

# **TERMS OF REFERENCE**

## **DEVELOPMENT OF ERC EXECUTIVE INFORMATION SYSTEM AND HYPERCONVERGED INFRASTRUCTURE (HCI) HARDWARE**

The Energy Regulatory Commission (ERC), with its goal of full automation of processes, aims to develop the ERC Executive Information System (EIS) Development (Phase 1) to (1) initially, monitor and manage all documents within the Office of the Chairperson and Commission Members (OCCM) and the Office of the General Counsel and Secretariat (OGCS) and (2) later, have a unified information system where all ERC processes shall be interconnected.

Amidst the technological advances such as portability and online applications, the ERC is in dire need to develop a system that will improve efficiency and productivity such as routing of documents with notification or alerts, report generation for audit purposes and executive management control. Further, prepare all ERC processes to be interconnected to the ERC EIS development.

In this regard, the ERC intends to engage a Contractor that will develop the ERC EIS development with the following detailed requirements:

### **I. PROJECT COVERAGE**

The scope of services covers the supply, delivery, installation, and implementation of the ERC EIS development (Phase 1), which include the following:

1. Provision of Functional Specification Design;
2. Provision of Hyperconverged Infrastructure capable of Hybrid Setup using Cloud Services;
3. Timelines of Supply, Development, Deployment, and Implementation based on Section 6 (Scope of Work) of this document;
4. System maintenance, Support, Software Updates and one (1) year post implementation technical support, minor bug fixes and maintenance;
5. Five (5) working days trainer's training (for system user); and
6. Two (2) working days extensive technical training.

## **II. DELIVERY AND CONTRACT PERIOD**

The delivery for the Development and Deployment of ERC EIS development (Phase 1) shall be **seventy-five (75) calendar days** from **receipt of Notice to Proceed (NTP)** and contract period for Technical Support shall be **one (1) year** from Final Acceptance and deployment (Go Live) including five (5) working days trainer's training and two (2) working days extensive technical training.

The Contractor shall be willing to provide flexibility on the delivery and installation of the Hyperconverged Infrastructure in the Pacific Center Building or in Exquadra Tower, in case of transfer, with no additional cost on the part of ERC.

## **III. APPROVED BUDGET FOR THE CONTRACT**

1. Fund for this engagement shall be sourced from the Current Appropriations for the fiscal year 2021 of the ERC.
2. The ABC for the project is **NINETEEN MILLION SEVEN HUNDRED THOUSAND PESOS (PhP19,700,00.00)** inclusive of all applicable government taxes, other fees, and charges.

## **IV. MODE OF PROCUREMENT**

The Mode of Procurement shall be **Competitive or Public Bidding**, as specified in the 2016 IRR of Republic Act (RA) No. 9184. Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country that the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA 5183.

## **V. QUALIFICATIONS**

The Contractor should have the necessary eligibility, experience, and expertise in providing development and implementation of ERC EIS development (Phase 1):

- a. The Contractor shall not be partly/wholly owned by or affiliated to any Distribution Utilities or regulated entities in the Philippines;

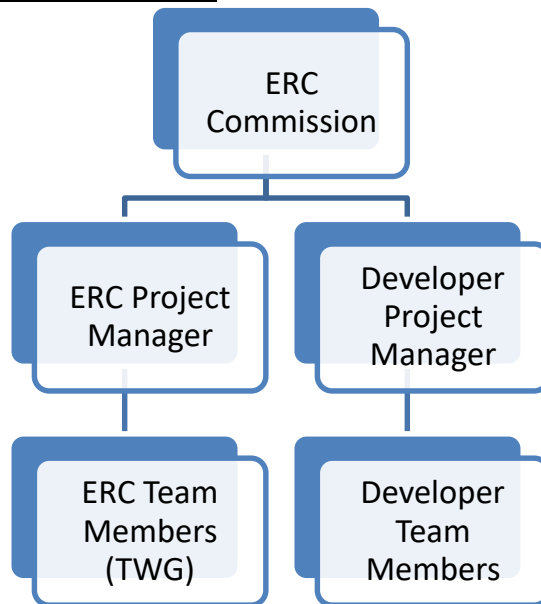
- b. Has more than three (3) years of experience of end-to-end development, deployment, and/or support of similar systems/projects within the private industry and, as well as, for government agencies; and
- c. Has deployed at least two (2) similar projects *preferably* developed in Microsoft environment specified in Section 6 (Scope of Work).

