



Registrar

National Electric Power Regulatory Authority

Islamic Republic of Pakistan

NEPRA Tower, Attaturk Avenue (East), G-5/1, Islamabad
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Web: www.nepra.org.pk, E-mail: registrar@nepra.org.pk

No. NEPRA/R/DL/LAG-302/ 5262-64

April 19, 2016

Mr. Khalid Mahmood
Executive Director
Master Power (Private) Limited
3-KM Off Raiwind-Manga Mandi Road,
District Lahore, Pakistan.

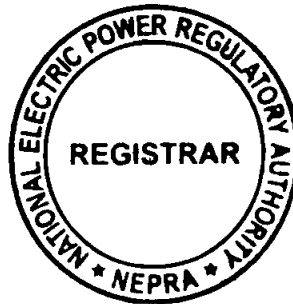
**Subject: Grant of Generation Licence No. SGC/116/2016
Licence Application No. LAG-302
Master Power (Private) Limited (MPPL)**

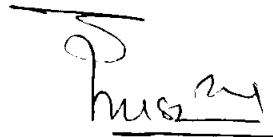
Reference: Your application vide letter No. nil, dated March 30, 2015 (received on April 01, 2015).

Enclosed please find herewith Determination of the Authority in the matter of Application of "Master Power (Private) Limited (MPPL)" for the "Grant of Generation Licence" along with Generation Licence No. SGC/116/2016 annexed to this determination granted by the National Electric Power Regulatory Authority (NEPRA) to "Master Power (Private) Limited (MPPL)" for its "20.00 MW Imported/Local Coal based Generation Facility located at 3-KM Off Raiwind-Manga Mandi Road, Tehsil Raiwind, District Lahore in the Province of Punjab" pursuant to Section 15 of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997).

2. Please quote above mentioned Generation Licence No. for future correspondence.

**Enclosure: Generation Licence
(SGC/116/2016)**




19.04.16
(Syed Safeer Hussain)

Copy to:

1. Chief Executive Officer, Lahore Electric Supply Company Limited, 22-A, Queens Road, Lahore.
2. Director General, Environment Protection Department, Government of Punjab, National Hockey Stadium, Ferozpur Road, Lahore.

National Electric Power Regulatory Authority
(NEPRA)

Determination of the Authority
in the Matter of Application of Master Power (Private) Limited for
the Grant of Generation Licence

April 12, 2016
Case No. LAG-302

(A). Background

(i). The Electric Power Sector of the country is experiencing a Supply-Demand gap. Due to the shortage of electricity the utilities are finding it hard to meet with the requirements of its consumers especially Industrial Concerns.

(ii). In order to cope with the above mentioned situation, various Industrial Groups are contemplating to set up generation facilities using cheaper resources for supplying to their affiliated Industrial Units. Master Group has planned to set up a 20.00 MW Indigenous/Imported Coal based Generation Facility/Co-Generation Power Plant/Thermal Power Plant at 3 KM, off Raiwind - Manga Road, Tehsil Raiwind, District Lahore, in the Province of Punjab.

(iii). In order to implement the project, the sponsors incorporated a Special Purpose Vehicle in the name of Master Power (Private) Limited (MPPL) under Section-32 of the Companies Ordinance 1984.

(B). Filing of Application

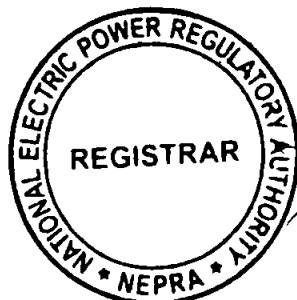
(i). MPPL submitted an application on April 01, 2015 in accordance with Section-15 of Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 ("the NEPRA Act"), requesting for the grant of Generation Licence.



(ii). The Registrar examined the submitted application to confirm its compliance with the NEPRA Licensing (Application and Modification Procedure) Regulations, 1999 ("the Regulations"). The Registrar found the same non-compliant with the Regulations and directed the company/MPPL for submitting the missing information/documents etc. MPPL completed the missing information/documentation on April 20, 2015. Accordingly, the Registrar submitted the matter for the consideration of the Authority for admission of the application or otherwise.

(iii). The Authority considered the matter in its Regulatory Meeting (RM-15-372), held on May 12, 2015 and found the form and content of the application in substantial compliance with Regulation-3 of the Regulations. Accordingly, the Authority admitted the application for consideration of the grant of the Generation Licence as stipulated in Regulation-7 of the Regulations. The Authority approved the advertisement [containing (a). the prospectus of the company; and (b). a notice to the general public about the admission of the application of MPPL], inviting the general public for submitting their comments in the matter as stipulated in Regulation-8 of the Regulations. The Authority also approved the list of the stakeholders for providing their comments or otherwise to assist the Authority in the consideration of the above mentioned application of MPPL under Regulation-9 of the Regulations.

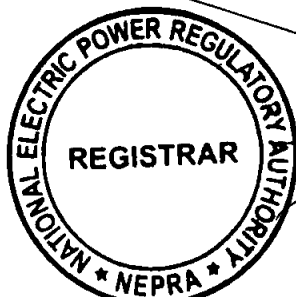
(iv). Accordingly, the advertisement was published in one Urdu and one English National Newspaper on May 16, 2015. Apart from the said, separate letters were also sent to Government Ministries, their Attached Departments, Representative Organizations and Individual Experts etc. on May 21, 2015. The said stakeholders were directed for submitting their views/comments for the assistance of the Authority.



(C). Comments of Stakeholders

(i). In response to the above, the Authority received comments from five (05) stakeholders. These included The Federation of Pakistan Chambers of Commerce & Industry (TFoPCoC&I), Ministry of Petroleum & Natural Resources (MoP&NR), Central Power Purchasing Agency (CPPA) of National Transmission and Despatch Company Limited (NTDC), Punjab Mineral Development Corporation (PMDC) and Lahore Electric Supply Company Limited (LESCO). The comments of stakeholders are summarized below:-

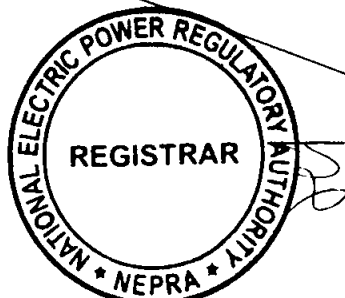
- (a). TFoPCoC&I commented that in view of the serious shortage of energy in the country, it is strongly recommended expediting the processing of all applications of power projects pending with the Authority. Further, TFoPCoC&I stated that it has no objection if the Authority grants a Generation Licence to MPPL;
- (b). MoP&NR remarked that MPPL intends to install a Coal Fired Thermal Power Plant, to be operated on Imported & Local Coal as fuel. For the said, no gas is required therefore, the ministry has no objection to the grant of Generation Licence;
- (c). CPPA stated that it has no reservation for grant of Generation Licence to MPPL, subject to meeting of all the conditions laid down in the NEPRA Licensing (Generation) Rules 2000 ("the Rules");
- (d). PMDC submitted that it has no objection if the Authority issues Generation Licence to MPPL for installation of 20.00 MW Coal Based Thermal Power Plant; and



(e). LESCO objected to the grant of Generation Licence to MPPL on the premise that Master Textile Mills (Pvt.) Limited (MTMPL) is its Bulk Power Consumer (BPC) and MPPL cannot lawfully sell to the same. LESCO stated that the Section-22(1) of the NEPRA Act ceases to exist after the lapse of stipulated time fifteen (15) years from the commencement of the said Act. Therefore, the Authority is no more empowered to allow MPPL selling electric power to the BPC(s). LESCO also contested that pursuant to Section-22(2) of the NEPRA Act, MTMPL and its neighboring industry being BPCs of LESCO are bound to give notice of three (03) years prior to the stoppage of purchase of electricity from it. LESCO clarified that under any law a BPC is not allowed to have dual source of supply therefore, MTMPL and neighboring BPCs cannot be allowed to have two independent connections. LESCO also informed that proposed feeder for supply of electric power from MPPL to BPC will pass through its service territory therefore, it has serious objection to the proposed arrangement.

