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Tariff Authority for Major Ports

G.No.290

New Delhi,

26 August 2015

NOTIFICATION

In exercise of the powers conferred by Section 48 of the Major Port Trusts Act, 1963 (38 of 1963), the Tariff Authority for Major Ports hereby disposes of the proposal received from V.O. Chidambaranar Port Trust for fixation of Reference tariff for mechanization of loading system at the existing coal yard on license basis for 10 years period on revenue share basis, as in the Order appended hereto.

(T.S. Balasubramanian)
Member (Finance)

Tariff Authority for Major Ports
(No. TAMP/39/2015–VOCPT)

V.O. Chidambaranar Port Trust

Applicant

QUORUM:

- (i). Shri. T. S. Balasubramanian, Member (Finance)
- (ii). Shri. C. B. Singh, Member (Economic)

O R D E R

(Passed on this 4th day of August 2015)

This case relates to the proposal received from V.O. Chidambaranar Port Trust (VOCPT) for fixation of reference tariff for mechanization of loading system at the existing coal yard on license basis for 10 years period on revenue share basis.

2. This Authority had passed an Order dated 21 March 2015 fixing reference tariff at the VOCPT for mechanization of loading system at the existing coal yard on license basis for 10 years period on revenue share basis. The said Order was notified in the Gazette on 21 April 2015 vide Gazette No.133.

3.1. In this backdrop, the VOCPT vide its letter No. MEE/P&M/F.Coal yard/2015/D.2193 dated 25 May 2015 has again filed a proposal for fixation of Reference tariff for mechanization of loading system at the existing coal yard system on license basis for 10 years period on revenue share basis.

3.2. The submissions made by the VOCPT in its letter dated 25 May 2015 are summarized below:

- (i). In response to the Notice Inviting Tender (NIT) published on 16.02.2015 for the project, no tenders were received within the extended due date of 27.03.2015.
- (ii). When the above was informed to the Board of Trustees of VOCPT, the Board in the meeting held on 30.03.2015 suggested to go in for re-tender of the mechanization project, after re-visiting the capacity and cost of the project.
- (iii). Accordingly, a meeting was held on 17.04.2015 with port users/ prospective bidders to obtain their views/ suggestions regarding viability of the Project. In the meeting, the participants suggested following points for consideration:
 - (a). If silo is proposed, Silo capacity may be increased to 3000 tonnes.
 - (b). Conveyor capacity may be reduced to 1000 tonnes and receiving hopper may be reduced to one number.
 - (c). Plots to be earmarked near railway line to facilitate easy loading of cargo in to the wagon.
 - (d). Number of trucks to be increased.

3.3. Based on the above suggestions, VOCPT has reported to have drawn up the proposal under reference and has requested for fixation of Reference tariff.

4. A comparative position between the parameters considered in the Order passed in March 2015 and the parameters now considered by the port in the proposal in reference is tabulated below:

(₹.in Lakhs)

S. No	Particulars	Estimates considered in the Order dated 21 March 2015	Estimates furnished by VOCPT in its proposal dated 25 May 2015
I	<u>OPTIMAL CAPACITY</u>		
(i).	Yard Capacity:		
	- Area of the yard (A) (in sq. metres)	416412	295112
	- Percentage of total are used for stacking (P)	70%	70%
	- Quantity stacked (Q) (tonnes/ sq. metres)	3	3
	- Turnover Ratio (T)	12	12
	- Capacity (A x P x Q x T x 70%) (in metric tonnes)	7345508	5205776
	- Percentage of cargo moving through Rail	50%	50%
	- Relevant Capacity (in metric tonnes)	3672754	2602888
	- Relevant Capacity (in million metric tonnes)	3.67	2.60
(ii).	Plant capacity		
	- Capacity of truck (C) (in tonnes)	20	20
	- No. of trips in an hour (T)	6	6
	- No. of hours in a day (H)	24	24
	- No. of days per annum (D)	365	365
	- No. of trucks (S)	5	10
	- Capacity (C x T x H x D x S x 0.7) (in metric tonnes)	3679200	7358400
	- Capacity (in million metric tonnes)	3.68	7.35
	OPTIMAL CAPACITY (in MMTPA)	3.67	2.60
II	<u>CAPITAL COST</u>		
	(A). Civil Works		
	- Conveyor Supporting Bed	7.00	Individual Breakup not furnished
	- Conveyor (including Foundation)	271.00	
	- Retaining wall (including excavation)	100.00	
	(A)	378.00	638.00
	(B). Mechanical Works		
	- Covered Belt Conveyor (Capacity 2500 TPH) (Earlier - 420 metres) (Now – 1.95 kms)	96.00	Individual Breakup not furnished
	- Hoppers (5 nos.)	175.00	
	- Silo for Rail Loading (1500 MT) (1 no.)	450.00	
	- Front End Loaders (Earlier-5 nos)(Now-3 nos)	500.00	
	- Trucks (20 T) (5 nos.)	125.00	
	- Miscellaneous items (Magnets, Metal Detectors, Belt Feeders, Belt Scales, Head Pulleys)	61.00	
	- Spares	15.00	
	(B)	1422.00	1790.00
	(C). Electrical Works		
	- Power Distribution System	25.00	Individual Breakup not furnished
	- Control & Automation	25.00	
	- Lighting System	10.00	
	- Communication system	2.00	
	(C)	62.00	62.00

	(D). Miscellaneous (5% of A + B + C)	93.10	124.00
	TOTAL CAPITAL COST (A + B + C + D)	1955.10	2614.00
III	<u>OPERATING COST:</u>		
(i).	Power Cost	317.34	310.21
	(TAMP - 3672754 tonnes * 0.83 unit per tonne * Rs. 10.41 per Unit) (VOCPT - 2602888 tonnes * 1.18 unit per tonne * Rs. 10.1 per Unit)		
(ii).	Fuel cost:		
(a).	- Front end loaders	309.54	302.61
	(TAMP - 6132 Hrs * 20 ltrs per Hr * Rs.50.48 per litre * 5 Loaders) (VOCPT - 6132 Hrs * 20 ltrs per Hr * Rs.49.35 per litre * 5 Loaders)		
(b).	- Trucks	37.15	151.31
	(TAMP - 6132 Hrs * 2.4 Ltrs per Hr * Rs.50.48 per litres * 5 Trucks) (VOCPT - 6132 Hrs * 5 Ltrs per Hr * Rs.49.35 per litres * 10 Trucks)		
(iii).	Repairs & Maintenance cost		
(a).	Civil works	3.97	6.69
	(TAMP - 1% on Civil Costs incl. the component of civil costs in Other Capital costs) (VOCPT - 1% on Civil Costs)		
(b).	Mech & Elect works	109.07	136.11
	(TAMP - 7% on Mechanical & Electrical Costs incl. the component of Mechanical & Electrical costs in Other Capital costs) (VOCPT - 7% on Mechanical & Electrical Costs)		
(iv).	Insurance	19.55	26.14
	(TAMP - 1% on Capital Costs) (VOCPT - 1% on Capital Costs)		
(v).	Depreciation:		
(a).	Mech & Elect works	98.63	117.22
	(TAMP - 6.33% on Mechanical & Electrical Costs incl. the component of Mechanical & Electrical costs in Other Capital costs) (VOCPT - 6.33% on Mechanical & Electrical Costs)		
(b).	Civil Assets	12.58	20.21
	(TAMP - 3.17% on Civil Costs incl. the component of civil costs in Other Capital costs) (VOCPT - 3.17% on Civil Costs)		
(vi).	Rent (License Fee)		
(a).	Area of ground level (Pit)	8.72	0.00
	[TAMP - (50 * 50) sq.mtr. * Rs.348.68 per sq. mtr] VOCPT - NIL		
(b).	Conveyor area	0.03	0.03
	[TAMP - (525 * 4.5) sq.mtr. * Rs.1.42 per sq. mtr per annum] [VOCPT - (500 * 4.5) sq.mtr. * Rs.1.42 per sq. mtr per annum]		
(c).	Trucks and Front end loaders	1.26	2.01
	[TAMP - (12 * 3 * 5) + (12 * 3 * 5) sq.mtr. * Rs. 348.68 per sq. mtr.) [VOCPT - (12 * 3 * 10) + (12 * 3 * 5) sq.mtr. * Rs. 348.68 per sq. mtr.)		

(vii).	Other Expense	97.76	130.69
	(VOCPT - 5% on Capital Costs) (TAMP - 5% on Capital Costs)		
	TOTAL OPERATING COST	1,015.60	1,203.24
IV	ANNUAL REVENUE REQUIREMENT		
	(a). Total Operating Cost	1,015.60	1,203.74
	(b). Return on Capital Employed @16%	312.81	418.21
	(c).Total Revenue requirement	1,328.41	1,621.45
V	PER TONNE HANDLING RATE		
	Annual Revenue Requirement (Rs. In Lakhs)	1,328.41	1,621.45
	Optimal Capacity (in Metric Tonnes)	3,672,754	2,602,888
	Handling Rate per tonne		
	- Foreign	36.17	62.29
	- Coastal	21.70	37.38

5.1. The Cargo Handling Charges proposed by the VOCPT for mechanised Wagon Loading System at the Coal stack yard are as follows:

Sl. No.	Commodity	Rate per in MT (in Indian Rupees)	
		Foreign	Coastal
1.	Dry Bulk Cargo	62.29	37.38
2.	Thermal coal	62.29	62.29

Note:

1. The Tariff rate is proposed for transportation of cargo from coal yard to wagon/ truck through conveyor system.
- 2.
2. Thermal coal will not come under Coastal Cargo category.

