed after due diligence and included in the Facility Documents.</p>
Representations and Warranties	<p>Facility Documents shall incorporate usual and appropriate list of representations and warranties for a facility of this type, including but not limited to:</p> <ol style="list-style-type: none"> All license, approvals, consents and Project Documents necessary for carrying out the business and operations are valid and shall remain valid and in force during the entire Tenor of the Facility; The Company will not lend/ invest to the associated companies/ subsidiaries (except in ordinary course of business) during the Tenor of RF Facility without prior consent of Financiers in the event such investment has a material adverse effect over the Company's financial position; Company is not desirous of selling, transferring or dispose-off any of the Project assets (other than the ordinary course of business); No litigation is in process, which may have a material adverse effect on the Company/Project; The Complex/Plant is fully operational and any costs incurred to maintain it shall be borne by the Sponsors. Any liquidated damages incurred because of non-performance of the Complex/Plant shall be borne by the Sponsors or shall be pass-through to equipment supplier or O&M operator acceptable to Financiers; and Any other condition as deemed necessary by Transaction Legal Counsel and/or Financiers/Agent Bank.
Restriction to Declare and /or Pay Dividend	<p>The Company shall not declare any dividends during the entire Tenor of the Facility if the declaration and /or payment of dividends result in non-compliance of Financial Covenants, Event of Default and/ or Material Adverse Change.</p>

Events of Default	Facility Documents shall incorporate usual and appropriate list of Events of Default related to the Facility.
Positive Covenants	<p>a. Clean-up clause – At 360th days from FED, GAEL shall be required to clean-up all the working capital accounts maintained with ABL;</p> <p>b. Compliance of Financial covenants as finalized at time of legal documents;</p> <p>c. The Company to comply with State Bank of Pakistan's Prudential Regulations as applicable to the banks/DFIs that shall be participating in the Transaction throughout the Tenor of the Facilities and all applicable rules and regulations of the Securities and Exchange Commission of Pakistan with respect to the Facilities;</p> <p>Any other covenants for the Company as determined and required after due-diligence, by the Financiers will be later incorporated in the Finance Documents with mutual consent of the Obligor.</p>
Negative Covenants	Facility Documents shall incorporate usual and appropriate negative covenants in favour of the Financiers.
Other terms and conditions	<p>a. This offer is being submitted on a best efforts basis and is subject to receipt of internal credit approvals of Financiers under the Facility;</p> <p>b. The Obligor shall restrain from actions that could prejudice the rights and Security of the Financiers;</p> <p>c. The Facility is subject to satisfactory financial, technical and legal due diligence;</p> <p>d. All required insurances are in full force and effect at all times during the Transaction Tenor;</p> <p>e. CIB clearance to be obtained such that the Sponsors / Company are not defaulters of any Bank / DFI;</p> <p>f. Obligor to submit un-audited quarterly and half-year accounts within 90 days of quarter end and half-year end respectively; and annual audited accounts within 120 days of the financial year-end;</p> <p>g. The company shall provide stock report to the Financiers on a monthly basis within 10 days from the end of each month; and</p> <p>h. Any other conditions that the Agent/Financiers deem necessary.</p>
Confidentiality	The contents of these Proposal Documents are for your confidential use only and you hereof will disclose neither their existence nor the terms to any person.
Governing Law	The Facility will be governed by the laws of Pakistan.
Validity	This offer is valid till March 01, 2019 unless extended by ABL.

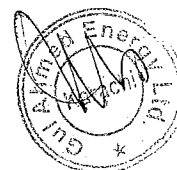
For and on behalf Financial Advisor & Lead Arranger/ Agent Bank

Agreed and Accepted
For and on behalf of Gul Ahmed Energy Limited



ANNEXURE E
COPY OF GENERATION LICENSE



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

GENERATION LICENCE

NO. IPGL/09/2003

In exercise of the Powers conferred upon the National Electric Power Regulatory Authority (NEPRA) under Section 15 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (XL of 1997), the Authority hereby grants a Generation Licence to: -

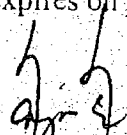
Gul Ahmed Energy Limited

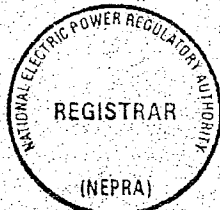
Incorporated under the Companies Ordinance, 1984
Under Certificate of Incorporation

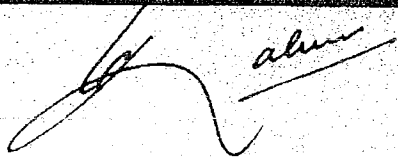
No. K-05482 Dated 20th July 1994

to engage in generation business subject to and in accordance with the Articles of this Licence.

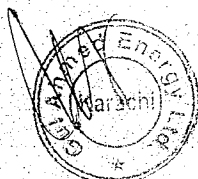
Given under my hand this 26th day of August, Two Thousand & Three and expires on 25th day of August, Two Thousand & Nineteen.


Registrar









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

GENERATION LICENCE

NO. IPGL/09/2003

In exercise of the Powers conferred upon the National Electric Power Regulatory Authority (NEPRA) under Section 15 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (XL of 1997), the Authority hereby grants a Generation Licence to: -

Gul Ahmed Energy Limited

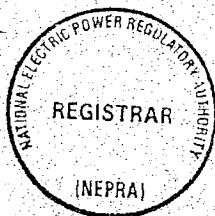
Incorporated under the Companies Ordinance, 1984
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No. K-05482 Dated 20th July 1994

to engage in generation business subject to and in accordance with the Articles of this Licence.

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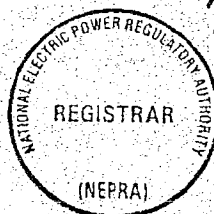


Article 1 Definitions

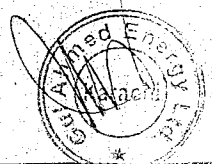
- (1) In this Licence:
- a. "Act" means the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (XL of 1997);
 - b. "Agreements" means any or both of the Implementation Agreement and the Power Purchase Agreement;
 - c. "Authority" means the National Electric Power Regulatory Authority constituted under Section 3 of the Act, or any successor thereof;
 - d. "Implementation Agreement" means the Implementation Agreement dated 29th June, 1995 as amended between the Licensee and the President of Pakistan;
 - e. "Licensee" means Gul Ahmed Energy Limited;
 - f. "Power Purchase Agreement" means the Power Purchase Agreement dated 7th June 1995 as amended between the Licensee and the power purchaser thereof and for the due performance of which a sovereign guarantee has been executed by the Government of Pakistan;
 - g. "Rules" means the National Electric Power Regulatory Authority Licensing (Generation) Rules, 2000, as amended from time to time;
- (2) Words and expressions used but not defined herein bear the meaning given thereto in the Act or in the Rules.

Article 2 Application of Rules

- (1) This Licence is issued subject to the provisions of the Rules, as amended from time to time.



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- (2) During the subsistence of the Agreements entered into by the Licensee prior to the enactment of the Act, nothing contained in the Rules or this 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.

Article 3 Generation Facilities

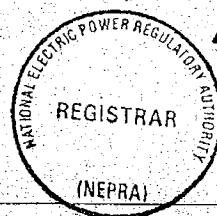
- (1) The location, size, technology, interconnection arrangements, technical limits technical functional specifications and other details specific to the generation facilities of the Licensee are set out in Schedule I to this Licence.
- (2) The net capacity of the generation facilities is set out in Schedule II hereto.

