



**Registrar**

# National Electric Power Regulatory Authority Islamic Republic of Pakistan

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Web: www.nepa.org.pk, E-mail: info@nepa.org.pk

No. NEPRA/R/LAG-68/1978-80

February 26, 2014

Mr. Shaukat Memon  
Director  
Anoud Power Generation Limited  
Plot # 7-B/1, Adjacent National Refinery Ltd.,  
Korangi Industrial Area,  
Karachi

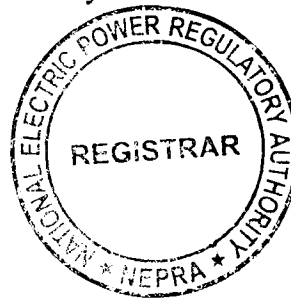
**Subject: Modification-I in Generation Licence No. SGC/028/2005 —  
Anoud Power Generation Limited**

*Reference: Your letter No. nil, dated December 04, 2012*

It is intimated that the Authority has approved "Licensee Proposed Modification" in Generation Licence No. SGC/028/2005 (issued on February 08, 2005) in respect of Anoud Power Generation Limited (APGL) pursuant to Regulation 10(11) of the NEPRA Licensing (Application & Modification Procedure) Regulations, 1999.

2. Enclosed please find herewith determination of Authority in the matter of Licensee Proposed Modification of APGL along with Modification-I in the Generation Licence No. SGC/028/2005, as approved by the Authority.

**Encl:/As above**



  
(Syed Safer Hussain) 26/2/14

Copy to:

1. Chief Executive Officer, Karachi Electric Supply Company Limited, KE House, 2<sup>nd</sup> Floor, 39-B, Sunset Boulevard, DHA-II, Karachi.
2. Director General, Pakistan Environmental Protection Agency, Plot No. 41, Street No. 6, H-8/2, Islamabad.

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

**Determination of the Authority**  
**in the Matter of Licensee Proposed Modification (LPM)**  
**Anoud Power Generation Limited**

**February 17, 2014**  
**Application No. LAG-68**

**(A). Background**

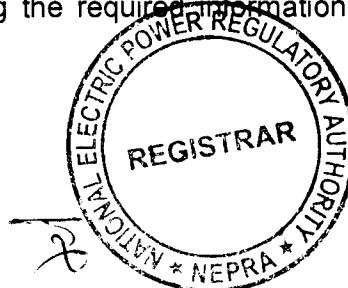
(i). The Authority granted a Generation Licence (No. SGC/028/2005, dated February 08, 2005) to Anoud Power Generation Limited (APGL) for its 23.84 MW Residual Furnace Oil/RFO Operated Distributed Generation Facility (DGF) located at Plot 7-B/1, National Refinery Limited (NRL), Korangi Industrial Area, Karachi, Sindh.

(ii). The Authority also granted a Second Tier Supply Authorization (STSA) for supplying to two (02) Bulk Power Consumers in the name of National Refinery Limited (NRL) and Enar Petroleum Refining Facility (EPRF)/ Enar Petrotech Services (Pvt.) Limited (EPTSPL) respectively. Further, the Authority also allowed APGL supplying 11.92 MW of RFO based surplus electric power to Karachi Electric Supply Company Limited (KESC).

**(B). Communication of LPM**

(i). APGL in accordance with Regulation-10 of the NEPRA Licensing (Application & Modification Procedure) Regulations, 1999 (the Regulations), communicated the LPM to the Authority on April 07, 2011 informing about enhancement in generation capacity. The Registrar observed that the LPM was not compliant with the Regulation 10 of the Regulations.

(ii). In view of the above, Registrar directed APGL for submitting the LPM in compliance with Regulation 10 of the Regulations. APGL finally complied with the regulation by submitting the required information on December 28, 2012.



APGL in the "Text of the proposed Modification" & "Reason in Support of Modification" statements stated that the proposed modification in Generation License by around 7.20MW is based on the enhancement in Generation Capacity from 23.86 MW to around 31.00 MW. The company has planned to generate /supply additional load and to meet the excess demand of power and its auxiliary consumption efficiently. The above enhancement in generation capacity is based on the idea for using modernized equipment and to keep supplying uninterrupted power.

(iii). Regarding the "Impact on Tariff", "Quality of Service (QoS)" and "Performance" APGL stated that all the said factors will show a positive impact besides the capital investment and would thus improve the overall performance of the company to a good extent.

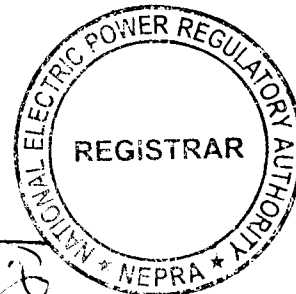
#### **(C). Processing of LPM**

(i). APGL completed the requirements of the Regulations as stipulated under the Regulation 10 (2) and 10 (3) of the Regulations. After completion of the said requirements, the Registrar accepted the communicated LPM for further processing as stipulated in the Regulations.

(ii). Accordingly, the Registrar in terms of Regulation 10 (4) of Regulations got published in the Newspapers the communicated LPM on April 05, 2013, seeking comments from general public and other stakeholders in favor or against the communicated LPM. Apart from the notice in the press, separate notices were also sent to experts, government ministries and representative organization etc. inviting their views and comments.

