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Tariff Authority for Major Ports

G.No.40 **New Delhi,** **29 January 2015**

NOTIFICATION

In exercise of the powers conferred by Sections 48 and 50 of the Major Port Trusts Act, 1963 (38 of 1963), the Tariff Authority for Major Ports hereby disposes of the proposal received from the Kandla Port Trust for fixation of reference tariff for setting up of Single Point Mooring (SPM) and allied facilities in Gulf of Kutch on BOT basis in PPP mode under the Revised Guidelines for Determination of Tariff for Port Projects at Major Ports, 2013 as in the Order appended hereto.

(T.S. Balasubramanian)
Member (Finance)

Tariff Authority for Major Ports
Case No. TAMP/60/2014-KPT

Kandla 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 2nd day of January 2015)

This case relates to the proposal received from the Kandla Port Trust (KPT) for fixation of reference tariff for setting up of Single Point Mooring (SPM) and allied facilities in Gulf of Kutch on BOT basis in PPP mode.

2.1. The Ministry of Shipping (MOS) under cover of its letter No.PR-14019/16/2012-PG dated 31 July 2013 has issued 'Guidelines for Determination of Tariff for Projects at Major Ports, 2013' under Section 111 of the Major Port Trusts (MPT) Act, 1963 on 31 July 2013. In compliance of the policy directives issued by the (MOS) under Section 111 of the MPT Act, 1963, the said Guidelines were notified vide Notification No.TAMP/18/2013-Misc. in the Gazette of India on 8 August 2013, vide Gazette no.214. The said Guidelines are effective from 31 July 2013. Subsequently, the MOS has issued revised Guidelines for Determination of Tariff for Projects at Major Ports, 2013 under Section 111 of the Major Port Trusts Act and made effective from 9 September 2013. The said revised guidelines were notified in the Gazette of India on 30 September 2013 vide Gazette No.254.

2.2. The KPT has filed a proposal for fixation of Reference tariff for setting up of SPM and allied facilities in Gulf of Kutch on BOT basis under the revised tariff guidelines of 2013.

3.1. Before proceeding ahead on the current proposal filed by the KPT for fixation of the Reference Tariff it is relevant here to mention that the KPT had earlier in February 2010 also filed a proposal for fixation of the upfront tariff for SPM facilities under then applicable guidelines of 2008 for upfront tariff fixation.

3.2. Since the upfront tariff guidelines of 2008 do not prescribe any norms for fixation of upfront tariff for SPM facilities, the matter was referred to the Ministry of Shipping (MOS). The MOS in response, vide its letter dated 9 June 2010 had stated that the Indian Maritime University (IMU) has been engaged to examine the said matter and to furnish its report and had advised this Authority to undertake fixation of upfront tariff for SPM at KPT based on the parameters applicable for liquid bulk handling with reference to SPM operation carried out at the KPT, Cochin Port and Paradip Port Trust as an interim measure till the guidelines for SPM terminals are finalized. The advice of MOS was conveyed to KPT.

3.3. Subsequently, the KPT filed its revised proposal dated 12 January 2012. The revised proposal then filed by the KPT was processed and this Authority had passed an Order No.TAMP/15/2010-KPT dated 18 January 2011, fixing upfront tariff for the SPM facility in Gulf of Kutch at KPT in pursuance of the upfront tariff guidelines of 2008.

4. The KPT has now stated that the said SPM project did not materialise for the reasons given in the subsequent paragraphs. Hence, the KPT has filed the current proposal dated 13 October 2014 for fixation of reference tariff under 2013 guidelines following the principles of 2008 guidelines for setting up of SPM and allied facilities after restructuring its proposal, followed by its e-mail dated 10 November 2014 furnishing the contact details of three RFQ applicants for consultation, at our request.

5.1. The KPT in its proposal dated 13 October 2014 has given the following reasons/ background for seeking Reference Tariff for setting up SPM and allied facility on BOT basis:

(i). The Project earlier envisaged by KPT comprised of SPM with capacity of 12 Million Metric Tonnes Per Annum (MMTPA) and pipeline of 19.5 kms to be connected with Crude Oil Terminal (COT). The COT was to be developed outside the Port Limits and did not form part of the Project.

(ii). Based on the upfront tariff approved by the Authority for SPM facility vide Order No.TAMP/15/2010-KPT dated 18 January 2011 notified in the Gazette on 15 February 2011, three rounds of bidding process were carried out by KPT. But, none of them could be closed with award of Letter of Intent to successful bidder.

(iii). Hence, the Board of Trustees of Kandla Port have restructured the Project to make it more attractive. The major restructuring of the Project includes:

(a). Development of Crude Oil Terminal within the KPT port limits.

(b). Increasing the Construction Period from 2 Years to 4 years.

(c). The KPT to take responsibility to provide land for COT and also the Environment Clearance for the same.

(iv). Accordingly, the project of "Setting up of Single Point Mooring (SPM) and Allied facilities in Gulf of Kutch on BOT basis on PPP Mode" for a concession period of 30 years, has been restructured. The project is first of its kind as it shall cater to common merchant users unlike presently operating SPM projects which are on captive use basis or any other structure.

(v). The concept of the project is to establish a Single Point Mooring at an offshore location with sufficient draft for large crude carriers like VLCC (Very Large Crude Carrier), laying pipeline from SPM to Crude Oil Terminal to be developed onshore from where the Crude Oil shall be transported to respective refinery users through cross country pipelines.

(vi). For the purpose, the Project cost estimates have been carried out afresh and the Optimal Capacity has been kept intact as approved by TAMP in its previous Order 18 January 2011.

(vii). Based on the already approved Optimal Capacity, with fresh estimates of capital and operating expenditure, tariff formulation has been carried out based on the principles of Guidelines of 2008.

5.2. The main highlights of the KPT proposal are summarized below:

(i). The project envisages to establish SPM at an off shore location with sufficient draft for large crude carriers like VLCC.

(ii). The main components of the project which shall be constructed by the BOT operator are:
(a). SPM Terminal.
(b). Crude Oil terminal for storage of liquid cargo (COT).
(c). Foundation for tank farm.
(d). Pipeline of 17.5 km comprising 15.75 Km submerged and 1.75 Kms in Inter-tidal zone.

(iii). 17.5 Km Pipeline of 48" dia connecting SPM with Crude Oil Terminal is to be developed onshore on land area admeasuring 50 Ha. Additional 50 Ha land may also be provided for future expansion subject to the availability of the same with Concessioning Authority.

(iv). There will be Storage Tank farm of 7 storage tanks for Petroleum crude of approx. 60000 cum per tank (pumpable volume of 52000 cum per tank) with provision of 1 tank for outage.

(v). The storage tank farm shall have associated facilities which may include but not limited to Booster Pump Station, Pig Launcher/ receiver, firefighting system, Electrical facilities, Civil and Structural components, ETP, lab testing facility, buildings etc. required for development of COT.

(vi). Optimal capacity:
Optimal Capacity of Single Point Mooring as approved in the TAMP Order dated 18 January 2011 is 12 MMTPA and the same is maintained in the current proposal.

(vii). Storage Capacity of COT:
Storage Tank capacity estimated by the port is 3,12,000 KL as shown below:

Sr. No.	**Storage Capacity of the COT**		
(i).	Pumpable Volume of Crude Oil	**52000**	Cum
(ii).	Nos. of Tanks Total	7	Nos.
(iii).	Less: 1 No. dedicated for outage i.e. evacuation / tanker loading	**1**	Nos.
(iv).	Net available for storage	6	Nos.
	Pumpable Volume of Crude Oil (i*iv)	312000	Cum

(viii). Capital Cost:
The capital cost of the project is estimated at ₹992.38 crores. The break-up of capital cost estimates is given below:

Sl. No.	**Particulars**	**₹ in crores**
(i).	SPM and Allied Facilities	179.24
(ii).	Pipelines Installation and Allied Facilities	355.67
(iii).	Block Estimates for SPM and Pipelines (i + ii)	534.91
(iv).	Crude Oil Terminal - Civil Cost	229.90
(v).	Crude Oil Terminal - Mechanical Cost	180.32
(vi).	Block Estimates COT (iv + v)	410.22
(vii).	Block Estimates for Project (iii + vi)	945.12
(viii).	IDC, Misc and Contingency for SPM and Pipelines @ 5%	26.75
(ix).	IDC, Misc and Contingency for COT @ 5%	20.51
(x).	**Total Estimated Project Cost**	**992.38**

(ix). Operating Cost:
The Operating Cost estimated based on principles of tariff guidelines of 2008 is tabulated below:

Particulars	**Unit**	**Values**	**Rate**	**₹ in crs.**
SPM & Pipelines				
Repairs & maintenance: mechanical	Gross Block ₹ in crores	561.65	2%	11.23
Civil		0.00	1%	0.00
Depreciation: mechanical		561.65	10.34%	58.07
Civil		0.00	3.34%	0.00
Insurance		561.65	1%	5.62
License Fee				
Land Area	Sq. mtrs.	317743	₹141.45/ sq mtr/ annum	4.49
Water Area	Sq. mtrs.	3180863	₹70.725/sq. mtr/ annum	22.50
Other Expenses		561.65	1%	5.62
Total Operating Expenses - SPM & Pipelines (A)				**107.53**
Crude Oil Terminal				

Repairs and maintenance: mechanical	Gross Block	189.34	2%	3.79
Civil	Gross Block	241.39	1%	2.41
Depreciation: mechanical	Gross Block	189.34	10.34%	19.58
Civil	Gross Block	241.39	3.34%	8.06
Insurance	Gross Block	430.73	1%	4.31
License Fee				
Land Area	sqm	500000	₹141.45 mtr/ annum	7.07
Power for illumination (norms 2.4 lakhs units/ annual hectare)	Ha	12000000	₹10.89/unit	13.07
Other Expenses		430.73	1%	4.31
Total Operating Expenses – COT- (B)				**62.60**
Total Operating Expenditure for Project (C=A+B)				**170.13**

(x). Reference Tariff is calculated as shown below based on the principles of Tariff Guidelines, 2008:

Sr. No.	Particulars	₹ in crores
(A)	**Crude handling Charges**	
(i)	**Annual Revenue Requirement**	
(a)	Operating expenditure	107.53
(b)	16% on ROCE (16%*₹561.65 cr)	89.86
(c)	**Total Annual Revenue Requirement**	**197.40**
(ii)	Optimal handling Capacity (MT)	12000000
(iii)	**Tariff for Crude handling (₹/MT) (c/ii)**	**164.50**
(B)	**Crude Oil Terminal (COT) Storage charges**	
(i)	**Annual Revenue Requirement**	
(a)	Operating expenditure for COT	62.60
(b)	16% on ROCE (16%*₹430.73 cr)	68.92
(c)	Total Annual Revenue Requirement	131.52
(ii)	Capacity in KL	312000.00
(iii)	Operating Days	365.00
(iv)	**COT Storage Charges ₹/MT/Day**	**18.33**
(v)	**Storage Charges ₹/MT/Month** {Annual Revenue Requirement / [312000*365*0.7*0.9 (density)]}	**549.93**

(xi). Based on the above computation, the Reference Tariff proposed by the KPT is given here under:

(a). **CONSOLIDATED HANDLING CHARGES**

Description	Rate in ₹ per metric Ton
Composite handling charge	164.50

Notes: The handling charge prescribed above is a composite rate for handling the crude from vessels / tanker, transportation through pipeline till Crude Oil Terminal, wharfage and all other associated services provided by the operator except the storage charges which are proposed below in the next section.

(b). **STORAGE CHARGES:**

The storage charges for the cargo stored in the crude oil terminal shall be as below:

No free days shall be allowed for any type of cargo.

(i). For Import & Export

Description / Cargo	(Rate in ₹ per MT per day) Tariff
Crude Oil	18.33

(ii). For Import & Export

Description / Cargo	(Rate in ₹ per MT per Month)
Crude Oil	549.93

(xii). Performance Standards proposed by the KPT are given below:

Sl. No.	Performance Standard	Value/Unit	Remarks
(i).	Gross Berth Output for SPM – Crude Oil	5500 Tons/Hour	As per approved TAMP Order dated 15/2/2011
(ii).	Transit Storage Dwell Time	7 Days	= Parcel Size / Average Daily Disposal =255000 MT/ 37989 MT
(iii).	Turnaround Time for receipt / delivery operation	37989 MT/Day	Based on recommendation of Technical Advisor for 3 Mainline Pumps with capacity of 837.5 cum/hr.

6.1. Based on the preliminary scrutiny of the proposal, the KPT was requested vide our letter dated 3 December 2014 to furnish additional information/ clarifications on a few points. The KPT has vide its letter dated 6 December 2014 and e-mail dated 11 December 2014 furnished its reply on queries raised. Summary of queries raised by us and the response of the KPT is brought out in the subsequent paragraph.

6.2. It is relevant here to state that while seeking clarification from the KPT, it was brought to the attention of the KPT that, since norms/ guidelines for fixation of tariff for SPM operation following the principles of 2008 guidelines are not received from MOS, the current proposal of the KPT for SPM operation will be processed by this Authority based on the parameters applicable for liquid bulk handling with SPM operation carried out at the KPT and other Major Port Trusts namely COPT and PPT as done in earlier similar case of the KPT, as suggested by the MOS earlier vide its letter dated 9 June 2010.

7.1. In accordance with the consultative procedure prescribed, the proposal of the KPT dated 13 October 2014 was forwarded to the concerned users/ user organizations/ prospective applicants (as forwarded by KPT) seeking their comments. A joint hearing in this case was held on 6 December 2014 at the KPT premises. The KPT made a power point presentation of its proposal. At the joint hearing, the KPT and the concerned users/ organisation bodies/ prospective applicants have made their submissions.

