

KSEBL Power House Visit portal

Functional Requirements Specification

Version-I

OCTOBER 2022

IT (Computerisation Unit)

KSEBL

This document aims to detail the system requirements for the development of Power House Visit application for the public to register/apply/book for visiting power houses of KSEB in order to provide information to the technical community who will specify and build the system. The collection of requirements that constitutes the specification and its representation acts as the bridge between the two groups and must be understandable by both the business analyst and the technical community. The purpose of this document is to provide a description of what the system should do but not how to do (no design or implementation details).

1. Introduction

The objective of this document is to provide description of the development of web based online portal for Power House Visit by the public. It also explains the requirements for the development and implementation of web based online application portal.

2. Background

Generating Stations of KSEBL are major area of interest to the visitors, especially students and teachers from educational institutions. The Industrial visit is mandatory in Technical institutions and it is a part of their curriculum. Being a public sector organization, KSEBL is bound to promote Institution-Industry coordination and allowed students to visit generating stations on academic interest. Visitors were permitted to enter power stations of KSEBL, except at Idukki Under Ground Power Station and Malampuzha SHEP and the facility was temporarily stopped due to the COVID pandemic..

But, based on the requests from institutions, Clubs, Residential Associations, General Public etc it is decided to restart the facility. It is reported that the Managers of Power Stations had laced difficulties in managing the crowd especially during the execution of Annual Maintenance works and other major maintenance works in the Stations. Further, the safety of the visiting individuals and station assets are of paramount importance. Therefore, a staff or an officer at the power station, need to be spared exclusively for the guidance.

Considering the above, it was decided to impose a nominal entry fee from the visitors to compensate the time and effort put in by KSEBL, for facilitating the visitors in these strictly secure installations of KSEBL with close monitoring and supervision. Employees (both retired & live) of KSEBL are exempted from the charging entry fee, the exemption is not applicable to relatives of KSEBL employees. A separate Head of account was also allotted to collect the entry fee, through ONLINE /ARU / section office, based on the approval from the authority.

3. Scope of Work

To develop a web portal for submitting application for power house visit with the following features

- 3.1. General application submission page with provisions for entering
 - a) Name, address, institution name,contact number, ID proof.
 - b) Phone number OTP
 - c) Selection of available power house from a drop down menu
 - d) Selection of avilable date for the visit from calander
 - e) Selection of available time slots

- f) Entering number of persons subject to a maximum limit
 - g) Selection of type of visitors -General/Educational/KSEB staff
 - h) Uploading of Ids and other proofs
 - i) Calculation of total entry fees
 - j) Online collection facility of fees
 - k) Generation of permission letter with the format as per annexure
- 3.2. Verification of permission
- a) Provision for Verification of the permission at a later date for any change using allotted permission number or phone number
 - b) Any change shall be displayed etc time slot change etc
 - c) provision for cancellation
 - d) provision of change of date or change of power house if permission is denied
- 3.3. Power house admin page with following facilities
- a) Setting available dates (From -to dates or marking dates from calander)
 - b) setting Time slots (from Hours -To Hours for a slot)
 - c) Setting maximum number of persons for a time slot subject to a day maximum
 - d) Various reports
- 3.4. Application admin page
- a) setting availability of the portal
 - b) setting maximum visitor for each slot if needed
 - c) setting availability of power houses if needed
 - d) login password reset facility
 - e) login permission setting
- 3.5. Reconciliation pages
- a) Accounting to the specific heads.
 - b) Various accounting reports/ledgers for reconciliation etc

4. **General Instructions**

- 4.1. Application for visit, specifying the name of power station, date of visit , the list of visitors & valid e-mail ID, contact number may be submitted to the Deputy Chief Engineer of the respective Generation circles, at least two days prior to the proposed date of visit. For Industrial Visits, request may be submitted in the letter

head of the institution duly signed by the Principal /HOD of the respective institution, along with list of students and staff accompanying the visit or forwarded the scanned copy of the same to the concerned generation circles, officially from the respective institution, the request should reach the concerned , at least two days prior to the proposed date of visit.

