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TARIFF AUTHORITY FOR MAJOR PORTS

G.No. 68

New Delhi,

17 February 2016

NOTIFICATION

In exercise of the powers conferred under 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 Mumbai Port Trust (MBPT) for fixation of reference tariff for handling of import Liquefied Natural Gas (LNG) cargo for Regasification in the Floating Storage and Regasification Unit (FSRU) in MBPT on PPP basis, as in the Order appended hereto.

(T.S. Balasubramanian)
Member (Finance)

Tariff Authority for Major Ports

Case No. TAMP/68/2015-MBPT

The Mumbai Port Trust

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Applicant

QUORUM

- (i). Shri. T.S. Balasubramanian, Member (Finance)
- (ii). Shri. Rajat Sachar, Member (Economic)

ORDER

(Passed on this 15th day of January 2016)

This case relates to a proposal received from Mumbai Port Trust (MBPT) for fixation of reference tariff for handling of import Liquefied Natural Gas (LNG) cargo for Regasification in the Floating Storage and Regasification Unit (FSRU) in MBPT on PPP basis.

2.1. The MBPT vide its letter No. FA/ACC/195(F)/49 dated 09 November 2015 filed a proposal for fixation of Reference Tariff for handling of import Liquefied Natural Gas (LNG) cargo for Regasification in the Floating Storage and Regasification Unit (FSRU) in MBPT on PPP basis.

2.2. The submissions made by the MBPT in the proposal are summarized below:

- (i). As per the new guidelines of 2013 for determination of tariff for project at Major Ports, Reference tariff for each commodity for each Major Port will be notified by the TAMP.
- (ii). There is no reference tariff available for LNG cargo handled at a Floating Storage and Regasification Unit. Thus, the proposal for upfront tariff fixation has been prepared using the Guidelines for upfront tariff setting for PPP Projects at Major Port Trusts, 2008 (issued by TAMP on 26th February 2008).
- (iii). The project is expected to be awarded in 2016 with a Concession Period of 30 years including 3 years construction period. Thus the Commercial Operations are expected to start in 2019 for which TAMP is required to fix an upfront tariff for the following activities:
 - (a). Berth Hire Charges
 - (b). Wharfage Charges
- (iv). The FSRU facility shall receive only imported LNG. Thus, 100% of the vessels are foreign in nature and there shall be no coastal movement.

3.1. The highlights of the proposal as seen from the supporting documents furnished by the MBPT are summarized below:

- (i). In order to meet the growing market demand of natural gas in the western coast of India, MBPT has decided to pursue the development of Floating Storage and Regasification Unit (FSRU) in Mumbai harbor. For the same, the MBPT has decided to carry out the bidding process for the "Setting up of Floating Storage and Regasification Unit in Mumbai harbour on PPP mode" (the "Project") on Design, Build, Finance, Operate and Transfer ("DBFOT") basis. The project is for setting up of Floating Storage and Regasification Unit of 5 MMTPA capacity along with supporting infrastructure in Mumbai harbour. The support facilities to be developed as part of the project by the Concessionaire are:
 - (a). FSRU vessel with storage capacity of 170,000 cubic meter and 5 MMTPA re-gasified LNG production capacity.

- (b). Marine terminal including berthing and mooring facilities for FSRU and LNG carriers, offloading and transfer, riser systems for gas send-out.
 - (c). Sub-sea pipeline
 - (d). Dredging to cater Q-Max vessels (12.5m draft) with design depth of about -12.5m CD in Turning Circle and Approach Channel and with design depth of -14m CD at the berth.
 - (e). Landfall point facilities for metering station.
- (ii). The MBPT has furnished the Executive Summary of its proposal, which is as follows:

(₹. in crores)

Capital Cost of the Project	
Cargo Handling	349.29
Berth Hire	469.73
Total Capital Cost of the Project	819.02
Return on Capital Employed Required (16%)	
Cargo Handling	55.89
Berth Hire	75.16
Total Return on Capital Employed Required	131.05
Total Operating Expenditure	
Cargo Handling	32.30
Berth Hire	4.70
Total Operating Expenditure	37.00
Total ROCE and Operating Expenses	168.04
Revenue Required	
Cargo Handling	83.78
Berth Hire	79.85
Total Revenues Required Through Tariffs	163.63
Miscellaneous	4.41
Total Revenues Required	168.04
Tariffs Proposed (per ton of LNG) - Rs per Ton	
Wharfage Charges (Composite of all Cargo Handling Charges)	546.51
Berth Hire Charges (per GRT per hour)	0.04472
Tariffs Proposed (per ton of LNG) - USD per Ton	
Wharfage Charges (Composite of all Cargo Handling Charges)	9.11
Berth Hire Charges(per GRT per hour)	0.00075

- (iii). The Physical Features of Facility are as follows:

- (a). Design Ship Size

The design ship size is a Q-Max vessel for the proposed FSRU. The details of the vessel are as under:

			Ship Dimensions	GRT
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Sr. no.	Cargo	Ship Size-Cubic meters	L-m	B-m	D(loaded)-m	
1	LNG	266,000	345	54	12	112,000

(b). Civil Works proposed

- (i). Marine terminal including berthing and mooring facilities for FSRU and LNG carriers.
- (ii). Dredging to cater Q-Max vessels (12.5m draft) with design depth of about -12.5m CD in Turning Circle and Approach Channel with design depth of -14m CD at the berth.
- (iii). Landfall point facilities for metering station

(c). Mechanical Works Proposed

- (i). Offloading and transfer System
- (ii). Riser systems for gas send-out
- (iii). Sub-sea pipeline

(iv). Optimal Terminal Capacity

As per TAMP Guidelines, the capacity of the terminal is mainly dependent on the following factors:

- (a). Type of Cargo to be Handled
- (b). Cargo Mix Ratio
- (c). Size of Vessels to be Handled

The optimal capacity of the terminal is calculated using the following formula:

$$\text{Optimal Capacity} = 0.7 \left\{ \frac{S1}{100} * P1 + \frac{S2}{100} * P2 + \frac{S3}{100} * P3 + \dots \right\} * 365$$

S1 = Percentage Share of capacity of Cargo Type 1

P1 = Handling Rate of vessel carrying Cargo Type 1

S2 = Percentage Share of capacity of Cargo Type 2

P2 = Handling Rate of vessel carrying Cargo Type 2

S3 = Percentage Share of capacity of Cargo Type 3

P3 = Handling Rate of vessel carrying Cargo Type 3

S4, P4, S5, P5 and so on depending on the number of different types of Cargo to be handled at berth.

Using the above formula, the optimal capacity of the terminal is calculated as follows:

S. No	Type of Cargo	% Share of Capacity	Handling Rate		Optimal Berth Capacity	
					1 Berth	Units
(i)	LNG	70%	250	Tons/hour	1.53	MTPA

The above Handling Rate of 250 Tons per hour of LNG cargo is provided in the guidelines issued by TAMP.

(v). Capital Cost and the Annual Operation & Maintenance Cost Estimates as per TAMP Guidelines is given below:

Sl. No	Item Description	Capital Cost (Rs Crore)	Maintenance Norms	O&M Cost (Rs Crore)
A	Cargo Handling			
(i)	Capital Cost	349.29		

(ii)	Operation & Maintenance Costs			
1	Power (@ 4 Tons per day)		@ Rs 36000 per tn	5.26
2	Repair & Maintenance of Civil Assets		1% of the Civil Assets	0
3	Repair & Maintenance of Mechanical and Electrical	313.97	2% of the Mechanical & Electrical equipment	6.28
4	Insurance	349.29	1% of the Asset Block	3.49
5	Depreciation	349.29	3.70% of the Asset Block	12.94
6	License Fee		INR 0.84 Crore @ Rs 150/sqm	0.84
7	Other Expenses	349.29	1% of the Asset Block	3.49
	Total Operation & Maintenance Costs (Cargo Handling)			32.30
B	Berth Activity			
(i)	Capital Cost	469.73		
(ii)	Operation & Maintenance Costs			
1	Repairs and Maintenance cost	469.73	1% of Asset Block	4.70
	Total Operation & Maintenance Costs (Berth Activity)			4.70

Note:

The Fuel requirement of the complete project is about 40 Tons per day. About 10% of the total Fuel Consumption i.e. 4 Tons per day has been assumed as part of the O&M cost of cargo handling.

3.2. The MBPT has submitted the following proposed Scale of Rates (SOR):

(a). Cargo Handling Charges :-

Item Description	Total Amount (Crs.)
Return on Capital Employed (16% of Capital Cost)	55.89
Operation & Maintenance Cost	32.30
Total Revenue Requirement	88.19
Allocation of Revenue Requirement	
Cargo Handling Charges (95%)	83.78
Miscellaneous Charges (5%)	4.41
Total Revenue Requirement (Cargo Handling)	88.19
Wharfage INR per ton of LNG	₹. 546.51
Wharfage USD per ton of LNG	\$ 9.11
\$1 = INR 60 as per conversion rates provided in Model Bid Documents of Ministry of Shipping.	

The proposed Wharfage Charges for LNG cargo has been derived as INR 546.51 per ton. Assuming this Wharfage Charges, about INR 83.78 Crore of the Revenues can be recovered for handling 1.53 MMTPA (optimal Capacity of berth). The above Wharfage Charge is for the year 2019.

