

#### **DEPARTMENT OF ENERGY**

(Kagawaran ng Enerhiya)

Procurement Management Division

3F DOE Main Bldg., Energy Center, Rizal Drive Bonifacio Global City, Taguig City, Philippines 1632 Telephone No.: (02) 3479-2900 local 383 Facsimile: (02) 8541-4105

Email address:

#### **BIDDING DOCUMENTS**

## 24<sup>TH</sup> PB CY 2024 – PROCUREMENT OF DEVELOPMENT OF THE ENERGY DISASTER INFORMATION AND MANAGEMENT SYSTEM (EDIMS) FOR CY2024

(Purchase Request No. 05-0101-2024-07-0339)

6<sup>th</sup> Edition July 2020

## Section I. Invitation to Bid



## PROCUREMENT OF DEVELOPMENT OF THE ENERGY DISASTER INFORMATION AND MANAGEMENT SYSTEM (EDIMS) FOR CY2024

- The Department of Energy (DOE) is undertaking Procurement of Development of the Energy Disaster Information and Management System (EDIMS) for CY 2024 and intends to apply the sum of Php10,000,000.00 that will be sourced from the FY 2024 GAA, being the Approved Budget for the Contract (ABC) to payments for the contract under Purchase Request No. 05-0101-2024-07-0339. Bids received in excess of the ABC shall be automatically rejected at bid opening.
- 2. The DOE now invites bids for Procurement of Development of the Energy Disaster Information and Management System (EDIMS) for CY 2024. Delivery of the Goods and Services is One Hundred Eighty (180) Calendar Days upon receipt of Notice to Proceed. Bidders should have completed, within two (2) years from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II. Instructions to Bidders.
- 3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184, otherwise known as the "Government Procurement Reform Act".
  - Bidding is open to all interested bidders, whether local or foreign, subject to the conditions for eligibility provided in the 2016 revised IRR of RA No. 9184.
- 4. The DOE is implementing an Alternative Work Arrangement setting the office working days of DOE is from Mondays to Thursdays and interested bidders may obtain further information from Department of Energy Procurement Management Division and inspect the Bidding Documents at the address given below during office hours from Mondays to Thursdays 8:00am to 4:00pm.

Procurement Management Division Department of Energy DOE Main Building, Energy Center, Rizal Drive, Bonifacio Global City Taguig City, Philippines 1632

The DOE is implementing its digital Order of Payment System. Bidders are advised to:

1. Call the Procurement Management Division at 84792900 local 383 or send email to <a href="mailto:jlabad@doe.gov.ph">jlabad@doe.gov.ph</a>, <a href="mailto:marcuevas@doe.gov.ph">marcuevas@doe.gov.ph</a> a day before their payment, with the following information:

- a. Company Name
- b. Title of Item to Bid
- c. Contact Person
- d. Contact Number
- e. At least two (2) official email addresses
- 2. The supplier should respond "Yes" to the email that will be sent by DOE regarding the payment.
- 3. The Supplier will receive from DOE Accounting an approved Order of Payment.
- 4. The Supplier should present the approved Order of Payment to the DOE Treasury during payment and provide copy to Procurement Management Division or upon submission of Bid.
- 5. In case of Bank Payment the Supplier shall ensure that the amount paid is as reflected in the Order of Payment and sent a copy of the Bank Deposit Slip together with the approved Order of Payment to the email address above or upon submission of Bid

The DOE also accepts payment for the bid documents through bank payment (Landbank of the Philippines), the amount to be paid thru Bank payment should be exclusive of bank and other charges:

Payment for : Bidding Documents for [Item to be Bidded]

Payee Account Name: DOE Trust Fund Account Number: 0052-1155-58
Swift Code: TLBPPHMM

Beneficiary Address: Department of Energy, Energy Center, BGC,

**Taguig City** 

Copy of the payment receipt must be emailed to:

#### Jaymee Joy A. Deogracias:

bacsecretariat@doe.gov.ph or jdeogracias@doe.gov.ph

5. For pre-bid conference purposes, the bid documents may be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Procuring Entity. The bidder shall pay the Bidding Documents not later than the submission of their bids.

Bidders are encouraged to download a copy of the Bid Documents for pre-bid conference purposes instead of physically securing a hard copy at the DOE-BAC Secretariat office.

6. A complete set of Bidding Documents may be acquired by interested Bidders on **17 October 2024** from the address below and upon payment of the applicable fee

for the Bidding Documents, pursuant to Section 5 of Appendix 8 of the 2016 IRR of RA 9184 in the amount of **Php10,000.00**.

The Department of Energy will hold a Pre-Bid Conference on **24 October 2024** which **will start at 08:00 AM** at the DOE – **Audio Visual Room** DOE BAC Main Office.

7. Bids must be duly received by the BAC through manual submission at the office address indicated below on or before 08:00 AM of 07 November 2024 or submission could be made through courier service provided it will be stamped-received by the DOE Records Management Division or the BAC Secretariat on or 08:00 AM of 07 November 2024. Online submission is not yet available. Late bids shall not be accepted.