## VI. SCOPE OF WORK

Supply, delivery, installation, and implementation of ERC EIS development with the following requirements:

### 1. Project Management and Infrastructure:

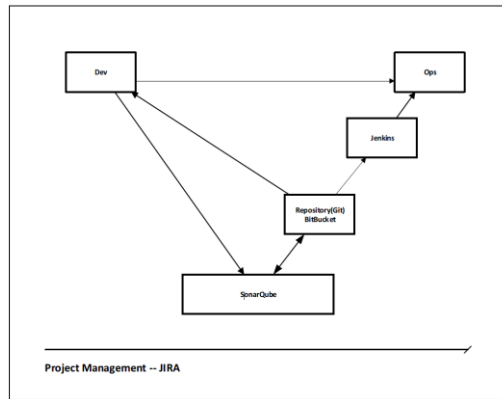
#### 1.1. Project Team Structure



#### 1.2. Version Control

The Contractor shall use version control throughout the duration of the project, Virtual Machine (VM) servers for User Acceptance Test and Production shall be setup on premise the ERC. It shall act as repository of all information's and source code of the project.

#### 1.3. Project Management Software



#### 1.4. Infrastructure

- ✓ The Contractor shall provide the ERC with a Hyperconverged Solution (see attached **Annex A: Hyperconverged Solution Specification**) which will be installed in the ERC Data Center premises.
- ✓ The Contractor must develop the application on their ICT Infrastructure using dummy data only.
- ✓ The Contractor shall do the initial setup and configuration of the Hyperconverged Infrastructure. They must develop User Acceptance Test (UAT) environment at ERC ICT Infrastructure. The UAT must be conducted at ERC ICT Infrastructure to be approved and signed by the TWG (Subject Matter Experts (SMEs) and Business Process Owner) prior to deployment to the Production. They must develop an Extract, Transform, Load (ETL) tools integrated on the system for data migration. The Data migration must be done by the concerned ERC Service(s) for the security of live data.

## 2. **ERC EIS development General Features (including the integration of the Integrated Case Tracking and Monitoring System “ICTMS” and the Document Tracking System “DTS” such as but not limited to):**

### 2.1. Accounts Management

- ✓ Existing ICTMS and DTS functionalities;
- ✓ Enhancement of the “create-user-account” feature and capable of disabling them when employee is no longer connected in the office;
- ✓ Enhancement of the password reset tool to be managed by the end user requester via email;

- ✓ Capable of notifying the administrator thru email for every new request for change password;
- ✓ Organized/uncluttered and customized dashboard;
- ✓ A profile upload feature;
- ✓ Activation / Deactivation of access for users; and
- ✓ Well-defined Type of accounts and access levels approved by the Commission.

## 2.2. Records Management

- ✓ Existing ICTMS and DTS functionalities;
- ✓ Barcoding (required) and/or QR Coding (addons) of documents;
- ✓ Capable to create barcode in a “pdf file”;
- ✓ Uploading of scanned documents viewable in the system (uploaded documents must be **encrypted** both in the database and on-premises and/or cloud storage);
- ✓ Compliant with ERC’s Case Categories (*see attached Annex B: Case Categories*);
- ✓ Capable of archiving documents based on the retention period set by the ERC. It must have an advanced record retention and disposition that can manage and organize the active and inactive files;
- ✓ Automatic conversion of uploaded documents into “pdf files” with footer for downloaded files and printouts. It should also be capable of attaching ERC logo watermark on the document’s computer image and downloaded files;
- ✓ A document tracking/history which efficiently track the movements and activities of the users (e.g. documents accessed, downloaded or printed) as well as the electronic documents (e.g. last accessed by whom, retrieved on what date and time, among others);
- ✓ Enhancement of the private repository feature where only permitted user/s and group/s can view and edit a record; and
- ✓ Capable of uploading single or bulk scanned documents including succeeding related documents to a particular case file;

- ✓ Capable of providing unique classification (indexing) through the document metadata or indexes extracted from the documents' contents;
- ✓ Capable of encoding and/or editing the details of the documents uploaded;
- ✓ Capable of linking documents;
- ✓ Capable of furnishing documents to concerned services and has option to acknowledge receipt of the documents; and
- ✓ Automatic generation of acknowledgement reply (use Secure SMTP Port).