(b). Berth Hire Charges:-

Item Description	Total Amount (Crs.)
Return on Capital Employed (16% of Capital Cost)	75.16
Operation & Maintenance Cost	4.70
Total Revenue Requirement	79.85
Allocation of Revenue Requirement	
Berth Hire Charges (100%)	79.85
Berth Hire Rs per ton of LNG	₹. 520.87
Berth Hire Rs GRT per hour of LNG	₹. 0.04472
Berth Hire USD GRT per hour of LNG	\$ 0.00075
\$1 = INR 60 as per conversion rates provided in Model Bid Documents of Ministry of Shipping.	

The proposed Berth Hire Charges for LNG cargo has been derived as INR 0.085 per GRT per hour. Assuming this Berth Hire Charges, about INR 79.85 Crore of the Revenues can be recovered for handling 1.53 MMTA (optimal Capacity of berth). The above Berth Hire Charge is for the year 2019.

3.3. The MBPT has also proposed the Performance Standard which is given below:

Sr.No.	Cargo Category	Performance Indicator
1	LNG Cargo	250 Tonnes/hour

4. In accordance with the consultative procedure prescribed, a copy of the MBPT proposal dated 09 November 2015 was forwarded to the concerned users/ user organisations / Prospective bidders (as furnished by MBPT) seeking their comments. The comments received from some of the users/ user organisations and Prospective bidders were forwarded to the MBPT as feedback information. The MBPT has responded to the comments of the users / user organisations/ prospective bidders vide its letter dated 10 December 2015.

5. Based on a preliminary scrutiny of the proposal, the MBPT was requested vide our letter dated 23 November 2015 to furnish additional information/ clarifications. The MBPT has vide its letter dated 1 December 2015 furnished its reply on additional information/ clarifications sought by us. While furnishing the information /clarification sought by us, the MBPT has revised its proposal. The additional information/ clarifications sought by us and the response of the MBPT thereon is tabulated below:

Sl. No.	Information/ Clarification sought by us	Response by MBPT
A.	General	
(i).	MBPT to certify that the operator of the facility would not be allowed to handle any other cargo, other than Liquefied Natural Gas (LNG) at the proposed Floating Storage and Regasification Unit (FSRU).	The operator would be allowed to handle only LNG for the purpose of re-gasification.
(ii).	From the proposal filed by MBPT, it is seen that the MBPT has formulated the proposal following the norms for fixation of upfront tariff for services rendered at a Liquid Bulk Terminal prescribed in the upfront tariff fixation guidelines of 2008 for approval for	The LNG vessel will directly unload the LNG into the FSRU storage unit, it will be regasified in the regasifying unit and conveyed to the landfall point through subsea pipelines.

	the levy of Cargo handling charges and the Berth hire charges at the FSRU. In this regard, it is relevant to mention here that the 2008 Upfront tariff Guidelines for the Liquid Bulk terminal relied upon by the MBPT to arrive at the rate for the proposed project states that the cargo handling charges include cargo loading/ unloading charges, as the case may be, transportation through pipelines and storage charges. The cost estimates provided by MBPT, do not capture capital and operating cost for storage and pipelines facilities. In this connection, the MBPT to clarify the tariff arrangement for storage of unloaded LNG Cargo and transportation of regasified cargo through pipelines. MBPT to note that the tariff for the services listed under Section 48 and 42 of the MPT Act should be fixed upfront before inviting bids.	Since storage and pipeline facilities are integral part of FSRU, the cost of such facilities is not considered as part of tariff calculation. The Revised proposal is furnished.
(iii)	In the operating cost estimates, one of the cost components indicated by the MBPT is the Licence fees to the tune of ₹ 0.84 crores. However, from the proposal of the port, the details of the total area proposed to be allotted for the facility, its allocation for the various ancillary purposes and the actual area that would be available for storage, is not clear. The MBPT to furnish the requisite details as listed above with workings to arrive at the license fee of ₹ 0.84 crores.	Handling charges and berth hire charges are calculated considering the unloading of LNG into FSRU using the berthing and unloading equipments available at the terminal. Activities in FSRU and beyond FSRU are not considered in the calculation of tariff. Total area is 56000 sq. mtr. and the licence fee is based on approved rate for OCT project i.e. @Rs.150 per sq.mtr.
2.	Optimal capacity:	
	In the optimal capacity calculation, the MBPT has indicated the percentage share of capacity of LNG at 70%. In this regard, MBPT to note that since only LNG is envisaged to be handled at the facility, the percentage share of capacity of LNG is to be considered at 100%. However, the utilisation factor of 70% is to be considered in the calculation of optimal capacity. MBPT to note that this suggested change would not have any impact on the optimal capacity of 1.53 MTPA assessed by MBPT in its proposal.	Optimal capacity calculation has been revised and included part of the revised proposal.
3.	Capital costs:	
(i).	The MBPT in its proposal has indicated the capital cost of the cargo handling activity at ₹ 349.29 crores and that of the Berthing activity at ₹469.73 crores. The Feasibility Report furnished by the MBPT indicates the capital cost for the proposed FSRU at ₹2559.39 crores. In this context, the MBPT to clarify / furnish the following :	The Revised proposal is furnished.
(a)	The reason for the significant difference between the project cost assessed at ₹.2559.39 crores in the Feasibility Report	

	and the total capital cost of ₹819.02 crores (₹ 349.29 crores + ₹469.73 crores).	
(b)	The break-up for the capital cost of ₹349.29 crores considered for the cargo handling activity in terms of civil construction cost, if any, Liquid Cargo Handling Equipment and Miscellaneous Cost of all other facilities required for the proposed facility, supported with documentary evidence for unit cost.	
(c).	Likewise, the break-up for the capital cost of ₹.469.73 crores considered for the berthing activity in terms of cost of construction of berth and cost of dredging, if any, carried out alongside the facility supported with documented evidence for unit cost.	
(ii)	The MBPT to also furnish workings to determine the cost of each type of equipment as considered by MBPT in its calculations.	
(iii)	The MBPT to furnish the basis for the quantum of each item of civil work, if any, considered by it to estimate the civil capital costs under both viz., cargo handling activity and berthing activity.	
(iv)	The MBPT to furnish an analysis supported with workings to justify the number of each type of equipment envisaged to be used at the facility to handle LNG to show that given the productivity of each type of the equipment, the quantity of different equipment commensurate with the quantity of LNG estimated to be handled.	
4.	Operating Costs:	
(i).	Power cost: Considering the power consumption at 4 tons per day unit rate of ₹36000 per ton and by considering the period at 365 days, the MBPT is seen to have arrived at the power cost of ₹ 5.26 crores in the calculation. In this regard, the MBPT to clarify/ furnish the following:	Energy consumption for the facility has been assumed by considerable research through secondary sources in the market. Operating data on other FSRU currently operating across the globe is very limited. Hence, the report available for a similar facility to be set up in Myanmar has been referred to in this case. While 40 tonnes is the fuel required for the entire operation of the FSRU per day (including the regasification), 10% of that is for operations (unloading of LNG into the FSRU).
(a)	MBPT to furnish the basis for considering the power consumption at 4 tons per day with necessary workings.	The facility shall be operated using HSD (High Speed Diesel) as fuel and the cost of HSD has been assumed as ₹.36000 per Ton. Power required for the facility shall be generated through DG set to be installed at the project site. Hence, the project operation will only involve cost of fuel so required.

		As explained earlier most of the assumptions have been validated through secondary research or the limited data available on similar facilities (FSRU)
(b)	It is not clear how the cost of power has been considered at ₹36000/- per ton. MBPT to furnish documentary evidence or workings in support of the proposed rate.	(The MBPT vide its email dated 11 December 2015 has furnished documentary evidence in support of fuel charges. As per the document furnished, the rate for HFHSD at Mumbai is indicated at ₹.63102.46 per tonne)
(c) (i).	Though in the workings, the power consumption has been considered at 4 tons per day, the MBPT in the note given in Annexure VI of its proposal has stated that the fuel requirement of the complete project is about 40 tons per day and that about 10% of the total fuel consumption at 4 tons per day has been considered as part of O & M cost of cargo handling. MBPT to clarify whether the envisaged project would involve power cost or fuel cost.	
(ii)	The basis for considering 10% of the total fuel consumption to be furnished.	(The MBPT vide its separate email dated 11 December 2015 has <i>interalia</i> , stated that the fuel cost of 4 tonnes per day is considered to berth operation days only.)
(ii)(a)	MBPT to confirm whether the rate of depreciation considered at 3.70% on the asset block is as per the provisions of the Companies Act, 2013.	Depreciation rate is assumed in line with Companies Act of 2013. i.e. 30 years for civil assets and 15 years for Mechanical & Electrical assets as per Schedule II of Companies Act 2013.
(b)	If the asset block of ₹.349.29 crores consist of civil cost, equipment cost and Miscellaneous cost, then it is necessary to adopt the rate of depreciation relevant for the concerned item of cost as prescribed in the Companies Act, 2013.	
(c)	The MBPT also to furnish workings for the total deprecation considered giving reference to the requisite prescription contained in the Companies Act, 2013, alongwith a supporting document, indicating the said rate of depreciation.	
(iii).	Licence fees: The MBPT has indicated the licence fee as ₹150/- per sq. mtr It has, however, not indicated the quantum of area considered for calculation of licence fees. Further, in the absence of requisite details/ workings, it is not found possible to check the correctness of the licence fee amount of ₹0.84 crores. The MBPT to, therefore, furnish the basis for considering the said rate by giving reference to its Scale of Rates and supported by necessary workings.	Total area is 56000 sq. mtr and the License fee is based on approved rate for OCT project i.e. @₹.150 per sq.mtr. Subsequently, the MBPT vide its email dated 11 December 2015 has confirmed that the licence fee of ₹.150/- per sq.m per annum has been considered in the proposal.

