	कुल	67.7	3.69			
ग	औद्योगिक	10.155	4.5	3.69	1.22	17
ख	गैर-घरेलू/व्यावसायिक	16.925	4.65	3.69	1.26	18
3	0-50 कि.वाट घष्टा	6.093	1.9	3.69	0.52	07
2	150 कि.वाट घष्टा से अधिक	10.155	3.5	3.69	0.95	13

#### JOINT ELECTRICITY REGULATORY COMMISSION

(For the State of Goa & Union Territories)

#### NOTIFICATION

Gurgaon, the 19th October, 2016

Amendments in the Joint Electricity Regulatory Commission for the State of Goa & Union Territories (except Delhi) (Multi Year Distribution Tariff) Regulations, 2014

No. JERC:18/2014.—In exercise of the powers conferred under sub-section(1) of Section 181 of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it in this behalf, and after previous publication, the Joint Electricity Regulatory Commission for the State of Goa and Union Territories hereby makes the following amendments in the Joint Electricity Regulatory Commission for the State of Goa & Union Territories (Multi Year Distribution Tariff) Regulations, 2014 (hereinafter referred to as the Principal Regulations).

#### 1. Short Title and Commencement

- 1.1 These Regulations shall be called the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Multi Year Distribution Tariff) (Second Amendment) Regulations, 2016.
- 1.2 These Regulations shall come into force from the date of their publication in the Official

#### 2. Amendment of Regulation 19 of the Principal Regulations

Regulation 19 of the Principal Regulations shall be substituted as under:-

The Distribution Licensee shall recover the incremental cost on account of fuel and power purchase adjustment in accordance with FPPCA formula provided in the schedule to these Regulations.

KEERTI TEWARI, Secy.

[ADVT.-III/4/Exty./378/16(218-I)]

SCHEDULE

#### 1. Recovery Periodicity (Cycle)

The licensee shall compute fuel and power procurement cost variations on quarterly basis and adjustment shall be made in consumers bills starting after a month following the end of the quarter on units billed in the month under consideration. For example, Fuel &

Power Purchase Cost Adjustment (FPPCA) for the quarter April-May-June shall be made in the month of July and shall be reflected in the consumers bills raised in the months of August-September and October on the units billed for the respective months. The formula shall be applicable prospectively for the purpose of consideration of Fuel and Power Purchase Cost Adjustment. FPPCA shall be done for all consumer categories except Below Poverty Line (BPL) and Agriculture consumers.

### 2. Fuel & Power Purchase Cost Adjustment Formula

i. The formula for determination of per unit Fuel & Power Purchase Cost Adjustment ("FPPCA") is as under:

#### In words:

Per Unit FPPCA (Paise/unit) =

Per Unit Actual Cost of Power Purchase – Per Unit Approved Cost of Power Purchase in the Tariff Order

i.e.

$$Per\ Unit\ FPPCA\ (Paisa/unit) = (\begin{array}{c} (PActual\ -\ S\ Bulk) \\ \hline \\ [\{(X-c)-X_s\}^*b]-Z \end{array}] * 1000\ -\ RApproved$$

Whereas

$$c = \{(X-A)*T_{Approved}/100\}$$

b=(1-YApproved/100)

#### Where:

P Actual	Actual cost of power purchased during the quarter (excluding purchase from unapproved bilateral and other unapproved sources) includes transmission charges of PGCIL but excludes SLDC charges, RLDC charges and reactive energy charges (Rs <b>Crores</b> ).
	Explanatory Note;
Services and appropriate and a	The actual cost of power purchase during the quarter will include the total cost of power purchased during the quarter through approved sources of power including central generating stations, other approved stations & power purchased through power exchanges limited to the rate given in the Tariff Order of the licensees. The total cost of power purchase in this formula includes the transmission charges of PGCIL but does not include SLDC/ RLDC charges and reactive energy charges. Any variation in these charges shall be taken care in the true up.
S <sub>BULK</sub>	Actual Revenue recognized from Sale of power to persons other than consumers of the licensee during the quarter. (Rs crores).
	Explanatory Note:
	The actual revenue recognized from sale of power to persons other than utility's consumers includes the revenue recognized by the utility with adjustments of brokerage and Power Exchange charges, if any. The actual revenue from sale will also include the adjustments made through UI mechanism in case of under drawl by the utility.