### 2.3. Search and Retrieval Management

- ✓ Existing ICTMS and DTS functionalities
- ✓ Capable of searching, filtering, and sorting the data based on the following pre-identified information:
  - i. Barcode;
  - ii. Case Number;
  - iii. Case Title;
  - iv. Handling Staff;
    - a. Technical
    - b. Legal
  - v. Applicants;
  - vi. Firm Name;
  - vii. Address of Applicants;
  - viii. Date Filed;
  - ix. Subject Matter;
    - x. Nature of the Case;
    - xi. Case Status
  - xii. Date of Pleadings Filed;
  - xiii. Date of Order/Decision issued by the Commission;
  - xiv. Document Type;
  - xv. Date Promulgated;
  - xvi. Dispositive Part of the Order/Decision;
  - xvii. Manner of Service;
  - xviii. Registry Receipt No;
  - xix. Date of Mailing; and
  - xx. Other categories which the ERC may later on identify;
- ✓ Capable of viewing document/s uploaded retrievable using customizable filter options (e.g.

- recent uploads, specific period, particular month, among others);
- ✓ Capable of retrieving and printing scanned documents per category (with history of all transaction/processes performed by a particular user);
  - ✓ Enhancement of the basic and advance search and retrieval templates;
  - ✓ Optimal search capability (i.e. can search any documents seamlessly using keywords whether in scanned images, PDF or rich text documents.

#### 2.4. Reports Management

- ✓ The system must develop an Executive Dashboard, Operational reports, and Analytics.
- ✓ Provision for Alerts and Self-Service BI (Business Intelligence)
- ✓ Capable of generating customizable real-time reports according to the needs of the concerned end user;
- ✓ Capable of counting the number of uploaded documents (i.e. weekly, monthly, yearly);
- ✓ Capable of displaying the accumulated storage and total available storage capacity;
- ✓ Capable of generating a database of the information encoded in the system and downloadable as excel, word or pdf file;
- ✓ Capable of summarizing the history of all the transactions/processes performed by a particular user;
- ✓ Capable of monitoring the status of all case records, letters and other correspondences in real time;
- ✓ Capable of uploading and posting documents to the ERC Website upon a click of a button;
- ✓ Capable of generating transmittal sheets displaying the details of inbound, outbound, and case related documents;
- ✓ Capable of generating smart charts or data visualization; and

- ✓ Capable to set limitations in report generation based on Access Matrix List<sup>1</sup>.

## 2.5. Document Management with Calendar Scheduling and Notification

- ✓ Dynamic routing of documents;
- ✓ Capable to set up notifications and/or alerts;
- ✓ A centralized calendar with scheduling capability
- ✓ An email notification feature that will automatically notify the user of his/her pending actions (e.g. deadlines/deliverables); and
- ✓ Capable of viewing deadlines and hearing dates through the dashboard.

## 2.6. System, Database and Audit Management

- ✓ User interface of the web-based application must be responsive to different devices such as laptops, tablets and smartphones;
- ✓ Use of Frontend, Backend and Database software compatible on the existing ERC ICT infrastructure (software, hardware, firmware, and networks) of the agency;
- ✓ Use of latest development Framework;
- ✓ Two Factor Authentications or use of one-time pin (OTP);
- ✓ Application Programming Interface (API) integration to all existing ERC internal and external Information Systems (e.g. EVOSS);
- ✓ Development of the database must include Extract – Transform - Load (ETL) Process, Database Diagrams and utilize the best practice in the industry;
- ✓ The system should have a Document Version Control – It provide check-in/check-out facility that prevent the documents from being overwritten or deleted. The documents can be updated by any user who has permission to update;
- ✓ All activities must be reflected in transaction logs:

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<sup>1</sup> Access Matrix List is a table that defines access permissions between specific subjects and functions of the application.



