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Tariff Authority for Major Ports

G No. 38 **New Delhi,** **3 February, 2014**

NOTIFICATION

In exercise of the powers conferred by Sections 48, 49 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 Jawaharlal Nehru Port Trust (JNPT) for fixation of Reference tariff for development of additional Liquid Terminal at JNPT under Revised Guidelines for Determination of Tariff for Port Projects at Major Ports, 2013, which were notified vide Notification No.TAMP/18/2013-Misc. dated 30 September 2013 vide Gazette No. 254 as in the Order appended hereto.

(T.S. Balasubramanian)
Member (Finance)

Tariff Authority for Major Ports

Case No. TAMP/50/2013-JNPT

Jawaharlal Nehru 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 31st day of December 2013)

This case relates to a proposal received from the Jawaharlal Nehru Port Trust (JNPT) for fixation of Reference tariff for development of additional Liquid Bulk Terminal (LBT) at JNPT.

2.1. The JNPT filed a proposal for development of additional LBT under cover of its letter dated 10 October 2013. On an initial scrutiny of the proposal of JNPT, it was seen that the JNPT had not furnished the following:

(i). Copy of Feasibility Report.

(ii). List of users / shortlisted bidders or prospective applicants to be consulted with addresses and other contact details.

(iii). Soft copy of the entire upfront proposal including the proposed Scale of Rates. Soft copy is required to be circulated to the relevant stakeholders to avoid postal delay.

2.2 Since the proposal of JNPT could not be taken up on consultation with users / short listed bidders in the absence of the above details, the JNPT was requested vide our letter dated 17 October 2013 to furnish the requisite details to enable us to proceed further in the matter. It was also intimated to JNPT that its proposal would be taken up for further processing only after the receipt of the requisite details from JNPT.

2.3. In response, the JNPT vide its e-mail dated 24 October 2013 furnished the list of bidders who have purchased RFQ and participated in pre-application meeting. Subsequently, the JNPT vide its e-mail dated 28 October 2013 forwarded the tariff calculation for the Liquid Terminal and stated that it has already forwarded the feasibility report.

2.4 From the list of bidders furnished by the JNPT, it was seen that the JNPT has only furnished the name and address of the bidders. Given the priority attached to disposal of the reference tariff cases in a time bound manner the concerned proposal is forwarded by e-mail to all the users/ prospective bidders, to avoid delay. In view of this position, the JNPT was requested to furnish the e-mail address and other contact details of the bidders.

2.5. Since the feasibility report was also not made available, we had vide our e-mail dated 28 October 2013 requested the JNPT to furnish the same at the earliest so as to enable us to proceed further.

2.6. Again, the JNPT was reminded to furnish the following vide our letter dated 4 November 2013:

(i). Telephone no., fax no. and e-mail address of the bidders.

(ii). Soft copy of the following:

(a). JNPT Proposal
(b). Draft Scale of Rates

(c). Schedule of Performance Standards.
(d). Feasibility Report

The port was also intimated that its proposal would be taken up for further processing only after the receipt of the requisite details from JNPT, as already mentioned in our letter dated 17 October 2013.

2.7. In this backdrop, the JNPT on 6 November 2013 has furnished the following:

(i). Soft copy of the proposal along with draft Scale of Rate [by e-mail dated 6.11.2013

(ii). Soft copy of the Schedule of performance Standards and Telephone no., fax no. and e-mail address of the bidders [by e-mail dated 6.11.2013

(iii). Soft copy of Feasibility Report (in CD form) (by hand delivery).

2.8. In other words, it is only on 06 November 2013 that the entire proposal was received in the soft form, which was immediately taken up on consultation the next day on 7 November 2013 with the relevant stakeholders, as brought out in the subsequent paragraph.

3. The main points made by the JNPT in its proposal dated 10 October 2013 are summarized below:

(i). Background of the case:

(a). Upfront tariff is proposed for Liquid Bulk Terminal at JNPT based on the guidelines published by the 'Tariff Authority for Major Ports' vide Notification No.214 dated 8 August 2013 'Guidelines for Determination of Tariff for Projects at Major Ports, 2013'. As per Clause 2.4 of the latest guidelines, in case specific tariff is not available for a commodity, tariff available in the neighboring port is required to be considered.

(b). At JNPT even though tariff for Liquid Cargo is available, the same is not fixed under guidelines for PPP Projects, 2008. In view of that, JNPT may be required to consider rate at neighboring port.

(c). Rates for liquid terminal fixed under guidelines, 2008 is available only for Kandla Port Trust (KPT) in the neighboring port. However, it is noticed that the Capital Cost of Project at KPT is ₹ 233.50 Crores, whereas the Capital Cost envisaged for the Liquid Project at the JNPT is over ₹ 1171.07 Crores, with a capacity of 15.84 million tonnes.

(d). In view of the above, the proposal has been submitted under the 2008 guidelines so as to arrive at a realistic rate.

(ii). An additional liquid bulk terminal at JNPT is proposed to handle all liquid cargo, as it is expected that the liquid traffic at JNPT will reach 32 MTPA by the year 2034-35.

(iii). Traffic Forecast

Based on a detailed traffic study, it is seen that various liquid cargoes such as crude oil, POL products and other liquid Cargos could be handled at the Additional Liquid Terminal (except BPCL jetty), which is as follows:

Year	Base Case Scenario	Year	Base Case Scenario
2012-13	5.20	**2024-25**	12.32
2013-14	5.99	**2025-26**	13.04

Year	Base Case Scenario	Year	Base Case Scenario
2014-15	5.83	**2026-27**	13.80
2015-16	6.28	**2027-28**	15.83
2016-17	8.31	**2028-29**	16.77
2017-18	7.90	**2029-30**	17.76
2018-19	7.52	**2030-31**	18.80
2019-20	8.05	**2031-32**	19.93
2020-21	9.11	**2032-33**	23.59
2021-22	9.66	**2033-34**	25.05
2022-23	11.09	**2034-35**	**26.62**
2023-24	11.64		

POL products and Crude oil traffic will contribute to the major portion of the liquid cargo traffic.

(iv). Development Plan

In planning of the facility, it has been considered that the existing BPCL Jetty will continue to handle traffic to its designed capacity i.e. 5.5 MTPA and the additional traffic would be handled at the new facility. Thus, the traffic projection for the various phases of development of the Additional Liquid Terminal of JNPT are given below:

Commencing Year	Terminal	Cargo handled	Traffic volume (MT)
2018-19	PHASE-IA	Crude	0.93
		POL	5.59
		Other Cargo	0.99
2027-28	PHASE-IB	Crude	1.52
		POL	10.05
		Other Cargo	2.24
2034-35	MASTERPLAN	Crude	1.61
		POL	21.44
		Other Cargo	3.56

(v). Master plan of Additional Liquid Terminal:

A Master Plan has been prepared for the additional liquid terminal considering cargo projection up to year 2034-35. Master Plan consists of development of 6 liquid cargo jetties, where 4 jetties would be developed in first phase (Phase 1A and Phase 1B) and another two in Master Plan stage. Features of Master plan are as follows:

Phase	Year	Traffic (MTPA)	No. of Berths
Phase-IA	2018-19	7.51	2
Phase-IB	2027-28	15.83	4
Master Plan	2034-35	26.61	6

(vi). Upfront tariff Calculation

The upfront tariff to be levied on the cargo handled at the Additional Liquid Terminal is in the following categories:

(a). Berth Hire Charges
(b). Cargo handling Charges
(c). Storage Charges

(vii). The Project Capital Cost for the PHASE-I (IA + IB) is as follows:

Sl. No.	Description of Facilities	Cost (₹ in Crores)
1	**Berth**	
	4 nos. Jetty Structure including Bresting and Mooring Dolphins, Fenders, Bollards and Quick Release Mooring Hooks, and other inserts and furnitures	138.04
	Dredging Berth Pocket	3.00
	Building - Control Tower cum Pump House with Electrical Substation	2.00
	Miscellaneous @ 5%	7.15
	TOTAL EXPENDITURE ON BERTH	**150.19**
2	**Cargo Handling Cost**	
2.1	**Civil Cost**	
	Approach Bridge - 15m Approach Bridge to support Pipeline trestle as well as Two Lane Carriage Way	266.94
	Other Civil Works- Fencings and Compound Walls and Drainage Works	1.00
	Building for Control Tower And Fire & Water Supply Pumphouse Building	1.26
	Fire Fighting System for Jetty	
	Miscellaneous @ 5%	13.46
	TOTAL CIVIL CONSTRUCTION COST	**282.66**
2.2	**Mechanical Cost**	
	Pipeline Cost & marine Loading Arm	
	Crude	44.44
	POL	161.42
	Others	82.18
	Control Systems and Tank Automation System	7.96
	Electrical System	9.50
	Water/Air/Nitrogen/bunkering lines	0.77
	Miscellaneous @ 5%	15.31
	TOTAL MECHANICAL COST	**321.57**
	TOTAL CAPITAL COST FOR HANDLING ACTIVITY (2.1 + 2.2)	**604.23**
3	**Storage Area**	
3.1	**Civil Cost**	
	Storage Area Filling and Ground Improvement	43.80
	Storage Tanks - including piling under tank-farms, Dike Construction	307.76
	Internal Roads & Railways	16.27
	Miscellaneous @ 5%	18.39
	TOTAL CIVIL CONSTRUCTION COST	**386.22**
3.2	**Mechanical & Electrical Cost**	
	Fire Fighting System for Tank Farm Area	9.26
	Truck and Wagon Loading Farm	19.72
	Miscellaneous @ 5%	1.45
	TOTAL MECHANICAL AND ELECTRICAL	**30.43**
	TOTAL CAPITAL COST FOR STORAGE ACTIVITY (3.1 + 3.2)	**416.65**

(viii). Key Assumptions considered for the estimation of Tariff for the Liquid cargo berths:

(a). Liquid cargo namely Crude Oil, POL and other liquid cargoes (consisting of Edible oil, chemicals, molasses, etc.) are envisaged to be handled at the proposed liquid terminals at JNPT.

(b). For the development of the project, the port envisages to allot 13 hectares of water area for the four berths of Phase-I and 73 hectares of land for setting up of storage yard. Land lease rent has been considered @ ₹16 / Sqm. / Month as per JNPT Scale of Rates.

(c) Optimal Capacity:

The optimum capacity of the Liquid Terminal is assessed at 31.55 Million Tonnes Per Annum (MTPA). The cargo-wise break up is given hereunder:

S. No.	Type of Cargo	Capacity in MT (Million Tons)
1.	Crude Oil	3.09
2.	POL	23.73
3.	Others	4.74
	TOTAL CAPACITY	**31.55**

(d). The handling rate as specified by the for the liquid terminal is tabulated below:

S. No.	Type of Cargo	Handling Rate (T/ Hr)
1.	Crude Oil	5000
2.	POL	1000
3.	Others	300

(e). The traffic estimated to be handled in the year 2028-29 has been taken as the base to determine the cargo share. For assessing the optimal capacity, the port has considered, share of cargo in terms of berth days reckoning with the handling rate of each type of cargo as tabulated below:

S No	Type of Cargo	Estimated Cargo in MTPA	Share of Cargo Traffic	Share of Cargo Occupancy	Foreign Vessel	Coastal Vessel
1.	Crude Oil	1.55	10%	2%	0%	100%
2.	POL	11.91	75%	59%	60%	40%
3.	Others	2.38	15%	39%	72%	28.40%

(f). The average cargo wise GRT of vessels

Cargo Type	Average GRT (T)
Crude oil	72000
POL	48000
Other liquid	36000
Avg GRT	**48547**

(ix). Calculation of Berthing Charges:

Berthing charges collected from vessels have been computed based on the TAMP guidelines. The details are furnished in the following paragraphs.

(a). As given earlier, the capital cost for the berthing activity has been estimated at ₹150.19 crores.

(b). The details considered for the estimation of Annual Operating Cost for berth hire services is given below:

Particular		**₹ in Crores**
Maintenance cost	1% of Berthing Capital Cost except Dredging	1.50
Insurance	1% of total Berthing Capital Cost	1.50
Depreciation	3.34% of total Berthing Capital Cost	5.02
Total Operating Expenses		**8.02**

(c). Annual Revenue Requirement (ARR) on Berthing services:

S No	**Particulars**	**₹ in Crores**
1.	Total Annual Operating Cost	8.02
2.	Capital Employed	150.19
3.	16% Return on Capital Employed (ROCE)	24.03
4.	**Annual Revenue Requirement**	**32.05**

(d). Berth hire Charges

Based on the parameters given in the previous paragraphs, the port has estimated the berth hire charges as given below:

Average GRT Vessel (T)	48547
Utilisation	70%
No of Berths	4 nos
No of Hours at the jetty	24528 hrs.
Total GRT Hours	1190760223 hrs
GRT Hrs through Foreign Vessel	757881056
GRT Hrs through Coastal Vessel	432879166
Revenue Requirement	₹32.05cr.

Based on the above the port has arrived the Berth Hire for Additional Liquid Terminal, which is given below:

Berth Hire Charges/GRT / Hr	**Foreign in ₹**	**Coastal in ₹**
	0.31	0.19

(x). Calculation of Cargo Handling Charge:

The cargo handling tariff for the liquid cargoes have been computed based on the TAMP guidelines, as per the details furnished in the following paragraphs.

(a). Capital expenditure on Cargo handling facilities:

The Capital cost for cargo handling activity is has been estimated at ₹604.23 crores, as given earlier.

(b). The various expenses considered for the estimation of annual operating cost is given below:

Particular			₹ in Crores
Maintenance cost		1% of Civil Cost	2.98
		2% of Mechanical Works	6.13
Other expenses		1% of total capital employed	6.04
Power charges		13 hectares * 2.4 lakh units per hectare * ₹7 per unit	2.18
License Fee			2.50
Insurance		1% of the total capital cost	6.04
Depreciation	civil	3.34%	8.99
	Equipment & pipeline	10.34%	33.25
TOTAL Operating Cost			**88.11**

(c). Annual Revenue Requirement (ARR) on Cargo handling facilities

S. No	Particulars	In ₹ Crores
1.	Total Annual Operating Cost	88.11
2.	Capital Employed	604.23
3.	16% Return on Capital Employed (ROCE)	96.68
4.	**Annual Revenue Requirement**	**184.79**

(d). Handling charges

The handling Charges for various cargoes is arrived by distributing the arrived ARR based on the Occupancy levels of each cargo as given in the following table:

Capital Cost Split-up					
Cargo	**Occupancy**	**Pipeline & Loading Arm**	**Others Capital Cost**	**16% ROCE**	**Operation Cost**
Crude	2%	44.44	4.865	7.89	1.36
POL	59%	161.42	186.919	55.73	52.09
Others	39%	82.18	124.415	33.05	33.05

Cargo Handling Rate (₹ Per Metric Ton)

Handling Charges per Ton	Foreign Cargo	Coastal Cargo
Crude	49.89	29.94
POL	54.10	32.46
Other	161.25	96.75

(xi). Calculation of Storage Charges:

(a). Capital expenditure on Storage facilities has been estimated to the tune of ₹ 416.65, as explained earlier. :

(b). Operating expenses

(i). Power cost is estimated considering the consumption norm of 2.4 lakh units/annum/ hectare for 73 hectares. The unit rate of power adopted is ₹7. The total power cost of ₹12.26 crores

(ii). Repairs and Maintenance on civil cost is estimated at 1% on civil assets and 2% on mechanical and equipment cost as per the norms prescribed in the guidelines.

(iii). Insurance and other expenses are estimated at 1% each on the gross fixed value.

(iv). Depreciation is computed at per rate prescribed in the Companies Act.

Accordingly, the annual operating cost estimated as follow:

Particular			**₹ in Crores**
Power cost		73 hectares * 2.4 lakh units per hectare * ₹7 per unit	12.26
Maintenance cost		1% of Civil Cost	3.68
		2% of Mechanical Works	0.58
Insurance		1%	4.17
Depreciation	Civil	3.34%	12.29
	Equipment	10.34%	3.00
Licence Fee			14.01
Other expenses		%	4.17
TOTAL			53.95

(c). Annual Revenue Requirement (ARR) on storage facilities.

S. No.	**Particulars**	**₹ in Crores**
1.	Total Annual Operating Cost	53.95
2.	Capital Employed	416.65
3.	16% Return on Capital Employed (ROCE)	63.49
4.	Annual Revenue Requirement	117.44

(d). Storage Charges

Particulars	**Rate in ₹**
Storage charge / T/ Day	6.97
Storage charge / T/ Month	209.03

(xii). The rates proposed by the JNPT are as follows:

(i). Berth Hire Charges (₹ / GRT / Hour)

Foreign in ₹	**Coastal in ₹**
0.31	0.19

(ii). Handling Charges (₹ / Metric T)

Cargo Type	**Foreign Cargo in ₹/T**	**Coastal Cargo in ₹/T**
Crude	49.89	29.94
POL	54.10	32.46
Other	161.25	96.75

(iii). Storage Charges

	Rate in ₹
Storage charge (₹ / T/ Day)	6.97
Storage charge (₹ / T/ Month)	209.03

4. In accordance with the consultative procedure prescribed, the JNPT proposal dated 10 October 2013 was forwarded to the users / user organisations and prospective applicants (as per the list provided by the JNPT) vide our letter dated 7 November 2013 seeking their comments by 17 November 2013. The users were informed that no further extension will be granted to respond and if no comments are received from them, it may be presumed that they have no comments to offer. The comments received from the users / user organisations and prospective applicants were forwarded to the JNPT as feedback information. The JNPT has responded vide its letters dated 18 November 2013 and 26 December 2013.

5. Based on a preliminary scrutiny of the proposal, the JNPT was requested to furnish additional information/ clarifications on various points vide our letter dated 28 November 2013. After a reminder dated 18 December 2013, the JNPT vide its e-mail dated 18 December 2013 has responded. A summary of the queries raised by us and response of the JNPT is tabulated below:

Sl. No.	**Queries raised by TAMP**	**Response of JNPT**
I.	**General:**	
(i).	The JNPT has envisaged development of the Additional Liquid Bulk Terminal (LBT) to handle 'Crude Oil', 'POL' and 'Others' in a phased manner. In this regard, 2 nos. of berths are envisaged to be developed in Phase - IA (commencing from the year 2018-19), 2 nos. of berths are envisaged to be developed in Phase - IB (commencing from the year 2027-28) and 2 nos. of berths are envisaged to be developed in Master Plan (commencing from the year 2034-35). However, the entire proposal of the JNPT appears to proceed based on the Phase – I (IA + IB) development only, viz., cost of construction of 4 berths, allotment of water area for 4 berths etc. In this regard, the JNPT to confirm that its proposal under reference is to the limited extent of fixing reference tariff to be adopted for award of contract for the Phase – I only and not with reference to the Phase of Master Plan reported to commence from the year 2034-35.	This is as per traffic studies conducted by Consultant.
(ii).	(a). The JNPT has considered optimal capacity of the facility consisting of 4 no. of berths at 31.55 MMTPA. As per the features of the Master Plan provided by the JNPT under para 1.2.1 of Project details, the traffic of Phase – I (IA and IB) is expected to reach 15.83 MMTPA to be handled at the four berths. That being so, the reason for creating capacity at double the traffic projection to be explained.	This traffic capacity of 31.55 MMTPA is calculated based on the 2008 guideline issued by TAMP considering 70% berth occupancy and 365 days working time and handling rate mentioned by TAMP for the purpose of estimating the Upfront Tariff. But the traffic of 15.83MTPA for 4 berths has been considered in the Feasibility Report which suggests phasing of project development based on Port Planning guidelines. The Berth Occupancy as per the Feasibility Report is kept

	(b). Investment in the infrastructure facilities, both civil and equipment, to create almost 100% additional capacity may be an idle investment looking to the traffic potential indicated at 15.83 MMTPA in Phase – I, apart from prescription of tariff at lower level. Further, based on the cargo share of Crude Oil, POL and Others at 10%, 75% and 15% respectively (as furnished by the JNPT) and considering the handling rate in respect of the Crude Oil, POL and Others at 5000 tonnes/ hour, 1000 tonnes/ hour and 300 tonnes/ hour, as prescribed in the upfront guidelines for liquid cargo terminal, the optimal capacity for a berth for 24 hours and 365 days at 70% utilisation works out to 7.94 million metric tonnes per annum. This shows that 2 berth configuration may be sufficient to handle the traffic of 15.83 MMTPA envisaged during the Phase – I. Therefore, the JNPT to review the four berth configuration and restrict the capital cost and operating cost relevant for 2 berth configuration. If 4 berth configuration is absolutely essential even at the start of the project, the JNPT to fully justify the capital and the operating costs for the additional 2 berths.	about 60% and a port operating days of 330 (days to account for down time) to keep the Vessel waiting time to minimum. Please refer berth occupancy calculation as per Feasibility Report in the attached sheet.
(iii).	The JNPT has considered optimal capacity of the facility consisting of 4 no. of berths at 31.55 MMTPA. However, the traffic that is estimated to be achieved in the year 2034-35 (commencing year of the Master Plan) is only 26.62 MMTPA. In such a scenario, the proposal to create capacity to the tune of 31.55 MMTPA against the requirement of 26.62 MMTPA to be justified.	This capacity is based on the guideline published by TAMP and for the purpose of Upfront Tariff Calculation.
(iv).	The JNPT to furnish the details of the total allocation of land for the project and the details of the land proposed to be allocated for the ancillary facilities.	A total land of about 73 Ha of Port area has been allotted for the project for the development of the back-up area and the approximate break-up are as follows: 1. Storage Tank farm Area (including Future) – 38 Ha Truck Parking and Queing Area – 8 Ha Truck Loading Area & Operation area – 6.5 Ha Rail Siding and Wagon Loading Area – 15 Ha Area for Approach Bund, Green Belt and Miscellaneous – 5.5 Ha Also the water area of about 13.2 Ha is provided for development of Approach Trestle and Berth Structures as follows: Area for 4 Berths Structure – 700mx50m= 3.5 Ha Approach Trestle – 6950mx14m = 9.7 Ha Thus Total Water Front Area is 13.2Ha
(v).	Also, confirm whether the proposed allotment of land for the LBT is in line with the land use plan of the port.	
(vi).	The basis for proposing to allot 13 hectares of water area for the 4 berths and 73 hectares of land for setting up of storage yard to be furnished.	