(iv)	Although the 2008 upfront guidelines restrict the operating cost at 1% of the berth cost, the asset requires adequate insurance coverage and the fact that the value of the asset will depreciate due to wear and tear can also not be denied. While fixing upfront berth hire at the other Major Port Trusts, this position has been recognised and the cost of insurance and depreciation have been considered to assess the annual revenue requirement from berthing service. In view of the position explained above, the element of insurance cost @ 1% and depreciation cost as per the Companies Act, 2013, is estimated by MBPT in this case also while estimating the operating cost for berth hire service. The requisite prescription contained in the Companies Act, 2013, along with a supporting document, indicating the said rate of depreciation to be furnished.	Complied as suggested by TAMP.
5.	Apportionment of Annual Revenue Requirement:	
(a)	Though the MBPT has apportioned 5% of the Annual Revenue Requirement (ARR) relating to the Cargo handling activity towards Miscellaneous charges, no rate is seen to have been proposed by the MBPT towards Miscellaneous charges in the proposed Scale of rates. The MBPT to propose a rate for Miscellaneous charges in the Scale of rates, alongwith a note listing down the services that would be included within the scope of the proposed miscellaneous levy.	Miscellaneous charges has been considered and included in the revised proposal.
(b)	Similarly, the MBPT has not furnished workings to arrive at the proposed berth hire charges from the ARR relating to the berthing activity. Please furnish the same. While doing so, the average number of LNG Carriers envisaged per annum alongwith the average GRT of each LNG Carrier may also been factored in the calculation of berth hire charges.	Calculation for berth hire charges has been included in the Revised proposal.
(c)	Provisions governing levy of priority berthing charges as per the Government policy and keeping in view the provisions prescribed in the existing Scale of Rates of MBPT to be proposed, if required.	As far as FSRU facilities are concerned vessel will only call at the terminal when the operator chooses to call subject to availability of storage volume in the FSRU. Hence, priority berthing is not applicable here.
6.	Scale of Rates:	
(i)	It is desirable that the tariff schedule is formulated in such a way to avoid disputes in future between the Port Trust and the operator and between the operator and the users of the facility. In the proposed tariff	Suggestion of TAMP has been considered in the preparation of the Revised proposal.

	Schedule furnished by MBPT, the following deficiencies are noticed:	
(a)	No definitions for the terms used in the Scale of Rates have been proposed.	
(b)	No conditionality's with reference to levy of berth hire have been proposed.	
(c)	The services that would be covered under the proposed handling charges are not listed.	
(d)	The rate towards 'Miscellaneous charges' has not been proposed.	
(e)	The services covered by the levy of miscellaneous charges are not listed.	
(f)	A general note with regard to indexation of the tariff caps to inflation has not been proposed by the Port in the tariff schedule.	
	The MBPT to take note of the above said deficiencies and also other points, if any, and propose a complete tariff Schedule.	
(ii)	The rate for Cargo handling charges and the berth hire charges is seen to have been prescribed in dollar terms. In this regard, MBPT to note that it has already been decided by this Authority in other upfront/ reference tariff cases that prescribing dollar denominated upfront tariff would not be appropriate which will have a validity of 30 years. Firstly, applying a WPI based escalation on a foreign currency is not correct. Secondly, the foreign exchange variation over the next 30 years cannot be predicted. In case of any abnormal variations, either the users or the operator will have to bear the incidence, depending on which side the appreciation takes place. This Authority has, therefore, been prescribing the upfront tariff in rupee denomination. Therefore, the MBPT to prescribe the proposed charges in rupee terms only.	
(iii)	Incidentally, since no dollar denominated tariff would be prescribed, the conditionalities governing recovery of dollar denominated charges in Indian Rupees, as proposed by the MBPT may not be relevant.	
7.	Performance Standards:	
	The conditionalities governing the performance standards for the various cargoes to be also proposed to avoid ambiguity and dispute in future.	Performance Standard shall only be fixed for unloading of LNG and the same is assumed as 2300T/hr. Subsequently, the MBPT vide its email dated 11 December 2015 has, <i>interalia</i> , confirmed that the performance standard relating to turnaround time of a vessel (30 hours) specified in the proposal is correct.

6. A joint hearing on the case in reference was held on 26 November 2015 at the office of this Authority in Mumbai. The MBPT made a brief power point presentation of its proposal. At the joint hearing, MBPT, users/ user organisations and Prospective bidders have made their submissions.

7.1. As stated earlier, the MBPT while furnishing the information / clarification sought by us, has revised its proposal. Therefore, as agreed at the joint hearing, the MBPT was requested vide our letter dated 30 November 2015 to circulate its revised proposal to all the users/ prospective bidders. All the concerned users / prospective bidders were also requested vide our letter dated 30 November 2015 to furnish their comments on the revised proposal of MBPT with a copy endorsed to this Authority, within a week. The MBPT was also requested to respond to the submissions to be made by the users/ prospective bidders within 3 days thereafter.

7.2. In this connection, MBPT vide its email dated 11 December 2015 has stated that, it has circulated the revised proposal to Prospective Bidders on 01 December 2015, requesting them to offer their comments by 4 December 2015. The MBPT has also stated that, they have not received any comments from bidders and that they presume that the bidders do not have any queries regarding the revised proposal.

8.1. As stated earlier, the MBPT while furnishing the information / clarification sought by us vide its letter dated 01 December 2015 has revised its proposal. A comparative position of the initial proposal of November 2015 vis-à-vis the revised proposal of December 2015 is given below:

Particulars	Proposal dated 09.11.2015	Revised Proposal dated 01.12.2015
<u>Optimal Capacity</u>		
<u>Optimal Quay Capacity</u>		
Share of capacity of LNG (S1)	70%	100%
Handling rate of LNG per hour (Tonnes per Hour) (P1)	250	2300
Optimal Capacity of the Berth (0.7 utilisation * S1 * P1 * 365 days * 24 hours)	1533000	14103600
<u>Optimal Capacity of the Regasification Unit</u>		
Average parcel size (in MT)	Not worked out in the initial proposal	65000
No. of days required to evacuate one parcel of Regasified LNG		4.74
Evacuation of Regasified LNG in MT per day (E)		13698.63
Optimal Capacity of the Regasification Unit (0.7 utilisation * 365 days * E)		3500000
Optimal Capacity (lower of A and B) (in Metric Tonnes)		3500000
Optimal Capacity (in Million Metric Tonnes)	1.53	3.50
<u>Capital Cost</u>	₹ in crores	
<u>Cargo Handling Activity</u>		
(i). Civil Cost		
- Port Control Building	Break up not furnished.	5.00
- Pump House Building		5.00
- Walkways		4.00
- Navigational Aids		6.00
- Miscellaneous Costs @ 5%		1.00
Total	35.32	21.00
(ii). Mechanical/ Equipment Cost		
- Equipment		75.00

- Fire Fighting facilities	Break up not furnished.	25.00
- Piping (material supply)		15.00
- Piping installation		15.00
- Cables and installation		8.00
		(₹ in crores)
- Supports and installation		12.00
- Miscellaneous Costs @ 5%		7.50
Total	313.97	157.50
Total Capital Cost for Handling Activity (i + ii)	349.29	178.50
Berth Hire Activity		
- Unloading platform	Break up not furnished.	20.00
- Mooring Dolphins		36.00
- Breasting Dolphins		64.00
- Port Craft jetty		5.00
- Shore approach facility		25.00
- Dredging		202.00
- Miscellaneous Costs @ 5%		17.60
Total	469.73	369.60
Total capital cost for Berth hire Activity	469.73	369.60
Total Capital Cost (A + B)	819.03	548.10
<u>Operating Cost for Cargo Handling Activity</u>		
		(₹ in crores)
(a). Fuel Cost	5.26	3.68
(b). Repairs and Maintenance		
- Civil Assets	0.00	0.21
- Mechanical & Electrical Equipment including spares	6.28	3.15
(c). Insurance	3.49	1.79
(d). Depreciation	12.94	
- Civil Work		0.70
- Mechanical Work	0	10.50
(e). License Fee (56000 sq.m * 150 per sq.m per annum)	0.84	0.84
(f). Other Expenses (1% on gross value of assets)	3.49	1.79
Total Operating Cost	32.30	22.65
<u>Estimated Revenue Requirement</u>	-	
(a). Total Operating Cost	32.30	22.65
(b). Return on capital Employed @ 16%	55.89	28.56
(c). Total Revenue requirement from cargo handling activity	88.19	51.21
Apportionment of Revenue Requirement		
(a). Cargo Handling Charges (95% of ARR)	83.78	48.65
(b). Miscellaneous Charge (5% of ARR)	4.41	2.56
(d).Total Revenue requirement from cargo handling activity	88.19	51.21
<u>Cargo Handling charge</u>	-	
(a). Cargo Handling Charge		
- Revenue Requirement (Amount in ₹)	8378000000	486523975