5.2. The VOCPT has furnished the following Performance standards. These are found to be similar to the Performance Standards prescribed in the March 2015 Order.

“The licensee shall meet both the following Performance standards:

- (a). The Minimum guaranteed availability of 90% of the Mechanised Loading system per month. The availability shall be calculated for the total mechanized system: and,
- (b). The licensee shall complete the loading of half a rake consisting of 30 Wagons of each of 66 Tonnes carrying capacity in fifty minutes.”

6. In accordance with the consultative procedure prescribed, a copy of the VOCPT proposal dated 25 May 2015 was forwarded to the concerned users/ user organisations/ prospective bidders for their comments. None of the users / user organisations and prospective bidders have furnished their comments, till the case was finalised.

7. While acknowledging the proposal itself and based on a preliminary scrutiny of the proposal, the VOCPT was requested vide our letter dated 29 May 2015 to furnish information / clarifications on various points. The VOCPT vide its letter dated 24 June 2015 has furnished its reply on the information / clarification sought by us. A summary of information / clarification sought by us and the response of the VOCPT thereon is tabulated below:

Sr. No.	Information / Clarification sought by us	Reply of VOCPT
(i).	The reason for reducing the area of the yard from 416412 sq. metres (in the March 2015 Order) to 295112 sq. metres in the proposal under reference.	During the meeting held on 17.04.2015 with Port Users/ Prospective bidders for obtaining the views/ suggestions regarding viability of the project, Port Users/ Prospective bidders suggested that plots to be earmarked near railway line to facilitate easy loading of cargo into the wagon. Coal yard Phase II & III are far away from the wagon loading point. Hence, not considered in this project. The area of the yard has been reduced to 295112 sq. metres in the present proposal by considering Phase- I & Lime stone area which are nearer to wagon loading point.
(ii).	The basis for increasing the no. of trucks from 5 (in the March 2015 Order) to 10 trucks in the proposal under reference with a detailed analysis in this regard.	During the meeting held on 17.04.2015 with Port Users/ Prospective bidders to obtain the views/ suggestions regarding viability of the project, Port Users/ Prospective bidders suggested that Number of trucks to be increased. Also to match the conveyor requirement of 1000 T/Hr. (20 T x 10 Trucks x 6 Trips x0.70 = 840 T/Hr) since the hopper capacity of 150 T/Hr is the holding capacity and not discharging capacity. Hence, the number of trucks has been increased from 5 to 10.
(iii).	The VOCPT in its proposal has indicated the capital civil cost at ₹.6.38 crores and that of the mechanical and electrical works at ₹.18.52 crores. However, the VOCPT has not given the individual breakup of components forming part of the civil cost and the mechanical and electrical works. The VOCPT to furnish the individual breakup of the cost of each of the items considered under civil cost aggregating to ₹.3.68 crores and cost of each of the	<u>I. Civil Works:</u> Based on the budgetary offer of M/s. IMC Ltd, Chennai, capital cost for civil works for conveyor system is considered as ₹. 6.375 Crores as given below. i. Closed Conveyor (1000TPH Rated capacity (500 meter approx) = ₹.4.75 Crores ii. Conveyor Gallery comprising of pile foundation & structural steel supports = ₹.1.50 Crores iii. Erection and commissioning cost = ₹.0.125 Crores Total = ₹.6.375 Crores Say, ₹.6.38 Crores <u>II. Mechanical and Electrical works cost :-</u> Based on the Feasibility report & budgetary offer, capital cost of equipment & machinery proposed and the break up for the Mechanical & Electrical work cost is given below. i. Conventional Fixed type Silo system for Wagon Loading (1500 MT Capacity- 02 Nos) [Feasibility Report] = ₹.9 Crores ii. Trucks (Each 20 T Capacity- 10 Nos) [Feasibility Report] = ₹.2.5 Crores iii. Front end loaders (3.5 Cu.Mtr-5 Nos) [Feasibility Report] = ₹.5 Crores

	equipment and electrical works proposed to be utilised aggregating to ₹.18.52 crores.	iv. Hoppers 150 Tonnes (Capacity- 1 No) [Budgetary offer] = ₹.0.73 Crores v. Misc. items. [Feasibility Report] a) Magnet (1 No) = ₹.0.03 Crores b) Metal Detectors (1No) = ₹.0.12 Crores c) Belt feeder (2 Nos) = ₹.0.30 Crores d) Belt scales (1 No) = ₹.0.15 Crores e) Movable head pulleys (2 Nos) = ₹.0.01 Crores f) Spares @ 1% for the above items (₹.17.84 Crores) [Feasibility Report] = ₹.0.1784Crores g) Cost of Electrical works [Budgetary offer] = ₹.0.50 Crores. Total = ₹.18.52 crores																																																												
(iv).	The documentary evidence in support of the cost of each of the item considered under the civil cost as well as the mechanical and electrical works considered in the calculation to be furnished.	Based on the Budgetary offer of M/s. IMC Ltd., the cost of civil works has been considered for ₹.6.38 crores. Based on the feasibility report submitted by M/s. I-Martime consultancy Pvt. ltd, Mumbai and on the Budgetary offer of M/s. IMC Ltd., the cost of Mechanical & Electrical works has been considered for ₹.18.52 crores. Soft copy of the feasibility report prepared by the firm M/s. I-maritime consultancy Pvt. ltd, Mumbai is furnished. Details of cost of equipment is as follows: <table><tr><th>Sr. No.</th><th>Item Description</th><th>Unit</th><th>Quantity</th><th>Rate (Rs)</th><th>Amount (Rs)</th></tr><tr><td>1</td><td>150 Ton Capacity Closed Type Tyre Mounted Mobile Hopper</td><td>Nos</td><td>1</td><td>7300000</td><td>7,300,000</td></tr><tr><td>2</td><td>1000 TPH Capacity Closed Conveyor System</td><td>RMT</td><td>1000</td><td>95000</td><td>95,000,000</td></tr><tr><td>3</td><td>Conveyor gallery comprising of Pile foundation, Structural steel supports, Structural steel gallery with walkway, Sheet cladding and roof etc Complete</td><td>RMT</td><td>1000</td><td>30000</td><td>30,000,000</td></tr><tr><td>4</td><td>Electrical(Breaker,Cables & lightings)</td><td>Ls</td><td>1</td><td>5000000</td><td>5,000,000</td></tr><tr><td>5</td><td>Erection and Commissioning</td><td>Ls</td><td>1</td><td>2500000</td><td>2,500,000</td></tr><tr><td>6</td><td>Other Cost</td><td>LS</td><td>1</td><td>100000</td><td>100,000</td></tr><tr><td></td><td>TOTAL COST</td><td></td><td></td><td></td><td>137,300,000</td></tr><tr><td>7</td><td>Contingencies</td><td></td><td></td><td></td><td>6,865,000</td></tr><tr><td></td><td>TOTAL COST</td><td></td><td></td><td></td><td>144,165,000</td></tr></table>	Sr. No.	Item Description	Unit	Quantity	Rate (Rs)	Amount (Rs)	1	150 Ton Capacity Closed Type Tyre Mounted Mobile Hopper	Nos	1	7300000	7,300,000	2	1000 TPH Capacity Closed Conveyor System	RMT	1000	95000	95,000,000	3	Conveyor gallery comprising of Pile foundation, Structural steel supports, Structural steel gallery with walkway, Sheet cladding and roof etc Complete	RMT	1000	30000	30,000,000	4	Electrical(Breaker,Cables & lightings)	Ls	1	5000000	5,000,000	5	Erection and Commissioning	Ls	1	2500000	2,500,000	6	Other Cost	LS	1	100000	100,000		TOTAL COST				137,300,000	7	Contingencies				6,865,000		TOTAL COST				144,165,000
Sr. No.	Item Description	Unit	Quantity	Rate (Rs)	Amount (Rs)																																																									
1	150 Ton Capacity Closed Type Tyre Mounted Mobile Hopper	Nos	1	7300000	7,300,000																																																									
2	1000 TPH Capacity Closed Conveyor System	RMT	1000	95000	95,000,000																																																									
3	Conveyor gallery comprising of Pile foundation, Structural steel supports, Structural steel gallery with walkway, Sheet cladding and roof etc Complete	RMT	1000	30000	30,000,000																																																									
4	Electrical(Breaker,Cables & lightings)	Ls	1	5000000	5,000,000																																																									
5	Erection and Commissioning	Ls	1	2500000	2,500,000																																																									
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(v).	The VOCPT to furnish an analysis supported with workings to justify the number of each type of equipment envisaged to be used to evacuate the cargo, to show that given the productivity of each type of the equipment, the numbers of different equipment commensurate with the optimal capacity of coal envisaged to be evacuated from the stack yard.	Optimal capacity considered in the TAMP application - 2602888 Tones No of Wagons to be loaded (½ rake) - 30 wagons Loading capacity of wagon - 66 T/ wagon Time taken for loading half rake of 30 wagons - 30 X 66X60 ----- 1500 - 79.2 Say $\approx$ 80 minutes Time required for loading of full rake (59 wagons) - 2 Times X 80 Mins - 160 Minutes Time Taken for wagon Placement - 45 minutes Time taken for placing 2nd rake after leaving loaded rake at the marshalling yard - 120 minutes Total time required for evacuation of 1 rake - 160+45+120=325 Mins. No of rake in a day - 24 X 60 ----- = 4.43 325 i.e = 4 rakes per day Tonnage to be evacuated in a day - 4X3960x0.7=11088 T per day Tonnage to be evacuated in a year - 11088 X 365 X 0.7 = 2832984 T Say $\approx$ 2.8 MTPA The matching of capacity of Trucks, Hopper and Conveyor is already furnished vide reply to Sr.No.2
(vi).	The reason for increasing the power consumption from 0.83 units per tonne (in the March 2015 Order) to 1.18 units per tonne in the proposal under reference with a detailed analysis in this regard.	In the previous proposal, the optimal capacity was considered as 3.68 MT whereas in the present proposal optimal capacity has been revised to 2.60 MT in the present proposal. The reasons for increasing the power consumption is due to reduction of optimal capacity from 3.68 MT to 2.60 MT (as per calculation given below). Power requirement :- Based on the TANGEDCO bill for March-2015, ₹.10.10 per unit is considered for electricity consumption of 30,66,000 units for this project. [500 KVA X 24 Hrs x 365 Days x 0.7] <u>Electricity charges as per TANGEDCO bill dt.1.4.2015 is given under:</u> Electricity consumption = 840656 units Amount in the TANGEDCO bill = ₹.84,86,222 Rate per unit = ₹.84,86,222 / 840656 units = ₹.10.10/unit Unit per Ton = 30,66,000 units/ 2602888 tonnes = <u>1.18 units/ ton</u> Power cost = 2602888 X ₹.10.10 per unit x 1.18 = ₹.3,10,21,219.00 = ₹.310.21 lakhs

