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 / 5061185/357 Date: 18th June 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 Capacity Seawater Reverse Osmosis Desalination Plant at Perur and allied works(**JICA Loan ID-P267**)"
Replacement of Non Key/Local Expert, Mechanical Engineer B3 – Reg.

Ref
1. Your Letter no. CMWSSB/SE(Desal)/400 MLD Plant/PMC-035/2021 dated 12.03.2021
2. Our Letter no. Ref: SSNT PMC 400 MLD / CMWSSB / 5061185/297, dated 04.03.2021
3. Our Letter no. Ref: SMEC/ CMWSSB / 5061185/240, dated 14.12.2020
4. Your Letter no. CMWSSB/SE(Desal)/400 MLD Plant / PMC-018/2020, dated 10.09.2020
5. Our Letter no. Ref: SMEC/ CMWSSB / 5061185/146, dated 20.08.2020
6. Our Letter no. Ref: SMEC/ CMWSSB / 7061563/005, dated 20.01.2020
7. Your Letter no. CMWSSB/SE(Desal)/400 MLD Plant / PMC/2020, dated 13.01.2020
8. Our Contract Agreement with CMWSSB, dated 09.01.2020

Dear Sir,

Kindly find the enclosed letter from Tata Consulting Engineers Ltd. requesting the Replacement of Non Key/Local Expert, Mechanical Engineer B3 for the subject project.

The details of proposed expert's CV with evaluation sheet is attached.

This is for your kind consideration and approval.

Thanking you assuring our services at all times.

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

S.Srinivasarao
Project Coordinator

SMEC International Pty. Ltd.-TCE Ltd.- NISEI Pvt. Ltd.-SMEC (India) Pvt. Ltd.
PMC for 400 MLD CHENNAI.

SUPERINTENDING ENGINEER (DESAL) 18 JUN 2021 CMWSS BOARD, CHENNAI-2

Encl: As above

PMC Chennai Office Address:
13th Floor, Purva Primus, No 236, Okhiyampettai, Old Mahabalipuram Road, Thoraipakkam, Chennai, Tamil Nadu 600097
☎ +91 044 66973300 ✉ indiabd@smec.com www.smec.com

Letter No: TCE/WS-400 DESAL/P047/2021
16.06.2021

To
The Superintending Engineer
(Desalination),
CMWSSB
Urban Administrative Building,
1st floor, No.75, Santhome High Road,
MRC Nagar, Raja Annamalaipuram,
Chennai- 600 028

Sub: Consultancy services for the design, preparation of bid documents, evaluation, construction management and supervision for the proposed 400 MLD desalination plant and other allied works- **Replacement of Non-Key, Non-Evaluated expert , Mechanical Engineer-National**

Ref: 1. Contract Agreement no CNT/CON/DESAL/ICB/GoI/016/2018-19 Dt 09.01.2020
2. Our letter no. TCE/WS-400 DESAL/P011/2020 Dt 20.07.2020
3. Our letter no. TCE/WS-400 DESAL/P037/2020 Dt 04.03.2021
4. CMWSSB letter no. CMWSSB/SE(Desal)/400 MLD Plant/PMC/035/2021 Dt 12.03.2021

Dear Sir,

This is reference to the above subject, we are here by proposing to replace the following non-key, non-evaluated national expert:

- Mr. Mayur Gupta, Mechanical Engineer (B3)

Please note that Mr. Mayur Gupta, Mechanical Engineer (B3) whose CV got approved and worked in the project so far was resigned and separated from our organization on 23.03.2021. Hence, we propose Mr. Deb Kumar Kar as replacement to Mr. Mayur Gupta

Mr Deb Kumar Kar having more than 27 years of experience in the mechanical engineering field of water industry.

The details of proposed expert's CV with evaluation sheet is attached separately for easy review and reference.

This is for your kind consideration and approval please.

