

#### DAMODAR VALLEY CORPORATION

## COMMERCIAL DAPARTMENT DVC TOWERS, VIP ROAD KOLKATA - 700 054.

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No. Coml / Tariff / CERC / 693

To
The Secretary
Central Electricity Regulatory Commission
3<sup>rd</sup> and 4<sup>th</sup> Floor, Chanderlok Building
36, Janpath, New Delhi – 110 001.

Sub : Comments/Suggestions for Discussion Paper on "Market Based Economic Dispatch of Electricity: Re-designing of Day-Ahead Market (DAM) in India"

Ref : Public Notice vide no. No. RA-14026(11)/3/2018-CERC dated 31.12.2018 and Extension vide no. RA-14026(11)/3/2018-CERC Dtd. 31.01.2019.

Dear Sir,

This has reference to the public notice dtd. 31.12.2018 on the above subject posted at CERC web site wherein comments/suggestions of the stakeholders were solicited.

Accordingly, the comments/suggestions in respect of DVC, on the Discussion Paper on "Market Based Economic Dispatch of Electricity: Re-designing of Day-Ahead Market (DAM) in India", considering some special aspects conferred upon DVC are enclosed herewith as Annexure-I for your kind perusal and consideration please.

We also crave leave to submit at a future date further materials on the subject which may be available to us in the event we are of the opinion that the same would render meaningful assistance to the Hon'ble Commission in the matter.

Thanking you,

Chief Engineer-I (Commercial)

Dated: 15/02/2019

Enclosure: - As stated above

Copy to:-

- The Secretary, West Bengal Electricity Regulatory Commission, FD-415A, Pora Bhavan, 3<sup>rd</sup> Floor, Sector-III, Bidhannagar, Kolkata-700106
- The Secretary, Jharkhand State Electricity regulatory Commission, 2<sup>nd</sup> Floor, Rajendra Jawan Bhawan-cum Sainik Bazar, Main Road, Ranchi-834001

# <u>Comments of DVC on Discussion Paper on "Market Based Economic Dispatch of Electricity: Re-designing of Day-Ahead Market (DAM) in India"</u>

#### Preamble:-

DVC is a statutory body constituted under the DVC Act, 1948 with multifarious activities and in this regard DVC is distinct from other electricity utilities. DVC is engaged in activities related to electricity described as power (as an integrated entity in Generation, Transmission, Distribution and Retail supply of Electricity to the consumers, bulk supply of electricity to other procurers including states of West Bengal and Jharkhand utilities.

Comments of DVC on Discussion Paper on "Market Based Economic Dispatch of Electricity: Redesigning of Day-Ahead Market (DAM) in India" are as below:

## 1. Suffering by Generator (Reserve Shut-Down, Ramp-Up/Down)

In case of 'Forced Outage of Generator' whose schedule already cleared in Market Clarification required in respect of Following:

- (i) Provision of Schedule revision, if required
- (ii) Penalty mechanism

Regulation should provide shielding in case of tripping of generators as it may become very difficult from Generator's point of view to meet the demand from real time market.

In case of Generator participating in Market shall be scheduled based on bid being cleared in market which may fluctuate widely depending on bid and MCP. The wide fluctuation in schedule of Generator will enforce Generator to go for frequent Ramp Up/Down resulting in stress to the Generator which may affect the life of auxiliaries and STG as well as enhance of O&M expenses.

In case of a Generator which is in operation/service, if not scheduled for next day because of bid not cleared may be forced to run for flexible operation i.e. run below technical minimum even may go for 'Reserve Shut-Down'. Situation may arise forcing the Generator to take shut-down frequently because of higher energy charge rate of Generator and MCP. Under that condition, there may be severe deterioration of normative parameters like SOC, APC, GSHR etc. Clarification is proposed to be devised out due to compensate such case. In that case, 'compensation to Generator' for such flexible operation and recovery of 'Fixed Charge' based on availability in case of 'Reserve Shut-down' needs to be ensured to Generator.

The regulation should make specific provisions for some technical and operational constraints like Ramp-up/ Ramp-down rate, technical minimum operation, cold and hot start time while allocating generation schedule.

# 2. System Operation

Criteria for selection of 'Must Run Generator' along with its definition need clarification. The status regarding revision of 'Must Run generator' also needs clarification.

System operation may pose problem where a Generator is in operation/service is essential from point of view of System Operation but not from economic /Market criteria.