- Optimal Capacity of LNG	1530000	3500000
- Per Tonne rate	546.51	139.00
(c). Miscellaneous Charge		
- Revenue Requirement (₹ in INR)	44100000	25606525
- Capacity (Lakh Tonnes per annum)	1533000	3500000
- Miscellaneous Charge (₹ per tonne)	28.82	7.32
<u>BERTH HIRE CHARGES</u>		
<u>Revenue Requirement</u>		
(a). Repairs & Maintenance Charge	4.70	1.58
(b). Depreciation	0.00	5.25
(c). Insurance	0.00	1.58
(d). Other Expenses	0.00	1.58
(e). Maintenance cost on Dredging	0.00	10.61
Subtotal (i)	4.70	20.58
Return on capital Employed @ 16%	75.16	59.14
Total Revenue requirement from Berthing services	79.85	79.72
Berth hire charges (per GRT per hour)	520.87	4.16

8.2. A comparative position of the rates proposed by MBPT in its initial proposal of November 2015 vis-à-vis revised proposal of December 2015 is given below:

(Rate in ₹)

Particulars	Proposal dated 09.11.2015	Revised Proposal dated 01.12.2015
Cargo Handling Charges (per ton of LNG)	546.51	139.00
Berth Hire Charges (per GRT per hour)	US\$ 0.04472	4.16
Miscellaneous	4.41	7.32

9. The proceedings relating to consultation in this case are available on records at the office of this Authority. An excerpt of the comments received and 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>

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

- (i). (a) In order to meet the growing market demand of natural gas in the western coast of India, Mumbai Port Trust (MBPT) has decided to develop a Floating Storage and Regasification Unit (FSRU) in Mumbai harbor on Design, Build, Finance, Operate and Transfer (DBFOT) basis. The scope of the project as envisaged by MBPT involves import of the Liquefied Natural Gas (LNG) into the FSRU and transfer of the Liquefied Natural Gas (LNG) from the FSRU to the Regasification Unit for conversion of LNG into gas at the Regasification Unit and thereafter, distribution of gas through submarine pipeline and national pipeline grid of Gas Authority of India (GAIL) to be supplied to end users. In other words, the project of MBPT involves two stages of operation viz.,
 - (i). Import of LNG at the berth and transfer of the LNG from the berth to the Regasification Unit.
 - (ii). Conversion of LNG into gas at the Regasification Unit and distribution of gas through submarine pipeline and national pipeline grid of Gas Authority of India (GAIL) to be supplied to end users.

- (b). However, the proposal of the MBPT is to the limited extent of fixing Reference Tariff for offloading of Import LNG Cargo from LNG carriers in the FSRU unit in pursuance of the Reference Tariff Guidelines. In this regard, it is relevant to mention here that Section 48(1) of the Major Port Trusts Act, 1963, (MPT Act) read with Section 42 mandates this Authority to frame Scale of Rates at which, and a statement of conditions under which, any of the services specified under Section 48(1) shall be performed by a Board or any other person authorised under section 42 at or in relation to the port or port approaches. The services specified under Section 48(1) includes landing of goods from vessels to any berth, among other places, within the limits of the port or port approaches. The services specified thereunder also includes storage of goods on any such place.

The envisaged project involves construction of berthing structure and the role of the BOT operator is to receive LNG carriers, thereat among other roles. One of the services of the BOT operator of receiving cargo (LNG) is also covered by Section 42 of the MPT Act. The BOT operator will also store the LNG cargo received at the Project. The MBPT has reported that the location of the project is within the Mumbai Port Limits. Thus, with regard to the MBPT proposal in reference, this Authority is required to fix tariff in relation to the 1st stage of operation viz., Import of LNG at the berth and transfer of the LNG from the berth to the Regasification Unit, including storage of LNG cargo at the facility, which falls within the ambit of tariff regulation as per provisions of the MPT Act.

The 2nd stage of operation (relating to conversion of LNG into gas at the Regasification Unit) is not covered either by Section 48 or section 42 of the MPT Act.

- (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. Since there is no reference tariff available for offloading of LNG cargo at a FSRU at any other Major Port Trust, the MBPT has come up with a proposal to fix Reference tariff based on the 2008 Upfront tariff guidelines, in line with the stipulation contained in clause 2.4 of the Reference Tariff Guidelines. The MBPT has furnished the proposed Reference Tariff Schedule and the Performance Standards.
- (iii). The cargo proposed to be handled under this project is LNG only, as confirmed by the MBPT. Based on this position, the MBPT is seen to have considered the norms prescribed in the 2008 upfront tariff guidelines for a Liquid terminal, as base to arrive at the handling charges. The approach adopted by MBPT to consider the norms prescribed in the 2008 upfront tariff guidelines for a liquid terminal, as base to arrive at the handling charges of LNG, is considered in this analysis.
- (iv). The MBPT had initially filed the proposal in November 2015. Subsequently, while responding to the additional information/ classification sought by us, the MBPT vide its letter dated 01 December 2015 has revised its proposal. The revised proposal of December 2015 alongwith the information/ clarification furnished by the MBPT during the proceedings of the case in reference is considered in the analysis.
- (v). Optimal Capacity:
- (a). Quay capacity:
- (i). In its initial proposal of November 2015, the MBPT, based on the upfront tariff fixation guidelines for liquid cargo terminal, had worked out the optimal capacity of the facility at 1.53 million MT per

annum, based on the handling of 100% LNG cargo and by considering the handling rate in respect of the LNG at 250 tonnes/ hour for 24 hours and 365 days at 70% utilization.

- (ii). Subsequently, in its revised proposal of December 2015, the MBPT, on the ground that the unloading rate of 250 tonnes per hour as prescribed in the TAMP guidelines is with reference to lower capacity LNG vessels and that since they envisage handling of higher capacity vessels, MBPT is seen to have calculated the capacity at 14.103600 million MT per annum, by considering the unloading rate at 2300 tonnes per hour for 24 hours and 365 days at 70% utilization of the capacity.
- (b). Capacity of the Regasification Unit:
 - (i). Considering the average parcel size of LNG Vessels at 65000 tonnes and considering the time taken to evacuate one parcel of Regasified gas at 4.74 days, the MBPT has arrived at the optimal capacity of the Regasification unit by considering the operation for 365 days and at 70% utilization at 3.50 million metric tonnes per annum i.e. $[(65000 / 4.74) * 365 * 70\%]$.
 - (ii). The average parcel size of LNG Vessels at 65000 tonnes is reported to be based on the market details. The evacuation output per day of regasified LNG, which is worked out at 13698.63 tonnes (65000 / 4.74 days) is reported to be based on a primary research. A slight calculation error in the working of MBPT in the evacuation output per day of regasified LNG has been rectified. The average parcel size of the vessel and evacuation rate as furnished by the MBPT are relied upon.
 - (iii). Based on the above slight moderation, the optimal capacity of the regasification unit has been worked out at 3503692 tonnes per annum, instead of 3500000 tonnes per annum calculated by the MBPT.
- (c). Thus, 3.50 million metric tonnes per annum, being the lower among the two capacities viz., quay capacity of 14.10 million metric tonnes per annum and capacity of the regasification unit at 3.50 million metric tonnes per annum, has been considered as the optimal capacity of the facility.
- (d). The optimal capacity is a critical factor in determination of the reference tariff and if the parameters considered in determining the reference tariff now, is improved at a later date, it may result in unintended gain to the operator. In the case in reference, it can be seen that there is a wide gap in the two capacities viz., quay capacity and capacity of the regasification unit. In other words, the quay has a capacity to handle upto 14.10 million metric tonnes per annum, however, in view of the limitation in the capacity of the regasification unit, the optimal capacity of the facility has been restricted by the MBPT to the capacity of the regasification unit. In such a scenario, there is a possibility that in the event of development of more regasification units at a later stage it may result in unintended gain to the operator. In view of the above position, it is brought to the notice of the MBPT that the tariff is subject to review in the event of development of more Regasification units, which may lead to increase in the optimal capacity of the Regasification units. In this connection, the port is advised to incorporate an appropriate clause to this effect in the bid documents to be issued and in the BOT agreement to be signed with the successful bidder. It is relevant to state that a similar approach was adopted in case of fixation of upfront tariff for dry bulk terminal off Tekra near Tuna at port of Kandla and while fixing the

tariff for the Single Point Mooring (SPM) operations and allied facilities in Gulf of Kutch at the Kandla Port Trust in January 2011.

(vi). Capital costs:

(a). The total cost of the project is envisaged at ₹ 548.10 crores. Out of this, ₹ 178.50 crores is towards cargo handling activity and the balance ₹ 369.60 crores is towards berthing activity.

(b). Cargo handling activity:

(i). Out of the capital cost pertaining to cargo handling activity at ₹178.50 crores, the cost of civil assets comprising of cost of Port Control Building, Pump House Building, Walkways and Navigational Aids and Miscellaneous cost at 5% of the cost of civil assets, is envisaged at ₹ 21 crores.

(ii). The upfront tariff guidelines broadly indicate the civil works involved for the liquid cargo terminal and require the port to estimate the civil cost. The nature of the civil works proposed to be undertaken at the facility generally adheres to normative list of civil works stipulated in the guidelines for the liquid cargo terminal.