7.2. The Gandhidham Chamber of Commerce & Industry, IMC Limited and Adani Ports & SEZ Limited have also furnished their written submissions on the subject proposal at the joint hearing which was forwarded to KPT vide our letter dated 9 December 2014. The KPT vide its letters dated 6 December 2014 and 10 December 2014 has furnished its views on the written submissions made by them.

7.3. As agreed at the joint hearing, the HPCL-MPL vide its letter dated 9 December 2014 has furnished its written submissions to KPT with a copy endorsed to this Authority. The KPT vide its letter dated 10 December 2014 has furnished its reply. In addition to that, the KPT vide its letter dated 6 December 2014 has also brought out the submissions made by HPCL-MPL verbally at the joint hearing and has furnished its response thereon.

8. The KPT vide its letter dated 6 December 2014 and e-mail dated 11 December 2014 has furnished its response to the queries raised by us vide our letter dated 3 December 2014. A summary of the queries raised by us and reply furnished by the port is tabulated below:

Sl. No.	Queries raised by us	Reply furnished by KPT
(1).	Sl. No.(x) of the checklist of the of documents / information to be submitted while filing the proposal for determination of Reference Tariff following 2008 guidelines which was circulated to all Major Port Trusts including KPT vide our letter No.TAMP/4/2014-Misc dated 24 September 2014, require Major Port Trusts to furnish a copy of the Board resolution approving the proposal filed by them. The KPT has not furnished the same. The KPT to furnish a copy of the Board resolution approving the proposal filed by the KPT for fixation of reference tariff for SPM operations under the principles of 2008 guidelines	A copy of the Board Resolution approving the tariff proposed by KPT is furnished.
(2).	**Optimal Capacity**:	
(i).	Handling Capacity:	
	(a). Page 25 of the feasibility report furnished by KPT along with the proposal states that discharge rate of 5500 m3/hr has been considered in the current restructured proposal based on the Order approved by the TAMP, notified on 15 February 2011. In this regard, it is relevant to state that the discharge rate of 5500 m3/hr considered in the Order No.TAMP/15/2010-KPT dated 18 January 2011 (notified on 15 February 2011), was based on the then proposal filed by the KPT which envisaged share of Suez Max Vessel and VLCC in the ratio of 50:50. As against that the current restructured proposal is planned to handle VLCC vessel upto 3,00,000 DWT. As per the details furnished by the KPT while processing its earlier SPM proposal [brought out in Para 12.2, Sl. No.(ii).(b)], the handling rate reported for SPM operations for a VLCC vessel is 7200 m3/hr at Essar -Vadinar, 8250 m3/hr at BPCL-Kochi and 7500 m3/hr at IOCL-Vadinar. Since the current proposal filed by KPT envisages to handle VLCC at the proposed SPM, the KPT to review the handling rate and upgrade appropriately based on handling rate achieved for VLCC at the other SPM instead of 5500 m3/hr considered by the KPT. In the light of the above observation, the optimal capacity considered by the KPT at 12 Million Metric Tonnes Per Annum (MMTPA) also needs to be reviewed and modified with detailed computation of optimal handling capacity.	Current Proposal envisages handling the vessels up to the size of VLCC i.e. 300000 DWT, mainly including VLCC and Suez max with equal sharing based on our earlier proposal only. Based on the same assumptions as considered in the earlier proposal, handling capacity of SPM at 12 MMTPA has been proposed in the present proposal also. Moreover, the discharge rate and other parameters forming the basis of Optimal Handling Capacity have also been confirmed from IOC Vadinar that those are prevailing presently also. However, in view of any apprehension regarding determination of Optimal Capacity, as it was concluded in the earlier approved TAMP Order, in case the actual traffic exceeds the 12 MMTPA, a provision for reviewing the tariffs may be incorporated in the Bidding Documents for the present proposal also. Though storage activities was not a part of the earlier proposal, in the Original Feasibility Report prepared by Engineers India Limited included the assessment for the required storage facilities. The same has now been considered in the current proposal. This is further explained in response to the subsequent observation specifically drawn for the storage capacity.

	While reassessing the optimal handling capacity and the optimal storage capacity, the KPT to ensure there is no wide gap between these two capacities.	
	(b). Confirm whether the inputs/ parameters i.e. discharge rate, capacity utilisation, no. of days of operation, etc., considered by the KPT based on the survey of SPMs at Essar- Vadinar, IOCL-Vadinar and BPCL-Kochi for the years 2007-08 to 2009-10 as summarised in para 12.3. of the earlier Order dated February 2010 are relevant for the current proposal. If not, the KPT to furnish and consider updated inputs for the last three years i.e. 2011-12 to 2013-14 for these SPMs and modify the optimal handling capacity based on the updated parameters.	Basis of Optimal Handling Capacity has been considered same as it was considered in the previous proposal. Moreover, as explained in previous reply, the discharge rate and other parameters forming basis of Optimal Handling Capacity are confirmed by IOC Vadinar that those prevails presently also. However, in view of any apprehension regarding determination of Optimal Capacity or the basis thereof, in case the actual traffic exceeds the 12 MMTPA, a provision for reviewing the tariffs may be incorporated in the Bidding Documents for the present proposal also. This was done in case of earlier approved TAMP Order. Same may be followed.
	(c). With reference to 15.75 km of pipeline with pipeline diameter of 48” (page 35 of the feasibility report) considered in the proposal, the port should certify whether the said dimensions considered are the optimum level and that no further improvement is possible technically, which may have an impact on handling rate. The port to also clarify whether the Concession Agreement would categorically specify the dimensions of pipeline, which cannot be altered by the BOT operator.	The pipeline dimensions as considered in the earlier proposal have been considered in the revised Feasibility Report also. As suggested, Port shall categorically specify the dimensions of pipeline in the Concession Agreement which cannot be altered by the BOT Operator.
(ii).	Crude Oil Terminal- (COT) Storage Capacity: The KPT at Page 5 of its proposal has stated that the COT storage capacity is 3,12,000 KL (i.e. 6 tanks * pumpable volume of 52000 KL per tank = 52000 *6). With reference to this, the KPT to clarify the following points:	
	(a). Though the proposal envisages total seven storage tanks for COT (page 6 of the proposal), one tank is excluded for outage i.e. evacuation/ tanker loading. The KPT to further elaborate the reasons for excluding one tank from the calculation of storage capacity and confirm whether it is in line with the practice followed at other SPMs operated at KPT and SPMs operated at Cochin Port Trust (COPT) and Paradip Port Trust (PPT).	Keeping one Tank for outage i.e. evacuation / tanker loading has been suggested by Technical Consultant Engineers India Ltd who prepared the Original Feasibility Report. The same has been relied upon. Moreover, during the Joint hearing this was discussed with perspective bidders wherein they agreed that one tank need to be kept for outage/ evacuation.
	(b). Explain the basis for considering the pumpable volume of 52000 KL per tank.	60000 cum is the total volume of each of the Crude Oil Storage Tanks. The same cannot be utilized fully. Pumpable volume that could be stored would always be less than the same. 52000 KL as pumpable volume for Tank of 60000 cum has been suggested by Technical Consultant Engineers India Ltd who prepared the Original Feasibility Report. Thus, same has been considered.
	(c). From the proposal it is understood that	Following is the calculation of the Storage

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<td>at any point of time, the six tanks considered by the KPT can store 3,12,000 KL of crude. This cannot be termed as the optimal annual storage capacity of the COT. The KPT to, therefore, assess optimal annual storage capacity of the COT and furnish detailed computation of annual storage capacity of tanks envisaged in the proposal (in MMTPA) as brought out in our query of (d) below. The KPT should also correlate how the storage facility of six tanks can meet the optimal handling capacity assessed for the proposed project.</td>
<td>Capacity of COT and its appropriateness for Optimal Capacity of 12 MMTPA.
<table>
<tr><th>Storage Capacity of the COT</th><th>Value</th><th>Unit</th></tr>
<tr><td>Pumpable Volume of Crude Oil</td><td>52000</td><td>Cum</td></tr>
<tr><td>Nos. of Tanks Total</td><td>7</td><td>Nos.</td></tr>
<tr><td>Less: 1 No. for evacuation / tanker loading</td><td>1</td><td>Nos.</td></tr>
<tr><td>Net available for storage</td><td>6</td><td>Nos.</td></tr>
<tr><td>Pumpable Volume of Crude Oil</td><td>312000</td><td>Cum</td></tr>
<tr><td>Density of Crude Oil</td><td>0.9</td><td>MT/Cum</td></tr>
<tr><td>Storage Capacity of the COT</td><td>280800</td><td>MT</td></tr>
</table>
For handling 12 MMTPA, considering the parcel size of 255000 MT per Vessel, 48 Nos. of vessels would require to be handled in a year. So, every month, 4 Nos. of vessels may be required to be handled. Hence, storage of one vessel may be required for approximately a week period. Moreover, the proposed evacuation through three mainline pumps would be possible to achieve evacuation of one vessel within a week’s time period as per following calculation:
<table>
<tr><th>Particulars</th><th>Value</th><th>Unit</th></tr>
<tr><td>3 Nos. Mainline Pumps supported by Booster Pumps each with capacity of 837.5 cum/hr</td><td>2512.5</td><td>cum/hr</td></tr>
<tr><td>Per Day Pumping Capacity</td><td>42210</td><td>cum/day</td></tr>
<tr><td>Per Day Pumping Capacity (multiplied by 0.9 density factor to convert into Tonnes)</td><td>37989</td><td>MT/day</td></tr>
<tr><td>Parcel Size of VLCC</td><td>255000</td><td>MT</td></tr>
<tr><td>Days required for evacuating a vessel with above mentioned size.</td><td>6.71</td><td>Days</td></tr>
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Thus, above position for storage capacity is justified.</td>
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<td></td>
<td>(d). The storage facility is new service included in the current proposal which was not envisaged while processing the last tariff Order. The KPT to assess the optimal annual storage capacity in MMTPA for the proposed project as the same has not been assessed. In this context, as stated earlier, in the absence of any norms/ guidelines for fixation of tariff for SPM under 2008 guidelines, the tariff for the proposed project has to be determined based on the parameters applicable for liquid bulk handling with reference to SPM operation carried out at KPT and other Major Port Trusts viz., COPT and PPT as recommended by the MOS vide its letter dated 9 June 2010. The KPT to furnish the relevant parameters viz. pumpable discharge volume per tank, no of tanks, turnover, and other relevant parameters along with the annual storage capacity in MMTPA achieved at the SPM of IOCL at Vadinar, Essar-Vadinar both at KPT and other SPMs viz. BPCL-Kochi and PPT.</td>
<td>Refer the previous reply. Further, as per the information collected for the existing operating SPM of IOCL at Vadinar, the Average dwell time of their COT is 7 days which is also in line with present proposal.</td>
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	The parameters (to be) adopted by KPT for assessing the optimal storage capacity of COT to be justified based on the parameters achieved at the above mentioned SPMs. The KPT to ensure that there is no wide gap between the optimal annual handling capacity of the SPM (to be reviewed by the KPT) and the optimal annual storage capacity of the COT (to be assessed by the KPT).	
	(e). Page 5 of the proposal states that total 100 hectares (ha) of land area is to be given of which 50 ha is envisaged to be handed over presently and additional 50 ha may be provided by the Concessioning Authority for future expansion. In this regard the following points to be clarified:	
	(i). Explain how 50 hectares of land (i.e. 5,00,000 sq. mtrs. applying conversion factor of 1 ha = 10,000 sq. mtr.) is determined for the purpose of storage tank facility envisaged in the current proposal and justify 50 ha proposed to be allotted for storage tank facility.	(i). Land area requirement has been suggested by Technical Consultant i.e., Engineers India Ltd. Requirement of land was also discussed with the existing SPM and/or COT operators during a conference held on 9th May 2014 for Project Restructuring purpose. These existing players were of the view that 50 Ha land would be sufficient for storage of one VLCC. However, in case the refinery users require storage of two vessels at a time, there may be requirement of additional 50 Ha for expanding the storage facilities. Hence, in view of the same, it has been envisaged that if the storage facilities are to be expanded, KPT may provide 50 Ha in future subject to review of capacity and tariff.
	(ii). The aggregate of land break up for Buildings, civil structures, COT tanks and, miscellaneous furnished at page no.39 of the Feasibility Report comes to 2,72,492 sq. mrts. as against 5 lakh sq. mtrs. considered in the current proposal. Please reconcile the area of land mentioned in the Feasibility Report and considered in the proposal bringing out how the difference in area (5,00,000 sq. mtrs. - 2,72,492 sq. mtrs.) is proposed to be used.	(ii). Land area table mentioned at page no. 39 of FR shows the area of some of the facilities which shall occupy the land. However, overall total land requirement would be as discussed in the previous reply.
	(iii). Furnish calculation to show that 6 storage tanks plus 1 for outage proposed by the port are sufficient to store the optimal handling capacity assessed at 12 MMTPA and the revised optimal handling capacity (to be) assessed as suggested in our queries now. If so, then where is the question of the port considering to allot additional land for storage tank in future.	(iii). Refer the reply of (c) above.
	(iv). If additional land for storage tank is envisaged to be allotted by the port in	(iv). As requested by prospective bidders, a

