SCOPE OF WORK

1. Brief Scope of work

The scope of work of Implementation Partner (IP) shall include the following:

- Supply and installation of ERP licenses including ATS
- ERP system implementation, Project Management, Training, Hand-holding & Stabilization Support, Help Desk etc.
- AMC of the ERP implementation for two years after the expiry of Stabilization support.

The scope of the work includes, but is not limited to, detailing of functionalities listed in this tender document, understanding of HPPTCL’s Business Processes, design and development of implementation plan covering all the functions, supply of ERP license and it’s installation, configuration and realization of the ERP solution, development of interfaces/ integration with GIS/SCADA etc, testing, data migration/ porting, technical support, core team training, functional and user training, final preparation, switch-over to the ERP solution, post “Go-Live” support, documentation, recommendation for technical infrastructure, project management and monitoring. The bidder will be required to ensure designing, configuring, testing and implementing all the functionalities/processes/modules that are required to be implemented. The scope of work also includes program management, change management, process improvement, solution assurance services and other services as detailed in this document. Bidder is required to critically review the purpose of implementation and shall ensure inclusion of all other essential services (not mentioned specifically) for achieving the objective within the time frame for successful implementation.

1.1 Detailed Scope of Work (SOW) for the IP

The IP shall be required to do the following:

A) Supply and Installation of ERP Licenses

Number of Users

IP shall supply 100 numbers of named ERP user licenses and also HR Self-service and payroll licenses for total number of employees (150 numbers). HPPTCL, at its discretion, shall distribute the user licenses within the organization. There shall not be any restriction in use of functions/modules in each named user license. All the ERP licenses supplied shall be unrestricted and fully functional. HPPTCL shall have right to conveniently distribute these ERP licenses across the modules at the Corporate Office or Other locations/office as per its need.

The price quoted by bidder shall remain valid for next five years from date of delivery of first licence. The offered licenses shall include cost of the additional license (if required) to meet the functionalities mentioned in para 2.1 & 2.2.
B) Implementation of ERP System

I. Design and develop the Project Plan

The detailed project plan of the implementation is to be prepared at the commencement of the project. The implementation of ERP solution will require a strong program management activity implementing the ERP with software application. This ensures complete acceptability of the solution within the organization.

Program management services shall aim at improving the business processes, leveraging technology solutions, incorporating best-of-breed industry practices to maximize opportunities for HPPTCL’s business operations and at the same time addressing growth and development of the employees.

II. Develop detailed scope for the functionalities to be implemented

The detailed scope of the business processes to be implemented shall be finalized by IP in association with the project team members from HPPTCL.

III. Deployment of IP Manpower

IP shall ensure deployment of sufficient specialised and experienced man power throughout the project to complete the implementation & stabilisation of the ERP System in time successfully. The deployment of IP manpower shall be as per the clause no. 6 of ITB (Profile of proposed project team).

IV. Detailed Design

IP shall design the relevant business processes with all details. The process shall include the following steps:

- ‘AS-IS’ process mapping to activity/task level and current state analysis to identify areas of improvement and opportunities for standardization.
- Review the ‘AS-IS’ processes and define the TO-BE processes that are based on business requirements, GAP Analysis and ERP enabled “best practices” and processes.
- Designing of the specific screens and data formats along with the process and method for entering the details.

V. Configuration

Based on the functionalities designed, IP shall be responsible for:

- Configuring the ERP system according to the processes
- Testing of configuration of Modules
• Identification of the fields that need to be captured for the
The design proposed by IP, shall be realistic, simple, flexible enough to take care of future changes in the organizational structure and easy maintainability.

VI. Integration Management And Testing

Integration management and testing should be as per the standard practices. This shall include development of exhaustive test scenarios, carrying out the integration tests on these scenarios and necessary corrections based on test results and the feedback. IP shall be responsible for completing the integration tests with the desired quality and schedule. HPPTCL shall provide support to IP in this connection. HPPTCL and IP project team shall jointly envisage scenarios for testing and developing test scripts. HPPTCL will also make available live data for the purposes of testing wherever required. HPPTCL and IP shall extensively participate in the module and integration testing. IP shall be responsible for the documentation of integration process & test results. The data conversion testing shall also be done in similar manner to ensure that, after the loading of final data, the system remains stable.

VII. Data Migration

The IP shall define all specifications that are needed to populate the data into the new ERP system.