Thanking you

Yours truly
For Tata Consulting Engineers ltd

Nagesh Chinnam
Project Manager

TATA CONSULTING ENGINEERS LIMITED

Encl: As above

Form TECH-6 Curriculum Vitae (CV)

1. General

Position Title and No.	**Mechanical Engineer - Local Expert**
Name of Key Expert	**Deb Kumar Kar**
Name of Firm proposing the key expert	TATA Consulting Engineers Limited
Date of Birth:	01/12/1966
Nationality	Indian
Country of Citizenship / Residence	India

2. Education:

- B.E. in Mechanical Engineering from Jalpaiguri Government Engineering College, North Bengal University, West Bengal in June 1991.

3. Employment record relevant to the assignment:

Mr Deb Kumar Kar is Mechanical Engineer with more than 29 years of Professional Experience in the field of Project engineering and worked for various water supply and sewerage projects. His responsibilities includes preparation of the inception report, Managing & motivating a team of engineers, site visits, studying of existing water supply pattern, optimization and design of Pumping System, Pumping Machinery design of raw water and clear water transmission mains, Designing of pump houses, Preparation of BOQ, Inspection of Mechanical Equipment viz. Pipes, Pumps, Blowers, **etc.** of water supply projects. He has also worked in various Bilateral/ Multi-Lateral funding projects like **JICA, Centre/ State Funded Projects in India, United States Of America.**

Period	Employing organization and your title/position. Contact information for references	Country	Summary of activities performed relevant to the Assignment
November 2014 to till date	**Employing organization:** M/s. TATA Consulting Engineers Limited, Bangalore. **Position Held:** "General Manager-Mechanical" **Reference:** Mr. G N Virupaksha (Associate Vice President, TCE) Contact: 9341602291 Email: gnvirupaksha@tce.co.in	India	**Major Projects:** • 775 MLD Portable Water to Bangalore & 110 Villages newly added to BBMP under Cauvery Water Supply Scheme (CWSS) Stage – V (775.0 MLD WTP, Pumping Stations, Pipe Line for Trunk Main along Eastern & Western Route) in Bangalore Water Supply & Sewage Board, Bangalore, Karnataka**(JICA Funded)** • Water Supply Scheme for approx. 250 Villages & Talukas with intake & booster pumping stations, under Hafeshwar Water Supply Scheme at DAHOD, Gujarat • Water Supply Scheme for approx. 200 Villages & Talukas based on UKAI DAM, under SAGBARA & DEDIYAPADA, Dist. Narmada & Tapi. Gujarat • Water Supply Scheme for approx. 300 Villages & Talukas based on VATRAK & MAZUM DAM, under SK-2, 3 & 4 GROUP, Dist. Aravalli., Gujarat • Water Supply Scheme for approx. 200 Villages & Talukas based on TAPI RIVER, under VYARA GROUP, Dist. Tapi, Gujarat • Water Supply Scheme for approx. 240 Villages & Talukas based on KAKRAPAR WEIR, under KAKRAPAR, Dist. Surat • Design of Pumping System for Botad PS, Chavand PS, Gadhada PS, Barwala PS, Navava PS, Upleta PS & water supply scheme under D Network, Gujarat • 314 MLD Pumping system design at Hadala Pumping Station in Gujarat. • Design of Idar Vadali raw water intake Pumping Station, Gujarat. • 145 kilometer Cross country raw water transmission pipeline for D Network at Gujarat.