	future as stated by the KPT in its proposal, then please explain what is the recourse available to the terminal operator to recover such additional cost of investment as the upfront/ reference tariff caps (to be) approved by this Authority are applicable for the entire project period subject to indexation as per clause 2.2. read with 2.9. of the reference tariff guidelines of 2013.	provision for reviewing the storage tariffs may be kept in case the storage capacity gets expanded in the future.
(3).	**Capital Cost**:	
(i).	The capital cost of the project considered by the KPT in the tariff fixation is ₹992.38 crores (page nos.4 and 7 of the proposal). Whereas, the capex estimated in the Feasibility Report at page 7 is ₹1086.29 crores, but at other pages it is ₹992.38 crores. Confirm the capex considered at ₹992.38 crores is the correct figure.	₹992.38 crores is correct Capex of Project.
(ii).	The Rate Analysis furnished in the feasibility report draws reference to the rates mentioned in the Schedule of Rates, prevailing market rates, etc. The KPT to furnish the relevant Schedule of Rates, documentary evidence in the form of budgetary quotations based on which it has adopted the prevailing market rates in its capital cost estimation.	Rate Analysis supporting including Scale of Rates are furnished.
(iii).	Explain the basis of estimating detailed engineering cost @ 7% of the capex on the capital cost estimated for SPM and allied facilities and for Pipeline and installation cost.	This has been taken based on discussion with some of the leading engineering consultants.
(4).	**Operating Cost**:	
(i).	Power Cost:	
	(a). The KPT to furnish workings and a copy of the latest Electricity bill in support of the unit cost of power considered at ₹10.89 per unit for estimation power for general illumination for COT. In the recent proposal filed by KPT for fixation of upfront tariff for Container Terminal at Berth Nos.11 and 12, the unit cost of power considered by the KPT is ₹9.49 per unit based on the working furnished for the year 2014-15. The KPT to explain reasons as to why the unit cost of power for the SPM project is different from the unit cost of power considered recently for the container terminal.	Working of Electricity Unit Rate based on Tariff Schedule of KPT has been furnished.
	(b). As per the guidelines for liquid terminal, the power consumption norm of 2.4 lakh unit per hectare is prescribed towards the general lighting which will generally be provided at the operational area. The KPT has estimated power cost for the entire 5 hectares of land applying the said norms. The KPT to confirm whether the entire 5 hectares of land will be provided with the general lighting. If not the estimates may be suitably modified.	It is envisaged that the whole area may require the illumination.

<table>
<tr><td></td><td>(c). The port has not estimated any power or fuel cost for handling operations at SPM. The port to confirm no power or fuel is required for SPM operations for transfer of crude through pipelines. Also, confirm it is in line with the position at other SPM operations carried out at Vadinar Division in its port.</td><td>No requirement for power and fuel cost for SPM Operations has been considered as per the previous Tariff Order as well as in line with the discussion with the suppliers.</td></tr>
<tr><td>(ii).</td><td>Depreciation:</td><td></td></tr>
<tr><td></td><td>(a). Calculate the amount of depreciation in line with the provisions of the Companies Act, 2013.</td><td>Depreciation would be as per the rates in line with Companies Act 2013.</td></tr>
<tr><td></td><td>(b). As regards pipeline, the KPT has calculated the depreciation at 10.34% at par with the mechanical equipment for SPM operations. It is seen that in the another upfront tariff Order of the KPT relating to Oil Jetty as well as at Visakhapatnam Port Trust (VPT) for liquid terminal, the depreciation rate of 13.91% was considered for pipelines based on the then depreciation rate applicable under the Companies Act 1956. Subsequently, in fixation of Reference Tariff for the Liquid bulk terminal at Jawaharlal Nehru Port Trust (JNPT), depreciation on pipelines was considered at 4% in line with the Companies Act 2013, as confirmed by the JNPT. This was adopted in fixation of common tariff for floating pipeline facility for handling edible oil cargo at Kolkata Port Trust (KOPT). The KPT to, therefore, review and consider the depreciation rate applicable for pipeline in line with the provisions of the Companies Act, 2013.</td><td>Depreciation would be as per the rates in line with Companies Act 2013.</td></tr>
<tr><td>(iii).</td><td>License fee:</td><td></td></tr>
<tr><td></td><td>(a). (i). The proposal of the KPT does not mention about water area proposed to be allotted to the allotee. The estimation of operating cost for SPM and pipelines, however, includes estimation of license fee for 31,80,863 sq. mtrs. of water area towards way leave charges. The KPT to give the basis of arriving at the water area of 31,80,863 sq. mtrs. of area giving breakup of water area proposed to be allotted for SPM operations and water area to be occupied by the pipelines submerged in the water.

(ii). The KPT has estimated licence fee for 50 ha i.e. 5,00,000 sq. mtrs. of land envisaged in the proposal under the activity COT. In addition to that, the operating cost shows estimation of license fee for 3,17,743 sq. mtr. of land area for SPM activity. Considering the fact that SPM operations will be carried out in the water area and the 15.75 kms. pipelines</td><td>(i). Land and Water Area has been envisaged as given below:
<table>
<tr><th>Land and Water Area for SPM and Pipelines</th><th>Area in sqm</th><th></th></tr>
<tr><td>Land Area for Installation of SPM = PI()*(300)^2</td><td>282743</td><td></td></tr>
<tr><td>Land Area for Pipeline (17500 m * 2 m width = 35000)</td><td>35000</td><td>On way leave</td></tr>
<tr><td>Water Area chargeable which is available surrounding SPM (excluding the land area covered by SPM Installations i.e., PI()*((350*3)^2)-282743</td><td>3180863</td><td>3 times LOA as per EIL report</td></tr>
<tr><td>Land Area for Crude Oil Terminal</td><td></td><td></td></tr>
<tr><td>Land Area for COT</td><td>500000</td><td></td></tr>
</table>

(ii). Subsequently, the KPT vide its e-mail dated 11 December 2014 has furnished the working of the Land & Water Area. The Calculation furnished by the KPT is :
A= Area to be occupied by the SPM along with its foundation anchorage system
= (Pie X Dia x Dia)/ 4
= (Pie X 600 X 600)/4
= 282743 sq.m</td></tr>
</table>

	envisaged in the proposal is submerged in the water, the relevance and the basis of estimating license fee on land area of 3,17,743 sq. mtrs. for estimating license fee on land area for SPM which is nowhere mentioned in the proposal is not clear. The KPT to clarify the position in this regard and explain the basis for estimating this cost item.	B= Area for maneuvering (Waterfront area) = (Pie X Dia x Dia)/ 4 = (Pie X 2100 X 2100)/4 (Total area of A & B) = 3463606 (Total area of A & B) Total area for waterfront = (Total area of A & B) - Total Area of A above. =3463606 – 282743 = 3180863 sq.m.
	(b). (i). The upfront tariff guidelines requires estimation of license fee for port assets based on the rates prescribed in the Scale of Rates of the respective port trusts. The estimation of license fee by the KPT applying unit rate of ₹ 141.45 per sq. mtr. annum for land area and ₹ 70.725 per sq. mtr. per annum for water area reportedly based on the valuation of land undertaken by its Consultant in the year 2012 is not in line with the norms prescribed in the 2008 guidelines for estimating the license fee. The KPT to, therefore, modify the estimate of license fee based on the Scale of Rates applicable as per the rates approved by the Authority. Also, give the reference of the unit rate adopted from the prevailing Scale of Rates of KPT along with the applicable escalation factor, if any and forward a copy of the said Scale of Rates adopted by the KPT for estimating the license fee. (ii). It is seen that 50% of the license fee for land area is applied by the KPT for estimating license fee for water area for SPM operations. The KPT to explain how the estimation of license fee for water area at 50% of licence fee of the abutting land is relevant when the SPM operations will be carried out mid sea far away from the port. In fact the Land Policy Guidelines for Major Ports-2014 issued by the Ministry of Shipping, contain specific provisions for right of way charges for laying pipe lines. The KPT to, therefore, relook the estimation of license fee on water area and make necessary modification in the proposal in the light of the above observation.	(i). (a). License Fee has been calculated considering Para 16.2 (f) of Land Policy Guidelines 2014. Subsequently, the KPT vide its email dated 11 December 2014 has stated that this license fees is being considered at the land area rates since the area will be used to install the SPM, its foundation and anchorage system in the seabed and will be in possession of the BOT operator. (b). Further, the KPT vide its e-mail dated 10 December 2014, while addressing the reply to the comments of Adani Ports & SEZ Limited, KPT has reiterated that it is decided to consider the rate of license fee based on the valuation report got prepared by KPT in 2012 by a Competent Government approved valuer M/s.K.M. Thacker & Associates for land assets in the port estate premises at Tuna Port. The KPT has also furnished the extract copy of the Valuation Report. The license fee is calculated at 6% of market value in line with Land Policy for Major Ports 2014 and approval by KPT Board is awaited. The license fee rate is calculated as ₹135.96/ sqm/ annum (i.e. ₹2266 x 6% = ₹135.96) as on 2012. Hence, adding escalation at 2% per year, the rate of license fee is arrived at ₹ 141.45/ sqm/ annum. (ii). KPT would like to clarify that the water area has been calculated considering the water area in the mid sea which is surrounding the SPM installation. For sea bed occupied by SPM installation including anchor chains and pipelines installation occupying land area, way leave charges have been considered equivalent to License Fees for land.
(iv).	Storage charge computation for COT: For arriving at the storage charge, the KPT has divided the estimated ARR of ₹131.52	Storage charges has been derived by dividing the Annual Revenue Requirement with storage capacity in optimal tons per day for 365 days

	crores over [storage capacity of 6 tanks per day at 312000 KL * 365 days* 70% * 0.9 (density)] which comes to 71.44 Million Tonnes. The figures of 71.74 million tonnes considered for arriving at the storage charge does not match with the optimal handling capacity assessed by the KPT at 12 MTPA. The KPT to furnish revised working for arriving at the storage charge taking into consideration the optimal capacity of the terminal, average dwell time of crude at the proposed COT. Also, explain the basis of adopting the average dwell time parameter and other relevant parameter for arriving at the storage charge and confirm it is in line with the parameters achieved at the Vadinar division by Essar and IOCL.	@ 70% utilisation. The method which was used in case of Order approved by TAMP for Oil Jetty and Bunkering Project at KPT is followed. The computation is given hereunder: = Maximum Storage Capacity in KL * Density (to convert into Tons)* 365 * 70% optimization factor i.e. = 312000 KL*0.9*365*0.7 =71744400 Ton Days i.e. 70% of maximum utilization of storage tanks Thus, ARR has been divided by the said number. Correlation of the Storage Capacity with Handling Capacity has already been explained in reply to previous query at Sr. 2 (ii) (c).
(5).	**Performance Standards**:	
(i).	The proposed performance standard of 5500 T/ hour may be revised and modified in the light of queries raised earlier to upgrade the handling rate considered in the computation of optimal handling capacity.	5500 T/Hour was considered in the earlier Order of TAMP for 12 MMTPA Capacity of handling. Moreover, it has been once again confirmed from IOC Vadinar that the said discharge rate of 5500 Tons/hour can also be considered presently.
(ii).	Explain the basis of proposing the performance standard for transit storage dwell time of seven days. Indicate the average dwell time of crude at SPM operations at Kandla, COPT and PPT.	Refer response to observation at Sr. 2 (ii) (c).
(iii).	The remarks column for the performance parameter relating to turnaround time for receipt/ delivery operation states it is based on main line pumps with capacity of 837.5cum/ hour. Explain the basis of adopting 837.5 cum/ hour and also explain with working as to how it translates to the proposed performance standard of 37,989 MT/ day.	Refer response to observation at Sr. 2 (ii) (c).
(6).	**Scale of Rates**:	
(i).	<u>Note (i) under Schedule 2. Consolidated Handling charges</u>: The note prescribed in the earlier tariff Order dated 18 January 2011, while elaborating the services covered under the consolidated handling charge mentioned the words "pipeline within the limits of the port". The KPT to explain the reasons for deleting the words "within the limits of the port" after the word pipeline in the proposed Reference tariff Schedule.	KPT would like to clarify that the Project has been restructured to include the Scope of developing COT and full pipeline length between SPM and COT as against the original structure wherein Project Scope included only the SPM and Pipeline till the Port Limits. Presently the SPM, Pipelines and COT and all allied facilities are within the Port Limits only. Hence, the composite Handling Charge has been framed for handling the crude from vessels/ tanker, transportation through pipeline till Crude Oil Terminal, wharfage and all other associated services provided by the operator except the storage charges which are prescribed below in a separate section. Thus, in view of the restructure project scope the words "pipeline within the limits of port" has to be removed in view.
(ii).	Schedule 3. Storage charges: The storage charge per day is already proposed at (A).	Storage Charges per day has been converted as Monthly rental in case the users may want

	Hence, explain the relevance of proposing storage charge on per month basis also at (B).	to utilize the same on monthly rental basis. In case of Oil Jetty and Bunkering Terminal Case, the storage charges for tank farm have been approved by TAMP in similar fashion.

9. Norms/ guidelines for fixation of tariff for SBM operation following the principles of 2008 guidelines are not received from MOS. We have also not received the response of MOS to forward a copy of recommendations made by the (then) Adviser of Indian Maritime University (IMU), engaged by the MOS to formulate norms for SPM operations so as to enable us to have the benefit of his inputs while disposing of the proposal filed by KPT. This SPM project has been included in the Shelf of Projects for 2014-15 as per the e-mail dated 27 October 2014 received from MOS. Therefore, the MOS vide our letter dated 27 November 2014 was informed that the current proposal filed by the KPT vide its letter dated 13 October 2014 will be processed by this Authority based on the advice of the MOS vide its earlier letter dated 9 June 2010.