R <sub>Approved</sub>	Approved per unit cost of power purchase for use in the FPPCA formula as given in the tariff order of the Licensee (paisa per unit).
	Explanatory Note:
Dustine of the	The approved per unit cost of power purchase for the financial year to be considered in the FPPCA formula including transmission charges of PGCIL but excluding SLDC charges, RLDC charges and charges for reactive energy (paise per unit) would be calculated as mentioned in the Tariff Order of the respective utility.
X	Actual Energy units (kWh) procured during the quarter in consideration excluding unapproved sources (million units).
	Explanatory Note  The actual energy units during the quarter will include the total energy (million units) procured during the quarter through approved sources including central generating stations, other approved stations, power procured through power exchanges and over drawal from the grid. The total energy units procured shall be without considering transmission losses.
A	Actual Energy Units (kWh) procured during the quarter in consideration (million units) from power exchanges, power generation within the periphery of the licensee & used by licensee and units overdrawn from the grid.
T <sub>Approved</sub>	Approved inter-state transmission losses for the year in consideration as provided in the Tariff Order (%).
Y <sub>Approved</sub>	Approved T&D losses for the year in consideration as provided in the Tariff order (%)
X <sub>5</sub>	Actual Sale of power to persons other than the utility consumers (million units) during the quarter.  Explanatory Note:  The actual units sold to persons other than utility consumers through bilateral transactions, transactions through power exchanges and under drawl through UI mechanism.
Z	Actual energy units billed for BPL and Agriculture category consumers (million units).

#### **Terms & Conditions**

- For the purpose of Fuel & Power Purchase Cost Adjustment all the bills admitted and credits, if any, received by the distribution licensee during the period under consideration, irrespective of the period to which they pertain shall be considered. However, the bills or credits of earlier period received by the distribution licensee earlier than the period under consideration will not be considered for the purpose of FPPCA.
- The variation in fuel & power purchase cost adjustment with respect to the approved per unit power purchase cost, as per the formula specified above shall be recoverable/payable based on units billed for each category of consumers except BPL & Agriculture.
- Per unit rate of FPPCA to be billed to consumers shall be worked out in Paisa after rounding off to the
  next lower integer in case of fraction less than 0.5 and to the next higher integer in case of fraction
  equal to or greater than 0.5.
- 4. The per unit FPPCA so worked out shall be charged differentially as per the approved retail tariff of the consumers. The determination of differential per unit FPPCA is mentioned below:

#### Step 1: Determination of Value of K

 $K = Approved \ Retail \ Tariff \ for \ a \ category \ or \ sub-category/Weighted \ Average \ Retail \ Tariff \ (WART)$ 

The value of K for different consumer category or sub category for the year in consideration will be as provided in the respective Tariff Order.

Step 2: Determination of proportionate FPPCA (Paisa/unit) consumer category/subcategory wise  $\,$ 

FPPCA to be billed for the consumer category or sub-category (Paisa/unit) =Average FPPCA

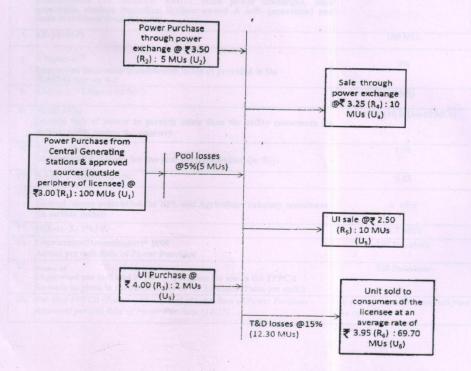
(Paisa/unit)\*K for that consumer category or sub-category

### **Duties of the Licensees and Designated Officer**

- 1. Every distribution licensee shall appoint a designated officer not below the rank of Executive Engineer with Name, Designation. Telephone no. & Fax and Place of Posting, who shall compute, certify and post the PPCA calculations, PPCA chargeable & related data summary on the licensees website and clarify to the consumers query, if any.
- 2. The Designated Officer shall send certified copy of FPPCA calculations immediately to Joint Electricity Regulatory Commission.