(vii).	In the Order, of March 2005 based on the proposal of VOCPT, licence fee on the area of ground level (Pit) to the tune of ₹.8.72 crores was factored in the Operating costs. In the proposal under reference, the VOCPT has not considered this component in the estimation of the operating costs. The reason for the same to be explained.	In the earlier proposal the Ground Level (pit) was considered for mounting 04 Hopper units. In the present proposal, there is no ground level pit and only one Hopper will be installed in the system. Way leave Charges @ ₹.1.42 per Sq. meter for the conveyor area is considered. The area occupied by Front & End loaders and trucks are considered for lease rent @ ₹.348.68 per Sq. meter. Details furnished in the TAMP application vide Pg.no.12, is given below:						
		S. NO	Name of the equipment	Qty	Dimension of each equipment		Total Area in Sq.Mtr [C*D*E]	Way leave charges @ Rs.1.42 per sq.mtr & Lease rent @ Rs. 348.68 per Sq.Mtr.
					Length In Meters	Width In Meters		
		A	B	C	D	E	F	G
		1	Conveyor area (Way leave charges)	LS	500	4.5	2250	3195.00
		2	Front end loaders	5 Nos	12	3	180	62762.40
		3	Trucks	10 Nos	12	3	360	125524.80
(viii)	The VOCPT to furnish the copy of the Minutes of its Board meeting, approving the VOCPT proposal in reference.	Copy of the Minutes of Board meeting is furnished.						

8.1. On a scrutiny of the additional information/ clarification furnished by the VOCPT vide its letter dated 24 June 2015, it was seen that there were gaps in the information furnished by VOCPT. The VOCPT was, therefore, requested vide our letter dated 03 July 2015 to furnish requisite information/ clarification. The VOCPT has responded vide its letter dated 16 July 2015. The information sought by us and the response of the VOCPT thereon is tabulated below:

Sr. No.	Information Sought by us	Reply of VOCPT
(i).	When asked for the reason for reducing the area of the yard from 416412 sq. metres to 295112 sq. metres in the proposal under reference and the justification for increasing the no. of trucks from 5 (in the March 2015 Order) to 10 trucks in the proposal under reference, the VOCPT in its letter dated 24 June 2015 has mainly stated that the changes are due to the suggestion made by the users/ prospective bidders. In this regard, it may be noted that considering the area	The number of trucks are reduced from 10 nos to 4 nos. Incorporating the above changes in cost statement of Tariff fixation suitably, the revised cost statement is furnished.

	of the stack yard at 295112 sq. mtrs. and based on the other parameters viz., stack height, turnover ratio, 70% utilisation factor and 50% movement through rail, the VOCPT has arrived at the optimal yard capacity at 2.60 MMTPA. However, by increasing the number of trucks from 5 nos. to 10 nos. now and based on other parameters, the VOCPT has worked out the plant capacity at 7.36 MMTPA. In the Order of March 2015, the yard capacity and the plant capacity were in tandem with each other. However, in the case in reference, there is a wide mismatch between the yard and plant capacity. If the yard is a constraint, then based on the parameters furnished by the VOCPT, it can be seen that 4 trucks would be sufficient to handle the yard capacity of 2.60 MMTPA, thereby rendering the remaining 6 trucks as an idle investment. The VOCPT, therefore, to examine this aspect and justify the additional 6 trucks considered in the proposal.	
(ii)	In its proposal of February 2015, which had culminated in the Order of March 2015, the cargo envisaged to be handled was coal, coke and limestone. In this regard, the VOCPT had then confirmed that coal, coke and limestone have similar handling rate and similar stacking height and hence had proposed the same rate for the above cargoes under the category of dry bulk cargo. The VCOPT had also informed then that out of the total cargo handled, 95% of cargo handled in the coal stackyard is coal. Now, in the proposal of May 2015, the cargo envisaged to be handled is coal, gypsum and limestone. In this regard, the VOCPT to clarify/ furnish the following:	
(a)	The reason to exclude coke and instead envisage handling gypsum in the current proposal under reference.	In the coal yard, only coal, coke and limestone are being handled through wagons. Hence, coal, coke and limestone may be considered. There is no traffic impact due to exclusion of Gypsum and inclusion of Coke.
(b)	The VOCPT to confirm whether the handling and stacking parameters in respect of gypsum will also be similar to that of coal, to justify prescription of a common handling rate.	Gypsum is not being handled at Coalyard. Hence, it may be deleted.
(c)	The VOCPT may confirm whether coal will continue to constitute 95% of cargo handled in the coal stackyard.	Yes, it is confirmed that coal will continue to constitute 95 % of cargo handled in the coal stack yard.

(iii)	With regard to the breakup of the capital cost components now furnished by VOCPT under cover of its letter dated 24 June 2015, the VOCPT to clarify/ furnish the following:	
(a).	In March 2015 Order, the VOCPT had proposed use of 420 metres Covered Belt Conveyor (Capacity 2500 TPH) at a cost of ₹.96 lakhs. Now, the VOCPT has envisaged deployment of 500 metres Closed Conveyor (Capacity 1000 TPH) at a cost of ₹.4.75 crores. Given that the length of the Conveyor being comparable and a lower capacity conveyor is envisaged, the substantial increase in cost to be justified. Documentary proof in support of the Conveyor cost to be furnished.	In the earlier proposal, as per the Feasibility report, the cost of proposed conveyor for Rs.96 lakhs is only a covered belt conveyor and the cost of other mechanical accessories like rollers and bearings had not been included. In the present proposal, as per the budgetary offer the cost of ₹.4.75 Crores is closed conveyor system which includes the cost of other mechanical accessories like rollers and bearings. Documentary proof in support of the Conveyor Cost is furnished.
(b)	The reason to propose deployment of 2 no. of 1500 MT Silo for Rail Loading in the proposal under reference as compared to 1 no. of 1500 MT Silo for Rail Loading considered in the March 2015 Order, appears to be based on the suggestion made by the users/ prospective bidders. If yard is a constraint, the need for deployment of 1 more no. of Silo, which may not be utilised fully, to be justified with a detailed analysis.	The capacity of a full rake consisting of 59 Wagons of each 66 Tonnes works out to 3894 Tonnes for which two silos of each 1500 Tonnes capacity are proposed. Since, half rake consisting of 30 Wagons of each 66 tonnes needs 1980 tonnes to be filled, single silo of capacity 1500 tonnes may not be sufficient to complete the loading in the specified time.
(c)	The documentary proof in support of the unit rate of 150T Hopper to be furnished.	The documentary proof in support of the unit rate of 150 T Hopper is furnished.
(iv).	With regard to a query to explain the reason for increasing the power consumption from 0.83 units per tonne (in the March 2015 Order) to 1.18 units per tonne in the proposal under reference, the VOCPT in its letter dated 24 June 2015 has simply stated that the reason for increase in the power consumption is due to reduction of optimal capacity from 3.68 MT to 2.60 MT. In this connection, it may be noted that the total power cost may reduce on account of reduction in capacity, however, reduction in capacity will not have a bearing on the per tonne consumption of power. The VOCPT, therefore, to furnish a detailed analysis with regard to the increase in the power consumption from 0.83 units per tonne (in the March 2015 Order) to 1.18 units per tonne in the proposal under reference	Power requirement :- Based on the TANGEDCO bill for March-2015, Rs.10.10 per unit is considered for electricity consumption of 30,66,000 units for this project.[500 KVA X 24 Hrs x 365 Days x 0.7] <u>Electricity charges as per TANGEDCO bill dt.1.4.2015 is given under:</u> Electricity consumption = 840656 units Amount in the TANGEDCO bill = Rs.84,86,222 Rate per unit = Rs.84,86,222 / 840656 units = Rs.10.10/unit Unit per Ton = 30,66,000 units/ 2602888 tonnes [Present proposal] <u>1.18 units/ ton</u> Unit per Ton = 30,66,000 units/ 3672754 tonnes [Earlier Proposal] = <u>0.83 units/ ton</u>