<table>
<tr><td></td><td></td><td>It is confirmed that the proposed allotment of land for the LBT is in line with the land use plan of the port.</td></tr>
<tr><td>B.</td><td><u>Optimal Capacity</u>:</td><td></td></tr>
<tr><td>(i).</td><td>As stated earlier, the JNPT is seen to have considered the cargo share of Crude Oil, POL and Others at 10%, 75% and 15% respectively, based on the cargo share that would prevail during the year 2028-29. The JNPT to validate the cargo share with analysis.</td><td rowspan="2">This cargo share is adopted based on the traffic projection with Feasibility Report for that period. A table showing traffic projection is attached for reference</td></tr>
<tr><td>(ii).</td><td>The JNPT to examine whether the actual cargo share that prevailed during the last three years at the existing liquid jetty at JNPT viz., 2010-11 to 2012-13 may be more relevant rather than considering the cargo share that may prevail at a distant future.</td></tr>
<tr><td>(iii).</td><td>The JNPT to furnish details of capacity of pipelines proposed to be installed for transporting different liquid cargoes from/ to the Storage Tank Farm to justify the handling rates considered by the port for the respective cargoes. The JNPT is also requested to establish linkage between pipeline dimensions and handling rates of respective cargo.</td><td>Pipeline dimensions as per the Feasibility Report is presented in following table:

<table><tr><th>LIQUID CARGO</th><th>LINE SZE (IN INCHES)</th></tr><tr><td>CRUDE OIL</td><td>32”Ø</td></tr><tr><td>POL</td><td>24”Ø</td></tr><tr><td>EDIBLE OIL unloading</td><td>20”Ø</td></tr><tr><td>CHEMICALS</td><td>16”Ø</td></tr></table>
However, the Handling Rate as prescribed by TAMP Guidelines is considered for Capacity Calculation.</td></tr>
<tr><td>(iv).</td><td>With reference to pipeline, the port to certify that the dimensions considered by it in the proposal is optimum and that no further improvement, which may have an impact on handling rate, would be possible due to technical reasons. The port is also requested to clarify whether the Concession Agreement would categorically specify the dimensions of pipeline, which cannot be altered by the BOT operator, after award of the contract.</td><td>JNPT certifies that dimensions considered are optimum based on cargo forecast and efficiency of the system. No further improvements will be required based on technical reasons. .

However the Concession Agreement shall not specify the dimensions of pipelines for BOT operator.</td></tr>
<tr><td>(v).</td><td>Though the computation of storage yard capacity is not required as per the guidelines, the capacity of the storage area may have an impact on the optimal capacity considered by the port in this case. The JNPT is, therefore, requested to compute and furnish the optimal capacity of the storage tank farm with detailed workings.</td><td>The Optimal Capacity of the Tank-farms is proposed as per the Feasibility Report for the Additional Terminal as follows:

No Storage for Crude
16 Days storage for POL
20 Days storage for Other Cargo

With the above the storage Capacity estimated is as follows:

<table><tr><th>Sl. No.</th><th>Liquid Cargo</th><th>Projected Traffic</th><th>Optimal Storage Capacity Required</th><th>Storage Capacity Provided</th></tr><tr><td>1</td><td>Crude</td><td>1.55</td><td>-</td><td>-</td></tr><tr><td>2</td><td>POL</td><td>11.90</td><td>521643</td><td>523400</td></tr><tr><td>3</td><td>Other</td><td>2.38</td><td>130410</td><td>136290</td></tr><tr><td colspan="2">TOTAL</td><td>15.83</td><td>652053</td><td>659690</td></tr></table></td></tr>
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<tr><td>(vi).</td><td>The reason for considering the entire capacity of Crude oil to be coastal, 60% of the POL capacity to be Foreign and the balance 40% to be Coastal and 71.61% of the Other Liquid capacity to be Foreign and 28.39% of the Other Liquid capacity to be coastal, to be explained.</td><td>As per the traffic study during the period 2028-29 the port is expected to handle only crude moving from JNPT to Refineries in South India Hence only coastal movement.

POL vessel mix assumed to be 60% Foreign and 40% coastal considering future trend showing India to become net exporter of POL.
The break-up for Other cargo are as follows:

<table>
<tr><th colspan="2">Others</th><th colspan="2" rowspan="2">Foreign</th><th colspan="2" rowspan="2">Coastal</th></tr>
<tr><th>Cargo</th><th>% of Total Traffic</th></tr>
<tr><td>Edible</td><td>4.20%</td><td>100%</td><td rowspan="3">71.61%</td><td>0%</td><td rowspan="3">28.39%</td></tr>
<tr><td>Molasses</td><td>0.17%</td><td>100%</td><td>0%</td></tr>
<tr><td>Chemical</td><td>10.66%</td><td>60%</td><td>40%</td></tr>
<tr><td>Total</td><td></td><td></td><td></td><td></td><td></td></tr>
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<tr><td>C.</td><td><u>Capital cost</u>:</td><td></td></tr>
<tr><td>(i).</td><td>The JNPT to furnish the basis for the quantum of each item of civil work and the document substantiating the base rate considered by it to estimate the civil capital costs under each of the activity viz., Handling activity, Berthing activity and Storage activity.</td><td>JNPT considered rate for the each item of work as submitted with Feasibility Report prepared in 2013.</td></tr>
<tr><td>(ii).</td><td>Though the JNPT has furnished Document to support the capital cost of marine loading arms and construction of tanks, in the absence of workings, we are not in a position to correlate the documentary evidence with the cost of the said equipment. The JNPT is, therefore, requested to furnish detailed working to arrive at the capital cost considered in its proposal, based on the rate quoted in the documents furnished by the port.</td><td>JNPT has received quotations with two varied values. Hence JNPT has used the same as per the Feasibility Report prepared in 2013.</td></tr>
<tr><td>(iii).</td><td>The JNPT is also requested to furnish workings to arrive at the cost of each of the other equipment, as considered by it in its proposal. The documentary evidence in support of the cost of the each of the said equipment also to be furnished.</td><td>JNPT has considered rate for the each item of work as submitted with Feasibility Report prepared in 2013.</td></tr>
<tr><td>(iv).</td><td>With regard to capital dredging, the JNPT to furnish the quantum of silt proposed to be dredged and the unit rate of dredging. The unit rate of dredging to be substantiated with documentary proof.</td><td>The estimated dredging requirement at berth pocket is 0.2 Million cum</td></tr>
<tr><td>(v).</td><td>The JNPT to confirm that the base rate considered by it to estimate the civil capital costs as well as cost of the each of the equipment considered under each of the activity viz., Handling activity, Berthing activity and Storage activity, reflect the prevailing/ current market rates.</td><td>JNPT has confirmed that the cost estimate presented is as per Feasibility Report 2013 rates.</td></tr>
<tr><td>(vi).</td><td>The reason for not estimating any capital cost for firefighting system for the jetty to be explained.</td><td>This has been included.</td></tr>
</table>

D.	**Operating cost**:		
(i).	Cargo handling activity:		
	(a).	While calculating the repairs & maintenance cost on civil assets, the JNPT appears to have included the 'miscellaneous cost component relating to equipment cost' also as part of the civil assets and estimated the maintenance cost on civil assets at ₹2.98 crores, instead of ₹2.83 crores i.e. 1% of civil costs at ₹282.66 crores. The JNPT to rectify the mistake.	JNPT has noted. JNPT has stated that it will review and correct.
	(b).	While calculating the repairs & maintenance cost on equipment, the JNPT appears to have excluded the 'miscellaneous cost component' and estimated the maintenance cost on equipment at ₹6.13 crores, instead of ₹6.43 crores i.e. 2% of equipment cost at ₹321.58 crores. The JNPT to rectify the mistake.	JNPT has noted. JNPT has stated that it will review and correct.
	(c).	The JNPT is seen to have excluded the 'miscellaneous cost component' forming part of the civil assets, while calculating depreciation on the civil assets. The same to be considered.	JNPT has noted. JNPT has stated that it will review and correct.
	(d).	The JNPT to rework the depreciation considered by it in respect of equipment and pipelines, in line with the depreciation provisions prescribed in the Companies Act, 2013.	JNPT has noted. JNPT has stated that it will review and correct.
	(e).	It is not clear how the JNPT has arrived at the licence fee of ₹2.50 crores. The JNPT to furnish detailed working in this regard, by specifying the area and rate of licence fee adopted. While doing so, it may be kept in view that the licence fee as available in the Scale of Rates of JNPT (Schedule 7.1 of Chapter 7) may have to be escalated with reference to the note no. (3) and (4) mentioned below the Schedule 7.1. Further, it may be noted that the Land Policy Guidelines of 2010 stipulate that the licence fee for the water area would be 50% of the licence fee of the abutting land. Therefore, if the JNPT estimates the licence fee with reference to the water front area, then only 50% of the escalated licence fee may have to be considered.	₹2.5 crore is arrived as follows: As per JNPT Scale Of Rate of ₹16/- per sqm/month corresponding to lessess other than Government for developed Space Inside Port area Thus for 13 ha of water area, 130000X 16X12months =2.5 crore. The same shall be revised for 50% for Water Area.
	(f).	There appears to be a mistake in the total of the operating cost considered by JNPT. Based on the	JNPT has stated that it will review and correct, if required.

		figures of each of the components forming part of the operating costs, as furnished by the JNPT, the operating cost works out to ₹68.11 crores and not ₹88.11 crores. The JNPT to reconcile the difference.	
(ii).	Storage activity:		
	(a).	While calculating the repairs & maintenance cost on civil assets, the JNPT appears to have excluded the 'miscellaneous cost component' forming part of the civil assets. The same to be considered.	JNPT has stated that it will review and correct, if required.
	(b).	Similarly, while calculating the repairs & maintenance cost on equipment, the JNPT appears to have excluded the 'miscellaneous cost component' forming part of the equipment. The same to be considered.	JNPT has stated that it will review and correct, if required.
	(c).	The JNPT is seen to have excluded the 'miscellaneous cost component' forming part of the civil assets, while calculating depreciation on the civil assets. The same to be considered.	JNPT has stated that it will review and correct, if required.
	(d).	Similarly, while calculating depreciation on the cost on equipment, the JNPT appears to have excluded the 'miscellaneous cost component' forming part of the equipment. The same to be considered.	JNPT has stated that it will review and correct, if required.
	(e).	The JNPT to rework the depreciation considered by it in respect of equipment and tank farms, in line with the depreciation provisions prescribed in the Companies Act, 2013.	JNPT has stated that it will review and correct, if required.
	(f).	It is not clear how the JNPT has arrived at the licence fee of ₹14.01 crores. The JNPT to furnish detailed working in this regard, by specifying the area and rate of licence fee adopted. While doing so, it may be kept in view that the licence fee as available in the Scale of Rates of JNPT (Schedule 7.1 of Chapter 7) may have to be escalated with reference to the note no. (3) and (4) mentioned below the Schedule 7.1.	JNPT has calculated as follows: Lease rate = ₹16/-/sqm/month Area=730000X16X12 = 14.01crores
E.	**Revenue Requirement and proposed tariff**:		
(i).	The JNPT has arrived at the per tonne handling rate by considering the ratio of pipeline and loading arm to be deployed to handle each type of cargo as well as the based on the berth occupancy. In this regard, it is relevant to mention here that		JNPT has considered per tonne handling rate by considering the ratio of equipment cost and Berth Occupancy (which also includes Handling Rate of each cargo) as the revenue required from the same is collected based on hourly rates. Thus the same is considered.

<table>
<tr><td></td><td>while fixing the upfront tariff for the Liquid jetty at Kandla Port Trust (KPT), the per tonne handling rate for each cargo was determined by the KPT based on the handling rate of each cargo and the ratio of foreign and coastal cargo in respect of each of the cargo. The JNPT to examine the approach adopted by the KPT to arrive at the per tonne handling rate vis-à-vis, the approach adopted by the JNPT in this regard and justify the approach adopted by the JNPT with an analysis.</td><td></td></tr>
<tr><td>(ii).</td><td>Out of the revenue from the cargo handling activity, the JNPT has proposed to recover the amount from the levy of handling charges only, whereas the guidelines prescribe apportionment of 5% revenue requirement towards Miscellaneous charges. In view of this position, the JNPT to review its proposal so as to allocate 5% revenue towards miscellaneous charges and thereby prescribe the per tonne miscellaneous levy. The workings in this regard to be furnished. The activities to be covered for levy of Miscellaneous charges also to be listed out.</td><td>JNPT has stated that Rate for Miscellaneous Handling shall be added.</td></tr>
<tr><td>(iii).</td><td>The JNPT has determined the per tonne storage charges by considering the capacity of the tank farm at 659690 MT. The JNPT to furnish basis for consideration of the said capacity, with workings.</td><td>The Optimal Capacity of the Tank-farms is proposed as per the Feasibility Report for the Additional Terminal as follows:
The Optimal Capacity of the Tank-farms is arrived as:
No Storage for Crude
16 Days storage for POL
20 Days storage for Other Cargo
With the above the storage Capacity estimated as follows:
<table>
<tr><th>Sl. No.</th><th>Liquid Cargo</th><th>Projected Traffic</th><th>Optimal Storage Capacity Required</th><th>Storage Capacity Provided</th></tr>
<tr><td>1</td><td>Crude</td><td>1.55</td><td>-</td><td>-</td></tr>
<tr><td>2</td><td>POL</td><td>11.90</td><td>521643</td><td>523400</td></tr>
<tr><td>3</td><td>Other</td><td>2.38</td><td>130410</td><td>136290</td></tr>
<tr><td colspan="3">TOTAL</td><td>652053</td><td>659690</td></tr>
</table></td></tr>
<tr><td>(iv).</td><td>The JNPT has estimated the storage charge based on the capacity of the tank farm at 659690 MT for 365 days at 70% utilization (256 days). In this regard, it may be confirmed that the liquid cargo would be stored for all the 256 days in a year, so that the BOT operator will achieve the revenue requirement from storage of cargo.</td><td>Yes it is confirmed that cargo will be stored for 256 days in a year so that BOT operator will achieve revenue requirement from the storage of the cargo.</td></tr>
<tr><td>(v).</td><td>JNPT to furnish an analysis to establish that the said capacity of the storage tank farm is in tandem with the capacity of the LBT.</td><td>The Optimal Capacity of the Tank-farms is proposed as per the Feasibility Report for the Additional Terminal as follows:
<table>
<tr><th>Sl. No.</th><th>Liquid Cargo</th><th>Projected Traffic</th><th>Storage Capacity Provided as per Feasibility Report</th></tr>
<tr><td>1</td><td>Crude</td><td>1.55</td><td>-</td></tr>
<tr><td>2</td><td>POL</td><td>11.90</td><td>523400</td></tr>
<tr><td>3</td><td>Other</td><td>2.38</td><td>136290</td></tr>
<tr><td colspan="3">TOTAL</td><td>659690</td></tr>
</table></td></tr>
</table>

<table>
<tr><td>(vi).</td><td>In the calculation of berth hire, JNPT to furnish the basis for considering the average size of the vessels carrying Crude Oil, POL and Other Liquids at 72000 GRT, 48000 GRT and 36000 GRT respectively.</td><td rowspan="2">The details are revised for Avg. Vessel Size as per Port's Vessel Log and the same are as follows:

<table><tr><th>Cargo</th><th>Avg. DWT</th><th>Avg. GRT (tonnes) (assuming GRT/DWT factor of 0.6)</th></tr><tr><td>Crude</td><td>80,000</td><td>48000</td></tr><tr><td>POL</td><td>40,000</td><td>24000</td></tr><tr><td>Others</td><td>25,000</td><td>15000</td></tr></table>
The past 3 years Vessel Size are as follows:

<table><tr><td></td><td>Cargo</td><td>Avg. DWT</td><td>Avg. GRT (tonnes) (assuming GRT/DWT factor of 0.6)</td></tr><tr><td rowspan="3">2011-12</td><td>Crude</td><td>72990</td><td>43794</td></tr><tr><td>POL</td><td>33504</td><td>20102</td></tr><tr><td>Others</td><td>21349</td><td>12809</td></tr><tr><td rowspan="3">2010-11</td><td>Crude</td><td>77571</td><td>46542</td></tr><tr><td>POL</td><td>34460</td><td>20676</td></tr><tr><td>Others</td><td>20576</td><td>12346</td></tr><tr><td rowspan="3">2009-10</td><td>Crude</td><td>61725</td><td>37035</td></tr><tr><td>POL</td><td>33710</td><td>20226</td></tr><tr><td>Others</td><td>19012</td><td>11407</td></tr></table></td></tr>
<tr><td>(vii).</td><td>The JNPT is also requested to furnish the average GRT of the vessels carrying the above mentioned liquid cargo during the last three years for each of the said cargo.</td></tr>
<tr><td>F.</td><td><u>Scale of Rates</u>:</td><td></td></tr>
<tr><td>(i).</td><td>As per policy direction of the Government, concessional tariff are to be prescribed for coastal cargo (other than thermal coal and POL including crude oil, iron ore and iron ore pellets) not exceeding 60% of the normal cargo/ vessel related charges. In such a scenario, prescription of concessional coastal rate for handling Crude Oil and POL in the proposed Reference tariff Schedule to be justified.</td><td>The JNPT has modified the same.</td></tr>
<tr><td>(ii).</td><td>Since the JNPT has not envisaged handling of Bunkering fuel, the note no. (iii) proposed under Section 3.1 to be deleted.</td><td>The JNPT has Deleted.</td></tr>
<tr><td>(iii).</td><td>As stated earlier, a per tonne miscellaneous levy to be prescribed in the Reference tariff Schedule along with listing of the activities that to be covered by the levy of Miscellaneous charges.</td><td>JNPT has added rate for Miscellaneous Handling.</td></tr>
<tr><td>(iv).</td><td>The JNPT has prescribed a general note in the tariff schedule with regard to indexation of the tariff caps to inflation to the effect that the tariff caps would be indexed to the extent of 60% of the variation in WPI occurring between 1 January 2012 and 1 January of the relevant year. When the capital cost and operating cost estimates are required to be updated with reference to the year 2013, the reason for considering the year 2012 for the purpose of indexation is not clear.</td><td>JNPT has modified the same to 1.1.2013.</td></tr>
<tr><td>(v).</td><td>The reason for not proposing any free days for storage of the Liquid cargo to be explained.</td><td>No free period is given in the current liquid terminal at JNPT.</td></tr>
<tr><td>(vi).</td><td>The relevance of prescribing note (iv) under Section 1.1 to be explained, given that the BOT operator is authorized to collect berth hire charges in the instant case and that he is required to grant rebate incase the vessel idles for the reasons attributable to the</td><td>May be deleted.</td></tr>
</table>

	operator as prescribed in note (iii) under Section 2.	
G.	**Performance Standards:**	
(i).	In the Schedule of Performance Standards, the reference to the term 'dry and break bulk cargo' in the initial paragraph, is not clear. JNPT to clarify the position.	The JNPT has modified the same.
(ii).	The indicative norms in the Performance Standard Schedule distinguish the POL products into white and black. However, no such differentiation has been made in the capacity calculation. JNPT to explain the position.	JNPT has stated that it is difficult to give breakup of white and black.
(iii).	Incase of black POL products, an indicative norm of 700 tonnes per hour is prescribed, which is seen to be on a lower side when compared to the per day output for the POL considered at 1000 tonnes per hour in the optimal capacity calculation. The JNPT is, therefore, requested to review the performance standard in this regard.	Since in the norms no distinction is made, the same will prevail.
(iv).	Further, in the Performance Standard Schedule, indicative norms has been specifically prescribed for LPG/ LNG at 400 tonnes per hour. However, the said cargo share has not been considered while determining the optimal capacity. JNPT to review this position.	At present LPG/LNG is not envisaged.
(v).	The indicative norm of 250 tonnes per hour for Other Liquids in the Performance Standard Schedule, is seen to be on a lower side when compared to the per day output for the Other Liquids considered at 300 tonnes per hour in the optimal capacity calculation. The JNPT is, therefore, requested to review the performance standard in this regard.	Indicative norm is as per Standard. For Optimal Capacity calculations, norms fixed by Guidelines are taken.
(vi).	In the schedule of performance standards, the JNPT has prescribed conditionalities governing performance evaluation and calculation of liquidated damages. Clause 2.2 of the revised guidelines for determination of tariff for projects at major port trusts, 2013, requires a port trust to propose 'Performance standards'. In this regard, the JNPT to examine the relevance of prescribing the above said conditionalities in the schedule of performance standards.	JNPT has modified the Conditionality.