(iii). In spite of a specific request, the MBPT has not furnished the basis for the quantum of each item of civil work considered by it to estimate the civil capital costs under cargo handling activity. Nevertheless, the civil cost considered by the MBPT in its proposal is seen to be as per the Feasibility Report and hence relied upon in the analysis.

(iv). The cost of equipment considered at ₹ 157.50 crores comprises of cost of Equipment, Fire Fighting facilities, Piping (material supply), Piping installation, Cables and installation, Supports and installation and Miscellaneous Costs @ 5% of the Equipment cost.

(v). In spite of a specific request, the MBPT has not furnished any analysis supported with workings to justify the number of each type of equipment envisaged to be used at the facility to handle LNG to show that given the productivity of each type of the equipment, the quantity of different equipment commensurate with the quantity of LNG estimated to be handled. The MBPT has also not furnished any documentary evidence in support of cost of each of the equipment. Nevertheless, the equipment costs considered by the MBPT in its proposal is seen to be as per the Feasibility Report and hence relied upon in the analysis.

(vi). Under the civil capital cost and equipment cost, the JNPT has considered miscellaneous capital cost @ 5% of the estimated civil cost and equipment cost respectively. In this regard, it is relevant to mention here that the Upfront tariff guidelines of 2008 stipulate estimating Miscellaneous capital cost @ 5% of the total of the estimated civil and equipment. The MBPT instead, has separately considered the miscellaneous cost under the respective category of Capital cost.

(c). Berthing activity:

(i). The MBPT has estimated the capital costs relating to berthing activity to the tune of ₹369.60 crores. This estimated cost pertains to Unloading platform, Mooring Dolphins, Breasting Dolphins, Port

Craft jetty, Shore approach facility, Dredging and Miscellaneous cost @ 5%.

- (ii). In spite of a specific request, the MBPT has not furnished the basis for the quantum of each item of civil work considered by it to estimate the civil capital costs including the cost of dredging under berthing activity. Nevertheless, the civil costs considered by the MBPT in its proposal is seen to be as per the Feasibility Report and hence relied upon in the analysis.
- (iii). The MBPT has considered miscellaneous capital cost @ 5% of the estimated capital cost relating to berthing activity. Though the Upfront tariff fixation guidelines of 2008 stipulate estimation of Miscellaneous capital cost @ 5% of the total of the estimated civil cost in case of handling activity, the guidelines do not specifically provide for estimation of miscellaneous capital cost under berthing service. It is noteworthy that in many cases relating to fixation of the upfront tariff for various projects at various major port trusts, the miscellaneous capital cost at 5% has been considered to meet contingencies under the Berthing Service. Keeping in view the position considered in the various cases, the miscellaneous capital cost under the berthing activity at 5% of the capital cost of berth is taken into account, as proposed by the port.
- (vii). Return on capital employed is calculated at 16% of the estimated capital cost as per the norms prescribed in the guidelines.
- (viii). Operating cost:
 - (a). Cargo Handling activity:
 - (i). Fuel cost:
 - (a). The fuel cost has been estimated by the MBPT by considering a consumption of 4 tonnes of fuel per day for 256 days at the rate of ₹ 36000 per tonne of fuel.
 - (b). The MBPT has stated that while 40 tonnes of fuel would be required for the entire operation of the FSRU per day (including the regasification), 10% of 40 tonnes i.e. 4 tonnes of fuel has been considered by it towards operation relating to unloading of LNG into the FSRU. The assumption of consumption of 4 tonnes of High Speed Diesel (HSD) per day is reported to be based on considerable research through secondary sources in the market and based on operating data on other FSRUs. The position as reported by the MBPT is relied upon.
 - (c). Given that the fuel is envisaged to be utilized towards operation relating to unloading of LNG into the FSRU, the MBPT has subsequently stated that the fuel cost of 4 tonnes per day is considered towards berth operation days only. Since the operation at the berth would be for about 63.41 days i.e. $[3.5 \text{ MMTPA} / (2300 \text{ tonnes per hour} \times 24 \text{ hours})]$, the fuel cost has been considered in respect of 63.41 days, as requested by MBPT.
 - (d). When requested to furnish documentary evidence in support of the fuel cost of ₹ 36000/- per tonne, the MBPT has furnished a document which reflects the cost of per

tonne of HSD at ₹ 63102.46. The same has been considered in our analysis.

- (ii). Power cost:
According to MBPT, the power required for the facility shall be generated through DG set to be installed at the project site as well as the Boil-Off-Gas (BOG) returned to the LNG Vessel for liquefaction and storage and hence, the MBPT has not taken into account any power cost in its proposal.
- (iii). Repairs and maintenance cost has been estimated by the MBPT at 1% of the civil assets and 2% of the equipment costs. This is seen to be in line with the norms prescribed in the guidelines and hence accepted.
- (iv). Insurance cost and other expenses each has been estimated by MBPT at 1% of the gross fixed assets. This is also seen to be in line with the norms prescribed in the guidelines and hence accepted.
- (v). Depreciation has been computed by MBPT @ 3.34% on civil cost and 6.67 % on equipment cost. The rate of depreciation on civil cost and equipment cost have been considered at 3.17% and 6.33% respectively in line with the rates of depreciation prescribed in the Companies Act, 2013.
- (vi). Licence fee has been calculated by the MBPT for an area of 56000 sq. metres at the rate of ₹ 150/- per sq.m per annum. The rate of License fee at ₹ 150/- per sq.m is reported to be based on approved rate for Off-shore Container Terminal (OCT) project at MBPT. This position is relied upon.

(b). Berthing activity:

The guidelines require the operating cost for berthing service to be estimated at 1% of the berth cost. In addition to operating cost, the MBPT has considered insurance, depreciation, other expenses and maintenance dredging, while estimating the operating cost of berthing service.

Although the guidelines restrict the operating cost at 1% of the berth cost, the asset requires adequate insurance coverage and the fact that the value of the asset will depreciate due to wear and tear can also not be denied. While fixing upfront berth hire at the other Major Port Trusts, this position was recognised and the cost of insurance and depreciation were considered to assess the annual revenue requirement from berthing service.

In view of the position explained above, the element of insurance cost @ 1% and depreciation cost @ 3.17% are considered in this case also while estimating the operating cost for assessment of the revenue requirement from berth hire service. However, cost towards 'Other Expenses' considered by MBPT is not considered in our analysis. There is no provision to consider other expenses in the guidelines. Further, given that the maintenance cost on the capital cost of dredging has been taken into account by us, no separate component of maintenance dredging is considered as cost under berthing activity. On the whole, there is only marginal difference of ₹.1.47 crores between the amount computed by MBPT and the amount computed by us.

- (ix). The statement for fixing Reference tariff submitted by the MBPT has been modified in line with the above analysis. A copy of the modified statement is attached as **Annex - I**.

(a). Cargo handling activity:

- (i). The annual revenue requirement for the cargo handling activity which is the sum of the operating cost and return on capital employed works out to ₹ 48.57 crores as against the annual revenue requirement of ₹ 51.27 crores, as estimated by the MBPT.
- (ii). The MBPT has apportioned 95% of the total revenue requirement towards handling charges and 5% towards miscellaneous charge, as stipulated in the upfront guidelines for liquid bulk terminal.
- (iii). Considering the estimated annual revenue requirement pertaining to the cargo handling activity and the optimal capacity, the per tonne handling rate in respect of the LNG cargo works out to ₹ 131.68 per tonne as against ₹ 139/- per tonne proposed by the MBPT.
- (iv). Based on the position that the FSRU facility shall receive only imported LNG and that there shall be no coastal movement, the entire 100% of the LNG cargo as well as the no. of the vessels have been considered as foreign in nature. This position is relied upon in the analysis. However, for the sake of prescription, coastal rate for handling LNG has been prescribed at 60% of the cargo related charges, in line with the Government policy.
- (v). Considering 5% of the total revenue requirement related to handling activity and the total optimal capacity, the miscellaneous levy works out to ₹ 6.93 per tonne. The miscellaneous levy is seen to cover miscellaneous services such as cleaning the wharf, flow metering, pollution control etc.

(b). Berthing activity:

Based on the analysis explained earlier, the revenue requirement from berthing service works out to ₹ 78.24 crores, as against ₹ 79.72 crores as estimated by the MBPT. The MBPT has proposed berth hire for foreign going vessel at ₹ 4.16 per GRT per hour or part thereof.

Considering the ship day output of 55200 tonnes per day (2300 tonnes x 24 hours), optimal capacity and parcel size of the vessels, the MBPT has arrived at the number of berth days. Thereafter, by considering the factor of 24 hours per day, the MBPT has arrived at the number of berth hours. Thereafter, considering the GRT of the vessels, the MBPT has arrived at the total GRT hours. Thus, by taking into account the annual revenue requirement from berthing activity and the total GRT hours, the MBPT has arrived at the berth hire charge of ₹ 4.16 per GRT per hour. The approach adopted by the MBPT to arrive at the berth hire charges is in line with the approach adopted in fixation of other reference tariff cases. However, a minor change in the optimal capacity (as discussed earlier) has resulted in the berth hire charge of ₹ 4.076 per GRT per hour instead of ₹ 4.16 per GRT per hour as proposed by the port.

It has already been decided by this Authority while finalising the upfront/ reference berth hire at the other Major Port Trusts to approve the berth hire charge in Rupee term only. The proposal of the MBPT for rupee

denominated berth hire is in line with the decision taken by this Authority in the other upfront/ reference tariff cases.