		In both the proposals, the unit consumption for the project is considered as 500 KVA only. Since, the optimal capacity is in the denominator, the per tonne consumption of power will increase. Power cost = 2602888 X Rs.10.10 per unit x 1.18 = Rs.3,10,21,219.00 = Rs 310.21 lakhs
(v).	The copy of the Minutes of the Board Meeting furnished by the VCOPT under cover of its letter dated 24 June 2015 reflects the approval given by the Board to do retendering after restructuring of the project. It does not reflect approval of the Board with regard to the VOCPT proposal in reference. The VOCPT to furnish the copy of the Minutes of its Board meeting, approving the VOCPT proposal in reference.	Copy of the Minutes of Board meeting held on 30.05.2014, approving the VOCPT proposal in reference vide Resolution No.173 (Agenda item No.34) is furnished.

8.2. In continuation to its letter dated 16 July 2015, the VOCPT vide its letter dated 29 July 2015 has made the following submissions:

- (i). The fuel consumption of the 20 T Truck may be considered as 2.40 litres per truck per hour as per the Feasibility Report.
- (ii). The Performance Standard as specified below may be considered, which is in line with the Performance Standard as indicated in the Tender document:
“b. The licensee shall complete the loading of half a rake consisting of 30 Wagons of each of 66 Tonnes carrying capacity in 80 (eighty) minutes.”

9. The VOCPT vide its letter dated 04 June 2015, with reference to some communication received by it from Tuticorin Stevedores Association (TSA) has responded as given below:

- (i). Many Thermal Power Stations are coming up in and around Tuticorin city. These power plants are mainly depending on the VOC Port for importing the coal required for their plants. The transfer of huge quantity of coal to their plants by road will involve lot of trucks movements on the roads in the Port area and in Tuticorin city causing not only traffic congestion but also environmental pollution by way of dust emanated from the road and spillage of coal from trucks. Further, quick evacuation of cargo from coal yard is possible, if large quantity of coal is moved through rail.
- (ii). Moreover, mechanization of existing coal yard operation may require consolidation of cargo by the operators and also consolidation of same operators in order to have large slots in future.
- (iii). Mechanization could result in enhanced handling rate and thus could faster evacuation of cargo through the rake and this leads to reduction in demurrage.

After providing the mechanization wagon loading facility in the coal yard the coal movement through rail will increase.

10. A joint hearing on the case in reference was held on 26 June 2015 at the VOCPT premises. The VOCPT made a brief power point presentation of its proposal. At the joint hearing, the VOCPT and the concerned users/ organization bodies and Prospective bidders have made their submissions.

11. The proceedings relating to consultation in this case are available on records at the office of this Authority. An excerpt of the arguments made by the concerned parties will be sent separately to the relevant parties. These details will also be made available at our website <http://tariffauthority.gov.in>.

12. With reference to totality of the information collected during the processing of the case, the following position emerges:

- (i). The industrial coal coming at the port is currently being stacked in the coal yard by the various port users in their respective allotted slots and further transported to the end users through wagon/ trucks as and when required. The current system of moving the cargo by trucks from the coal yard to VOC Wharf for loading in the wagons placed on the wharf line, is reported to be time consuming and resulting in slow evacuation of cargo from the coal stack yard and also leading to ineffective utilization of the total stack yard area. In order to mitigate the poor evacuation rate and to increase cargo turnaround of the stack yard and to reduce pollution, the VOCPT has proposed to install a suitable mechanised handling system at the coal stack yard. In the proposed system, the cargo from the users plot in the coal stock yard would be transported to the apron area through front end loaders and trucks. Then, the cargo will be transferred to the fixed wagon loading silo installed near the apron area through conveyors and through the silo the cargo will be loaded into the Railway wagons.

In this connection, based on a proposal filed by VOCPT in February 2015, this Authority vide its Order dated 21 March 2015 had fixed Reference tariff for mechanization of loading system at the existing coal yard (i.e. transportation of cargo from the coal yard to wagon/ truck through conveyor system) on license basis for 10 years period on revenue share basis. Since there was no response for the project, the VOCPT, based on the decision of its Board of Trustees, and in consultation with the users and prospective bidders, has reviewed their proposal. Thus, the exercise under reference is to refix Reference tariff for mechanization of loading system at the existing coal yard, based on the proposal of VOCPT submitted in May 2015.

- (ii). Clause 2.4 of the tariff guidelines of 2013 stipulates that if in the view of the Major Port Trust, the tariff determined for a particular commodity under 2008 guidelines at that Major Port Trust or any other Major Port Trust is not a representative Reference Tariff for that commodity, then the Major Port is free to approach this Authority with a proposal to fix Reference Tariff under 2008 guidelines for the project giving detailed and sufficient justification. As stated earlier, the proposal in reference is for fixation of Reference tariff for transportation of cargo from the coal yard to wagon/ truck through conveyor system. Though upfront tariff is available for handling of various types of dry bulk cargo for the entire movement of cargo from ship to yard and yard to truck/ wagon, no upfront tariff is available for mechanisation of the truncated movement of cargo from yard to wagon. That being so, the proposal is seen to have been filed by the VOCPT under 2013 Reference tariff guidelines by following the principles of 2008 guidelines.
- (iii). The cargo proposed to be handled under this project are coal, coke and limestone, of which 95% of cargo handled would be coal, as confirmed by the VOCPT. Based on this position, the VOCPT is seen to have considered the norms prescribed in the 2008 upfront tariff guidelines for a coal terminal, as base to arrive

at the handling charges. The VOCPT has also confirmed that the cargo items other than coal also have similar handling rate and similar stacking height. Based on the submission made by the VOCPT, the approach adopted by VOCPT to consider the norms prescribed in the 2008 upfront tariff guidelines for a coal terminal, as base to arrive at the handling charges, is considered in this analysis.

- (iv). The VOCPT had initially filed the proposal in May 2015. Subsequently, while responding to the queries raised by us, the VOCPT vide its letter dated 16 July 2015 has made some changes to its proposal of May 2015. The said proposal of July 2015 alongwith the information/ clarification furnished by the VOCPT during the proceedings of the case in reference are considered in the analysis.
- (v). Optimal Capacity:
 - (a). Yard Capacity:
 - (i). In its initial proposal of February 2015, the VOCPT had considered the area of the stackyard at 416412 sq. mtrs. Now, in its revised proposal of May 2015, the VOCPT has reduced the area of the yard from 416412 sq. metres to 295112 sq. metres. This reduction in the area is attributed by the VOCPT to the suggestion made by the Users/ Prospective bidders to have the plots earmarked near railway line to facilitate easy loading of cargo into the wagon and this area of 295112 sq. metres being the area which is nearer to wagon loading point.
 - (ii). Considering the area of the stack yard at 295112 sq. mtrs. with 70% utilisation, and taking into account the stack height of 3 tonne per sq. mtr. and a turnover ratio of 12, the VOCPT has arrived at the optimal yard capacity at 5.20 MMTPA. Thereafter, considering the position that only 50% of the stacked cargo would move by rail, the yard capacity has been assessed at 50% of 5.20 MMTPA i.e. 2.60 MMTPA.
 - (iii). Out of the said area of the stackyard, the VOCPT is seen to have taken into account 70% of the area as available for stacking, in line with the stipulation contained in the upfront guidelines for coal terminal for calculation of yard capacity.
 - (iv). The stack height of 3 tonne per sq. mtr. as considered by the VOCPT is as per the norm prescribed in upfront guidelines for coal terminal. In this connection, it is to state that in fixing upfront tariff for the coal terminal at Visakhapatnam Port Trust (VPT) a stack height of 6 tonnes per Sq. metre has been considered as against the norm of 3 tonnes per Sq. metre prescribed in the guidelines. If stacking height of 6 tonnes per sq.mtr. is considered, the plant capacity in terms of transportation of cargo to wagon loading silo as well as 50% of yard capacity is the limiting factor as can be noted from succeeding paragraphs.
 - (v). The Turnover ratio of 12 considered by VOCPT is seen to be as per the norm of upfront guidelines for coal terminal and hence considered in the analysis.
 - (vi). Based on the formula prescribed in the upfront guidelines for coal terminal and taking into account the various parameters as furnished by the VOCPT as discussed above, the yard capacity at 70% utilization works out to 5205776 tonnes per annum, as assessed by the Port.