6. A joint hearing in this case was held on 2 December 2013 at the Office of this Authority in Mumbai. The JNPT has made a power point presentation of its proposal. During the joint hearing the JNPT has confirmed that M/s. Shapoorji Pallonji Ltd. (SPL) has also been issued RFP and that they may also be considered in the consultation proceedings. Based on the suggestion made by the JNPT, it was decided to consult SPL in the proceedings relating to the concerned proposal of JNPT. At the joint hearing, the JNPT and the users / user organisations / prospective applicants have made their submissions.

7.1. As agreed at the joint hearing, the JNPT was requested vide our letter dated 3 December 2013 to take action / furnish information on some points. After a reminder vide our letter

dated 16 December 2013, the JNPT vide its e-mail dated 17 December 2013 has furnished its revised proposal alongwith draft Scale of Rates and Performance Standards. The points raised by us vide our letter dated 3 December 2013 and the response of the JNPT thereon are tabulated below:

Sl. No.	Points raised by us	Response of the JNPT
(i).	Review its proposal based on the inputs to be received by it from the users/ prospective bidders and furnish its revised proposal.	JNPT has furnished the revised proposal. A comparative position of its earlier proposal dated 10 October 2013 and the revised proposal dated 19 December 2013 has been brought out at paragraph no.8.1.
(ii).	To simultaneously furnish a copy of its revised proposal to the users/ prospective bidders.	
(iii).	The user organizations/ prospective bidders are being requested to furnish their comments, if any, on the revised proposal to the JNPT and TAMP simultaneously, latest by 18 December 2013. The JNPT to furnish its comments on the comments to be received from the user organizations / prospective bidders immediately thereafter.	
(iv).	To respond to the queries raised by us vide our letter of even number dated 28 November 2013. While doing so, the replies may be given with reference to the revised proposal to be filed by the port, as mentioned at points (i) to (iv) above.	The JNPT has furnished its reply to the queries raised by us, which has been brought out at paragraph no.5 above.

7.2. As agreed at the joint hearing, the users / user organisations / prospective applicants were requested vide our letter dated 3 December 2013 to furnish inputs to Jawaharlal Nehru Port Trust (JNPT), latest by 05 December 2013, so as to enable them to review their proposal in reference. The users / user organisations / prospective applicants were also requested to furnish comments, if any, on the revised proposal, to the JNPT and TAMP simultaneously, thereafter.

8. The JNPT vide its letter dated 17 December 2013, has furnished its revised proposal along with draft Scale of Rates, Performance Standards and reply to our queries. A comparative position between the parameters contained in the original proposal of JNPT dated 10 October 2013 and revised proposal submitted vide its letter dated 17 December 2013 are given below:

JNPT proposal dated 10 October 2013

Project Capital Cost

Capital Cost arrived PHASE-I (IA + IB)		
Sl. No.	**Description of Facilities**	**Cost (₹ in Crores)**
1	**Berth**	
	4 nos. Jetty Structure including Bresting and Mooring Dolphins, Fenders, Bollards and Quick Release Mooring Hooks, and other inserts and furnitures	138.04
	Dredging Berth Pocket	3.00
	Building - Control Tower cum Pump House with Electrical Substation	2.00
	Miscellaneous @ 5%	7.15
	TOTAL EXPENDITURE ON BERTH	**150.19**
2	**Cargo Handling Cost**	
2.1	**Civil Cost**	
	Approach Bridge - 15m Approach Bridge to support Pipeline trestle as well as Two Lane Carriage Way	266.94
	Other Civil Works- Fencings and Compound Walls and Drainage Works	1.00

JNPT proposal dated 17 December 2013

Project Capital Cost

Capital Cost arrived PHASE-I (IA + IB)		
Sl. No.	**Description of Facilities**	**Cost (₹ in Crores)**
1	**Berth**	
	2 nos. Jetty Structure including Bresting and Mooring Dolphins, Fenders, Bollards and Quick Release Mooring Hooks, and other inserts and furnitures	68.91
	Dredging Berth Pocket	3.00
	Building - Control Tower cum Pump House with Electrical Substation	2.00
	Miscellaneous @ 5%	3.70
	IDC & financing charges	28.00
	TOTAL EXPENDITURE ON BERTH	**150.61**
2	**Cargo Handling Cost**	
2.1	**Civil Cost**	
	Approach Bridge - 15m Approach Bridge to support Pipeline trestle as well as Two Lane Carriage Way	266.94
	Other Civil Works- Fencings and Compound Walls and	1.00

	Building for Control Tower And Fire & Water Supply Pumphouse Building	1.26
	Fire Fighting System for Jetty	
	Miscellaneous @ 5%	13.46
	TOTAL CIVIL CONSTRUCTION COST	**282.66**
2.2	**Mechanical Cost**	
	Pipeline Cost & marine Loading Arm	
	Crude	44.44
	POL	161.42
	Others	82.18
	Control Systems and Tank Automation System	7.96
	Electrical System	9.50
	Water/Air/Nitrogen/bunkering lines	0.77
	Miscellaneous @ 5%	15.31
	TOTAL MECHANICAL COST	**321.57**
3	**Storage Area**	
3.1	**Civil Cost**	
	Storage Area Filling and Ground Improvement	43.80
	Storage Tanks - including piling under tank-farms, Dike Construction	307.76
	Internal Roads & Railways	16.27
	Miscellaneous @ 5%	18.39
	TOTAL CIVIL CONSTRUCTION COST	**386.22**
3.2	**Mechanical & Electrical Cost**	
	Fire Fighting System for Tank Farm Area	9.26
	Truck and Wagon Loading Farm	19.72
	Miscellaneous @ 5%	1.45
	TOTAL MECHANICAL AND ELECTRICAL	**30.43**

	Drainage Works	
	Building for Control Tower And Fire & Water Supply Pumphouse Building	1.26
	Fire Fighting System for Jetty	--
	Miscellaneous @ 5%	13.46
	TOTAL CIVIL CONSTRUCTION COST	**282.66**
2.2	**Mechanical Cost**	
	Pipeline Cost & marine Loading Arm	
	Crude	44.44
	POL	161.42
	Others	82.18
	Control Systems and Tank Automation System	7.96
	Electrical System	9.50
	Water/Air/Nitrogen/bunkering lines	0.77
	Fire Fighting system for Jetty	9.00
	Miscellaneous @ 5%	15.76
	TOTAL MECHANICAL COST	**331.02**
	IDC	**112.69**
	Total Cargo Handling Cost	**726.37**
3	**Storage Area**	
3.1	**Civil Cost**	
	Storage Area Filling and Ground Improvement	43.80
	Storage Tanks - including piling under tank-farms, Dike Construction	307.76
	Internal Roads & Railways	16.27
	Miscellaneous @ 5%	18.39
	TOTAL CIVIL CONSTRUCTION COST	**386.22**
3.2	**Mechanical & Electrical Cost**	
	Fire Fighting System for Tank Farm Area	9.26
	Truck and Wagon Loading Farm	19.72
	Miscellaneous @ 5%	1.45
	TOTAL MECHANICAL AND ELECTRICAL	**30.43**
	IDC	**77.69**
	Total Storage Charges	**494.34**

Traffic estimate

S No	Type of Cargo	Estimated Cargo in MTPA	Share of Cargo Traffic	Share of Cargo Occupancy	Foreign Vessel	Coastal Vessel
1.	Crude Oil	1.55	10%	2%	0%	100%
2.	POL	11.91	75%	59%	60%	40%
3.	Others	2.38	15%	39%	72%	28.40%

Traffic estimate

S No	Type of Cargo	Estimated Cargo in MTPA	Share of Cargo Traffic	Share of Cargo Occupancy	Foreign Vessel	Coastal Vessel
1.	Crude Oil	1.55	10%	2%	0%	100%
2.	POL	11.91	75%	59%	60%	40%
3.	Others	2.38	15%	39%	72%	28.%

Average Cargo wise GRT of Vessel

Cargo Type	Average GRT (T)
Crude oil	72000
POL	48000
Other liquid	36000
Avg GRT	**48547**

Average Cargo wise GRT of Vessel

Cargo Type	Average GRT (T)
Crude oil	48000
POL	24000
Other liquid	15000
Avg GRT	**24997**

Annual Operating Cost

Sl. No	Expense details	Basis
1.	Repairs and Maintenance of Civil Assets	1% of Civil capital cost of the berth considered
2.	Equipment cost	2% on cost on Equipment
3.	Power expense	2.4 lakh units per hectare with cost of power consider ring at ₹7 / Kwh
4.	Insurance	1% of capital cost
5.	Depreciation	As per the provisions of Companies Act
6.	Other Expenses	1% of the Gross Capital

Capital Expenditure on Berth

S No	Cost components	₹ in Crores
1.	Civil construction cost	140.04
2.	Dredging	3.00
3.	Miscellaneous costs	7.15
Total cost		**150.19**

Annual Operating cost for Berth Hire Service

Particular		₹ in Crores
Maintenance cost	1% of Berthing Capital Cost except Dredging	1.50
Insurance	1% of total Berthing Capital Cost	1.50
Depreciation	3.34% of total Berthing Capital Cost	5.02
Total Operating Expenses		**8.02**

Annual Revenue Requirement on Berth

S No	Particulars	₹ in Crores
1.	Total Annual Operating Cost	8.02
2.	Capital Employed	150.19
3.	16% Return on Capital Employed (ROCE)	24.03
4.	**Annual Revenue Requirement**	**32.05**

Berth Hire Charges

Average GRT Vessel (T)	48547
Utilisation	70%
No of Berths	4 nos
No of Hours at the jetty	24528 hrs.
Total GRT Hours	1190760223 hrs
GRT Hrs through Foreign Vessel	757881056
GRT Hrs through Coastal Vessel	432879166
Revenue Requirement	₹ 32.05cr.

Annual Operating Cost

Sl. No	Expense details	Basis
1.	Repairs and Maintenance of Civil Assets	1% of Civil capital cost of the berth considered
2.	Equipment cost	2% on cost on Equipment
3.	Power expense	2.4 lakh units per hectare with cost of power consider ring at ₹14 / Kwh
4.	Insurance	1% of capital cost
5.	Depreciation	As per the provisions of Companies Act
6.	Other Expenses	1% of the Gross Capital

Capital Expenditure on Berth

S No	Cost components	₹ in Crores
1.	Civil construction cost	70.91
2.	Dredging	3.00
3.	Miscellaneous costs	3.70
4.	IDC	28.00
Total cost		**105.61**

Annual Operating cost for Berth Hire Service

Particular		₹ in Crores
Maintenance cost	1% of Berthing Capital Cost except Dredging	1.06
Insurance	1% of total Berthing Capital Cost	1.06
Depreciation	3.34% of total Berthing Capital Cost	3.52
Total Operating Expenses		**5.64**

Annual Revenue Requirement on Berth

S No	Particulars	₹ in Crores
1.	Total Annual Operating Cost	5.64
2.	Capital Employed	105.61
3.	16% Return on Capital Employed (ROCE)	16.90
4.	**Annual Revenue Requirement**	**22.54**

Berth Hire Charges

Average GRT Vessel (T)	24997
Utilisation	70%
No of Berths	4 nos
No of Hours at the jetty	24528 hrs.
Total GRT Hours	613137307 hrs
GRT Hrs through Foreign Vessel	390242419
GRT Hrs through Coastal Vessel	222894888
Revenue Requirement	₹ 22.54cr.

Berth Hire charges for Additional Liquid Terminal

Berth Hire Charges/GRT / Hr	Foreign in ₹	Coastal in ₹
	0.31	0.19

Berth Hire charges for Additional Liquid Terminal

Berth Hire Charges/GRT / Hr	Foreign in ₹	Coastal in ₹
	0.43	0.26

Cargo Handling Charges

S No	Project cost components	In ₹ Crores
1.	Civil construction cost	269.20
2.	Electrical and Mechanical Costs	306.26
3.	Miscellaneous Costs	28.77
Total Cost		**604.23**

Cargo Handling Charges

S No	Project cost components	In ₹ Crores
1.	Civil construction cost	282.66
2.	Electrical and Mechanical Costs	331.02
3.	Miscellaneous Costs	112.69
Total Cost		**726.37**

Annual Operating Cost for Cargo Handling

Particular			₹ in Crores
Maintenance cost- civil		1% of Civil Cost	2.98
Maintenance cost-Mechanical		2% of Mechanical Works	6.13
Other expenses		1% of total capital employed	6.04
Power charges			2.18
License Fee			2.50
Insurance		1% of the total capital cost	6.04
Depreciation	civil	3.34%	8.99
	Equipment & pipeline	10.34%	33.25
TOTAL Operating Cost			**88.11**

Annual Operating Cost for Cargo Handling

Particular			₹ in Crores
Maintenance cost- civil		1% of Civil Cost	2.83
Maintenance cost-Mechanical		2% of Mechanical Works	6.62
Other expenses		1% of total capital employed	7.26
Power charges			4.44
License Fee			2.01
Insurance		1% of the total capital cost	7.26
Depreciation	civil	3.34%	9.44
	Equipment & pipeline	10.34%	16.36
	Pipeline	13.91%%	24.03
TOTAL Operating Cost			**80.26**

Annual Revenue Requirement on Cargo handling facilities

S. No	Particulars	In ₹ Crores
1.	Total Annual Operating Cost	88.11
2.	Capital Employed	604.23
3.	16% Return on Capital Employed (ROCE)	96.68
4.	**Annual Revenue Requirement**	**184.79**

Annual Revenue Requirement on Cargo handling facilities

S. No	Particulars	In ₹ Crores
1.	Total Annual Operating Cost	80.26
2.	Capital Employed	726.37
3.	16% Return on Capital Employed (ROCE)	116.22
4.	**Annual Revenue Requirement**	**176.48**

Handling charges

Capital Cost Split-up					
Cargo	Occupa-ncy	Pipeline & Loading Arm	Others Capital Cost	16% ROCE	Operation Cost
Crude	2%	44.44	4.865	7.89	1.36
POL	59%	161.42	186.919	55.73	52.09
Others	39%	82.18	124.415	33.05	33.05

Cargo Handling Rate

Handling Charges per Ton	Foreign Cargo in ₹ /T	Coastal Cargo in ₹ /T
Crude	49.89	29.94
POL	54.10	32.46
Other	161.25	96.75

Capital Expenditure on Storage facilities

S No	Project cost components	₹ in Crores
1.	Civil construction cost	386.22
2.	Electrical and Mechanical Costs	30.43
3.	Miscellaneous Costs	20.83
Total Cost		**437.49**

Operating cost on Storage facilities

Particular			₹ in Crores
Maintenance cost- civil		1% of Civil Cost	3.68
Maintenance cost- Mechanical		2% of Mechanical Works	0.58
Insurance		1%	4.17
Depreciation	Civil	3.34%	12.29
	Equip ment	10.34%	3.00

Annual Revenue Requirement on Storage facilities

S. No.	Particulars	₹ in Crores
1.	Total Annual Operating Cost	53.95
2.	Capital Employed	416.65
3.	16% Return on Capital Employed (ROCE)	63.49
4.	Annual Revenue Requirement	117.44

Storage Charges

Particulars	Rate in ₹
Storage charge / T/ Day	6.97
Storage charge / T/ Month	209.03

PROPOSED SCALE OF RATES

(i). Berth Hire Charges (₹ / GRT / Hour)

Foreign in ₹	Coastal in ₹
0.31	0.19

(ii). Handling Charges (₹ / Metric T)

Cargo Type	Foreign Cargo in ₹/T	Coastal Cargo in ₹/T
Crude	49.89	29.94
POL	54.10	32.46
Other	161.25	96.75

(iii). Storage Charges

	Rate in ₹
Storage charge (₹ / T/ Day)	6.97
Storage charge (₹ / T/ Month)	209.03

Cargo Handling Rate

Handling Charges per Ton	Foreign Cargo in ₹ /T	Coastal Cargo in ₹ /T
Crude	18.52	18.52
POL	92.63	92.63
Other	308.78	185.27

Capital Expenditure on Storage facilitie

S No	Project cost components	₹ in Crores
1.	Civil construction cost	386.22
2.	Electrical and Mechanical Costs	30.43
3.	Miscellaneous Costs	77.69
Total Cost		**494.34**

Operating cost on Storage facilities

Particular			₹ in Crores
Maintenance cost- civil		1% of Civil Cost	2.16
Maintenance cost- Mechanical		2% of Mechanical Works	0.98
Insurance		1%	4.94
Depreciation	Civil	3.34%	7.22
	Equipment	10.34%	3.15
	Tank Farm	13.91%	23.65

Annual Revenue Requirement on Storage facilities

S. No.	Particulars	₹ in Crores
1.	Total Annual Operating Cost	93.86
2.	Capital Employed	494.34
3.	16% Return on Capital Employed (ROCE)	79.10
4.	Annual Revenue Requirement	172.95

Storage Charges

Particulars	Rate in ₹
Storage charge / T/ Day	10.26
Storage charge / T/ Month	307.84

PROPOSED SCALE OF RATES

(i). Berth Hire Charges (₹ / GRT / Hour)

Foreign in ₹	Coastal in ₹
0.43	0.26

(ii). Handling Charges (₹ / Metric T)

Cargo Type	Foreign Cargo in ₹/T	Coastal Cargo in ₹/T
Crude	18.52	18.52
POL	92.63	92.63
Other	308.78	185.27

(iii). Storage Charges

	Rate in ₹
Storage charge (₹ / T/ Day)	10.26
Storage charge (₹ / T/ Month)	307.84

9. It is seen from the comments of users that the JNPT on 17 December 2013 has forwarded its revised proposal to the users / user organisations / shortlisted bidders requesting them to furnish their comments by 19 December 2013 directly to the Authority under intimation to JNPT, as agreed at the joint hearing. Some of the users/ user organisations/ shortlisted bidders have furnished their comments on the revised proposal of JNPT. The JNPT has also responded to the comments made by the various users/ prospective bidders, vide its e-mails dated 24 December 2013 and e-mail dated 27 December 2013.

10.1. The JNPT vide its first e-mail dated 27 December 2013 has made the following submissions:

(i). Depreciation has been considered in our proposal at 13.91% based on earlier depreciation schedule. TAMP may consider depreciation based on life norms as per Companies Act, 2013 wherein depreciation on pipelines comes to 4% with life of 25 years.

(ii). IDC has been considered in revised proposal as per comments of trade, even though it was not considered in earlier proposal as per TAMP guidelines. However, TAMP may take a view.

10.2. Thereafter, the JNPT vide its second e-mail of 27 December 2013 has made the following submissions:

(i). There is a reduction in the pipeline cost to the tune of ₹ 70 crores in the capital assets due to reduction in berths to two numbers in the revised proposal.

(ii). This may be considered as an amendment to the revised proposal and treated accordingly while examining the proposal.

10.3. From the above, is can be seen that the JNPT vide its second e-mail dated 27 December 2013 has revised its proposal to the extent of considering a lower amount towards the pipelines and marine loading arm. Further, it is also seen that the cost towards Interest during Construction considered by the JNPT in the capital cost estimation in its revised proposal of 17 December 2013 has not been considered now by the JNPT in its latest proposal of 27 December 2013.

