



National Electric Power Regulatory Authority

Islamic Republic of Pakistan

2nd Floor, OPF Building, G-5/2, Islamabad
Ph: 9207200, 9205225 Fax : 9210215
E-mail: registrar@nepra.org.pk

Registrar

No. NEPRA/R/TRF-101/KESC-NTDC-2008/276-79
September 29, 2008

Subject: **Determination of the Authority in the Matter of Tariff Petition filed by Karachi Electric Supply Company Ltd. (KESC) (Case No. NEPRA/TRF-101/KESC-NTDC-2008 - Intimation of Determination of Tariff pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997))**

Dear Sir,

Please find enclosed the subject determination of the Authority (06 pages) in Case No. NEPRA/TRF-101/KESC-NTDC-2008.

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

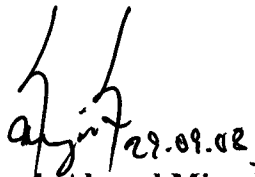
3. Please note that only Order of the Authority at para 9 of the determination needs to be notified in the official gazette. The Order is reproduced for the purpose of clarity and is attached herewith.

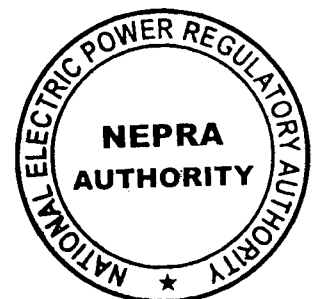
Enclosure: As above.

Secretary
Cabinet Division,
Government of Pakistan
Cabinet Secretariat
Islamabad

CC:

1. Secretary, Ministry of Water & Power, Islamabad.
2. Secretary, Ministry of Finance, Islamabad.
3. Secretary, Privatization Commission, EAC Building, Islamabad.


(Mahjoob Ahmad Mirza)



MODIFIED ORDER OF THE AUTHORITY IN CASE NO. NEPRA/TRF-45/NTDC-2005
TO BE NOTIFIED IN THE OFFICIAL GAZETTE

The National Transmission and Despatch Company (NTDC) is allowed to charge such tariff and on such terms and conditions as provided hereunder:

(1) Use of System Charges

NTDC shall charge its users for provision of transmission and allied services the following two-part tariff i.e. a fixed and variable charge:

Fixed charge (USCF) = Rs 100.15/ kW/ month

Variable charge (USCV)= Rs 0.1233 per kWh X LAL factor.

Where:

LAL Factor is a factor for Adjustment of Losses and Load imposed on the transmission system by a user. LAL Factor of unity will be applied till benchmarks are defined by NEPRA.

The fixed charges shall be applicable to the maximum demand in kilowatts (kW) recorded during a billing period and the variable charge shall be applicable to the energy in kilowatt-hours (kWh) recorded during a billing period. Recording of the maximum demand in kW and energy delivered in kWh shall be carried out at meters installed at the delivery metering points i.e. inter-connection point between:

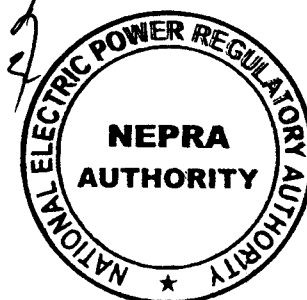
- (a) NTDC transmission system (NTDC System) and the bulk power consumer.
- (b) NTDC system and the transmission system of a special purpose transmission licensee.
- (c) NTDC system and the transmission system of another country connected under an arrangement approved by the Federal Government.
- (d) NTDC system and a distribution company receiving power in bulk either for sale to its own consumers or on behalf of another distribution company or a BPC located in another distribution company.

(2) Transfer Price or Transfer Charge to XWDISCOs & KESC

NTDC shall charge the DISCOs formed consequent to the unbundling of WAPDA (termed as XWDISCOs) and KESC, a transfer charge for procuring power from approved generating companies (termed as CPGENCOs) and its delivery to DISCOs for a billing period as under:

$$XTC = XCTC + XETC$$

1
/



Where:

| | | |
|------|---|--|
| XTC | = | Transfer charge to XWDISCOs & KESC |
| XCTC | = | Capacity Transfer Charge to XWDISCOs & KESC |
| XETC | = | Energy Transfer Charge to XWDISCOs & KESC |
| XCTC | = | $\frac{\text{CpGenCap} + \text{USCF}}{\text{XWD}}$ |