- i. Activity logs (Copy, Delete, Extract, Archive);
- ii. User utilization logs (login and logout of users);
- iii. System Utilization logs;
- ✓ A policy for brute force attacks, viz:
  - iv. Accounts with three (3) failed login attempts should automatically locked the account;
  - v. Reset password feature automatically sent to registered email;
  - vi. Idle time of five (5) minutes should automatically log-out the system. Said idle time can be set by the IT Admin;
  - vii. Security and access limitations; and
- ✓ The system must be dynamic and modular that could easily adopt to any process changes approved by the Commission.

## 2.7. Other Features

- ✓ The system should have the following basic fields:
  - i. Docketed Case Documents  
Case Number, Case Title, Applicants/Respondents, Date Filed, Counsel of Applicants/Respondents, Address of Applicants/Counsel, Case Category, Type of Succeeding Document, Assigned Service, Handling Officer, Date of Order/Decision, Date of Promulgation, Type of Document, Copy Furnished, Subject Matter, Manner of Service, Date of Mailing, Status of the Case and Age of Document and other fields as may be necessary
  - ii. Letters/Correspondences  
Barcode Number, Sender, Address of Sender, Date of Document, Date Received, Subject Matter, Manner of Service, Date of Mailing and other fields as may be necessary
- ✓ Capable of customizing the dates for setting the deadlines of the compliances and notify the concerned user thereof through a “reminder”;

- ✓ Dashboard must be capable of monitoring the number of incoming and outgoing documents (per month and per year) and generate reports thereof; and
- ✓ Compatible to all ERC hardware/equipment.

### **3. ERC EIS development Modular Features:**

- a. Office of the General Counsel and Secretariat (OGCS) Information Systems Module;
  - 1. Mandatory Requirements
    - 1.1. In accordance with the End-to-End process of ERC Filing of Applications (*see attached **Annex C: Process Flow Chart of Filing of Applications***)
- b. Office of the Chairperson and Commission Members (OCCM) Information Systems Module;
  - 1. Mandatory Requirements
    - 1.2. Receiving of incoming documents
    - 1.3. Assigning of documents
    - 1.4. Barcoding, uploading, and encoding of documents
    - 1.5. Updating of document status and/or details
    - 1.6. Compliant with OCCM's Document Categories (*see attached **Annex D: OCCM Document Categories***)
- c. Office of the Executive Director (OED) Module
  - 1. Mandatory Requirements
    - 1.1. Receiving of incoming documents
    - 1.2. Assigning of documents
    - 1.3. Updating of document status and/or details
    - 1.4. Document Version Control
- d. Regulatory Operations Service Information Systems (ROS Portal) Module
  - 1. Mandatory Requirements
    - 1.1. Receiving of incoming documents
    - 1.2. Assigning of documents
    - 1.3. Updating of document status and/or details
    - 1.4. Document Version Control
  - 2. Additional Process Integration (considering the Filing of Application or preparatory for Phase 2)