- (vii). Thereafter, considering the position that 50% of the yard capacity would pass through railway wagons, the optimal capacity works out to 2602888 tonnes as assessed by the Port. The position about 50% of the cargo would pass through railway wagons is reported to be based on the Feasibility Report, which is relied upon.
- (b). Plant Capacity:
 - (i). In its initial proposal of February 2015, the VOCPT had considered deployment of 5 trucks and had accordingly calculated the plant capacity by taking into account the deployment of 5 nos. of 20T truck each undertaking 6 trips in 24 hours and 365 days at 70% utilization. In the revised proposal of May 2015, the VOCPT is seen to have calculated the plant capacity by taking into account the deployment of 10 nos. of 20T truck and keeping other parameters intact had arrived at the plant capacity at 7.36 MMTPA. The increase in the no. of trucks from 5 (in the March 2015 Order) to 10 trucks in the May 2015 proposal was reported to be based on the suggestion given by the Users/ Prospective bidders. The VOCPT had also stated that increase in the number of trucks would also match the conveyor requirement.
 - (ii). In this connection, it was seen that though the yard capacity works out to only 2.60 MMTPA, the plant capacity based on the deployment of 10 trucks works out to 7.36 MMTPA, which is three times the yard capacity. If the yard capacity is a constraint as reported by VOCPT, then based on the parameters furnished by the VOCPT, it was seen that 4 trucks would be sufficient to handle the yard capacity of 2.60 MMTPA, thereby rendering the remaining 6 trucks as an idle investment. On being pointed out of this position, the VOCPT on examination, has reduced the number of trucks from the then proposed 10 nos. to 4 nos. in its revised proposal of July 2015. Further, in an official level meeting held with VOCPT on 29 July 2015, the VOCPT has confirmed that 4 no. of 20 T Trucks would be sufficient for the operation at the facility.
 - (iii). Considering deployment of 4 nos. of 20T truck each undertaking 6 trips in 24 hours and 365 days at 70% utilization, the plant capacity has been worked out by VOCPT at 2.94 tonnes. The Plant Capacity determined by the VOCPT is seen to be in tandem with the derived yard capacity.
- (c). Thus, the 50% yard capacity, being lower among the two viz., full Yard capacity and Plant Capacity, at 2602888 tonnes per annum is considered as the optimal capacity of the facility.
- (vi). Capital Cost:
 - (a). The capital cost as estimated by the VOCPT in its revised proposal of July 2015 is ₹.24.56 crores of which, ₹.6.38 crores is towards civil works, ₹.16.42 crores towards Mechanical Equipment, ₹.0.50 crores towards Electrical works and ₹.1.17 crores towards Miscellaneous capital costs.
 - (b). Civil Costs:
The upfront tariff guidelines require consideration of the civil cost as per the estimates given by the Port Trust. In this regard, the VOCPT has estimated the civil costs relating to the proposed facility at ₹.6.38 crores. This estimated cost pertains to the cost of Closed Conveyor (Capacity 1000 TPH) (500 metres), Conveyor Gallery comprising of pit foundation

and steel supports and the Erection & Commissioning cost. The civil costs as given by the VOCPT is reported to be as per the budgetary offer and relied upon in the analysis.

(c). Equipment/ Mechanical cost:

- (i). The estimated Equipment cost to the tune of ₹.16.42 crores pertains to the cost of 1 no. of 150 T Hopper, 2 nos. of 1500 MT Silo for Rail Loading, 5 nos. of Front End Loaders, 4 nos. of 20 T Trucks and cost of Miscellaneous items viz., Magnets, Metal Detectors, Belt Feeders, Belt Scales, Head Pulleys and Spares.
- (ii). The Feasibility Report furnished by VOCPT states that as the objective of the facility is to enable faster evacuation of cargo through rail, the proposed Silo of capacity 1500 tonnes would be filled prior to the arrival of the rake. Also, the existing siding at the coal yard can accommodate only the half rake due to its restricted length. So, the Silo can discharge 1500 tonnes of cargo to the half rake in 25 minutes at a rate of one wagon (66 Tonnes) per minute. Till that time, the conveyor will keep on filling the silo at the rate of 2000 TPH. After completion of loading operation to the first half of the rake, it is estimated by the port that it would require approximately 30 minutes for the second rake to take its position on the existing siding. Hence, the time taken by the shunting of the rake would be utilized for filling the silo. Further, considering that the capacity of a full rake consisting of 59 Wagons of 66 Tonnes each works out to 3894 Tonnes for which two silos of each 1500 Tones capacity is envisaged by VOCPT, as the single silo of capacity 1500 Tones may not be sufficient to complete the loading in the specified time. Based on the above position, it appears that the productivity and the numbers/ capacity of each type of the equipment may commensurate with the optimal capacity of dry bulk cargo envisaged to be evacuated from the stack yard.
- (iii). Based on the above position and since the number of equipment considered by the port is as per the Feasibility Report and also since none of the users/ prospective bidders have raised any objection with regard to the number of each and every equipment, the number/ capacity of each equipment as proposed by the port is relied upon in the analysis.
- (iv). No documentary evidence in support of the base rate of each of the equipment is furnished despite a request made to the VOCPT. Since the cost of each equipment considered by the port is as per the Feasibility Report and also since none of the users/ prospective bidders have raised any objection with regard to the cost of equipment, the cost of each equipment as estimated by the port is relied upon in the analysis.

(d). Electrical costs:

The electrical costs estimated as a lumpsum at ₹ 0.50 crores pertains to cost of Power Distribution System, Control & Automation, Lighting System and Communication system. The said estimates are seen to be as per the budgetary offer and considered in the analysis.

(e). Miscellaneous costs:

The Miscellaneous capital costs have been estimated at 5% of the total civil, equipment and electrical costs as discussed earlier, which is seen to be as per the upfront guidelines and hence considered in the analysis.

- (f). Thus, the aggregate capital cost for the facility as estimated by the Port at ₹.24.56 crores is relied upon in this analysis.
- (vii). The VOCPT has calculated the return on capital employed at 16% of the estimated capital cost, as prescribed in the guidelines.
- (viii). Operating cost:
- (a). Power cost:
The Power cost has been calculated for the optimal capacity based on the power consumption at 1.18 units per tonne at the rate of ₹.10.10 per unit.
- The 2008 upfront tariff guidelines prescribe the norm for the power consumption at 1.4 units per tonne for operation of a full-fledged mechanized coal terminal for undertaking the entire operation of unloading of coal from ship, storage at yard and for loading onto wagons/trucks. The power consumption at 1.18 units per tonne by VOCPT for the operation involved in movement of cargo from yard to wagon is reported to be based on the actual power requirement for the project. The estimation with regard to the power consumption per tonne as furnished by the port is considered in the analysis.
- The rate of ₹.10.10 for per unit of power is validated by a documentary evidence and is accepted.
- (b). Fuel cost:
- (i). The fuel cost has been estimated in respect of front end loaders and trucks for a period of 6132 hours of operation and at the rate of ₹.49.35 per litre.
- (ii). In respect of front end loaders, fuel consumption has been considered at 20 litres per hour reportedly based on the actual consumption of Front End Loaders ascertained from the Port users. This position is relied upon.
- (iii). In respect of trucks, the VOCPT had initially considered the fuel consumption at 5 litres per hour. Thereafter, the VOCPT has requested to consider the fuel consumption of Trucks at 2.4 litres per truck per hour. In this connection, it is relevant to mention here that in the Order of March 2015, a fuel consumption of 2.4 litres per hour per truck was considered as estimated by the Port then. Therefore, the fuel consumption in respect of trucks is considered at 2.4 litres per hour. Incidentally, in respect of another proposal of VOCPT relating to Mechanisation of berth No. III/IV, the fuel consumption in respect of trucks is considered at 2.4 litres per hour.
- (iv). The rate of fuel at ₹.49.35 per litre is validated based on a documentary evidence and hence considered in the analysis.
- (c). Repairs and maintenance cost on civil work is estimated by VOCPT at 1% on the civil cost including the component of civil cost forming part of the Miscellaneous Capital costs. Similarly, Repairs and maintenance cost on mechanical equipment and electrical equipment cost is estimated by VOCPT at 7% on mechanical equipment and electrical equipment cost including the component of Mechanical and Electrical costs forming part of the Miscellaneous Capital costs, which are in line with the approach adopted in other Upfront/ Reference tariff fixation of other major port trusts.