#### **(D). Comments of Stakeholders**

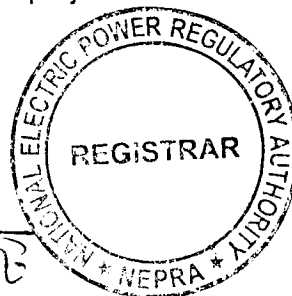
(i). In response to the above, the Authority received comments from three (03) stakeholders. These included National Refinery Limited (NRL), Karachi Electric Supply Company Limited (KESC) and Ministry of Water and Power (MoW&P).



(ii). The salient points of the comments offered by the above mentioned stakeholders are summarized in the following paragraphs: -

(a). NRL submitted that it leased a part of the land measuring 13, 200 Square Yards for an initial period of 30 years (i.e. up to May 25, 2026). NRL has no intention of extending this agreement as it intends utilizing the same for its own business. It was clarified that NRL has 9.09% equity in APGL however, no dividend has been provided to NRL in any form. NRL enquired about source of financing of the project and potential benefit for Shareholder from enhanced Generation Capacity. NRL informed that as per Clause 7 of Settlement Agreement dated December 01, 1999 between the parties, APGL cannot supply electricity to any third party without first obtaining the written consent of NRL. It was further stated that the said clause shall remain intact in case the Authority approves the modification under consideration. NRL also stated that existing term of the Generation License of APGL will expire on February 07, 2023 and enquired that whether a separate License for the proposed enhancement in generation capacity will be issued or otherwise? In case a modification is issued, what would be the "Term" of license as the new units have different useful lives as compared to existing units?

(b). KESC remarked that it entered into Power Acquisition Contract (PAC) with APGL for the supply of 12 MW for a period of 20 years, which was further amended on April 27, 2010. APGL has neither discussed nor submitted a formal proposal to KESC in relation to the LPM. Therefore, KESC is not aware of whose demand will be met through such expansion as noted in the advertisement. Additionally, no information has been made available to KESC on the technology, fuel and costs related to the expansion project. In view of the above, KESC is unable to



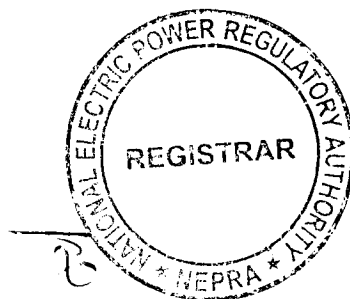
commit for the purchase of additional power from APGL unless a formal proposal is received and a proper due diligence of the same is carried out. Similarly, APGL is not allowed to distribute the proposed additional power within service territory to any other consumer(s).

(c). MoW&P supported the LPM for enhancement in generation capacity.

(iii). The perspective of APGL on the aforesaid positions of NRL and KESC was sought. In reply to the observations of NRL, it was submitted that there was no plan to add any new consumer or distribution of electricity without prior consent of NRL. It was clarified that APGL understands the importance of continuous operation of the refinery and has been supplying uninterrupted power to NRL for its smooth operation and assured complying on with the terms of settlement/power supply agreement. About the nonpayment of dividend, it was submitted that NRL was a minority shareholder and would benefit in shape of dividend as and when announced by the company. During the beginning years due to late operation of the supply facility and huge accumulated financial burden APGL was exposed to severe operational losses. So far now and in future after the complete settlement of debt financing, If the company would be in position to make profit and thus benefit all the stack holders accordingly.

(iv). On the comments of KESC, it was clarified that APGL had applied for modification for enhancement of capacity and it had no plan to add new consumer etc. It was further clarified that the proposed addition is being made to add efficiency in the use of auxiliary consumption and for supplying to the existing consumers. APGL also confirmed to continuously supplying power to KESC as per the terms agreed in the amended PAC.

(v). The Authority considered the comments of the stakeholders, and the rejoinder filed by AGPL and decided to proceed further in the matter as stipulated in Regulations and NEPRA Licensing (Generation) Rules, 2000 (the Rules).



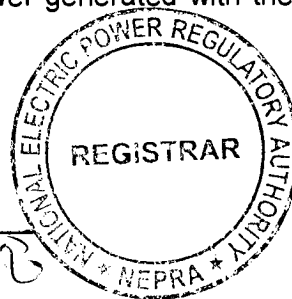
**(E). Approval of LPM**

**(i).** The availability of sufficient electricity at affordable prices with a reasonable mix of Hydel and Thermal is considered imperative for the sustainable economic development of the country. The Authority is well aware that presently there is severe shortage of electricity in the country and there is huge Supply-Demand gap.

**(ii).** In view of the above, the Distribution Companies are facing difficulties in serving their consumers on a continuous basis. Due to this prevailing situation, the Industrial Units are forced to make their alternate arrangements to meet their electricity requirements including Self-Generation as well as purchasing from other Generating Companies. AGPL is a DGF which is meeting the electric power requirements of its two (02) BPCs. Further, it is also supplying RFO based surplus electric power to KESC. Lately, AGPL has got allocated 7.152 MMCFD of Natural Gas through SSGC. In order to utilize the allocated Natural Gas, AGPL has installed four (04) Gas Engine of different capacity/size. The installation of additional Gas Engine has increased the total Installed Capacity of AGPL requiring modification in the Generation Licence.

**(iii).** The Authority has considered the comments/observations/objections of the stakeholders including NRL, KESC and MoW&P as explained at Para D above and has also taken into account the response of AGPL. The Authority observes that the explanation offered by AGPL to the comments/observations/objections of the stakeholders is satisfactory and therefore in terms of Regulation 10(11) of the Regulations, the Authority hereby approves the communicated LPM in the Generation Licence of AGPL for addition of another 7.11 MW (1 x 3.00 MW + 2 x 1.08 MW + 1 x 1.95 MW), increasing the total installed capacity of AGPL from the existing 23.84 MW to 30.95 MW.