(ii). The Authority considered the above comments of the stakeholders and found the same in favor of the grant of Generation Licence, except observations raised by LESCO. Accordingly, the Authority considered it appropriate seeking perspective of MPPL on the observations of LESCO.

(iii). In its rejoinder to the comments of LESCO, the company/MPPL submitted that in terms of Article-4(2)(b) of the constitution of Pakistan no person is prevented from or be hindered in doing that which is not prohibited by the Law. Further, in terms of Section-15 read with Section-7 of the NEPRA Act, only the Authority has the exclusive right to decide which entity qualifies for the grant of



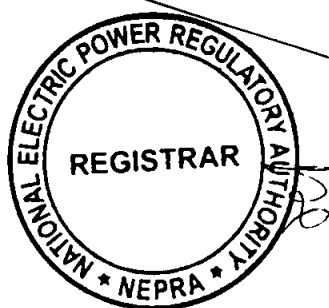
Generation Licence and for the sale of electric power or otherwise. Regarding the interpretation of Section-22(1) of the NEPRA Act, it was clarified that understanding of LESCO is totally contrary to the fact as after the lapse of fifteen (15) years the electric power sector is now open enabling the free transactions between generation companies and BPCs. About the contention of LESCO for giving three (03) years prior notice, MPPL clarified that the same is only applicable in a scenario where the BPC has stopped purchasing electric power and is not applicable in the present case. In response to the objection relating to dual source of supply, MPPL stated that argument of LESCO in the matter is illegal and unlawful as there is no restriction in the Law on having two or more connections. MPPL clarified that if the said argument of LESCO is taken to be correct then it would undermine the possibility of switching to renewable energy sources as the same cannot substitute the base load plants. Regarding the feeder crossing the service territory of LESCO, it was submitted that the same does not belong to a generation company and the matter related to distribution of electric power is subject to the approval of the Authority.

(iv). The Authority considered the above submissions of MPPL and found the same plausible. Therefore, the Authority considered it appropriate to process the application of MPPL for the consideration of grant of the Generation Licence as stipulated in the Regulations and the Rules.

(D). Grant of Generation Licence

(i). Electricity is a fundamental element for the economic growth of any country. The electricity consumption per capita has a strong correlation to the Social Development Indices (Human Development Index-HDI, life expectancy at birth, infant mortality rate, and maternal mortality) and Economic Indices (such as GDP per capita etc.).

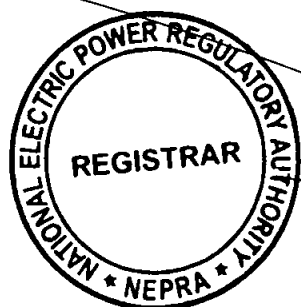
(ii). Increasing electricity consumption per capita can directly stimulate faster economic growth and indirectly achieve enhanced social development. In short, the Economic Growth of any country is directly linked with the availability of



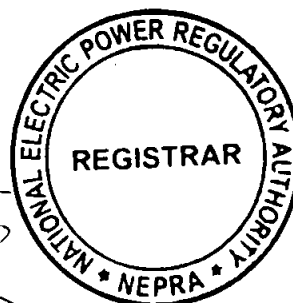
safe, secure, reliable and cheaper supply of electricity. The Authority is well aware of the fact that presently there is severe shortage of electricity in the country and that as a result of huge Supply-Demand gap the Distribution Companies are facing difficulties in serving their consumers. Due to the prevailing situation, the Industrial Units are forced to make their own arrangements to meet their electricity requirements.

(iii). The present case pertains to request of MPPL for the grant of Generation Licence for a coal based generation facility to be located at 3 KM, off Raiwind - Manga Road, Tehsil Raiwind, District Lahore, in the Province of Punjab. The said generation facility is being set up primarily to meet with the electric power requirements of the group companies of Master Group however, some of the available surplus will also be supplied to adjoining Industrial Units. In this regard, MPPL has informed that it will be supplying to Master Textile Mills (Pvt.) Limited-MTMPL (8.00 MW), Ihsan Sons (Pvt.) Limited-ISPL (2.50 MW), Asian Foods Industries (Pvt.) Limited-AFIPL (1.80 MW), Procon Engineering (Pvt.) Limited-PEPL (0.940 MW), Master Synthetic (Pvt.) Limited-MSPL (0.500 MW) and Umer Spinning Mills (Pvt.) Limited-USMPL (4.00 MW). In this regard, it is clarified that pursuant to Section-21 of the NEPRA Act, the Authority is empowered allowing a Generation Company to sell to BPCs. In terms of Section-2(ii) of the NEPRA Act, a BPC is a consumer which purchases or receives electric power, at one premises in an amount of one (01) megawatt or more or in such other amount and voltage level and with such other characteristics as the Authority may determine and the Authority may determine different amounts and voltage levels and with such other characteristics for different areas. In consideration of the said, the Authority declares all the above mentioned affiliated and external Industrial Units as BPCs of MPPL under Section-21 of the NEPRA Act.

(iv). LESCO has raised objection that MPPL cannot sell electricity to any BPC within its exclusive service territory. While referring to Section-22 of the NEPRA Act, LESCO has stated that since Section-22(1) of the NEPRA Act ceases to exist after the lapse of fifteen (15) years therefore, the Authority is no more empowered to

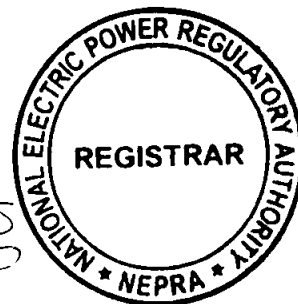


allow MPPL to selling to the BPCs. Further, LESCO also contested that pursuant to Section-22(2), MTMPL and its neighboring industry being BPCs of LESCO are bound to give notice three (03) years prior to the stoppage of purchasing electricity from it. In this regard, the Authority has observed that under Section-21 of the NEPRA Act, the Authority may, subject to the conditions specified in the NEPRA Act, grant a Distribution Licence and the Licensee shall possess exclusive right to provide distribution services and to make sale of electric power to consumers in the territory specified in the License. It is pertinent to highlight here that such grant of exclusive distribution right is subject to conditions specified in the NEPRA Act as explicitly stated in the Section-21 of the NEPRA Act. The NEPRA Act imposes certain conditions on a Distribution Licensee and that Licensee cannot enjoy exclusivity without corresponding obligations to provide safe, continuous and reliable electricity to consumers. Thus a Distribution Licensee cannot claim the exclusive right as an absolute right for the reason that the NEPRA Act does not intend to create a monopoly to sell electricity to consumers being bonded consumers. Proviso to Section-21 of the NEPRA Act further clarifies the intention of legislature by carving out an exception to aforementioned exclusive right of a Distribution Licensee. The said Proviso categorically states that a generation company may make sales of electric power to BPC(s) within such territory as the Authority may allow, subject to Section-22 of the NEPRA Act for a period of fifteen (15) years. It is also imperative to clarify that time period mentioned in Proviso to Section-21 of the NEPRA Act does not restrict the powers of the Authority to allow such arrangement only for the fifteen (15) years from the commencement of the NEPRA Act. Such restrictive interpretation of period of fifteen (15) years mentioned in the Proviso is against the spirit of the NEPRA Act, which undermines the competitive environment and discourages the investment in private sector resulting in enhanced demand and supply gap. It is a settled principle of law that a statute has to be read as whole and no single provision can be read to arrive at a just and correct interpretation. Therefore, period of fifteen (15) years cannot be read in isolation, it has to be interpreted in the context of scheme of the law. The NEPRA Act envisages a competitive market which was duly translated in the Transmission License of NTDC setting year 2012 as Competitive Market Operation Date, meaning thereby after