Annex Lobby
Procurement Management Division
Department of Energy
DOE Main Building, Energy Center,
Rizal Drive, Bonifacio Global City
Taguig City, Philippines 1632

- 8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.
- 9. Bid opening shall be on **07 November 2024** at **09:00AM**, DOE Audio Visual Room, DOE-Main Building. The bidder's authorized representative, as stated in the bid submission, is required to attend the Bid Opening at the DOE AVR. Bids will be opened in the presence of the bidders' representatives.

Department of Energy DOE Main Building, Energy Center, Rizal Drive, Bonifacio Global City Taguig City, Philippines 1632

10. To minimize errors in the preparation of bids, bidders are strongly enjoined to send the person or representative actually preparing their bids to attend/participate in the Pre-bid Conference. The bidders' representative shall carefully consider all the discussions during the Pre-bid Conference and be guided by them in the preparation of bids.

Official communication or notification shall be sent through the official email provided by the suppliers and are considered official and duly received by the supplier even without confirmation of such receipt.

11. The **Department of Energy** reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.

#### 12. For further information, please refer to:

#### Jaymee Joy A. Deogracias

Procurement Management Division DOE Main Bldg., Energy Center, Rizal Drive Bonifacio Global City, Taguig City, Philippines 1632

Email address: bacsecretariat@doe.gov.ph

Telephone/Facsimile: (02) 3479-2900 local 383 (02) 8541-4105

Website: www.doe.gov.ph

(sgd)

Usec. Giovanni Carlo J. Bacordo
Chairperson
Bids and Awards Committee

#### Section II. Instructions to Bidders

#### 1. Scope of Bid

The Procuring Entity, Department of Energy wishes to receive Bids for the Procurement of Development of the Energy Disaster Information and Management System (EDIMS) for CY 2024 under Purchase Request No. 05-0101-2024-07-0339.

#### 2. Funding Information

2.1. The GOP through the source of funding from GAA for **FY2024**, in the amount of **Php10,000,000.00** 

#### 3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manuals and associated policies, rules, and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or **IB** by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have verified and accepted the general requirements of this Project, including other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

#### 4. Corrupt, Fraudulent, Collusive, and Coercive Practices

The Procuring Entity, as well as the Bidders and Suppliers, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex "I" of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

#### 5. Eligible Bidders

- 5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.
- 5.2. Foreign ownership limited to those allowed under the rules may participate in this Project.
- 5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder shall have an SLCC that is at least one (1) contract similar to the

Project the value of which, adjusted to current prices using the PSA's CPI, must be at least equivalent to at least fifty percent (50%) of the ABC.

5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

#### 6. Origin of Goods

There is no restriction on the origin of goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN, subject to Domestic Preference requirements under **ITB** Clause 18.

#### 7. Subcontracts

7.1. The Procuring Entity has prescribed that: **Subcontracting is not allowed.** 

#### 8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address and/or through videoconferencing as indicated in paragraph 6 of the **IB**.

#### 9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

#### 10. Documents comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in Section VIII (Checklist of Technical and Financial Documents).
- 10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed **within two (2) years** prior to the deadline for the submission and receipt of bids.
- 10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

#### 11. Documents comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.
- 11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.
- 11.3. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.4. For Foreign-funded Procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

#### 12. Bid Prices

- 12.1. Prices indicated on the Price Schedule is inclusive of all Value added tax and all other applicable taxes and charges and shall be entered separately in the following manner:
  - a. For Goods offered from within the Procuring Entity's country:
    - i. The price of the Goods quoted EXW (ex-works, ex-factory, exwarehouse, ex-showroom, or off-the-shelf, as applicable);
    - ii. The cost of all customs duties and sales and other taxes already paid or payable;
    - iii. The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
    - iv. The price of other (incidental) services, if any, listed in e.

#### b. For Goods offered from abroad:

- i. Unless otherwise stated in the BDS, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the BDS. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.
- ii. The price of other (incidental) services, if any, as listed in **Section VII (Technical Specifications).**

#### 13. Bid and Payment Currencies

13.1. For Goods that the Bidder will supply from outside the Philippines, the bid prices may be quoted in the local currency or tradeable currency accepted

by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies, shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.

13.2. Payment of the contract price shall be made in: Philippine Pesos

#### 14. Bid Security

- 14.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 14.2. The Bid and bid security shall be valid **until 07 March 2025.** Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

#### 15. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

#### 16. Deadline for Submission of Bids

16.1. The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the IB.

#### 17. Opening and Preliminary Examination of Bids

17.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

17.2. The preliminary examination of bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

#### 18. Domestic Preference

18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.

#### 19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring BAC shall immediately conduct a detailed evaluation of all Bids rated "passed," using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of the 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **ITB**Clause 14 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII** (**Technical Specifications**), although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. The Project shall be awarded as One (1) Project having several items that shall be awarded as one contract.
- 19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

#### 20. Post-Qualification

20.2. Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS) and other appropriate licenses and permits required by law and stated in the **BDS**.