**(iv).** In accordance with Rule 6 of the Rules, the licensee is allowed to charge only such tariff for the provision of electric power as may be determined approved or specified by the Authority. According to the information provided by AGPL, the additional electric power generated with the installation of New Gas

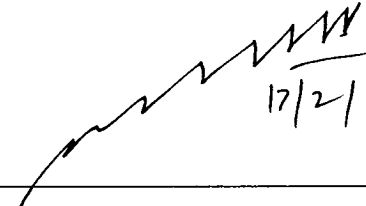


Engines will be supplied to KESC. In this regard, the Authority hereby directs AGPL and KESC for filing appropriate application under the NEPRA Interim Power Procurement (Procedures and Standards) Regulations, 2005 to the Authority for approval of draft Power Purchase Agreement/PPA.

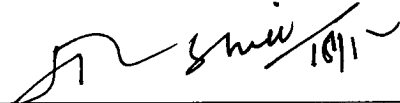
(v). In view of the above, the Authority hereby approves the communicated LPM in the Generation Licence of AGPL for addition in generation capacity. Accordingly, the already granted Generation Licence No. SGC/28/2005, dated February 08, 2005 is hereby modified. The Face Sheet indicating the changes in Schedule-I (now Revised/Modified Schedule-I) & Schedule-II (now Revised/Modified Schedule-II) of the Generation Licence and STSA (now Revised/Modified STSA) are attached as Annexure to this determination. The grant of such an LPM would be subject to the provisions contained in the NEPRA Act and relevant rules framed there under. APGL is further directed to strictly comply with the terms and conditions of the STSA and provisions of the Gas Supply Agreement with SSGC.

**Authority**

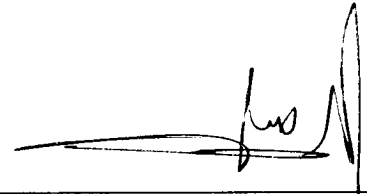
Habibullah Khilji  
Member

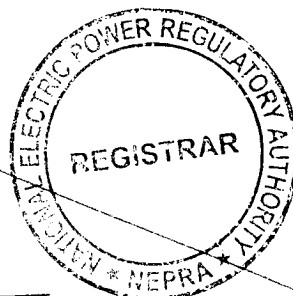
  
17/2/2014

Maj. (R) Haroon Rashid  
Member

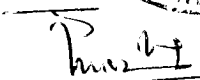


Khawaja Muhammad Naeem  
Member/Vice Chairman

  
24/2/14





  
26.02.14

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

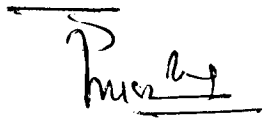
**GENERATION LICENCE**

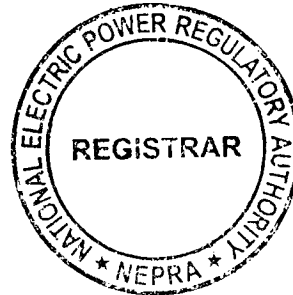
**No. SGC/028/2005**

In exercise of the Powers conferred upon the National Electric Power Regulatory Authority (NEPRA) under Section-26 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997, the Authority hereby modifies the Generation Licence granted to ANOUD POWER GENERATION LIMITED (issued on February 08, 2005 and expiring on February 07, 2023), to the extent of changes mentioned as here under: -

- (a). The **Installed Capacity** mentioned in the **Face Sheet** may be read as **30.95 MW instead of 23.84 MW**;
- (b). **Changes in Schedule-I** attached as **Revised/Modified Schedule-I**;
- (c). **Changes in Schedule-II** attached as **Revised/Modified Schedule-II**; and
- (d). **Changes in Second Tier Supply Authorization** attached as **Revised/Modified Second Tier Supply Authorization**.

This **Modification-I** is given under my hand this **26<sup>th</sup>** of **February Two Thousand & Fourteen**