Article 4 Term

- (1) Pursuant to Rule 5 of the Rules, this Licence is granted for a term of Sixteen (16) years.
- (2) Unless revoked earlier, the Licensee may, ninety (90) days prior to the expiry of the term of the licence, apply for renewal of the Licence under the Licensing (Application and Modification Procedure) Regulations, 1999.

Article 5 Licence Fee

The Licensee shall pay to the Authority the Licence fee in the amount and manner and at the time specified in the National Electric Power Regulatory Authority (Fee) Rules, 2002.



[Handwritten signatures]

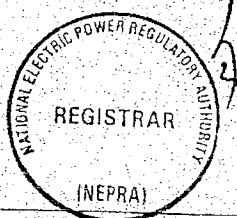


Article 6
Competitive Trading Arrangement

- (1) During the subsistence of the Agreements entered into by the Licensee prior to the enactment of the Act, the Licensee shall have the option to participate in such measures as may be directed by the Authority from time to time for development of a Competitive Trading Arrangement.
- (2) Any variation or modification in the Agreements under the foregoing sub-article (1), for allowing the Licensee to participate wholly or partially in the Competitive Trading Arrangement shall be subject to mutual agreement of the parties thereto and such terms and conditions as may be approved by the Authority.
- (3) In the event that the Licensee exercises its option to participate wholly or partially in development of the Competitive Trading Arrangement under the fore-going sub-article (1), the Licensee shall in good faith work towards implementation and operation of the aforesaid Competitive Trading Arrangement in the manner and time period specified by the Authority and in doing so, the Licensee shall not by any act or omission impede the development, implementation or operation of the Competitive Trading Arrangement.

Article 7
Maintenance of Records

For the purpose of sub-rule (1) of Rule 19 of the Rules, copies of records and data shall be retained in standard and electronic form and all such records and data shall, subject to just claims of confidentiality, be accessible by authorized officers of the Authority.



Article 8

Compliance with Performance Standards

Subject to the provisions of Article 2(2), the Licensee shall comply with the relevant rules on performance standards as may be prescribed by the Authority from time to time.

Article 9

Compliance with Environmental Standards

The Licensee shall, to the full satisfaction of the relevant competent authority, comply with the environmental standards as may be prescribed by the aforesaid relevant competent authority from time to time.

Article 10

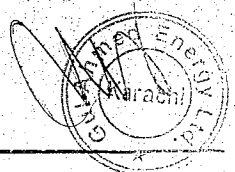
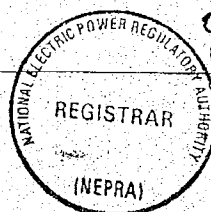
Provision of Information

Subject to the provisions of Article 2(2), the Licensee shall provide to the Authority all such information as the Authority may require.

Article 11

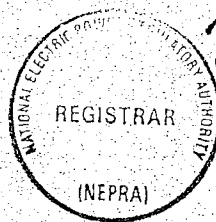
Revocation and Suspension

- (1) In exercising its powers to suspend or revoke the Licence under Section 28 of the Act, the Authority shall issue a show cause notice of a period not less than 30 days.
- (2) Pursuant to the powers under Rule 8(4), the obligations of the Licensee under Rule 8(3) stand modified to the extent of inconsistencies with the Agreements and in the event of termination of the Agreements, the Authority may revoke or suspend this Licence.

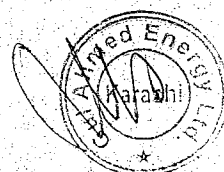


Article 12
Approvals and Authorisations

Notwithstanding the provisions of Article 11(2), the Licensee shall apply to the Authority, where required, for approvals and authorizations under the Rules, including without limitation, the approvals and authorisations under Rule 8, Rule 10 and Rule 14.



Schedule I



SCHEDULE 1

POWER PURCHASE AGREEMENT

MINIMUM FUNCTIONAL SPECIFICATIONS

The Complex consists of nine (9) units of RFO (Residual Furnace Oil) fired of diesel generating set with the following design ratings:

1. Gross Capacity under ISO 3046 (Latest Version)
Diesel Generating Unit : 15.13 MW per unit x 9 units = 136.17
at Alternator Terminal MW for the Complex
2. Derating : 6.80 MW
3. Auxiliary consumption : 4.07 MW
of the Complex
4. Estimated Dependable Capacity : 125.30 MW
of the Complex at 132kV Busbar
under Reference Conditions

The proposed Site is located in Korangi, Karachi adjacent to an existing gas turbine power station owned by KESC.

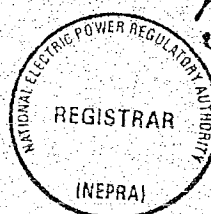
The proposed Site area is characterized by tropical climate. Average rainfall is 600mm per year, but this amount falls in short durations. Reference Conditions are as follows:

AMBIENT AIR TEMPERATURE = 30 deg. C

CHARGE AIR COOLANT TEMPERATURE = 40 deg. C

RELATIVE HUMIDITY = 80 %

A maximum earthquake design factor of 0.1 g will be utilized for the design of the plant buildings and structures and the design wind speed will be 40 m/sec.



The proposed Site is at an elevation 8 m with respect to mean sea level (MSL). All structures will have a ground floor elevation of at least 10 m above MSL. Access to the Site will be provided by Public Road.

The main power block consists of 9 units of diesel generating sets.

* Cooling water will be supplied via a radiator system.

Each diesel generator will be nominally rated at 18,910 kVA, 0.8 lagging and 0.9 leading power factor, 11,000 V, 3 phase, 50 cycle, not less than 0.55 short circuit ratio

The Complex will be capable of operation within a voltage range of $\pm 10\%$ on the 132 kV system.

The Complex will have three generator transformers 63 MVA, 132/11 kV, ONAN/ONAF.

Interconnection with the KESC system will be via a 132kV, outdoor Conventional type substation with interrupting capacity of 31.5 kA at 132kV.

A common control room is provided to monitor and control the Complex. Operator interfaces for control of the Complex will be via control panel and PC operating stations and each generating unit can be started and stopped locally. The plant control system will include a data acquisition system.

Fuel supply to the Complex will be via tanker truck delivery. The Site will have sufficient RFO storage capacity to support operation of the Complex for the equivalent of 100 % of full load for 30 Days.

All material, plant, equipment and machinery incorporated in the construction of the Complex shall be new and unused.

* Other plant buildings and structures outside of main power block include the following:

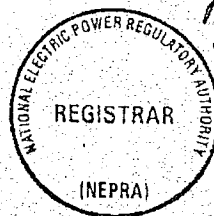
Fuel storage area

Fuel treatment plant/Water treatment plant

Water storage

Work shop / stores

Fire fighting basin



SCHEDULE 2

TECHNICAL LIMITS

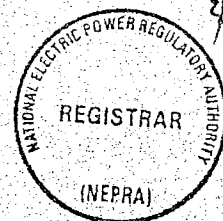
1. Design Limits

1.1 Unit Starts

- (a) The notice required by the Company to start-up the Complex and synchronize to the KESC Grid System will vary according to the length of time the Unit has been shutdown. Table 1 below shows the length of notice required against various periods of shutdown.