## 21. Signing of the Contract

21.1. The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.

## Section III. Bid Data Sheet

#### **Bid Data Sheet**

ITD	
ITB	
Clause	
5.3	For this purpose, contracts similar to the Project shall be:
	Similar contract related to disaster information and management system
	<ul> <li>b. Completed within two (2) years prior to the deadline for the submission and receipt of bids</li> </ul>
7.1	Subcontracting is not allowed
10.1	Brochures of products being offered is part of the submission for post qualification
12	The price of the Goods shall be quoted DDP – <b>Department of Energy</b> or the applicable International Commercial Terms (INCOTERMS) for this Project.
14.1	The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:
	<ul> <li>Not less than Php200,000.00 if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or</li> </ul>
	b. Not less than <b>Php500,000.00</b> if bid security is in Surety Bond.
15.	Each Bidder shall submit <b>one (1) original</b> and <b>two (2) copies</b> of the first and second components of its bid.
20.2	No further Instructions

## Section IV. General Conditions of Contract

#### 1. Scope of Contract

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

Additional requirements for the completion of this Contract shall be provided in the **Special Conditions of Contract (SCC).** 

#### 2. Advance Payment and Terms of Payment

- 2.1. Advance payment of the contract amount is provided under Annex "D" of the revised 2016 IRR of RA No. 9184.
- 2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.

#### 3. Performance Security

Within ten (10) calendar days from receipt of the Notice of Award by the Bidder from the Procuring Entity but in no case later than prior to the signing of the Contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR of RA No. 9184

#### 4. Inspection and Tests

The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project specifications at no extra cost to the Procuring Entity in accordance with the Generic Procurement Manual. In addition to tests in the **SCC**, **Section IV** (**Technical Specifications**) shall specify what inspections and/or tests the Procuring Entity requires, and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

All reasonable facilities and assistance for the inspection and testing of Goods, including access to drawings and production data, shall be provided by the Supplier to the authorized inspectors at no charge to the Procuring Entity.

#### 5. Warranty

- 5.1 In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.
- 5.2 The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

#### 6. Liability of the Supplier

The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Supplier is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

# Section V. Special Conditions of Contract

## **Special Conditions of Contract**

GCC Claus e	
1	Delivery and Documents –
	For purposes of the Contract, "EXW," "FOB," "FCA," "CIF," "CIP," "DDP" and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows:
	"The delivery terms applicable to the Contract are DDP delivered Department of Energy, Taguig City. In accordance with INCOTERMS."
	"The delivery terms applicable to this Contract are Department of Energy, Taguig City. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination."
	Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements).
	For purposes of this Clause the Procuring Entity's Representative at the Project Site is: Mr. Danilo V. Vivar – Chief, EPPB-PFRD
	Delivery and Documents
	For purposes of the Contract, "EXW," "FOB," "FCA," "CIF," "CIP," "DDP" and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows:
	The delivery terms applicable to this Contract are delivered at DOE Main Office. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination."
	Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements).
	Packaging
	The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit,

and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.

#### **Transportation**

Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.

Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price.

Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available, but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure.

The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers, risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination.

#### Intellectual Property Rights -

The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.

2.2 The terms of payment shall be as follows:

## **PAYMENT SCHEDULE**

The SP shall be paid according to the following schedule:

NO.	SCOPE OF WORK	DELIVERABLES		PAYMENT SCHEDUL E (% OF THE CONTRAC T PRICE)
		ACTIVITIES	DOCUMENTARY REQUIREMENTS	
1.	Project Kick- off, Inception Meeting, and Submission of Inception Report	<ul> <li>Conduct and facilitation of Inception Meeting</li> <li>Submission of Inception Report</li> <li>Project Proposal Acceptance by the End-User</li> </ul>	Certificate of Acceptance for the following items: Approved Inception Report Approved Project Proposal	10%
2.	Formulation and Documentation of Software Requirements and Design Specifications (SRDS)	Conduct and facilitation of Requirement Elicitation Workshop, User Experience (UX) Workshop     Submission of SRDS Document	Certificate of     Acceptance for     the following     items:     Approved     Software     Requirement and     Design     Specifications     (SRDS) Document     Approved     database designs     Approved Network     Topology     Approved     Storyboard     Approved UX     Workshop     Document     including mockups     and prototypes	25%

3.	System Development	<ul> <li>Completion of Development (Annex B – Expected Outputs and Features)</li> <li>Installation and conduct of a series of testing for EDIMS:         <ul> <li>Alpha Testing</li> <li>Regression Testing</li> <li>Load Testing</li> <li>Stress Testing</li> </ul> </li> </ul>	Certification of Acceptance by the End- User	45%
4.	System	Performance     Testing		20%
	Delivery and Adoption			
4a	Delivery, Installation, Testing, and Deployment	Installation and conduct of a series of testing for EDIMS: Beta Testing VAPT PIA	Certificate of Acceptance for the following items: User Acceptance Testing (UAT) Scripts Approved UAT documents Go Live Acceptance Certificate VAPT Report PIA Report PIA Report Software Licenses (certificates or their equivalent)  Cloud subscriptio n (certificate or its equivalent)	
4b	User Training	Conduct User     Training for     the enhanced     and     developed     systems     (Free of     Charge)	Certificate of     Acceptance for     the following     items:     Training     Certificates     Training Modules	