- 4.2. Entry fee (inclusive of applicable GST) @ Rs.250/- for general public and @Rs.50/- for Students and staff from Educational Institutions, within the State. Retired & Live Employees of KSEBL are exempted from entry fee. In the case of live employees, request should be forwarded officially through their controlling officers and for retired employees their PPO number should be provided in the request, for availing the fee exemption. The fee exemption may not be applicable to the relatives of KSEBL employees.
- 4.3. Permission is restricted to working hours from 08:00 AM to 05:00 PM except Sundays and other calendar holidays.
- 4.4. Number of visitors per power station is limited to 10 at a time and 50 per day.
- 4.5. Availability of date / slot shall get confirmed before forwarding the request ,the confirmation shall be obtained from the respective offices ,on all office working days, between 10:00 AM and 05:00 PM.
- 4.6. Industrial Visits are restricted to those Institutions within the State of Kerala.
- 4.7. Permission will be issued, on first come first serve basis, subject to availability and the copy of permission letter will be sent to the e-mail ID concerned or hard copy can be collected from the office concerned. KSEBL will not take any responsibility on account of any delay / non-receipt of the permission letters, caused by Network / software related issues. In the case of online mode the permission letter may be downloaded from the site.
- 4.8. Copy of the Permission letter obtained from the O/o the Deputy Chief Engineer concerned /downloaded may be produced along with the proof of remittance of the prescribed entry fee, at the time of visit and gate pass may be collected at the respective stations. Entry fee remitted is Non-Refundable.
- 4.9. Children below the age group of 10 years are not allowed to enter the power station.
- 4.10. The visitors are permitted to enter the power houses in small groups ,maximum 10 at a time without making any disturbance to the O&M activities of the power station.
- 4.11. The original photo identity proof of visitors should be produced on demand at the time of visit.
- 4.12. Visitors shall enter the Power House under the strict guidance of a KSEBL officer /competent employee, entrusted for the guidance, after getting the local

permission /gate pass from the respective officers / Project managers of the respective stations.

- 4.13. Photography inside the Power House and premises are strictly prohibited ,any breach of this is a punishable offense.
- 4.14. The permission will be canceled without any prior intimation, in case of emergency.
- 4.15. In the case of complaints in connection with the visits, the decision of the Director concerned, is final.
- 4.16. All correspondence may be addressed to the O/o the Deputy Chief Engineer of the concerned Generation Circle under which the power station is functioning.

5. **Fees and Account Head**

Sl No	Applicant Type	Fee amount per head	Account Head
1	General Public	Rs 250	62.940
2	Students and institution staff	Rs 50	
3	KSEB staff(including retired)	Nil	

6. **Assumptions and Constraints**

The factors that could affect the requirements stated in the requirement specifications document. These factors are not design constraints on the software, but are rather, any changes to them may affect the overall requirements. Following are the major assumptions and dependencies;

- 6.1. It is assumed that the system architecture with respect to hardware, software, connectivity and other infrastructure would be available as envisaged for the proper functioning of the application.
- 6.2. Interfaces to KSEBL applications will be provided as web services based on the formats devised by KSEBL IT Team.
- 6.3. The external interfaces would be dependent on services provided by other government agencies or service providers.
- 6.4. All the legal/regulatory/administrative approvals/changes, if any, would be undertaken by the KSEBL to enable the functionality covered in this document.

7. **Non Functional Requirements**

The section identifies non-functional requirements to be supported by the portal. It also includes the non-functional requirements for the support & management service, Design,development and testing of the service.