Table 1

<u>Length of Shutdown</u>	<u>Notice required to synchronize</u>
(i) Not more than 0.5 hours	30 minutes
(ii) More than 0.5 hours but not more than 8 hours	60 minutes
(iii) More than 8 hours but not more than 32 hours	2 hours
(iv) More than 32 hours but not more than 150 hours	4 hours
(v) More than 150 hours	7 hours



- (b) For the purposes of this Schedule start up of the Complex is classified as follows:

"Hot Start" - A start following a shutdown period as per (i) above.

"Cold Start" - A start following a shutdown period as per (ii), (iii), (iv) and (v) above.

and the reference to starts, starting or started means the process of pre heating the fuel and engine, starting and running of Diesel engine generators and synchronizing it to the KESC Grid System.

- (c) The notice required to synchronize under item (i) above shall apply provided the previous shutdown was not the result of a trip.

- (d) Starting of the Complex shall be subject to the following limits for each Unit:



Type of Starts	Table 2	
	Total aggregate maximum number of starts	Maximum number of starts per year
Hot Starts		
Cold Starts		

NO TECHNICAL LIMITATIONS

1.2 Complex loading

- (a) The Complex load ramping rate is the steady rate at which the load can be raised. The maximum load ramping rates are shown below in Table 3

Table 3 A	
Complex Load Range %	Cold Start % per minute
(i) 0 ~ 75	6
(ii) 75 ~ 100	5

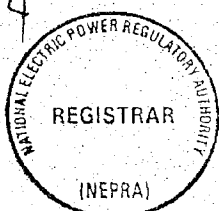
Complex load percentages in this Schedule refer to the load at the generator terminals as a percentage of gross capacity.

- (b) The unit load ramping rate is the steady rate at which the load can be raised. The maximum load ramping rates are shown below in table 3B:

Table 3B	
Unit Load Range %	Cold Start % per minute
(i) 0 ~ 75	0.88
(ii) 75 ~ 100	0.7335

Unit load percentages in this Schedule refer to the load at the generator terminals as a percentage of the Unit gross capacity.

- (c) Step changes in Despatched load of up to 20% are allowable provided that Complex load is greater than 35%. After such step change the new Complex load must be held constant for 30 minutes for stabilization purposes, or for a pro rata period for lesser step changes.



(d) The Complex can withstand a full load rejection and remain in a safe condition. *provided the Complex auxiliaries are operated continuously, The Complex can be re-synchronized within one hour provided that the reason for the load rejection has been removed.*

(e) The Complex minimum continuous loading shall be 8%. *of Gross Capacity only for the first unit.*

1.3 Frequency, Power Factor, Voltage Limits and Droop Settings

(a) The Complex will operate at 100% load with a power factor in the range 0.8 lagging to 0.9 leading which range shall not be exceeded. At 0% load the Unit has a Reactive Power capability of 16 MVAR lagging or 6 MVAR leading. At 100% load the Unit has a Reactive Power capability of 11.3 MVAR lagging or 8.2 MVAR leading.

(b) The Complex can operate within the range $\pm 10\%$ on the 132 kV high voltage system which range shall not be exceeded.

(c) The Complex can operate within the frequency range 47 Hertz to 53 Hertz which range shall not be exceeded.

(d) The Complex will be subject to tripping if frequency and/or voltage fluctuations outside the ranges stated in 1.3(b) and 1.3(c) occur.

(e) The Unit governor droop is adjustable in the range 0% to 10%. The automatic voltage regulator will control the generator voltage over the range of $\pm 10\%$ of rated voltage with a droop characteristic of $\pm 0.5\%$.

1.4 General

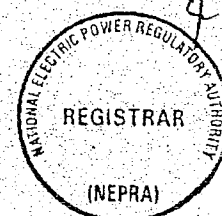
(a) The Company shall advise KESC of any temporary operating constraints and limits which may from time to time apply to the Complex.

2. Design Maintenance Limits

The cycle of Scheduled Outages is set out in Table 4 below together with a manufacturer's recommended durations for such inspections.

TABLE 4

Major items and Nature of Maintenance in 12 Months Period	Operating hours interval for each Maintenance activity	Estimated Duration of Each Activity Per Unit x times/year
Change of Lube Oil in TC	500	1.5 hrs x 16
Check of valve clearance	1000	10 hrs x 8



Check of alarm and stop devices
Cleaning of suction air filters

Inspection of injection valves 2000
Change of oil in governor
Check of overspeed devices

23 hrs x 4

Cleaning of coolers 4000
Inspection of crankshaft
Check of crankshaft alignment
Inspection of T/C
Check of water space
Inspection of one piston

115 x 2 hours

Inspection of engine driven pumps 6000 ~ 8000
Inspection of thermostatic valve
Piston Overhaul
Cylinder head Overhaul
Turbocharger Overhaul
Injection Pump Overhaul
Inspection of main bearings
Check of damper

294 hrs x 1

Required time per unit (including other activities) : 720 hours

Scheduled Outages thereafter continue on a one-year cycle which must be maintained. The scheduling of maintenance inspections will be compatible with regulatory requirements. All regulatory inspections will be carried out during Scheduled Outages. In addition to the above yearly Scheduled Outage, 720 hours Scheduled Outage for Overhaul as shown in table 5 shall be allowed at every fifth (5th) year.

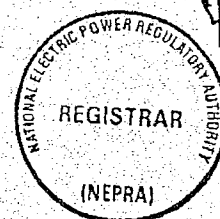
Table 5

Major items of Works 24000 ~ 32000 hrs
Change of Torsional Vibration Damper
Inspection/reconditioning of piston crown and skirts
Change of valve seat rings and valve guides
Inspection/change of intermediate gear wheel bearings
Inspection/change of camshaft bearings
Inspection/change of Big end bearings
Inspection/change of valve seats

Required time per unit : 720 hours

3. Prudent Utility Practice

Notwithstanding anything to the contrary, the Company shall operate and maintain the Complex in accordance with Prudent Utility Practices.



SCHEDULE 3

INTERCONNECTION FACILITIES AND TRANSMISSION FACILITIES

1. Interconnection and Transmission Facilities

- (a) ~~The connection between the Complex (four line bays) and KESC's 132 kV substation at _____, Karachi. The location of which will be shown on the Site plans Fig.1. (to be submitted later) The transmission line will terminate in the substation of the Complex, the location of which is shown on the Site plans Figures 1 and 2. (to be submitted later) The circuits of the transmission line will connect at terminal of line gantries provided by the Company as shown on the single line diagram of the substation at Figure 3 (to be submitted later). The boundary of responsibility between the Company and KESC will be at the top of the terminal of line gantries (the "Interconnection Point"). The Company will provide KESC with an earth connection from the earthing system of the Complex. KESC will install the Metering System which together with the transmission line referred to above within the Site boundary shall comprise the "Interconnection Facilities." This equipment will remain the property of KESC and shall be commissioned and maintained thereafter by KESC.~~

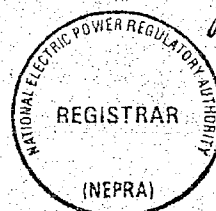
- (b) Protection. A carrier intertripping circuit for each transmission line shall be provided between the line circuit breakers at the Complex owned by the Company and the line circuit breakers at the 132kV Grid Station owned by KESC.

2. Design Data

The following design data has been provided by the Company to KESC to enable completion of KESC of the design of the Interconnection Facilities and the Transmission Facilities.