Where:

- (i) CPGenCap = the summation of the capacity cost in respect of all CPGenCos in Rs for a billing period minus the amount of liquidated damages received during the month.
- (ii) XWD = the sum of the maximum demand of the XWDISCOs & KESC in kW recorded during a billing period at all the delivery metering points at which power is received by the XWDISCOs & KESC.
- (iii) USCF = the fixed charge part of the use of system charges in Rs per kW per month.
- XETC = $\frac{\text{CpGen (Rs)}}{\text{XWUs (kWh)}}$

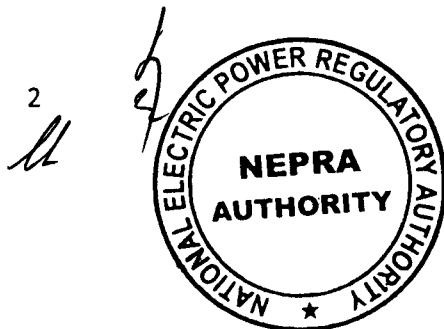
Where:

- (i) CPGenE = the summation of the variable charge rate (Rs per kWh) approved for each of the CPGenCOs times the energy in kWh procured from the respective CPGENCO during the billing period.
- (ii) XWUs = the summation of the energy units (kWh) recorded at the delivery metering point of all the XWDISCOs & KESC during a billing period.

The transfer charge is inclusive of the transmission loss charge as the same is rolled in on account of the costs divided on units delivered basis to arrive at the Transfer Charge, therefore NTDC shall, for the purpose of clarity intimate to all DISCOs the generation part of the Transfer Charge during a billing period by deducting from the Transfer Charge the Transmission Charge or Use of System Charges.

The following generation entities and extraneous sources of import of electricity stand approved as CPGENCOs who would be providing electric power to CPPA within NTDC for onward delivery to the XWDISCOs & KESC:

- (i) All Hydroelectric Generating Stations owned and operated by WAPDA.



- (ii) Chashma Nuclear Power Generating Station.
- (iii) All IPPs selling power to WAPDA under a long-term contract for which sovereign guarantees have been provided by the Federal Government.
- (iv) The thermal generation companies formed out of unbundling of WAPDA for a period upto 01.07.2009 or till the Competitive Market Operation Date determined by the Authority (whichever is later).
- (v) Other generation entities (in the public sector, private sector or under public-private partnership, initiated, sponsored or developed by the Federal Government or any Provincial Government) approved by NEPRA to provide power to NTDC for onward delivery to the XWDISCOs & KESC for a specific period.
- (vi) Sources of electricity imported from another country or the territory of Azad Jammu and Kashmir under an approval of the Federal Government for provision of power to meet the demand of any or all of the XWDISCOs & KESC as approved by NEPRA.

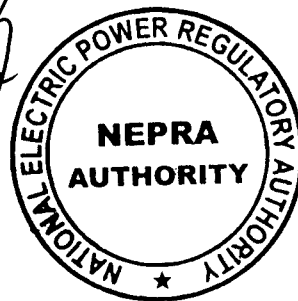
Note: The UOSC shall remain effective till such time the tariff for NTDC is revised by the Authority subsequent to the petition filed by NTDC and notified by Federal Government in the official gazette.

Terms and Conditions:

(a) Definitions:

1. Bulk Power Consumer (BPC) means a Bulk Power Consumer as defined in NEPRA Act.
2. Billing Period means a period determined by NEPRA for the purpose of charging the transfer charge to XWDISCOs & KESC in respect of power delivered. The billing period for the purpose of applying a transfer charge shall be on a one month basis (starting 24:00 of the 1st day of the month and ending 12:00 hrs on the last day of the month) till a shorter billing period is specified by NEPRA through a Competitive Trading Arrangement Transitional Order.
3. Competitive Market Operation Date = The date as defined under article 7(2) of the Licence granted to NTDC.
4. CPPA = Central Power Purchase Agency as required under Article 8(a) of the Licence granted to NTDC.
5. Delivery metering point means the interconnection point at the grid stations where power is delivered by NTDC to XWDISCOs, BPCs connected directly to the transmission system or other users of the transmission system and where relevant meters are installed to measure such power delivered.