10.1. When this case was in advance stage of finalization, the KPT vide its email dated 15 December 2014 informed that it wanted to review one of the cost items and requested this Authority to keep its tariff proposal on hold.

10.2. Since no response was received, the KPT was requested vide our letter dated 31 December 2014 to intimate us further action taken by the port in the matter and advise us to proceed ahead with determination of reference tariff on the subject proposal immediately.

10.3. In this regard, the KPT has vide its e-mail dated 31 December 2014 has forwarded a letter dated 31 December 2014. The KPT in the said letter has requested this Authority to consider revised total licensee fee of ₹12.12 crores as against ₹34.06 crores estimated by it earlier. The KPT has stated that the revised licensee fee has been approved by the Competent Authority of KPT. The KPT has also furnished the comparative statement showing detailed calculation of the license fee estimated in its earlier proposal and the revised license fee along with rationale as tabulated here under:

Description	**Licensee Fee as earlier Proposed to TAMP**			**Presently proposed License Fee as per Revised calculations**			**Remarks**
	Area in Sqm	**Rate**	**₹ Crs.**	**Area in Sqm**	**Rate**	**₹ Crs.**	
Land Area for Installation of SPM=PI*(300)^2	282743	141.45	4.00	0	141.45	0.00	1. Land Area considered for circular area with 300 m radius is now considered as Water Area because; actually no land is being used except for the anchor chains to be installed. Further, this is not the case like full sea bed being used for jetty construction which is considered as Land Area. 2. Water Area chargeable
Water Area Chargeable which is available surrounding SPM (excluding the land area covered by SMP Installation =PI*((350*3)^2)-282743	3180863	70.725	22.50	-	-	-	
Water Area Chargeable which is available surrounding SPM (PIO*(50+(350*1.5))^2)				643261	70.725	4.55	

							surrounding SPM is now taken in consistency with that considered in the Captive SPM Project at Vadinar i.e. radius of the circular area has been arrived at by considering 1.15 times (safety factor as per IS code) LOA of vessel plus 50 m as distance between SPM centre and bow of the vessel.
Land Area for Pipeline (17500 m * 2 m width =35000)	35000	141.45	0.50	35000	141.45	0.50	No change proposed. Further, it is as per earlier approved Tariff order and also in line with Land Policy-2014.
Land Area for COT	500000	141.45	7.07	500000	141.45	7.07	No change proposed
Total Amount			**34.06**			**12.12**	

[*Though the KPT has revised the estimation of license fee, it has not furnished revised calculation of its effect on the estimations of ARR and the proposed rates*]

11. 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.

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

(i). The proposal of the Kandla Port Trust (KPT) is to fix reference tariff for setting up of Single Point Mooring (SPM) and allied facilities in Gulf of Kutch on Build, Operate, Transfer (BOT) basis for a concession period of 30 years under Public Private Partnership (PPP) mode.

(ii). As brought out earlier, this Authority had passed an Order No. TAMP/15/2010-KPT dated 18 January 2011, fixing upfront tariff for the SPM facility in Gulf of Kutch at KPT in pursuance of the upfront tariff guidelines of 2008. The KPT has reported that the despite three attempts for bidding the SPM project could not be awarded. The KPT has, therefore, restructured the SPM project to make it attractive to the investors. One of the restructuring of the project is inclusion of storage tanks at the Crude Oil Terminal (COT) which was not included in the earlier proposal of the KPT of February 2010.

(iii). (a). Clause 2.4 of the said guidelines 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.

(b). Reporting that the restructured SPM project includes provision of storage facility at COT which was not envisaged in the earlier SPM proposal, KPT has submitted that the upfront tariff fixed by this Authority earlier in January 2011 for SPM at KPT will not be representative/ comparable for the current restructured SPM project. The KPT has confirmed that the current SPM project is not representative or comparable to any of existing projects and hence it has filed proposal under 2013 guidelines following principles of 2008 guidelines. In view of the above position, this Authority takes up the proposal of the KPT for fixation of reference tariff following the principles of 2008 guidelines.

(c). For the reasons stated earlier, this Authority decides to proceed fixing reference tariff on the current proposal of the KPT based on the advice earlier communicated by the MOS vide its letter No.PD-11015/1/2010-KPT dated 9 June 2010 to undertake the fixation of upfront tariff for SPM at KPT based on the parameters applicable for liquid bulk handling with reference to SPM operations carried out at the KPT (Vadinar Division), Cochin Port and Paradip Port Trust as an interim measure till the guidelines for SPM terminals are finalised.

(iv). **Optimal Capacity**:

The KPT has maintained the capacity of SPM in the current proposal at 12 Million Tonnes Per Annum (MTPA) as estimated by the KPT during fixation of upfront tariff for SPM in its earlier proposal in the year 2010 which was approved by this Authority in its Order No.TAMP/15/2010-KPT dated 18 January 2011.

Even in the current SPM project, it envisages to handle Very Large Crude Carrier (VLCC) and Suez max in equal ratio i.e. 50:50 as envisaged in its earlier proposal. The KPT has confirmed that the average discharge rate of 5500 tonnes / hour and other parameters which formed the basis of assessing the optimal handling capacity of 12 MTPA in the earlier proposal filed by the KPT and which is brought out in para 12.3. of the Order in the year 2010 continue to be relevant for its present proposal as well. Even one of the prospective bidders HPCL Mittal Pipelines Ltd (HPCLMPL) has admitted that discharge rate of 5500 tonnes/ hour can be achieved for transfer of crude from vessel to the SPM. Thus, in short, the KPT has maintained the optimal capacity assessed at 12 MTPA as assessed by it during the earlier exercise of upfront tariff fixation of SPM and as considered by this Authority for reasons brought out in para 14(iv)(a) to (c) of the last tariff Order of 18 January 2011. As already pointed out in the said Order dated 18 January 2011, the optimal capacity is a critical factor in determination of the reference tariff and if the various parameters assumed in determining the rate based on which the tariff is fixed is improved at a later stage it may result in unintended gain to the operator. In the absence of any separate norms for SPM operations, the MOS was requested vide our earlier letter dated 6 December 2010 to examine the deviation from the guidelines proposed by the KPT with reference to the capacity determination in view of the constraints explained by the port.

In the current proposal as well the KPT has sought for review of tariff if the actual traffic handled at SPM exceeds optimal capacity of 12 MTPA as done in the last Order. We have not received any specific advice or any reservations from the Ministry on the deviation proposed by the KPT from the guidelines with reference to the assessment of the capacity till finalisation of this case and for review of the tariff of KPT if the actual traffic exceed the optimal capacity of 12 MMTPA. The KPT has expressed urgency to expedite fixing reference tariff for SPM in view of the SFC meeting taken up by the Ministry of Shipping on 9 December 2014. Further, this project is also included in the Shelf of projects of the MOS for the year 2014-15.

In view of the above position and in the absence of any separate norms for SPM operations and since we have not received any specific advice or any reservations from the Ministry on the deviation proposed by the KPT from the guidelines with reference to the assessment of the capacity, the optimal capacity maintained by the KPT at the level of 12 MTPA as considered in the upfront tariff fixation of SPM in the Order dated 18 January 2011 is considered in fixation of reference tariff relying on the position reported by the KPT that the handling rate and the other parameters furnished by the KPT which formed the basis of assessing the optimal handling capacity of 12 MMTPA in the January 2011 Order are applicable at present and this is reportedly based on confirmation obtained by the KPT from SPM operated by IOCL at Vadinar as well. Thus, reference tariff is determined for optimal capacity of 12 MMTPA as considered by the KPT at the level estimated in the January 2011 Order subject to review when actual traffic handled exceeds the optimal capacity of 12 MMTPA considered in this exercise. This is in line with the decision taken by this Authority in the Order dated 18 January 2011.

The port as well as the concerned BOT operator should immediately report if the actual traffic exceeds 12 MMTPA and the KPT should ensure that the BOT operator files the proposal for review of tariff if the actual traffic at SPM exceeds 12 MTPA. 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 condition was stipulated in the upfront tariff fixed for SPM facility for KPT earlier, upfront tariff fixed for dry bulk terminal off Tekra near Tuna at port of Kandla and Reference tariff fixed for Container terminal at KPT for berth nos.11 and 12.

(v). (a). The major component included in the restructured SPM project is storage area envisaged to be provided for storage of crude oil at Crude Oil Terminal (COT). The KPT has envisaged to allot 50 hectares (ha) of land (i.e. 5,00,000 sq. mtr. applying conversion factor of 1 ha = 10,000 sq. mtrs.) for the SPM project. On this 50 ha of land, the KPT envisages the BOT operator to construct seven storage tanks of which one of the tanks is for outage/ evacuation and six tanks are considered for assessing the storage capacity of COT. The storage capacity assessed by the KPT is to store 3,12,000 KL (i.e. 2,80,800 tonnes applying conversion factor of 0.9) crude oil in the storage tanks at any point of time. The KPT has assumed that crude oil will avail the storage facility throughout the year. The upfront tariff guidelines does not require or prescribe any norms for assessment of optimal storage capacity for liquid terminal. The KPT has, however, assessed the storage capacity of the COT of 2,80,800 tonnes at any point of time to meet the Optimal Capacity assessed for SPM at 12 MMTPA.

(b). The parameters adopted by the KPT for assessing the storage capacity of COT and the basis explained by the KPT for the parameters adopted is tabulated hereunder:

Storage Capacity of the COT	**Value**	**Unit**	**Basis furnished by the KPT**
Area to be allotted at COT	**50**	Ha	Land area requirement has been suggested by Technical Consultant i.e., Engineers India Ltd. Requirement of land was also discussed with the existing SPM and/or COT operators during a

			conference held on 9th May 2014 for Project Restructuring purpose. These existing players were of the view that 50 Ha land would be sufficient for storage of one VLCC.
Pumpable Volume of Crude Oil	**52000**	Cum	Total volume of Crude Oil Storage Tanks is 60000 cum and the same cannot be utilized fully. Thus, the pumpable volume could be stored would always be less than the same and hence, 52000 KL as pumpable volume for Tank of 60000 cum.
Nos. of Tanks Total	7	Nos.	Of the seven storage tanks envisaged for the project, one Tank is for outage i.e. evacuation / tanker loading as suggested by its Technical Consultant Engineers India Ltd and hence excluded by the KPT for computation of storage capacity of COT. It is confirmed by KPT that the prospective bidders also agree that one tank need to be kept for outage/ evacuation.
Less: 1 No. for evacuation/ tanker loading	1	Nos.	
Net available for storage	6	Nos.	
Pumpable Volume of Crude Oil (52000 Kl * 6 tanks)	312000	Cum	**(52000 Kl * 6 tanks)**
Density (conversion from KL to of Crude Oil	**0.9**	MT/ Cum	Furnished by the KPT
Storage Capacity of the COT	**280800**	tonnes	**(312000 Kl * 0.9 conversion factor)**

(c). The KPT has assumed that the COT will be utilised throughout the year to store 2,80,800 tonnes of crude at any point of time to meet the optimal capacity of SPM of 12 MMTPA. For optimal capacity of 12 MMTPA, considering the parcel size of a vessel at 2,55,000 MT, the KPT has estimated to handle 47 Nos. of vessels in a year. The KPT has rounded it off to 48 vessels apparently for ease in computation to arrive at 4 Nos. of vessels in a month or in other words one VLCC per week. The evacuation of crude from the tanks at COT is proposed by three mainline pumps supported by Booster Pumps each with capacity of 837.5 cum/hr (i.e. total evacuation rate 2512.5 cum./ hour = 837.5 cum./ hour * 3 main line pumps). The following calculation supports the achievement of evacuation of one vessel within a week's time:

Particulars	Value	Unit
3 Nos. Mainline Pumps supported by Booster Pumps each with capacity of 837.5 cum/hr	2512.5	cum/hr
Per Day Pumping Capacity	42210	cum/day
Per Day Pumping Capacity (multiplied by 0.9 density factor to convert into Tonnes)	37989	MT/day
Parcel Size of VLCC	255000	MT
Days required for evacuating a vessel with above mentioned size.	6.71 Around i.e. 1 week	Days

(d). Some of the users/ prospective bidders like the HPCL Mittal Pipelines Limited (HPCLMPL), IMC Limited (IMC) have raised few concerns over the storage capacity. Their argument is that refinery may require two to three grades of crude and it is possible that more than one refinery may use the SPM for crude oil. They, therefore, request for additional storage tanks. The KPT has emphatically claimed that clashing of two vessels of different users is ruled out. Clarifying that to achieve the optimal capacity of 12 MMTPA and vessel frequency of 1 vessel per week, the storage area has been planned, the KPT has emphatically claimed that clashing of two vessels of different users is ruled out. The KPT has argued that for more than one user also, the vessel arrival can be planned.

The HPCLMPL has pointed out that whilst the input discharge rate from vessel to SPM @ 5500 T/ hour is achievable, the evacuation assumed by the KPT at 2512.5 cum/ hour for 3 mainline pumps is on the higher and does not match with the input rate of 5500 T/ hour. They have argued that in India, normally pipelines with diameter of 28 or 30 inch are used. Even if 30 inch diameter pipeline is used, crude can be evacuated @ 1300 to 1400 cum/ hour by 3 pumps. The HPCLMPL has, therefore, contended that seven tanks proposed by the KPT are not sufficient even to handle the present capacity and have suggested that fourteen storage tanks are required to operate the terminal.