- * The connection between the Complex and KESC'S 132 KV system/network shall be between Korangi Town, Landhi and Port Qaid stations by two 132 KV double circuit transmission lines. The Company shall provide provision of proper interconnection with KESC.

* Landhi, Korangi Town and Port Q.



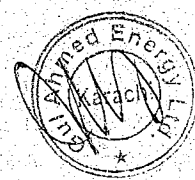
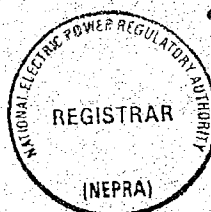
2.1. Generator Design Data (for diesel engine)

(a) Rating

Rating	18,910 kVA
Nominal Rated Capacity	18,910 kVA
Power factor	0.8 lagging 0.9 leading
Rated hydrogen pressure	N.A. (Air Cooled).
Number of phases	3
Number of poles	12
Frequency	50 Hz, $\pm 6\%$
Rated speed	500 rpm
Terminal voltage	11 kV, $\pm 10\%$
Short circuit ratio at rated MVA	not < 0.55
Excitation system	Brushless

(b) Generator Reactances (at the rated MVA & kV base) (for diesel engine)

Unsaturated direct axis synchronous reactance	191 %
Saturated direct axis sub-transient reactance	24.4 %
Saturated direct axis transient reactance	36.1 %
Negative phases sequence reactance	26.6 %



Zero phase sequence reactance 8.4 %

Leakage reactance 0.01 p.u.

(c) Generator time constants (for diesel engine)

Direct axis open circuit time TDO 5.2 seconds
constant

Direct axis open circuit sub TDO 0.034 seconds
transient time constant

Direct axis short circuit sub TD 0.025 seconds
transient time constant

Direct axis short circuit TD 1.2 seconds
transient time constant

.....(d) Inertia constant

diesel engine + its generator J=17,200 kgm²
H=1.25 sec.

Notes : 1) The above design values will have tolerances as specified in the relevant IEC standards.

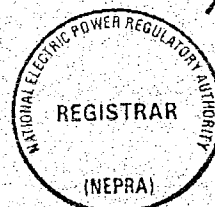
2.2 Excitation System

Excitation of the engine generator is provided by a brushless system using booster transformers. The excitation control system has two (2) voltage regulators which are automatic voltage regulator (AVR) and stand-by AVR. During normal operation, the whole excitation system is subject to automatic control by means of AVR. In case of AVR fault, stand-by AVR will be automatically connected.

Technical Characteristics

(i) Voltage setting range for AVR operation: +/- 10 %

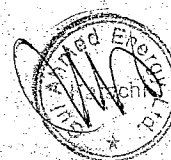
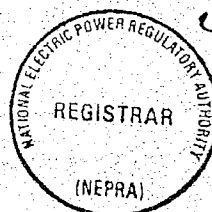
(ii) Voltage adjusting range for MEC operation: N.A.



- (iii) Generator terminal voltage is held within $\pm 10\%$ from no load to full load at rated frequency.
- (iv) Under the maximum direct current supplied from the excitation system for a specified time, the ceiling voltage to the generator field voltage is 2.0 p.u.
- (v) The transfer function diagram of excitation system as shown in Figure 4 (to be supplied later).

2.3 Generator Transformer

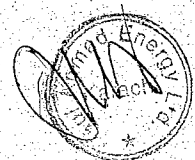
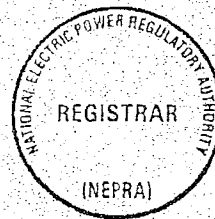
Rated Power	63 MVA
Rated voltage <i>NO OF TAPS</i>	132 kV $\pm 10\%$ / 11 kV $\pm 10\%$ (+/- 13 Taps)
Current prim./sec.	276 / 3307 A
Frequency	50 Hz, $\pm 6\%$
Connection Group	YND11
Insulation Level	
Impulse	650 (250) / 95 kV
AC withstand	230 (95) / 38 kV
Type of Cooling	ONAN/ONAF
Temp. rise wdg. / oil	55 / 50 deg. C
Max. system short circuit power	7,200 MVA
Impedance and losses	at reference power 63 MVA
Impedance	15 % HV to LV
No load losses	40 kW
Load losses	190 kW



Aux. losses

2.2 kW

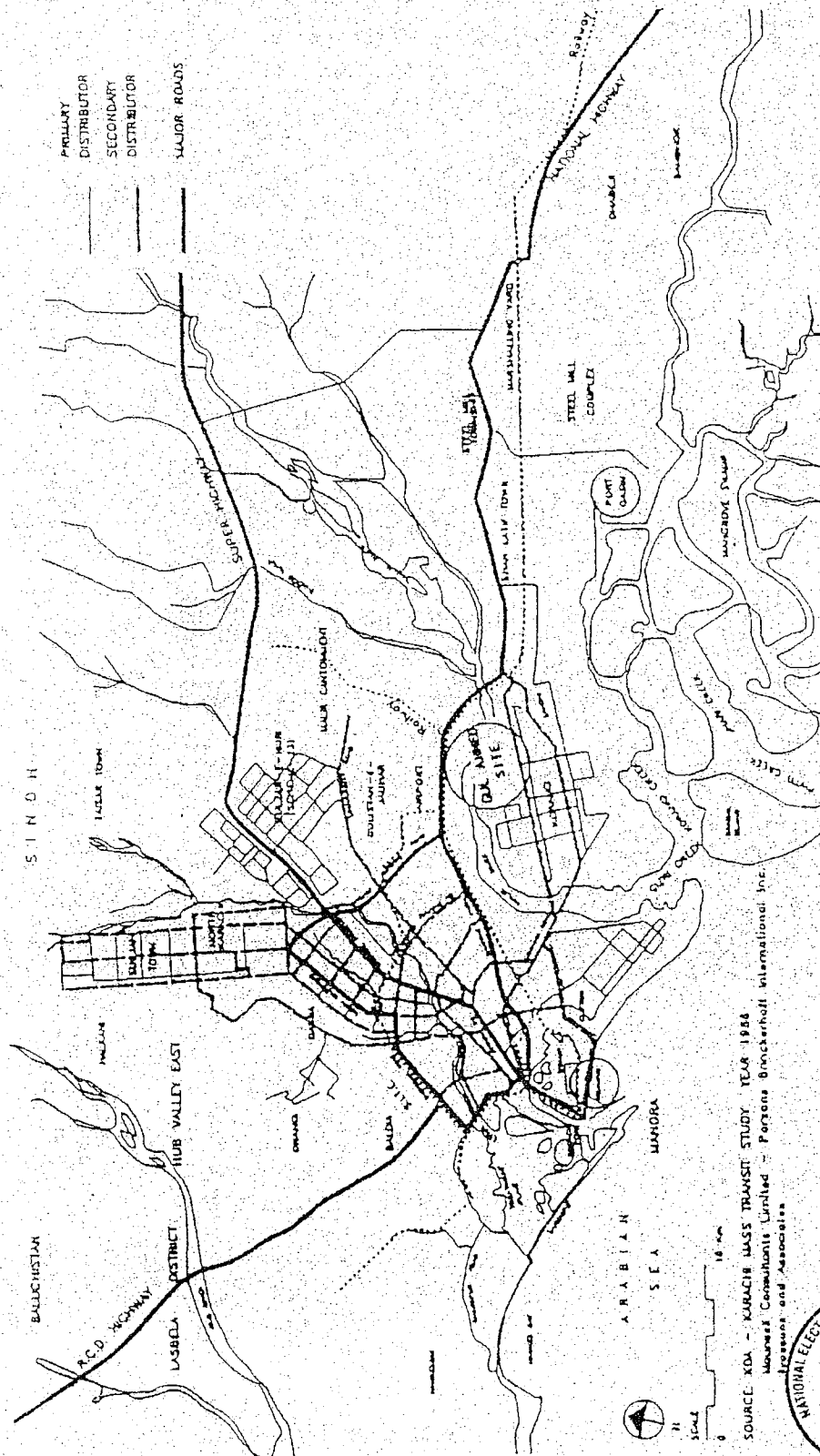
- 2.4 The governor droop will be adjustable from 0 % to 10 %, and the smallest size of step adjustment/ change of the governor droop is 0.1%. The governor droop is designed to operate over the frequency range 47 to 53 Hz.
- 2.5 The AVR droop setting is $\pm 0 \sim 10\%$ of rated voltage with a droop characteristic of $\pm 0.5\%$.