fifteen (15) years of commencement of the NEPRA Act power market will be opened for bilateral contracting. Therefore, fifteen (15) years mentioned in the Proviso cannot be read as to disallow sales of electricity by a generation company to BPCs in the territory of a DISCO rather that no such permission will be required after fifteen (15) years of commencement of the NEPRA Act. The Authority has further observed that Section-22 of the NEPRA Act is applicable only in the case where the Authority has allowed a generation company to sell electricity to BPCs within the territory of another DISCO. Therefore, the condition mentioned in the Section-22(2) to give three years notice to DISCO is not relevant in the scenario where a generation company is supplying electricity to BPCs within the territory of the same DISCO.

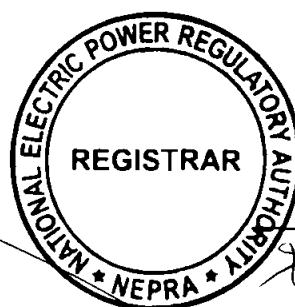
(v). MPPL has informed that the supply of electric power to the above mentioned BPCs will be made through three (03) Feeders at 11 KV voltage. MPPL has confirmed that the proposed 11 KV Feeders will be mostly located on private property either owned by Master Group or the prospective BPC(s) however, a portion of the feeder supplying to USMPL will also be crossing a road (i.e. public property). In this regard, it is clarified that public property is part of the exclusive territory of the host DISCO i.e. LESCO and cannot be intruded. In consideration of said, it is pertinent to mention that according to Section-2(v) of the NEPRA Act, wherein the ownership, operation, management and control of distribution facilities located on private property and used solely to move or deliver electric power to the person owning, operating, managing and controlling those facilities or to tenants thereof is not included in the definition of "distribution". Therefore, to facilitate the supply of BPC(s) without impairing the exclusivity service territory of LESCO, the Authority considers that either generation company or the concerned BPC may construct distribution lines located at public property at own cost and hand over the same to DISCO/LESCO, either on lease basis or through outright sale. Further, Operation and maintenance of the facilities may be carried out by the generating company, BPC or DISCO on mutually agreed terms and conditions. In view of the said, the supply of electric power from MPPL will not only be within the ambit of Section-2(v) of the NEPRA Act but will also not cause any infringement of the service territory of LESCO.



(vi). The term of a Generation Licence under the Rule-5 (1) of the Rules, is to be commensurate with the maximum expected useful life of the units comprised in a generating facility except where an applicant consents to a shorter term. The proposed Generation Facility/Thermal Power Plant of MPPL will be consisting of one (01) Steam Turbine Unit of 20.00 MW. According to the International benchmarks available, the useful life of a Steam Turbine is normally taken at least thirty (30) years from its Commercial Operation Date (COD). In this regard, MPPL has also requested that the term of its proposed Generation Facility may be fixed as per the available benchmarks. In consideration of the said, the Authority fixes the term of the proposed Generation Licence to thirty (30) years from the COD of the Project.

(vii). Regarding the Tariff of Generation Facility that the company will be charging from the Power Purchaser, it is clarified that MPPL will be supplying to the designated BPC(s) only. As the matter of charges between MPPL and its BPCs is a bilateral issue and does not affect any third party. Therefore, the parties i.e. MPPL and its BPCs may agree the same mutually and approach the Authority for its approval.


(viii). As explained above, the proposed Generation Facility/Thermal Power Plant for which Generation Licence has been sought is based on Imported Coal. The Coal based Generation Facility/Thermal Power Plant may be harmful to environment because of emission of Green House Gases (GHG) and production of ash and other effluents. In this regard, MPPL confirmed that proposed Generation Facility/Thermal Power Plant will meet local regulatory emissions limits and has also provided the No Objection Certificate from the Environmental Protection Department Government of the Punjab (EPDGoPb). However, to ensure that the Generation Facility/Thermal Power Plant conforms to the relevant environmental standards, a separate article has been included in the Generation Licence along with other terms and conditions. Further, the Authority also directs MPPL to submit a Bi-Annual report confirming that operation of its proposed Generation Facility/Thermal Power Plant is compliant with the required Environmental Standards prescribed by EPDGoPb.



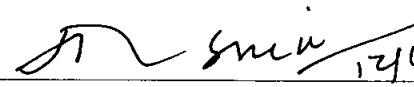
(ix). In view of the above, the Authority hereby decides to approve the grant of Generation Licence to MPPL on the terms and conditions set out in the Generation Licence annexed to this determination. The grant of Generation Licence will be subject to the provisions contained in the NEPRA Act, relevant rules, regulations framed there under and the other applicable documents.

Authority

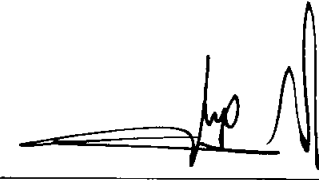
Syed Masood-ul-Hassan Naqvi
(Member)


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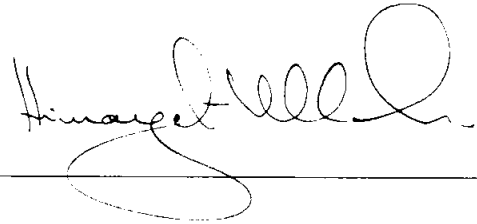
Maj. (R) Haroon Rashid
(Member)


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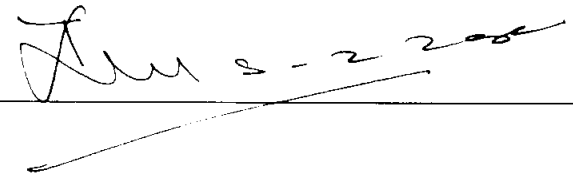
Khawaja Muhammad Naeem
(Member)



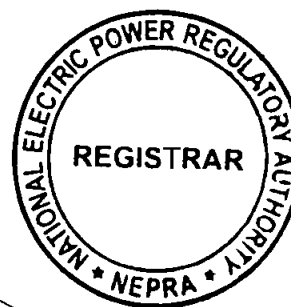
Himayat Ullah Khan
(Member)/(Vice Chairman)

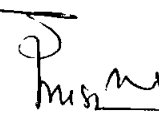


Brig. (R) Tariq Saddozai
(Chairman)








17.04.16

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

GENERATION LICENCE

No. SGC/116/2016

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, the Authority hereby grants a generation licence to

MASTER POWER REGULATORY LIMITED

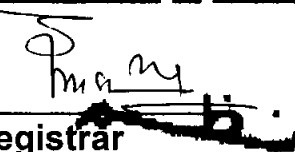
of the Companies Ordinance, 1984 (Registration No. 1984/Punjab-3) and Identification No. 000079000, dated February 04, 2015

for its proposed/Local Coal Based Generation Facility/Co-Generation Power Plant located at 3-KM Off Raiwind, Ganga Mandi Road, Tehsil Raiwind, District Lahore, in the Province of Punjab

(Total/Gross Installed Capacity: 20.00 MW)

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

Given under my hand on 29 day of April Two Thousand & Sixteen and expiry on 29 day of November Two Thousand & Forty Six.