			• 150 MLD Nand Intake Pumping Station near Surat, Gujarat. • Designed more than 100 small, medium & big Pumping stations involving Vertical Turbine, Horizontal Centrifugal, Submersible Pump sets in Gujarat Water Supply & Sewage Board, Gujarat
February 2012 to October 2014	**Employing organization:** Jacobs Engineering India Pvt. Ltd. **Position Held:** "Manager"	India	**Major Projects:** • Design, Engineering of various types of Water systems including water treatment plant, Mechanical Systems/ Equipment's like cooling tower, Electro Static Precipitators, Thickener, Fire Fighting, HVAC systems, Filter Press, Process Fan for **4.0 MTPA Pallet plant at Jindal Steel & Power Ltd, Barbil, Orissa.** • Design, Engineering of Utilities, water pumping system, water treatment, cooling tower, Fire Fighting, HVAC systems, for **International Paper Kadium Mill; Rajamundri, Andhra Pradesh.** •
January 2011 to January 2012	**Employing organization: Mcnally Bharat Engineering India Ltd.** **Position Held:** "Assistant General Manager"	India	**Major Projects:** • Design and detail engineering & execution of water management for industrial projects comprising of water distribution system and water treatment plant, centrifugal pumps, cooling towers, piping, Valves, EOT Cranes, scale pit, Bagging Plant for **Bokaro Steel Plant, Indo Gulf Fertilizers Ltd.**
May 2008 to December 2010	**Employing organization: M.N.DASTUR & CO PVT LTD** **Position Held:** "Deputy Chief Engineer(Water Supply)"	India	**Major Projects:** • Basic and detailed engineering of Water system including selection, optimization of pumping system, Selection of Pumps, Motors, Valves, EOT Cranes, Piping, HT & LT Switchgear, Cable/ design of electromechanical equipment's , Scale pit, settling tank, firefighting system, lead a team of various discipline engineers as project lead, at **Special Bar Mill & Wire Rod Mill at Visakhapatnam Steel Plant, Visakhapatnam, Andhra Pradesh.** • Looking after Design, Engineering of various types of Water distribution System and Water Treatment Plant, Fire Fighting System, River Intake System, Recirculation system for different steel & power plants. His area of work also involves coordination with different departments, vendors and clients, vender evaluation, vendor Drawing review, preparation of specification, Bid review/evaluation; preparation of technical specification, tender documents, detailed project reports etc for Water systems, filtration plant involves scale pit, settling tank, pressure filter etc. Checking of equipment, drawings, specifications, piping layout at **Tata Steel, PHED** etc.
July 2006 to April 2008	**Employing organization: Alstom Projects India Ltd** **Position Held: "Lead Mechanical Engineer"**		**Major Projects:** • Design and Detailed engineering of Electrostatic Precipitator for **Grasim Ltd.** • Design and Detailed engineering of Electrostatic Precipitator, Dry FGD, Wet FGD at **ALSTOM ,Knoxville, USA.** • Conceptualization, Basic and detail engineering of environment Control equipment like Electro Static Precipitator (ESP), Wet FGD (Flue Gas Desulphurization) units etc. for Thermal Power Plant, Refinery, Aluminum , sugar, Petrochemical, and various Industries. Coordinator between Alstom India and Alstom power, USA for the various design documents. Preparation of technical specifications and cost estimation
June 2000 to June 2006	**Employing organization: Jyoti Ltd** **Position Held: "Assistant Manager"**		**Major Projects:** • Design and Detailed engineering of Water Distribution system including vertical turbine pumps, piping, valves, EOT Cranes, flow meter, HT/LT Switchgears, cables, capacitors, electrics for **Bansdroni Booster Pumping station for Kolkata Metropolitan Development Authority, Kolkata, West Bengal.**