- (d). Insurance cost is estimated at 1% of the gross fixed assets and other expenses are estimated at 5% of the gross value of fixed assets by VOCPT, which are in line with the norms prescribed in the guidelines.
- (e).
 - (i). Depreciation, as per the guidelines, should be calculated following the depreciation rates as per Straight Line Method (SLM) prescribed in the Companies Act. The VOCPT has calculated depreciation @ 6.33% on mechanical and electrical cost. The VOCPT in the proceeding relating to the March 2015 Order had furnished relevant extract of the Companies Act, 2013, in support of the rate considered. This same position is now relied upon in the analysis.
 - (ii). The rate of depreciation at 3.17% on civil assets is seen to be based on the extract of the Companies Act, 2013, furnished by the port in the proceeding relating to the March 2015 Order and hence considered now in the analysis.
 - (iii). In addition, depreciation cost is also calculated on other assets duly considering the rate in proportion to the component of civil and equipment cost forming part of the Miscellaneous Capital costs in our analysis.
- (f).
 - (i). The guidelines for upfront tariff stipulate that licence fee for port land is to be estimated based on the rates prescribed in the Scale of Rates of the respective Major Port Trusts.
 - (ii). Licence fee has been estimated by the port in respect of Conveyor area of 500 * 4.5 sq.mtr. and in respect of the area to be occupied by 4 nos. of each of Trucks and 5 nos. of Front end loaders, each with a dimension of 12 * 3 sq.mtr.
 - (iii). In respect of the area to be occupied by 4 nos. of Trucks and 5 nos. of Front end loaders, the VOCPT has adopted the rate of licence fee at ₹355.65 per sq. mtr., which is seen to be as per the prevailing Scale of Rates.
 - (iv). In respect of Conveyor area, the VOCPT has adopted the rate of way leave charges at ₹1.42 per sq. mtr, which is also seen to be as per the prevailing Scale of Rates.
 - (v). A minor arithmetical error noticed in the calculation of licence fee of the area to be occupied by Trucks and Front end loaders has been rectified.
- (g). The total operating cost based on the above analysis works out to ₹.1056.55 lakhs as against ₹.1081.67 lakhs estimated by the VOCPT.
- (ix). The cost statement for fixing Reference tariff submitted by VOCPT is modified in line with the above analysis. A copy of the modified Cost statement is attached as **Annex - I**.
- (x). (a). The total Annual Revenue Requirement (ARR) works out to ₹.1449.56 lakhs, which is an aggregate of operating cost (₹.1056.55 lakhs) and 16% return on capital cost (₹.393.01 lakhs), as against the Annual Revenue Requirement estimated by the port at ₹.1474.68 lakhs.

- (b). The VOCPT has envisaged recovery of the entire assessed ARR from the optimal capacity of the facility. Accordingly, considering the modified ARR at ₹.1449.56 lakhs and the optimal capacity of the facility at 2602888 tonnes, the rate works out to ₹.55.69 per tonne, instead of ₹.56.66 per tonne estimated by the VOCPT.
- (c). Based on the position of VOCPT that cargo like coke, limestone and coal have similar handling rates, a common rate is prescribed for transportation of all types of cargo i.e. coke, limestone and coal from the coal yard to wagon/ truck through conveyor system, in line with the approach adopted by the VOCPT. Further, the VOCPT is of the view that the entire cargo handled would be only foreign cargo. Nevertheless, coastal rate has been prescribed at 60% of the foreign rate, as proposed by the port.
- (xi). The Government of India in the Ministry of Shipping (MOS) under cover of its letter No. PT-11033/51/2014-PT dated 11 November 2014 has forwarded a copy of the guidelines on priority berthing of coastal vessels at Major Port issued vide letter No. PT-11033/51/2014-PT dated 4 September 2014 to this Authority. Accordingly, this Authority vide its Order no. TAMP/52/2014-Genl. dated 28 November 2014 has, inter alia, approved the replacement of definition of 'Coastal Vessel' prescribed in the existing SOR of all the Major Port Trusts as follows:

“Coastal vessel” shall mean any vessel exclusively employed in trading between any port or place in India to any other port or place in India having a valid coastal licence issued by the Director General of Shipping/ Competent Authority.’

Therefore, the definition of Coastal Vessel proposed by the VOCPT has been modified in line with the above mentioned definition of 'Coastal Vessel'.
- (xii). A general note relating to indexation factor for automatic adjustment every year giving the base WPI to be considered for such indexation is prescribed in the Upfront/ Reference tariff cases. Since the cost estimates considered in the reference tariff calculation are based on the market rate pertaining to the year 2015, it is found appropriate and relevant to prescribe the base WPI to be considered for automatic adjustment every year as 1 January 2015. Thus, the note in this regard is incorporated in the Reference tariff schedule.
- (xiii). Clause 2.2 of the revised tariff guidelines of 2013 requires this Authority to prescribe the Reference Tariff along with the Performance Standards. Though the revised guidelines of 2013 do not require this Authority to go into the Performance Standards proposed by the port it is not unreasonable to assume that the ports would propose reasonable and achievable Performance Standard. As brought out earlier, as per the Performance Standard Schedule proposed by the Port, the licensee shall meet both the Performance Standards i.e. the Minimum guaranteed availability of 90% of the Mechanised Loading System per month as well as completing the loading of half a rake consisting of 30 wagons of each 66 tonnes carrying capacity in eighty minutes. The Performance Standards as proposed by the Port is prescribed.
- (xiv). The general note that the users will not be required to pay charges for delay beyond a reasonable level attributable to the operator is incorporated in the SOR.

13.1. Subject to above analysis, the Reference Tariff Schedule and the Performance Standards as proposed by the port are attached as **Annex – II** and **Annex - III** respectively.

13.2. In the result, and for the reasons given above and based on a collective application of mind, the Reference Tariff Schedule for Mechanization of Loading System at the Existing Coal Yard System on License Basis in VOCPT is approved and is notified along with the Performance Standards.

14.1. As per clause 2.5 of the Revised Tariff Guidelines 2013, the Reference Tariff and Performance Standards notified by this Authority shall be mentioned in the bid document and subsequently in the Concession Agreement in respect of PPP Projects. Accordingly, the VOCPT is advised to incorporate the Reference Tariff and Performance Standards, in the bid document and subsequently in the Licence Agreement in respect of PPP Project.

14.2. From the date of Commercial Operation (CoD) till 31st March of the same financial year, the tariff would be limited to the indexed Reference Tariff relevant to that year, which would be the ceiling. The aforesaid Reference Tariff shall be automatically revised every year based on an indexation as provided in para 2.2 of the tariff guidelines of 2013 which will be applicable for the entire licence period.

However, the Licensee would be free to propose a tariff along with Performance Standards (the "Performance Linked Tariff") from the second year of operation onwards, over and above the indexed Reference Tariff for the relevant financial year, at least 90 days before the 1st April of the ensuing financial year. Such Performance Linked Tariff shall not be higher than 15% over and above the indexed Reference Tariff for that relevant financial year (and this will be the Tariff Cap). The Performance Linked Tariff would come into force from the first day of the following financial year and would be applicable for the entire financial year.

14.3. The proposal shall be submitted to this Authority along with a certificate from the independent engineer appointed under the Licence Agreement of the Project indicating the achievement of Performance Standards in the previous 12 months as incorporated in the Licence Agreement or for the actual number of months of operation in the first year of operation as the case may be.

14.4. On receipt of the proposal, this Authority shall seek the views of the Major Port Trust on the achievement of Performance Standards as outlined in para 5 of the tariff guidelines of 2013, within 7 days of receipt.

14.5. In the event of Licensee not achieving the Performance Standards as incorporated in the Licence Agreement in previous 12 months, this Authority shall not consider the proposal for notifying the Performance Linked Tariff for the ensuing financial year and the Licensee shall be entitled to only the indexed Reference Tariff applicable for the ensuing financial year.

14.6. After considering the views of the Major Port Trust, if this Authority is satisfied that the Performance Standards as incorporated in the Licence Agreement have been achieved, it shall notify the performance linked tariff by 15th of March to be effective from 1st of April of the ensuing financial year.

14.7. While considering the proposal for Performance Linked Tariff, this Authority shall look into the Performance Standards and its adherence by the Licensee. This Authority shall decide on the acceptance or rejection of the Performance Linked Tariff proposal based on the achievement or otherwise of the Performance Standards by the Licensee. Determination of indexed Reference Tariff and Performance Linked Tariff would follow the illustration shown in the Appendix attached to the tariff guidelines of 2013

14.8. From the third year of operation, the Performance Linked Tariff proposal from the Licensee shall be automatically notified by this Authority subject to the achievement of Performance Standards in the previous 12 months period as certified by the Independent Engineer. The Licensee, for the Performance Linked Tariff from the third year onwards, will submit the Performance Linked Tariff proposal along with the achievement certificate from the independent engineer by 1st March and this Authority shall notify by 20th March, the Performance Linked Tariff to be effective from the ensuing financial year.

14.9. As stipulated in Clause 6.2 of the revised 2013 guidelines, in the event any user has any grievance regarding non-achievement by the Licensee of the Performance Standards as notified by this Authority, he shall prefer a representation to this Authority which, thereafter, shall conduct an inquiry into the representation and give its finding to the VOCPT. The VOCPT will be

bound to take necessary action on the findings as per the provisions of the respective Licence Agreement.

14.10. As stipulated in Clause 6.3.1 of the revised 2013 guidelines, within 15 (fifteen) days of the signing of the Licence Agreement, the concerned operator will forward the Licence Agreement to this Authority which will host it on its website.