## ILLUSTRATION NO. 1: FUEL & POWER PURCHASE COST ADJUSTMENT IS RECOVERABLE FROM THE CONSUMERS

## ALL VALUES MENTIONED HERE ARE FOR ILLUSTRATIVE PURPOSES ONLY



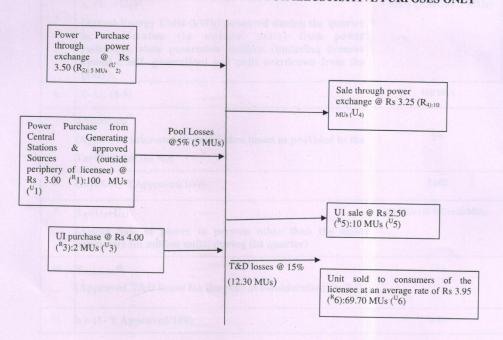
SI.	. rarticulars	Amount/Units	
Nu	merator = $(PActual-S_{Buik})$		
1.	PActual {{Ri*Ui+R2*U2+R3*U3)/10}} Actual cost of power purchased during the quarter (excluding purchase fro unapproved bilateral and other unapproved sources) includes transmissic charges of PGCIL but excludes SLDC charges, RLDC charges and reactive energy charges (Rs Crores).	on .	
	SLDC charges, RLDC charges and reactive energy charges crores)!		
2.	S <sub>BUIk</sub> :{(R4*U <sub>4</sub> +R <sub>5</sub> *U <sub>5</sub> )/IO} [Actual Revenue recognized from Sale of power to persons other that consumers of the licensee during the quarter. (Rs. crores))	Rs. 5.75 Crores	
3.	(PActual-Bulk): (1-2)	Rs. 26.8 Crores	
Den	$\mathbf{priminator} = [\{(X-c) - X_s\} * b] - Z$	No. 20.6 Clotes	
4.	$X:(U_1+U_2+U_3)$ [Actual Energy units {kWh} procured during the quarter in consideration excluding unapproved sources (in million units)]	107 M Us (100 MUs+5 MUs+2 MUs)	
	$A:(U_2+U_3)$ [Actual Energy Units (kWh) procured during the quarter in consideration (in million units) from power exchanges, state generation stations (including licensee owned & self- generation) and units overdrawn from the grid]		
6.	(X-A): (4-5)	100 MUs	
	TApproved <sup>®</sup> (Approved inter-state transmission losses as provided in the Tariff Order (in %)]	5%	
8.	C={(X-A)*TAppro»ed/100}	5 MU	
	$X_S:(U_4+U_5)$ [Actual Sale of power to persons other than the utility consumers (in million units) during the quarter)	20 MUs (10 MUs+10 MUs)	
	Y <sub>Approved</sub> % Approved T&D losses for the year in consideration (in %)]	15%	
	0 = (1- Y Approved/100)	0.85	
1	Z Actual energy units billed for BPL and Agriculture category consumers in million units)]	2 MUs	
	$\{(X-c)-X_5\}*b]-Z$	67.7 MUS	
1. (	Numerator/Denominator)* 1000 Actual per unit Rate of Power Purchase	396 Paisa/unit	
f. R	Approved Approved per unit cost of power purchase for use in the FPPCA ormula as given in the tariff order of the Licensee (Paisa per unit)	350 Paisa/unit	
). F	er Unit FPPCA (Paisa/unit) = Actual per unit Rate of Power Purchase - pproved per unit Rate of Power Purchase (14-15)	46 Paisa/unit to be recovered from the consumers	

# Determination of Differential FPPCA to be recovered from the consumers of different consumer categories

Category/Sub-category (assuming there are only 3 categories)	which were billed after actual T&D	(DT)	WART- Weighted Average Retail Tariff of all categories (Rs/unit)	K (RT/ WART)	FPPCA (Paisa per Unit) to be recovered from consumers
Domestic	40.62				
50-150 KWh	24.372	3.2	3.69	0.87	S Courses
Above 150 KWh	10.155	3.5	3.69	0.95	
0-50 KWh	6.093	10	3.60	0.52	
Non-Domestic/Commercial					
Industrial		111100			
Total	67.7	3.69	3.09	1.22	
	Domestic  50-150 KWh Above 150 KWh Non-Domestic/Commercial Industrial	(assuming there are only 3 categories)    Actual MUs which were billed after actual T&D losses	(assuming there are only 3 categories)    Categories   Actual MUs which were after actual T&D losses	Category   Cassuming there are only 3   Categories   Ca	Category   Cassuming there are only 3   Categories   Ca