			• Design and Detailed engineering of Water supply system including pumps, piping, valves, EOT Cranes, flow meter, HT/LT Switchgears, cables, capacitors, electrics **for Rukkka pumping station at Ranchi, Bihar** for **Public Health Engineering Department, Bihar.** • Design and Detailed engineering Intake Pumping Water system including vertical turbine pumps, piping, valves, EOT Cranes, flow meter, HT/LT Switchgears, cables, capacitors, electrics **for Bokaro Thermal Power Plant of Damodar Valley Corporation, Bokaro, Jharkhand.**
April 1994 to June 2000	**Employing organization: Worthington Pump India Ltd(WPIL LTD)** **Position Held: "Senior Application Engineer"**		**Major Projects:** • Design and Detailed engineering of **TEKEPER Lift Irrigation Scheme** including vertical turbine pumps, piping, EOT Cranes, valves, HT/LT Switchgear, Cables, Capacitors, other electrics for **Irrigation Department, Government of Maharashtra.** • Design and Detailed engineering **Ambhora Lift Irrigation Scheme** including vertical turbine pumps, piping, valves, expansion joints, EOT Cranes, HT/LT Switchgear, Capacitors, Cables, other electrics for **Irrigation Department, Government of Maharashtra.** • Design and Detailed engineering of municipal Water Pumping systems including Horizontal split case pumps, piping, valves, and electrics for **Surat Municipal Corporation, Surat, Gujarat.** • Design and Detailed engineering of township Water system for **NTPC-Vidyutnagar Water Supply Scheme** including pumps, piping, valves, expansion joints, EOT Cranes, HT/LT Switchgear, Capacitors, Cables, other electrics **for National Thermal Power Corporation, Uttar Pradesh.** • Design and Detailed engineering of **NTPC Farakka Raw water Intake pumping Station** including vertical turbine pumps, piping, valves, expansion joints, EOT Cranes, HT/LT Switchgear, Capacitors, Cables, other electrics at **NTPC, Farakka super thermal power station, Farakka, West Bengal.** • Design and Detailed engineering of Raw water intake pumping stations for **NTPC-Talcher** including vertical turbine pumps, piping, valves, expansion joints, EOT Cranes, HT/LT Switchgear, Capacitors, Cables, other electrics at **NTPC Talcher, Orissa.**
Novemberh 1991 to March 1994	**Employing organization: Frick India Ltd** **Position Held: "Engineer"**		• Marketing, Bid preparation, design, engineering of Air Conditioning, Refrigeration, Heat Load Calculation, design of cold storage, Ice plant, Central Air conditioning system, selection of compressor, motor, condenser, expansion device, preparation of techno commercial clarification etc. • Designed 30 TON per day ICE Plant at Sankarpur, Digha, West Bengal. • Designed Cold Storage for Potato, Ginger, Garlic, Fish at Orissa. Assam, Bihar & West Bengal.

4. Membership in Professional Associations and Publications: Nil

5. Language Skills (indicate only languages in which you can work):

Languages	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Bengali	Excellent	Excellent	Excellent
Hindi	Good	Good	None

6. Adequacy for the Assignment:

Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks:

PROJECTS DONE & WORKING

1. 775 MLD Portable Water to 110 Villages newly added to BBMP under Cauvery Water Supply Scheme (CWSS) Stage – V

- CP-02: 775.0 MLD WTP at TK Halli
- CP-03: 775.0 MLD Transmission Facilities at TK Halli
- CP-04: 775.0 MLD Transmission facilities at Harohalli & Tataguni

- CP-07: Transmission facilities from TK Halli to Harohalli
- CP-08: Transmission facilities from Harohalli to Vajarahalli.
- CP-09: City Trunk Main along Eastern Route.
- CP-10: City Trunk Main along Western Route

Design Engineer – Mechanical

- Review of Vendor Drawing, Vendor Credentials, Methodology & QAP for Pipes, Mechanical Equipment QAP, GAD, head Calculations, NPSHa calculations, performance curve superimposed on parallel operation Curves & Datasheet for Pumps(Capacity of each pump 5920 cum/hour, head 160 meter, motor 3500 kw, 11Kv, 1000 rpm), Valves, Bellows, EOT, etc. Mechanical/Manual Screen, Pumps, EOT, CPB etc.
- Inspection of all Major Mechanical Equipment Viz. Pipes, Pumps, Valves, Mechanical Screens, Blowers, EOT etc.
- Site Acceptance Test (SAT) of Pumps, Valves, EOT, Blowers etc.
- Supervision & Commissioning Assistance of Installation of Mechanical Equipment.
- Guiding, Motivating, and managing a team of different discipline engineers.