IP’s responsibility for Data Migration

This shall include the following tasks:

• Identification & development of the data upload/download programs
• Providing data migration tools and templates to HPPTCL
• Convert and migrate all the relevant data from hard files/format to soft copy format as per the requirement of the ERP system
• Populate and migrate all the legacy/ raw/new data element to the ERP system
• Training and facilitating the HPPTCL core team
• Check the data quality and integrity
• Integration testing of the configured system using the populated master and transaction data
• Assist HPPTCL team in Master Data Management

The following data need to be migrated:

• All open transactions and all transactions from the start of financial year of Go-Live.
• Standing or master data such as vendors/suppliers, customers, all employees, material, work breakdown structures, equipment, work specification, cost data, etc.
• All the related Master Data and associated drawings, test results etc. as applicable.
• The migration of historical data is not in the scope of this project. However, some available historical data like Last Purchase Price etc. (if required) to be migrated to the ERP system.

IP’s responsibility shall be to ensure that data migration is complete in all aspects, within time so that the requirements of the implementation are fulfilled.

*HPPTCL’s responsibility for Data Migration*

HPPTCL shall only rationalize and validate the data with IP’s assistance.

**VIII. Technical Support**

IP is required to undertake the following:

a) Formulation of all policies and procedures related to System Administration, Data Base Management, applications, archives, network management & security, back up etc.

b) Prepare requisite system landscape and procedures for smoothly implementing ERP.

c) IP shall assist the HPPTCL team to perform all authorization-related activities (activity group, authorizations, profiles, etc) till the ERP system stabilizes.

d) Assist HPPTCL to manage the data interfaces, print spools, batch Jobs, printer configuration etc.

e) Prepare a detailed System administration manual, Data administration manual, operational manual, User manual which shall be used by HPPTCL employees to run ERP enabled production environment. This shall also include how the various parameters shall be monitored/ tuned in a live system. Manuals should be text and screen recordings of steps.

f) Finalize the archival policies for all the functional areas. All necessary configurations shall be done and tested.

g) Round the clock support for trouble shooting in functional and technical area.

**IX. Annual Technical Support (ATS) for the ERP product**

The ERP OEM shall provide ATS support and maintenance of the ERP package, tools, accessories and any service provided as part of product solution for a period of three years from the date of delivery of ERP licenses. During this period, the ATS shall include technical and functional support and maintenance of the ERP system, RDBMS etc. which form the part of the ERP product’s solution.

The ATS contract should cover the services which the ERP product vendor provides normally under Technical Support and shall include minimally the following support for ERP system, RDBMS and all other standard software wherever applicable.

a) All product upgrades/ (patches and fixes)
b) User and technical support on a 24 * 7 basis for product related issues

c) Provide free upgrades, updates, fixes, upgrade scripts & patches of the ERP software and tools to HPPTCL within 30 working days of its release by the ERP product vendor.

d) Technical support for installation of any patch or product upgrades

e) Periodic site visits, if required.

Warranty for the ERP product is to ensure that the supplied ERP product/licenses shall be free from defects under normal use and shall remain valid for twelve (12) months after the ERP product/licenses have been delivered to and accepted by HPPTCL. In addition to the Warranty Services required from the ERP OEM, HPPTCL requires ATS services from the ERP OEM which shall cover the services as listed below. The ATS charges shall be applicable from the date of delivery of the ERP product/licenses.

a) All product upgrades/ (patches and fixes)

b) User and technical support on a 24 * 7 basis for product related issues

c) Provide free upgrades, updates, fixes, upgrade scripts & patches of the ERP software and tools to HPPTCL within 30 working days of its release by the ERP product vendor.

d) Technical support for installation of any patch or product upgrades

e) Periodic site visits, if required.

X. Capacity Building & Training

HPPTCL is highly focused on the Capacity Building for it’s employees for this project. Hence, appropriate & well-designed training for the ERP implementation is a critical success factor at HPPTCL. Capacity Building & Training shall be a continuous activity at HPPTCL throughout the project duration. There will be various levels and types of training during the project implementation at HPPTCL. At the start of the project, IP shall arrange Management Exposure Site Visits in Power Utility Sector to provide an insight to the functioning of the ERP and other advanced IT systems for the Executives of HPPTCL. IP shall arrange two visits – One National site visit and One International site visit to showcase similar ERP and other advance IT systems implementations in India and Abroad.

IP shall conduct a training need assessment of HPPTCL’s ERP core team members as well as end users as a component of the process improvement and change management process. Training needs should be continuously refined and frequently reconfirmed with the end-user community & the core team as the project progresses.