Registrar

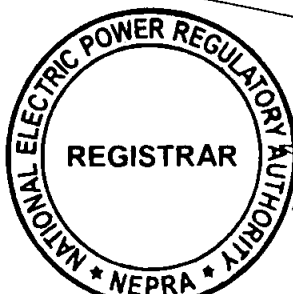
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Article-1
Definitions

1.1 In this Licence

- (a).** "Act" means "the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997";
- (b).** "Applicable Documents" have the same meaning as defined in the Rules;
- (c).** "Authority" means "the National Electric Power Regulatory Authority constituted under Section-3 of the Act";
- (d).** "Bulk Power Consumer-BPC" means a consumer who purchases or receives electric power at one premises, in an amount of one megawatt or more or any other amount and any voltage level as may be specified by the Authority;
- (e).** "Bus Bar" means a system of conductors in the generation facility/Co-Generation Power Plant of the Licensee on which the electric power of all the generators is collected for supplying to the Power Purchaser;
- (f).** "Co-Generation Power Plant" means the generation facility for simultaneous production of both electric power and heat or steam for industrial processes from a common fuel source;
- (g).** "Commercial Operations Date (COD)" means the day immediately following the date on which the generation facility/Co-Generation Power Plant of the Licensee is commissioned and starts supplying to the Power Purchaser;

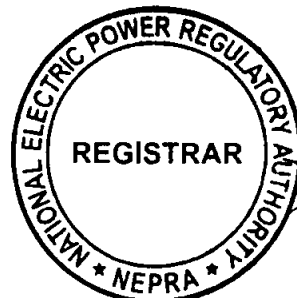


- (h). "Law" means all the Act, relevant rules and regulations made there under and all the Applicable Documents;
- (i). "Licensee" means "**Master Power (Private) Limited**" and its successors or permitted assigns;
- (j). "Power Purchase Agreement" means the Power Purchase Agreement, entered or to be entered into by and between the Power Purchaser and the Licensee, for the purchase of electric power/energy generated by the generation facility/Co-Generation Power Plant of the Licensee, as may be amended by the parties thereto from time to time;
- (k). "Power Purchaser" means a BPC which has entered or be entering into a Power Purchase Agreement with the Licensee, for the purchase of electric power/energy generated by the generation facility/Co-Generation Power Plant of the Licensee, as may be amended by the parties thereto from time to time;
- (l). "Regulation" means "the National Electric Power Regulatory Authority Licensing (Application & Modification Procedure) Regulations, 1999" as amended or replaced from time to time;
- (m). "Rules" mean "the National Electric Power Regulatory Authority Licensing (Generation) Rules, 2000".

1.2 Words and expressions used but not defined herein bear the meaning given thereto in the Act or Rules and regulations issued under the Act.

Article-2
Applicability of Law

This licence is issued subject to the provisions of the Law as amended or replaced from time to time.



Article-3
Generation Facilities

3.1 The location, size (capacity in MW), technology, interconnection arrangements, technical limits, technical and functional specifications and other details specific to the generation facility/Co-Generation Power Plant of the Licensee are set out in Schedule-I of this licence.

3.2 The net capacity of the generation facility/Co-Generation Power Plant of the Licensee is set out in Schedule-II hereto.

3.3 The Licensee shall provide the final arrangement, technical and financial specifications and other specific details pertaining to its generation facility/Co-Generation Power Plant before its COD.

Article-4
Term of Licence

4.1 The Licence is granted for a term of thirty (30) years after the COD of the generation facility/Co-Generation Power Plant.

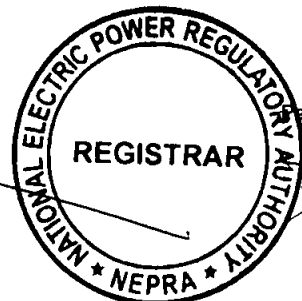
4.2 Unless suspended or revoked earlier, the Licensee may apply for renewal of the Licence within ninety (90) days prior to the expiry of the term of this licence, as stipulated in the Regulations.

Article-5
Licence fee

After the grant of the Generation Licence, the Licensee shall pay to the Authority the Licence fee, in the amount and manner and at the time set out in the National Electric Power Regulatory Authority (Fees) Rules, 2002.

Article-6
Tariff

The Licensee shall charge only such tariff which has been determined, approved or specified by the Authority.



Article-7
Competitive Trading Arrangement

7.1 The Licensee shall participate in such manner as may be directed by the Authority from time to time for development of a Competitive Trading Arrangement. 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. Provided that any such participation shall be subject to any contract entered into between the Licensee and another party with the approval of the Authority.

7.2 Any variation or modification in the above-mentioned contracts for allowing the parties thereto 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.

Article-8
Maintenance of Records

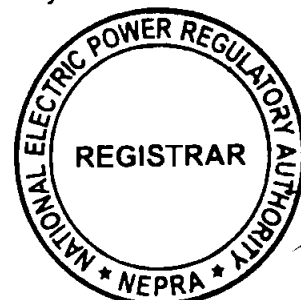
For the purpose of sub-rule (1) of Rule-19 of the Rules, copies of records and data shall be retained in standard and electronic form and all such records and data shall, subject to just claims of confidentiality, be accessible by authorized officers of the Authority.

Article-9
Compliance with Performance Standards

The Licensee shall comply with the relevant provisions of the National Electric Power Regulatory Authority Performance Standards (Generation) Rules 2009 as amended from time to time.

Article-10
Compliance with Environmental Standards

10.1 The Licensee at all times shall comply with the environmental standards as may be prescribed by the relevant competent authority as amended from time to time.



10.2 The Licensee shall provide a certificate on a bi-annual basis, confirming that the operation of its generation facility/Co-Generation Power Plant is in line with environmental standards as prescribed by the relevant competent authority.

Article-11
Power off take Point and Voltage

The Licensee shall deliver power to the Power Purchaser at the outgoing bus bar of its grid station. The up-gradation (step up) of generation voltage up to the required Interconnection voltage level will be the responsibility of the Licensee.

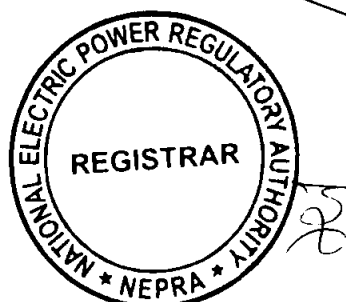
Article-12
Provision of Information

12.1 The obligation of the Licensee to provide information to the Authority shall be in accordance with Section-44 of the Act.

12.2 The Licensee shall be subject to such penalties as may be specified in the relevant rules made by the Authority for failure to furnish such information as may be required from time to time by the Authority and which is or ought to be or has been in the control or possession of the Licensee.