2. DDSA HAFESHWER BULK WATER SUPPLY SCHEME:

- Design, supply, construction, installation, testing and commissioning of Water Supply Scheme for approx. 250 Villages & Talukas with intake & booster pumping stations with MCC panel room, DG set and all civil, electrical, mechanical, piping and instrumentation works with three months trial run and post completion operation & maintenance of entire system for 5 years including one-year defect liability period under Hafeshwar Water Supply Scheme at DAHOD, Gujarat

3. SAGHBARA DEDIAPARA BULK WATER SUPPLY SCHEME:

- Design, supply, construction, installation, testing and commissioning of Water Supply Scheme for approx. Design, supply, construction, installation, testing and commissioning of Water Supply Scheme for approximate 200 Villages & Talukas based on UKAI DAM, with Pumps. Motors, Valves, EOT Cranes, Pipes, MCC panel room, DG set and all civil, electrical, mechanical, piping and instrumentation works with three months trial run and post completion operation & maintenance of entire system for 5 years including one-year defect liability period under SAGBARA & DEDIYAPADA, Dist. Narmada & Tapi. Gujarat

4. VARTAK & MAJUM INTAKE & WATER SUPPLY SCHEME

- Design, supply, construction, installation, testing and commissioning of Water Supply Scheme for approx. 300 Villages & Talukas based on VATRAK & MAZUM DAM, with Pumps. Motors, Valves, EOT Cranes, Pipes MCC panel room, DG set and all civil, electrical, mechanical, piping and instrumentation works with three months trial run and post completion operation & maintenance of entire system for 5 years including one-year defect liability period under SK-2, 3 & 4 GROUP, Dist. Aravalli., Gujarat.

5. TAPI BULK PIPELINE & WATER SUPPLY SCHEME:

- Design, supply, construction, installation, testing and commissioning of Water Supply Scheme for approx. 200 Villages & Talukas based on TAPI RIVER, with Pumps. Motors, Valves, EOT Cranes, Pipes MCC panel room, DG set and all civil, electrical, mechanical, piping and instrumentation works with three months trial run and post completion operation & maintenance of entire system for 5 years including one-year defect liability period under VYARA GROUP, Dist. Tapi, Gujarat.

6. KAKRAPAR INTAKE & WATER SUPPLY SCHEME:

- Design, supply, construction, installation, testing and commissioning of Water Supply Scheme for approx. 240 Villages & Talukas based on KAKRAPAR WIER, under with Pumps. Motors, Valves, EOT Cranes, Pipes, MCC panel room, DG set and all civil, electrical, mechanical, piping and instrumentation works with three months trial run and post completion operation & maintenance of entire system for 5 years including one-year defect liability period at KAKRAPAR, Dist. Surat.

7. D NETWORK PUMPING STATION & WATER SUPPLY SCHEME:

- Design, supply, construction, installation, testing and commissioning of Pumping System for Botad PS, Chavand PS, Gadhada PS, Barwala PS, Navava PS, Upleta PS & water supply scheme with Pumps. Motors, Valves, EOT Cranes, Pipes MCC panel room, DG set and all civil, electrical, mechanical, piping and instrumentation works under D Network, Gujarat.

- **HADALA EMERGENCY WATER SUPPLY SCHEME:**

- Design, supply, construction, installation, testing and commissioning of 314 MLD Pumping system design at Hadala Pumping Station with Pumps. Motors, Valves, EOT Cranes, Pipes, MCC panel room, DG set and all civil, electrical, mechanical, piping and instrumentation works with three months trial run and post completion operation & maintenance of entire system for 5 years including one-year defect liability period in Gujarat.

9. IDAR VADALI INTAKE PUMPING SYSTEM:

- Design, supply, construction, installation, testing and commissioning of Idar Vadali raw water intake Pumping Station, with Pumps. Motors, Valves, EOT Cranes, Pipes, MCC panel room, DG set and all civil, electrical, mechanical, piping and instrumentation works with three months trial run and post completion operation & maintenance of entire system for 5 years including one-year defect liability period at Gujarat.