8. **Application Requirement description Technology Platform should be**
Portal should be platform independent of Operating System, browser etc
The Application shall be developed in PHP/JAVA and DB in Opensource platform. The application shall be mobile responsive
9. **Scalability Requirement description**
The application must be scalable
10. **Change requirement Management**
During support period any enhancement/customization requirement having of 7 person days should be done without additional charges to KSEBL.
11. **User Manual**
The firm should prepare detailed video-based user manuals covering “step-by-step” and “how to use” concepts for the portal.
12. **Training**
Functional Training
This training (Knowledge Transfer) shall be provided to the KSEBL’s Core IT Team members (minimum 10 employees) at Thiruvananthapuram, Kerala.
13. **Training Materials**
The firm shall be responsible for preparation of the training materials, handouts covering “step-by-step” and “how to use” concepts for the portal.
14. **Project Inception**
The firm should prepare a detailed Project Plan detailing all tasks including the person in charge, allocated resources, timelines for each activity, milestones, and deliverables
15. **Requirement study**
The firm should review and finalize proposed SRS in discussion with KSEBL and submit a detailed SRS to KSEBL.
16. **System Design**
Based on the SRS the firm should perform detailed system design. As part of this phase the firm should submit design documents. The portal shall be integrated with KSEBL internal applications, SMS gateway, Payment Gateway etc and capable to send communications through email & other modes.

17. **User Acceptance Tests (UAT)**

The firm should conduct User Acceptance Tests (UATs) to ascertain whether the application and its sub-system is capable of meeting the functional requirement as per the requirement. Conducting such tests will be responsibility of the vendor. KSEBL will provide full co-operation to the vendor in conduct of the tests.

18. **Documentation**

The design documents contents of the application should cover all the required technical information. The complete documentation of the project shall be delivered both in hard copy and soft copy.

19. **Product Support**

The entire source code should be transferred to KSEBL. A detailed documentation explaining the structure of code should be submitted along with source code

20. **Security**

Ensure the design of the web-portal shall follows the NCIIPC, CERT-In guidelines and security auditing of the portal is also included in the scope of the work. Vendor also must obtain certificate from CERT-In empaneled agency.

23. **Time line**

The selected firm shall complete the development and commissioning of the application **with in 4 months from the date of issue of Letter of Award**.

Format

No. (Visit Reference Number)

Date:

PERMISSION TO VISIT POWER HOUSE

- Ref:-
1. B.O.(FTD) No.542/2018(DGE/G3 /General /2017-18)dated: 28 -02-2018
 2. B.O.(FTD)No.388/2022(DGE/G3/Power House Visit)dated 07-05-2022
 3. (Request)

Considering the request under reference, the Deputy Chief Engineer, Generation Circle, Moolamattom/ Moozhiyar/ Thrissur/ Kothamangalam/ Meencut/ Kozhikode has granted permission for the following Power House visit as per B.O.(2) referred above.

Name of Power Station	
Date of visit	
Name & Address of Applicant/visitor /Firm/ Institution	
Name of Course/Semester/Batch	
Students (Nos.)	
Staff (Nos)	
Total Visitors (Nos)	
*Whether the visitors are KSEBL employees (Retired/Live)	
**Amount to be remitted (INR)@	

**KSEBL employees (Retired /Live) are exempted from remitting the entry fee*

*** Amount may be remitted in any of the Generation Circle offices/KSEBL section offices / collection centres of KSEB Ltd/ARUs., (permission letter should be produced at the time of remittance), obtain the receipt and produce the same along with this permission letter at the time of visit.*

Deputy Chief Engineer
Generation Circle Name
**(Moolamattom/Moozhiyar/ Thrissur/
Kothamangalam/ Meencut/
Kozhikode)**

To
The Station
Engineer
Copy to: the applicant

Note:

- 1. The original identity proof of visitors should be produced, on demand, at the time of visit.*
- 2. Visitors should abstain from wearing loose cloths and should be in formal dress*
- 3. The list of visitors should be produced on demand*
- 4. The permission will be cancelled without any prior intimation, in case of emergency.*
- 5. Entry fee remitted is Non-Refundable*

-----**For office use only**-----

Payment particulars: (Account Code 62.940):