14.11. As stipulated in clause 6.3.2 of the revised 2013 guidelines, the Licensee shall furnish to this Authority quarterly reports on cargo traffic, ship berth day output as well as the tariff realized for each berth. The quarterly reports shall be submitted by the PPP operator within a month following the end of each quarter. Any other information which is required by this Authority shall also be furnished to them from time to time.

14.12. As stipulated in clause 6.3.3 of the revised 2013 guidelines, this Authority shall publish on its website all such information received from PPP operator. However, this Authority shall consider a request from the Licensee about not publishing certain data/ information furnished which may be commercially sensitive. Such requests should be accompanied by detailed justification regarding the commercial sensitiveness of the data/ information in question and the likely adverse impact on their revenue/ operation of upon publication. This Authority's decision in this regard would be final.

14.13. As per clause 3.8.5 of the guidelines, if any question arises requiring clarifications or interpretation of the Scale of Rates and the statement of conditionalities, the matter shall be referred to this Authority and its decision in this regard will be binding on the operator.

14.14. The performance norms for the project should be clearly brought out in the bid documents. The Licensee is expected to perform at least at the performance norms brought out in the bid document/ Licence agreement.

14.15. The actual performance of the Licensee will be monitored by this Authority. If any complaint regarding quality of service is received, this Authority shall enquire into such allegation and forward its findings to the VOCPT. If any action is to be taken against the operator, the VOCPT shall initiate appropriate action in accordance with the provisions of the relevant Licence Agreement.

(T.S. Balasubramanian)
Member (Finance)

**COST STATEMENT FOR FIXATION OF REFERENCE TARIFF FOR MECHANISATION OF LOADING SYSTEM AT THE EXISTING
COAL YARD AT AT V. O. CHIDAMBARANAR PORT TRUST**

(Rs. In Lakhs)

S.No	Particulars	Estimates furnished by VOCPT in its revised proposal dated 16.07.2015	Estimates as considered by TAMP
I	<u>OPTIMAL CAPACITY</u>		
	(i). Yard Capacity:		
	- Area of the yard (A) (in sq. metres)	295112	295112
	- Percentage of total are used for stacking (P)	70%	70%
	- Quantity stacked (Q) (tonnes/ sq. metres)	3	3
	- Turnover Ratio (T)	12	12
	- Capacity (A x P x Q x T x 70%) (in metric tonnes)	5205776	5205776
	- Percentage of cargo moving through Rail	50%	50%
	- Relevant Capacity (in metric tonnes)	2602888	2602888
	- Relevant Capacity (in million metric tonnes)	2.60	2.60
	(ii). Plant capacity		
	- Capacity of truck (C) (in tonnes)	20	20
	- No. of trips in an hour (T)	6	6
	- No. of hours in a day (H)	24	24
	- No. of days per annum (D)	365	365
	- No. of trucks (S)	4	4
	- Capacity (C x T x H x D x S x 0.7) (in metric tonnes)	2943360	2943360
	- Capacity (in million metric tonnes)	2.94	2.94
	OPTIMAL CAPACITY (in MMTPA)	2.60	2.60
II	<u>CAPITAL COST</u>		
	(A). Civil Works		
	- Closed Conveyor (Capacity 1000 TPH) (500 metres)	475.00	475.00
	- Conveyor Gallery comprising of Pile Foundation and Structural Steel Supplies	150.00	150.00
	- Erection & Commissioning cost	12.50	12.50
	(A)	637.50	637.50
	(B). Mechanical Works		
	- Hoppers (150 T) (1 no.)	73.00	73.00
	- Silo for Rail Loading (1500 MT) (2 nos.)	900.00	900.00
	- Front End Loaders (5 nos.)	500.00	500.00
	- Trucks (20 T) (4 nos.)	100.00	100.00
	- Miscellaneous items (Magnets, Metal Detectors, Belt Feeders, Belt Scales, Head Pulleys)	61.00	61.00
	- Spares	17.84	17.84
	(B)	1651.84	1651.84
	(C). Electrical Works		
	- Power Distribution System	50.00	50.00
	- Control & Automation		
	- Lighting System		
	- Communication system		
	(C)	50.00	50.00
	(D). Miscellaneous (5% of A + B + C)	116.97	116.97
	TOTAL CAPITAL COST (A + B + C + D)	2456.31	2456.31

S.No	Particulars	Estimates furnished by VOCPT in its revised proposal dated 16.07.2015	Estimates as considered by TAMP
III	OPERATING COST:		
(i).	Power Cost (VOCPT - 2602888 tonnes * 1.18 unit per tonne * Rs. 10.10 per Unit) (TAMP - 2602888 tonnes * 1.18 unit per tonne * Rs. 10.10 per Unit)	310.21	310.21
(ii).	Fuel cost:		
(a).	- Front end loaders (VOCPT - 6132 Hrs * 20 ltrs per Hr * Rs.49.35 per litre * 5 Loaders) (TAMP - 6132 Hrs * 20 ltrs per Hr * Rs.49.35 per litre * 5 Loaders)	302.61	302.61
(b).	- Trucks (VOCPT - 6132 Hrs * 5 Ltrs per Hr * Rs.49.35 per litres * 4 Trucks) (TAMP - 6132 Hrs * 2.4 Ltrs per Hr * Rs.49.35 per litres * 4 Trucks)	60.52	29.05
(iii).	Repairs & Maintenance cost		
(a).	Civil works (VOCPT - 1% on Civil Costs) (TAMP - 1% on Civil Costs incl. the component of civil costs in Other Capital costs)	6.69	6.69
(b).	Mech & Elect works (VOCPT - 7% on Mechanical & Electrical Costs) (TAMP - 7% on Mechanical & Electrical Costs incl. the component of Mechanical & Electrical costs in Other Capital costs)	125.09	125.09
(iv).	Insurance (VOCPT - 1% on Capital Costs) (TAMP - 1% on Capital Costs)	24.56	24.56
(v).	Depreciation:		
(a).	Mech & Elect works (VOCPT - 6.33% on Mechanical & Electrical Costs) (TAMP - 6.33% on Mechanical & Electrical Costs incl. the component of Mechanical & Electrical costs in Other Capital costs)	107.73	113.11
(b).	Civil Assets (VOCPT - 3.17% on Civil Costs) (TAMP - 3.17% on Civil Costs incl. the component of civil costs in Other Capital costs)	20.21	21.22
(vi).	Rent (License Fee)		
(a).	Conveyor area [VOCPT - (500 * 4.5) sq.mtr. * Rs.1.42 per sq. mtr per annum] [TAMP - (500 * 4.5) sq.mtr. * Rs.1.42 per sq. mtr per annum]	0.03	0.03
(b).	Trucks and Front end loaders [VOCPT - (12 * 3 * 4) + (12 * 3 * 5) sq.mtr. * Rs. 348.68 per sq. mtr.) [TAMP - (12 * 3 * 4) + (12 * 3 * 5) sq.mtr. * Rs. 355.65 per sq. mtr.)	1.20	1.15
(vii).	Other Expense (VOCPT - 5% on Capital Costs) (TAMP - 5% on Capital Costs)	122.82	122.82
	TOTAL OPERATING COST	1,081.67	1,056.55
IV	ANNUAL REVENUE REQUIREMENT		
	(a). Total Operating Cost	1,081.67	1,056.55
	(b). Return on Capital Employed @16%	393.01	393.01
	(c).Total Revenue requirement	1,474.68	1,449.56
V	PER TONNE HANDLING RATE		
	Annual Revenue Requirement (Rs. In Lakhs)	1,474.68	1,449.56
	Optimal Capacity (in Metric Tonnes)	2602888	2602888
	Handling Rate per tonne		
	- Foreign	56.66	55.69
	- Coastal	33.99	33.41

**REFERENCE TARIFF SCHEDULE FOR MECHANIZATION OF LOADING SYSTEM AT THE
EXISTING COAL YARD SYSTEM ON LICENSE BASIS.**

SCALE OF RATES

1.1. DEFINITIONS

In this Scale of Rates, unless the context otherwise requires, the following definitions shall apply:

- (i) **“Coastal Vessel”** shall mean any vessel exclusively employed in trading between any Terminal or place in India to any other Terminal or place in India having a valid coastal license issued by the Director General of Shipping/ Competent Authority.
- (ii) **“Foreign-going Vessel”** shall mean any vessel other than a coastal vessel.
- (iii) **“Port”** shall mean V.O.Chidambaranar Port Trust.
- (iv) **“Shift”** Shall mean shift of eight hours as applicable to Port employees
- (v) **“Per day”** shall mean a calendar day or part thereof
- (vi) **“TAMP”** shall mean the Tariff Authority for Major Ports constituted under Section 47A of the Major Trusts Act, 1963.
- (vii) **“Tonne”** shall means one Metric Tonne or 1000 Kilograms or one cubic meter

1.2. General Terms & Conditions

- (i) The status of the vessel, as borne out by its certification by the Customs or the Director General of Shipping, shall be the deciding factor for its classification as ‘coastal’ or ‘foreign-going’ for the purpose of levying vessel related charges; and, the nature of cargo or its origin will not be of any relevance for this purpose.
- (ii)
 - (a) A foreign going vessel of Indian Flag having a General Trading Licence can convert to Coastal run on the basis of a Customs Conversion Order.
 - (b) A foreign going vessel of Foreign Flag can convert to coastal run on the basis of a Coastal Voyage Licence issued by the Director General of Shipping.
 - (c) In cases of such conversion, coastal rates shall be chargeable by the load Terminal from the time the vessel starts loading coastal goods.
 - (d) In cases of such conversion, coastal rates shall be chargeable only till the vessel completes coastal cargo discharging operations; immediately thereafter, foreign-going rates shall be chargeable by the discharge Terminals.
 - (e) For dedicated Indian coastal vessels having a Coastal Licence from the Director General of Shipping, no other document will be required to be entitled to Coastal rates.
- (iii) Interest on delayed payments/refunds.
 - (a) The user shall pay penal interest on delayed payments of any charge under this Scale of Rates. The rate of interest will be (prescribed at 2% above the Prime Lending Rate of State Bank of India)
 - (b) Likewise, the Terminal shall pay penal interest on delayed refunds. The rate of interest will be (prescribed at 2% above the Prime Lending Rate of State Bank of India)
 - (c) The delay in refunds will be counted beyond 20 days from the date of completion of services or on production of the documents required from the users, whichever is later. (The Terminal must specify specific documents to be submitted for claiming refund).