10.4. Further, the JNPT vide its third e-mail of 27 December 2013 requested to ignore its earlier email of 27 December 2013 indicating reduction of ₹70 crs in capital cost. The JNPT vide its third e-mail of 27 December 2013 sent a revised proposal. The revision was seen to the extent of exclusion of some costs relating to the pipelines and marine loading arms, resulting in a corresponding change in the operating costs. The JNPT also mentioned about considering depreciation on pipelines to the tune of 4%. Further, it is also seen that the cost towards Interest during Construction considered by the JNPT in the capital cost estimation in its revised proposal of 17 December 2013 has not been considered now by the JNPT in its latest proposal of 27 December 2013.

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 totality of the information collected during the processing of this case, the following position emerges:

(i). Considering the robust potential for liquid cargo, the Jawaharlal Nehru Port Trust (JNPT) has envisaged development of an Additional Liquid Bulk Terminal (ALBT) at JNPT to handle liquid cargo like Crude Oil, Petroleum and Oil Lubricants (POL) and Other liquid cargo (consisting of Edible oil, chemicals, molasses, etc.), under Public Private Partnership (PPP) mode on Design, Build, Finance, Operate and Transfer (DBFOT) basis.

Accordingly, a proposal has been submitted by JNPT to fix reference tariff for handling of liquid cargo like Crude Oil, Petroleum and Oil Lubricants (POL) and Other liquid cargo (consisting of Edible oil, chemicals, molasses, etc.) envisaged to be handled at the proposed ALBT. The proposal is based on the Revised Guidelines for Determination of Tariff for Projects at Major Ports, 2013, effective from 9 September 2013, issued by the Ministry of Shipping.

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 re-fix Reference Tariff under 2008 guidelines for the project giving detailed and sufficient justification.

No upfront tariff has been fixed for handling liquid cargo at JNPT. The tariff fixed for the existing BOT operator handling liquid cargo at JNPT is based on the tariff guidelines of March 2005. Since the upfront tariff available at neighboring Kandla Port Trust is not representative enough owing to the huge difference in the capital costs, the JNPT has come up with a proposal for fixation of Reference tariff for handling of above mentioned liquid cargo, generally following the norms prescribed in the 2008 upfront Guidelines for a liquid terminal.

(ii). The JNPT furnished an incomplete proposal on 10 October 2013. For the reasons brought out in the earlier part of this Order, the complete proposal of JNPT could be taken up on consultation only on 06 November 2013. Though furnishing of the list of prospective bidders (who are to be taken on consultation) and the Feasibility Report is a pre-requisite for submission of any upfront tariff proposal, it was not furnished to us along with the proposal. It is noteworthy that the submission of the above mentioned documents along with the proposal is also mentioned in the Checklist prescribed by us for submission of upfront tariff proposals by the major port trusts.

It is relevant here to state that right from the beginning as well as during the entire processing of this case, the approach of the JNPT was not in a focused manner. The replies furnished by the JNPT in response to our queries do not sufficiently address the issues. Given that the mandate is to dispose the reference tariff proposal within specified time frame under the revised tariff guidelines of 2013, the case is processed completely relying on the information and clarifications furnished by the JNPT subject to the modifications wherever found necessary as explained in the subsequent paragraphs.

(iii). As stated earlier, the JNPT has submitted its proposal in October 2013. Subsequently, based on the information/ clarifications sought by us during the processing of the case and based on the decisions taken during the joint hearing held on 02 December 2013, the JNPT under cover of its letter dated 17 December 2013 has revised its proposal. The revision is to the extent of considering optimal capacity related to 2 berths at 15.84 MMTPA, instead of the optimal capacity of 31.55 MMTPA, based on four berths proposed in the initial proposal. This has resulted in change in the capital costs and the operating costs. Further, the JNPT has rectified some errors in its initial calculations, which were pointed out in the questionnaire issued to JNPT.

Since, it was decided during the joint hearing that the JNPT would be revising its proposal, the JNPT was advised during the joint hearing itself to forward its revised proposal to the concerned users and the prospective bidders, so as to avoid further delay in the processing of the case. The JNPT has also forwarded the revised proposal to the concerned users and the prospective bidders for their comments. Some of the users and the prospective bidders have also promptly

furnished their comments on the revised proposal. The JNPT has also responded to the comments of the users/ prospective bidders.

The said revised proposal of the JNPT dated 17 December 2013 including the revision effected by JNPT as communicated to us on 27 December 2013 (as brought out in the initial part of this Order), along with the information/ clarification furnished by JNPT during the processing of the case in reference is considered in this analysis.

(iv). The JNPT in its initial proposal of October 2013 had considered optimal capacity of the facility based on 4 no. of berths at 31.55 MMTPA. As per the features of the Master Plan provided by the JNPT under para 1.2.1 of Project details, the traffic of Phase – I (IA and IB) is expected to reach 15.83 MMTPA by the year 2027-28, to be handled at the proposed four berths. Looking to the traffic potential indicated at 15.83 MMTPA in Phase – I, investment in the infrastructure facilities, both civil and equipment, to create almost 100% additional capacity looked like an idle investment being created way ahead, apart from resulting in prescription of tariff at lower level.

Further, based on the cargo share of Crude Oil, POL and Others at 10%, 75% and 15% respectively (as furnished by the JNPT) and considering the handling rate in respect of the Crude Oil, POL and Others at 5000 tonnes/ hour, 1000 tonnes/ hour and 300 tonnes/ hour, as prescribed in the upfront guidelines for liquid cargo terminal and that adopted by the JNPT itself, the optimal capacity for a berth for 24 hours and 365 days at 70% utilisation worked out to 7.94 million metric tonnes per annum. This showed that 2 berth configuration looked sufficient to handle the traffic of 15.83 MMTPA envisaged during the Phase – I. Further, during the joint hearing, the prospective bidders like M/s. IMC Limited (IMCL) and M/s. United Liner Agencies of India (Private) Limited (ULAIPL) have voiced their concern about the estimated optimal capacity at 31.55 MMTPA being on the higher side. Therefore, the JNPT during the joint hearing itself agreed to review the optimal capacity for the proposed facility.

Accordingly, the JNPT has reviewed the capacity and in its revised proposal of 17 December 2013 has considered the capacity relating to two berths at 15.84 MMTPA.

(v). The proposal filed by JNPT envisages handling of liquid cargo by transporting the liquid cargo through pipelines to the Tank Farm. With regard to a specific query, the JNPT has confirmed that dimensions of the pipelines are optimum based on cargo forecast and efficiency of the system and that no further improvements will be required based on technical reasons. The JNPT has, however, stated that the Concession Agreement shall not specify the dimensions of pipelines for BOT operator. In such a scenario, it is not clear how the JNPT would ensure that the pipelines deployed by the operator would be commensurate with the handling rates and optimal capacity of the project. At the same time, it is also not clear how the JNPT would ensure that the operator does not put into use pipelines of higher dimension with a higher pumping rate resulting in a higher productivity of the liquid cargo berths, than that considered for determining the optimal capacity of the facility. However, to protect user interest, it may be essential that the Concession Agreement spells out at least the minimum requirement of the pipelines. The JNPT is, therefore, advised to spell out the minimum requirement of the pipelines in the Concession Agreement. The JNPT is also advised to ponder over the situation where the operator may deploy pipelines of higher dimension and incorporate a suitable provision in this regard in the Concession Agreement, if it is felt necessary.

(vi). The JNPT has proposed allotment of 730000 sq. m. (73 hectares) of land area and 132000 sq. m. (13.2 hectares) of water area for the proposed facility. Out of the 730000 sq.m of land area, 380000 sq.m of land is proposed to be utilised as

storage tank farm area. The balance area is proposed to be utilised for ancillary facilities like Truck Parking and Queuing Area, Truck Loading Area & Operation area, Rail Siding and Wagon Loading Area, Area for Approach Bund, Green Belt and Miscellaneous purposes. The JNPT has also confirmed that the proposed allotment of land is in line with the land use plan of the port. The judgment of the port for the total area requirement for handling liquid cargo is relied upon in the analysis.

(vii). With regard to fixation of reference tariff for handling liquid cargo at the ALBT, the JNPT is seen to have followed the norms prescribed in the Upfront tariff guidelines for the liquid bulk terminal. In this regard, it is relevant here to mention that the Upfront tariff guidelines for the liquid bulk terminal prescribe allocation of the total Annual Revenue Requirement (ARR) into two groups i.e. Handling charges and Miscellaneous charges. The Guidelines state that the handling charges, *inter alia,* are inclusive of the charges for storing in tanks. In the case under reference, the JNPT has segregated the capital costs, operating costs etc. relevant for handling charges and storage charges separately. As a result, it has arrived at different per tonne rate for handling and storage of various liquid cargo. Since the approach adopted by the JNPT is more detailed and elaborate, it is considered in the analysis. Such an approach was also accepted by this Authority while determining the upfront tariff for the KPT liquid jetty, as proposed by the KPT.

(viii). Optimal capacity:

(a). By considering the percentage share of the liquid cargoes viz., Crude oil, POL and Other liquids at 9.79%, 75.20% and 15.01% respectively and the handling rate of above mentioned Liquid cargo at 5000 tonnes/ hour, 1000 tonnes/ hour and 300 tonnes/ hour respectively and at 70% utilization, the JNPT has determined the optimal capacity for a two berth configuration at 15.78 Million Metric Tonnes Per Annum (MMTPA).

(b). The percentage share of Crude oil, POL and Other liquids is reported to be based on the cargo share that would prevail during the year 2028-29 in JNPT. In this regard, when the JNPT was requested to consider the past actual cargo share, which may be more relevant rather than considering the cargo share that may prevail at a distant future, the JNPT has stated that the cargo share is as per the Feasibility Report. In this regard, it is relevant to mention here that the JNPT in its calculation of berth hire charges has considered average GRT of the vessels based on the past data, as brought out in the later part of the analysis. No consistency is seen in the approach followed by the port.

Nevertheless, presuming that the Feasibility Report has taken into account all relevant factors that may prevail in distant future and given that none of the users/ prospective bidders have objected to the proposed cargo mix, the share of each cargo in the total cargo capacity, as furnished by the port, is relied upon in the analysis.

(c). The handling rate for Crude oil, POL and Other Liquids considered by the JNPT at 5000 tonnes/ hour, 1000 tonnes/ hour and 300 tonnes/ hour respectively is seen to be in line with the handling rates prescribed for the said cargo in the Upfront Guidelines.

Two of the prospective bidders viz., ULAIPL and IMCL has stated that why should the handling norm for Crude Oil at 5000 TPH be considered to calculate the optimal capacity when the Feasibility Report prescribes a handling rate of only 3000 TPH for Crude Oil. In this regard, it is relevant to mention here that the 2008 upfront tariff guidelines have been issued as a policy direction to this Authority under Section 111 of the MPT Act, 1963 and are binding on this Authority. Hence, the norms prescribed in

the 2008 guidelines need to be taken into account while fixing the upfront tariff by this Authority. Further, the port has also chosen to go by the handling rate as prescribed in the guidelines. Hence, the same is considered in the analysis.

(d). Considering the cargo share and the handling rate of each of the cargo as discussed above, the optimal capacity of the proposed ALBT facility for a two berth configuration works out to 15.78 Million Metric Tonnes Per Annum at 70% utilization, as proposed by the port, which is considered in the analysis.

(ix). Though the computation of storage capacity is not required as per the guidelines for the liquid terminal, it appears that the capacity of the tank farms used for storage of the liquid cargo may have an impact on the optimal capacity considered by the port in this case. The JNPT has not established that the proposed storage capacity of the tank farm is commensurate with the optimal capacity of the ALBT. The judgment of the JNPT in estimation of the capacity for Storage Tank Farm at 659690 MT is relied upon.

(x). Capital cost:

(a). Handling activity:

The capital cost for the handling activity as estimated by the JNPT is ₹549.42 crores of which ₹282.66 crores is estimated towards civil capital costs and the balance ₹266.76 crores is estimated for equipment capital costs.

(i). Civil works:

(a). The upfront tariff guidelines broadly indicate the civil works involved for the liquid cargo terminal and require the port to estimate the civil cost. The nature of the civil works proposed to be undertaken at the facility generally adheres to normative list of civil works stipulated in the guidelines for the liquid cargo terminal. The estimated civil costs relating to handling of liquid cargo to the tune of ₹282.66 crores pertains to 15m Approach Bridge, Fencing, Compound wall, Drainage, Building for Control Tower, Fire & Water supply & Pump House and Miscellaneous cost @ 5%.

(b). The JNPT has stated that the rate for each item of civil work is as per the Feasibility Report of 2013. This position is relied upon.

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

(ii). Equipment costs:

(a). The cost of equipment comprises of cost of Pipeline and Marine Loading Arm related to Crude oil, POL and others, Control systems & Tank Automation System, Electrical System, Water/ Air/ Nitrogen/ Bunkering lines, Fire Fighting System for Jetty and Miscellaneous cost @ 5%. The nature of the equipment proposed to be deployed at the facility generally adheres to normative list of equipment stipulated in the guidelines for the liquid cargo terminal.

(b). The JNPT has not furnished documentary evidence in support of the cost of equipment. It has only mentioned that the cost of the equipment is as per the Feasibility Report of 2013. The equipment cost as furnished by the JNPT is considered.

(c). For the reasons stated earlier, the estimation of Miscellaneous capital cost @ 5% of the total of the estimated equipment cost is considered in the analysis.

(b). Berthing activity:

(i). The JNPT has estimated the capital costs relating to berthing activity to the tune of ₹75.93 crores. This estimated cost pertains to 2 nos. of Jetty structure, dredging of berth pocket, Building for Control Tower cum Pump House with electrical Substation and Miscellaneous cost @ 5%.

(ii). The JNPT has stated that the rate for each item of civil work under the berthing activity is as per the Feasibility Report of 2013. This position is relied upon.

(iii). With regard to dredging cost estimated at ₹1.40 crores, the cost is towards estimated dredging requirement at berth pocket, which is considered in the a*na*lysis.

(iv). The JNPT has considered miscellaneous capital cost @ 5% of the estimated capital cost relating to berthing activity. Though the Upfront tariff guidelines of 2008 stipulate estimation of Miscellaneous capital cost @ 5% of the total of the estimated civil cost incase of handling activity, the guidelines do not specifically provide for estimation of miscellaneous capital cost under berthing service. It is noteworthy that in many cases relating to fixation of the upfront tariff for various projects at various major port trusts, the miscellaneous capital cost at 5% has been considered to meet contingencies under the Berthing Service. Keeping in view the position considered in the various cases, the miscellaneous capital cost under the berthing activity at 5% of the capital cost of berth is taken into account, as proposed by the port.

(c). Storage activity:

The capital cost for the storage activity as estimated by the JNPT is ₹416.64 crores of which ₹386.21 crores is estimated towards civil capital costs and the balance ₹30.43 crores is estimated for equipment capital costs.

(i). Civil works:

(a). The cost of civil works considered under the storage activity consists of cost of Storage Tank farms foundation work including piling work, Storage Tank - Tank

fabrication and erection etc., Internal Roads & Railways and Miscellaneous Charges @ 5%.

(b). The JNPT has stated that the rate for each item of civil work is as per the Feasibility Report of 2013. This position is relied upon.

(c). For the reasons stated earlier, the estimation of Miscellaneous capital cost @ 5% of the total of the estimated civil cost under storage activity is considered in the analysis.

(ii). Equipment costs:

(a). The cost of equipment considered under the storage activity comprises of cost of Fire fighting for Tank Farm area, Truck & Wagon Loading Farm and Miscellaneous Charges @ 5%.

(b). The JNPT has not furnished documentary evidence in support of the cost of equipment. It has only mentioned that the cost of the equipment is as per the Feasibility Report of 2013. The equipment cost as furnished by the JNPT is considered.

(c). For the reasons stated earlier, the estimation of Miscellaneous capital cost @ 5% of the total of the estimated equipment cost is considered in the analysis.

(d). The ULAIPL by referring to RFQ has stated that consideration of a lower capital costs by the JNPT in its proposal when compared with the capital cost contained in the RFQ document, has resulted in a lower handling charges for the ALBT. In this regard, it is relevant to mention here that the capital cost as furnished by the port in its proposal has been relied upon by us in the analysis. We are not aware of the cost components forming part of the capital cost in the RFQ document.

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

(xii). Operating cost:

(a). Cargo Handling activity:

(i). Power cost has been estimated by the port for illumination of 13.2 hectares of water front area at 240000 units per hectare per annum at the rate of ₹13 per unit.

The consumption of 240000 units per hectare per annum for illumination is as per the norms prescribed in the upfront guidelines.

Though the JNPT has furnished the electricity tariff schedule, it does not reflect per unit cost of electricity at ₹13 per unit. The JNPT has not furnished workings to arrive at per unit cost of electricity from the tariff schedule. However, during the general revision of tariff of the private terminals operating at JNPT viz., gateway Terminals India Private Limited (GTIPL) and Nhava Sheva International Container Terminal Private Limited (NSICTPL) in the year 2012, the unit cost of power has been

considered at ₹12.36 and ₹13/- respectively, based on the documentary evidence then furnished by the private operators. Based on this position, the unit cost of power as estimated by the port at ₹13/- is considered in this analysis.

(ii). Repairs and maintenance cost has been estimated by the JNPT at 1% of the civil assets and 2% of the equipment costs. This is seen to be in line with the norms prescribed in the guidelines.

(iii). Insurance cost and Other expenses each has been estimated by JNPT at 1% of the gross fixed assets. This is seen to be in line with the norms prescribed in the guidelines.

(iv). Depreciation has been computed by JNPT @ 3.34% on civil cost, 10.34% on equipment cost and 4% on the cost of pipelines. The rate of depreciation on civil cost and pipeline cost is seen to be as per the depreciation prescribed in the Companies Act, 2013. However, the rate of depreciation in respect of equipment cost is considered at 10% in line with the depreciation prescribed in the Companies Act, 2013.

(v). The guidelines for upfront tariff stipulate that licence fee for port land is to be estimated based on the rates prescribed in the Scale of Rates of the respective Major Port Trusts.

Licence fee has been estimated by the port for 132000 sq.m of water front area, at the rate of ₹12.73 per sq. mtr per month, being 50% of the rate as applicable as per the rate prescribed in Schedule 7.1 of Chapter – VII of the existing Scale of Rates of JNPT, duly escalated. 50% of the escalated rate has been considered for the water front area, based on the stipulation prescribed in the Land Policy Guidelines of 2010. The licence fee as estimated by the port is considered in the analysis.

(b). Berthing activity:

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

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

In view of the position explained above, the element of insurance cost @ 1% and depreciation cost @ 3.34% are considered in this case also while estimating the operating cost for assessment of the revenue requirement from berth hire service.

(c). Storage activity:

(i). Power cost has been estimated by the port for illumination of 73 hectares of backup area at 240000 units per hectare per annum at the rate of ₹13 per unit.

The consumption of 240000 units per hectare per annum for illumination is as per the norms prescribed in the upfront guidelines.

For the reasons stated earlier, the power cost of ₹13 per unit as estimated by the port is considered in this analysis.

(ii). Though the JNPT has estimated Repairs and maintenance cost at 1% of the civil assets and 2% of the equipment costs, as per the norms prescribed in the upfront guidelines, it is seen to have not considered repairs and maintenance cost on one of the cost components viz., Storage Tank farms foundation work including piling work. The same is, therefore considered in the analysis. Further, an arithmetical error noticed in the calculation of repairs and maintenance cost on equipment is also rectified.

(iii). Insurance cost and Other expenses each has been estimated by JNPT at 1% of the gross fixed assets. This is seen to be in line with the norms prescribed in the guidelines.

(iv). Depreciation has been computed by JNPT @ 3.34% on civil cost, 10.34% on equipment cost and 4% on the cost of storage tanks. The rate of depreciation on civil cost and storage tanks is seen to be as per the depreciation prescribed in the Companies Act, 2013. However, the rate of depreciation in respect of equipment cost is considered at 10% in line with the depreciation prescribed in the Companies Act, 2013.

(v). As brought out earlier, the guidelines for upfront tariff stipulate that licence fee for port land is to be estimated based on the rates prescribed in the Scale of Rates of the respective Major Port Trusts.

Licence fee has been estimated by the port for 730000 sq.m of backup area, at the rate of ₹25.45 per sq. mtr per month, as per the rate prescribed in Schedule 7.1 of Chapter – VII of the existing Scale of Rates of JNPT, duly escalated. The licence fee as estimated by the port is considered in the analysis.

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

(a). Cargo handling activity:

(i). The annual revenue requirement for the liquid cargo handling activity which is the sum of the operating cost and return on capital employed is estimated at ₹139.05 crores as against ₹139.38 crores estimated by the port.

(ii). The JNPT in its revised proposal of December 2013 is seen to have apportioned 95% of the total revenue requirement towards handling charges and 5% towards miscellaneous charge, as stipulated in the upfront guidelines for liquid bulk terminal.