10. D NETWORK CROSS COUNTRY RAW WATER BULK PIPELINE:

- Design, Engineering, installation of 145-kilometer Long Cross country raw water transmission pipeline including valves, fittings, all civil, electrical, mechanical, piping and instrumentation works with three months trial run and post completion operation & maintenance of entire system for 5 years including one-year defect liability period for D Network at Gujarat.

11. WATER SYSTEM FOR SPECIAL BAR MILL & WIRE ROD MILL FOR VISAKHAPATNAM STEEL PLANT, AP

- Basic and detailed engineering of Water system including selection, optimization of pumping system, Selection of Pumps. Motors, Valves, EOT Cranes, Pipes, pipe/valve/motor/cable/ design of electromechanical equipment's , Scale pit, settling tank, firefighting system, lead a team of discipline engineers as project lead, at Special Bar Mill & Wire Rod Mill at Visakhapatnam Steel Plant, Visakhapatnam, Andhra Pradesh.

12. ESP. FGD PACKAGES IN ALSTOM PROJECTS INDIA LTD

- Design and Detailed engineering of Electrostatic Precipitator for Grasim Ltd. Uttar Pradesh. Job involves Design and Detailed engineering of Electrostatic Precipitator, Dry FGD, Wet FGD with ALSTOM, Knoxville, USA. Conceptualization, Basic and detail engineering of environment Control equipment like Electro Static Precipitator (ESP), Wet FGD (Flue Gas Desulphurization) units etc. for Thermal Power Plant, Refinery, Aluminum , sugar, Petrochemical, and various Industries. Coordinator between Alstom India and Alstom power, USA for the various design documents. Preparation of technical specifications and cost estimation

13. KMDA BANSDRONI BOOSTER PUMPING STATION

- Design and Detailed engineering of Water Pumping and Distribution system including vertical turbine pumps, piping, valves, EOT Cranes, flow meter, HT/LT Switchgears, cables, capacitors, electrics for Bansdroni Booster Pumping station for Kolkata Metropolitan Development Authority, Kolkata, West Bengal.

14. PHED – RUKKA BOOSTER PUMPING STATION

- Design and Detailed engineering of Water supply system including pumps, piping, valves, EOT Cranes, flow meter, HT/LT Switchgears, cables, capacitors, electrics for Rukkka pumping station at Ranchi, Bihar for Public Health Engineering Department, Bihar.

15. RAW WATER INTAKE PUMPING STATION AT DVC-BOKARO THERMAL PUMPING STATION

- Design and Detailed engineering, installation, commissioning, Troubleshooting of Intake Pumping Water system including vertical turbine pumps, piping, valves, EOT Cranes, flow meter, HT/LT Switchgears, cables, capacitors, electrics for Bokaro Thermal Power Plant of Damodar Valley Corporation, Bokaro, Jharkhand.

15. TEKEPER LIFT IRRIGATION SCHEME

- Design and Detailed engineering of TEKEPER Lift Irrigation Scheme including vertical turbine pumps, piping, EOT Cranes, valves, HT/LT Switchgear, Cables, Capacitors, other electrics for Irrigation Department, Government of Maharashtra.

16. AMBHORA LIFT IRRIGATION SCHEME

- Design and Detailed engineering Ambhora Lift Irrigation Scheme including vertical turbine pumps, piping, valves,

expansion joints, EOT Cranes, HT/LT Switchgear, Capacitors, Cables, other electrics for Irrigation Department, Government of Maharashtra.