IP shall conduct the following types of training at HPPTCL:

1. Overview level training

   (i) Overview level training for Top Management

   IP shall conduct overview level training of the ERP system for the Top Management of HPPTCL for one day at the start of the project.
(ii) **KPI Workshop for the Top Management**
IP shall conduct workshops for the Top Management for the design of Key Performance Indicators (KPI) of the ERP system of HPPTCL.

(iii) **Overview level training for the Functional Core Team**
IP shall conduct overview level training of the ERP system for the Functional Core Team of HPPTCL at the start of the project.

(iv) **Overview level training for the End Users**
IP shall conduct overview level training of the ERP system for the End Users of HPPTCL for 1 day at the start of the project.

2. **Detailed Functional level training for the Core Team during Project Preparation Phase**

This is the functional level training of the ERP system for 3 weeks for the functional core team of HPPTCL for ERP implementation. This training needs to be completed before the start of the Business Blueprinting phase of the ERP implementation. This cross-functional core team of HPPTCL will comprise of members from all the business functions and IT. This training should enable the functional core team of HPPTCL to involve in implementation, building and managing ERP related skills and maintain the ERP system in HPPTCL.

The training should be given to approximately 15 personnel of HPPTCL by IP themselves, at the cost of IP at HPPTCL. The training should be based on standard ERP certification training material.

3. **Technical Training for the internal IT Team**

This is the technical training to be given to the internal IT team of approximately 7-8 personnel of HPPTCL by IP themselves, at the cost of IP at HPPTCL. IP should give training on the following areas:

- ERP System Administration
- Database Administration
- Programming for customizations/development works, Reports and FORMS development
- Data Migration and
- Technical tools associated with the ERP implementation.

4. **End User Training**
All the end users need to be trained by the IP for the smooth functioning of the ERP System. The IP shall submit a detailed Training Plan for all the end users. IP shall conduct extensive training for all the End Users before the Go-Live of the ERP system. IP shall also give hands-on training of the ERP system to all the End Users. This training should be for at least 1 week for each module/ function for all the End Users.

**Training tools and Training materials:**

Use of recommended ERP training tools/ software(s) for providing various training is essential. Adequate training material which includes training manuals, quick reference cards etc should be provided during the training sessions. The recommended training material should be in paper & electronic media with courses on ERP fundamentals, business process overview, job activity training, and delivery options being on-line, instructor led class rooms, etc.

XI. Final Preparation and Go-Live

IP is required to undertake the following at HPPTCL:

- Review readiness for cut over
- Manning the central help desk for any queries
- Resolve Technical & functionality related issues for ERP
- Review the usage and performance of the ERP system till it stabilizes
- Documentation of the issues/problems that come up and solutions thereof
- Final configuration/ integration, volume and stress testing
- Data migration
- Switch over to production environment.

XII. Post Go Live Support

(a) Post Go-Live Stabilization Support

IP shall be responsible for Project implementation and correct & satisfactory functioning of the ERP system. IP shall provide Post Go-Live Stabilization support to HPPTCL to ensure the efficient day-to-day functioning of the ERP system for a period of six months from the date of Go-Live at all the locations of HPPTCL. After Go-Live, atleast three functional consultants alongwith one Project Manager having knowledge of main modules to be deployed as per requirement for hand holding support at HPPTCL. Also, four technical consultants from technical areas like Database administration, System administration, programming etc. shall also be placed at HPPTCL.

(b) Annual Maintenance Contract (AMC)

In addition to (a) above, IP is required to provide Annual Maintenance Contract (AMC) Support on-site at HPPTCL for two year (2 years) from the end of Post Go-Live stabilization
support period at a price to be quoted in the financial bid. During this period, IP shall ensure trouble free running of the total system. A minimum average of 3 Functional and Technical Consultants per month to be deployed onsite at HPPTCL during the AMC support period. All the deployed consultants must be having an experience of at least 1 ERP project implementation. The AMC Support period would be for two year (2 years) from the end of Post Go-Live stabilization support period.

Additionally, the IP may be required to provide handholding support for another one year (1 year) at the discretion of HPPTCL with the same price and terms & conditions of the contract as that of Annual Maintenance Contract Support.

For smooth running of the system & day-to-day functioning it is of paramount importance that adequate transfer of knowledge to the core team members of HPPTCL takes place. Towards this, the IP should mentor HPPTCL core team members who will be responsible for doing any configuration change independently. IP needs to take the responsibility of creating post-go-live support strategy. The objective of this exercise is to ensure that HPPTCL builds in-house competencies to maintain the ERP solution in the long term without dependency on external consultants.

**DISASTER RECOVERY AND BACK-UP POLICY**

The IP shall formulate an effective Back-Up strategy and Disaster Recovery Plan and advice HPPTCL on Business Continuity Requirements.