(iii). The JNPT has considered the entire capacity of Crude oil to be coastal, 60% of the POL capacity to be Foreign and the balance 40% to be Coastal and 72% of the Other Liquid capacity to be Foreign and 28% of the Other Liquid capacity to be coastal, in its revised proposal. This is reported to be based on the traffic

estimates and also considering future trend. This position is relied upon in the analysis.

(iv). The JNPT has arrived at the per tonne handling rate by considering the ratio of capital cost of pipeline and loading arm to be deployed to handle each type of cargo as well as the berth occupancy based on the traffic that would prevail during the year 2028-29. In this regard, it is relevant to mention here that while fixing the upfront tariff for the Liquid jetty at Kandla Port Trust (KPT), the per tonne handling rate for each cargo was determined by the KPT based on the handling rate of each cargo and the ratio of foreign and coastal cargo in respect of each of the cargo. The JNPT was, therefore, requested to examine the approach adopted by the KPT to arrive at the per tonne handling rate vis-à-vis, the approach adopted by the JNPT and justify the approach adopted by the JNPT with an analysis. In this regard, the JNPT has simply stated that it has adopted the approach as revenue required from the handling is collected based on hourly rates.

The statement made by the JNPT is not clear, as the handling rates are proposed to be recovered on per tonne basis only. The JNPT has not furnished any justification or rationale behind consideration of capital cost of pipeline and loading arm to be deployed to handle each type of cargo also. Further, the composition of traffic of the year 2028-29, which has been taken as base by JNPT to determine the berth occupancy in respect of each cargo is seen to be totally different from the optimal capacity of each cargo, thereby resulting in requirement of berth for 20140 hours in a year at 70% utilization. In this regard, it is to be kept in view that the total hours available for 2 berths in a year at 70% utilization is only 12264 hours (i.e. 365 days x 24 hours x 70% utilization x 2 berths).

In the absence of clarity for the approach adopted by the JNPT, it is not found possible to consider the approach adopted by the port. In view of the above position, the per tonne handling rate in respect of each of the cargo is determined based on the handling rate of each cargo and their individual composition of foreign/ coastal cargo to meet the estimated revenue requirement. Such an approach has been adopted not only in the KPT case, as referred above but also in determination of upfront tariff in other major port trusts also.

(v). As per policy direction of the Government, concessional tariff are to be prescribed for coastal cargo (other than thermal coal and POL including crude oil, iron ore and iron ore pellets) not exceeding 60% of the normal cargo/ vessel related charges. Accordingly, the JNPT in its revised proposal has not proposed for any coastal rates for Crude oil and POL and has proposed concessional rates for coastal cargo of Other Liquids in line with the Government policy.

(vi). The users/ prospective bidders have requested for individual rates for each cargo falling under ‘Other Liquids’. As mentioned by the ULAIPL, tariff for each item of cargo under ‘Other Liquids’ was prescribed in VPT. However, it is to be noted here that the proposal of the VPT itself was for fixation of upfront tariff only for Other Liquids and the capacity share of each of the cargo under ‘Other Liquids’ was estimated by the VPT. In the JNPT case in reference, the port has not furnished capacity share for each

cargo item under 'other liquids' and as admitted by the JNPT, in the absence of such information, it is found not possible to prescribe cargo wise tariff under 'other liquids'.

(vii). Considering 5% of the total revenue requirement related to handling activity and the total optimal capacity, the miscellaneous levy works out to ₹4.41 per tonne. The miscellaneous levy is seen to cover services like pigging, compressor charges, vaporizer charges and such related charges.

(b). Berthing activity:

Based on the analysis explained earlier, the revenue requirement from berthing service works out to ₹16.20 crores, as estimated by the port.

Considering the average GRT of the vessels at 24997 GRT and the operating hours at 12264 (6132 hours per berth x 2 berths), the JNPT has arrived at the total GRT hours. Considering the ratio of foreign and coastal vessels at 64:36, the port has arrived at the berth hire charge of ₹0.62 per GRT per hour for foreign going vessels, in its revised proposal.

In its initial proposal, the JNPT had based its calculation of berth hire based on the average GRT of vessel at 48547 GRT. Based on the submissions made by one of the prospective bidders viz., M/s. IOT Infrastructures & Energy Services Limited, the JNPT in its revised proposal has considered the average GRT of vessels at 24997 GRT. This is seen to be based on the average of the yearly average GRT of the vessels carrying Crude Oil, POL and Other Liquids during the past years viz., 2010-11, 2011-12 and 2012-13. This position is relied upon in the analysis.

Based on the ratio of foreign vessels and coastal vessels at 64:36 and taking into account the revenue requirement from berthing service and considering the ratio of the GRT hours of the coastal vessels and GRT hours of foreign going vessels, the upfront berth hire rate of ₹0.62 worked out by JNPT is seen to be in order and as per the approach adopted in other upfront tariff cases.

In this connection, it is relevant to mention here that the capital cost and operating costs under the berthing activity have all been considered with reference to two berths. Therefore, the berth hire derived as above is applicable for two berths. Incase of occupation of only one berth by a vessel, the rate relevant for one berth should only be applied. Thus, incase of occupation of only one berth by a vessel, the upfront berth hire rate of ₹0.31 per GRT per hour or part thereof on foreign vessels and ₹0.19 per GRT per hour or part thereof on coastal vessels will be applicable. A suitable note in this regard is prescribed in the Reference tariff Schedule under the Berth hire charges. Such an approach has been adopted while fixing the upfront tariff for development of West Quay-North berth (WQ-7 and WQ-8) in the inner harbour of Visakhapatnam Port Trust for handling dry bulk cargo and in respect of fixation of Reference tariff in respect of two projects at MBPT viz., Offshore Multipurpose Cargo Berth and Harbour Wall Berth.

It has already been decided by this Authority while finalising the upfront berth hire at the other Major Port Trusts to approve the upfront berth hire charge in Rupee term only. The proposal of the JNPT for rupee denominated berth hire is in line with the decision taken by this Authority in the other upfront tariff cases.

(c). Storage activity:

(i). Based on the analysis explained earlier, the revenue requirement from storage activity works out to ₹141.60 crores instead of ₹140.36 crores estimated by the port.

(ii). The JNPT has considered the capacity for Storage Tank Farm at 659690 MT reportedly based on the Feasibility Report. The JNPT has estimated the storage charge based on the capacity of the tank farm at 659690 MT for 365 days at 70% utilization (256 days). In this regard, with regard to a specific query, the JNPT has confirmed that liquid cargo will be stored for 256 days in a year so that BOT operator will achieve revenue requirement from the storage of the cargo.

(iii). Considering the capacity of the Tank Farm at 659690 KL, as discussed earlier for 365 operating days at 70% utilisation, the JNPT has arrived at the storage charge of ₹8.33 per tonne per day. In view of change in the Revenue Requirement, the storage charge of ₹8.40 per tonne per day has been worked out.

(xiv). In the proposed reference tariff schedule, the JNPT has proposed definitions for common terms like coastal vessel, foreign vessel, free period, port, TAMP and tonne. These definitions are found to be in line with the definitions prescribed for the respective terms in the other upfront tariff cases and Scale of Rates of other major ports and private terminals.

(xv). The JNPT has proposed some general conditionalities like conditionalities governing levy of interest on delayed payments/ refunds, rounding off bills, non-levy of charges for delay beyond a reasonable level attributable to the terminal operator, conditionalities prescribing criteria for categorization of a vessel as a foreign going vessel or coastal vessel, conditionalities prescribing 60% concessional tariff, conditionalities governing the flexibility provided to the terminal operator to levy charges lower than ceiling rates, which are found to be in line with the general conditionalities prescribed in the Upfront tariff schedule of various major port trusts.

(xvi). Clause 2.15 prescribed in the tariff guidelines of 2005 states that users should not be required to pay charges for delays beyond reasonable level attributable to the operator. This condition is uniformly prescribed in the Scale of Rates of all Major Port Trusts under 2005 guidelines, 2008 guidelines as well as 2013 guidelines. Flowing from the principle prescribed in the above clause a general condition is also prescribed in the Scale of Rates of Private Terminal operators where berth hire is not collected by the operator stating that in case a vessel idles due to breakdown or non-availability of the shore based facilities of Terminal Operator or any other reasons attributable to Terminal Operator, rebate equivalent to berth hire charges payable to the concerned Major Port Trust accrued during the period of idling of vessel shall be allowed by Terminal Operator. In the JNPT case in reference, the operator would be entitled to collect the berth hire charges and the berth hire schedule prescribes the note that no berth hire shall be levied for the period when the vessel idles at its berth for continuous one hour or more due to breakdown of terminal operator's equipment or power or for any other reasons attributable to the Terminal Operator. Therefore, prescription of the general note that in case a Oil Vessel idles due to breakdown or non-availability of the shore based facilities of Oil Terminal or any other reasons attributable to Terminal, rebate equivalent to berth hire charges payable to the concessionaire accrued during the period of idling of vessels shall be allowed by Concessionaire, is not found relevant. The same is, therefore, deleted, as agreed by the JNPT.

(xvii). In the Berth hire Schedule, the common conditionalities like the period of berth hire to be calculated from the time vessel occupies the berth, Berth hire includes charges for services rendered at the berth, such as occupation of berth, rubbish removal, cleaning of berths, fire watch, etc., and no berth hire to be levied for the period when the vessel idles at the berth for continuous one hour or more due to breakdown of terminal operator's equipment or power or for any other reasons attributable to the terminal operator, are seen to be in line with the conditionalities prescribed at the Scale of Rates of the port and also in other upfront tariff Schedule.

(xviii). The JNPT has proposed a provision under the Schedule of Cargo handling charges to state that the handling charges prescribed shall include the cargo loading or unloading charges (as the case may be), transportation through pipelines, wharfage, etc. The note also states that it would include unloading of the cargo from vessels and transfer of the same up to the point of storage and loading on to trucks/ tankers in respect of import cargo and unloading of the cargo from the trucks/ tankers at the storage tank farm in respect of export cargo, transfer of the cargo to the loading point, loading onto the vessels, which is approved.

(xix). The JNPT has proposed for 5 free days for handling the liquid cargo in the proposed draft Reference tariff schedule. However, in reply to one of the query, the JNPT has stated that no free days are proposed based on the position obtaining at the existing terminal at JNPT. Further, it is noteworthy that unless the BOT operator levies storage charges for all the 256 days i.e. 70% utilization, he may not be able to achieve the storage revenue requirement as per the calculation furnished by the JNPT. Therefore, the Reference tariff schedule is suitably amended so as to reflect no free days.

(xx). Under the storage schedule, the common conditionalities like, Storage charges to be payable for all days including Terminal's non-working days and Customs notified holidays for stay of cargo, Storage charge to 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 seen to be in line with the conditionalities prescribed at the Scale of Rates of the port and also in other upfront tariff Schedule.

(xxi). The JNPT has proposed a note under Storage Schedule that the demurrage charges on hazardous liquids shall be levied at 1.25 times the normal rates specified in above schedule. Clause 5.7.3 of the 2005 guidelines, stipulates prescription of Premium to the extent of 25% on handling and storage charges in case of hazardous containers/ cargo. Accordingly, the said note is seen to be in line with the guideline position and hence approved.

(xxii). Under the Miscellaneous charge schedule, a note has been prescribed stating that miscellaneous charge is towards rendering services like pigging, compressor charges, vaporizer charges and such related charges.

(xxiii). As per clause 2.8 of the upfront tariff Guidelines of 2008, the tariff caps will be indexed to inflation but only to an extent of 60% of the variation in Wholesale Price Index (WPI) occurring between 1 January 2008 and 1 January of the relevant year. Such automatic adjustment of tariff caps will be made every year and the adjusted tariff caps will come into force from 1 April of the relevant year to 31 March of the following year. In the instant case, since the estimation of capital cost and unit rate of operating cost considered in the upfront tariff calculation are as of the year 2013, as confirmed by the JNPT, it is found appropriate and relevant to prescribe the base WPI to be considered for automatic adjustment every year as on 1 January 2013.

(xxiv). 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 JNPT has proposed the Performance Standards in respect of Crude, POL products (White and Black), LPG/ LNG and Other Liquids. The cargo items for which Performance Standards are proposed is not seen to match with the cargo items for which tariff has been proposed in the Reference tariff schedule. In the fixation of reference tariff till date, the cargo items for which Performance Standards are proposed generally match with the cargo items for which tariff has been proposed in the Reference tariff schedule. Inspite of a specific request, the JNPT has not justified prescription of Performance Standards in respect of White and Black POL products and for LPG/ LNG. Infact, the JNPT has specifically stated that it does not envisage handling LPG/ LNG at present. In the absence of justification, the Performance Standards is prescribed in respect of Crude, POL products and Other Liquids only.

The JNPT has proposed the Performance Standards by prescribing the indicative norms at 5000 tonnes per hour in case of Crude, 1000 tonnes per hour for White POL products, 700 tonnes per hour for Black POL products, 400 tonnes per hour for LPG/ LNG and 250 tonnes per hour in respect of Other Liquids. For the reasons mentioned above, the Performance Standards is prescribed in respect of Crude, POL products and Other Liquids only.

Since the indicative norms in respect of Other Liquids was seen to be on a lower side when compared to the output of one berth at 300 tonnes per hour, the JNPT was requested to review the performance standards. In this regard, the JNPT has stated that Indicative norm is as per Standard, whereas for Optimal Capacity calculations, norms fixed by Guidelines are taken.

While approving the proposal of Cochin Port Trust for fixation of Reference tariff for Coal Handling Terminal and the proposal of Mumbai Port Trust (MBPT) for fixation of Reference Tariff for multipurpose off shore cargo terminal, it had come to the notice of this Authority that the Performance Standards proposed by the concerned Major Port Trusts in these two recent cases are significantly lower.

Clause 2.5 of the 2013 revised tariff guidelines stipulates that the Reference Tariff and Performance Standards notified by TAMP would be mentioned in the bid document and subsequently in the Concession Agreement in respect of PPP Projects. As per the said guidelines, on the achievement of the Performance Standards at the level incorporated in the Concession Agreement, the operator is eligible to seek upward revision upto 15% over the indexed reference tariff. Thus, achievement of Performance Standards to claim tariff hike is the fulcrum of the 2013 guidelines. The Performance Standard to be notified by this Authority based on the proposal of the Major Port Trusts appears to have a significant impact on the tariff to be levied by the Operator during the entire period of Concession Agreement. In view of this provision of performance linked tariff envisaged in the 2013 guidelines, it is appropriate that the Major Port Trust carry out due diligence and take sufficient care while proposing Performance Standards at a reasonable level instead of solely adopting the indicative norms appended at Appendix-15 – Performance Standards to the Model Concession Agreement issued by the Ministry of Shipping. As suggested in the Appendix-15, the norms are only indicative relating to gross berth day output for major cargo items and other parameters as well. Even if the Performance Standards proposed by port trust are lower than the handling rate considered in the calculation of optimal quay capacity, then as per the 2013 guidelines, the BOT operator will have the option of seeking tariff revision upto 15% over the indexed Reference Tariff on achieving the lower Performance Standards prescribed in the Concession Agreement

without achieving any improvement in the performance. This perhaps may not serve the intended purpose for which the revised guidelines of 2013 are issued by the MOS linking achievement of performance while seeking tariff hike.

In view of the above position, the MOS has been requested to advise all the Major Port Trusts to propose reasonable and achievable Performance Standards which should not be lower than the output (handling) rate considered in the optimal quay capacity calculation of the PPP project.

Accordingly, in the present case of JNPT also, Performance Standards is prescribed based on output (handling) rate considered in the optimal quay capacity calculation. Thus, the Performance Standards is prescribed at 5000 tonnes per hour per berth in respect of Crude, 1000 tonnes per hour per berth in respect of POL and 300 tonnes per hour per berth in respect of Other Liquids.

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

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 for the ALBT at JNPT as modified by us 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 the ALBT at JNPT 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 JNPT is advised to incorporate the Reference Tariff and Performance Standards, in the bid document and subsequently in the Concession Agreement in respect of PPP Projects as agreed by the port.

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

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

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

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

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

14.5. After considering the views of the Major Port Trust, 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.

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

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

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

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

14.10. The PPP operator shall furnish to this Authority quarterly reports on cargo traffic, ship berth day output, average turnaround time of ships, average pre-berthing waiting time as well as the tariff realized for each berth. The quarterly reports shall be submitted by the PPP operator within a month following the end of each quarter. Any other information which may be required by this Authority shall also be furnished to them from time to time.

14.11. This Authority shall publish on its website all such information received from PPP operator. However, this Authority shall consider a request from any PPP operator about not publishing certain data/ information furnished which 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.

(T.S. Balasubramanian)
Member (Finance)

ANNEX - I

REFERENCE TARIFF CALCULATION FOR THE ADDITIONAL LIQUID BULK TERMINAL TO BE DEVELOPED AT JAWAHARLAL NEHRU PORT TRUST.

₹ in crores

Sr. No.	Particulars	Revised Proposal of JNPT dated 27 December 2013	Estimates modified by TAMP
I	**Optimal capacity**		
(a)	Percentage Share of Liquid cargo:		
	- Crude Oil (S1)	9.79%	9.79%
	- POL (S2)	75.20%	75.20%
	- Other Liquids (S3)	15.01%	15.01%
(b)	Handling rate of Liquid cargo per day:		
	- Crude Oil (P1)	120000	120000
	- POL (P2)	24000	24000
	- Other Liquids (P3)	7200	7200
(c)	Optimal Quay Capacity for a Berth = 0.7 * ((S1*P1)+(S2*P2)+(S3*P3)) * 365	**7889002**	**7889002**
(d)	Optimal Quay Capacity for 2 Berths = 0.7 * ((S1*P1)+(S2*P2)+(S3*P3)) * 365	**15778004**	**15778004**
	Optimal Capacity in million tonnes / annum	**15.78**	**15.78**
II	**Capital Cost**		
			₹ in crores
A.	**Cargo Handling Activity:**		
(a)	**Civil costs**		
	Approach Bridge (15 m)	266.94	266.94
	Other Civil works (Fencing, Compound wall, Drainage)	1.00	1.00
	Building for Control Tower, Fire & Water supply & Pump House	1.26	1.26
	Miscellaneous cost @ 5%	13.46	13.46
	(a)	282.66	282.66
(b)	**Equipment costs**		
	Marine Loading Arm		
	- Crude Oil (2 nos.)	10.00	10.00
	- POL (12 nos.)	54.00	54.00
	Pipe Line cost & Marine Loading Arm		
	- Crude Oil	24.30	24.30
	- POL	57.60	57.60
	- Others	80.93	80.93
	Control systems & Tank Automation System	7.96	7.96
	Electrical System	9.50	9.50
	Water/ Air/ Nitrogen/ Bunkering lines	0.77	0.77
	Fire Fighting System for Jetty	9.00	9.00
	Miscellaneous cost @ 5%	12.70	12.70
	(b)	266.76	266.76
	Total capital costs for the cargo handling activity	**549.42**	**549.42**
B.	**Berthing activity:**		
	2 nos. Jetty Structure	68.91	68.91
	Dredging Berth Pocket	1.40	1.40
	Building for Control Tower cum Pump House with electrical Substation	2.00	2.00
	Miscellaneous cost @ 5%	3.62	3.62
	Total capital costs for the berthing activity	**75.93**	**75.93**
C.	**Storage activity:**		
(a)	**Civil costs**		
	Storage Area Filling & Ground Improvement	43.80	43.80
	Storage Tank farms foundation work including piling work	145.82	145.82
	Storage Tank - Tank fabrication and erection etc.	161.93	161.93
	Internal Roads & Railways	16.27	16.27
	Miscellaneous Charges @ 5%	18.39	18.39
	(a)	386.21	386.21
(b)	**Mechanical Costs**		
	Fire fighting for Tank Farm area	9.26	9.26
	Truck & Wagon Loading Farm	19.72	19.72
	Miscellaneous Charges @ 5%	1.45	1.45
	(b)	30.43	30.43
	Total capital costs for Storage activity	**416.64**	**416.64**
D	**Total capital cost of the project (A + B + C)**	**1041.99**	**1041.99**