- 2.1. Online/Web Uniform Reportorial Requirement (URR) System
  - 2.2. Power Supply Agreement (PSA) – This is part of RMS
  - 2.3. Capital Expenditure (CAPEX)
  - 2.4. Performance Based Regulation (PBR)
  - 2.5. Supervision and Regulatory Fee System (SRFS)
  - 2.6. Grid Reliability Monitoring System (GRMS)
  - 2.7. Integration to the Billing and Revenue System
- e. Market Operations Service Information Systems (MOS Portal) Module
1. Mandatory Requirements
    - 1.1. Receiving of incoming documents
    - 1.2. Assigning of documents
    - 1.3. Updating of document status and/or details
    - 1.4. Document Version Control
  2. Additional Process Integration (considering the Filing of Application or preparatory for Phase 2)
    - 2.1. Certificate of Compliance (COC)
    - 2.2. Market Monitoring (MM) or PE@MOS
    - 2.3. Green Energy Option Program (GEOP) Monitoring System
    - 2.4. Integration to the Billing and Revenue System
- f. Consumer Affairs Service Information Systems (CAS Portal) Module
1. Mandatory Requirements
    - 1.1. Receiving of incoming documents
    - 1.2. Assigning of documents
    - 1.3. Updating of document status and/or details
    - 1.4. Document Version Control
  2. Additional Process Integration (considering the Filing of Application or preparatory for Phase 2)
    - 2.1. Consumer Complaint (CC) Processing and Management
    - 2.2. Letter Complaint (LC) Processing and Management
    - 2.3. Meter Division Appointment System (MDAS)
    - 2.4. Integration to the Billing and Revenue System
- g. Legal Service (LS) Information System Module
1. Mandatory Requirements
    - 1.1. Receiving of incoming documents

- 1.2. Assigning of documents
  - 1.3. Updating of document status and/or details
  - 1.4. Document Version Control
- h. Planning and Public Information Service (PPIS) Module
1. Mandatory Requirements
    - 1.1. Receiving of incoming documents
    - 1.2. Assigning of documents
    - 1.3. Updating of document status and/or details
    - 1.4. Document Version Control
  2. Additional Process Integration (considering the Filing of Application or preparatory for Phase 2)
    - 2.1. E-Government Services Database Connection
      - i. ERC Website Enhancement
      - ii. BYE Website Enhancement
      - iii. Online Payment – this is part of BRS
      - iv. Virtual Hearing and Teleconferencing / Audio & Video System Teleconferencing
      - v. EVOSS API integration
      - vi. Integration to the Billing and Revenue System
- i. Finance and Administrative Service (FAS) Module
1. Mandatory Requirements
    - 1.1. Receiving of incoming documents
    - 1.2. Assigning of documents
    - 1.3. Updating of document status and/or details
    - 1.4. Document Version Control
  2. Additional Process Integration (considering the Filing of Application or preparatory for Phase 2)
    - 2.1. Administrative & Support Systems
      - i. Billing and Revenue System (BRS)
      - ii. Inventory Management System (IMS)
      - iii. Human Resources Information System (HRIS)
      - iv. Strategic Performance Management System (SPMS)
      - v. Procurement Management System
- j. Other Ad Hoc Team or Division Module
1. Mandatory Requirements
    - 1.1. Receiving of incoming documents
    - 1.2. Assigning of documents

- 1.3. Updating of document status and/or details
- 1.4. Document Version Control
2. Additional Process Integration (considering the Filing of Application or preparatory for Phase 2)
  - 2.1. Audit Information System for Internal Audit Division (IAD)
  - 2.2. Bids and Awards Committee Procurement System (BAC-PS) – this is part of SCMS
  - 2.3. Integration to the Billing and Revenue System

**Note:** *Development platform to be used must be compatible with ERC's existing Microsoft Infrastructure, (e.g., Microsoft Power Automate, Dynamics, SPS, Visual Studio, combination of technologies, etc.), Database and Application Servers.*

#### **4. Technical Manuals, Documentations and Trainings:**

- a. Functional Specification Design;
- b. Timelines of Development, Deployment, and Implementation based on Section 6 (Scope of Work) of this document;
- c. System's Technical Manual (Design) including source codes;
- d. User manual for web apps and smart device apps; and
- e. User and admin trainings.

#### **Summary of Deliverables:**

- Functional Specification Design;
- Hyperconverged Infrastructure;
- Timelines of Development, Deployment, and Implementation based on Section 6 (Scope of Work) of this document;
- Approved ERC EIS (Phase 1);
- System's Technical Manual (Source Codes, Design & Development);
- User manual for web apps and smart device apps;
- Five (5) working days trainer's training (for system user);
- Two (2) working days extensive technical training;
- Optional Hybrid Setup (Primary – On Premise and Backup – Infrastructure as a Service on Cloud)
- One (1) year warranty of ERC EIS (Phase 1) on system maintenance, software updates, and technical support including minor bug fixes;

- At least one (1) year warranty on repair and maintenance, software license subscription and upgrade, and technical support service of the Hyperconverged Infrastructure as provided in **Annex A**; and

Criteria	Description
1.1. System Maintenance and Support	Provide 9 (hours) X 5 (days) technical support on the problems reported by ERC based on the prescribed time frames
1.2. Software updates, maintenance releases and patches	Provide software updates, maintenance releases and patches within thirty (30) calendar days after product distribution in the market for the duration of the contract at no additional cost to the ERC.