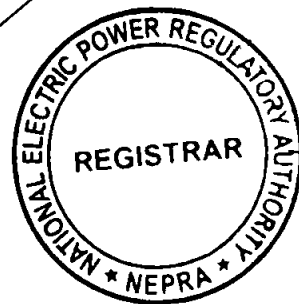
Article-13
Generating Capacity Reserve Requirements

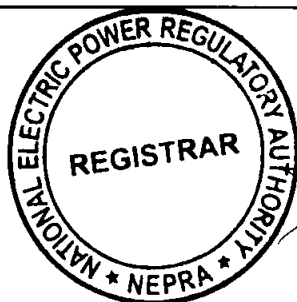
The Licensee shall comply with the minimum and maximum capacity requirements as stipulated and agreed in the Power Purchase Agreement signed between the Licensee and the Power Purchaser(s).



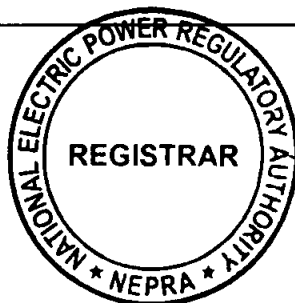
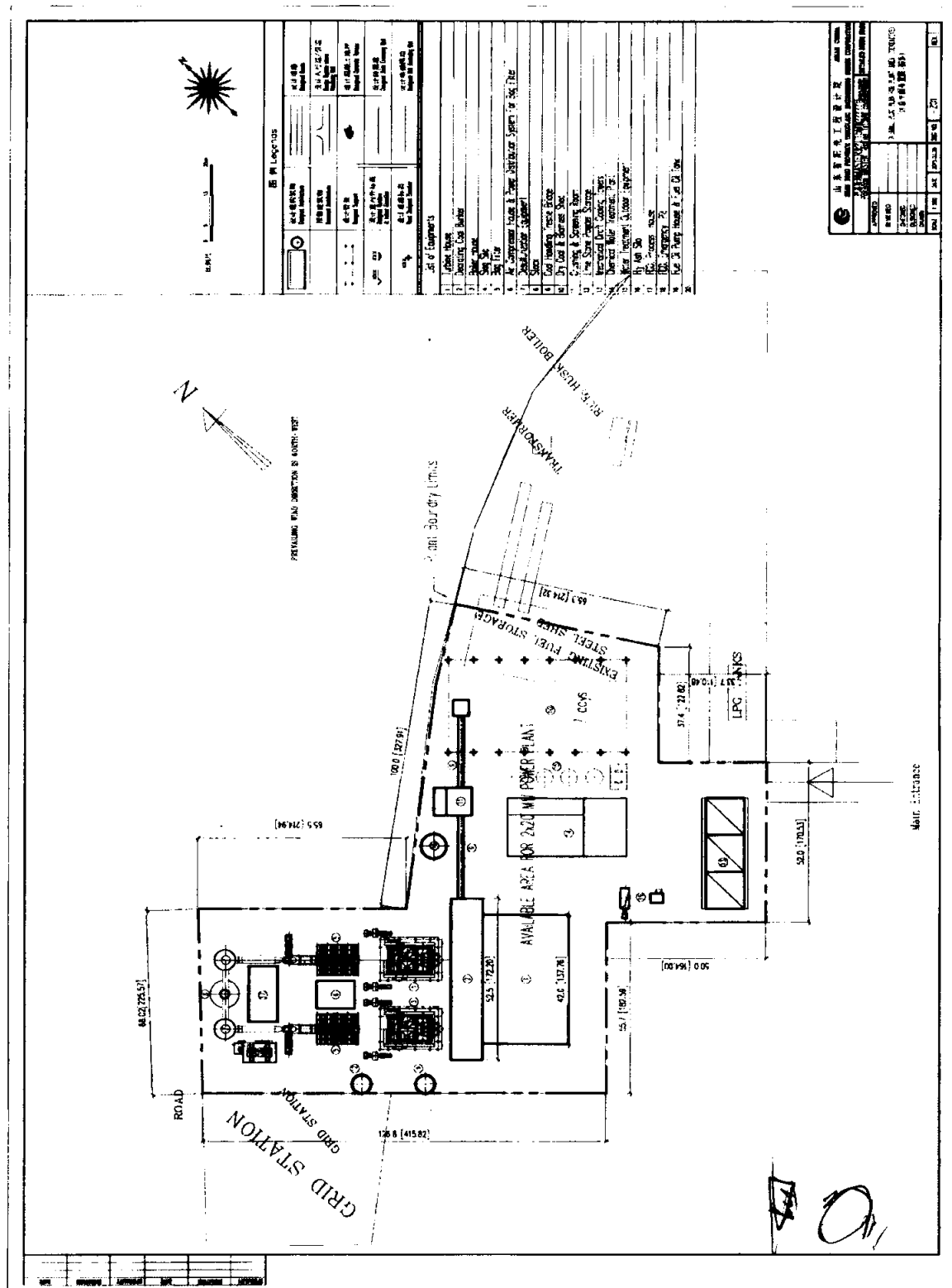
SCHEDULE-I

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 Facility of the Licensee are described in this Schedule

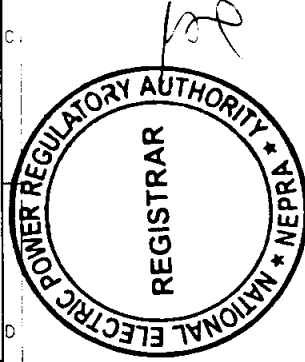
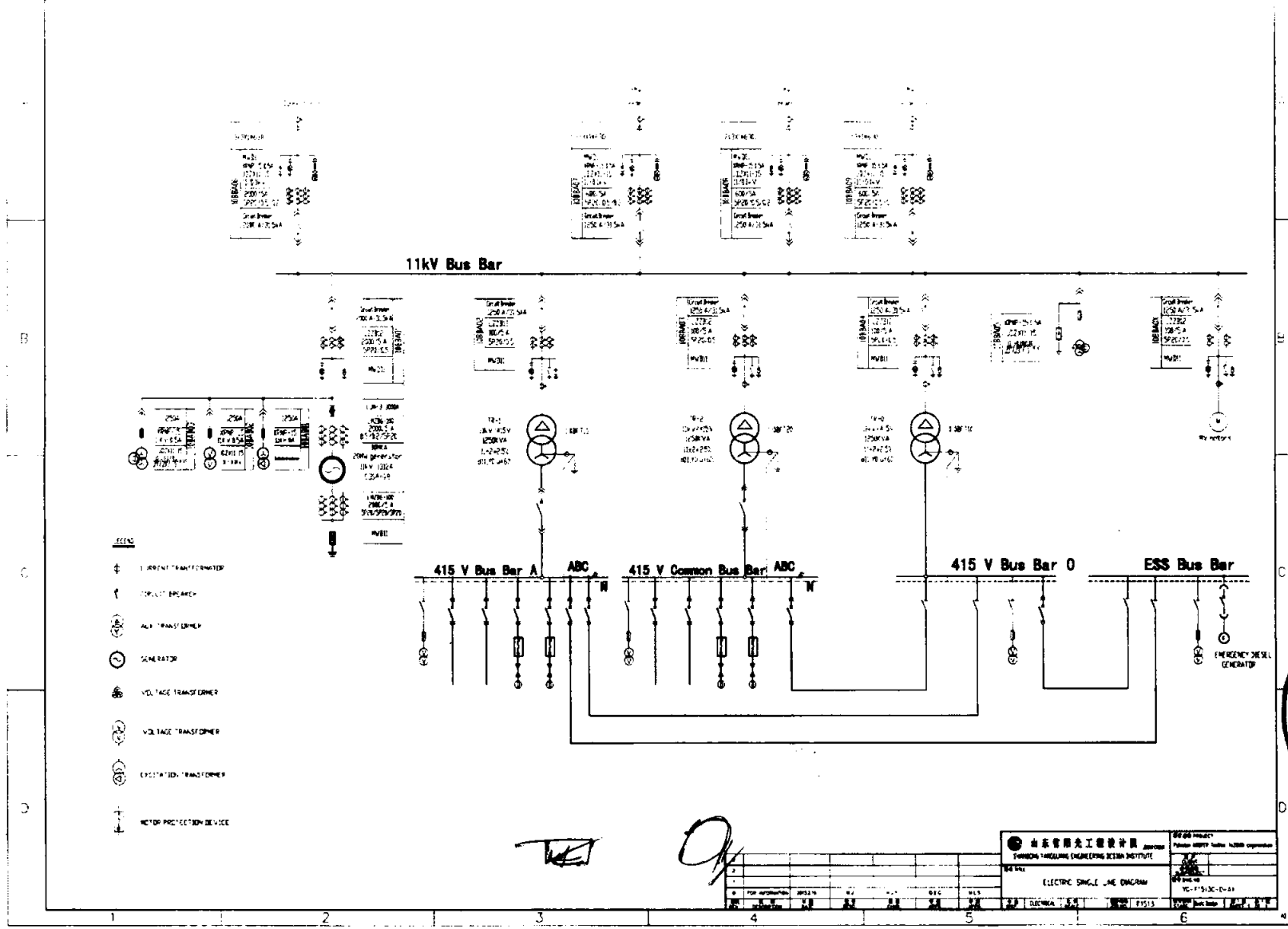