SARGENT & LUNDY

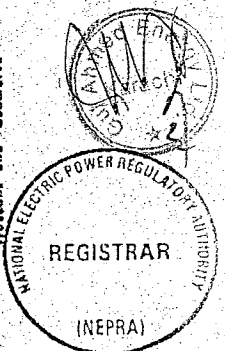
Road Network Near the Site

Figure 3-1
SL-4993



SL-4993 3/050895

SOURCE: XDA - KURACHI MASS TRANSIT STUDY YEAR 1986
Mansoor Consultants Limited - Parsons Brinckerhoff International Inc.
Innovative and Associates



Schedule II

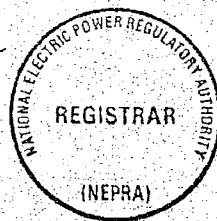


INSTALLED CAPACITY (GROSS) & NET CAPACITY

Installed ISO (Gross) Capacity 136.17MW

Net Capacity 125.30MW

Note: Net Capacity – These are indicative figures only as provided by the Licensee. The net capacity available to NTDC for dispatch and other purchasers will be determined through procedures contained in the Agreements or Grid Code.



Gul Ahmed Energy Limited

Ref: 549(1)/01/4144

April 02, 2001

The Registrar,
National Electric Power Regulatory Authority,
OPF Building, Sector-G/5,
Islamabad.

Subject: Application for Generation License.

Dear Sir,

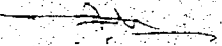
I, Suleman Modi, Commercial Manager & Co-ordinator, being the duly authorized representative of Gul Ahmed Energy Ltd., by virtue of Board Resolution, dated 20th November, 2000, hereby apply to the National Electric Power Regulatory Authority for the grant of a Generation License to the Gul Ahmed Energy Limited pursuant to NEPRA Notification SRO 476(I)/99, dated 10th April, 1999, of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

I certify that the documents-in-support attached with this application are prepared and submitted in conformity with the provisions of the National Electric Power Regulatory Authority Licensing (Application and Modification Procedure) Regulations, 1999, and undertake to abide by the terms and provisions of the above-said regulations. I further undertake and confirm that the information provided in the attached documents-in-support is true and correct to the best of my knowledge and belief.

A Bank Draft in the sum of Rupees 1.65 million No. 165363 dated March 31, 2001 being the non-refundable license application fee calculated in accordance with Schedule II to the National Electric Power Regulatory Authority Licensing (Applications and Modification Procedure) Regulations, 1999, is also attached herewith.

Thanking you

Sincerely
for Gul Ahmed Energy Limited


Suleman Modi
Commercial Manager
& Co-ordinator

Received
[Signature]
R&I Section
NEPRA (Govt. of Pakistan)
3rd Floor, OPF Building, G-5/2
Islamabad



ANNEXURE F
REFERENCE GENERATION TARIFF TABLE

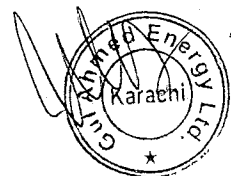


REFERENCE GENERATION TARIFF TABLE

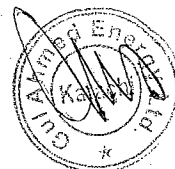
Y E A R S	ENERGY PURCHASE PRICE Rupees per kWh				CAPACITY PURCHASE PRICE (CPP) @ 100% PF (Rs. /KW/hr)						TOTAL TARIFF PKR / Kwh
	Fuel	VARIABLE O&M		TOTAL	Fixed O&M		Insurance	Working Capital	ROE	TOTAL CPP	
		Local	Foreign		Foreign	Local					
1	9.6506	0.2497	0.8491	10.7494	0.0574	0.3095	0.0789	0.1712	0.6510	1.2680	12.0174
2	9.6506	0.2497	0.8491	10.7494	0.0574	0.3095	0.0789	0.1712	0.6510	1.2680	12.0174
3	9.6506	0.2497	0.8491	10.7494	0.0574	0.3095	0.0789	0.1712	0.6510	1.2680	12.0174
4	9.6506	0.2497	0.8491	10.7494	0.0574	0.3095	0.0789	0.1712	0.6510	1.2680	12.0174
5	9.6506	0.2497	0.8491	10.7494	0.0574	0.3095	0.0789	0.1712	0.6510	1.2680	12.0174

AVERAGE TARIFF

<u>YEARS</u>	<u>Rupees per kwh</u>	<u>cents per kwh</u>
01 - 05	12.0174	10.8853
Levelized	12.0174	10.8853



ANNEXURE G
COPY OF ELECTRICITY ACT EXEMPTION



GOVERNMENT OF SINDH
IRRIGATION AND POWER DEPARTMENT

Dated Karachi the 8th January '96

NOTIFICATION

No.SOPP-6/29-75 (GL). In exercise of the powers conferred by section 30 of the Electricity Act, 1910, the Government of Sindh are pleased to exempt M/s Gul Ahmed Energy Limited, Sattar Chambers 29 West Wharf Road, Karachi.

from the application of the said provision to the extent of use of energy in their Power House for the whole life of their project subject to the compliance of the provisions of Part - IV (Protective Clauses) of the Act and of the rules made thereunder, as may be applicable.

SECRETARY TO GOVERNMENT OF SINDH
IRRIGATION AND POWER DEPARTMENT

No.SOPP-6/29-75 (GL)

Dated Karachi the 8th January, 1996.

A copy is forwarded to the Superintendent, Government Printing Press, Sindh, Karachi with the request to publish the above notification in the next issue of the Sindh Government Gazette, and supply 25 copies to this Department.

(SYED AKHTAR H. KAZMI),
Deputy Secretary (Power).

No.SOPP-6/29-75(GL)

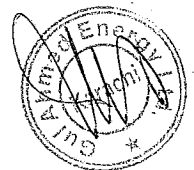
Dated Karachi the 8th January, 1996

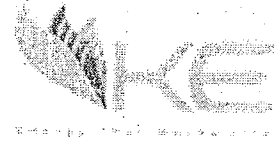
Copy of above is forwarded for information to the :-

- 1) Executive Director, Private Power and Infrastructure Board, Ministry of Water and Power, Government of Pakistan, 50 - Nazimuddin Road, F-7/4, Islamabad.
- 2) Electric Inspector, Government of Sindh, Karachi/Hyderabad/Sukkur.
- 3) M/s. Gul Ahmed Energy Limited, Sattar Chambers, 29 West Wharf Road, Karachi.