No.		etention of 5% of the	<ul> <li>Project         Completion         Acknowledgeme         nt Form</li> <li>Certificate of         Acceptance for         the following         items:         User Manual         Operation and         Technical         Manuals         Technical         Documentations         (Source codes,         API Specifications,         Database         Documentation,         server/ database/         account         credentials, Data         Dictionaries,         Database Setup         and Maintenance,         Entity Relationship         Diagram,         Deployment         Manual, and         Helpdesk Support         Escalation         Process)         AVP materials         Minutes of         meetings         Terminal Report</li> </ul>	
4 Ins	spection and Tests:	As stated in the TC	DR/Specifications	
5.1 No	further instructions	S		

## Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Lot No.	Item	Delivery
1	Procurement of Development of the Energy Disaster Information and Management System (EDIMS) for CY 2024 for CY 2024	One Hundred Eighty (180) Calendar Days upon receipt of Notice to Proceed

## Section VII. Technical Specifications/ Terms of Reference

#### TERMS OF REFERENCE

Bidder's Compliance

Development of Energy Disaster Information and Management System (EDIMS)

Approved Budget for the Contract: PhP 10,000,000.00

#### 1. BACKGROUND

The Task Force on Energy Resiliency (TFER) is empowered with coordination, integration, supervision, monitoring, and evaluation functions related to Energy Resiliency. To improve the responsiveness and relevance of TFER on Disaster Risk Response and Management and pursuant to Section 7.1.2 of DC2022-06-0028, the TFER is mandated to conduct vulnerability and risk assessment of energy systems and to develop a harmonized exposure map, risk information 2and other geospatial information of energy facilities for the planning process needs of the energy sector. In addition, section 7.1.11 mandates TFER to develop a harmonized disaster reporting tool and protocol for ease and timely reporting of critical and relevant information during and after disaster events.

During disasters, situation reports are prepared by consolidating individual reports from different energy sectors submitted through Viber or email. However, the current system does not allow for quick analysis and visualization of data or the creation of dashboards with disaster-related information and statistics of energy facilities. To address these challenges, the TFER is developing the Energy Disaster Information and Management System (EDIMS). EDIMS is an online platform that will have a centralized, comprehensive, and unified database of energy infrastructures from the power generation, transmission, distribution, as well as the oil and gas sectors. This platform can be used for monitoring and generating situation reports before, during, and after disasters or emergencies. Additionally, EDIMS will feature the integration of hazard exposure maps of energy facilities. These maps can be used for vulnerability, risk

assessment, and contingency planning. Ultimately, EDIMS will be the online platform of the Energy Sector Emergency Operations Center (ESEOC). This system is included in the DOE Information Systems Strategic Plan (ISSP) CY2024- 2025.

Hence, this document provides the Terms of Reference (TOR) in the development of EDIMS. The Service Provider (SP) shall refer to this document in the performance of its responsibilities relative to EDIMS.

This document will also help the prospective SPs during the procurement process. Some elements of this document will need to be elaborated in detail after awarding to the SP to align and fit with the corresponding business process requirements, which will require agreement on the scope of work and platform to be used.

#### 2. OBJECTIVES

The objective of this project is to establish and operationalize EDIMS to meet the needs of the DOE and its stakeholders. The specific objectives are as follows:

- 2.1 System and Database Design: To create a well-organized and efficient structure for a web- based energy disaster information and management system, ensuring it meets specified requirements. The design should include a comprehensive architecture with well-defined components, modules, interfaces, and data organization, focusing on features and functionalities that ensure expandability, maintainability, and performance for optimal functionality and future growth;
- 2.2 System and Database Development: To develop a database on energy disaster-related information and statistics that aligns with the Department's goals and objectives, ensuring that it is user-friendly, efficient, and adaptable to evolving needs;
- 2.3 ICT and Database Integration: To ensure the seamless installation and integration of the system with existing disaster information and management systems to include thematic and GIS maps through direct database connection or API, as well as other ICT systems within and outside DOE, the system must have an API for interoperability and data sharing with other stakeholders, ensuring that data can be easily shared and

analyzed across platforms;