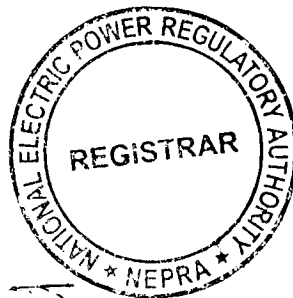
  
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Registrar



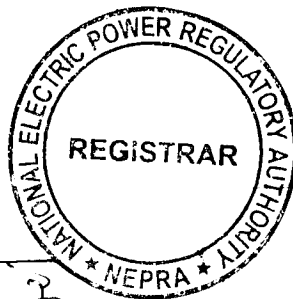


SCHEDULE-I  
(Revised/Modified)  
Modification-I

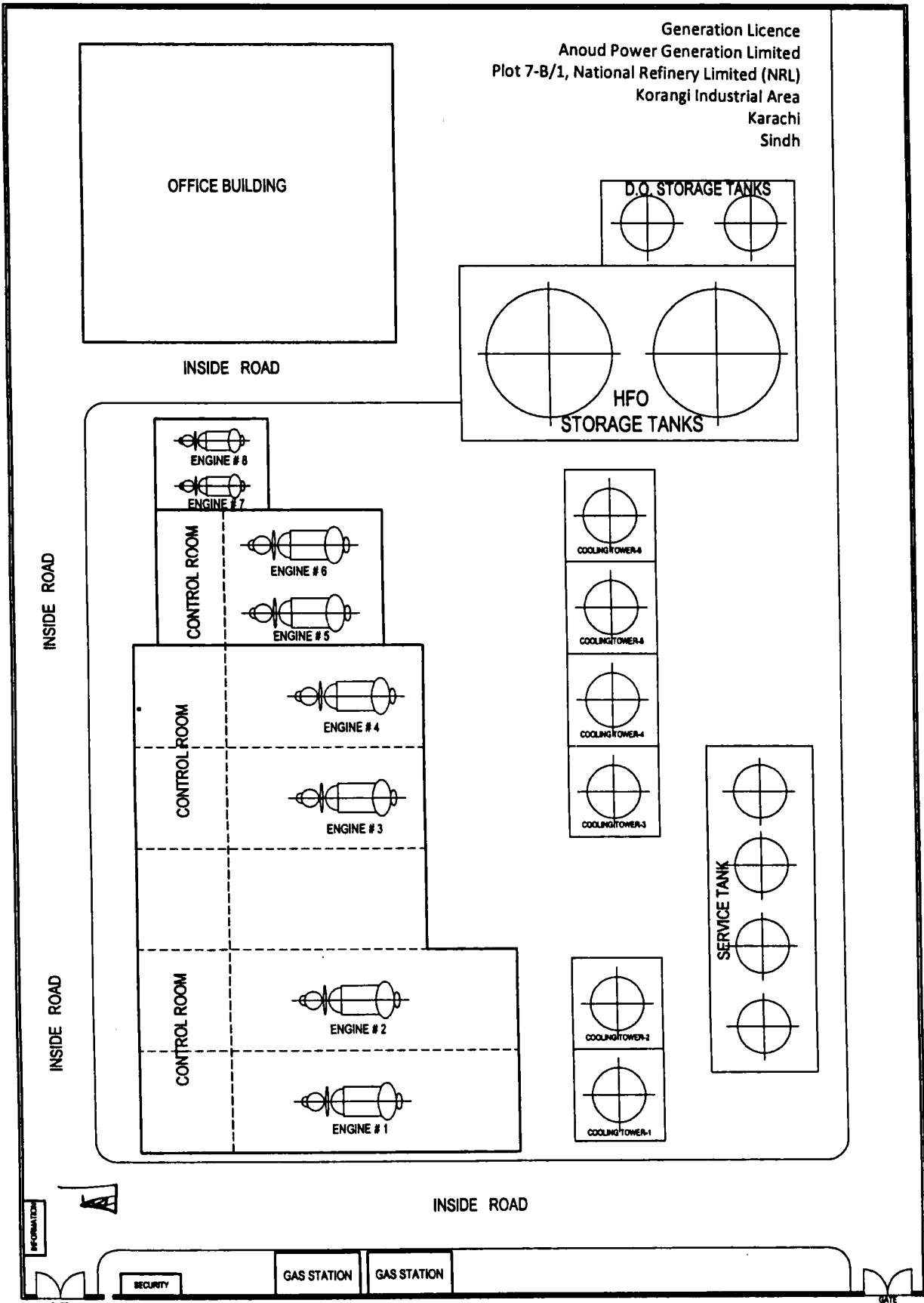
The Location, Size (i.e. Capacity in MW), Type of Technology, Interconnection Arrangements, Technical Limits, Technical/Functional Specifications and other details specific to the Generation Facilities of the Licensee are described in this Schedule.



Generation Licence  
Anoud Power Generation Limited  
Plot 7-B/1, National Refinery Limited (NRL)  
Korangi Industrial Area  
Karachi  
Sindh



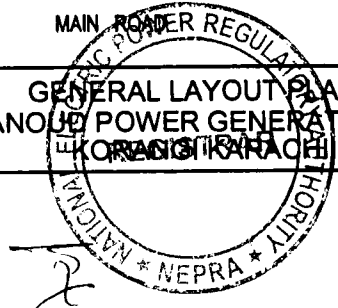
Generation Licence  
 Anoud Power Generation Limited  
 Plot 7-B/1, National Refinery Limited (NRL)  
 Korangi Industrial Area  
 Karachi  
 Sindh



ARCHITECT:  
 ARCHITECTURAL DESIGNER  
 ARCHITECTURE, STRUCTURE, PLANNING & INTERIOR  
 SUIT # 206, 2ND FLOOR, ALMAS HERBERT HALLWAY  
 SHAHRA-E-FATEMA, KARACHI  
 TEL: 0212-112094, 0212-0633830  
 E-mail: info@anoudpower.com, info@anoudpower.com

CLIENT:  
 ANOUD POWER REGULATOR  
 GENERAL LAYOUT PLAN FOR  
 ANOUD POWER GENERATION LIMITED  
 KARACHI

SCALE:	N.T.S.	DRAWN BY:	N.A. SIDDIQUI
DATE:	DEC., 2013	CHECKED BY:	

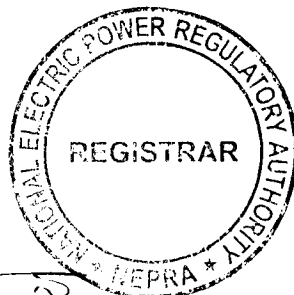


**INTERCONNECTION/TRANSMISSION**  
**ARRANGEMENT FOR THE DISPERSAL OF**  
**POWER FROM THE POWER PLANT**

The Power generated by Anoud Power Generation Limited (APGL) from its Thermal Power Generation facility, shall be supplied to its two designated Bulk Power Consumers (BPCs).

The details pertaining to BPCs, their load requirements and distribution Network is provided in this schedule. Further, the surplus power from the generation facilities of APGL is provided to KESC through 11 KV feeder to 132 KV Korangi Industrial Area.