Sr. No.	Particulars	Revised Proposal of 27 December 2013	Estimates modified by TAMP
III	**Operating Cost**	₹ in crores	
A	**Cargo handling activity:**		
	(a). Power cost	4.12	4.12
	(JNPT - 13.2 hectares water front area * 240000 units per hectare @ Rs.13 per unit) (TAMP - 13.2 hectares water front area * 240000 units per hectare @ Rs.13 per unit)		
	(b). Repair & Maintenance		
	- Civil works (1% on civil costs)	2.83	2.83
	- Equipment cost (2% on Equipment costs)	5.34	5.34
	(c). Insurance (1% on Gross fixed assets)	5.49	5.49
	(d). Depreciation		
	- Civil works (3.34% on civil costs)	9.44	9.44
	- Equipment cost	9.90	9.58
	(JNPT - 10.34% on Equipment costs excl. pipeline cost) (TAMP - 10% on Equipment costs excl. pipeline cost)		
	- Pipelines cost (4% on Pipeline costs)	6.84	6.84
	(e). License Fee		
	(JNPT - For Water front - 132000 sq.mtrs. * Rs.25.45 per sq.m * 12 months * 0.5) (TAMP - For Water front - 132000 sq.mtrs. * Rs.25.45 per sq.m * 12 months * 0.5)	2.02	2.02
	(f). Other Expenses (1% on Gross fixed assets)	5.49	5.49
	Operating Cost for cargo handling activity	**51.47**	**51.14**
B.	**Berthing activity:**		
	(a). Repairs & Maintenance Charge (1% on berth costs)	0.76	0.76
	(b). Depreciation (3.34% on berth costs)	2.54	2.54
	(c). Insurance (1% on berth costs)	0.76	0.76
	Operating cost for the berthing activity	**4.05**	**4.05**
C.	**Storage activity:**		
(i)	**POL & Other Liquid Storage Tank Farm**		
	(a). Power cost	22.78	22.78
	(JNPT - 73 hectares of land * 240000 units per hectare @ Rs.13 per unit) (TAMP - 73 hectares of land * 240000 units per hectare @ Rs.13 per unit)		
	(b). Repair & Maintenance		
	- Civil works (1% on civil costs)	2.16	3.86
	- Equipment cost (2% on Equipment costs)	0.96	0.61
	(c). Insurance (1% on Gross fixed assets)	4.17	4.17
	(d). Depreciation		
	- Civil works (3.34% on civil costs)	7.22	7.22
	- Equipment cost	3.15	3.04
	(JNPT - 10.34% on Equipment costs excl. storage tank cost) (TAMP - 10% on Equipment costs excl. storage tank cost)		
	- Storage tank cost - (4% on storage tank cost)	6.80	6.80
	(e). License Fee	22.29	22.29
	(KPT - 730000 sq. mtrs of land * Rs.25.45 per sq.m * 12 months) (KPT - 730000 sq. mtrs of land * Rs.25.45 per sq.m * 12 months)		
	(f). Other Expenses (1% on Gross fixed assets)	4.17	4.17
	Operating cost for the POL & Other Liquid Storage Tank Farm	**73.69**	**74.94**

Sr. No.	Particulars	Revised Proposal of December 2013	Estimates modified by TAMP
IV	**Estimated Revenue Requirement & upfront tariff**		
A.	**Cargo handling activity:**		
(i).	**Estimated Revenue Requirement**		
	(a). Total Operating Cost	51.47	51.14
	(b). Return on capital Employed @ 16%	87.91	87.91
	(c). Total Revenue requirement from liquid handling activity	**139.38**	**139.05**
(ii).	**Apportionment of Revenue Requirement**		
	(a). Liquid Handling Charges (95%)	132.41	132.10
	(b). Miscelleneous Charge (5%)	6.97	6.95
	(c). Total Revenue requirement from liquid handling activity	**139.38**	**139.05**
(iii).	**Liquid Handling charge**		
	(a). Liquid Handling Charge		
	- Revenue Requirement (₹ in crores)	132.41	132.02
	- Capacity (Million Metric Tonnes per annum)	15.78	15.78
	- Per tonne handling rate (in Rs.)		
	- Crude oil	**15.44**	**21.53**
	- POL	**77.20**	**107.65**
	- Other liquid	**257.35**	**404.09**
	(b). Miscelleneous Charge		
	- Revenue Requirement (₹ in crores)	6.97	6.95
	- Capacity (Million Metric Tonnes per annum)	15.78	15.78
	- Miscellenous Charge (₹ per tonne)	**4.42**	**4.41**
B.	**Storage activity:**		
(i).	**POL & Other Liquid Storage Tank Farm**		
	Estimated Revenue Requirement		
	(a). Total Operating Cost	73.69	74.94
	(b). Return on capital Employed @ 16%	66.66	66.66
	(c). Total Revenue requirement from storage activity	**140.36**	**141.60**
	Capacity of Tank Farm in KL	659690	659690
	No. of operating days	365	365
	Optimal utilisation	70%	70%
	Storage charge per tonne per day (in Rupees)	**8.33**	**8.40**
	Storage charge per tonne per month (in Rupees)	**249.82**	**252.03**

C.	**BERTH HIRE CHARGES**		
	(a) Operating cost	4.05	4.05
	(b) Return on capital Employed @ 16%	12.15	12.15
	(c)Total Revenue requirement from Berthing services	**16.20**	**16.20**
	Berth hire Charge (Rate per GRT per hour) in ₹ for foreign going vessels	**0.57**	**0.62**
	Berth hire Charge (Rate per GRT per hour) in ₹ for coastal vessels	**0.34**	**0.37**

Berth Hire Calculation:

Sr. No.	Particulars	Unit	As given by JNPT	As modified by us
i	No. of Vessel	No.	1	1
ii.	Average GRT of the Vessel	Tonnes	24997	24997
iii.	No. of hours at the berth	Tonnes	12264	12264
iv.	Total GRT hours (ii * iii)	GRT hours	306563208	306563208
	- Foreign (64%)	GRT hours	196200453	196200453
	- Coastal (36%)	GRT hours	110362754.9	110362755
v.	Revenue Requirement	Rs. In crores	16.20	16.20
vi	Berth hire charge for foreign going vessels	Rs. per GRT per hour	0.62	0.62
vii.	Berth hire charge for coastal vessels	Rs. Per GRT per hour	0.37	0.37

Annex - II

JAWAHARLAL NEHRU PORT TRUST

REFERENCE TARIFF SCHEDULE FOR THE ADDITIONAL LIQUID BULK TERMINAL

Definitions:-

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

(i) **"Coastal vessel"** means any vessel exclusively employed in trading between any port or place in India to any other port or place in India having a valid coastal licence issued by the competent authority**.**

(ii) **"Foreign vessel"** means any vessel other than Coastal vessel.

(iii) **"Free Period"** shall mean the period during which cargo shall be allowed storage free of demurrage charges/ground rent and this period shall exclude Customs notified holidays and Terminal's non-operating days.

(iv) **"Port"** shall mean Jawaharlal Nehru Port Trust.

(v) "TAMP" shall mean the Tariff Authority for Major Ports constituted under Section 47A of the Major Port Trusts Act, 1963.

(vi) **"Tonne"** shall mean one metric tonne or 1,000 kilograms or one cubic metre.

1. GENERAL TERMS & CONDITIONS

i. Interest on delayed payments / refunds:

(a). The user shall pay penal interest on delayed payments under this Scale of Rates. Likewise, the operator shall pay penal interest on delayed refunds.

(b). The rate of penal interest will be 2% above the Prime Lending Rate of State Bank of India (SBI). The penal interest rate will apply to both the operator and the port users equally.

(c) The delay in refunds will be counted only 20 days from the date of completion of services or on production of all the documents required from the users, whichever is later.

(d) The delay in payments by the users will be counted only 10 days after the date of raising the bills by the Terminal Operator. This provision shall, however, not apply to the cases where payment is to be made before availing the services where payment of charges in advance is prescribed in this Scale of Rates.

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

iii. Users will not be required to pay charges for delays beyond reasonable level attributable to the Terminal Operator.

iv. The status of the Vessel as borne out by its certification by the Customs or Director General of Shipping is the relevant factor to decide whether vessel is

"Coastal" or "Foreign-going" for the purpose of levy of berth hire, and the nature of cargo or its origin will not be of any relevance for this purpose.

v. (a) A foreign going vessel of Indian Flag having a General Trading Licence can convert to Coastal run on the basis of a Customs Conversion Order.

(b) A foreign going vessel of Foreign Flag can convert to Coastal run on the basis of a Coastal Voyage Licence issued by the Director General of Shipping.

(c) In case of such conversion, coastal rates shall be chargeable by the load port from the time the vessel starts loading coastal goods.

(d). In cases of such conversion coastal rates shall be chargeable only till the vessel completes coastal cargo discharging operations; immediately thereafter, foreign going rates shall be chargeable by the discharge ports.

(e). For dedicated Indian coastal vessels having a Coastal Licence from the Director General of Shipping, no other document will be required to be entitled to Coastal rates.

vi. (a) The berth hire for all coastal vessel should not exceed 60% of the corresponding charges for other vessels.

(b) The cargo related charges for all coastal cargo other than crude including POL should not exceed 60% of the normal cargo related charges.

(c) Cargo from a foreign port which reaches an Indian Port "A" for subsequent transhipment to Indian Port "B" will be levied the concession charges relevant for its coastal voyage. In other words, cargo from/to Indian Ports carried by vessels permitted to undertake coastal voyage will qualify for the concession.

vii. The 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.

The Terminal Operator if so desires, rationalise 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.

The Terminal Operator should, however, notify the public such lower rates and / or rationalization of the conditionalities governing the application of such rates and continue to notify the public any further changes in such lower rates and / or in the conditionalities governing the application of such rates provided the new rates fixed shall not exceed the rates notified by the TAMP.

2**. Berth Hire Charges:**

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

Foreign going Vessels	₹ 0.62 per GRT per hour
Coastal Vessels	₹ 0.37 per GRT per hour

Notes:

(i). Incase of occupation of only one berth by a vessel, 50% of the respective berth hire charges as mentioned above are leviable for the foreign going vessels and coastal vessels.

(ii). The period of berth hire shall be calculated from the time vessel occupies the berth.

(iii). Berth hire includes charges for services rendered at the berth, such as occupation of berth, rubbish removal, cleaning of berths, fire watch, etc.

(iv). No berth hire shall be levied for the period when the vessel idles at its berth for continuous one hour or more due to breakdown of terminal operator's equipment or power or for any other reasons attributable to the Terminal Operator.

3. Cargo Handling Charges:

The liquid cargo handling charges at Oil Jetty shall be payable on the manifested cargo directly by the importer of cargo at the rates specified below:

(₹ per metric tonne)

Description / Cargo	Foreign	Coastal
Crude	21.53	21.53
POL	107.65	107.65
Others	404.09	242.45

Note:

The cargo handling charges shall include the cargo loading or unloading charges (as the case may be), transportation through pipelines, wharfage, etc.

(a). Unloading of the cargo from vessels and transfer of the same up to the point of storage and loading on to trucks/ tankers in respect of import cargo.

(b). Unloading of the cargo from the trucks/tankers at the storage tank farm in respect of export cargo, transfer of the cargo to the loading point, loading onto the vessels.

4. Storage Charges:

The storage charges for the cargo stored in the tank farm shall be as below:

	Storage charges in ₹
Per tonne per day	8.40
Per tonne per month	252.03

Notes:

i. No Free days will be allowed.

ii. The demurrage charges on hazardous liquids shall be levied at 1.25 times the normal rates specified in above schedule.

iii. Storage charges shall be payable for all days including Terminal's non-working days and Customs notified holidays for stay of cargo.

iv. 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.

5. Miscellaneous Charges:

₹ 4.41 per tonne shall be charged towards pigging, compressor charges, vaporizer charges and such related charges.

6. General Note to Section 2 to 4 above.

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 1st January 2013 and 1st January of the relevant year. Such authomatic adjustment of tariff caps will be made every year and the adjusted tariff caps will come into force from 1st April of the relevant year to 31st March of the following year.

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Annex - III

ADDITIONAL LIQUID BULK TERMINAL AT JAWAHARLAL NEHRU PORT TRUST
PERFORMANCE STANDARDS

1. Gross Berth Output

The parameter deals with the productivity of the terminal (Gross Berth Output) for different types of cargo. The Gross Berth Output shall be calculated as the total cargo handled (either loaded/unloaded) from the ship during a month divided by the time spent by the ship at the terminal number of working days of ships in that month at that terminal. While determining the number of working days from the ship hours, the berth allowance of 4 hours shall be subtracted from the total hours.

The indicative norms for Gross Berth Output is as follows:

Liquid Bulk	Indicative Norms
Crude	5000 T/H
POL Products	1000 T/H
Other Liquids	300 T/H

Weightage in case of a shortfall in meeting the prescribed performance standard - 0.6

2. Transit Storage Dwell Time

The Transit Storage Dwell Time for liquid cargo shall be calculated, as half of average parcel size of above cargo vessels in a month divided by average disposal of cargo from the port per day as per the following methodology:

$$\text{Average disposal of Cargo per day (A)} = \frac{\text{OB+Received/Despatched-CB}}{\text{No. of days}}$$

OB = Opening Balance, CB = Closing Balance.

Average Parcel Sizes (B) = (P1+P2+ ……+Pn)/(n(no. of parcels)))

P1,P2 ……Pn are parcel size of each vessel in a month.

Transit Storage Time for Bulk Cargo = 0.5 (B/A)

Weightage in case of a shortfall in meeting the prescribed performance standard - 0.3

3. Turnaround Time for receipt/delivery operation

The Turnaround Time for receipt/delivery operation shall be the sum of time taken for loading/unloading of cargo divided by the number of trucks/trailers/rakes deployed, as the case may be, in a month. Further, in case the truck/trailer/rake does both unloading and loading operations on a single entry into the terminal, the time allocated shall be doubled for those trucks/trailers/rakes.

(i). Truck for conventional cargo (Single operation)	4 hours
(ii). Truck for conventional cargo (Double operation)	8 hours

Weightage in case of a shortfall in meeting the prescribed performance standard - 0.1

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

F. No.TAMP/50/2013-JNPT	**-**	**Proposal from Jawaharlal Nehru Port Trust (JNPT) for fixation of Reference tariff for development of additional Liquid Terminal at JNPT.**

A summary of comments received from users / user organisations and prospective applicants and the response of the JNPT thereon is tabulated below:

<table>
<tr><th>Sl. No.</th><th>Comments of users / user organisations and prospective applicants</th><th>Response of JNPT</th></tr>
<tr><td>1.</td><td>ICC Shipping Association</td><td></td></tr>
<tr><td>(i).</td><td>Concessional tariff for Coastal Shipping. Consideration should be given for reserving small part of the facility for use of coastal ships.</td><td rowspan="2">Port has taken consideration on concessional tariff of Coastal shipping as per the guidelines from the Government of India. Further, all statutory requirements will be complied by the Terminal Operator.</td></tr>
<tr><td>(ii).</td><td>All applicable statutory requirements including obligation under the MARPOL Convention for the terminal to be completed.</td></tr>
<tr><td>2.</td><td><u>M/s. United Lines Agencies of India (P) Ltd</u>:</td><td></td></tr>
<tr><td>(i).</td><td>The JNPT has taken into account only the capital costs involved in Ist Phase Construction (that too not fully).</td><td>-</td></tr>
<tr><td>(ii).</td><td>The rates proposed for ALCT are much lower than those notified by TAMP for Kandla Port in respect of Berth hire although the capital cost of construction of berth is much higher in the case of JNPT. The storage charges proposed are also much lower than what the Tank farm Operators charge in JNPT. A comparative statement of the proposed rates of ALCT with Kandla, MbPT and JNPT BPCL berths are given below:
<table>
<tr><th rowspan="3">Port</th><th colspan="2">Berth hire charges (₹ / GRT / hr)</th><th colspan="6">Cargo Handling Charges (₹ / ton)</th><th rowspan="3">Storage charges (₹/MT/ Month)</th></tr>
<tr><th colspan="2">crude</th><th colspan="2">POL</th><th colspan="2">Others</th></tr>
<tr><th>F</th><th>C</th><th>F</th><th>C</th><th>F</th><th>C</th><th>F</th><th>C</th></tr>
<tr><td>Kandla</td><td>0.57</td><td>0.34</td><td>-</td><td>-</td><td>31.29</td><td>31.29</td><td>108.64</td><td>65.18</td><td>189.42</td></tr>
<tr><td>MbPT</td><td>-</td><td>-</td><td>52.10</td><td>52.10</td><td>-</td><td>-</td><td>88.00</td><td>52.80</td><td>250.00</td></tr>
<tr><td>BPCL</td><td>-</td><td>-</td><td>43.25</td><td>43.25</td><td>31.71 to 98.02</td><td>31.71 to 98.02</td><td>98.02</td><td>58.81</td><td>300.00</td></tr>
<tr><td>ALCT</td><td>0.31</td><td>0.19</td><td>49.89</td><td>29.94</td><td>54.10</td><td>32.46</td><td>161.25</td><td>96.75</td><td>209.03</td></tr>
</table></td><td>It can be seen from the statement furnished by M/s. United Lines Agencies that only in respect of Berth hire charges, the rates proposed are lower than Kandla Port Trust.</td></tr>
<tr><td>(iii).</td><td>The total capital cost involved in phase-I of the Project was indicated by JNPT in reply to RFQ queries as ₹1436.00 crores. As against this, capital cost taken by JNPT in this proposal is only ₹ 1191.91 crores. This wrong assumption drastically reduces the tariffs as 16% return on capital has to be taken into account for arriving at tariffs.</td><td>The total capital cost involved in Phase - I of the Project is inclusive of interest during construction, which has been considered separately @ 5% of capital cost as per the guidelines for fixation of upfront tariff of PPP Project.</td></tr>
<tr><td>(iv).</td><td>As per policy direction of the Government, (as quoted by TAMP in Kandla Oil Jetty Order) concessional tariffs are not to be prescribed for coastal cargo for thermal coal and POL including crude oil, iron ore and iron ore pellets. Accordingly, the KPT has not proposed any concession for coastal rates for crude and POL. Similar is the case with BPCL jetty and Mumbai Terminals. However, JNPT chose to prescribe</td><td>Necessary corrections in respect of coastal rates of Crude & POL will be made in the proposal submitted to the TAMP.</td></tr>
</table>

	concessional rates for crude and POL which is not warranted and is against the policy directions of the Government.	
(v).	While calculating the cargo handling rates, the capacities assumed by JNPT for handling various commodities appear to be wrong as they seem to have mixed up the capacities that will be available after Phase-II is completed. This will give lower tariffs as they have considered only the capital costs of Phase-I in the entire tariff proposal. JNPT may be requested to indicate as to what are optimal capacities for handling different cargoes that were taken for arriving at these rates.	The method of calculations of optimum capacity is indicated in the guidelines of fixation of upfront tariff and the same has been adopted while arriving at capacity for different cargos. Guidelines for fixation of upfront tariff for PPP Project prescribed a method for fixation of tariff with certain norms. Therefore, incremental traffic has not been considered.
(vi).	The throughputs expected only after about 15-20 years have been taken into account while fixing the tariffs ignoring the fact that traffic ramp up takes time and the Operator would be put to great loss and difficult because of lower tariffs.	Traffic projection for 15-20 years cannot be predicted correctly.
(vii).	While calculating the storage charges, the annual lease rentals for 73 hectares of land do not seem to have been taken into account. This has a great impact on the quantum of storage charges as the lease rentals are approximately ₹ 14 crores per annum.	For the calculation of storage charges annual lease rentals amounting to ₹14.01 crores has been considered.
(viii).	An area of 13 hectares was assumed for berth and its appurtenant facilities. Lease rentals for this area have not been taken into account while arriving at the berth hire charges. It is presumed that no lease rentals are payable for this area.	Lease rentals of 13 hectares for berth hire charges has been considered in the calculation of handling charges.
(ix).	The cost of maintenance dredging (approximately 1.5 million cubic meters of maintenance dredging per annum is involved) has not been taken into account while calculating the operating expenditure for arriving at the berth hire charges.	--
(x).	Commodity break up is inadequate. Many cargoes cannot afford the rate mentioned in "Other Category". The rate prescribed by TAMP for the JNPT BPCL Jetty for chemicals like MEG, Styrene, Butyl Acrylate, Crude Clycol, LAG and Xylene is ₹ 98.02 / ton, for edible oil ₹51.90 per ton, for acid ₹ 99.02 per ton and for molasses ₹ 40.36 per ton. The rate at Mumbai Port is ₹ 88 per ton while at Kandla is ₹ 108.64 per ton. This is as against ₹ 161.25 proposed by JNPT for ALCT.	As per the norms for fixation of upfront tariff for Liquid Berth Terminal, classifications of Liquid bulk are into 4 categories; i.e. Crude, POL, LPG/LNG and other liquids. Therefore, other than Crude, POL & CNG/LNG, all other chemicals fall under other liquids. Since handling of different chemicals depends on the operator, he may fix different rates for different chemicals, keeping in view the overall ceiling rate fixed for other chemicals.
(xi).	There is no mention of tariffs for miscellaneous charges like pigging, compressor charges, liquid nitrogen charges, vaporizer charges etc.	As per norms for fixation of upfront tariff for Liquid Berth Terminal apportionate of total revenue requirement is in only 2 categories; i.e. handling charges and miscellaneous charges. Handling charges constitute 95% of the total revenue requirement and Misc. charges constitute 5%. Since storage charges constitute a major

		part, 5% allocated charges have been considered in storage charges.
(xii).	The proposal sent by JNPT to TAMP for fixation of tariffs seems to contain some errors as it does not take account the correct capita costs, correct capacities, ignores important operational costs, and confuses with the capacity of the Terminal after Phase-II for handling different commodities while arriving at the tariffs and therefore needs to be reviewed.	--
3.	**M/s. IOT Infrastructure and Energy Services Limited:**	
(i).	Covering Letter, Para 2 & 5. General note to section 2 to 4 Please clarify whether the rate set as "Reference Tariff" for this project post hearing/review by TAMP shall undergo escalation at 60% WPI PA as per Tariff guideline 2008 since 1st January 12 till date the Terminal at JNPT is commissioned.	Tariff will undergo escalation at 60% of WPI PA after fixation.
(ii).	Storage Charges, Notes, Clause iv Storage charges to be applicable unless of proven delay or cause attributable to the Terminal Operator or otherwise.	Storage charges is a service and chargeable as it involves capital investment.
(iii).	Development Plan/Matrix ONGC's Crude Oil production has dropped 25% since the time it started producing and is expected to decline further. The volume produced by ONGC is supplied through pipeline to HPC/BPC and a small volume exported to MRPL. Therefore in the aforementioned scenario please elaborate the reason of an incremental volume assumed in Crude throughput.	ONGC's Phase-II and Phase-III development of Oil Wells planned for the next 15 years has been considered.
(iv).	Performance Standards for ALBT (a). The Port has specified the Gross Berth Output and has indicated any shortfall in the performance will entail liquidated damages as stipulated. The rates of handling are as follows: Crude : 5000TPH (3000 TPH) White Oil : 1000TPH`(1200 TPH) Black Oil : 700 TPH LPG : 400 TPH Other liquids : 250 TPH The figures given in the bracket are those indicated by L&T Ramboll in the DPR. It may kindly be noted that the terminal operator has no control over these rates except for those products which are exported through his tankage. Crude is pumped by ONGC from their Uran terminal. Based on the past data, the pumping rate has never exceeded 2000 TPH. Likewise for the POL products brought in for marketing	The handling rate for Berth Occupancy calculation in DPR is for the proposed new terminal wherein better operational efficiency is expected by providing state-of-the-art equipments, larger line sizes and better operating efficiency. However, for the purpose of up-front tariff calculation, the handling rates as per the TAMP 2008 guidelines published by TAMP has been adopted.