3



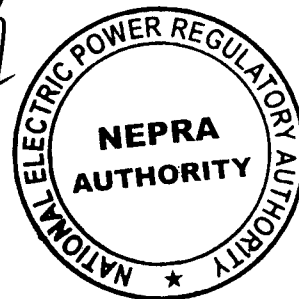
2

6. IPPs = Independent Power Producers established under the Federal Government's Power Policy of 1994 or earlier.
 7. Maximum Demand = The highest demand recorded during a billing period measured over successive periods of 30 minute interval at the receiving metering point of the XWDISCO or user of the transmission system. Maximum demand measuring apparatus used for recording the maximum demand during a billing period shall be based on a [30] minutes interval reset basis.
 8. Month means a calendar month according to the Gregorian Calendar.
 9. Power Factor: the rate expressed as a percentage of the kilowatt-hours to the kilovolt hours consumed during a billing period.
 10. Use of System Charge means any charge (fixed or variable) payable by a Distribution Company, BPC or any other user of the transmission system for Transportation of Power from Generator to Delivery Metering Point and delivery to a distribution company, BPC or any other user and as required under Article 13 and 14 of the NTDC Licence.
- (b) Other Terms and Conditions
11. Power Factor Penalty: The XWDISCOs & KESC shall maintain an average power factor during a billing period at the delivery metering point of at least 85 percent lagging. In the event of the said Power Factor falling below 85% in a billing period the concerned XWDISCO & KESC shall pay to NTDC a penalty as determined by the Authority for general applicability on the recommendation of NTDC and after consultation with the generation and distribution licensees.
-

ll

2/

42



Determination of the Authority
in the matter of Tariff Petition filed by
Karachi Electric Supply Company (KESC)
Case NO. NEPRA/R/TRF-101/KESC-NTDC-2008

KESC filed a tariff petition on 2nd June 2008 for modification/revision in the mechanism given in NTDC's tariff determination dated 14th April 2004 for the rate of power purchase from NTDC. The petition was admitted by the Authority on 4th June 2008. Notice for admission was published in the daily newspapers on 6th June 2008, for the information and participation of interested/affected persons/parties in the proceedings either by offering their comments or becoming a party to the case as interveners. Public hearing of the case was held on 16th June 2008 at main NEPRA Office Islamabad.

KESC, in its tariff Petition, sought relief in respect of the following:-

- a) KESC may be given the status of DISCO for purchase of power from NTDC up to 750 MW through CPPA by removing the condition set in the determination of NTDC tariff by NEPRA.
- b) The rate for import of power from NTDC through CPPA should be the same as applicable to other DISCOs.

2. The following intervention requests were received and approved by the Authority.

- i. Mr. Muhammad Arif Bilwani
Pakistan Hosiery Manufacturers Association
- ii. Mr. Khalil Ahmed
Acting Secretary
Karachi Chamber of Commerce & Industry
- iii. Mr. Muhammad Naseem Khan
Secretary
SITE Association of Industry Karachi
- iv. Mr. Muhammad Arif Bilwani
As Industrial, Commercial and Domestic consumer

3. All the interveners offered their comments in favor of KESC tariff Petition. Gujranwala Electricity Supply Company (GEPCO) in its comments however, showed certain reservations and therefore, did not support KESC's petition.

Present Status of KESC

4. KESC is a vertically integrated utility having a separate generation and distribution licence. KESC has been allowed a multi-year tariff for seven years applicable from the date of its privatization i.e. 29th November 29th 2005. KESC is allowed to purchase power from IPPs and other generators such as KANUPP, PASMIC and NTDC etc. NTDC was allowed to charge KESC on the basis of marginal cost plus



1
ll

2

use of system charge according to the Determination of the Authority in case No. NEPRA/TRF-19/NTDC-2003 dated 14th April 2004.

5. The power exchange between KESC and ex-WAPDA has been carried out since long. Presently, KESC is purchasing power from NTDC and charged on marginal cost basis, to meet power shortfall in its system. As such there is no written agreement between NTDC and KESC for the quantum and period of power to be purchased by KESC.

Decision of the Authority.

6. During the course of proceedings in respect of the instant petition, a decision of the Economic Coordination Committee (ECC) of the Cabinet dated 26th August 2008 was communicated by the Ministry of Water & Power to NEPRA. According to this, the Federal Government has decided to treat KESC at par with DISCOs for tariff purposes.