- 2.4 Data/Report Processing, Generation, and Monitoring: EDIMS can receive submissions from various stakeholders through templated reports or Data Capture Forms. The data/reports are stored in a database, processed through data analytics, generate comprehensive reports (such as situation reports), and have generated user-friendly dashboards. Data/reports submitted can be edited and have role-based access controls. It includes a monitoring capability for stakeholders and end-users on the status of submissions through a dashboard that is presented in an easy-to-understand manner. The submissions and editing have alerting systems linked to account user emails.
- 2.5 **Geographic Mapping and Analytic Dashboard:** User-friendly interface and geographic mapping analytical dashboard with interactive data mashup for quick and effective analysis which generates charts, graphs, tables, and other visualizations.
- 2.6 User Management and Data Security: EDIMS provides processed energy data to authorized DOE and stakeholders, through role-based access control (RBAC) or role-based security, allowing them to access energy-related information faster, easier, and in a more convenient manner. The processed data shall comply with appropriate security safeguards to protect personal data against unauthorized access, disclosure, alteration, or destruction, as required by the Data Privacy Act and other applicable laws, rules, and regulations. This includes but is not limited to encryption, access controls, and pseudonymization to mitigate risks to data security.
- 2.7 **User-friendly Data Visualization Tools:** The platform will feature user-friendly tools for visualizing EDIMS data enhancing accessibility and interpretation.
- 2.8 **Training:** To conduct comprehensive training to administrators and end-users on the operation and maintenance of the system, as well as provide awareness of its purpose and significance, ensuring that all stakeholders are equipped with the necessary skills and knowledge to effectively utilize the system;

2.9 **Continuous Improvement:** To facilitate continuous improvement of EDIMS, incorporating feedback from stakeholders and leveraging new technologies and best practices to enhance its functionality and effectiveness.

#### 3. SCOPE OF WORK

The SP, being knowledgeable in information systems design and development, is required to provide services for the design and development of EDIMS, which contains the following Scope of Work:

# 3.1 PROJECT KICK-OFF, INCEPTION MEETING AND SUBMISSION OF INCEPTION REPORT (See Annex A – Report Guidelines)

- 3.1.1 The SP shall conduct an Inception Meeting with the enduser to discuss and coordinate the specific requirements for EDIMS.
- 3.1.2 The SP shall formulate an Inception Report, which shall be approved by the end-user.

# 3.2 FORMULATION AND DOCUMENTATION OF SOFTWARE REQUIREMENTS AND DESIGN SPECIFICATIONS (SRDS)

- 3.2.1 The SP shall design and produce accurate mock-up models of the system and design of the database before proceeding to ensure accurate and timely project execution.
- 3.2.2 The SP shall conduct and facilitate workshops (e.g., Requirement Elicitation Workshop, User Experience Workshop, among others) and meetings for EDIMS based on the requirements stated in the Expected Features and Output / Scope of Work.
- 3.2.3 The SP shall submit a System Requirement and Design Specification Report (SRDS), which outlines the technical requirements and design specifications for EDIMS. The report should provide a comprehensive overview of the system's functional and non- functional requirements, as well as its architectural design and technical specifications.

#### 3.3 **SYSTEM DEVELOPMENT**

General System Components and Features (For Detailed Features, See Annex B – Specific System Components and Features)

3.3.1 Data Input and Import/upload and export/download of data or files Allow users to manually input data through templated reports or Data Capture Forms or upload files into the system and export or download files from the platform. This includes input of historical data, data for energy facilities database, submission of incident reports, and others. (Please see Annex C for the Data and Information Creation and Publication Mechanism)

#### 3.3.2 **Central Database Repository**

The system will serve as a central data warehouse housing an array of data and information on the energy sector as well as on hazards, disasters, national events, and other data that may be relevant to the energy sector and to the mapping and analytical features of the system. (Please see Annex D for Minimum Server and Software Specification Requirements)

#### 3.3.3 Search and Retrieval of Data

Employ semantic search functionality utilizing keywords within both document contents and metadata. Advanced filters will be used to refine search outcomes based on date, author, document type, and other relevant parameters. Utilization of ISO standard for digital geospatial metadata.

# 3.3.4 User Access and Permission (see Annex K for detailed information on User Groups)

Implement a mechanism that restricts system access based on roles or user groups. There will be different levels of permissions and privileges, which determine the data and system features that can be accessed. Access control will include authentication to prove the identity of the user logging in.

#### 3.3.5 **Data Analytics**

Capability to offer insightful analyses, both in descriptive and predictive formats, which can be presented through dashboards, comprehensive reports (such as situation reports), visually engaging infographics, or spatial representations on maps. These will provide summaries of information and insights into the status of energy facilities

during disasters and national events, as well as allow the stakeholders to easily access information on the vulnerability and risk assessment of facilities. The generated outputs should be readily available for download, ensuring accessibility for authorized users only. (*Please see Annex E for the Map/Dashboard Layers*)

#### 3.3.6 Alert and Notification System

Feature that provides a means of delivering a message to system users or designated recipients. The notifications will show activities related to an event, account, or person such as account creation, system updates or changes, or disaster-related events, among others. (*Please see Annex F for detailed Requirements*)

# 3.3.7 Application Programming Interface (API) with Other ICT Systems

The system must have API for interoperability and data sharing with other stakeholders. Through API, EDIMS will be able to access and display selected data from other ICT systems and vice-versa. (Please see Annex G for detailed Requirements)

#### 3.3.8 **Events**

Feature that allows the creation of automatic events based on disasters or manual events as created by the administrator for reportorial submissions. (Please see Annex H for Mechanisms for Auto-Triggered Events)

#### 3.3.9 Other User Interface (UI) Features

The interface provides the end-users a navigational platform to control the system. The SP must ensure that end-users find the interface intuitive and visually pleasing.