Layout of the Generation Facility/Co-Generation Power Plant



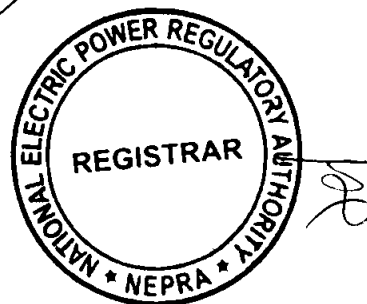
Single line of the Generation Facility/Co-Generation Power Plant



**Interconnection Facilities/
Transmission Arrangements for Dispersal of Power from the
Generation Facility/Co-Generation Power Plant**

The electric power from the Indigenous/Imported Coal based generation facility/Co-generation Power Plant of the Licensee/Master Power (Private) Limited (MPPL) will be supplied to different Bulk Power Consumers (BPCs).

(2). The Interconnection Facilities (IF)/Transmission Arrangements (TA) for supplying to BPCs from the above mentioned generation facility shall be at 11 KV level as described in the subsequent details given in this Schedule.



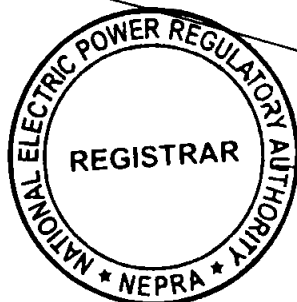
Detail of Generation Facility/Co-Generation Power Plant

(A). General Information

(i).	Name of the Company/ Licensee	Master Power (Private) Limited
(ii).	Registered /Business Office the Company/ Licensee	82-C-1, Gulberg III, Lahore, Pakistan.
(iii).	Location of the Generation Facility/ Co-Generation Power Plant	3-KM- Off Raiwind-Manga Mandi Road, Tehsil Raiwind, District Lahore, in the Province of Punjab (Latitude of 31° 16' 85" & Longitude of 74° 10' 50")
(iv).	Type of the Generation Facility/Co-Generation Power Plant	Thermal Generation Facility

(B). Plant Configuration

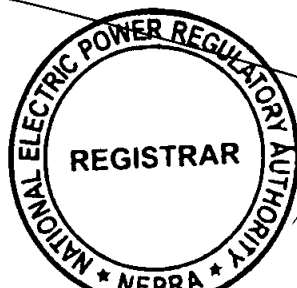
(i).	Installed Capacity/ Size the Generation Facility/ Co-Generation Power Plant	20.00 MW	
(ii).	Type of Technology of the Generation Facility/ Co-Generation Power Plant	Circulating Fluidized Bed Boiler (Subcritical parameters) and Steam Turbine Thermal Generation Facility	
(iii).	Number of Units/Size (MW)	1 x 20.00 MW	
(iv).	Unit Make/Model & Year of Manufacture	Steam turbine	EHNK40/56 Sub Critical, axial flow, single casing, single pressure, extraction condensing type, Manufacturing Year 2016
		Boiler	Circulating Fluidized Bed (CFB) Boiler , with subcritical steam parameters, Manufacturing Year 2016



(v).	Expected COD of the Generation Facility/ Co-Generation Power Plant	November 30, 2016 (Expected)
(vi).	Expected Useful Life of the Generation Facility/ Co-Generation Power Plant from COD	30 Years (Minimum)

(C). Fuel/Raw Material Details

(i).	Primary Fuel	Local Coal from Quetta and Khushab		
(ii).	Alternative Fuel	Imported Coal from Indonesia/South Africa		
(iii).	Start-Up Fuel	High Speed Diesel-HSD		
(iv).	Fuel Source for each of the above (i.e. Imported/ Indigenous)	The main fuel source is indigenous, produced in different coal mines locally, will be supplied to the site by various suppliers.		
(v).	Fuel Supplier for each of the above	Primary Fuel	Alternative Fuel	Start-Up Fuel
		Local Coal suppliers	Imported from Indonesian/ South African Coal mines	Any Oil marketing Company including PSO, Shell or Total etc.
(vi).	Supply Arrangement for each of the above	Primary Fuel	Alternative Fuel	Start-Up Fuel
		124000 MT per annum via trucks from Local mines	Required capacity to be supplied via trucks from Karachi port	Required capacity to be supplied via Oil Tankers/Bowsers
(vii).	No of Storage Bunkers/Tanks/ Open Yard	Primary Fuel	Alternative Fuel	Start-Up Fuel
		Two Open stockyards (One at Power Plant ,one nearby)	Same as of Primary Fuel	Two (02) oil tank



(viii).	Storage Capacity of each Bunkers/Tanks/ Open Yard	Primary Fuel	Alternative Fuel	Start-Up Fuel
		Approx. 18,000 Tons	Same as of Primary Fuel	50 m ³
(ix).	Gross Storage	Primary Fuel	Alternative Fuel	Start-Up Fuel
		Approx. 36,000 Tons	Same as of Primary Fuel	100 m ³

(D). Emission Values

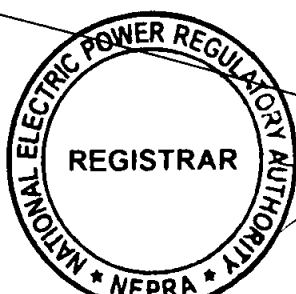
		Primary Fuel	Alternative Fuel	Start-Up Fuel
(i).	SO _x (mg/Nm ³)	<850	<850	<850
(ii).	NO _x (mg/Nm ³)	<510	<510	<510
(iii).	CO ₂ %	CO ₂ + O ₂ : 18.77 % (volume basis of flue gas)	N/A	-


(E). Cooling System

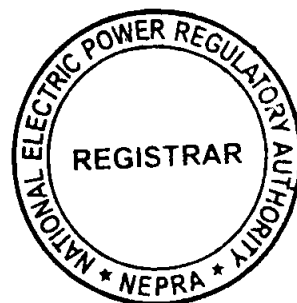
(i).	Cooling Water Source/Cycle	Well water at site
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(F). Plant Characteristics

(i).	Generation Voltage	11 KV
(ii).	Frequency	50Hz
(iii).	Power Factor	0.8 (lagging) /0.95(leading)
(iv).	Automatic Generation Control (AGC) (MW control is the general practice)	Yes
(v).	Ramping Rate (MW/min)	As per Discharge. This will be confirmed after engineering design of the plant.