7. In view of the aforesaid guidelines by the GoP, the instant tariff petition of KESC is disposed of in the terms mentioned below;

- i) NTDC shall treat KESC at par with EX-WAPDA DISCOs (hereinafter the "XWDISCOs") for the purpose of sale of power and shall charge KESC on the basis of similar mechanism as approved for XWDISCOs.
- ii) For power procurement from NTDC, KESC is directed to enter in to written agreement with the NTDC for a definite period at terms mutually agreed between the parties, which shall reach this office within two months of the notification of instant determination.

8. Accordingly, in line with the provisions of section 7(6) of the NEPRA Act, previous order of the Authority in the determination of NTDC case No. NEPRA/TRF-45/NTDC-2005/2338-41 dated 6th January 2006 is modified in the manner given herein below;

Order

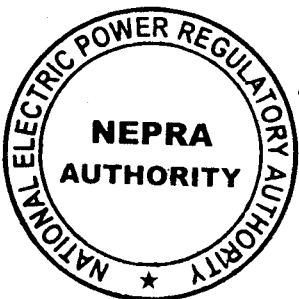
9. The National Transmission and Despatch Company (NTDC) is allowed to charge such tariff and on such terms and conditions as provided hereunder:

(1) Use of System Charges

NTDC shall charge its users for provision of transmission and allied services the following two-part tariff i.e. a fixed and variable charge:

Fixed charge (USCF) = Rs 100.15/ kW/ month

Variable charge (USCV)= Rs 0.1233 per kWh X LAL factor.



ll²

✓

Where:

LAL Factor is a factor for Adjustment of Losses and Load imposed on the transmission system by a user. LAL Factor of unity will be applied till benchmarks are defined by NEPRA.

The fixed charges shall be applicable to the maximum demand in kilowatts (kW) recorded during a billing period and the variable charge shall be applicable to the energy in kilowatt-hours (kWh) recorded during a billing period. Recording of the maximum demand in kW and energy delivered in kWh shall be carried out at meters installed at the delivery metering points i.e. inter-connection point between:

- (a) NTDC transmission system (NTDC System) and the bulk power consumer.
- (b) NTDC system and the transmission system of a special purpose transmission licensee.
- (c) NTDC system and the transmission system of another country connected under an arrangement approved by the Federal Government.
- (d) NTDC system and a distribution company receiving power in bulk either for sale to its own consumers or on behalf of another distribution company or a BPC located in another distribution company.

(2) Transfer Price or Transfer Charge to XWDISCOs & KESC

NTDC shall charge the DISCOs formed consequent to the unbundling of WAPDA (termed as XWDISCOs) and KESC, a transfer charge for procuring power from approved generating companies (termed as CPGENCOs) and its delivery to DISCOs for a billing period as under:

$$XTC = XCTC + XETC$$

Where:

XTC = Transfer charge to XWDISCOs & KESC

XCTC = Capacity Transfer Charge to XWDISCOs & KESC

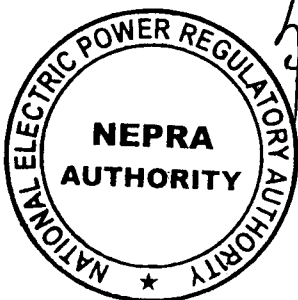
XETC = Energy Transfer Charge to XWDISCOs & KESC

XCTC = $\frac{\text{CpGenCap}}{\text{XWD}} + \text{USCF}$

Where:

(i) CPGenCap = the summation of the capacity cost in respect of all CPGencos in Rs for a billing period minus the amount of liquidated damages received during the month.

(ii) XWD = the sum of the maximum demand of the XWDISCOs & KESC in kW recorded during a billing period at all the delivery metering points at which power is received by the XWDISCOs & KESC.



(iii) USCF = the fixed charge part of the use of system charges in Rs per kW per month.

XETC = $\frac{\text{CpGen (Rs)}}{\text{XWUs (kWh)}}$

Where:

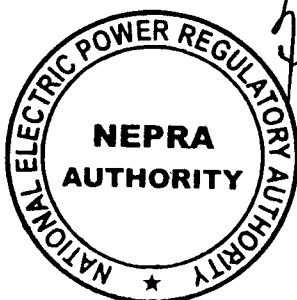
(i) CPGenE = the summation of the variable charge rate (Rs per kWh) approved for each of the CPGenCOs times the energy in kWh procured from the respective CPGENCO during the billing period.