**XIII. Documentation**

IP shall prepare and submit complete documentation in MS-WORD format, screen recording videos and other required formats of all the reports, documents, configuration settings, other activities, steps / stages involved in the implementation. IP in close coordination with HPPTCL core team shall prepare the business process document, end-user manuals and training documents in the jointly agreed templates. Three (3) sets of hard copies along with one (1) set of softcopy in CD/DVD of each of the finalised documents shall be submitted to HPPTCL.

**XIV. Technical Architecture**

IP shall validate HPPTCL’s existing technical infrastructure and recommend an appropriate solution to meet HPPTCL’s business requirements in the implementation of the ERP system. IP shall also monitor the archiving strategy, control and security aspects during implementation at HPPTCL.

IP will then recommend the IT architecture design including hardware, and operating system for the implementation keeping in view the geographical spread & complexity of the implementation, communication infrastructure available in the country & at HPPTCL and Data Archival & Storage requirements. The recommended architecture shall also provide for
scalability, disaster recovery, test and production environments. IP shall assist in providing
detailed specifications for the sizing of hardware to be procured by HPPTCL.

XV. Sign Off And Closure

HPPTCL recognizes the importance of an expeditious sign off and closure of agreed
deliverables and HPPTCL Team will expedite the process of sign off and closure. However,
IP shall facilitate such acceptance/sign off from the Management/Process owners for all the
deliverables mentioned above by way of preparing / producing such documentation / review
reports / test results etc. as may be necessary for HPPTCL to ascertain that the prerequisites
to subject sign off and closure have been met completely in accordance with the Contract
Document.

XVI. Solution Assurance by Quality Review Group

The ERP implementation at HPPTCL is to be monitored by the Quality Review Group for
ensuring smooth and timely implementation as per the requirement of the purchaser. IP shall
provide details of the Quality Assurance Plan envisaged for the implementation of ERP
system in the project plan. A Quality Review Group shall be constituted which will comprise
representatives from HPPTCL and the Implementation Partner.

1.2 Organization Change Management

The purpose of Organization Change Management is to ensure that HPPTCL achieves the
expected results from its investment in ERP technology in a short span of time. As part of
this service, IP will work closely with HPPTCL core team in introducing the change-
processes, stressing the importance of organizational alignment, and introducing the
necessary tools and techniques needed to address issues in the Organization.

1.3 Process Improvement

Process Improvement will be done to enable HPPTCL to adopt some of the best practices
embedded in the ERP system. The areas that can bring maximum benefits will be identified
by IP in close coordination with HPPTCL process owners. The consulting IP team needs to
work closely with the user team to translate this into a set of processes that can be
implemented in ERP. In order to do this, IP will also bring in knowledge of the best practices
adopted by other world-class organization to the HPPTCL implementation.

1.4.1 Quality Audit by the ERP OEM

The IP shall ensure to depute consultants from ERP OEM each during Blueprint & Go-Live
phase on mutually agreed dates at HPPTCL site for ensuring smooth and proper
implementation of the ERP system at HPPTCL. The ERP OEM shall submit two Audit
Reports/Audit Observations on the ERP implementation to HPPTCL to be submitted, one
after the Business Blue Print and the other before the Go-Live of the ERP system. The envisaged responsibilities of the ERP OEM for the ERP implementation project at HPPTCL are as follows:

1.4.2 Monitor and Review Quality of Project’s Progress

   i) Review Business Blueprint Documents prepared by the IP
   ii) Review Go-Live parameters/ readiness for the ERP implementation

(The bidders will have to submit a confirmation with regard to above, from ERP OEM on their Letter head signed by their authorized signatory and enclosed with technical bid part – I).

1.5 Knowledge Transfer & Training

HPPTCL believes that it needs to build in-house skills in ERP implementation that will enable HPPTCL to reduce the dependency on external skills. The implementation approach followed by IP has to be such that it ensures that there is significant knowledge transfer from consulting team to the HPPTCL Core Team during the course of implementation. This coupled with the emphasis on the product and implementation training offered to user teams before starting the project ensures that the required platform for knowledge transfer is established. A well-designed training strategy is vital for development of competency that would enable HPPTCL’s core project team to steer the ERP implementation program through out the organization. IP shall therefore prepare a plan for suitable training needs of HPPTCL’s project core team members that would help them understand the ERP system in detail and subsequently undertake the ERP implementation.