- (x). In the proposed reference tariff schedule, the MBPT has proposed definitions for common terms like "foreign vessel" and "per day". These definitions are found to be in line with the definitions prescribed for the respective terms in the other Reference tariff cases and Scale of Rates of other major ports and private terminals. The MBPT has also defined FSRU as 'Floating Storage and Regasification Unit'.
- (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.'

The definition of Coastal Vessel as proposed by the MBPT is also in line with the above mentioned definition of 'Coastal Vessel'.

- (xii). In the proposed reference tariff schedule, under the heading of 'Definitions', the MBPT has proposed a note to the effect that a day shall be reckoned as a calendar day from 0800 hours to 0800 hours or part thereof for the purpose of demurrage charges. This note has been replaced with 'Day Shall mean the period starting from 0800 hours of a day and ending at 0800 hours of the following day', in line with the definition prevailing in the existing Scale of Rates of MBPT.
- (xiii). The MBPT has proposed general conditionalities prescribing criteria for categorization of a vessel as a foreign going vessel or coastal vessel. These proposed conditionalities have been modified in line with the amendments effected vide Order no. TAMP/53/2015-VOCPT dated 26 November 2015, wherein all the Major Port Trusts have been directed to amend their existing Scale of Rates by suitably incorporating the amended provisions.
- (xiv). The MBPT has proposed some general conditionalities like conditionalities governing levy of interest on delayed payments/ refunds, rounding off bills, non-levy of charges for delay beyond a reasonable level attributable to the terminal operator, rounding off weight, not entertaining refund claims for amount less than ₹ 100/-, which are found to be in line with the general conditionalities prescribed in the Upfront tariff schedule of various major port trusts.
- (xv). The conditionalities prescribing 60% concessional tariff and conditionalities governing the flexibility provided to the terminal operator to levy charges lower than ceiling rates, which have not been proposed by MBPT, are also prescribed in the Reference tariff schedule.
- (xvi). In the Berth hire Schedule, the common conditionalities like the period of berth hire to be calculated from the time vessel occupies the berth, Berth hire includes charges for services rendered at the berth, such as occupation of berth, rubbish removal, cleaning of berths, fire watch, etc, and no berth hire to be levied for the period when the vessel idles at the berth for continuous one hour or more due to breakdown of terminal operator's equipment or power or for any other reasons attributable to the terminal operator, stoppage of berth hire after the vessel signaling readiness to sail, exclusion of the ship's waiting time for want of favorable tide conditions, inclement weather, and due to lack of night navigation in the time limit of 4 hours prescribed for the cessation of berth hire, Penal Berth hire to be equal to one-day's (24 hours)

berth hire charge for a false signal, definition for “False signal”, are seen to be in line with the conditionalities prescribed at the Scale of Rates of the port and also in other upfront/ reference tariff Schedule.

- (xvii). The MBPT has proposed a provision under the Schedule of Cargo handling charges to state that the handling charges prescribed is a composite charge for (i) unloading of the cargo from the vessel in to the FSRU storage tanks and (ii) Usage of Loading/ unloading equipment. The MBPT has also stated that the composite charge includes wharfage and supply of labour, wherever necessary. The proposed note is approved.
- (xviii). Under the Miscellaneous charge schedule, a note has been prescribed stating that miscellaneous charge is a composite charge for provision of all miscellaneous services such as cleaning the wharf, flow metering, pollution control etc. The proposed note is approved.
- (xix). As per clause 2.8 of the upfront tariff Guidelines of 2008, 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 2008 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. In the instant case, since the estimation of capital cost and unit rate of operating cost considered in the reference tariff calculation are as of the year 2015, it is found appropriate and relevant to prescribe the base WPI to be considered for automatic adjustment every year as on 1 January 2015.
- (xx). 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 may not be unreasonable to assume that the ports would propose reasonable and achievable Performance Standard.

The MBPT has proposed the Performance Standards for handling of import LNG cargo for regasification in the FSRU. The MBPT has stated the Gross Berth Output to be 2300 MT/hour and the Turnaround Time for the vessels at 30 hours.

The prescription of Gross Berth Output at 2300 MT/ hour is seen to be as per the ship day output considered in the optimal capacity calculation and hence is prescribed as one of the Performance Standard. The Turnaround Time for the vessels at 30 hours may also be prescribed as another Performance Standard.

Recognizing that clause 2.2. of the revised guidelines of 2013 requires this Authority to notify the Performance Standards, the Performance Standards as proposed by the MBPT, is notified along with the Reference Tariff Schedule.

11.1. Subject to above, the Reference Tariff Schedule along with conditionalities governing the Reference Tariff has been modified.

11.2. The modified Reference Tariff Schedule is attached as **Annex-II** and the Performance Standards as proposed by the MBPT is attached as **Annex-III**.

11.3. In the result, and for the reasons given above and based on a collective application of mind, this Authority approves the modified Reference Tariff Schedule and notifies it alongwith the Performance Standards.

11.4. 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 MBPT is advised to incorporate the Reference Tariff and Performance Standards, in the bid document and subsequently in the Concession Agreement in respect of PPP Projects as agreed by the port.

12.1. 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 concession period.

However, the PPP operator 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.

12.2. The proposal shall be submitted to this Authority 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 Concession Agreement or for the actual number of months of operation, in the first year of operation as the case may be.

12.3. On receipt of the proposal, this Authority will seek the views of the MBPT on the achievement of Performance Standards as outlined in para 5 of the tariff guidelines of 2013, within 7 days of receipt.

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

12.5. After considering the views of the MBPT, if this Authority 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.

12.6. While considering the proposal for Performance Linked Tariff, this Authority will look into the Performance Standards and its adherence by the Operator. This Authority 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 operator. Determination of indexed Reference Tariff and Performance Linked Tariff will follow the illustration shown in the Appendix attached to the tariff guidelines of 2013.

12.7. From the third year of operation, the Performance Linked Tariff proposal from the PPP operator 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 PPP operator, 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.

12.8. In the event any user has any grievance regarding non-achievement by the PPP operator of the Performance Standards as notified by this Authority, he may prefer a representation to this Authority which, thereafter, shall conduct an inquiry into the representation and give its finding MBPT. The MBPT will be bound to take necessary action on the findings as per the provisions of the respective Concession Agreement.

12.9. Within 15 (fifteen) days of the signing of the Concession Agreement, the concerned operator will forward the Concession Agreement to this Authority which will host it on its website.

12.10. The PPP operator shall furnish to this Authority quarterly reports on cargo traffic, ship berth day output, average turnaround time of ships, average pre-berthing waiting time 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.

12.11. This Authority shall publish on its website all such information received from PPP operator. However, this Authority shall consider a request from any PPP operator about not publishing certain data/ information furnished which is 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. Authority's decision in this regard would be final.

(T.S. Balasubramanian)
Member (Finance)

**REFERENCE TARIFF CALCULATION FOR HANDLING OF IMPORT LNG CARGO FOR REGASIFICATION IN THE
FLOATING STORAGE REGASIFICATION UNIT (FSRU) IN MUMBAI HARBOUR OF MUMBAI PORT TRUST.**

₹ in crores			
Sr. No.	Particulars	Estimates furnished by MBPT vide its revised proposal dated 01.12.2015	Estimates modified by TAMP
I	<u>Optimal Capacity</u>		
A	<u>Optimal Quay Capacity</u>		
(a)	Share of capacity of LNG (S1)	100%	100%
(b)	Handling rate of LNG per hour (P1)	2300	2300
(c)	Optimal Capacity of the Berth (0.7 utilisation * S1 * P1 * 365 days * 24 hours)	14103600	14103600
B	<u>Optimal Capacity of the Regasification Unit</u>		
(a)	Average parcel size (in MT)	65000	65000
(b)	No. of days required to evacuate one parcel of Regasified LNG	4.74	4.74
(c)	Evacuation of Regasified LNG in MT per day (E)	13698.63	13713.08
(d)	Optimal Capacity of the Regasification Unit (0.7 utilisation * 365 days * E)	3500000	3503692
C	<u>Optimal Capacity (lower of A and B) (in Metric Tonnes)</u>	3500000	3503692
	<u>Optimal Capacity (in Million Metric Tonnes)</u>	3.50	3.50
II	<u>Capital Cost</u>		
A.	<u>Cargo Handling Activity</u>	₹ in crores	
	<u>(i). Civil Cost</u>		
	- Port Control Building	5.00	5.00
	- Pump House Building	5.00	5.00
	- Walkways	4.00	4.00
	- Navigational Aids	6.00	6.00
	- Miscellaneous Costs @ 5%	1.00	1.00
	Total	21.00	21.00
	<u>(ii). Mechanical/ Equipment Cost</u>		
	- Equipment	75.00	75.00
	- Fire Fighting facilities	25.00	25.00
	- Piping (material supply)	15.00	15.00
	- Piping installation	15.00	15.00
	- Cables and installation	8.00	8.00
	- Supports and installation	12.00	12.00
	- Miscellaneous Costs @ 5%	7.50	7.50
	Total	157.50	157.50
	Total Capital Cost for Handling Activity (i + ii)	178.50	178.50
B.	<u>Berth Hire Activity</u>		
	- Unloading platform	20.00	20.00
	- Mooring Dolphins	36.00	36.00
	- Breasting Dolphins	64.00	64.00
	- Port Craft jetty	5.00	5.00
	- Shore approach facility	25.00	25.00
	- Dredging	202.00	202.00
	- Miscellaneous Costs @ 5%	17.60	17.60
	Total	369.60	369.60
	Total capital cost for Berth hire Activity (i + ii)	369.60	369.60
	Total Capital Cost (A + B)	548.10	548.10
III	<u>Operating Cost for Cargo Handling Activity</u>		
		₹ in crores	
(a).	Fuel Cost	3.68	1.60
	(MBPT - 4 tonnes/ day * 256 days * Rs. 36000 per tonne)		
	(TAMP - 4 tonnes/ day * 63.41 days * Rs. 63102.46 per tonne)		
(b).	Repair & Maintenance		
	- Civil Assets	0.21	0.21
	(MBPT - (1% on civil work)		
	(TAMP - 1% on civil work)		
	- Mechanical & Electrical Equipment including spares	3.15	3.15
	(MBPT - 2% on equipment cost)		
	(TAMP - 2% on cost of equipment)		
(c).	Insurance (1% on Gross fixed assets)	1.79	1.79
(d).	Depreciation		
	- Civil Work	0.70	0.67
	(MBPT - 3.33% on civil assets)		
	(TAMP - 3.17% on civil assets)		
	- Mechanical Work	10.50	9.97
	(MBPT - 6.67% on mechanical assets)		
	(TAMP - 6.33% on mechanical assets)		
(e).	License Fee (56000 sq.m * 150 per sq.m per annum)	0.84	0.84
(f).	Other Expenses (1% on gross value of assets)	1.79	1.79
	Total Operating Cost	22.65	20.01