(ii) XWUs = the summation of the energy units (kWh) recorded at the delivery metering point of all the XWDISCOs & KESC during a billing period.

The transfer charge is inclusive of the transmission loss charge as the same is rolled in on account of the costs divided on units delivered basis to arrive at the Transfer Charge, therefore NTDC shall, for the purpose of clarity intimate to all DISCOs the generation part of the Transfer Charge during a billing period by deducting from the Transfer Charge the Transmission Charge or Use of System Charges.

The following generation entities and extraneous sources of import of electricity stand approved as CPGENCOs who would be providing electric power to CPPA within NTDC for onward delivery to the XWDISCOs & KESC:

- (i) All Hydroelectric Generating Stations owned and operated by WAPDA.
- (ii) Chashma Nuclear Power Generating Station.
- (iii) All IPPs selling power to WAPDA under a long-term contract for which sovereign guarantees have been provided by the Federal Government.
- (iv) The thermal generation companies formed out of unbundling of WAPDA for a period upto 01.07.2009 or till the Competitive Market Operation Date determined by the Authority (whichever is later).
- (v) Other generation entities (in the public sector, private sector or under public-private partnership, initiated, sponsored or developed by the Federal Government or any Provincial Government) approved by NEPRA to provide power to NTDC for onward delivery to the XWDISCOs & KESC for a specific period.
- (vi) Sources of electricity imported from another country or the territory of Azad Jammu and Kashmir under an approval of the Federal Government for provision of power to meet the demand of any or all of the XWDISCOs & KESC as approved by NEPRA.



Note: The UOSC shall remain effective till such time the tariff for NTDC is revised by the Authority subsequent to the petition filed by NTDC and notified by Federal Government in the official gazette.

Terms and Conditions:

(a) Definitions:

1. Bulk Power Consumer (BPC) means a Bulk Power Consumer as defined in NEPRA Act.
2. Billing Period means a period determined by NEPRA for the purpose of charging the transfer charge to XWDISCOs & KESC in respect of power delivered. The billing period for the purpose of applying a transfer charge shall be on a one month basis (starting 24:00 of the 1st day of the month and ending 12:00 hrs on the last day of the month) till a shorter billing period is specified by NEPRA through a Competitive Trading Arrangement Transitional Order.
3. Competitive Market Operation Date = The date as defined under article 7(2) of the Licence granted to NTDC.
4. CPPA = Central Power Purchase Agency as required under Article 8(a) of the Licence granted to NTDC.
5. Delivery metering point means the interconnection point at the grid stations where power is delivered by NTDC to XWDISCOs, BPCs connected directly to the transmission system or other users of the transmission system and where relevant meters are installed to measure such power delivered.
6. IPPs = Independent Power Producers established under the Federal Government's Power Policy of 1994 or earlier.
7. Maximum Demand = The highest demand recorded during a billing period measured over successive periods of 30 minute interval at the receiving metering point of the XWDISCO or user of the transmission system. Maximum demand measuring apparatus used for recording the maximum demand during a billing period shall be based on a [30] minutes interval reset basis.
8. Month means a calendar month according to the Gregorian Calendar.
9. Power Factor: the rate expressed as a percentage of the kilowatt-hours to the kilovolt hours consumed during a billing period.
10. Use of System Charge means any charge (fixed or variable) payable by a Distribution Company, BPC or any other user of the transmission system for Transportation of Power from Generator to Delivery Metering Point and delivery to a distribution company, BPC or any other user and as required under Article 13 and 14 of the NTDC Licence.




5


2


(b) Other Terms and Conditions

11. Power Factor Penalty: The XWDISCOs & KESC shall maintain an average power factor during a billing period at the delivery metering point of at least 85 percent lagging. In the event of the said Power Factor falling below 85% in a billing period the concerned XWDISCO & KESC shall pay to NTDC a penalty as determined by the Authority for general applicability on the recommendation of NTDC and after consultation with the generation and distribution licensees.

Authority


Nasiruddin Ahmed
Member
29/9/08


Maqbool Ahmad Khawaja
Member


Zafar Ali Khan
Member
25/9/08


Khalid Saeed
Chairman