#### 3.3.10 Security and Compliance

As EDIMS will be the repository of sensitive data from stakeholders, the SP must ensure that data and accounts will be protected. A network topology to define the security features of EDIMS shall be developed. The developed system should be compliant to information security. After the development of the system, the SP shall issue a **Certificate of Completion**, which is subject to the approval and acceptance of the End-User. (*Please see Annex I for Data Privacy Requirements*)

The SP adheres to providing an enterprise-grade incident management tool for fully managed applications and

infrastructure-related incidents. This will be utilized as the main ticketing tool to monitor, and update reported incidents from the software solution provided. (Please see Annex J for the Incident Management Guidelines for Observed/Notified Application Issues)

#### 3.3.11 System Testing and Quality Assurance

Thorough testing is required to ensure all components and features work as intended. This includes User Acceptance Testing (UAT), Regression Testing, Load Testing, Stress Testing, Performance Testing, among others. The SP should provide test plans, cases, and reports, focusing on identifying and fixing issues before deployment.

#### 3.4 SYSTEM DELIVERY AND ADOPTION

#### 3.4.1 Delivery, Installation, Testing, and Deployment

Before turn-over, the system must undergo various tests and assessments with proper documentation to be submitted to the end-user.

#### 3.4.2 User Training

The SP shall provide various trainings for the end-user and other stakeholders. Training modules and certificates should also be provided to the end-user, free of charge.

#### 3.4.3 User Acceptance

The SP shall provide procedural manuals, instructional AVPs, and other documentations to the end-user. There will also be warranty support services for at least twelve (12) months.

#### 4. ROLES AND RESPONSIBILITIES

This section details the roles and responsibilities of the service provider team and the various user groups in the development and post-development stages of the system. The subsection on user groups and account holders defines the level of accessibility and role permissions for each user group.

#### 4.1 Service Provider Team:

- 4.1.1 Develop and deploy EDIMS in strict accordance with the specified requirements, ensuring a seamless and efficient launch.
- 4.1.2 Safeguard the system's integrity by ensuring robust security measures and scalability to accommodate potential growth and increased usage.
- 4.1.3 Implement a system that grants data access only to individuals authorized by the data provider, maintaining a secure and controlled data environment.
- 4.1.4 Provide technical support throughout the entire development and deployment phases, extending assistance post-deployment to address any potential issues or inquiries.
- 4.1.5 Collaborate with stakeholders to gather valuable feedback, fostering an iterative process that leads to necessary enhancements and improvements.
- 4.1.6 Provide regular and transparent progress reports to the End-User, detailing the ongoing development and deployment activities of the platform to ensure continuous communication and alignment with project objectives. This includes virtual or on-site meetings with the End-User at least once a week during the development period after the submission of the Inception Report.
- 4.1.7 Collaborate with concerned offices and teams on the drafting and subsequent issuance of a Non-disclosure Agreement (NDA), Memorandum of Agreement (MOA), Data Sharing Agreement (DSA), among others.
- 4.2 User Groups and Account Holders (See Annex K EDIMS User Groups and Facilities Accounts):
  - 4.2.1 The SP should create accounts for various user groups and facilities. There will be different levels of accessibility and role permissions depending on the user group.

- 4.2.2 In general, all EDIMS account holders shall adhere to the following:
  - Use data available on the platform responsibly, respecting privacy and adhering to the designated terms of use.
  - b. Contribute relevant data and updates in a timely manner to foster a dynamic and comprehensive platform.
  - c. Adhere to the guidelines and rules established by the platform to ensure uniformity and effective collaboration.
  - d. Take necessary precautions to maintain the security of their accounts, including safeguarding log-in credentials and promptly reporting any suspicious activities.
  - e. Participate in training sessions or orientations to maximize proficiency in using the platform and to stay informed about updates.
  - f. Maintain open communication with data providers, seeking clarification when needed.

#### 5. SP MINIMUM QUALIFICATIONS

- 5.1 The SP shall comply with the requirements specified in Section 54.5 (Performance and Warranty Security in accordance with Sections 39 and 62) & Section 6 (PhilGEPS Registration and Number) of the Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
- 5.2 As a minimum requirement, the SP must have at least two (2) projects within the last three (3) years in systems design and development, particularly in workflow for government operations/process management, and database management, and has delivered and implemented similar projects, with at least a Satisfactory rating from two (2) government projects.
- 5.3 Upon awarding of the contract, the winning bidder (SP) must provide a project team staffing and follow the conditions stated to wit:
  - 5.3.1 The SP must provide the notarized Curriculum Vitae (CVs) of their proposed staff clearly showing the relevant skills and work experience to be submitted during the opening of bids and to be evaluated during the postqualification.