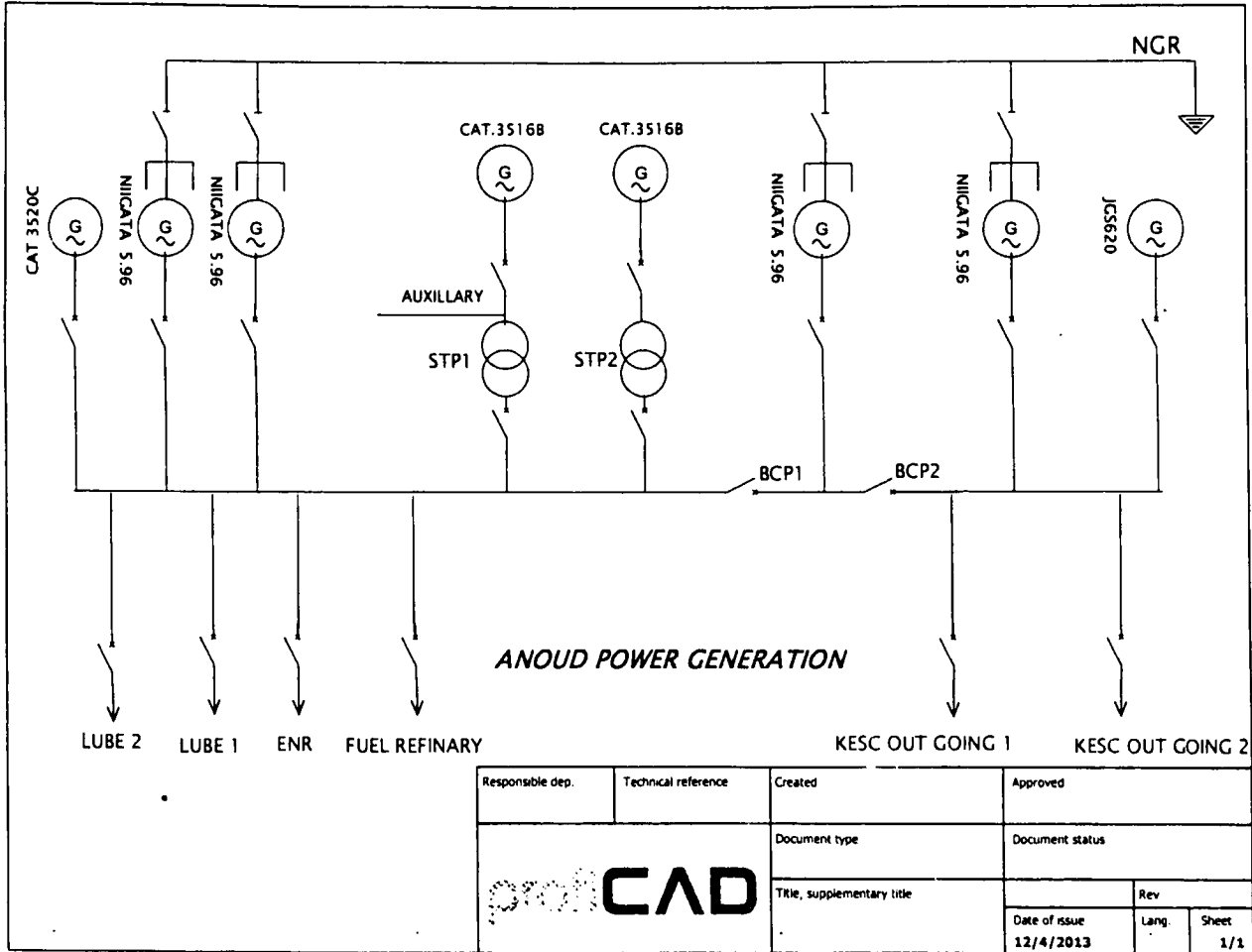
Revised/Modified Schedule-I



K.