- (d) The delay in payments by the users will be counted beyond 10 days after the date of raising the bills by the Terminal. This provision shall, however, not apply to the cases where payment is to be made before availing the services as stipulated in the Major Port Trusts Act, 1963 and/or where payment of charges in advance is prescribed in this Scale of Rates.
- (iv) All charges worked out shall be rounded off to the next higher rupee on the grand total of each bill.
- (v) No claims for refund shall be entertained unless the amount refundable is ₹ 100/- or more. Likewise, the license shall not raise any supplementary or under charge bills, if the amount due to Concessionaire is ₹ 100/- or less.
- (vi) (a) The rates prescribed in this Scale of Rates are ceiling levels; likewise, rebates and discounts are floor levels. The licensee may, if it so desires, charge lower rates and/ or allow higher rebates and discounts.
 (b) The licensee may also, if it so desires, rationalize the prescribed conditionalities governing the application of rates prescribed in the Scale of Rates if such rationalization gives relief to the user in rate per unit and the unit rates prescribed in the Scale of Rates do not exceed the ceiling levels. Provided that the licensee should notify the public such lower rates and / or rationalization of the conditionalities governing the application of such rates and continue to notify the public any further changes in such lower rates and / or in the conditionalities governing the application of such rates provided the new rates fixed shall not exceed the rates notified by the TAMP.
- (vii). Users will not be required to pay charges for delays beyond a reasonable level attributable to the operator.

2. Cargo Handling Charges for Mechanized Wagon loading system at coal stack yard:-

	Commodity	Rate per in MT (in Indian Rupees)	
		Foreign	Coastal
1.	Coal, Coke and Limestone	55.69	33.41

Note:-

- (i). The Tariff is for transportation of cargo from coal yard to wagon/ truck through conveyor system.
- (ii). Thermal coal will not come under Coastal Cargo category.

3. GENERAL NOTES:

- (i). The tariff caps will be indexed to inflation but only to an extent of 60% of the variation in Wholesale Price Index (WPI) occurring between 1 January 2015 and 1 January of the relevant year. Such automatic adjustment of tariff caps will be made every year and the adjusted tariff caps will come into force from 1 April of the relevant year to 31 March of the following year.
- (ii). From the date of Commercial Operation (CoD) till 31st March of the same financial year, the tariff would be limited to the indexed Reference Tariff relevant to that year, which would be the ceiling. The aforesaid Reference Tariff shall be automatically revised every year based on an indexation as provided in para 2.2 of the tariff guidelines of 2013 which will be applicable for the entire licence period.

However, the Licensee would be free to propose a tariff along with Performance Standards (the "Performance Linked Tariff") from the second year of operation onwards, over and above the indexed Reference Tariff for the relevant financial year, at least 90 days before the 1st April of the ensuing financial year. Such Performance Linked Tariff shall not be higher than 15% over and above the indexed Reference Tariff for that relevant financial year (and this will be the Tariff Cap). The Performance Linked Tariff would come into force from the first day of the following financial year and would be applicable for the entire financial year.

- (iii). The proposal shall be submitted to TAMP along with a certificate from the independent engineer appointed under the Concession Agreement of the Project indicating the achievement of Performance Standards in the previous 12 months as incorporated in the Licence Agreement or for the actual number of months of operation in the first year of operation as the case may be.
- (iv). On receipt of the proposal, TAMP will seek the views of the Major Port Trust on the achievement of Performance Standards as outlined in para 5 of the tariff guidelines of 2013, within 7 days of receipt.
- (v). In the event of Licensee not achieving the Performance Standards as incorporated in the Licence Agreement in previous 12 months, TAMP will not consider the proposal for notifying the Performance Linked Tariff for the ensuing financial year and the Licensee shall be entitled to only the indexed Reference Tariff applicable for the ensuing financial year.
- (vi). After considering the views of the Major Port Trust, if TAMP is satisfied that the Performance Standards as incorporated in the Concession Agreement have been achieved, it shall notify the performance linked tariff by 15th of March to be effective from 1st of April of the ensuing financial year.
- (vii). While considering the proposal for Performance Linked Tariff, TAMP will look into the Performance Standards and its adherence by the Licensee. TAMP will decide on the acceptance or rejection of the Performance Linked Tariff proposal based on the achievement or otherwise of the Performance Standards by the Licensee. Determination of indexed Reference Tariff and Performance Linked Tariff will follow the illustration shown in the Appendix attached to the tariff guidelines of 2013
- (viii). From the third year of operation, the Performance Linked Tariff proposal from the Licensee shall be automatically notified by TAMP subject to the achievement of Performance Standards in the previous 12 months period as certified by the Independent Engineer. The Licensee, for the Performance Linked Tariff from the third year onwards, will submit the Performance Linked Tariff proposal along with the achievement certificate from the independent engineer by 1st March and TAMP shall notify by 20th March, the Performance Linked Tariff to be effective from the ensuing financial year.

PERFORMANCE STANDARDS

**PERFORMANCE STANDARDS SCHEDULE FOR MECHANIZATION OF LOADING SYSTEM
AT THE EXISTING COAL YARD SYSTEM ON LICENSE BASIS.**

The licensee shall meet both the following Performance Standards:

- (i). The Minimum guaranteed availability of 90% of the Mechanised Loading System per month. The availability shall be calculated for the total mechanized system, and,
- (ii). The Licensee shall complete the loading of half a rake consisting of 30 wagons of each 66 tonnes carrying capacity in 80 (eighty) minutes.

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**SUMMARY OF THE ARGUMENTS MADE IN THIS CASE DURING THE JOINT HEARING BEFORE
THE AUTHORITY.**

TAMP/39/2015-VOCPT	:	Proposal received from the V.O. Chidambaranar Port Trust for fixation of Reference tariff for mechanization of loading system at the existing coal yard system on license basis for 10 years period on revenue share basis
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A joint hearing on the case in reference was held on 26 June 2015 at the VOCPT premises. The VOCPT made a brief power point presentation of its proposal. At the joint hearing, the VOCPT and the concerned users/ organization bodies and Prospective bidders have made the following submissions:

V.O. Chidambaranar Port Trust (VOCPT)

- (i). Port invited tenders for this project and two other projects.
- (ii). Because of poor response, the Board suggested to rework and retender. Before that we had a meeting with trade and concerned port users. Based on the suggestion of port users/ trade, we have revised the computation.
- (iii). This project is to minimize the time of loading of cargo into the railway wagons. It will also reduce dust pollution caused at wagon loading point and improve evacuation rate. Consequently, it will increase cargo turnaround at the stack yard.
- (iv). Number of trucks is increased from 5 nos. to 10 nos. Silos 1 no. is increased to 2 nos. Conveyor capacity reduced from 1500 TPH to 1000 TPH. Hopper also reduced from 4 nos. to 1 no. Yard area is reduced from 416412 sq. mtrs. to 295112 sq. mtrs. in the revised proposal.
- (v). Total capital cost is estimated at ₹.26.14 crores.
- (vi). Total operating cost estimated based on norms prescribed in the guidelines wherever available at ₹.1203.24 lakhs. Total ARR is estimated at ₹.1621.45 lakhs. Rate proposed is ₹.62.29 per tonne.
- (vii). We expect huge increase in wagon loading of cargo through wagon.
- (viii). Based on Feasibility Report submitted by M/s.I-Maritime Consultancy Private Limited the mechanical and electrical works has been considered at ₹.18.52 crores.

M/s.PSTS Logistics Pvt. Ltd.

- (i) Do all stevedores have to go through wagon loading?

[VOCPT: Plot will be allotted to concerned users. For moving cargo from plot through wagon, the PPP operator will offer the service. Only the cargo required to be moved through rail will avail this facility.]

- (ii). What happens if excess cargo goes to silo which is not loaded to railway wagon?

[VOCPT: It will be returned to the concerned user.]