5.3.2 The system provider must provide the required minimum number of regular personnel with the following roles/qualifications:

Personnel	Role/Qualification	Min. No.
Project Manager	Role: Responsible for the execution of the project Experience: At least five (5) years of management experience of IT related project Education: Bachelor's Degree Certification: Certified Project Management Professional or equivalent	1
Business Analyst	Role: Responsible for analyzing business processes, identifying areas for improvement, and implementing solutions to enhance operational efficiency  Experience: At least five (5) years in IT business analysis and development Education: Bachelor's Degree  Certification: Certified Business Analysis Professional or Certification of at least two (2) completed projects related to IT business analysis	1
Personnel Role/Qualification		Min. No.
Database Specialist	Role: Responsible for designing, developing, installing, administering, maintaining, and performance tuning of databases Experience: At least three (3) years in designing and implementing RDBMS or No-SQL databases Education: CS/IT Degree or a related field Certification: Certified Database Professional or equivalent	1
Full Stack Developers	Role: Responsible for developing and testing both the front-end and back-end components of web applications  Experience: At least five (5) years in web development  Education: CS/IT Degree or equivalent of at least three (3) software development training within five (5) years  Certification: Certification of at least two (2)	1

Interface/ User User User User Experience (UI/UX)  Role: Responsible for designing and enhancing the user interfaces and user experiences of a software product/solution Experience: At least three (3) years in web development Education:	
User of a software product/solution  Experience: At least three (3) years  in web development Education:	
Experience Experience: At least three (3) years	
in web development Education:	
I in woh dovolonment Education:	
Designer  Course Certification related to	
UI/UX Design Certification: Certified	
UI or UX Professional or equivalent	
Quality Role: Responsible for ensuring that software 1	
Assurance products and systems meet established	
Engineer quality standards and are tree of defects Experience: At least three (3) years of experience	
in software quality assurance or software	
testing and use of automated testing tools	
and frameworks	
Education: CS/IT Degree or equivalent of at least	
three (3) trainings on quality assurance	
· · · · · · · · · · · · · · · · · · ·	
relevant to IT Software Development	
within five (5) years	
Certification: Certified Software Quality Engineer	
or Certification of at least two	
(2) completed projects related to software	
quality assurance  Role: Responsible for ensuring that an 1	
Train responsible for should guide an	
Privacy organization complies with data protection	
Specialist laws and regulations	
Experience: At least two (2) years in data	
privacy and data protection Education:	
CS/IT/Law Degree or a related field	
Certification: Certified Data Privacy Professional	
or equivalent	
Solutions Role: Responsible for designing and building 1	
Architect technical solutions that align with business	
needs, integrating different technologies to	
create effective and scalable systems	
Experience: At least three (3)	
years in solutions architecture	
Education: CS/IT Degree or a	
related field	
Certification: Certified Solutions Architect or	
Certification of at least two (2) completed	
projects related to solution architecture	
Geographic Role: Responsible for managing spatial data to 1	
Information create maps and visualizations,	
Systems developing GIS applications for various	
(GIS) purposes, and implementing geospatial	
Specialist technologies	
Experience: At least five (5) years in GIS	
technology using ESRI, CartoDB,	
ı ı teciniology using ESKI, Galtude, l	11
1	
Mapbox, OpenStreetMap, among others or implementation of GIS technology in	

(DRRM)	
Education: Bachelor's Degree and completion	
of at least one (1) GIS Training Certification:	
of at least one (1) GIS Training Certification: Certification of at least two (2) completed	
projects related to GIS	

The SP may propose additional staffing to complement the skills of their proposed staff at no additional cost to the DOE.

5.3.3 Subcontracting is prohibited.

#### 6. PROJECT DURATION AND TIMELINE

The SP must accomplish the items in this TOR within six (6) months upon the receipt of the Notice to Proceed (NTP) with the provision of twelve (12) months after-sales service warranty. The Department shall acknowledge project completion by submitting/approving the Project Completion Acknowledgement Form. The timeline for the completion of the EDIMS is as follows:

No.	Scope of Work	Deliverables		Timeline	Work
		Activities	Documentary Requirement		Percentag e
1.	Project Kick- off, Inception Meeting, and Submission of Inception Report	<ul> <li>Conduct and facilitation of Inception Meeting</li> <li>Submission of Inception Report</li> <li>Project Proposal Acceptance by the End-User</li> </ul>	Certificate of Acceptance for the following items: Approved Inception Report Approved Project Proposal	21 calendar days	10%

3.	Formulation and Documentation of Software Requirements and Design Specifications (SRDS)	Conduct and facilitation of Requirement Elicitation Workshop, User Experience (UX) Workshop     Submission of SRDS Document      Completion of Development	Certificate of Acceptance for the following items:     Approved Software Requirement and Design Specifications (SRDS) Document     Approved database designs     Approved Network Topology     Approved Storyboard     Approved UX     Workshop Document including mockups and prototypes      Certification of Acceptance by	14 calendar days	45%	
		(Annex B – Expected Outputs and Features)  Installation and conduct of a series	the End-User	days		
No.	Scope of Work	Deliverables		Timeline	Work Percentag	
		Activities	Documentary Requirement		е	
		of testing for EDIMS:  O Alpha Testing O Regression Testing O Load Testing O Stress Testing O Performance Testing				