(SYED AKHTAR H. KAZMI),
Deputy Secretary (Power).

ANNEXURE H
KE CONSENT FOR TARIFF APPLICATION





BD/AR/GAEL - 0334/2019-0128

28 January 2019

Mr. Iqbal Alimohamed
Chief Executive Officer
Gul Ahmed Energy Limited ("GAEL")
7th Floor, Al-Tijarah Centre,
32-1-A, Block 6, PECHS,
Main Share Faisal, Karachi-75400

Subject: Consent for Tariff Application to NEPRA under NEPRA (Tariff Standards and Procedure) Rules 1998 in relation to the Renewal of Power Purchase Agreement ("PPA")

Dear Sir,

This refers to your Power Sale Proposal no. F-K-ELECTRIC-L18-00373 dated December 11th, 2018 and our subsequent application to NEPRA of a Power Acquisition Request ("PAR"). We are pleased to provide you with our consent to proceed with your application to NEPRA for determination of generation tariff under the NEPRA (Tariff Standards and Procedure) Rules 1998.

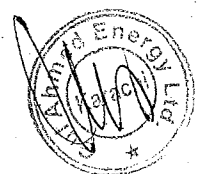
Yours sincerely,

Aunan Rizwi
Director- Commercial and Regulatory

Encl: PAR copy



ANNEXURE I
POWER ACQUISITION REQUEST



SBD/AR/NEPRA-0325/2019-1801
18th January 2019

The Registrar

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

Subject: Submission of Power Acquisition Request ("PAR") in relation to the Renewal of Gul Ahmed Energy Limited ("GAEL") Power Purchase Agreement

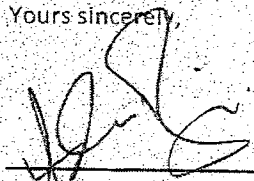
Dear Sir,

This refers to the Power Purchase Agreement ("PPA") between K-Electric Limited ("K-Electric") and GAEL on June 7th, 1995 for a period of twenty-two (22) Agreement Years. GAEL achieved the Commercial Operations Date on November 03rd, 1997. Thus, the PPA is valid till November 2nd, 2019. Section 4.1(c) of the PPA allows for the renewal of the PPA for another term of 5 years based on terms and conditions to be mutually agreed by the Parties.

In this regard, we are pleased to submit our PAR based on the Power Sale Proposal ("PSP") received from GAEL which is attached as Annexure to the PAR. The Authority is hereby requested to allow K-Electric for power acquisition from GAEL for another period of five (5) years starting from November 3rd, 2019. GAEL shall make an application to the NEPRA through a separate tariff petition pursuant to the NEPRA Tariff Standards and Procedure Rules 1998 for the determination of applicable tariff in relation to the renewal of the PPA.

We look forward to an early approval of the PAR by NEPRA.

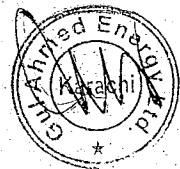
Yours sincerely,


Adrian Rizwi
Director- Commercial and Regulatory

Cc: CEO, GAEL

Encl:

1. PAR
2. PSP
3. General Power of Attorney
4. Certified True Copy of Board Resolution



POWER ACQUISITION REQUEST

IN RELATION TO:

GUL AHMED ENERGY LIMITED

SUBMITTED BEFORE:

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

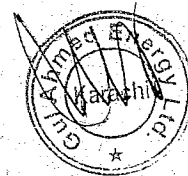
SUBMITTED BY:

K-ELECTRIC LIMITED



CONTENTS

Chapter 1	Grounds Forming Power Acquisition Request
Chapter 2	Basic Information on the Project
Chapter 3	Overview of Power Sale Proposal of GAEL
Annexure I	Information for Processing of Power Acquisition Request
Annexure II	Power Sale Proposal of GAEL
Annexure III	K-Electric Board of Directors Resolution



Chapter 1

Grounds Forming Power Acquisition Request

1.1 Demand Situation in Karachi

Karachi is the financial, industrial and trading capital of Pakistan. The availability of port facilities accumulated investments in energy infrastructure over past decades hence positioning Karachi as the entry point to energy corridor of Pakistan. The city's contribution is highest in terms of federal and provincial governments' revenues and GDP. Thus, it is extremely important to feed Karachi with necessary energy for its continued contribution towards growth of Pakistan.

Although K-Electric Limited ("K-Electric") has a customer base of more than 2.5 million connections across residential, commercial, industrial and agricultural sections, the real beneficiaries of power conveniently exceed 20 million people living in and around Karachi. Serving such large populace demands the availability of sufficient power generation and supply sources to meet both the baseload and peak demand requirements of the city.

Since 2009, K-Electric has added new power generation facilities of more than 1000 MW including BQPS II, KCCP, and GE JB's at Site and Korangi. Further to manage the growing power demand, in addition to other external sources, K-Electric has started procuring power from FFBL Power Company Limited (52 MW) and Sindh Nooriabad Power Company (Pvt.) Ltd. and Sindh Nooriabad Phase II Power Company (Pvt.) Ltd (combined 100 MW). However, despite these additions, there is a current shortfall of c. 500 MW against peak demand.

In order to address this shortfall and cater for future growth in power demand, KE has embarked on various new projects, including the addition of 100 MW through Oursun Pakistan Limited (50 MW) and Ghara Solar (Private) Limited (50 MW) which are expected to come online in FY 19 and FY 20 respectively. Another key project for K-Electric is the 700-MW coal fired power plant under an IPP structure, which is expected to be available from FY 22.

However, to ensure adequate supply of power to meet the growing power demand of the city, in addition to the expected pipeline of planned projects which shall come online in next few years, the continuity of existing sources of power supply in the next five years is an essential part of K-Electric's strategy to fulfill the increasing power demand.

1.2 Gul Ahmed Energy Limited

Gul Ahmed Energy Limited ("GAEL" or "Company") is an unlisted public limited company incorporated under the provisions of the Companies Ordinance, 1984. The project is located at the



Korangi Industrial Area ("KIA"), Karachi East, Sindh Province. The Company successfully set up a 136.17 MW (gross) Residual Furnace Oil ("RFO") private power project under the 1994 Power Policy of the Government of Pakistan, on a Build, Own and Operate ("BOO") basis. The Company achieved Commercial Operation Date on 3 November 1997 and has completed 21 years of commercial operations under the Power Purchase Agreement. The total term of the PPA is 22 Agreement Years expiring on November 3, 2019.

Besides PPA, the Company also entered into an Implementation Agreement ("IA") with the Government of Pakistan and was a recipient of sovereign guarantee. The Furnace Oil was supplied by Pakistan State Oil Company Ltd. ("PSO") under Fuel supply agreement ("FSA"). However, going forward, both the IA with the government and FSA with the PSO are not expected to be continued after expiry.

The project owners and sponsors are Gul Ahmed Energy Group of Pakistan and Tomen Corporation of Japan (merged with Toyota Tsusho Corporation).