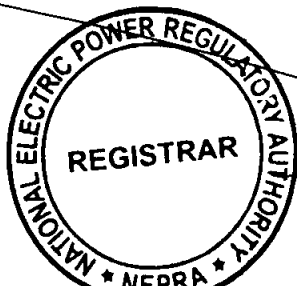



(vi).	Time required to Synchronize to Grid (Hrs.)	8 hours for cold start. This figure is indicative and will be confirmed after engineering design of the plant. 
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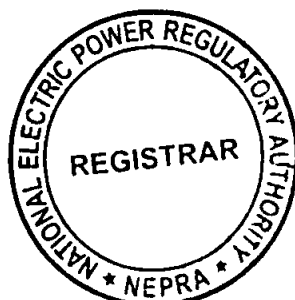


Information Regarding
Bulk Power Consumers-BPCs being supplied Electric Power from the Generation
Facility/Co-Generation Power Plant of the Licensee
[Master Power (Private) Limited-MPPL]

(i).	Total Number of BPCs	Six (06)		
(ii).	Name of the BPCs	BPC-I	Master Textile Mills (Private) Limited.	
		BPC-II	Master Synthetic (Private) Limited.	
		BPC-III	Procon Engineering (Private) Limited.	
		BPC-IV	Ihsan Sons (Private) Limited.	
		BPC-V	Asian Foods Industries (Pvt.) Limited.	
		BPC-VI	Umer Spinning Mills (Private) Limited	
(iii).	Location of each of the BPC (distance and/or identity of premises)	BPC-I	3-KM-Off Raiwind-Manga Mandi Road Tehsil Raiwind, District Lahore.	
		BPC-II		
		BPC-III		
		BPC-IV		
		BPC-V		
		BPC-VI		
(iv).	Contracted Capacity (MW) and Load Factor (L.F.) for Each of the BPC	Identity	Contracted Load	Load Factor
		BPC-I	08.00 MW	0.85%-0.90%
		BPC-II	00.50 MW	0.85%-0.90%
		BPC-III	00.94 MW	0.80%-0.85%
		BPC-IV	02.50 MW	0.80%-0.85%
		BPC-V	01.80 MW	0.70%-0.80%
		BPC-VI	04.00 MW	0.85%-0.90%

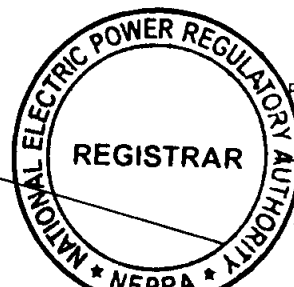


(v).	Specify Whether		
	(a).	Each BPC is an Associate undertaking of the MPPL -If yes, specify percentage ownership of equity;	BPC-I, II & III (are associated undertakings of the Licensee/MPPL whereas other BPCs are not associated in any way.
	(b).	There are common directorships:	Only BPC-I, II & III and MPPL have common directors.
	(c).	Either can exercise influence or control over the other.	Yes
(vi).	Specify nature of contractual Relationship		
	(a).	Between MPPL and BPCs	Supplying Electric Power on a continuous basis
	(b).	Between BPCs and LESCO.	All BPCs are also consumers of LESCO
(vii).	Any other network information deemed relevant for disclosure to or consideration of the Authority		N/A 

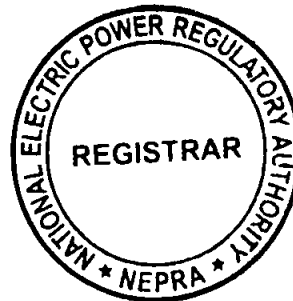


Information Regarding
Distribution Network for Supply of Electric Power to Different BPCs By the
Licensee [Master Power (Private) Limited-MPPL]

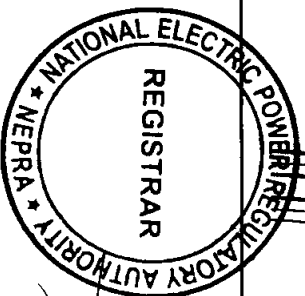
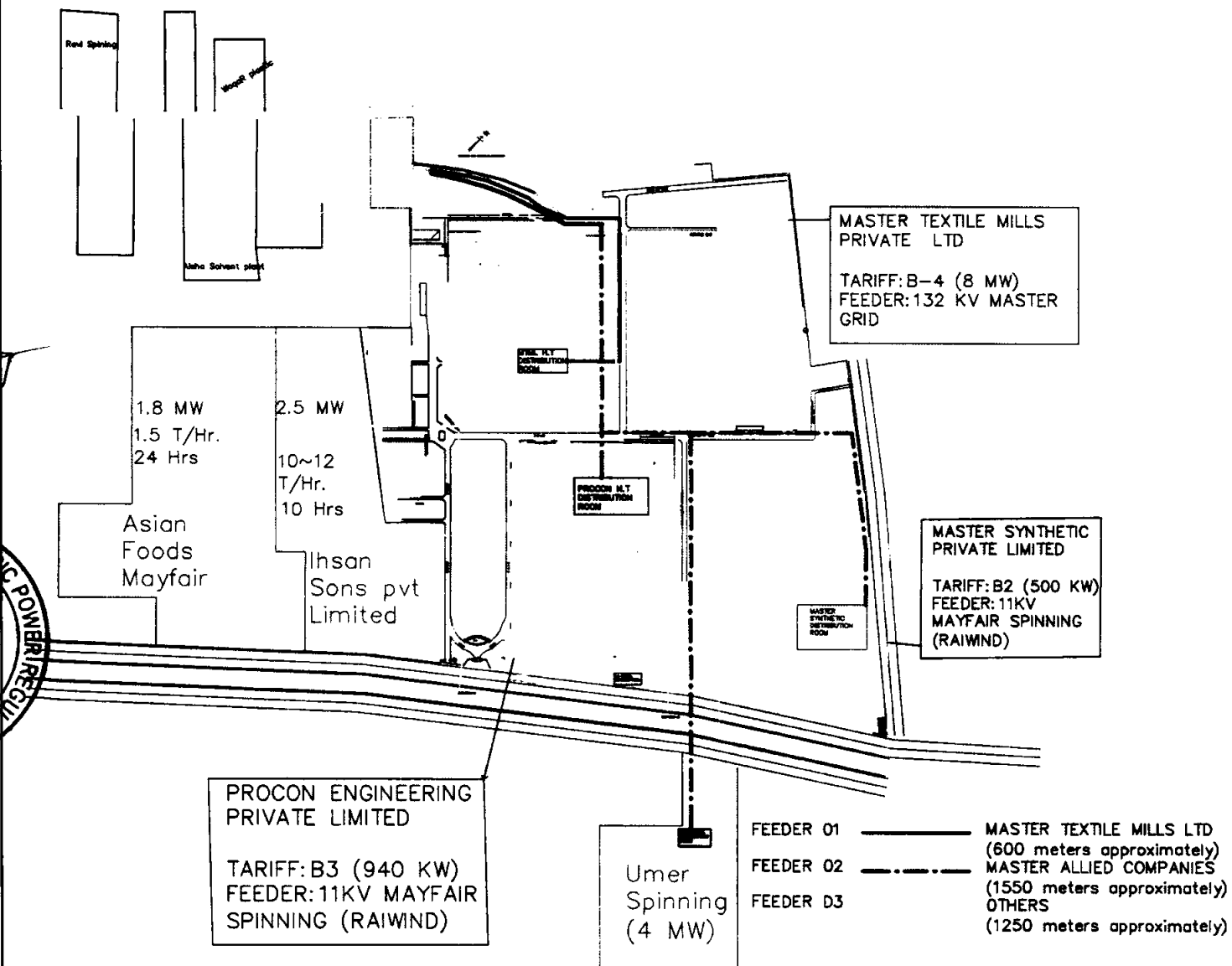
(i).	No. of Feeders	Three (03)		
(ii).	Length of Each Feeder (Meter)	Identity	Feeder No.	Feeder Length
		BPC-I	F-I	600 Meter
		BPC-II, III & VI	F-II	1550 Meter
		BPC-IV & V	F-III	1250 Meter
(iii).	Length of Each Feeder to each Consumer	As Above		
(iv).	In respect of all the Feeders, describe the property (streets, farms, Agri land, etc.) through, under or over which they pass right up to the premises of customer, whether they cross-over.	F-I	The feeder is located on the private property owned by BPC itself.	
		F-II	The feeder is located mostly on the private property owned by BPCs itself. However, the Feeder crosses a Public Property i.e. Manga-Raiwind Road while connecting to BPC-VI	
		F-III	The feeder is located on the private property owned by BPCs themselves.	
(v).	Whether owned by MPPL, BPC or LESCO-(deal with each Feeder Separately)			
	(a).	If owned by LESCO, please furnish particulars of contractual arrangement	F-I	Owned by BPC itself
			F-II	The complete Feeder will be constructed by the BPCs themselves. The portion of the feeder crossing the public property (i.e. crossing of the Road) will be handed over to LESCO either through sale or lease as decided mutually by the parties (i.e. respective BPC, MPPL and LESCO)
			F-III	Owned by BPCs themselves.