As regards the point made HPCLMPL, the KPT has clarified that on the total evacuation rate of 2512.5 cum/hr by the three main line pumps, it has applied an efficiency factor of 70% and the evacuation rate from COT to refinery is finally considered at 1750 cum/hr (2512.5 cum. Hr *70%). As regards the apprehension raised by the HPCLMPL about the evacuation from COT to refinery, the KPT has suggested that with adoption of efficiency improvements measures like increased diameter of pipelines, additional pumping capacity or more number of booster pumps, the evacuation rate envisaged in the proposal can be achieved. Since the activity of transfer of crude through Pipelines from COT to Refinery is out of the Scope of the Project as reported by the KPT, it will not have any impact on the reference tariff approved by this Authority in this Order.

As regards one of the points made by HPCLMPL that 7 days dwell time at COT is tight, the KPT has stated that once crude is received at COT, it can be continuously moved to the refinery as refinery is not going to remain idle. As brought out above, the KPT has furnished the calculation to show that one VLCC vessel can be evacuated within 7 days. The KPT has emphatically stated that the storage capacity envisaged by it at 6 nos. of tanks in 50 ha of land is sufficient enough for handling the optimal capacity of SPM assessed at 12 MMTPA. Relying upon the clarifications furnished by the KPT, this Authority is inclined to accept the storage capacity adopted by the KPT for storage of crude at COT.

The current proposal of the KPT is for fixation of Reference Tariff based on allotment of 50 ha of land and considering one VLCC vessel per week so as to meet the optimal capacity of 12 MMTPA. In order to give comfort level to the bidders on their concern about storage capacity, the proposal of KPT envisages to provide additional 50 ha of land to the Concessionaire during the period of concession if the storage facility needs to be expanded and it will be subject to mid-term review of optimal capacity and reference tariff for storage charge approved by this Authority in the current exercise. The tariff guidelines of 2013 as well as 2008 do not provide for any review of the tariff fixed by this Authority due to change in the project profile during the project period. In the instant, it is, however, relevant to state that Feasibility Report furnished by KPT for this project at page 8 itself envisages 100 ha of land for this project of which

50 ha of land is to be allotted by the KPT to the Concessionaire initially and additional 50 ha to be provided by the KPT in future subject to availability of land. Even the prospective bidders have requested for allotment of additional land. In view of the above position, if the KPT allots additional 50 ha of land during the project period the reference tariff fixed by this Authority would be reviewed as proposed by KPT. The KPT should, therefore, make it abundantly clear in the bid document at the time of bidding stage itself to all the prospective bidders as well as in the Concession Agreement that in case the KPT decides to allot additional 50 ha land to the Concessionaire any time during the project period, the reference tariff fixed by this Authority in this Order will be reviewed. In the event the KPT allots additional 50 ha of land, the KPT should ensure that a proposal is filed to review the reference tariff fixed in this Order and the reference tariff fixed here is reviewed.

(vi). **Capital Cost**:

(a). The total capital cost estimated by the KPT for SPM project is ₹992.38 crores. This comprises of ₹561.65 crores for SPM & pipeline and allied facilities and ₹430.73 crores for Crude Oil Terminal (COT) for storage of crude. As stated earlier, there are no separate norms prescribed for SPM operations.

The port furnished rate analysis to support the capital cost estimates. With regard to the request of IMC to review the capital cost based on the current market rates, the port has confirmed that the project cost estimates have been carried out afresh and are based on the current market rates. The capital cost estimated by the KPT at ₹992.38 crores include 5% of the capital cost estimates for SPM and Pipelines for COT towards miscellaneous capital cost. This is as per the norms prescribed in the guidelines for liquid terminal. The capital cost of ₹992.38 crores is supported with the Feasibility Report undertaken by the KPT in the year 2014. The 2008 guidelines stipulate that the capital cost will be as estimated by the concerned port trust is to be considered.

In view of the above position and recognising that the capital cost estimated by the KPT is based on the feasibility report and is reportedly based on the current market rate, the total capital cost as estimated by the KPT is relied upon in this exercise.

(b). Return on capital employed is estimated at 16% of the estimated capital cost as per the norms prescribed in the guidelines.

(vii). <u>Operating cost for SPM and COT</u>:
For estimation of operating cost, the KPT has in the absence of any specific norms for SPM operations adopted the norms prescribed for the liquid terminal. The operating cost estimated by the KPT is discussed hereunder:

(a). Power and fuel is not required for SPM operations as reported by the KPT after discussion with suppliers. For crude handling operations at the SPM, the KPT has stated that SPM operations will be powered by pump of vessel. The position clarified by the KPT is relied upon. This is also in line with the position followed in the earlier fixation of upfront tariff for SPM at KPT.

For COT, the KPT has estimated power cost for the 50 hectares (ha) of land for general illumination adopting the power consumption norm of 2.4 lakhs per hectare prescribed for liquid cargo terminal. When requested to confirm whether the whole area may require the illumination, the port has replied affirmatively that the entire 50 ha of land at COT area will require general illumination. In view of the clarification furnished by the KPT and recognising that it is based on the norms prescribed for liquid terminal in the absence of any specific norms available for SPM operations, and also recognising that none of the users have raised any objection in this regard, consumption of power considered by the KPT is considered. The unit cost of power considered by the KPT in the revised proposal is ₹10.89 per unit which is substantiated with detailed computation of unit rate of electricity based on the tariff schedule of power for the year 2014-15. The power cost for COT is considered as estimated by the KPT.

(b). The repairs and maintenance cost is estimated at 1% on the gross fixed asset value of civil works for COT and @ 2% on the gross fixed asset value of mechanical equipment for both COT and SPM operations adopting the norms prescribed in the 2008 guidelines for liquid terminal. Insurance cost and other expenses are estimated at 1% each of the gross fixed asset value estimated for SPM and for COT adopting the norms prescribed in the 2008 guidelines for liquid terminal. The estimates for these cost items are considered as estimated by the KPT.

(c). Clause 3.5.3. of the tariff guidelines of 2008 stipulates that the depreciation should be calculated following the Straight Line Method (SLM) as per the rates prescribed in the Companies Act 1956. The KPT has computed depreciation @ 3.34% on civil cost, 10.34% on mechanical equipment as per the rates prescribed in the Companies Act 1956 under the SLM for the relevant group of assets. When requested to calculate the amount of depreciation in line with the provisions of the Companies Act, 2013, the KPT has agreed that the depreciation rate should be as per the life norms prescribed in the Companies Act 2013. However, on perusing the depreciation computation it seen that the KPT has not made any modification in the depreciation computation.

The rate of depreciation on civil cost is seen to be as per the depreciation prescribed in the Companies Act, 2013 and hence considered as estimated by the KPT. The rate of depreciation in respect of capital cost on mechanical equipment is considered at 10% in line with the depreciation prescribed in the Companies Act, 2013 as against 10.34% considered by the KPT.

As regards pipeline, the Jawaharlal Nehru Port Trust (JNPT) had mentioned in their proposal for fixation of reference tariff for oil jetty that depreciation on pipelines under the Companies Act, 2013 will be 4%. This was considered while passing the Order No.TAMP/50/2013-JNPT dated 31 December 2013 in the case of the JNPT. This was also adopted in fixation of common tariff for floating pipeline facility for handling edible oil cargo at Kolkata Port Trust (KOPT). While admitting that depreciation should be as per the provisions of the Companies Act, 2013, the KPT has not objected to the depreciation rate of 4% for pipeline.

The provisions as per the Companies Act, 2013 (ref Schedule II of section 123) suggest that the useful life of pipelines to be considered as 30 years which translates to depreciation rate of 3.34% per annum. The depreciation rate considered in the case of JNPT for oil jetty based on the position indicated by the port at 4% is not found to be off the mark from 3.34%. Hence, the depreciation on pipeline is considered at @ 4% as against 10.34% considered by the KPT in line with the depreciation allowed for fixation of upfront tariff for oil jetty at JNPT and another Order No.TAMP25/2014-KOPT dated 29 October 2014 for fixation of tariff for floating pipelines as Kolkatta Port Trust.

While calculating depreciation, the other assets are duly taken proportionately under civil and equipment cost and depreciated. This is found to be in line with the approach followed in the other upfront tariff cases.

(d). (i). The upfront tariff guidelines require estimation of license fee for port assets based on the rates prescribed in the Scale of Rates of the respective Port Trusts. As brought out in the earlier part of this Order relating to factual position, the KPT had earlier estimated total license fee of ₹34.06 crores comprising of license fee of ₹26.99 crores for SPM operations towards 282743 sq. mtrs. of land area for installation of SPM, 35000 sq. mtrs. of land area for 17.5 kms pipeline, 31,80,0863 sq. mtrs. of water area available surrounding SPM and for COT the port had estimated license fee of ₹7.07 crores for 50,000 sq. mtr. of area for storage of crude. Most of the users/ prospective bidders have raised objection on the estimated license fee stating that the unit rate of license fee considered by KPT is very high. Though the KPT has not reduced the unit rate of license fee, it has reviewed this cost item and reduced the total license fee from ₹34.06 crores/ annum to ₹12.12 crores/ annum. The modification done in the estimation of license fee and the reasons therefor furnished by the KPT is brought out in the earlier paragraphs bringing out the factual position and hence not reiterated here.

(ii). The KPT has proposed to allot 50 ha of land to the concessionaire for development of storage facility referred at Crude Oil Terminal (COT). The KPT has, therefore, estimated license fee for 50 ha of land for arriving at the operating cost for storage at COT. The same is considered for estimation of license fee for COT.

(iii). For SPM operations, the KPT has estimated license fee for water area of 6,43,261 sq. mtrs. surrounding the SPM and has stated that it is in line with the captive SPM project at Vadinar. The KPT has furnished detailed working for arriving at the said total water area. The KPT has also estimated the area for pipeline from SPM to COT as 35000 sq. mtrs. by multiplying the length of pipe line at 17.5 kms X width of 2 mtrs. width of the pipe line. None of users have raised any objection on the sq. mtr. area considered by the KPT for SPM operations. The revised total area computed by the KPT for estimation of license fee for water area around SPM, and pipelines is solely relied upon.

(iv). The unit rate adopted by the KPT for estimation of license fee is ₹141.45 / sq mtr/ annum for land area of 50 ha at COT and for pipe line area of 35000 sq. mtrs. License fee @ 50% of the land area i.e. ₹141.45 and 50% of that = ₹70.725 / sq mtr/ annum is considered for estimating license fee for 6,43,261 sq. mtrs. of water area around SPM.

(v). The upfront tariff guidelines requires estimation of license fee for port assets based on the rates prescribed in the Scale of Rates of the respective port trusts. The estimation of license fee by the KPT applying unit rate of ₹141.45 per sq. mtr. annum for land area and ₹70.725 per sq. mtr. per annum for water area based on the valuation of land undertaken by its Consultant in the year 2012 is not in line with the provision prescribed in the 2008 guidelines for estimating the license fee. It is also relevant to mention here that in the upfront tariff for SPM fixed earlier, the unit rate adopted for estimating license fee was ₹0.75 per sq. mtr. per month (i.e. ₹9 per sq. mtr/ month) as considered by the KPT based on the rates prescribed in the Scale of Rates for Tuna. Some of users/ prospective bidders like the HPCL-Mittal Pipelines Limited have requested to consider ₹9 per sq. mtr. per annum as considered in the earlier SPM proposal. The KPT was, therefore, requested to modify the estimate of license fee based on the Scale of Rates applicable as per the rates approved by the Authority.

The KPT has clarified that the license Fee has been calculated considering Para 16.2 (f) of Land Policy Guidelines 2014. The relevant extract of the said para is reproduced hereunder:

"*In respect of PPP projects, the annual lease rent based on updated/latest market value with the approved rate of annual escalation would be indicated to the bidders at the bidding stage itself.*"

The KPT has stated that valuation of land in Tuna was undertaken by KPT by appointing a competent Government/ approved valuer in the year 2012. The KPT has substantiated the land valuation considered by it with copy of relevant pages of valuation report. The port has said that the said valuation of land is yet to be approved by its Board. Since the updated/ latest market value of land is available with the KPT and in view of stipulation in Clause 16.2.(f) of the Land Policy Guidelines, 2014 the KPT has reportedly decided to consider the license fee based on the updated market value. The license fee is calculated by KPT applying 6% return (which is the minimum level of return prescribed in the Land Policy for Major Ports 2014) on the market value of land assessed by the approved valuer in the year 2012 at ₹2266/ sq. mtr./ annum. The lease rent so arrived is ₹135.96/ Sqm/ Annum (i.e. ₹2266 x 6% = ₹135.96). Since the valuation of land pertains to the year 2012, license fee for land is escalated by 2% per annum which is the minimum cap prescribed in the Land Policy guidelines of 2014 to arrive at the license fee for the year 2014 at ₹141.45/ sqm/ annum (₹135.96 sqm/ annum * 2%*2%)

Ideally, when the valuation of land at Tuna was done by the KPT two years back in the year 2012, the KPT should have approached this Authority seeking approval of the license fee following the applicable land policy guidelines. It is not clear as to why the KPT did not undertake this exercise. The KPT has now quoted clause 16.2(f) of the Land Policy Guidelines of 2014 which requires the port in respect of PPP projects to indicate the bidders, the annual lease rent arrived by the KPT based on updated/ latest market value.

Though the unit rate of license fee adopted by the KPT is not based on the recommendation of Land Allotment Committee as per clause 18(a) of the land Policy Guidelines of 2014 and does not have the specific approval of the KPT Board, it cannot be denied that since the proposed rate arrived by the KPT has the approval of its Board, the proposed rate which includes estimation of license fee at the above mentioned rate has the incidental approval of its Board for the project.