	purposes, the pumping rate depends on the tankers bringing in the products. During the past years, the discharge rate has been below 400 TPH. For chemicals the discharge rate is generally less than 200 TPH. Moreover, the concessionaire after having invested in the facilities will already be incentivized to maintain optimum throughput in order to maximize its revenue. This should be revised to more realistic nos.	
	(b). The turnaround time for rail wagon unloading/unloading is generally around 7-8 hours. The Standard may please be revised accordingly.	Performance Standards are fixed after traffic studies carried out by Consultants.
(v).	<u>Performance Standards for ALBT - Performance Evaluation and calculation of liquidated damages</u> The calculations are not clear. Please explain by giving an example.	For handling, storage and turn-around time, Performance Standards are fixed and weightages are given. Cumulative performance evaluation is done after considering the above three parameters. Example for calculation is given in the Performance Standards.
(vi).	<u>Traffic/throughput projection</u> According to the Port Statistics published every year by Indian Ports Association, the POL traffic through JNPT during the past 5 years is as follows. It is presumed that this covers only crude and Petroleum products. 2012-13 4.286 million tonnes 2011-12 4.926 million tonnes 2010-11 5.135 million tonnes 2009-10 4.916 million tonnes 2008-09 5.866 million tonnes Under such scenario, the port expects that by 2018-19 the total traffic in liquid bulk will jump to more than 13 MTPA so that the new terminal will get the balance 7.5 MTPA after 5.5 MTPA being handled by the existing terminal. This is more than double the present traffic. In view of the development of other competing ports, this appears to be unrealistic.	The current traffic handled at JNPT is limited due to the Berth capacity constraints wherein the berth currently operates at about 90% occupancy. But Traffic Projection is projected without any such capacity constraints considering future developmental aspects and hence the estimated traffic during year 2018-19 is realistic.
(vii).	<u>GRT of vessels</u> It has been assumed that the GRT of the different types of vessels: Crude 72,000 T (10% of traffic) POL 48,000 T (75% of traffic) Others 36,000 T (15% of traffic) Average 48,674 T The revenue through berth hire charges has been worked out assuming 70% berth occupancy and with this average GRT at the proposed berth hire	GRT of vessels is provided considering the future sizes of vessels which is expected to grow with the Phase-I and Phase-II Channel Deepening works at JNPT.

	charges. It may be kindly noted the assumed GRT are on the higher side. For example, the assumed GRT of crude vessels correspond to 120,000 to 150,000 DWT. But in reality tankers under 90,000 DWT only call at JNPT. These will have only 43,000 T GRT. And with the crude oil production by ONGC expected to decline over the years, the no. of vessel calling will reduce in case larger vessel starts to call. Similarly for POL vessels the average GRT would be only 27,000 T (based on economic parcel size) and for others it could be only 18,000 T. Considering these values the average GRT could be only 27,250 T which is only 53% of the assumed average GRT. Consequently, the revenue through berth hire charges will come down by this percentage. Please review.	
(viii).	For revenue through berth hire charges, the proposal has assumed 70% berth occupancy and has considered 365 days. But L&T Ramboll have taken 330 days (as per Ministry of Shipping guidelines) and have worked out berth occupancy as 64.3% for phase IA and 58% for phase IB. Moreover, the proposal assumes that berth hire charges will be payable for the entire period of berth occupancy. But the definition of berth hire charges in some ports state that the time starts only when the first mooring rope is tied and ends when the last rope is disengaged. This means the time allowed for peripheral activities for each vessel has to be excluded. This will further reduce the revenue through berth hire as calculated in the port proposal.	330 days of available time of the port has been considered in the DPR considering 30 days of downtime. However, for the purpose of Up-front Tariff Calculation, the capacity calculations as per TAMP 2008 guidelines published by TAMP has been adopted.
(ix).	<u>Parcel sizes & Storage Tank Requirement</u> Under section 10.4.3 of the DPR prepared by the consultant LTR which deals with the storage tank requirements, the parcel sizes considered for planning are: POL 65,000 T and Chemicals 18,000 T This is in conflict with the parcel sizes considered earlier in the same report while working out the berth occupancy. These parcel sizes are POL - 13,250 T in phase IA and 30,000 T in phase IB Chemicals - 4,560 in phase IA and 10,000 T in phase IB. Even these appear to be on the higher side. The present average parcel sizes are POL 13,000T and Chemicals 4000 T. Please explain this difference in parcel sizes. If the tankage has been planned as indicated earlier and a capital cost is worked out based on that, it will be grossly incorrect.	In DPR, the expected Maximum parcel size for each cargo group is considered for designing the various facilities of the terminal like berths, navigation channel, storage, etc. The present vessel sizes cannot be considered as the facilities to be developed for Additional Liquid Terminal shall cater to the vessels expected in future. Further, for the purpose of calculating the berth occupancy only the Average parcel size needs to be considered to estimate the vessel calls.

(x).	<u>Cost estimates and expected return</u> The break-up of capital costs is given as follows in the port proposal: Berth ₹ 150.19 cr **<u>Cargo handling</u>** Civil ₹ 282.66 cr Mechanical ₹ 321.57 cr **<u>Storage</u>** Civil ₹ 386.22 cr Mechanical ₹ 30.43 cr **Total capital costs ₹ 1,171.07 cr** Storage capacity of about 660,000 KL is planned, which translates into ₹ 6300/KL (i.e. ₹ 317 cr/660,000 KL). This appears to be grossly underestimated. Moreover, tanks and pipeline of SS would be developed for certain chemicals, which are more expensive than MS tanks and pipelines. Similarly, considering the current cost of material and services for other facilities, the above estimated capital cost appear to be under estimated by around 40-50%. It may please be reviewed again. The annual revenue requirement to make the project viable has been worked out as follows Berth ₹ 32.05 cr Cargo handling ₹ 184.79 cr Tankage ₹ 117.44 cr The port want the licensee to construct the facilities for both phases IA and IB in the first instance with a total investment of ₹1171 cr. The revenue requirements take into account the capital investment, O&M costs, depreciation and return on capital invested. As the traffic builds up only the operating costs will vary marginally whereas the bulk of the other costs will remain the same. If one works out the actual cash inflow in the initial years (even assuming that the projected traffic will materialise), making modifications to the assumed GT and actual berth hire charges will be far less than what is required. This applies to cargo handling charges and tankage charges also. It has also to be noted that the cargo handling charges applicable will be mostly the lower value for coastal vessels. If the assumptions in the port proposal are modified in line with the actual scenario, the suggested tariff needs upward revision for ensuring the justified returns from the project. Request for necessary revision.	The rate is arrived after discussing with tank farm contractors and also comparing with the cost of other terminals. The up-front tariff calculation as per TAMP 2008 guidelines published by TAMP has been calculated based on Capacity of the Terminal and not the traffic. However, the same has been changed in the revised proposal.
(xi).	<u>Power cost under Operating expenses</u> Power expense of 2.4 lakh units per hectare with cost of power at ₹ 7 / Kwh has been considered,	The rate for power of Rs. 7/kwh is based on Approved Tariff Schedule by Maharashtra State

	whereas the current rate is much higher. Please take into account the current rate.	Electricity Distribution Co. Ltd. for HT I-HT industries. However, present consolidated rate has been considered in the revised proposal.
4.	**Mumbai and Nhava-Sheva Ship-Agents' Association**	
(i).	MANSA is eager to witness the planned additional liquid cargo handling facilities come up early in JNPT soonest possible to cater to increasing volumes that are envisaged. Therefore the tariff proposals should be framed in such a way that while the interests of the Trade are taken into account, it is also to be ensured that the bidders are able to obtain adequate returns on the huge capital investments made by them besides offering competitive bids to JNPT.	(i). MANSA has raised a query on adequate returns to the prospective bidders on the huge capital investments made by them. It has to be noted that upfront tariff has been proposed as per guidelines issued by the TAMP and Port cannot deviate from the guidelines issue by TAMP. Further, the rates of JNPT cannot be compared with rates of Kandla Oil jetty as both are of different capital investment. Interest during construction, which forms part of total capital cost, has not been considered in the calculations as the guidelines prescribe 5% of the capital cost to cover IDC. (ii). The Guidelines considered for fixation of tariff under 4 categories i.e. POL, Crude, CNG & others. Therefore, all commodities other than POL, Crude & LPG/LNG are accommodated in category. Further it is stated that no rates are prescribed under guidelines, 2008, specifically for products like, MEG, Styrene etc. Hence, the same is not considered in our proposal. As per guidelines, 2008, allocation of revenue is in two parts i.e. handling charges which constitute 95% and misc. charges which constitute 5%. Therefore, charges for miscellaneous activities like pigging etc., are not considered separately. For the purpose of calculation as per Guidelines, lower of optimum capacity and actual capacity is considered. In this case capacity considered is 6.97 million tons.
(ii).	The tariffs proposed are not commensurate with the returns on capital invested and the operating expenditure involved and also found to be not in line with the present tariffs applicable in JN and neighboring ports/Terminals. Some of the rates are even lower than the recently notified rates for Kandla Oil Jetty although the capital cost of the Kandla Project is much lower. So while fixing the tariff the overall viability of project is to be taken in to account. Prima facie, we observe that Phase I capital cost assumed in the proposal is much lower than the actual projected costs as per the Feasibility Report and certain costs like maintenance dredging, lease rentals etc. have not been considered.	
(iii).	While the rates prescribed for crude and POL are on the lower side, the rates proposed in the category of "Other Commodities" are pitched on the higher side. Many of the commodities mentioned in this category may not be able to afford these rates. The rates for some of the commodities like MEG, Styrene, Butyl Acrylate, Crude Glycol, LAB, Xylene, edible oil, acids, molasses etc., are much lower at Mumbai port as well as at BPCL Jetty of JNPT. We therefore suggest that cargo split up may be done for this Category and different rates fixed for different commodities. At this moment it is also not clear whether the port will again consider a revision of rate for the phase II. The coastal rate mentioned in the proposed tariff for crude and POL products is much lower than present tariff at BPCL.	
(iv).	The detailed traffic study done to assess the traffic potential of JNPT as per the Project Details given in the proposal indicates that traffic ramp up will take place slowly starting from about 6.28 million tonnes during 2015-16 to about 15.83 million tonnes (full capacity) only by about 2027-28 , that is, after about 15 years. This throughput is apparently taken into account while fixing the tariffs. As traffic realization during the initial years will be much less, the Operator may find it difficult	

	to recover the costs.	
(v).	Trade also avails various optional services like pigging, compressor charges, supply of liquid nitrogen, vaporizer etc. The proposal does not provide for any rates for such miscellaneous services.	
(vi).	The proposal may be reviewed in the light of the above view as we find this may affect the viability and delay in implementation of the project due to lack of response from the Trade.	
5.	**Indian Merchants' Chamber** The desire to have the proposed Liquid Terminal at JNPT is a highly ambitious for the following reasons:	
	(a). JNPT is already in the process of constructing the 4th & 5th Container Terminals. This would augment the handling capacity of JNPT to almost 10 million TEU containers annually.	(i). IMC has made some general remarks stating that the Liquid Terminal Project is highly ambitious. They also brought out inadequacy of facilities considering proposed projects of 4th & 5th Container Terminal. IMC have also brought out the issue of Dredging. (ii). The proposed Liquid Terminal Project at JNPT is as per the studies conducted by Consultant, who are experts in the Project. The project of Deepening & Widening of Channel is under execution to take care of the bigger size vessels. Moreover, the capacity of Liquid Terminal is already saturated and needs to be increased.
	(b). The number of vessels that would play within the Mumbai Harbour and the existing channels at JNPT would more than double, leading to substantial delay and the vessels awaiting at anchorage.	
	(c). In the last 25 years of JNPT, the existing main channel has not been dredged or deepened to permit larger vessels to arrive at its port. At present, the main Channel, to the best of our knowledge is at 10.05 meters draught, which is being deepened to 12 meters at the cost of ₹.1500 crores.	
	(d). In the proposed tariffs for the additional Liquid Terminal at JNPT and in order to make it a viable project, in our opinion, the existing Channel would have to be further deepened to 12 meters to a minimum of 18 meters, and the Main Channel would also have to be widened to a 4 Lane Channels as against the existing Channel that operates for Mumbai Port and JNPT. The cost of dredging the Main Channel to a depth for 18 meters would be approx. ₹ 3500 crores. It appears that the said cost has not been taken into consideration.	
	(e). The said cost for dredging would be borne by whom?	

2. A joint hearing in this case was held on 2 December 2013 at the Office of this Authority in Mumbai. The JNPT has made a power point presentation of its proposal. During the joint hearing the JNPT has confirmed that M/s. Shapoorji Pallonji Ltd. (SPL) has also been issued RFP and that they may also be considered in the consultation proceedings. Based on the suggestion made by the JNPT, it was decided to consult SPL in the proceedings relating to the concerned proposal of JNPT. At the joint hearing, the JNPT and the users / user organisations / prospective applicants have made the following submissions:

Jawaharlal Nehru Port Trust (JNPT)

(i). JNPT has been mainly associated with handling of containers.

(ii). But, we feel that there is a robust potential for liquid cargo.

(iii). Seven potential bidders have shown interest.

(iv). We would like to review the capacity based on the handling rates of the cargoes.

(v). We would review the GRT position.

(vi). We would like to review the proposal. We need inputs from the users/ prospective bidders in this regard.

M/s. IMC Ltd.

(i). We want to know the basis for TAMP fixing the norm for handling Crude Oil at 5000 TPH. Even in the Feasibility Report, a handling rate of only 3000 TPH has been considered for Crude Oil. Performance standards depend on the performance of the vessel. Therefore, performance standards may be moderated.

(ii). The capacity of the project at 31.55 MMTPA is seen to be on a higher side.

M/s. Shapoorji Pallonji Ltd.

(i). The length of the Approach Trestle to the tune of about 7 KM is not seen to have been considered by the port while determining the handling rates.

(ii). The pipeline connectivity is insufficient to handle 31.55 MMTPA.

M/s. United Liner Agencies of India (Private) Limited

(i). The project would be viable if it is for a capacity of 11 MMTPA. Please consider the said capacity. TAMP's norms are indicative. Estimated optimal capacity is on the higher side. TAMP guidelines provide for relaxation in the norms to cater to port specific requirements, provided the port gives a detailed justification in this regard. Please relook the capacity estimates. Ultimately, the project should be viable.

(ii). The total capital cost involved in phase-I of the Project is seen to be ₹1436.00 crores in the Feasibility Report, whereas the JNPT has considered only ₹1191.91 crores, thereby not considering return of 16% on about ₹250 crores and thereby, seeking for a lower tariff.

M/s. IOT Infrastructures & Energy Services Limited

The average GRT of the vessel considered in the berth hire calculation is on a higher side. Please consider the GRT on a realistic basis.

Mumbai and Nhava Sheva Ship Agents Association

Ours is a growing economy. Therefore, capacity is to be created in advance to meet the future demand.

Indian Merchants' Chamber

The users want this facility. However, it should be based on realistic parameters.

3. The JNPT has vide its 17 December 2013 has forwarded its revised proposal to the users / user organisations / shortlisted bidders requesting them to furnish their comments by 19 December 2013 directly to the Authority under intimation to JNPT, as agreed at the joint hearing. The JNPT has also responded to the comments made by the various users/ prospective bidders, vide its e-mails dated 24 December 2013 and e-mail dated 27 December 2013. The comments received from the users/ user organisations/ shortlisted bidders on the revised proposal of JNPT dated 17 December 2013 and the comments of JNPT thereon are tabulated below:

1.	**United Liner Agencies of India (Private) Ltd.**	**Comments of JNPT**

(i).	The port has considered the revised optimal capacity for the Terminal for arriving at the revised tariffs. However, while the cargo handling rates for POL and others have gone up, there is a drastic reduction in the tariff for crude. The earlier proposed rate was ₹49.89/ton for foreign vessels and ₹29.94/ton for coastal vessels. As against this, the rate now proposed is ₹ 18.52/ton. This seems to be not correct as with the reduction in optimal capacity the tariffs should have increased. The rate of ₹ 18.52/ton is completely unviable and needs to be relooked into.	In the revised proposal based on the revenue share of the cargo and occupancy level for each cargo, as worked out by the Consultant, have been considered. Therefore, there is variation in the rate as compared to initial proposal. In case this method of fixation results in unviable rate, we may have to have an alternative method whereby total revenue requirement can be divided by total traffic which gives a common ceiling rate of Rs. 117.83 per ton for Crude, POL and Other Cargos.
(ii).	It is understood that the port has considered only half the Estimated Cost of the Project for the purpose of tariff calculation. This will have a great impact on computation of berth hire charges as 16% return is taken into account for calculating the tariffs. Apparently, reduced Project cost has been considered for the purpose of reducing the optimal capacity of the Terminal. But as we have already brought out in our earlier communications and deliberations, that in the L&T Ramboll Report and in the RFQ Document issued by the JNPT, the optimal capacity of the Terminal in Phase I was indicated as 15.83 million tonnes by considering the loading rates for crude and limitation on the Tank Storage capacities. We have also brought out that under Para 3.2 of the Tariff Guidelines, 2008 notified by TAMP,TAMP can make necessary adjustments in these norms, based on the justification to be furnished by the concerned port trust keeping in view the port specific conditions having impact on the norms prescribed in these guidelines.	It has been stated that pro-rata reduction in capital cost for the berths will have an impact on computation of berth hire charges. We have considered 15.84 MT as per the norms fixed. Since earlier optimum traffic of 31.55 MT was for 4 berths, pro-rata reduction has to be considered for capital cost.
(iii).	The ULA has also brought out in our communication dated 15-11-2013 that many of the commodities included in the "Other Category" will not be able to afford the high rates proposed and therefore these commodities need to be split up and separate rates fixed. Separate rates have been fixed at JNPT BPCL Jetty for chemicals like MEG, Styrene, Butyl Acrylate, Crude Glycol, LAG and Xylene which are much less. Similarly rates available for these commodities at Mumbai and Kandla ports are also much less. TAMP may therefore relook into this issue.	For fixation of tariff, a base of traffic for each cargo that will be handled will be required to calculate the rates. The existing rates in any other port cannot be adopted directly unless the same is fixed under tariff guidelines of 2008. Therefore, port is not in a position to fix commodity-wise rates for cargos other than Crude and POL. It is reiterated that the rate fixed is a ceiling rate and operator may charge lower rate depending upon the traffic for different commodities.
(iv).	For the purpose of tariff calculation, the optimal capacity of 31.55 million TPA earlier assumed has been revised to 15.83 million TPA.	No specific comments have been furnished by the JNPT on these points.
(v).	Average GRT of the vessel for Crude, POL & Others is considered at 48,000, 24,000 & 15,000 instead of 72,000, 48,000 and 36,000.	
(vi).	Power charges have been considered at ₹ 14 per unit based on latest power bill, as against ₹ 7 per unit considered earlier.	
(vii).	Depreciation for pipeline has been considered separately at 13.91% as against 10.34%	

	considered earlier.	
(viii).	Cost of fire-fighting system amounting to ₹ 9 crores has been considered in the mechanical cost.	
(ix).	Interest During Construction (IDC) has been considered in Capital Cost while calculating Capital Cost.	
(x).	Separate rate for pigging @ ₹ 6.20/ton is now proposed.	
(xi).	On the basis of the above JNPT proposed certain revised rates. The following Table indicates the earlier proposed and now proposed rates: **Rate** | **Earlier rate (foreign) In ₹** | **Proposed rate (foreign) In ₹** | **Earlier Rate (coastal) In ₹** | **Proposed rate (coastal) In ₹** **Crude** | 49.89/ton | 18.52/ton | 29.94/ton | 18.52/ton **POL** | 54.10/ton | 92.63/ton | 32.46/ton | 92.63/ton **Others** | 161.25/ton | 308.78/ton | 96.75/ton | 185.27/ton **Storage** | 209.03/ month | 307.84/ month | | **Berth hire** | 0.31/hr/ GRT | 0.43/hr/ GRT | 0.19/hr/ GRT | 0.26/hr/ GRT From the above Table, it may be seen that while the cargo handling rates for POL and others have gone up, there is a drastic reduction in the tariff for crude. The earlier proposed rate was ₹ 49.89/ton for foreign vessels and ₹ 29.94/ton for coastal vessels. As against this, the rate now proposed is ₹ 18.52/ton. This seems to be not correct as with the reduction in optimal capacity to half the tariffs should have doubled. The rate of ₹18.52/ton is completely unviable and needs to be relooked into.	
(xii).	As per the TAMP Procedure, the cargo handling rates are arrived at after dividing the Annual Revenue Requirement by the Optimal capacity for a particular commodity. The following Table indicates the Annual Revenue Requirement as per the JNPT proposal: **Commodity** | **16% return on capital (₹ in crores)** | **Operating cost (₹ in crores)** | **Total Annual Revenue Requirement (ARR) (₹ in crores)** | **Optimal capacity (m tonnes)** Crude | 7.89 | 1.36 | 9.25 | 1.55 POL | 55.73 | 52.09 | 107.82 | 11.91 Others | 33.05 | 33.05 | 66.10 | 2.38 95% of the Annual Revenue Requirement is considered for arriving at the tariffs. The tariffs should have been as follows: **Commodity** | **Total Annual revenue Requirement (₹ in crores)** | **95% of ARR** | **Optimal capacity (m tonnes)** | **Tariff** Crude | 9.25 | 8.789 | 1.55 | 56.70 POL | 107.82 | 102.429 | 11.91 | 86.00 Others | 66.10 | 62.795 | 2.38 | 263.84	
(xiii).	United Liner Agencies have concern about the Estimated Project cost that has been taken into	

	account for calculating the 16% return on the capital. It is understood that the only half the Project Cost has been considered for the purpose of tariff calculation. This will have a great impact on computation of berth hire charges. Apparently, the reduction in Project cost has been considered for the purpose of reducing the optimal capacity of the Terminal. But as we have already brought out in our earlier communications and deliberations, that in the L&T Ramboll Report and in the RFQ Document issued by the JNPT, the optimal capacity of the Terminal in Phase I was indicated as 15.83 million tonnes. As against a loading norm of 5000 tonnes/hour prescribed by TAMP, L&T Ramboll arrived at a loading rate of 3000 tonnes per hour for crude keeping in view that the crude has to be loaded from ONGC Tanks which are situated far off and the low pumping capacity of these tanks. This is port specific condition and TAMP can certainly look into this aspect. Similarly the Tank storage capacities in the I Phase are proposed taking into account the I Phase requirements which is 15 million tonnes. The Optimal capacity may therefore be taken as 15 million tonnes for the purpose of tariff calculation. We have also brought out that under Para 3.2 of the Tariff Guidelines, 2008 notified by TAMP,TAMP can make necessary adjustments in these norms, based on the justification to be furnished by the concerned port trust keeping in view the port specific conditions having impact on the norms prescribed in these guidelines.	
(xiv).	JNPT has not considered commodity split for 'other cargo'. We have brought out in our communication dated 15-11-2013 that many cargoes cannot afford the rate mentioned in "Other Category". The rate prescribed by TAMP for the JNPT BPCL Jetty for chemicals like MEG, Styrene, Butyl Acrylate, Crude Glycol, LAG and Xylene is ₹ 98.02/ton, for unenumerated chemicals ₹ 121.09 per ton, for edible oil ₹ 51.90 per ton, for acid ₹ 99.02 per ton and for molasses ₹ 40.36 per ton. The rate at Mumbai port is ₹ 88 per ton while at Kandla is ₹ 108.64 per ton. This is as against ₹ 161.25 proposed by JNPT for ALCT. JNPT in their reply dated 29-11-2013 stated that as per the norms for fixation of upfront tariff, classification of liquid bulk can be done in four categories viz., Crude, POL, LPG/LNG and other chemicals. They have also suggested that as these rates are ceiling rates, they may fix different rates for different chemicals. As regards the first point, it is not correct that all the other chemicals have to be in one category because in the case of Visakhapatnam port, TAMP notified rates under 2008 guidelines for caustic soda, bio-diesel, edible oil and chemicals separately all of which	

<table>
<tr><td></td><td>come under the category of other liquids. Moreover, fixing lower rates for different chemicals will cause hardship to the Operators as the revenue share is calculated on gross revenue where the rebates are not taken into account.</td><td></td></tr>
<tr><td>(xv).</td><td>TAMP/JNPT may kindly look into the above aspects before finalizing the proposal.</td><td></td></tr>
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<table>
<tr><td>2.</td><td><u>M/s. Shapoorji Pallonji Ltd (SPL)</u></td><td></td></tr>
<tr><td>(i)</td><td>Comments of SPL on Revised proposal for upfront tariff fixation for Additional Liquid Bulk Terminal are as follows:

<table>
<tr><td>S. No.</td><td>Reference</td><td>Comments / Observation</td></tr>
<tr><td>1</td><td>Page No.7 – Cost estimate for Berth</td><td>Cost reduced from 138.04cr to 68.91cr without changing numbers of berth in Phase 1. Basis for change in cost of berths is not clear.</td></tr>
<tr><td>2</td><td>Page 13 – Annual Revenue Requirement on Cargo Handling Facilities</td><td>ARR calculated is 176.48cr.It shall be 196.48cr (80.26+116.22)</td></tr>
<tr><td>3</td><td>Page 13 – Cargo Handling Rate</td><td>Cargo handling charges for Crude has been reduced. Rationale for the same is not clear.</td></tr>
<tr><td>4</td><td>Page 16 – Transit Storage Dwell Time</td><td>Since there is no free day for storage of cargo, this performance standard does not seem relevant.</td></tr>
</table>
</td><td>Para 1 – (Page No. 7 – Cost estimate for Berth):
To match with the optimum capacity, provision of berths has been reduced to 2 from 4, which inadvertently remain uncorrected in the proposal. It is to be read as 2 Nos. of berths in Phase-I.

Para 2 – (Page 13 – Annual Revenue Requirement on Cargo handling Facilities):
ARR is taken correctly as Rs. 196.48 crores for handling activities, which was inadvertently indicated as Rs. 176.48 crores.

Para 3 – (Page 13 – Cargo Handling Rate):
Cargo Handling Charges have been allocated in the proportion of use of the berth for different cargos and therefore handling charges for Crude has been reduced. However, the same may be reviewed taking into consideration the proportion of traffic to the ARR.

Para 4 – (Page 16 – Transit Storage Dwell Time):
Since there is no free period for liquid cargo in the BPCL Terminal, which is operating at JNPT, free days for this terminal also has not been considered.</td></tr>
<tr><td>3.</td><td><u>Mumbai & Nhava-Sheva Ship-Agents Association (MANSA)</u></td><td></td></tr>
<tr><td>(i).</td><td>In the new proposed Tariff JNPT has enhanced the tariffs considerably in all categories. In addition to this the tariff fixed for various products under one head as "others" and pitched very higher side are not at all a workable proposition As explained, the rates for some of the commodities like MEG, Styrene, Butyl Acrylate, Crude Glycol, LAB, Xylene, Edible Oil, Acids, Molasses etc. are much lower at MbPT and in the neighbouring BPCL Jetty of JNPT. We therefore stress, once again, that Category / Commodity wise split-up of cargo is a dire necessity while fixing the tariffs since any of the commodities presently being handled at Mumbai and Kandla region is nearer to the</td><td>MANSA has raised an issue of having different rates for different commodities. They had stressed the requirement of category and commodity-wise split up of cargo while fixing tariff during the joint hearing also. It may please be noted that for fixing rate for different commodities, traffic projections of different cargo will be required. In the absence of such analysis, it may not be possible to propose commodity-wise tariff for different cargo.</td></tr>
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<tr><td></td><td>proposed tariff for the new Terminal and shall not be affordable to the EXIM Trade.</td><td></td></tr>
<tr><td>(ii).</td><td>For ready reference, please find below copy of the present BPCL Tariff:
<table><tr><th colspan="2" rowspan="2">WHARFAGE CHARGES</th><th colspan="2">CURRENT TARIFF RATE</th></tr><tr><th>FOREIGN VESSEL</th><th>COASTAL VESSEL</th></tr><tr><th>Sl. No.</th><th>CLASSIFICATION</th><th>RATE/MT (₹)</th><th>RATE/MT (₹)</th></tr><tr><td>1.</td><td>Phosphoric Acid / Acetic Acid / Other</td><td>98.02</td><td>58.81</td></tr><tr><td>2.</td><td>Naptha, Motor Spirit</td><td>77.84</td><td>77.84</td></tr><tr><td>3.</td><td>Molasses</td><td>40.36</td><td>24.22</td></tr><tr><td>4.</td><td>OIL and Non POL Products</td><td></td><td></td></tr><tr><td></td><td>a) Crude Oil</td><td>43.25</td><td>43.25</td></tr><tr><td></td><td>b) Keroses / Light Diesel Oil</td><td>31.71</td><td>31.71</td></tr><tr><td></td><td>c) Other POL Products HSD, FO BASE, OIL, CBFS, AHE</td><td>49.01</td><td>49.01</td></tr><tr><td></td><td>d) AFS</td><td>98.02</td><td>98.02</td></tr><tr><td>5.</td><td>Month Ehtyl / Glycol (MEG), STYRENE, BUTYL ACRY, CRUDE GLY., LAB, XYLENE</td><td>98.02</td><td>58.81</td></tr><tr><td>6.</td><td>Edible Oil</td><td>51.90</td><td>31.14</td></tr><tr><td>7.</td><td>Unenumerated Liquids / chemicals</td><td>121.09</td><td>72.65</td></tr></table>
In view of the above, Tariff Authority may kindly take these points into consideration vis-a-vis the existing practices of other bulk Indian Terminals while fixing the reference tariffs for the Additional Liquid Cargo Terminal of JNPT.</td><td>Secondly, the tariff guidelines 2013 specify that rates fixed under guidelines 2008 of the neighbouring port can be considered with WPI indexation. Since BPCL tariff is not fixed under 2008 guidelines, we are unable to consider the same. As stated earlier, since the tariff fixed are on ceiling level, the operator may fix the rate based on market analysis.</td></tr>
<tr><td>4.</td><td><u>M/s Indian Merchant chambers Limited (IMC)</u></td><td></td></tr>
<tr><td>(i).</td><td>Proposed Tariff for Cargo Handling Charges:

The tariff proposed for the different categories of liquids, viz Crude Oil, POL and Other Liquids are skewed.

For other liquids, the tariff of Rs.308.78 per MT is very high compared to existing tariff at JNPT and also with respect to competing ports. Such a high tariff would render the proposed terminal uncompetitive for liquid cargos such as Edible Oils and other commodities which are highly price sensitive.

For Crude Oil, the tariff of Rs.18.52 is very low, considering the projected percentage of its share in the overall traffic projection.

IMC request a review of the commodity wise tariffs and set them at appropriate levels so that the JNPT Liquid Terminal can effectively compete in the market on a long term basis.</td><td>Proposed handling charges are based on utilization of berths as indicated by the Consultants. However, the same may be reviewed with respect to the traffic vis-à-vis annual revenue requirement.</td></tr>
<tr><td>(ii).</td><td>From the tariff proposal, it appears that although the capacity of the terminal is 31.55 MMTPA, for the tariff workings, capacity is considered as 15.84 MMTPA. Please clarify that 15.84 MMTPA is the base used for computing the unit tariff for cargo handling charges.

The projected traffic starts from 5.2 MMTPA and reaches 15.84 MMTPA only in the year 2028-</td><td>In the earlier proposal, port had considered 31.55 MT, which was worked out based on the norms fixed by the tariff guidelines. However, during the hearing the Stakeholders expressed their doubts about the optimal quantity when projected traffic itself was 15.84 MT as per traffic projected by the Consultants. Therefore the same was indicated as</td></tr>
</table>

	29. With the current traffic assumption, it will be very difficult for the Concessionaire to achieve the required ROCE. We therefore request a review of the traffic projections and fixation of the base traffic to compute the unit tariffs. IMC also request that detailed calculations are provided for arriving at the unit tariff for each liquid commodity	15.84 MT.
(iii).	**Capital Cost:** The detailed break-up of the capital cost is required for assessment of the facilities considered to handle the projected traffic. We request information as below: (a) Berth/Jetty Specifications with design vessel sizes considered (b) Dredged depth alongside (c) Trestle specifications (d) Marine Loading Arms specifications We note that, for 4 numbers Jetty, the capital cost is considered at Rs.68.91 Crores. This estimate appears to be on the lower side. IMC request JNPT to provide the detailed cost break and the basis for arriving at the jetty and other marine related capital costs.	Detailed break up of capital cost is available in the DPR, a copy of which is shared by the Stakeholders. However, in the revised proposal the capital cost has been reduced to 2 berths instead of 4 berths.
(iv).	Please clarify if the Marine Pollution Control Systems are considered and if so, the details of the equipment and cost break up.	Marine Pollution Control System has been considered in the proposal.
(v).	**Berth Hire Charges:** The GRT hours for coastal vessels appears to be on the higher side. In our view, except for crude oil and limited volumes of POL, the majority of traffic will comprise of imports/exports. IMC request the basis of assumptions for the foreign and coastal vessels and arriving at the break up of foreign and coastal GRT hours.	Berth Hire Charges have been calculated based on proportion of GRT hours for foreign and coastal vessels.
(vi).	**Pipeline Cost Estimation**: We request information on the number of pipelines considered and the size of each pipeline?	Cost estimation of pipeline is available in the DPR, which is shared with the Stakeholders.
(vii).	**Storage Facility Cost:** (a) What is the storage capacity and the size of tanks considered? The cost of storage facility would vary depending on these parameters. (b) Whether mechanical cost for the storage tanks, i.e cost of steel and the fabrication costs, have been considered in the estimates and if so under which cost head?. (c) Within the storage area, various facilities such as product pumps, internal pipelines,	Storage Facility Cost has been dealt in detail in the DPR.

	truck filling and unloading facility, ship loading facility, heating system etc are to be provided. Please advise if provision is made for these costs	
(viii).	**Calculation of Storage Charges:** Please clarify whether major expenses such as salaries and wages, shipment expenses etc are included in the operating cost estimates.	Calculation of Storage Charges is as per the guidelines issued for fixation of up-front tariff for liquid terminal. Expenditure of storage is taken on normative basis, which includes salaries, wages and other expenses.
(ix).	**Tariff for Specialized Storage Facilities:** Liquid Bulk Terminals may also handle specialized cargoes such as ammonia, propylene etc which are liquefied gases and require significant level of investment and tailor made facilities. Customers may also require specific storage such as stainless steel tanks, heating facility on tanks, refrigeration, blending facility etc which may entail substantial additional investments. In such cases described above, the Concessionaire must have the option to levy separate storage tariff.	For fixation of up-front tariff for liquid terminal, JNPT has to follow guidelines issued by TAMP. JNPT cannot deviate from the guidelines, wherein there is no mention of tariff for specialized storage facilities. Therefore, in the proposal, tariff has been proposed for berth hire, handling, miscellaneous services and storage services.
5.	**<u>Adani ports and Special Economic one Ltd.</u>**	
(i).	Rebate should not be provided in case of the following situation: (a). In case of vessel is berthed and rejected for quality by receiver surveyor / in case of export from terminal. (b). Vessel tanks are rejected on berth by surveyor for compatible or suitably clean for respective cargo. For such above cases, idling of the terminal equipment and manpower should have a lump sum charge after cut of permissible limit.	Idea of rebate on berth hire is not to make the user of the terminal liable for delay due to reasons attributable to operator. M/s Adani wants to be specific on the reasons for rebate. Port has no comments on this.
(ii).	There should not be any rate difference for loading / unloading of "Other Cargo" for Foreign cargo and Coastal Cargo – as there is no difference in the operating cost incurred by BOT Operator for handling the foreign going vessel or coastal vessel.	Port has considered differential rate for other cargo as per policy of the government in respect of coastal cargo.
(iii).	It may be noted that Chemical cargo parcel are as small as 500 MT and goes upto 1500 MT per customer. Hence in the proposed terminal the dock line length is 7-8 km from berth. At the given rate of ₹6.20 per MT, it is very difficult to cover the actual cost incurred by the terminal operator in pigging operations. Pigging charges should be decided based on the length and diameter of the pipeline and the cargo specification to be pigged. It may be noted that all hazardous cargo (highly inflammable and health hazard) are required to be pigged by Nitrogen which very costly.	Miscellaneous charges are considered as 5% of the handling charges as per the guidelines for fixation of upfront tariff for liquid terminals. It is reiterated that the rates fixed are ceiling rates and the operator is at liberty to fix lower rates than notified.
(iv).	While the storage charges of ₹307/T/Month are	As stated by Adani, apportionment has

	in line with the prevalent market rates, the Cargo handling charges of ₹308/MT for "Other's" category are exorbitant. Any importer bringing in cargo falling into non crude oil / non POL category would have to shell out ₹600/ MT considering 12 turnarounds per year. At the above rates, the BOT operator will not be able to attract cargo to this terminal. This large variance happens due to the methodology adopted for apportionment of the Annual Revenue Requirement amongst the three major commodity groups. In the draft tariff proposal, the apportionment has been carried out on basis of share of berth occupancy. If the ARR is apportioned on basis of the charge of cargo traffic, the cargo handling charges will work out to about ₹ 110/MT, which are reasonable. In private ports and other competing terminals, the wharfage of liquid commodities is in range of ₹ 80-100/MT.	been made based on berth occupancy in the absence of any specific guideline. M/s Adani has suggested to consider Annual Revenue Requirement based on traffic instead of berth occupancy. TAMP may take view on this.
(v).	The Annex IV of the 2008 tariff Guidelines under which the draft tariff proposal has been made are silent on how the ARR should be apportioned amongst the major commodity groups. Hence, this decision is left to the discretion of TAMP. It is suggested to TAMP that they should apportion the ARR amongst Crude oil, POL and Others based on their cargo share. This will help in getting a more realistic cargo handling charges.	This query is directed at TAMP. TAMP may kindly take a view on this.
(vi).	Another important consideration is regarding Minimum Throughput Guarantee. Normally, as per the MOS Model Concession Agreement, MGT is considered to be minimum 50% of the Optimal Terminal Capacity. So in this case. Phase I optimal terminal capacity has been calculated as 15 MMTPA and hence the MGT shall be 7.5 MMTPA (at peak). We have been given to understand by JNPT that the tankage to be built as part of Phase I is 350,000 KL. This means that we need 22 turnarounds per year to handle 7.5 million tons of liquid cargo through 350,000 KL tank farm. The industry standard is about 8 turnarounds per year on an average for all commodities. With this, I see it difficult that we may be able to meet the MGT with 3,50,000 KL tank farm, unless some of the large customers evacuate directly from the wharf through a pipeline. If the BOT operator cannot meet MGT, it will carry obligation of paying revenue share on the MGT to the port trust, and this can lead the project to be financially unviable.	In the proposal, turnover has been considered based on traffic projections and storage period of 15 to 20 days. It may be stated that fixation of upfront tariff is on normative basis and industry norms for lower output is not acceptable as efficiency parameter.

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