The Complex consists of nine (9) units of RFO fired of diesel generating sets. Each unit is capable of producing 15.13 MW with a Complex total of 136.17 MW (gross). After consumption for the auxiliaries, the Complex generates and delivers a Dependable Capacity of 127.5 MW net at 132 kV Busbar under reference conditions.

1.3 Process Leading to Submission of Power Acquisition Request (PAR)

The Power Purchase Agreement ("PPA") between K-Electric and GAEL was executed on 7 June 1995 for the sale and purchase of electricity on a 'Take or Pay' basis for a period of twenty-two (22) years. The Company achieved its Commercial Operations Date on 3 November 1997.

On 3 November 2018, the Company has entered into last Agreement Year of its PPA. Therefore, prior to the expiry of the PPA on 3 November 2019 between the Company and K-Electric, the parties have discussed and decided to renew the PPA in accordance with the terms of Section 4.1(c) of the PPA which states:

"Following the end of the twentieth (20th) Agreement Year, at the request of either Party, the Company and KESC agree to enter into good faith negotiations for a renewal of this Agreement for an additional term of five (5) Agreement Years on terms and conditions mutually agreed to by the Parties."

The emphasis is added by underlining parts of the above Section of the PPA.



The proviso quoted from the Section 4.1(c) of the existing PPA allows for the renewal of the PPA. However, the proviso also allows for renegotiation of the terms and conditions of the existing PPA. Therefore, the Parties have decided to seek NEPRA's permission for a renewal of the PPA in accordance with the terms and conditions to be decided by the Authority for an additional period of five (5) Years.

The plant is located in the Korangi Industrial Area of Karachi and connected directly to 132 kV network, the Complex provides much needed technical stability and reliability for the system while serving an important industrial base of Pakistan. Thus, considering the growing demand, the plant forms an integral part of K-Electric's network for next 5 years period.

K-Electric have received from GAEL a Power Sale Proposal ("PSP") dated 11 December 2018 which is enclosed as Annexure – II to this PAR. K-Electric has reviewed the PSP and in view of demand forecast for the next five (5) years, K-Electric has decided to forward its PAR to NEPRA for processing.

1.4 Power Acquisition Request to NEPRA

In view of the growth in power demand in K-Electric network and ready availability of power from GAEL, K-Electric hereby is pleased to submit its Power Acquisition Request ("PAR") before NEPRA under the Interim Power Procurement (Procedures and Standards) Regulations, 2005 ("IPPR 2005"). Accordingly, NEPRA is requested to:

1. Grant the permission to acquire power from GAEL for a period of five (5) years starting from 3 Nov 2019;
2. Determine a reference tariff for sale and purchase of power for the period based on tariff petition to be filed by GAEL under the NEPRA (Tariff Standards and Procedure) Rules, 1998; and
3. Approve the PPA which shall be submitted to NEPRA subsequent to the grant of power acquisition permission and tariff determination by NEPRA.



Chapter 2

Basic Information on the Project

Key information related to the project is summarized as follows:

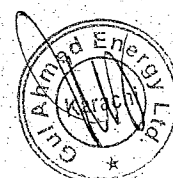
S. No	Heading	Description
1	Company Name	Gul Ahmed Energy Limited
2	Project Sponsors and Owners	(1) Gul Ahmed Energy Group (2) Tomen Corporation of Japan
3	Managed by	Gul Ahmed Group under the shareholders agreement
4	Project Agreements	(1) IA dated 29 June 1995 (2) PPA dated 7 June 1995 (3) FSA dated 19 July 1995
5	Commercial Operation Date	3 November 1997
6	PPA Term	22 Years from COD
7	PPA Expiry Date	3 November 2019
8	PPA Renewal Period	3 November 2019 to 2 November 2024
9	Existing Tariff	1994 Power Policy. Expires on 3 November 2019
10	Status of IA and FSA	To expire with the completion of initial term of PPA
11	Tariff for Renewal Period	To be determined by NEPRA
12	PPA Terms and Conditions for Renewal	To be decided by NEPRA. Remaining commercial terms to be negotiated between the Parties.
13	Project Location	Korangi Industrial Area ("KIA"), Karachi
14	Plant Capacity at Reference Conditions	(1) 136,170 kW (gross installed ISO) (2) 127,500 kW (net)
15	Configuration	9 Wartsila 18V46 Diesel Engines of 15.13 MW each coupled with ABB generators
16	Technology	Simple Cycle 4-stroke Diesel Engine based Complex
17	Interconnection	132 kV network of K-Electric
18	Fuel	Residual Furnace Oil
19	Source of Fuel	Domestically available furnace oil
20	Fuel Storage Capacity	60 Days at full load
21	Operation & Maintenance	Wartsila Corporation Company (Wartsila Finland) and Wartsila Pakistan (Pvt.) Limited
22	Generation License	1. Obtained GL in 1997 under the Electricity Act, 1910



		2. Reissued GL no. IPGL/ 09/ 2003 on 26 August 2003 by NEPRA
23	GL for Renewal Period	To be separately applied to NEPRA by the Company
24	Remaining Useful Life Assessment ("RULA Study")	Useful life assessment is in progress and will be shared upon completion with NEPRA and KE.
25	Tariff Basis for Renewal	"Take or Pay"
26	Tariff Composition	Energy Payment and Capacity Payment

A summary of power supplied to K-Electric by GAEL during the past 5 years is as follows:

Year	MWh	MW	Capacity factor
2013-14	582,415	66.49	52%
2014-15	718,362	82.00	64%
2015-16	687,875	78.52	62%
2016-17	788,481	90.01	71%
2017-18	712,710	81.36	64%



Chapter 3

Power Sale Proposal of GAEL

K-Electric received a Power Sale Proposal dated 11 December 2018 from the Company. The PSP have proposed continuation of sale of power from GAEL's Complex to K-Electric pursuant to the Section 4.1(c) of the existing PPA which expires on 3 November 2019. The Power Sale Proposal received from GAEL is attached as Annexure – II of this PAR for NEPRA's consideration. The Company will file its tariff petition to NEPRA subsequent to the filing of K-Electric's PAR.

The PSP proposes tariff to be on the two-part structure. The Energy Payment shall be billed for variable operations and maintenance costs and fuel consumption against actual net electrical output dispatched and delivered in kWh. The Capacity charges shall be billed on per kW of available capacity, based on a maximum net capacity of 127.5 MW. GAEL has proposed an availability factor of 86% to 87%. However, an availability factor of 92% may be considered to account for plant outages, in line with the availability factor allowed to other IPPs. This 'Take or Pay' arrangement has been proposed by the Company because of exclusive supply to K-Electric and the need to fully engage and retain at all time the resources that are necessary to make the Complex available 24/7 during the renewal period.

The proposed tariff following tariff structure:

- Energy Charges
 - Fuel Cost
 - Variable O&M (Local)
 - Variable O & M (Foreign)

- Capacity Charges
 - Fixed O&M (Local)
 - Fixed O&M (Foreign)
 - Working Capital
 - Insurance
 - ROE



ENERGY CHARGES

Fuel Cost

The Fuel Cost has been based on RFO price of Rs. 42,282.71/per ton (HHV) without sales tax and calorific value of 9,700 kcal/Kg (Net). The Complex operates on a Simple Cycle mode. NEPRA is requested to determine whether the Complex efficiency proposed by the Company is appropriate for the Simple Cycle operation.

Variable O&M (Local)

Since the Complex has Diesel Engines, the Variable O&M (Local) mainly covers the cost lubricants consumed by the engines.