Sr. No.	Particulars	Estimates furnished by MBPT vide its revised proposal dated 01.12.2015	Estimates modified by TAMP	
IV	Estimated Revenue Requirement & upfront tariff for Cargo Handling Activity			
A.				
(i).	Estimated Revenue Requirement			
	(a). Total Operating Cost	22.65	20.01	
	(b). Return on capital Employed @ 16%	28.56	28.56	
	(c). Total Revenue requirement from cargo handling activity	51.21	48.57	
(ii).	Apportionment of Revenue Requirement			
	(a). Cargo Handling Charges (95% of ARR)	48.65	46.14	
	(b). Miscellaneous Charge (5% of ARR)	2.56	2.43	
	(d).Total Revenue requirement from cargo handling activity	51.21	48.57	
(iii).	Cargo Handling charge			
	(a). Cargo Handling Charge			
	- Revenue Requirement (Amount in ₹)	486523975	461376818	
	- Optimal Capacity of LNG	3500000	3503692	
	- Per Tonne rate for handling of Iron & Steel & Project Cargo	139.00	131.68	
	(c). Miscellaneous Charge			
	- Revenue Requirement (₹ in lakhs)	25606525	24282990	
	- Capacity (Lakh Tonnes per annum)	3500000	3503692	
	- Miscellaneous Charge (₹ per tonne)	7.32	6.93	
B.	BERTH HIRE CHARGES			
(i).	Revenue Requirement	₹ in crores		
	(a). Repairs & Maintenance Charge (1% on capital cost for berth)	1.58	3.70	
	(b). Depreciation	5.25	11.72	
	(MBPT - 3.33% on civil assets) (TAMP - 3.17% on civil assets)			
	(c). Insurance (1% on total cost for berth hire service)	1.58	3.70	
	(d). Other Expenses (1% on the capital cost for berth)	1.58	0.00	
	(e). Maintenance cost on Dredging (5% on the dredging cost)	10.61	0.00	
	Subtotal (i)	20.58	19.11	
(ii).	Return on capital Employed @ 16%	59.14	59.14	
	Total Revenue requirement from Berthing services (i + ii)	79.72	78.24	
	Berth Hire Calculation			
Sr. No.	Particulars	Unit	As furnished by MBPT	As modified by TAMP
i	Ship day output	Tonnes/hour	2300	2300
ii.	Ship day output {24 x (i)}	Tonnes/day	55200	55200
iii.	Average GRT	Tonnes	126000	126000
iv.	Average parcel size	Tonnes	65000	65000
v.	Tonnage expected to be handled	Tonnes	3500000	3503692
vi.	Average no. of berth days (v / ii)	Days	63	63
vii	No. of berth hours {24 x (vi)}	Hours	1522	1523
viii.	Expected number of vessels (v / iv)	Nos.	54	54
ix.	Total GRT hours (iii x vii)	GRT hours	191739129	191941387
x.	Revenue Requirement	Rupees	797207500	782443200
xi.	Berth hire Charge for foreign going vessels (Rate per GRT per hour) in ₹ (x / ix)	Rupees	4.16	4.076
xii.	Berth hire Charge for Coastal vessels (Rate per GRT per hour) in ₹ (xi x 60%)		2.495	2.446

**SCALE OF RATES FOR HANDLING OF IMPORT LNG CARGO FOR REGASIFICATION IN THE
FLOATING STORAGE REGASIFICATION UNIT (FSRU) IN MUMBAI HARBOUR OF MUMBAI
PORT TRUST.**

1.1. DEFINITIONS

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

- (i). **“Coastal Vessel”** means 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 license issued by the competent authority.
 - (ii). **“Foreign Vessel”** means any vessel other than a coastal vessel.
 - (iii). **“FSRU”** means Floating Storage and Regasification Unit
 - (iv). **“Per day”** means per calendar day unless otherwise stated.
- Note: Day Shall mean the period starting from 0800 hours of a day and ending at 0800 hours of the following day.

1.2. GENERAL TERMS AND 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). System of classification of vessel for levy of Vessel Related Charges (VRC)
 - (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. Such vessel that converts into coastal run based on the Customs Conversion Order at her first port of call in Indian Port, no further custom conversion is required, so long as it moves on the Indian Coast.
 - (b). A Foreign going vessel of foreign flag can convert to coastal run on the basis of a Specified Period Licence issued by the Director General of Shipping and a custom conversion order.
- (iii). Criteria for levy of Vessel Related Charges (VRC) at Concessional Coastal rate and foreign rate
 - (a). In cases of such conversion, coastal rates shall be chargeable by the load port from the time the vessel starts loading coastal goods.
 - (b). In cases of such conversion coastal rates shall be chargeable till the vessel completes discharging operations at the last call of Indian Port; immediately thereafter, foreign going rates shall be chargeable by the discharge ports.
 - (c). 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.
- (iv). Criteria for levy of Cargo Related Charges (CRC) at Concessional Coastal rate
 - (a). Foreign going Indian Vessel having General Trading License issued for ‘worldwide and coastal’ operation should be accorded applicable coastal rates with respect to Handling Charges (HC) i.e. ship to shore transfer and

transfer from/ to quay to/ from storage yard including wharfage in the following scenario:

- (i). Converted to coastal run and carrying coastal cargo from any Indian Port and destined for any other Indian Port.
- (ii). Not converted* to coastal run but carrying coastal cargo from any Indian Port and destined for any other Indian Port.
* The Central Board of Excise and Customs Circular no.15/2002-Cus. dated 25 February 2002 allows carriage of coastal cargo from one Indian port to another port in India, in Indian flag foreign going vessels without any custom conversion.
- (b). In case of a Foreign flag vessel converted to coastal run on the basis of a Specified Period License issued by the Director General of Shipping, and a Custom Conversion Order, the coastal cargo/ container loaded from any Indian Port and destined for any other Indian Port should be levied at the rate applicable for coastal cargo/ container.
- (v)
 - (a). The Vessel related charges for all Coastal vessels should not exceed 60% of the corresponding charges for other vessels.
 - (b). The cargo /container related charges for all Coastal cargo / containers, other than thermal coal, POL including crude oil, Iron Ore and Iron pellets, should not exceed 60% of the normal cargo / container related charges.
 - (c). In case of cargo related charges, the concessional rate should be levied on all the relevant handling charges for ship-shore transfer and transfer from / to quay to / from storage yard including wharfage.
 - (d). For the purpose of this concession, cargo / container from a foreign port which reaches an Indian Port 'A' for subsequent transshipment to Indian Port 'B' will also qualify insofar as the charges relevant for its coastal voyage. In other words, cargo from/to Indian Ports carried by vessels permitted to undertake coastal voyage will qualify for the concession.
- (vi). Users will not be required to pay charges for delays beyond a reasonable level attributable to the Terminal operator.
- (vii). Interest on delayed payments / refunds:
 - (a). The user shall pay penal interest on delayed payments under this Scale of Rates. Likewise, the Service Provider shall pay penal interest on delayed refunds.
 - (b). The rate of penal interest will be 2% above the Base Rate declared by the State Bank of India. The penal interest rate will apply to both the Service Provider and the user equally.
 - (c). The delay in refunds will be counted only 20 days from the date of completion of services or on production of all the documents required from the users, whichever is later.
 - (d). The delay in payments by the users will be counted only 10 days after the date of raising the bills by the Terminal Operator. 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
- (viii). The minimum charges recovered in any bill shall be Rupees Hundred (₹ 100/-) only.
- (ix). All charges worked out shall be rounded off to the next higher rupee on the grand total of each bill.
- (x). In calculating the gross weight or measurement by volume or capacity of any individual item, fractions upto 0.5 shall be taken as 0.5 unit and fractions of 0.5 and above shall be treated as one unit, except where otherwise specified.