			F-I	BPC itself
	(b).	Operation and maintenance (O&M) responsibility for each feeder	F-II	The O&M of the Feeder will be done by BPC itself except the portion of crossing of the public property (i.e. Raiwind-Manga Road), whose O&M will be done either by respective BPC, MPPL or LESCO on mutually agreed terms and conditions.
			F-III	BPCs themselves
(vi).	Whether connection with network of LESCO exists (whether active or not)- If yes, provide details of connection arrangements (both technical and contractual)		Yes, all BPC(s) are also Consumer of LESCO	
(vii).	Any other network information deemed relevant for disclosure to or consideration of the Authority.		N/A <i>Q</i>	



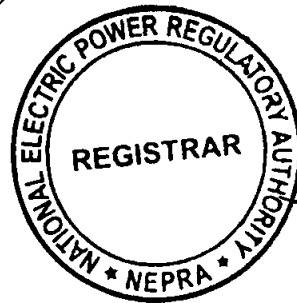
Schematic Diagram for Supply of Electric Power to Bulk Power Consumers from the Generation Facility/Co-Generation Power Plant



SCHEDULE-II

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

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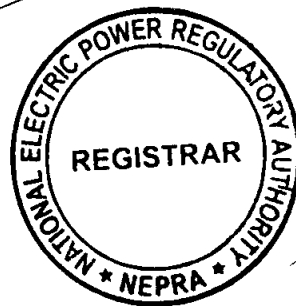
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SCHEDULE-II

(1).	Total/Gross Installed Capacity of the Generation Facility/Co-Generation Power Plant	20.00 MW
(2).	De-rated Capacity of the Generation Facility/Co-Generation Power Plant at Reference Site Conditions	20.00 MW
(3).	Auxiliary Consumption of the Generation Facility/Co-Generation Power Plant	3.00 MW
(4).	Total Net Capacity of the Generation Facility/Co-Generation Power Plant at Reference Site Conditions	17.00 MW

Note

All the above figures are indicative as provided by the Licensee. The Net Capacity available to Power Purchaser(s) for dispatch will be determined through procedure(s) contained in the Power Purchase Agreement or any other applicable document(s).



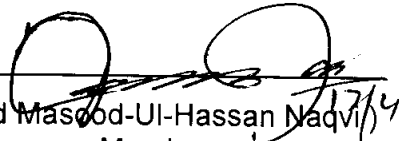
Authorization
by National Electric Power Regulatory Authority (NEPRA) to
Master Power (Private) Limited

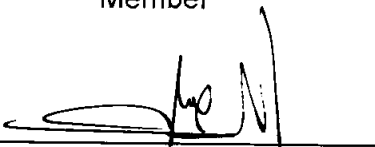
Incorporated under Section-32
of the Companies Ordinance, 1984 (XLVII of 1984) Having Corporate Universal
Identification No. 0091799, Dated February 04, 2015

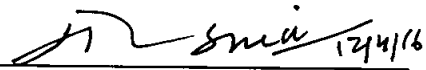
NEPRA GENERATION LICENCE No. SGC/116/2016
For
Sale to Bulk Power Consumer(s)

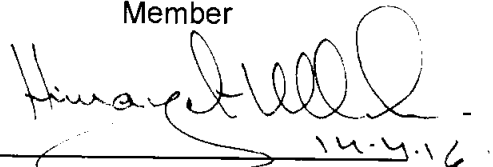
Pursuant to Section-21 of the NEPRA Act and Rule-7 of the NEPRA Licensing (Generation) Rules, 2000, the Authority hereby authorizes Master Power (Private) Limited-MPPL/(the Licensee) to engage in Second-Tier Supply business, limited to the following consumer(s) as mentioned in the Schedules-I of the Generation Licence (No. SGC/116/2016).

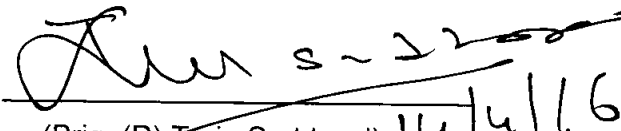
- (i). Master Textile Mills (Private) Limited;
- (ii). Master Synthetic (Private) Limited;
- (iii). Procon Engineering (Private) Limited;
- (iv). Ihsan Sons (Private) Limited;
- (v). Asian Foods Industries Limited;
- (vi). Umer Spinning Mills (Private) Limited.

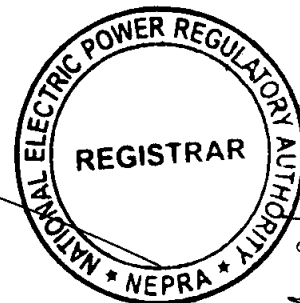

(Syed Masood-Ul-Hassan Naqvi)
Member

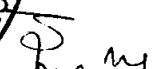

(Khawaja Muhammad Naeem)
Member


(Maj. (R) Haroon Rashid)
Member


(Himayat Ullah Khan)
Member/Vice Chairman


(Brig. (R) Tariq Saddozai)
Chairman




19/04/16