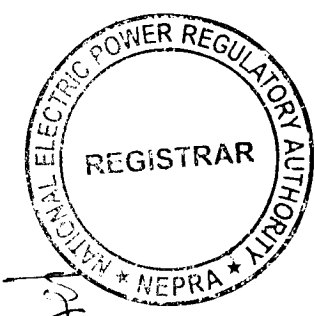
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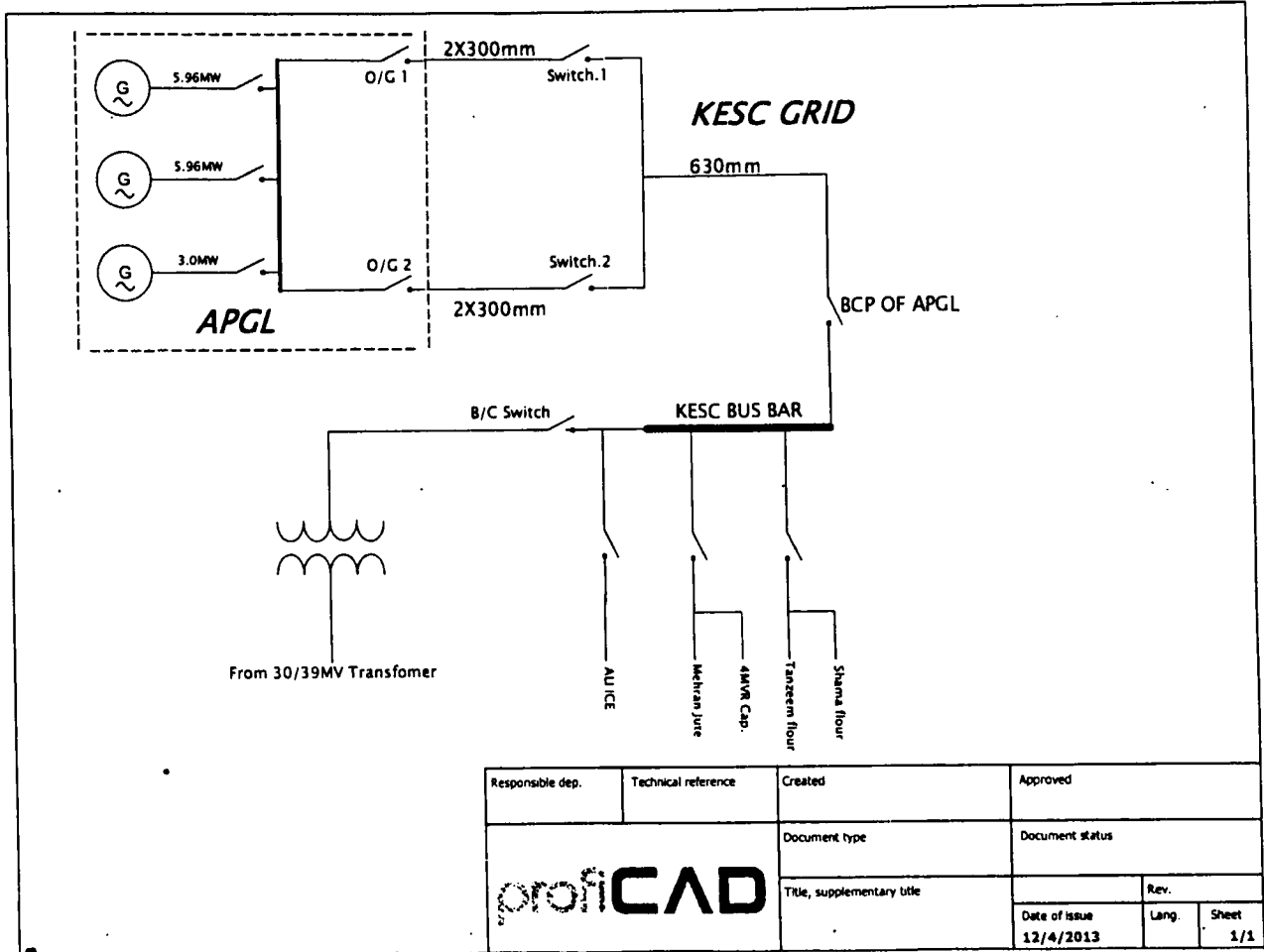
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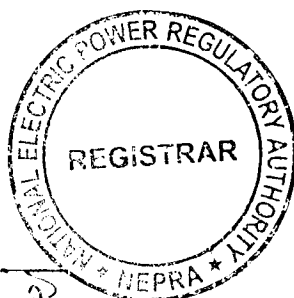
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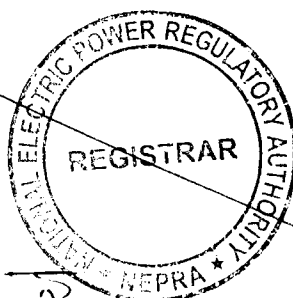
**Details of  
 Generation Facility of the Licensee/  
 Plant Details**

**(A). General Information**

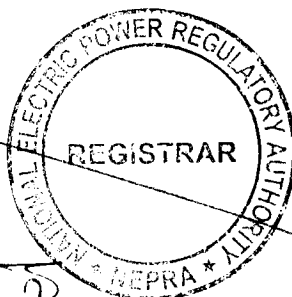
(i).	Name of Company/Licensee	Anoud Power Generation Limited
(ii).	Registered/Business Office	Plot 7-B/1, National Refinery Limited (NRL), Korangi Industrial Area, Karachi, Sindh
(iii).	Plant Location	Plot 7-B/1, National Refinery Limited (NRL), Korangi Industrial Area, Karachi, Sindh
(iv).	Type of Generation Facility	Thermal Generation

**(B). Plant Configuration**

		As per Original Generation Licence	As Per This Modification-I
(i).	Plant Size Installed Capacity (Gross ISO)	23.84 MW	07.11MW
(ii).	Type of Technology	Residual Furnace Oil (RFO) Based Engines Operating in Open Cycle	Gas Engines Operating in Open Cycle
(iii).	Number of Units/Size (MW)	4 x 5.96 MW	1 x 3.00 MW + 2 x 1.08 MW + 1 x 1.95 MW



(iv).	Unit Make & Model	Niigata/ 18V32CLX	Jenbacher JGS- 620/Caterpillar 3516-B/ Caterpillar 3520-C/		
(vii).	Date Commissioning /Operation of	Unit No. 1 & 2	July 2001	Unit No. 5	July 2013
		Unit No. 3	June 2002	Unit No. 6-7	July 2013
		Unit No. 4	August 2002	Unit No. 8	July 2013
(viii).	Expected Life of the Generation Facility from Commissioning/ Operation Date (based on the latest Unit)	20 Years	20 Years		
(ix).	Remaining Useful Life of the Generation Facility at the time of grant of Generation Licence (No. SGC/028/2005, dated February 08, 2005)	18 Years	-		
(x).	Remaining Useful Life of the Generation Facility at the time of grant of this LPM of the Generation Licence	10 Years	19 Years		