17. SURAT MUNICIPAL CORPORATION TOWNSHIP WATER SUPPLY SCHEME

- Design and Detailed engineering of municipal Water Pumping systems including Horizontal split case pumps, pumps, piping, valves, EOT Cranes, flow meter, HT/LT Switchgears, cables, capacitors, electrics for Surat Municipal Corporation, Surat, Gujarat

18. INTAKE PUMPING STATION FOR NTPC FARAKKA SUPER THERMEL POWER STATION.

- Design and Detailed engineering of NTPC Farakka Raw water Intake pumping Station including vertical turbine pumps, piping, valves, expansion joints, EOT Cranes, HT/LT Switchgear, Capacitors, Cables, other electrics at NTPC, Farakka super thermal power station at Farakka, West Bengal

19. INTAKE PUMPING STATION FOR NTPC TALCHER SUPER THERMEL POWER STATION

- Design and Detailed engineering of Raw water intake pumping stations for NTPC-Talcher including vertical turbine pumps, piping, valves, expansion joints, EOT Cranes, HT/LT Switchgear, Capacitors, Cables, other electrics at NTPC Talcher, Orissa

20. NTPC – VIDUTNAGAR TOWNSHIP WATER SUPPLY SCHEME

- NTPC-Vidyutnagar Water Supply Scheme including pumps, piping, valves, expansion joints, EOT Cranes, HT/LT Switchgear, Capacitors, Cables, other electrics for National Thermal Power Corporation, Uttar Pradesh.

7. Certification:

I, the undersigned, certify to the best of my knowledge and belief that:

(i) this CV correctly describes my qualifications and my experience;
(ii) In the absence of medical incapacity, I will undertake this assignment for the duration and in terms of the inputs specified for me in the Expert Schedule in Form TECH-7 provided team mobilization takes place within the validity of this proposal or any agreed extension thereof;
(iii) I am committed to undertake the assignment within the validity of Proposal;
(iv) I am not part of the team who wrote the terms of reference for this consulting services assignment;
(v) I am, pursuant to Clauses 3 and 4 of the ITC, eligible for engagement.

I understand that any misstatement described herein may lead to my disqualification or dismissal, if engaged.

Deb Kumar Kar

Signature of Key Expert or authorized representative of the firm **Date: 15/06/2021**

Full name of authorized representative: Mr. G N Virupaksha

TATA CONSULTING ENGINEERS LIMITED

Project Name: Consultancy for "Design, Preparation of Bid Documents & Evaluation of Bids for the Proposed Construction of 400 MLD Capacity Seawater Reverse Osmosis Desalination Plant at Perur along East Coast Road, South of Chennai, Tamil Nadu and Construction Management & Supervision for the Proposed Desalination Plant and its Product Water Conveyance Pipeline from the Plant and upto Porur and all allied works"

Replacement of Mechanical Engineer (Non-Key National)- Comparison Sheet:

Sl.No.	RFP Requirements	Original CV Evaluation	Replacement(1st) CV Evaluation	Proposed(Present) CV Evaluation
1	Name	Mr. Surajit Debnath	Mr. Mayur Gupta	Mr. Deb Kumar Kar
2	Nationality	Indian	Indian	Indian
3	Educational Qualifications: ▪ Graduate in Mechanical Engineering	• B. Tech in Mechanical Engineering, NIT Patna	• B.Tech in Mechanical Engineering from B.S.A.C.E.T, Mathura, U.P. Technical	• BE in Mechanical Engineering Jalpaiguri Government Engineering College, North Bengal University, West Bengal
4	Experience Criteria: ▪ Minimum 5 years' experience	▪ **10** years of Professional Experience in the field of Mechanical engineering in water supply and sewerage projects. ▪ Meets the requirement	▪ **13** years of Professional Experience in the field of Mechanical engineering ▪ Meets the requirement	▪ More than **29** years of Professional Experience in the field of Mechanical engineering. ▪ Meets the requirement
5	**Adequacy for the Assignment:** Experience in design, preparation of technical bid documents	▪ DPR updation for 24X7 Water supply project for Belgavi, Hubballi and Dharwad .KUIDFC, Karnataka ▪ PMC services 300 MLD Water Treatment Plant at TK Halli, BWSSB, Bangalore ▪ Intake Pump House and Water Piping-Electro mechanical Work, Surge Protection System for DN 1400 mm M.S. pipeline, Tata Steel, Orissa	▪ Consulting Services for Design, Engineering, Tendering, Supervision & Monitoring to implement BWSSB Stage-V various Contract packages in Bangalore City. – **JICA Funded.** ▪ Water Supply Scheme for Approx. 200 Villages & Talukas Based on Ukai Dam, Under Sagbara & Dediyapada, Dist. Narmada & Tapi ▪ Water Supply Scheme for Approx. 300 Villages & Talukas Based on Vatrak & Mazum Dam, Under Sk-2, 3 & 4 Group, Dist. Aravalli ▪ Construction of 1000 m3/hr Raw Water Treatment Plant for Nagarjuna Oil Corporation Ltd. Cuddalore, Tamilnadu	▪ 775 MLD Portable Water to Bangalore & 110 Villages newly added to BBMP under Cauvery Water Supply Scheme (CWSS) Stage – V (775.0 MLD WTP, Pumping Stations, Pipe Line for Trunk Main along Eastern & Western Route) in Bangalore Water Supply & Sewage Board, Bangalore, Karnataka **(JICA Funded)** ▪ Water Supply Scheme for approx. 250 Villages & Talukas with intake & booster pumping stations, under Hafeshwar Water Supply Scheme at DAHOD, Gujarat ▪ Water Supply Scheme for approx. 200 Villages & Talukas based on UKAI DAM, under SAGBARA & DEDIYAPADA, Dist. Narmada & Tapi. Gujarat ▪ Water Supply Scheme for approx. 300 Villages & Talukas based on VATRAK & MAZUM DAM, under SK-2, 3 & 4 GROUP, Dist. Aravalli., Gujarat ▪ Water Supply Scheme for approx. 200 Villages & Talukas based on TAPI RIVER, under VYARA GROUP, Dist. Tapi, Gujarat ▪ Water Supply Scheme for approx. 240 Villages & Talukas based on KAKRAPAR WEIR, under KAKRAPAR, Dist. Surat ▪ Design of Pumping System for Botad PS, Chavand PS, Gadhada PS, Barwala PS, Navava PS, Upleta PS & water supply scheme under D Network, Gujarat

Sl.No.	RFP Requirements	Original CV Evaluation	Replacement(1st) CV Evaluation	Proposed(Present) CV Evaluation
				▪ 314 MLD Pumping system design at Hadala Pumping Station in Gujarat. ▪ 145 kilometer Cross country raw water transmission pipeline for D Network at Gujarat. ▪ 150 MLD Nand Intake Pumping Station near Surat, Gujarat. ▪ Designed more than 100 small, medium & big Pumping stations involving Vertical Turbine, Horizontal Centrifugal, Submersible Pump sets in Gujarat Water Supply & Sewage Board, Gujarat. ▪ Design and Detailed engineering of Water Distribution system including vertical turbine pumps, piping, valves, EOT Cranes, flow meter, HT/LT Switchgears, cables, capacitors, electrics for Bansdroni Booster Pumping station for Kolkata Metropolitan Development Authority, Kolkata, West Bengal ▪ Design and Detailed engineering of TEKEPER and AMBHORA Lift Irrigation Scheme including vertical turbine pumps, piping, EOT Cranes, valves, HT/LT Switchgear, Cables, Capacitors, other electrics for Irrigation Department, Government of Maharashtra
6	**Familiarity with language & conditions of the Country Points**	Worked in various states of India	Worked in various countries i.e India, Italy, Saudi Arabia & Uganda	Worked in various **Centre/ State Funded Projects in India, United States of America**.
7	Familiarity with the Language (English)	Excellent	Excellent	Excellent

Details of the Non-Key expert proposed with available man months

Name of the Position	Name of the expert proposed	Man months as per RFP / Proposal			CV	Remarks
		Allocated	Utilized till	Available		
Non-Key Staff- National						
Mechanical Engineer- B3	Mr. Deb Kumar Kar	40	2.72	37.28	Enclosed CV of the substitute person	For CP-2, CP-3 and CP-4 package relevant working