# ILLUSTRATION NO. 2: FUEL & POWER PURCHASE COST ADJUSTMENT IS REFUNDABLE TO THE CONSUMERS

# ALL VALUES MENTIONED HERE ARE FOR ILLUSTRATIVE PURPOSES ONLY



Sl.	Particulars	Amount/Units		
	erator = (PActual-S <sub>Buik</sub> )			
1.	PActual { {R <sub>i</sub> *U <sub>i</sub> +R <sub>2</sub> *U <sub>2</sub> +R3*U <sub>3</sub> )/10} Actual cost of power purchased during the quarter (excluding purchase from unapproved bilateral and other unapproved sources) includes transmission charges of PGCIL but excludes SLDC charges, RLDC charges and reactive energy charges (Rs Crores).	Rs 32.55 Crores		
2.	S <sub>BUlk</sub> :{(R <sub>4</sub> *U <sub>4</sub> +R <sub>5</sub> *U <sub>5</sub> /IO} [Actual Revenue recognized from Sale of power to persons other than consumers of the licensee during the quarter. (Rs. crores))	Rs. 5.75 Crores		
3.	(PActual-Bulk): (1-2)	Rs. 26.8 Crores		
Deno	ominator = [{(X-c)- X <sub>s</sub> }*b]-Z	And were the second second		
4.	X:(U <sub>1</sub> +U <sub>2</sub> +U <sub>3</sub> ) [Actual Energy units {kWh) procured during the quarter in consideration excluding unapproved sources (in million units)]	107 M Us (100 MUs+5 MUs+2 MUs)		
5.	$ \begin{array}{c} A: (U_2 + U_3) \\ \hline \text{[Actual Energy Units (kWh) procured during the quarter in consideration (in million units) from power exchanges, state generation stations (including licensee owned & self- generation) and units overdrawn from the grid] } \\ \\ \end{array} $	7 MUs (5 MUs+ 2 MUs)		
6.	(X-A): (4-5)	100 MUs		
7.	TApproved <sup>%</sup> (Approved inter-state transmission losses as provided in the Tariff Order (in %)]	5%		
8.	C={(X-A)*TApproved/100}	5 MU		
9.	$X_S$ :(U <sub>4</sub> +U <sub>5</sub> ) [Actual Sale of power to persons other than the utility consumers (in million units) during the quarter)	20 MUs (10 MUs+10 MUs)		
10.	Y <sub>Approved</sub> %  [Approved T&D losses for the year in consideration (in %)]	15%		
11.	b = (1- Y Approved/100)	0.85		
	par PAR (Bard to the Combiner of Problemson, Dating In this	ALOK Privings by KUMAN COMMENTS AND STREET		

12.	Z	2 MUs
	[Actual energy units billed for BPL and Agriculture category consumers (in million units)]	
13.	$[\{(X-c)-X_5\}*b]-Z$	67.7 MUS
4.	(Numerator/Denominator)* 1000	396 Paisa/unit
	Actual per unit Rate of Power Purchase	
15.	RApproved	410 Paisa/unit
	[Approved per unit cost of power purchase for use in the FPPCA formula as given in the tariff order of the Licensee (Paisa per unit)]	
16.	Per Unit FPPCA (Paisa/unit) = Actual per unit Rate of Power Purchase - Approved per unit Rate of Power Purchase (14-15)	46 Paisa/unit to be recovered from the consumers

#### Determination of Differential FPPCA to be recovered from the consumers of different consumer categories

SI. No.	Category/Sub-category (assuming there are only 3 categories)	Actual MUs which were billed after actual T&D losses	Retail Tariff (RT) Per Unit)	WART- Weighted Average Retail Tariff of all categories (Rs /unit)	K (RT/ WART)	FPPCA (Paisa per Unit) to be recovered from consumers
A	Domestic	40.62	STATE OF	016(65)		
1	50-150 KWh	24.372	3.2	3.69	0.87	12
2	Above 150 KWh	10.155	3.5	3.69	0.95	13
3	0-50 KWh	6.093	1.9	3.69	0.52	07
В	Non-Domestic/Commercial	16.925	4.65	3.69	1.26	18
C	Industrial	10.155	4.5	3.69	1.22	17
	Total	67.7	3.69			ty is sentered