1.6 Project Management Guidelines

   a) The project will be governed by a Steering Committee that consists of members appointed by HPPTCL, member(s) of IP and Quality Review group. HPPTCL will approve the constitution of Steering Committee at the commencement of the project.
   b) IP shall be responsible for “go-live” as per the agreed schedule and output from the deliverables in each Phase.
   c) HPPTCL shall appoint a Project Management team (PMT) who shall co-manage the project together with the Project Manager appointed by IP and drive the project to successful completion.
   d) IP, in coordination with HPPTCL’s PMT, shall execute the detailed design/configuration/testing and all other aspects of implementation.
   e) Deployment of resources by IP in the project is subject to acceptance of the quality of such resources by HPPTCL. For any replacement / addition of resources, IP shall give four weeks advance notice to HPPTCL. Further, during the course of the project, if HPPTCL finds any resource unsuitable, they shall have the right to de-list the resource from the project after due deliberations with IP immediately and providing one month time for appropriate replacements.
   f) All the deliverables of IP will be subjected to quality review under Solution Assurance by Quality Review group.
g) In all the activities of implementation, IP’s Project Team shall bring in expert Inputs and guide the project. The HPPTCL’s Project Team shall actively participate along with IP in carrying out required activities.

2 Functional Scope

2.1 ERP system will broadly cover the following prime functions of HPPTCL
(Typical functionalities required in the ERP product are given in Technical Specifications, Section VI, Schedule of Supply. Below mentioned list is Indicative & not exhaustive)

Functional Scope to be covered under ERP

It is proposed to cover following main functions under the scope of ERP:

- Finance, Accounting and Controlling
- Project Management
- Inventory and Procurement Management
- Human Resource Management, Payroll and Employee Self-Service (ESS)
- Asset/ Maintenance Management
- Management Information Systems (MIS) Reports and Enterprise Performance Management
- ABT Billing
- Interface with GIS/SCADA

2.2 Other Functions

In order to support the prime functions, the ERP should also cover the following:

- Document Management
- Workflow Management
- Enterprise Portal

Go-Live of the ERP system

All the functions as mentioned above shall be implemented in the entire organization in a Big-Bang approach.

3 Geographic Scope of the ERP system

The ERP solution will be implemented organization wide at HPPTCL comprising of the Corporate Office at Shimla, Design Office at Anu, Hamirpur, Field Offices at Kinnaur, Shimla, Kullu and Chamba. The geographical scope for ERP implementation can be extended if any new office/site comes up in HPPTCL during the implementation phase. Also, provision is required to be kept under the ERP Implementation project to include new project site envisaged in the future.
4 Deliverables

IP shall be required to follow milestone based deliverables for the ERP Implementation process.

5 Completion Period

The completion period for the complete scope of work as provided in the contract shall be 78 weeks from the date of signing of contract. The Kick-Off meeting: Formal project Kick-off and inauguration will take place in Shimla once the contract is awarded. The goal shall be to orient and align both HPPTCL and the IP about project expectations and to communicate project goals and objectives. The tasks that are provided in the document and under deliverables but not listed in the delivery schedule are to be performed by the Implementation Partner in such a manner that it will not affect the project schedule.

6 Profile of proposed project team

IP has to deploy specialised and trained manpower for the successful and timely completion of the ERP implementation Project at HPPTCL. It is therefore mandatory that the key personnel in the team have the following minimum qualification and work experience.

a) One Project Manager

The Project Manager should have at least 2 ERP End-to-end implementation experiences as a Functional Consultant or as a Project Manager, out of which, at least 1 ERP project implementation should be in Power Sector in India. The CV of the proposed Project Manager for HPPTCL will be verified by the Tender Evaluation Committee of HPPTCL during the project kick off meeting.

b) Functional Consultants

IP should provide at least One Functional Consultant per module/function for HPPTCL (as listed below), each functional consultant having at least 1 ERP End-to-end implementation experience:

- Finance and Accounting
- Project Management
- Inventory and Procurement Management
- Human Resource Management, Payroll and Employee Self-Service (ESS)
- Asset/ Maintenance Management

c) Technical Consultants
Apart, IP should provide technical consultants required for programming, System & Database Administration, report writing, testing, data migration etc. as required for the successful implementation of the project. Each technical consultant should have at least 1 ERP implementation experience.

All the proposed manpower of the IP for the ERP implementation at HPPTCL must be mandatorily having a B.E./B. Tech/ M Tech/ MBA/ CA/CS degree or equivalent degree. The bidder needs to submit detailed CV’s of each of the Consultants and Project Manager of the proposed project team at the time of Kick-off of the project at HPPTCL.