- Must comply with imposed health protocols. Service providers must have a valid swab test result issued within three (3) days before proceeding onsite and must fill up a health declaration form before entering the ERC premises. Wearing of face masks and face shields are a must. Those who have COVID-19 symptoms shall be refused entry.

## **VII. CONFIDENTIALITY OF DATA**

1. The Contractor shall document detailed procedures/techniques in identifying systems security risks and breach(es) and how such shall be handled.
2. All project staff of Contractor shall be required to sign a non-disclosure agreement upon mobilization of the project.
3. The ERC EIS development (Phase 1), its components, parts and all products, product samples and specifications, data, ideas, technology, and technical and non-technical materials, all or any of which may be derived from any of the foregoing (all of which, individually and collectively, referred to as "Proprietary Information") are confidential and proprietary to the Energy Regulatory Commission.
4. The Contractor agrees to hold the Proprietary Information in strict confidence. The Contractor furthermore agrees not to reproduce, transcribe, or disclose the Proprietary

Information to third parties without prior written approval of the Energy Regulatory Commission.

5. To ensure the confidentiality of all information that will come to the knowledge of the Contractor and its employees detailed with the ERC, the Contractor and its employees assigned therein shall be considered agents of the ERC. The contract that will be executed heretofore shall categorically provide that the Contractor and its employees, as agents of the ERC, shall uphold strict confidentiality of any information regarding all cases handled by the ERC.

## **VIII. TERMS OF PAYMENT**

1. 15% of the contract price representing mobilization payment shall be released within fifteen (15) calendar days from receipt by the winning bidder of the Notice to Proceed (NTP);
2. 20% of the contract price shall be released upon delivery and acceptance of the provided Functional Specification Design, detailed timelines of Supply, Development, Deployment, and Implementation as stated in Section 6 (Scope of Work);
3. 25% of the contract price shall be released upon delivery and acceptance of the Hyperconverged Infrastructure with respect to Section 2 (Delivery and Contract Period);
4. 25% of the contract price shall be released upon delivery and acceptance of the approved ERC EIS development (Phase 1); and
5. 15% of the contract price remaining shall be released upon 100% completion of the project including provision of Manuals, User Acceptance Test (UAT) and deployment (Go Live).

The ERC has the right to terminate / cancel the project with or without notice even while in the middle of the project when observe that the Contractor cannot deliver and fully utilize the capability and features of the existing infrastructure of ERC.

## **IX. LIQUIDATED DAMAGES**

1. Where the Software Vendor refuses or fails to satisfactorily complete the work within the specified contract time, plus any extension time duly granted and is hereby in default under the contract, the Software Vendor shall pay ERC for liquidated damages, and not by way of penalty, an amount, as provided in the conditions of the contract, equal to one tenth (1/10) of one percent (1%) of the cost of the unperformed portion for every day of delay. The maximum deduction shall be ten percent (10%) of the amount of the contract, of which ERC may rescind or terminate the contract, without prejudice to other courses of action and remedies available under the circumstances such as but not limited to forfeiture of performance security and/or blacklisting of the latter.
2. For entitlement to such liquidated damages, ERC need not prove the damages actually incurred. Said damages in any amount shall be deducted from any money due or which may become due the Software Vendor under the Contract and/or collect such liquidated damages from the retention money or other securities posted by the Software Vendor at ERC's convenience.

## **X. RESERVATION CLAUSE**

The ERC reserves the right to accept or reject any quotation, to annul the procurement process, and to reject all quotations at any time without thereby incurring any liability to the affected supplier/s.