In view of the above submissions made by the KPT drawing reference to the relevant clause in the Land Policy Guidelines of

2014 and in view of exigency expressed by the KPT for seeking reference tariff for this project which is one of the Projects included by the Ministry of Shipping in Shelf of Projects for 2014-15, this Authority is in a fait accompli situation to consider the unit rate of license fee at the level determined by the KPT for determining the upfront tariff. The unit rate of licence fee considered by this Authority is only for the limited purpose of determining the upfront fee for the current SPM project. By way of abundant caution, this Authority clarifies that consideration of the said unit rate of license fee is only with the limited extent of determining the reference tariff for this project and should not in any way be construed as approval of this Authority to the said rate and should not be quoted or referred by any one in future for any other purpose.

Clause 17(I) of the Land Policy guidelines stipulates that the licence fee for water area should be 50% of the license fee for the abutting land. Following this clause, the KPT has estimated the license fee for water area around the SPM applying 50% of the license fee arrived for the land i.e. 50% x ₹141.45 per sq. mtr./ annum = ₹70.725 per sq. mtr./ annum. Whilst KPT has done so for water area around SPM, it has not followed the same approach for the 35,000 sq. mtr. area of under water pipeline from SPM to COT. For pipeline area submerged in the water, the KPT has applied the full unit rate of ₹141.45 per sq. mtr/ annum as considered for the land area. The point made by KPT that it is as per earlier approved Order is not found relevant as the lease rental of ₹9/ sq. per annum is not found to have been done based on market value of land. The point made by KPT that it is in line with Land Policy of 2014 is infact not found to be correct in view of provision in clause 17(I) in the said guidelines. Since the pipelines area from SPM to the COT will be submerged under the water, the application of license fee arrived by the KPT for the land i.e. ₹141.45 per sq. mtr. is not found to be in line with the Land Policy Guidelines of 2014. The estimate of license fee for pipeline area submerged in the water area is, therefore, modified by applying 50% of the license fee considered by the KPT for the land area. Subject to above modification, the revised license fee estimated by the KPT is considered. The total revised license fee considered by us in the cost statement is ₹11.87 crores as against ₹12.12 crores estimated by the KPT. The differential ₹0.25 crores is on account of applying the unit rate for license fee for pipeline at ₹70.725 per sq. mtr./ annum instead of ₹141.25 per sq.mtr/ annum considered by the KPT. (i.e. differential ₹70.725 per sq. mtr./ annum * 35000 sq. mts. pipeline = 0.25 crores)

(e). Subject to above analysis, the total operating cost for handling crude at SPM is estimated at ₹61.02 crores and the total operating cost for COT is estimated at ₹61.95 crores.

(viii). (a). The total annual revenue requirement from SPM operations is estimated at ₹150.88 crores which is an aggregate of 16% return on the capital cost estimated at ₹89.86 crores and operating cost of ₹61.02 crores as against total annual revenue requirement from SPM operations estimated by the KPT at ₹197.39 crores which is an aggregate return on the capital cost estimated at ₹89.86 lakhs and operating cost of ₹107.53 crores. The difference in the operating cost estimates made by KPT and in the modified estimates is ₹46.51 crores (i.e. ₹107.53 crores – ₹89.86 crores). Of ₹46.51 crores difference, ₹21.94 crores difference arises on account of estimates of license fee revised by KPT but not captured by KPT in its reference tariff calculation (₹34.06 crores – ₹12.12 crores). The remaining difference arises on account of modification in the rate of depreciation complying with the Companies Act 2013, though agreed by KPT but not modified in its calculation, and on account of considering 50% of unit rate of license fee of land for underground pipeline instead of applying 100% of unit rate as explained earlier.

(b). The entire estimated revenue requirement from SPM is proposed to be recovered entirely from the composite handling charges. Accordingly, to meet the estimated annual revenue of ₹150.88 crores over the optimal capacity of 12 MMTPA, the consolidated handling charge of ₹125.74 per tonne is prescribed as against ₹164.50 proposed by the KPT.

As per the coastal concession policy of the Government which is prescribed in clause 4.3. of the tariff guidelines notified on 31 March 2005, handling of crude including POL is not entitled for any coastal concession. The port has also, therefore, rightly not any proposed any concessional tariff in the handling charge for coastal category.

(ix). The entire estimated Annual Revenue Requirement (ARR) from COT is proposed to be recovered by way of storage charge. To arrive at the storage charge, the storage capacity of tanks assessed at 2,80,800 tonnes is taken as the base. Considering that this quantum of crude oil will be stored in the storage tanks throughout the year, the KPT has arrived at the total storage capacity figure for 365 days and applying 70% optimum utilisation factor as per the guidelines at 7,17,44,400 tonnes/ annum (i.e. 2,80,800 tonnes/ day * 365 days *70%). The basis adopted by the KPT is relied upon. The modified estimated ARR from COT at ₹130.87 crores (KPT estimated ₹131.52 crores) has been divided by the overall storage capacity of 7,17,44,400 tonnes in line with the approach followed by the KPT. Accordingly, storage charge comes to ₹18.24/ tonne/ day as against ₹18.33/ tonne/ day proposed by the KPT.

(x). The entire crude oil transferred from SPM to storage tanks at COT is to avail storage facility. The KPT has proposed a note that no free period shall be allowed for any cargo at COT. None of the users/ prospective bidder have raised any pointed objection in this regard. As stated earlier, there are no norms prescribed by the SPM operations. The conditionality is, therefore, prescribed as proposed by the KPT.

(xi). The definition of terms like Port, Per Day and Tonne included in the Reference tariff Schedule is found to be in line with the general definitions and hence are approved. The proposed definition of TAMP is not relevant to be included in its Scale of Rates and hence not incorporated.

(xii). The proposed note no.1 under the composite handling charge states that handling charge prescribed above is a composite rate for handling the crude from vessels / tanker, transportation through pipeline till Crude Oil Terminal, wharfage and all other associated services provided by the operator except the storage charges which are prescribed in the tariff schedule. The proposed note elaborates the services provided under the composite handling rate and hence prescribed in the reference tariff schedule as proposed by the KPT.

All the other conditionalities proposed in the draft Reference tariff Schedule are found to be same as prescribed in the upfront tariff schedule approved by this Authority in January 2011 and hence the same be accepted.

(xiii). The other general conditions relating to levy of storage charge stating that it shall be payable for all days including Terminal's nonworking days and Customs notified holidays for stay of cargo and that storage charge on cargo shall not accrue for the period when the terminal operator is not in a position to deliver/ship the cargo when requested by the user due to reasons attributable to the terminal operator are in line with general prescription in the other upfront tariff cases and hence are prescribed in this case also as proposed by the KPT.

(xiv). 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.

The KPT has proposed performance standard of Output for SPM at 5500 tonnes / hour reportedly based on the average discharge rate of 5500 tonnes / hour considered in the optimal capacity calculation furnished in its earlier proposal for fixation of upfront tariff for SPM operation which was approved in January 2011. As stated earlier, the KPT was advised to update the output parameter based on based on handling rate achieved for VLCC at the other SPMs. The KPT has responded that even in current SPM project, the average discharge rate of 5500 tonnes / hour which formed the basis of assessing the optimal handling capacity of 12 MTPA in the earlier proposal filed by the KPT which is brought out in para 12.3. of the Order in the year 2010 is relevant for the proposed SPM project. That being so, the performance standards of Gross Berth Output of crude oil at SPM at 5500 tonnes as proposed by the KPT is incorporated. Incidentally, even one of the prospective bidders HPCL Mittal Pipelines Ltd. (HPCLMPL) has admitted that discharge rate of 5500 tonnes/ hour can be achieved at SPM.

The performance standards for transit storage dwell time is proposed of 7 days. This is supported with computation by the KPT. The proposed performance standards is, therefore, prescribed as proposed by the KPT.

The KPT has proposed performance standard of 37,989 MT/ day for Turnaround Time for receipt/ delivery operation. The performance parameter of 37,989 MT/ day is proposed based on recommendation of Technical Advisor for 3 Mainline Pumps with capacity of 837.5 cum/ hr. This has been elaborately discussed in the storage capacity in the earlier paragraphs. None of the users have raised any pointed objection on the performance standards proposed by the KPT on this parameter. The proposed performance standard is, therefore, prescribed as proposed by KPT.

Inspite of a specific request to prescribe the conditionalities governing the performance standards for the various cargoes, the KPT has not prescribed the same.

Since clause 2.2. of the revised guidelines of 2013 requires this Authority to notify the Performance Standards based on the proposal of the port, the Performance Standards as proposed by the port is notified along with the Reference Tariff Schedule.

(xv). The KPT has proposed a general note relating to indexation factor wherein the base WPI to be considered for automatic adjustment every year is proposed as 1 January 2014. Since the cost estimates considered in the reference tariff calculation are reportedly based on the current market rate i.e. of the year 2014, it is found appropriate and relevant to prescribe the base WPI to be considered for automatic adjustment every year as 1 January 2014 as proposed by the KPT.

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

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

13.3. In the result, and for the reasons given above, and based on a collective application of mind, this Authority approves the Reference Tariff Schedule for SPM facility in Gulf of Kutch at Kandla Port Trust and notifies it alongwith the Performance Standards.

13.4. 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 KPT is advised to incorporate the Reference Tariff and Performance Standards, in the bid document and subsequently in the Concession Agreement in respect of PPP Project.

13.5. 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.

13.6. 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.

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

13.8. 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.

13.9. After considering the views of the KPT, 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.

13.10. 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.

13.11. 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.

13.12. As stipulated in Clause 6.2 of the revised 2013 guidelines, 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 to the Kandla Port Trust. The Kandla Port Trust will be bound to take necessary action on the findings as per the provisions of the respective Concession Agreement.

13.13. As stipulated in Clause 6.3.1 of the revised 2013 guidelines, 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.

13.14. As stipulated in clause 6.3.2 of the revised 2013 guidelines, the PPP operator 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.

13.15. 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 PPP operator 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.

13.16. 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.

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

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

13.19. During the commercial operation at the terminal, within 15 days from the end of every quarter, the operator shall submit to this Authority through the KPT a report containing the terminal's physical and financial performance during the preceding three months.

(T.S. Balasubramanian)
Member (Finance)

Annex - I

FORMULATION OF UPFRONT TARIFF FOR SINGLE POINT MOORING AND ALLIED FACILITIES IN THE GULF OF KUTCH AT KANDLA PORT TRUST

Rs.in Crores

Sr. No.	Particulars	Estimates of KPT	Estimates of KPT modified by TAMP
I	**Optimal capacity of SPM**	The KPT has maintained optimal handling capacity of SPM at 12 MMTPA as propsoed in its earlier SPM project in the year 2010. The Optimal capacity estimated by KPT at 12 MMTPA and accepted by the Authority is brought out in para 13 (ii) (c) and para 14(v) of the Order dated 18 January 2011.	
	Optimal capacity of the Terminal (in Million tonnes).	**12.00**	**12.00**
II	**Capital Cost**		
(i)	**SPM & Pipelines- Mechanical cost**		
	(a). SPM and Allied Facilities	179.24	179.24
	(b). Pipelines and Installation Cost	355.67	355.67
	(c). Miscellaneous [5% on (a) and (b)]	26.75	26.75
	Sub-Total SPM & Pipelines (i)	**561.65**	**561.65**
(ii).	**Crude Oil Terminal**		
	(a). Crude Oil Terminal- Civil Cost	229.90	229.90
	(b). Crude Oil Terminal-Mechanical Equipment Cost	180.32	180.32
	(c). Miscellaneous [5% on (a) and (b)]	20.51	20.51
	Sub-Total Crude Oil Terminal (ii)	**430.73**	**430.73**
	Total Capital Cost for SPM Project (i+ii)	**992.38**	**992.38**
III	**Operating Cost for handling Crude Oil at SPM.**		
(i)	Repair & Maintenance		
	(a). Mechanical Equipment: [KPT: 2%* ₹ 561.65 Cr] [TAMP: 2%* ₹ 561.65 Cr]	11.23	11.23
(ii)	Depreciation		
	(a). Mechanical Equipment: [KPT: 10.34%* ₹ 561.65 Cr] [TAMP: (10%* ₹ 188.20 Cr)+(4%* ₹ 373.45 Cr -Pipeline Cost)]	58.07	33.76
(iii)	Insurance [KPT: 1%* ₹ 561.65 Cr] [TAMP: 1%* ₹ 561.65 Cr]	5.62	5.62
(iv)	License Fee		
	(a). Land Area : [KPT: (282743sqm water area around SPM + 35000 sqm for pipe line* ₹ 141.45/sqm/yr] [KPT letter dt 31.12.14 : 35000 Sqm for pipe line*Rs. 141.45/sqm/yr = Rs. 0.50 lakhs]# [TAMP: 35000 Sqm for pipe line*Rs. 70.725/sqm/yr = Rs. 0.25 lakhs]	4.49	0.25
	(b) Water Area : [KPT: 3180863 sqm* ₹ 70.725/sqm/yr] [KPT letter dt 31.12.14: 643261 Sqm*70.725/sqm/yr = Rs. 4.55 lakhs]# [TAMP: Considered as given by KPT in its letter dated 31.12.2014]	22.50	4.55
(v)	Other Expenses (1% * ₹ 561.65 Cr)	5.62	5.62
	Total Operating Cost for handling Crude Oil at the SPM (III)	**107.53**	**61.02**
IV	**Operating Cost for Storage at the Crude Oil Terminal (COT)**		
(i)	Power Cost: [KPT: 50 Ha* 2.4 Lakhs/hectare* ₹ 10.89/unit] [TAMP: 50 Ha* 2.4 Lakhs/hectare* ₹ 10.89/unit]	13.07	13.07
(ii)	Repair & Maintenance		
	(a). Civil: [KPT: 1% * ₹ 241.39 Cr] [TAMP: 1% * ₹ 241.39 Cr]	2.41	2.41
	(b). Mechanical: [KPT: 2% * ₹ 189.34 Cr] [TAMP: 2% * ₹ 189.34 Cr]	3.79	3.79
(iii)	Insurance [KPT: 1%* ₹ 430.73 Cr] [TAMP:1%* ₹ 430.73 Cr]	4.31	4.31
(iv)	Depreciation		
	(a). Civil: [KPT: 3.34%* ₹ 241.39 Cr] [TAMP: 3.34%* ₹ 241.39 Cr]	8.06	8.06
	(b). Mechanical: [KPT: 10.34%* ₹ 189.34 Cr] [TAMP: 10%* ₹ 189.34 Cr]	19.58	18.93
(v)	License Fee		
	(a). Land Area : [KPT: 500000 sqm* ₹ 141.45/sqm/yr] [TAMP: Considered as given by KPT.]	7.07	7.07
(vi)	Other Expenses (1% * ₹ 430.73 Cr)	4.31	4.31
	Operating Cost for Storage at Crude Oil Terminal (COT)- (IV)	**62.60**	**61.95**