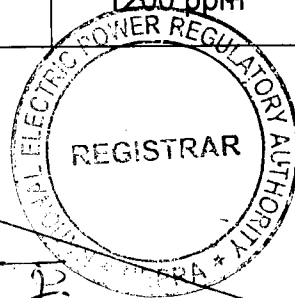


**(C). Fuel Details**

		As per Original Generation Licence		As Per This Modification-I
(i).	Primary Fuel	RFO		Natural Gas (NG)
(ii).	Alternative/Back-up Fuel	Diesel Oil (DO)		Not applicable
(iii).	Start-Up Fuel	Diesel Oil (DO)		Natural Gas
(ii).	Fuel Source (Imported/Indigenous)	Indigenous		Indigenous
(iii).	Fuel Supplier	National Refinery Limited (NRL)		Sui Southern Gas Company Limited (SSGC)
(iv).	Supply Arrangement	Through Pipeline		Through Pipeline Network of SSGC
(iv).	No of Storage Tanks	RFO	2	-
		DO	-	
(iv).	Storage Capacity of each Tank	RFO	1500 Tons	-
		DO	-	
(iv).	Gross Storage	RFO	3000 Tons	-
		DO	-	

**(D). Emission Values**

		RFO	DO	NG
(i).	SO <sub>x</sub>	818 ppm	-	0 mg/Nm <sup>3</sup>
(ii).	NO <sub>x</sub>	1200 ppm	-	200 mg/Nm <sup>3</sup>



(iii).	CO	<986 mg/Nm <sup>3</sup>	-	500 mg/Nm <sup>3</sup>
(iv).	PM <sub>10</sub>	100 mg/Nm <sup>3</sup>	-	10 mg/Nm <sup>3</sup>

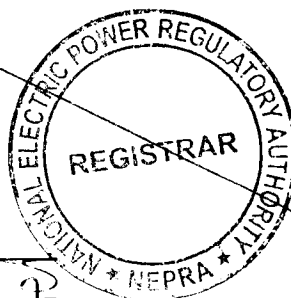
**(E). Cooling System**

(i).	Cooling Water Source/Cycle	Karachi Water and Sewerage Board (KW&SB) Through Pipe line (KWB) and Water Tankers/Closed Loop
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**(F). Plant Characteristics**

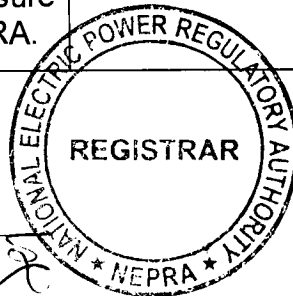
		Unit-1-4	Unit-5-8
(i).	Generation Voltage	11 KV	400 Volt
(ii).	Frequency Hz	50-Hz	50 Hz
(iii).	Power Factor	0.80 Lagging	0.80 Lagging
(iv).	Automatic Generation Control (AGC)	AVR Control	AVR Control
(v).	Ramping Rate	-	0.1 Second
(vi).	Time required to Synchronize to Grid and loading the complex to full load.	-	130.Second (max)

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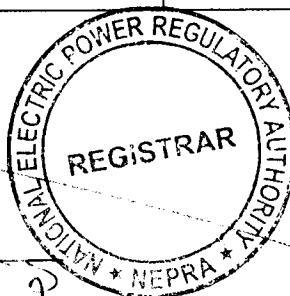
**Information Regarding Distribution Network for  
Supply of Power to Bulk Power Consumer (in the Name of  
National Refinery Limited-NRL and Enar Petrotech Services (Pvt.) Limited-  
EPTSPL of the License (i.e. Anoud Power Generation Limited/APGL)**

(A).	No. of Feeders	2 (Two)
(B).	Length of Each Feeder (Meter)	500 meters (Approximately) each
(C).	Length of Each Feeder to each Consumer	Same as above
(D).	In respect of all the Feeders, describe the property (streets, farms, Agri land, etc.) through, under or over which they pass right up to the premises of customer, whether they cross-over.	The Generation Facility of APGL is located on leased property within the premises of NRL. The Bulk Power Consumer(s)/BPC(s) are fed through underground cables located on the respective property of NRL and EPTSPL without involving any crossing of public property or any other third party.
(E).	Whether owned by APGL, Consumer or KESC -(deal with each Feeder Separately)	
	- If owned by KESC, please furnish particulars of contractual arrangement	Not Applicable
	- Operation and maintenance responsibility for each feeder	Each BPC is responsible for Operation and Maintenance of its feeder.
(F).	Whether connection with network of KESC exists (whether active or not)- If yes, provide details of connection arrangements (both technical and contractual)	YES. Refer attached Interconnection Drawing and Power Purchase Agreement with KESC.
(G).	Any other network information deemed relevant for disclosure to or consideration by NEPRA.	Nil



**Information Pertaining to the Bulk Power Consumers**  
**(in the name of (a) National Refinery Limited (NRL) and (b) Enar Petrotech**  
**Services (Pvt.) Limited-EPTSPL of the License**  
**(i.e. Anoud Power Generation Limited-APGL)**

