

PMC for 400 MLD SWRO Desalination Plant at Perur, Chennai

ofc.

Consortium Partners

SMEC International Pty. Ltd. (ACN-065440619/FCRN-F01483)
NJS Engineers India Pvt Ltd, India (CIN - U74210PN2007PTC129798)
Tata Consulting Engineers Limited, India (CIN- U74210MH1999PLC123010)
SMEC (India) Pvt. Ltd. (CIN: U93000DL1997PTC088574)



Ref: SSNT PMC 400 MLD/ CMWSSB / 5061185/ 292

Date: 26th February 2021

To,
The Superintending Engineer (Desalination)
Chennai Metropolitan Water Supply and Sewerage Board,
Urban Administrative Building,
2nd Floor, No.75, Santhome High Road,
Raja Annamalaipuram,
Chennai 600 028, Tamil Nadu, India

Sub: JICA Assisted Project for Construction of 400 MLD Seawater Reverse Osmosis Desalination Plant at Perur and allied works (JICA Loan ID-P267)
CP2- Updation of Existing Transmission System planned to be linked to Proposed System at Velachery and Porur – Reg.

- Ref**
1. Meeting held at 1st Floor Conference Hall, CMWSSB dated 11.02.2021
 2. Our Letter No. SMEC/ CMWSSB / 7061563/005, dated 20.01.2020
 3. Your Letter no. Lr.no. CMWSSB/SE(Desal)/400 MLD Plant / PMC/2020, dated 13.01.2020
 4. Our Contract Agreement No. CNT/CON/DESAL/ICB/Gol/016/2018-19, dated 09.01.2020

Dear Sir,

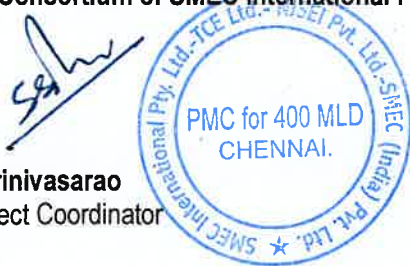
Thank you for giving me an opportunity to brief the O&M team in regard to the linking of existing transmission system (at Velachery and Porur WDS) with proposed transmission system of 400 MLD Desalination Plant Project. We have prepared the points briefed during the meeting and attached with this letter for your kind information and perusal. Also attached are the 3 sets (6 drawings) of transmission drawings for review and updation.

Thanking you and assuring our services at all times.

Yours truly,

For Consortium of SMEC International Pty Ltd -TCE Ltd.-NJS Engineers India Ltd.-SMEC (India) Pvt. Ltd.

S.Srinivasarao
Project Coordinator



Encl: Note with 3 sets of drawings (Existing & proposed interconnections transmission system drawings)



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Meeting with O&M Staff regarding interlinking of 400 Mld proposed product pipeline at Velachery and connecting the proposed transmission pipe to existing transmission pipeline at Porur

Venue: CMWSSB Head Office, Conference Hall (1st Floor)

Officials of CMWSSB: Desal Staff and O&M Staff

Consultant:

1. Mr. S. Srinivasa Rao, Project Co-ordinator
2. Mr. S. Siddappaswamy, Senior Civil Engineer

The following are points discussed during the meeting:

- Demand Allocation to En-route beneficiaries from Perur to Porur WDS
- Interlinking of proposed system with existing transmission main from Akkarai PS at Velachery
- Interlinking of transmission main from Porur WDS to existing system from Chembarabakkam
- Discussion on proposed/existing trunk system drawings
 - Proposed transmission main from Perur to Porur
 - Existing transmission system from Akkarai PS
 - Existing trunk system from Chembarabakkam, Porur and Puzal (300 Mld)
- Any other points

PMC briefed the components of the CP2 and CP3 to the O&M staff particularly the product water pipeline from Perur to Porur including en-route tapings with demands. PMC informed that the immediate demand allocation works out to be 303.3 MLD against the production capacity of 400 MLD. Also the ultimate demand adds up to 403.2 MLD against production capacity of 400 MLD. Therefore, requested to provide the details of the en-route demand (for 400MLD) as well as Porur to check the design. The demand details discussed are attached as Table 1.

PMC brought to the notice of O&M staff that the proposed product water pipeline from Perur to Porur is intended to tap at Kovilam Cherry with 1000 mm dia to interlink with the existing transmission main from Akkarai PS at Medvakkam. Also informed that there is a proposal to interlink the same existing transmission system with the 150 MLD Desal Plant system. Moreover the product water pipeline from 400 MLD plant has a terminal pressure of 62 m at Medvakkam, which needs to be taken into consideration before interlinking to avoid backflow/damage to Akkarai system. It was also discussed in regard to standby main at the same location which can be used to transfer the allocated quantity from 400 MLD system to desired areas. PMC requested O&M staff to provide the details of the standby system and also to review the entire system. The existing transmission

system drawing prepared based on the field staff input including the proposed product water pipeline is attached for review and further updation.

Also, briefed about the interlinking of proposed transmission main from the new PS at Porur to existing system from Chembarambakkam. PMC mentioned that upon review, we are of the opinion that the existing system can't take the additional load of 240 MLD. It is requested O&M staff to plan the delivery transmission system from Porur to different WDS in the City to avoid overflow at Porur. It is also informed that when the Chembarambakkam PS operates more than one pump, the Porur has to run only one pump in order to avoid back flow in the Chembarambakkam system. The system drawing from Chembarambakkam, Puzhal and Porur is prepared with the available data and presented to O&M staff with a request to review and update the same. The system drawing is attached for review and updation.

During the discussion, it is briefed on the product water pipeline from Perur in regard to location of tapings, highest and lowest points en-route to Porur. Requested to review the same.

In regard to Akkarai system, the drawing prepared based on the information from the field staff requires thorough review in regard to the location, quantity of withdrawal, dia and material of the pipeline etc. Therefore, requested O&M staff to update the same.

Similarly, the existing system of Chembarambakkam, Puzhal and Porur also required through review in regard to locations, quantity of withdrawal, dia & material of pipeline etc.

PMC thanked the officers of CMWSSB for participation.

Tablr 1 – Details of En-route Demand and Porur

S No.	Description of Tapping Point	2025 Demand (MLD)	Ultimate Demand (MLD)
1	Kelambakkam WDS Tapping	00.00	20.00
2	Velacherry / Alandur / B V Nagar WDS	24.50	72.00
3	OC-16 (Bulk Supply)	26.30	73.00
4	OC-15 (Bulk Supply)	10.00	95.60
5	Porur WDS	242.50	142.60
	Total	303.30	403.20