Rs.in Crores

Sr. No.	Particulars	Estimates of KPT	Estimates of KPT modified by TAMP
V	**Estimated Annual Revenue Requirement (ARR) & Proposed Tariff**		
(A).	**Crude Oil Handling at SPM.**		
(i)	**Estimated Annual Revenue Requirement for Crude Handling at SPM.**		
	(a). Total Operating Cost	107.53	61.02
	(b). Return on Capital Employed @ 16% * ₹ 561.65 Crores	89.86	89.86
	(c). Total Revenue requirement for Crude Oil Handling at SPM.	**197.39**	**150.88**
(ii)	**Optimal Capacity (in MTPA)**	**12.00**	**12.00**
(iii)	**Per tonne rate for Crude handling at SPM ₹. Per MT [(i) (c)/(ii)]**	**164.50**	**125.74**
(B)	**Storage Charges at Crude Oil Terminal (COT)**		
(i)	**Estimated Annual Revenue Requirement of Storage facility at COT**		
	(a). Total Operating Cost	62.60	61.95
	(b). Return on Capital Employed @ 16% * ₹ 430.73 Crores.	68.92	68.92
	(c). Total Revenue requirement for Storage Charges at COT	**131.52**	**130.87**
(ii)	**Storage Capacity Parameters at COT**		
	(a). Storage Capacity of Tanks at Crude Oil Terminal (in KL)	312,000.00	312,000.00
	(b).No of days	365.00	365.00
	(c).Capacity Utilization	70%	70%
	(d). Density (Conversion from KL to Tonnes)	0.90	0.90
(iii)	**Storage Charges Rs/MT/Day [Estimated ARR/(312000*365*70%*0.9 = 717,44,400 tonnes)**	**18.33**	**18.24**
	# Note: The KPT has furnished the revised license fee vide its letter dated 31 December 2014. The KPT has, however, not furnished the revised reference tariff consequent to this revision in license fee. In our computation the license fee revised by KPT is captured.		

Annex - II

KANDLA PORT TRUST

REFERENCE TARIFF SCHEDULE FOR SETTING UP OF SINGLE POINT MOORING AND ALLIED FACILITIES IN GULF OF KUTCH ON BOT BASIS

CHAPTER 1 – DEFINITIONS & GENERAL TERMS & CONDITIONS

1.1. DEFINITIONS – GENERAL

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

(i). **“Port”** shall mean Kandla Port Trust.

(ii). **"Per day"** means per calendar day unless otherwise stated

(iii). **“Tonne”** shall mean one metric tonne or 1,000 kilograms or one cubic metre.

1.2 GENERAL TERMS & CONDITIONS:

(i). Interest on delayed payments / refunds:

(a). The user shall pay penal interest on delayed payments. Likewise, the terminal operator shall pay interest on delayed refunds.

(b). The rate of interest will be 2% above the Prime Lending Rate of the 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 all the documents required from the user, whichever is later.

(d). The delay in payments by the users will be counted beyond 10 days after the date of raising the bills by the 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 Trust Act, 1963 and / or prescribed as a condition in the Scale of Rates.

(ii). All charges worked out shall be rounded off to the next higher rupee on the grand total of each bill.

(iii). For the purpose of calculating the dues the unit by weight shall be 1 tonne or 1,000 kilograms, the unit by volume measurement shall be 1 cubic metre and the unit by capacity measurement for liquids in bulk shall be 1,000 litres.

(iv). (a). Rates prescribed in this Scale of Rates are ceiling levels; likewise, rebates and discounts are floor levels. The operator may, if he 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 / or provided the new rates fixed shall not exceed the rates notified by the TAMP.

(v). 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.

(vi). The users will not be required to pay charges for delays beyond a reasonable level attributable to the operator.

2. CONSOLIDATED HANDLING CHARGES

Description	Rate in ₹ per metric Ton
Composite handling charge	125.74

Notes:

(i). The handling charge prescribed above is a composite rate for handling the crude from vessels / tanker, transportation through pipeline till Crude Oil Terminal, wharfage and all other associated services provided by the operator except the storage charges which are prescribed below in the next section.

(ii). Composite handling charge shall be levied on the actual tonnage of crude handled at the SPM.

(iii). The following vessel related charges shall be levied by the KPT as per the rates prescribed in the Scale of Rates of KPT from time to time for vessel related services provided by the port:

- Port dues
- Pilotage fees
- Pilot attendance fees
- Mooring charges
- Anchorage charges
- Tug Hire charges

3. STORAGE CHARGES:

The storage charges for the cargo stored in the crude oil terminal shall be as below:

(A). For Import & Export

Description / Cargo	(Rate in ₹ per MT per day)
Crude Oil	18.24

Note:

(i). No free days shall be allowed for any type of cargo.

(ii). Storage charges shall be payable for all days including Terminal's nonworking days and Customs notified holidays for stay of cargo.

(iii). Storage charge on cargo shall not accrue for the period when the terminal operator is not in a position to deliver/ship the cargo when requested by the user due to reasons attributable to the terminal operator.

4. GENERAL NOTE TO ABOVE SECTION 2 & 3:

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 2014 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.

Annex - III

PERFORMANCE STANDARDS

FOR REFERENCE TARIFF SCHEDULE FOR SINGLE POINT MOORING AND ALLIED FACILITIES IN GULF OF KUTCH AT KANDLA PORT TURST ON BOT BASIS.

PERFORMANCE STANDARDS

Sr. No.	Parameters	Performance Standards
(i)	Gross Berth Output for SPM- Crude Oil.	5500 Tonnes/Hour
(ii)	Transit Storage Dwell Time	7 Days
(iii)	Turnaround Time for receipt/delivery Operations	37989 MT/Day.

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

F. No.TAMP/60/2014 - KPT - Proposal from Kandla Port Trust for fixation of Reference tariff for setting up of Single Point Mooring (SPM) and allied facilities in Gulf of Kutch on BOT basis in PPP mode.

1.1. A joint hearing in this case was held on 6 December 2014 at the Kandla Port Trust (KPT) premises. The KPT made a power point presentation of its proposal. At the joint hearing, the KPT and the concerned users/ organisation bodies/ prospective applicants have made the following submissions:

Kandla Port Trust (KPT)

(i). Makes a brief presentation of its proposal. Hard copy is given.

(ii). The SPM proposal is not a representative or comparable to any of existing projects. Hence, we have filed the proposal under 2013 guidelines following principles of 2008 guidelines.

(iii). In the earlier proposal filed in February 2010 for SPM project, Crude Oil Terminal (COT) was not included. We have now restructured the SPM project. COT storage is included in the restructured SPM project.

(iv). We have considered average discharge rate of crude at SPM at 5500 T/ hour as considered by KPT in the February 2010 which was approved by TAMP. We confirm the average discharge rate of crude at SPM operated by IOCL at Vadinar is at the level of 5500 tonnes / hour.

(v). Optimal handling capacity is maintained at 12 MTPA as considered in our earlier SPM proposal, which was approved by TAMP in January 2011.

(vi). 50 hectares of land is sufficient to store 1 VLCC vessel bringing crude oil. Tariff proposed is based on 50 hectares of land at COT with 7 storage tanks.

(vii). Project allows us to provide additional storage area of 50 hectares in future if more than one vessel is to be handled.

(viii). To handle optimal capacity of 12 MTPA for an average parcel of vessel of 2,55,000 Million Tonnes (MT), 47 vessels are required per annum. This translates to handling on an average 4 vessels in a month i.e. 1 vessel in a week.

(ix). 3 mainline pumps supported with booster pumps can pump crude oil @ 837.5 cum/ hour. Applying 70% utilisation and density of cargo at 0.9, pumping, evacuation capacity works out to 37,989 tonnes/ day.

Thus, it will take 6.71 days to evacuate crude oil from COT to refinery for a parcel size of 2,55,000 MT of one VLCC vessel. Storage capacity considered by KPT will suffice.

(x). SPM operations will be powered by pump of vessel. Hence, SPM will not require power and fuel.

(xi). Other operating cost are estimated following norms prescribed in 2008 guidelines for multipurpose liquid terminal.

<u>HPCL-Mittal Pipelines Limited</u>

(i). Refinery may require two to three grades of crude. Moreover, it is possible that more than one refinery may use the SPM for crude oil. Hence, there is need for additional storage tanks.

(ii). We admit discharge rate of 5500 tonnes/ hour of crude from vessel to SPM can be achieved. There is, however, incompatibility in the input rate of crude at SPM and output rate of crude from COT.

(iii). Evacuation from COT tank farm to pipeline considered by KPT at 2512.5 cum/ hour for 3 mainline pumps is on the higher side. In India, normally pipelines with diameter of 28 or 30 inch are used. If we go for 30 inch diameter pipeline, crude can be evacuated @ 1200 to 1400 cum/ hour by 3 pumps. Seven tanks are not sufficient even to handle the present the capacity. More storage tanks will be required.
[KPT: Presently, we cannot handover entire 100 hectares of land. We have kept provision for 100 hectares of which 50 hectares will be handed initially. Additional 50 hectares can handed over in future. In that case, the capacity and the tariff fixed by TAMP will have to be reviewed.]

(iv). As per the current proposal, once a vessel discharges crude, we cannot get another vessel for seven days due to constraint in storage facility. Entire vessel will discharge crude in 36 hours. We need 24 hours for settlement after discharge of crude to storage tank. Hence seven days dwell time is tight.
[KPT: As regards the view of HPCLMPL that 7 days dwell time at COT is tight, it is to state that crude refinery is not going to be idle. Once crude is received at COT, it can be moved to the refinery.]

(v). Vessel related tariff for the proposed SPM should be in line with vessel related charges prescribed for SPM at Vadinar. If the vessel related rate is high, the proposed SPM project will not be commercially viable.
[KPT: At Vadinar we are providing vessel related services to IOCL and Essar. It is not for a single user. Whereas, for the proposed SPM at the Gulf of Kutch we have to provide marine services

exclusively due to different location. It cannot be combined with Vadinar or Kandla division due to long distance involved.]

(vi). Exclusivity means it become expensive.

<u>IMC Limited (Van Oord PPP International B.V. Consortium)</u>

(i). The KPT's assumption is fine for ideal condition. There can be bunching of vessel.
[KPT: We have kept cushion of 40% idle time for SPM operations. Hence the question of bunching of vessel does not arise.]