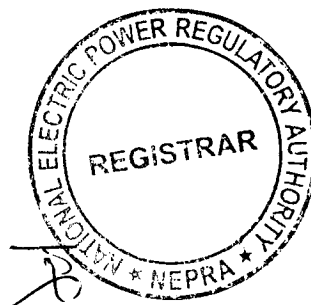
(A).	No. of Consumers	Two (02)	(a).	NRL
			(b).	EPTSPL
(B).	Location of consumers (distance and/or identity of premises)		Plot 7-B, National Refinery Limited (NRL), Korangi Industrial Area, Karachi, Sindh	
(C).	Contracted Capacity and Load Factor of Each Consumer		NRL	12.00 MW/Load factor is 0.8
			EPTSPL	01.00 MW/ Load factor is 0.8
(D).	Specify Whether			
	(i).	The consumer is an Associate undertaking of the APGL- If yes, specify percentage ownership of equity;	Only NRL has 9.09% equity shareholding	
	(ii).	There are common directorships:	No	
	(iii).	Either can exercise influence or control over the other.	No	
(E).	Specify nature of contractual Relationship			
	(i).	Between each consumer and APGL	Seller/Buyer	
	(ii).	Consumer and KESC.	No	



(F).	Capacity originally sanctioned by Provincial, if subsequently enhanced, evidence of permission for enhancement	N/A
(G).	Tariff Arrangement and particulars with WAPDA/KESC or Provincial Government etc.	N/A
(H).	Any other network information deemed relevant for disclosure to or consideration by NEPRA.	

Revised/Modified Schedule-I

✓

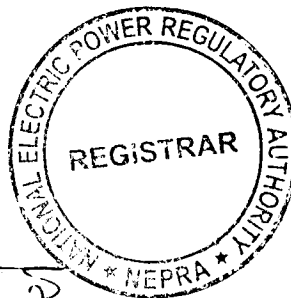


M.

**SCHEDULE-II**  
**Revised/Modified**  
**Modification-I**

The Installed/ISO Capacity (MW), De-Rated Capacity At Mean Site Conditions (MW), Auxiliary Consumption (MW) and the Net Capacity At Mean Site Conditions (MW) of the Generation Facilities of Licensee is given in this Schedule

Revised/Modified Schedule-II



*M.*  
Page 1 of 2 of  
Revised/Modified Schedule-II  
(Modification-I)

*x*

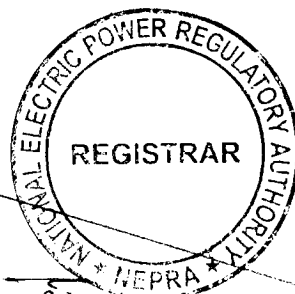
*2*

**SCHEDULE-II**

		As per Original Generation Licence	As Per This Modification-I	Total
1.	Installed Capacity Gross ISO	23.84 MW	07.11 MW	30.95 MW
2.	De-rated Capacity at Mean Site Conditions	23.84 MW	07.11 MW	30.95 MW
3.	Auxiliary Consumption	00.72 MW	00.18 MW	00.90 MW
4.	Net Capacity of the Plant	23.12 MW	06.93 MW	30.05 MW

**Note**

All the above figures are indicative as provided by the Licensee. The Net Capacity available to KESC and Bulk Power Consumers for dispatch will be determined through procedure(s) contained in the Bi-lateral Agreement(s) or any other applicable document(s).



*PM*

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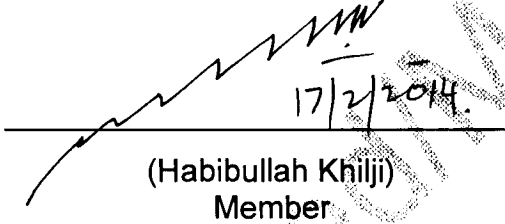
Revised/Modified Second Tier Supply Authorization (STSA)  
by National Electric Power Regulatory Authority (NEPRA) to  
Anoud Power Generation Limited

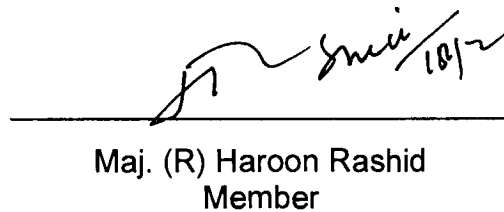
Incorporated under the Companies Ordinance, 1984  
Certificate of Incorporation No. K-05605, dated October 09, 1994

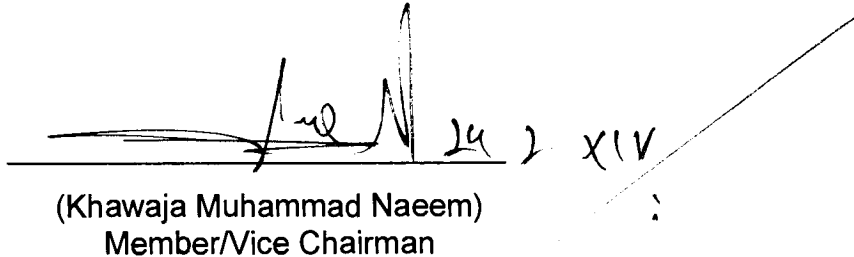
NEPRA GENERATION LICNCE No. SGC/028/2005  
for  
Sale to Bulk Power Consumer(s)

Pursuant to Section 22 of the Act and Rule 7 of the NEPRA Licensing (Generation) Rules-2000, the Authority hereby authorizes Anoud Power Generation Limited (the Licensee) to engage in second-tier supply business, limited to the following consumer:-

- (1). National Refinery Limited (NRL); and
- (2). Enar Petrotech Services (Pvt.) Limited (EPTSPL).

  
17/2/2014.  
\_\_\_\_\_  
(Habibullah Khilji)  
Member

  
\_\_\_\_\_  
Maj. (R) Haroon Rashid  
Member

  
\_\_\_\_\_  
(Khawaja Muhammad Naeem)  
Member/Vice Chairman