Variable O&M (Foreign)

The Variable O&M (Foreign) covers the cost of imported parts and foreign technical services required to maintain the Complex and make it available at the guaranteed level.

CAPACITY CHARGES

The capacity charges which include the below components are proposed to be on Take or Pay basis. The Company has asked for plant availability of 86% - 87%. However, an availability factor of 92% may be considered to account for plant outages including scheduled, partial forced and forced outages, in line with the availability factor allowed to other IPPs.

Fixed O&M (Local)

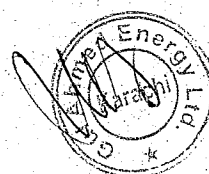
The Fixed O&M (Local) includes G&A, human resource, security, safety, and other such costs of fixed nature required for the operations of the Complex.

Fixed O&M (Foreign)

The Fixed O&M (Foreign) includes fixed fees paid to foreign O&M Operators.

Cost of Working Capital

Due to costly RFO, the investment in Working Capital is significant and hence is required as part of the tariff. This includes maintenance of inventory level and bill-recovery cycle for the fuel cost.



NEPRA is requested to consider an inventory level of 30 Days at full load in line with the current PPA to cover risk of fuel security as well as the bill-recovery cycle of 30 Days for determining a working capital component.

Insurance

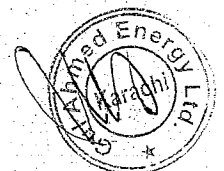
The PSP proposes Insurance component based on 0.7% of EPC cost. NEPRA is requested to consider whether the same may be worked out on the basis of actual premium paid in the current year covering machinery breakdowns, terrorism, and business interruption.

Return on Equity

The Return on Equity has been based on original equity invested by the sponsors of GAEL in the project. According to the Company, since the original equity has not been redeemed, the same is being used as basis for calculation of ROE.

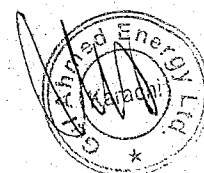
FINANCIAL ASSUMPTIONS:

- Reference Date: 2 January 2018
- PKR / US Dollar: 110.40
- PKR/ Euro: 132.63
- US CPI: 113.7 for the month of January 2018
- Pakistan CPI: 220.27 for the month of January 2018
- Income Tax: Not assumed. If levied on the Company, it should be passed through to K-Electric consumer-end tariff
- General Sales Tax: Should be dealt with in accordance with Sales Tax Act 1990
- WWF and WPPF: Should be allowed as pass through to consumer end tariff of K-Electric
- Force Majeure Events: The Company proposes that the events that are triggered by a "Change in Law Event" or Pakistan Political Event" (the Specific FMEs) where such events (a) result in an inability to make partial/complete capacity available, then the capacity payment for the unavailable capacity be allowed as a pass-through during such period; and/or (b) lead to restoration to be undertaken, then NEPRA is required to determine a supplemental tariff in relation to cost of restoration or cost of additional consumables, which, in each case, is then allowed as a pass-through. However, K-Electric shall reimburse such amounts as noted in (a) and (b) herein only upon approval by NEPRA for a pass through of such amounts in the consumer end tariff of K-Electric. Therefore, NEPRA is requested to allow such payments as a pass-through to K-Electric's consumer end tariff.



The reference tariff has been worked out by the Company as per the table given below:

TARIFF COMPONENT	PROPOSED TARIFF FOR EXTENSION	BASES FOR CALCULATION
ENERGY PAYMENT (Rs/kWh)		
Fuel	9.6506	On heat rate of 8779.7 BTU/kWh net LHV
Variable O&M – Local	0.2497	Costs for consumption of lube oil and various chemicals
Variable O&M – Foreign	0.8491	Costs of consumption of spare parts and technical assistance
Total EPP	10.7494	Rs/kWh
CAPACITY PAYMENT (Rs/KW/H) – BASED ON 100% LOAD FACTOR		
Fixed - O&M Local	0.3095	Cost of plant labour, plant management, office administration, management cost, security etc.
Fixed – O&M Foreign	0.0574	The Fixed O&M (Foreign) includes fixed fees paid to foreign O&M Operators
Cost of Working Capital	0.1712	On cost of funds for working capital requirement to procure fuel
Insurance	0.0789	0.7% of EPC cost
Return on Equity	0.6510	At a return of 15% on equity
Total CPP	1.2680	Rs/kW/h
Total Levelized Tariff	12.0174	Rs/kW/h
	10.8853	US\$/kW/h

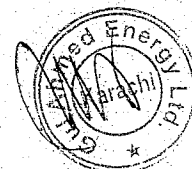


Annexure I - Information for Processing of Power Acquisition Request

Information about Generation Capacity Under Proposed Procurement Request

Net Capacity (MW)	127.5 MW
Technology	Diesel Engine Wartsila
Fuel	Furnace Oil
Whether Forms part of least cost plan	Lower than FO based Generation at BQ 1
Availability of Power/ Energy	92%
Year of Commissioning	1997
Expected rate of power to be acquired at 100% load factor (Levelized)	Rs. 12.0174 /kWh
Grid Location	Korangi Industrial Area
Grid Identification for Interconnection	Korangi Grid
Voltage	132 KV
Augmentation Required in Grid	None
Augmentation Required in transmission network	None
Estimated costs if augmentation required	None
Steps taken or required for transmission augmentation	None
Any other information	None

Financial Year	Peak Demand	Maximum Supply Achieved in Summer	Shortfall
	MW	MW	MW
2012-13	2,778	2,544	(234)
2013-14	2,929	2,601	(328)
2014-15	3,056	2,679	(377)
2015-16	3,195	2,741	(454)
2016-17	3,270	2,854	(416)
2017-18	3,527	3,008	(519)



Peak Demand at Interconnection Points of KE Transmission and Distribution Network

INTERCONNECTION 1:

Grid Identification	132kV Korangi Grid Station
Location	Korangi Industrial Area
Voltage	132kV
Capacity in MVA	160 MVA (power trafo)
Peak Demand in 2018	98.27 MW (power trafo loading) in May 2018

INTERCONNECTION 2:

Grid Identification	132kV, Landhi Grid Station
Location	Landhi, Karachi
Voltage	132kV
Capacity in MVA	160 MVA (power trafo)
Peak Demand in 2018	77.93 MW (power trafo loading) in May 2018

INTERCONNECTION 3:

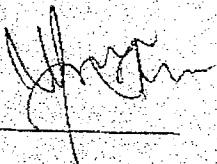
Grid Identification	132kV Air Port Grid Station (double circuit)
Location	Airport, Karachi
Voltage	132kV
Capacity in MVA	120 MVA (power trafo)
Peak Demand in 2018	54.35 MW (power trafo loading) In May 2018



KE (Distribution) Peak Demand

2010-11	Peak Demand (MW)	2,591
2011-12	Peak Demand (MW)	2,596
2012-13	Peak Demand (MW)	2,778
2013-14	Peak Demand (MW)	2,929
2014-15	Peak Demand (MW)	3,056
2015-16	Peak Demand (MW)	3,195
2016-17	Peak Demand (MW)	3,270
2017-18	Peak Demand (MW)	3,527

Submitted



Syed Moonis Abdullah Alvi

Chief Executive Officer



Dale Sinkler

Chief Generation & Transmission Officer