1.2. A summary of the written submissions made by Gandhidham Chamber of Commerce & Industry, IMC Limited and Adani Ports & SEZ Limited on the subject proposal and reply furnished by KPT is tabulated below:

<table>
<tr><th>Sl. No.</th><th>Written submissions made by users</th><th>Reply furnished by KPT</th></tr>
<tr><td>1.</td><td>Gandhidham Chamber of Commerce & Industry</td><td></td></tr>
<tr><td>(i).</td><td>The lease rental for land rate @ ₹141 per sq.m./annum are on extremely high side and we are afraid, this will make the project unviable and ineffective.</td><td rowspan="4">Refer to the reply furnished for Adani Ports & SEZ Limited at Sl.No.3 below.</td></tr>
<tr><td>(ii).</td><td>The valuation of land made by M/s.K.M. Thakkar & Associates is based on Kandla land and therefore are not realistic and logical. For such a mammoth work, the valuers' capability and competence are under clouds, as this work is done in record haste.</td></tr>
<tr><td>(iii).</td><td>The upfront storage tariff works out to ₹549.93 per m.t./month. Nobody will prefer to opt for storage facility at such exorbitant rates.</td></tr>
<tr><td>(iv).</td><td>The way Veera SPM is projected, it will prove a non-starter.</td></tr>
<tr><td>2.</td><td>IMC Limited</td><td></td></tr>
<tr><td>(i).</td><td>SPM and Sub Sea Pipeline:</td><td></td></tr>
<tr><td></td><td>It is noted that the SPM tariff is based on the earlier cost estimates made for the SPM and sub-sea pipeline with annual escalation. We suggest that a review of the capital cost based on current market prices so that the tariff is based on actual cost estimates.</td><td>The cost estimates for the Project are based on the current market rates.</td></tr>
<tr><td>(ii).</td><td>Crude Oil Terminal:</td><td></td></tr>
<tr><td></td><td>Capacity of 312,000 KL appears to be on the lower side due to the following reasons:</td><td></td></tr>
<tr><td></td><td>(a). With capacity of 312,000 KL, achieving 12 million tonnes per annum is very difficult as the tanks will have to turnaround 3-4 times a month. Considering that Crude Oil will have to pumped over long distances to the refineries, achieving this throughput is very challenging from a practical perspective.</td><td>Capacity of COT has been envisaged as given below:
<table>
<tr><th>Storage Capacity of the COT</th><th>Value</th><th>Unit</th></tr>
<tr><td>Pumpable Volume of Crude Oil</td><td>52000</td><td>Cum</td></tr>
<tr><td>Nos. of Tanks Total</td><td>7</td><td>Nos.</td></tr>
<tr><td>Less: 1 No. for evacuation / tanker loading</td><td>1</td><td>Nos.</td></tr>
<tr><td>Net available for storage</td><td>6</td><td>Nos.</td></tr>
<tr><td>Pumpable Volume of Crude Oil</td><td>312000</td><td>Cum</td></tr>
</table></td></tr>
</table>

<table>
<tr><td></td><td></td><td>
<table>
<tr><td>Density of Crude Oil</td><td>0.9</td><td>MT/Cum</td></tr>
<tr><td>Storage Capacity of the COT</td><td>280800</td><td>MT</td></tr>
</table>

For handling 12 MMTPA, considering the parcel size of 255000 MT per Vessel, 48 Nos. of vessels would require to be handled in a year. So, every month, 4 Nos. of vessels may be required to be handled. Hence, storage of one vessel may be required for approximately a week period. Moreover, the proposed evacuation through three mainline pumps would be possible to achieve evacuation of one vessel within a week's time period as per following calculation:

<table>
<tr><th>Particulars</th><th>Value</th><th>Unit</th></tr>
<tr><td>3 Nos. Mainline Pumps supported by Booster Pumps each with capacity of 837.5 cum/hr</td><td>2512.5</td><td>Cum/hr</td></tr>
<tr><td>Per Day Pumping Capacity</td><td>42210</td><td>Cum/day</td></tr>
<tr><td>Per Day Pumping Capacity (multiplied by 0.9 density factor to convert into Tonnes)</td><td>37989</td><td>MT/day</td></tr>
<tr><td>Parcel Size of VLCC</td><td>255000</td><td>MT</td></tr>
<tr><td>Days required for evacuating a vessel with above mentioned size.</td><td>6.71</td><td>Days</td></tr>
</table>

Thus, above position for storage capacity is justified.
</td></tr>
<tr><td></td><td>(b). It is possible that more than one refinery may use the SPM for crude oil, which may require additional tankages.</td><td>Vessel frequency to bring Crude Oil of 12 MMTPA is envisaged at a vessel per week. So, the same can be planned for more than one user also. The clashing of two vessels of different users is ruled out in view of this. However, over the period of Concession, in case, the Storage Facilities may be needed to be expanded, land would be provided by the Concessioning Authority subject to review of Capacity and Tariff for COT.</td></tr>
<tr><td></td><td>(c). Different grades of crude oil may be imported, requiring additional tankages.</td><td>Refer above.</td></tr>
<tr><td></td><td>(d). Some grades of crude oil require heating facilities in the tankage.</td><td>Cost estimates envisaged provides for the same.</td></tr>
<tr><td></td><td>(e). Crude Oil parcel size is taken as 255,000 MT. The parcel size could be upto 280,000 MT.

In view of these reasons, the tankage requirement must be higher than one VLCC load. We suggest that the Concessionaire is given the option to develop the tankage based on market requirements. If the tankage requirement is more than 312,000 KL, then the Concessionaire must be permitted to seek revision in the tariff for storage charges based on actual tankage and investment.</td><td>Refer the reply to Sr. No.1 which explains that the Capacity of COT is more than higher range of Parcel size mentioned by the participant. Also, refer the reply of 1 (b).
[Storage capacity of the COT = 2,80,800 MT as given by the KPT.]</td></tr>
</table>

(iii).	We request confirmation that the cost of on-shore pipeline from the Land Fall Point to the Crude Oil Tanks and from the Tanks to the boundary wall of the COT is included in the Project Cost for COT.	It is confirmed the said cost is included in the Estimated Project Cost.
(iv).	We request confirmation as to whether the cost of automation system of the Crude Oil Terminal has been considered separately as this is a significant cost item.	It is confirmed the said cost is included in the Estimated Project Cost.
(v).	There are grades of crude oil that require heating to ensure pumpability. It is suggested that cost of heating system is considered.	It is confirmed the said cost is included in the Estimated Project Cost.
(vi).	Please clarify that, in case, the BOT Concessionaire expands the COT to handle higher volumes, say 2 VLCCs, then the tariff will be revised suitably to provide returns on the increased capital cost and operating cost.	Refer reply at 2(ii)(b) above.
(vii).	The land lease rentals for the COT is very much on the higher side as the land identified for the COT is very marshy and substantial investment is required for clearing and filling the land. It is, therefore, requested that the land rentals are fixed on competitive terms.	License Fee has been calculated considering Para 16.2 (f) of the Land Policy Guidelines 2014.
3.	**Adani Ports & SEZ Limited**	
(i).	We observe that the license fee considered for the COT at Veera is exorbitantly high for such a remote location.	It is to state that the License Fee has been calculated considering Para 16.2 (f) of the Land Policy Guidelines 2014 which states that *"In respect of PPP projects, the annual lease rent based on updated/latest market value with the approved rate of annual escalation would be indicated to the bidders at the bidding stage itself."* In light of the Land Policy for Major Ports 2014, it can be said that in the form of valuation report, there is an availability of the updated/ latest market value (which is yet to be approved by Port Trust Board). It was decided to consider the rate of License Fee based on the valuation report got prepared by KPT in 2012 by a competent Govt. approved valuer M/s.K. M. Thacker & Associates for land assets in the Port Estate premises at Tuna Port. The copy of relevant pages of valuation report is furnished. License Fee is calculated at 6% of Market Value in line with Land Policy for Major Ports 2014 and approval by KPT Board is awaited. The License Fee rate is calculated as ₹135.96 / Sqm / Annum (i.e. ₹2266 x 6% = ₹135.96) as on 2012. Hence, adding escalation at 2% per year, the rate of License Fee is arrived at ₹141.45 / Sqm/ Annum. Further, it is to state that the land earmarked for COT has been considered with substantial costs towards land filling,
(ii).	Rate derived are on the basis of valuation report submitted by M/s.K.M. Thakker & Associates, with due respect, we have serious doubts about their competence to carry out such huge task and accordingly, we request that KPT should carry out the exercise of valuation with more competency and transparency in order to arrive at a fair price of the land.	
(iii).	Due to such exorbitant land valuation, the upfront storage rental is coming to ₹549.93/MT/month, which is way high than what market can absorb. Currently, the rentals for liquid storage tanks are in the range of ₹200-225/MT, in fact, KPT has already entered into one PPP project in Kandla wherein the upfront storage tariff for liquid storage is ₹214/MT and now if the tariff is fixed at approximately ₹611/KL, it would be impossible for any bidder to participate.	
(iv).	The land earmarked for COT is marshy land, requiring lot of ground improvement and concessionaire will have to incur substantial costs towards that, which is not considered.	
(v).	We request you to direct KPT to carry out proper exercise before determining the tariff for SPM at Veera, including the land valuation.	

		rolling, compaction etc.

1.3. A summary of the written submission received from the HPCL-Mittal Pipelines Limited (HPCL-MPL), as agreed by HPCL-MPL at the joint hearing and reply furnished by KPT thereon is tabulated below:

<table>
<tr><th>Sl. No.</th><th>Written submission received from HPCL-MPL</th><th>Reply furnished by KPT</th></tr>
<tr><td>(i).</td><td>Tariff for the marine related charges have not been explicitly included and provided to the bidders in any of the documents related to the RFQ by KPT. We suggest it should be clarified prior to issuance of RFP document and it should be in line with the charges at Vadinar for SPM in KPT Water to maintain commercial parity.</td><td>It is to state that the marine related charges have not been envisaged in the scope of work of the Concessionaire and the same is in purview of KPT. Hence, the tariff for the same need not to be included in the upfront tariff fixation proposal.</td></tr>
<tr><td>(ii).</td><td>KPT has included only tanks in the project whereas at least 14 tanks are required for operating a terminal considering receipt from VLCC and dispatch of crude received from earlier VLCC from two to 6 tanks at the same time considering the blend requirement by the customer. KPT is requested to clarify whether this aspect has been considered by KPT in formulating the tariff and if not how will the tariff be determined.</td><td>It is to state that 7 no. of tanks would be sufficient enough for handling capacity of 12 MMTPA, considering the parcel size of 255000 MT per vessel.

Following is the calculation of the Storage Capacity of COT and its appropriateness for Optimal Capacity of 12 MMTPA.
<table>
<tr><th>Storage Capacity of the COT</th><th>Value</th><th>Unit</th></tr>
<tr><td>Pumpable Volume of Crude Oil</td><td>52000</td><td>Cum</td></tr>
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<tr><td>Pumpable Volume of Crude Oil</td><td>312000</td><td>cum</td></tr>
<tr><td>Density of Crude Oil</td><td>0.9</td><td>MT/cum</td></tr>
<tr><td>Storage Capacity of the COT</td><td>280800</td><td>MT</td></tr>
</table>
For handling 12 MMTPA, considering the parcel size of 255000 MT per Vessel, 48 Nos. of vessels would require to be handled in a year. So, every month, 4 Nos. of vessels may be required to be handled. Hence, storage of one vessel may be required for approximately a week period. Moreover, the proposed evacuation through three mainline pumps would be possible to achieve evacuation of one vessel within a week's time period as per following calculation:
<table>
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<tr><td>3 Nos. Mainline Pumps supported by Booster Pumps each with capacity of 837.5 cum/hr</td><td>2512.5</td><td>cum/hr</td></tr>
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</table>
</td></tr>
</table>

		Thus, above position for storage capacity is justified.
(iii).	In the presentation of KPT as well as the report by M/s.Feedback Infra received with TAMP letter No.TAMP/60/2014-KPT dated 17 November 2014, an evacuation rate of 2500/- KL per hour from the Crude Oil Terminal Tanks has been considered considering the terminal operations with 7 tanks. This does not match with and is approximately 5 MMTPA higher than the target throughput desired by KPT in the RFQ. This is not economically and operationally viable as it would require a much higher dia pipeline that would be operated on and off and will be an unnecessary additional capacity expenditure imposed on the bidders. We request that a maximum of 1300 KL/Hr be considered for viability of the project as a whole and accordingly number of tanks may be revised to 14 numbers and 100 acres of land may be offered initially itself.	The envisaged evacuation rate of 2512.5 cum/hr has been further applied with 70% efficiency i.e. 1750 cum/hr has been considered to envisage the evacuation from COT to refinery. As far as the Pipelines from COT to Refinery is concerned, the efficiency improvements like increased dia, additional pumping capacity or more number of booster pumps may be applied by the Concessionaire on its own as required since the Pipelines from COT to Refinery is out of the Scope of the Project and Tariff. The justification for 7 no of tanks may be referred from the above reply to Sr. No. 2. Further, it is to state that 500000 sq. m. of land for development of COT has been suggested by the Technical Consultant i.e. Engineers India Limited. Requirement of land was also discussed with the existing SPM and/or COT operators during a conference held on 9th May 2014 for Project Restructuring purpose. These existing players were of the view that 50 Ha land would be sufficient for storage of one VLCC. However, in case the refinery users require storage of two vessels at a time, there may be requirement of additional 50 Ha for expanding the storage facilities. Hence, in view of the same, it has been envisaged that if the storage facilities are to be expanded, KPT may provide 50 Ha in future subject to review of capacity and tariff. Also, such additional 50 ha of land will be provided subject to availability of land with Kandla Port Trust.
(iv).	License fees for land offered may be confirmed at ₹9 per sqm as per existing SOR for the project to be viable.	Refer to the reply furnished for Adani Ports & SEZ Limited at para no.1.2. in Sl.No.3 above.
(v).	Cost of power, service water and other similar major costs may be considered to arrive at the operating cost.	It is to state that all the costs required to arrive at the operating cost have been considered as per the TAMP Guidelines, 2008. Moreover, there is no requirement for power and fuel cost for handling operations at SPM and the same has been considered as per the previous Tariff Order as well as in line with the discussion with the suppliers.

1.4. The KPT has vide its letter dated 6 December 2014 also brought out the following submission made by HPCL-MPL verbally at the joint hearing and has furnished its response thereon which is tabulated below:

Sl. No.	Verbal submission by HPCL-MPL as brought out by KPT in its letter dated	Response of KPT on the verbal submission of HPCL-MPL

	6 December 2014	
(i).	Evacuation rate of 2500 cum/hr may not be possible to be attended by the Pipelines from COT to refinery of 30’’ dia. Average rate in industry is maximum 1300 to 1400 KL/hr.	(a). On the envisaged evacuation rate of 2512.5 cum/hr, factor of 70% efficiency has been further applied i.e. 1750 cum/hr has been considered to envisage the evacuation from COT to refinery. (b). As far as the pipelines from COT to Refinery is concerned, the efficiency improvements like increased diameter of pipelines, additional pumping capacity or more number of booster pumps may be applied by the Concessionaire on its own as required since the Pipelines from COT to Refinery is out of the Scope of the Project and Tariff.

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