# 3. Transmission Charge

Commercial mechanism should be devised so that additional transmission charge due to 'Short term Transaction' over and above 'Long term Transmission Charge' is proposed to be exempted in order to avoid double charge for same quantum of power transaction.

## 4. Flexibility of Self Scheduling should be sufficiently safeguarded legally

Taking away the flexibility for self scheduling from the Beneficiary (DISCOM) of a Generator shall be against the contractual obligation on which contract/PPA between a DISCOM and a generator was agreed based on certain terms and conditions bilaterally.

# 5. Banking of Power

Banking which is convenient for various DISCOMs is also not possible through MBED.

## 6. Guideline for Bidding

Regulation should specify guideline regarding computation of Bidding Variable Charges (VC) on day to day basis prior to the computation of actual Variable Charges which is computed on monthly basis as per CERC (Terms and conditions of tariff) regulation.

Present Energy Charge is computed based on actual coal price and GCV which is being calculated by GENCO after receiving of coal bills from Coal Company. So at the time of bidding current month VC is not available.

The proposed MBED system is based on VC, which is actually not available at the time of bidding. The variation between actual VC and bid VC will be in almost every case which will not serve the purpose of economic dispatch.

Furthermore due to non-availability of actual VC the opportunity for gaming in respect of rate bidding may happen in the market.

It is proposed that the bidding price should be the last available Actual VC with 10% variation.

#### 7. BCS Settlement

Methodology related to billing, due date and adjustment of BCS credit should be clearly mentioned in the regulation to remove ambiguity.

Date for raising of Credit Note, Adjustment of the Credit Note should be clearly mentioned.

## 8. Recovery of Fixed Charges for untied Capacity

The consultation paper does not cover the guidelines for recovery of fixed charge for untied capacity of generators.

It is proposed that Bidding format of partially tied up generators should have separate bid values for allocated and unallocated quantum so that Fixed cost recovery for untied capacity can be achieved.

Sample format is shown below in the table:-

Name of the	Installed Capacity	BID for tied capacity		BID for un-tied capacity	
Generator		MW	Rate (Rs/Kwh)	MW	Rate (Rs/Kwh)
G-1	1000	400	1.751	600	3.320
G-2	1000	550	1.852	450	3.250

## 9. For vertically integrated utility

#### **Proposal 1:**

DVC Demand for valley area consumers will be considered as a distribution entity which will have allocation from more than one number of generators.

G-1	
G-2	
G-3	Total Retail Demand X MW
G-4	
G-n	

The variable charge will be calculated for the above mentioned unit based on wt. average energy charge. The weight will be determined by installed capacity – allocated capacity.

#### Illustration:

Station	Installed Capacity (MW)	Allocation (MW) to Other	Available for DVC DISCOM	Variable Cost
G-1	500	DISCOM 0	500	C1
G-2	500	0	500	C2
G-3	500	200	300	C3
G-4	500	150	350	C4

Weighted average variable cost (VC)

VC = (C1\*500+C2\*500+C3\*300+C4\*350)/1650

#### **Proposal 2:**

DVC Demand for valley area consumers will be considered as a distribution entity which will have dynamic allocation from different generators in the valley area. There should be some real time platform where the allocation to DISCOM from generators should be changed by the GENCO and which should be approved by DSICOM as well.

Time Block	Generator name	Installed	Allocation	Allocated	Untied
		Capacity	(MW)	beneficiaries	Capacity
		(MW)			

Based on the above real time allocation of power to DISCOM, DVC can change real time basis its allocation to DVC DISCOM.

## **Illustration:**

Time	Generator	Installed	Allocation to	Allocated	Untied
Block	name	Capacity (MW)	DVC DISCOM	beneficiaries	Capacity
			(MW)		
00.00	G1	500	200	200	100
00.15	G1	500	200	200	100
00.30	G1	500	200	200	100
23:45	G1	500	300	200	0
24.00	G1	500	300	200	0

Time	Generator	Installed	Allocation to	Allocated	Untied
Block	name	Capacity (MW)	DVC DISCOM	beneficiaries	Capacity
			(MW)		
00.00	G2	500	100	300	100
00.15	G2	500	100	300	100
00.30	G2	500	200	300	0
		••••	••••	••••	• • • •
23:45	G2	500	150	300	50
24.00	G2	500	150	300	50

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# 10. Contract of Composite Tariff from Pool Generators

Suppose Allocation for a DISCOM will be X MW from a GENCO, which has 4 nos. of generators. The contracted price for the generator is fixed for some specific period.

No guideline has been given for the contract with composite rate. It should be clarified.