- (xi). No claims for refund shall be entertained unless the amount refundable is ₹ 100/- or more likewise Terminal shall not raise any supplementary / under charge bills & interest bills if the amount due to port is less than ₹ 100/-.
- (xii). (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 operator 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 operator 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.

2. BERTH HIRE CHARGES:

The berth hire charge payable by masters / owners / agents of the vessel and other floating craft approaching or lying alongside the berth shall be as per the rates given below:

Sl. No.	Vessels	Rate in ₹ per GRT per hour or part thereof	
		Foreign going	Coastal
1.	LNG Vessels	4.076	2.446

Notes:

- (i). The period of berth hire shall be calculated from the time vessel occupies the berth.
- (ii). Berth hire includes charges for services rendered at the berth, such as occupation of berth, rubbish removal, cleaning of berths, fire watch, etc.
- (iii). No berth hire shall be levied for the period when the vessels idle at berths for continuous one hour or more due to break down of Terminal Operator's equipment or power failure or any other reasons attributable to the Terminal operator .
- (iv). (a). Berth hire shall stop 4 hours after the time of vessel signaling its readiness to sail.
- (b). The time limit of 4 hours prescribed for the cessation of berth hire shall exclude the ship's waiting time for want of favorable tide conditions, inclement weather, and due to lack of night navigation.
- (c). The master / agent of the vessel shall signal readiness to sail only in accordance with favorable tidal and weather conditions.
- (v). The Penal Berth hire shall be equal to one-day's (24 hours) berth hire charge for a false signal.

“False signal” would be when the vessel signals readiness and asks for a pilot in anticipation even when she is not ready for un-berthing due to engine not being ready or cargo operation not completed or such other reasons attributable to the vessels. This excludes the signaling readiness when a vessel is not able to sail due to unfavorable tide, lack of night navigation or adverse weather conditions.”

3. CARGO HANDLING CHARGES:

The cargo handling charges shall be payable on the manifested cargo directly by the users at the rate of ₹ 131.68/ tonne of LNG

Note:

The handling charges prescribed above is a composite charge for (i) unloading of the cargo from the vessel in to the FSRU storage tanks and (ii) Usage of Loading/ unloading equipment. This composite charge includes wharfage and supply of labour, wherever necessary.

4. MISCELLANEOUS CHARGES

A Miscellaneous charge of ₹ 6.93/ tonne of LNG will be levied.

The miscellaneous charges prescribed above is a composite charge for provision of all miscellaneous services such as cleaning the wharf, flow metering, pollution control etc.

5. GENERAL NOTE TO SCHEDULE (2) TO (4) ABOVE:

- (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 Standard (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 Standard 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 Standard 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 Standard 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 Standard 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 Standard 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 Standard 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 Standard 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.

Annex – III

PERFORMANCE STANDARDS FOR HANDLING OF IMPORT LNG CARGO FOR REGASIFICATION IN THE FLOATING STORAGE REGASIFICATION UNIT (FSRU) IN MUMBAI HARBOUR OF MUMBAI PORT TRUST.

Sr. No.	Description	Performance Standard
1.	Gross Berth Output	2300 MT/hour
2.	Turnaround Time for the vessels	30 hours

SUMMARY OF THE COMMENTS RECEIVED FROM THE PORT USERS / USER ORGANISATIONS / PROSPECTIVE BIDDERS AND ARGUMENTS MADE IN THIS CASE DURING THE JOINT HEARING BEFORE THE AUTHORITY.

- F. No.TAMP/68/2015- MBPT** - **Proposal received from Mumbai Port Trust (MBPT) for fixation of reference tariff for handling of import Liquefied Natural Gas (LNG) cargo for Regasification in the Floating Storage and Regasification Unit (FSRU) in MBPT on PPP basis.**

A summary of comments received from the users/ user organisations and Prospective Bidders and the comments of MBPT thereon are tabulated below:

Sl. No.	Comments of the Users / Prospective Bidders	Comments of MBPT
1.	Shapoorji Pallonji & Company Pvt Ltd.	
(i)	Article 8.1 of Draft Concession Agreement provided by MbPT for the project vide reference No: RFP No. CE.FSRU/2015 ‘Setting Up of Floating Storage and Regasification Unit in Mumbai Harbor on PPP Mode’ clearly states that the Concessionaire will be entitled to levy wharfage charges and Berth hire charges at its own discretion and TAMP guidelines will be applicable only on Port dues and Pilotage charges. Clearly this tender provision of MbPT is contradicting to the mail where in, TAMP desired to discuss the reference tariffs (Maximum permissible rates) for Wharfage charges and Berth Hire charges.	
(ii)	As per the provisions of the Agreement, MbPT is only leasing its waterfront for the development of the project and has no equity participation in the project. The project will be developed through capital contributed or arranged by the concessionaire only. As such, it is our understanding that wharfage charges and berth hire charges shall not be governed by TAMP guidelines.	The matter has already been discussed in the TAMP hearing. It has been clarified that the TAMP will fix the wharfage charges and berth hire charges. However, the regasification charges is out of purview of TAMP. Shpoorji Pallonji & Company Private Limited agreed to the proposal. It is clarified here that the Article 8.1 of the Draft Concession Agreement will be modified suitably considering the above points.
2.	Gas Authority of India Limited (GAIL)	
(i)	The Project is for setting up of FSRU of 5 MMTPA capacity along with supporting infrastructure in Mumbai Harbour. MBPT intends to supply RLNG from the proposed FSRU in the markets along the western coast of India. There are already 4 Re-gasification terminals in the western coast of India, at Dahej, Kochi, Hazira and Dabhol with a combined Re-gasification capacity of around 30 MMTPA,	The comments of the GAIL is that the capacity of regasification terminals are idle upto 60%. They have suggested that the above facts may be kept in view while taking decision for setting up of the subject terminal. It is to state that the entire project is on PPP basis and the bidders will consider setting up of terminal considering the above factors.

capable of supplying more than 100 MMSCMD of RLNG to the market. At present, around 40 MMSCMD of RLNG is being supplied to customers all over India from these Re-gasification terminals, rendering around 60% of available capacity of these Re-gasification terminals idle. The above aspect may be kept in view while taking decision to set up another Re-gasification terminal on the western coast of India.	
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2. A joint hearing on the case in reference was held on 26 November 2015 at the office of the Authority in Mumbai. The MBPT made a brief power point presentation of its proposal. At the joint hearing, MBPT, users/ user organisations and Prospective bidders have made the following submissions:

Mumbai Port Trust (MBPT)

- (i). This project is of national importance. This has been the dream project of MBPT for a couple of months now. The RFQ has been issued in June 2015. Four parties have expressed interest in this project. Since it has been a new concept for MBPT, the regulation of tariff for the proposal was discussed with TAMP in October 2015.
- (ii). We have revisited certain areas of the proposal based on the queries raised by TAMP.
- (iii). As per the provisions of the MPT Act, TAMP is required to fix charges only upto the regasification point. Thus, the proposal submitted to TAMP is only for this purpose.
- (iv). Other charges viz., Port dues, Pilotage, for the services rendered by the MBPT will be levied as per the MBPT SOR fixed by TAMP.

Feedback Infra on behalf of MBPT

- (i). The unloading rate of 250 tonnes per hour as prescribed in the TAMP guidelines is with reference to lower capacity LNG vessels. For the project in reference, we envisage higher capacity vessels. Hence, in the revised proposal, we have considered the unloading rate at 2300 tonnes per hour. The capacity of the facility has been worked out at 3.5 MMTPA, being the lower among the optimal capacity of the Regasification Unit and the optimal capacity of the Berth.
- (ii). In the capital cost estimation, the cost of capital items upto the Regasification Unit only has been considered. The capital cost pertaining to FSRU and beyond has been excluded.
- (iii). The operating costs has been considered as per TAMP guidelines. The licence fee for the water front area of 56000 sq.m has been considered at ₹150 per sq.m. The power cost considered at 4 tonnes per day is as per market guidelines.
- (iv). Out of the total Annual Revenue Requirement (ARR) of ₹.51.21 crores, 95% has been apportioned to be recovered through Cargo handling charges and 5% has been apportioned to be recovered through Miscellaneous charges. The storage charges form part of the handling charges.

Shapoorji & Pallonji

- (i). There are about 30 FSRUs around the world. However, the concept of FSRU is being introduced for the first time in the country.

- (ii). The project of MBPT is based on theoretical data. It has not been correlated to market dynamics.
- (iii). If there is no demand for the end product, the project will not sustain.
- (iv). Further, the project will be viable only if the costs are competitive.

Gas Authority of India Limited (GAIL)

- (i). There are 4 Re-gasification Terminals in the western coast of India, at Dahej, Kochi, Hazira and Dabhol with a combined Re-gasification capacity of around 30 MMTPA, capable of supplying more than 100 MMscMD of RLNG to the market.
- (ii). At present around 40 MMSCMD of RLNG is being supplied to customers all over India from these Regasification Terminals, rendering around 60% of available capacity of these Re-gasification Terminals idle.

Shapoorji & Pallonji

- (i). We understand that MBPT has revised the proposal. We request MBPT to furnish us their revised proposal, as we would like to give our further comments, on the revised proposal.

(MBPT: The revised proposal will be circulated during the pre-bid meeting).
