Project Management Consultancy Services (PMC) for A SCADA controlled Water Supply and Distribution system for Municipal & Industrial Water Systems

Indian Institute of Technology Bombay, Powai, Mumbai 400076, India

Ref No: IITB/SC/PSVN/2023/01

11 January 2023

Project Management consultancy services (PMC) are offered by IIT, Bombay for SCADA based Water Supply System comprising of Electro-Mechanical, Civil, Instrumentation & Automation activities at Municipal Corporations, Industrial Development Corporations & Smart Cities Etc. The nature of these services is detailed below.

Introduction

Over the past several years, IIT Bombay has been serving as project management consultant (PMC) for various smart cities and industrial development corporations in different technical areas, such as Civil, Electrical, Instrumentation, and SCADA based automation. IIT Bombay looks forward to undertaking more such projects as PMC, thereby serving the needs of the society and the country.

PMC services offered by IITB specifically for the SCADA controlled water supply systems for different agencies, utilities, and organizations in India are as under.

For general information about R and D activities of IIT Bombay, please visit the link https://rnd.iitb.ac.in

Terms of Reference

IITB shall carryout Project Management Consultancy including following services:

1. Advising smart cities, municipal corporations, and other agencies on (i) various matters including but not limited to devising and implementing strategies, policies, guidelines, processes to develop SCADA based water supply systems and similar projects under the respective programs initiated by the Government of India; (ii) Information and Communication Technology (ICT) solutions (iii) technological requirements of various development programmes; (iv) planning a wide range of compatible activities for efficient use of resources as a part of the aforesaid projects (v) approving technology and other infrastructure to cater to multiple initiatives in these areas.

2. Providing all aspects of program management services for implementation of water supply SCADA schemes across India.

3. Monitoring and supervision of project execution over entire duration of the project.
4. Technical review of civil works, instrumentation, control, and SCADA designs.
5. Technical approval of civil works, instrument and equipment specifications, datasheets, SCADA and network system architectures to be deployed.
6. Technical inspection of all items.
7. Final verification of all field items and software.
8. Monitoring and supervision of installation and commissioning as per recommended procedures.
9. Providing technical expertise at every stage for the success of the project.
10. Conducting project review meetings & submission of MPR.
11. Bill checking, Quality checking and certification.

Standards of performance
IITB shall perform the PMC services and carry out its obligations with all due diligence, efficiency and economy, in accordance with generally accepted professional techniques and practices, and shall employ appropriate advanced technology and safe and effective equipment, machinery, materials and methods.

Reports and Documents
IITB shall furnish to the client following reports & documents. All reports and documents shall be in English:
a) Monthly Progress Reports.
b) A completion report at the time of final certification in of work.

Required Staff (IITB’s Personnel)
IITB employ and provide qualified and experienced personnel as are required to carry out the PMC services at various stage of Project execution.
Annexure-1

Standard Structure of Fees

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Stage</th>
<th>Consultancy Fees as a percentage of the cost of the project</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>DPR Preparation</td>
<td>1.5 %</td>
</tr>
<tr>
<td>(ii)</td>
<td>RFQ Preparation</td>
<td>1.0 %</td>
</tr>
<tr>
<td>(iii)</td>
<td>PMC</td>
<td>3.0 %</td>
</tr>
</tbody>
</table>

Stages of Payments (Milestone wise):
Stages of payments (Milestone wise) of the agreed fees for the Project Management Consultancy shall be:

<table>
<thead>
<tr>
<th>SI No</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>Kick-off meeting (Issue of work order)</td>
</tr>
<tr>
<td>(ii)</td>
<td>Technical approval (25% completion of the work)</td>
</tr>
<tr>
<td>(iii)</td>
<td>Technical inspection (50% completion of the work)</td>
</tr>
<tr>
<td>(iv)</td>
<td>Verification of MRN (75% completion of the work)</td>
</tr>
<tr>
<td>(v)</td>
<td>Monitoring of installation and commissioning (100% completion of the work)</td>
</tr>
</tbody>
</table>

Note: Amounts are exclusive of GST and other applicable taxes & levies
Annexure-2

Organization Chart

- Dean R & D
  - IITB
  - Principle Investigator
    - Project Team Leader
      - Project On-site Manager
        - Engineer - Instrumentation
          - Supervisor - QC
        - Site Supervisor - Instrumentation
        - Site Supervisor - SCADA
      - Project Research Assistant - 1
        - Engineer - Civil
      - Project Research Assistant - 2
        - Site Supervisor - Civil
This document is available at the website https://www.sc.iitb.ac.in/~nataraj under reference no. IITB/SC/PSVN/2023/01. The document is uploaded on the website with approval of Dean R and D office, vide Email dated Jan 6, 2023.

For more information about R and D activities of IIT Bombay, please visit the link https://rnd.iitb.ac.in

January 11, 2023

Prof. P. S. V. Nataraj
Professor
IIT Bombay