4.	System Delivery and Adoption			33 calenda r days	20%	
4a.	Delivery, Installation, Testing, and Deployment	Installation and conduct of a series of testing for EDIMS: Beta Testing VAPT PIA	Certificate of Acceptance for the following items: User Acceptance Testing (UAT) Scripts Approved UAT documents Go Live Acceptance Certificate VAPT Report PIA Report Software Licenses (certificates or their equivalent)  Cloud subscription (certificate or its equivalent)			
4b	User Training	Conduct User     Training for the     enhanced and     developed     systems (Free     of Charge)	Certificate of     Acceptance for     the following     items:     Training Certificates     Training     Modules			
4c.	User Acceptance	<ul> <li>Submissio         n of         Terminal         Report</li> <li>Submission         Manuals         and         instructional         AVP         materials</li> </ul>	<ul> <li>Project         Completion         Acknowledgemen         t Form</li> <li>Certificate of         Acceptance for         the following         items:         Ouser Manual</li> </ul>			
No.	Scope of Work	Deliverables		Timeline	Work Percentage	
		Activities	Documentary Requirement			

Submission of all required documents: source code, documentation, and account credentials, among others.	<ul> <li>Administrator         Manual</li> <li>Operation and         Technical Manuals</li> <li>Technical         Documentations         (Source codes, API         Specifications,         Database         Documentation,         server/ database/         account credentials,         Data Dictionaries,         Database Setup         and Maintenance,         Entity Relationship         Diagram,         Deployment         Manual, and         Helpdesk Support         Escalation Process)         AVP materials         Minutes of meetings         Terminal Report</li> </ul>		
Total		180 calendar days	100%

**Note:** Retention of 10% of every progress billing to be released after project completion. Retention of 5% of the total contract price to be released after the warranty period.

# 7. APPROVED BUDGET FOR THE CONTRACT (ABC)

The ABC for the procurement of the EDIMS is **PhP 10,000,000.00** (inclusive of all taxes). This includes all costs associated with the development, installation, training, and warranty services of the system.

### 8. LIQUIDATED DAMAGES

If the SP fails to meet the agreed-upon delivery schedule as specified in this contract, the client shall be entitled to liquidated damages as provided under the rules of RA 9184, its IRR, and other related issuances.

### 9. OWNERSHIP

# ALL MATERIALS, EQUIPMENT, AND SOFTWARE SYSTEMS INCLUDING THE SOURCE

<u>CODES</u> developed and used under this contracted-out service delivery shall be owned by the DOE with all copyright and other

intellectual property rights associated with the deliverables under this project.

### 10. CONFIDENTIALITY

- 10.1 All data or information received or gathered by the SP, its employees, and agents in the course of or in the performance of their obligations under this Contract shall be deemed and kept confidential. Such data or information shall not be used, copied, reproduced, or divulged by the SP, its employees or agents to any third party without the written consent of the DOE. This confidentiality requirement shall be made an essential condition by the SP in the hiring of its employees or agents. Further, this obligation on confidentiality shall survive and subsist even after the termination or cancellation of this Contract. Furthermore, the SP shall protect Confidential Information with reasonable precautions and in accordance with the 11.3 and applicable laws, rules, and regulations.
- 10.2 In no event shall the SP use DOE's Confidential Information to reverse engineer or otherwise develop products or services functionally equivalent to the products or services of DOE or Third-Party Owner.
- 10.3 The following shall not be considered Confidential Information: (a) Information which is or becomes part of public domain through no fault or act of the receiving party; (b) Information that has been independently developed by the receiving party without the use of or reliance on the disclosing party's Confidential Information; (c) Information which was provided to the receiving party by a third party with no duty of confidentiality to the disclosing party; or (d) Information which is required to be disclosed by law. Provided, however, prompt prior notice thereof shall be given to the party whose Confidential Information is involved.
- 10.4 The SP agrees that the disclosure of any of the Confidential Information shall give rise to irreparable injury to the owner of Confidential Information, inadequately compensable in monetary damages. Accordingly, the DOE may seek injunctive relief against the breach or the threatened breach of the foregoing undertakings, in addition to any other legal remedies available.

# Annex A - Report Guidelines

1. Inception Report Minimum Items

	Report Winimum Items
Section	Particulars
Introduction	This section provides an overview of the project and its objectives. It also outlines the scope of the inception report and the methodology that will be used to gather information and analyze the data.
Background	This section provides context for the project by outlining any relevant background information. This may include information about the policy direction, the current system situation or problem that the project is designed to address, and any previous work that has been done on the project.
Project Description	This section provides a detailed project description, including its objectives, goals, and activities. It should also include information about the project team and any stakeholders/end-users involved.
Assessment of End-User and Stakeholder Needs	This section outlines the needs of End-Users and various stakeholders involved in the project. This may include information about the project's beneficiaries and any other groups or individuals affected by the project.
Risks and Assumptions	This section identifies any risks associated with the project and outlines the assumptions made in the design. This can help to identify potential challenges that may arise during project implementation.
	<ul> <li>Data Structures Review:</li> <li>Comprehensive Structure Identification: Delve deep into the underlying data structures, meticulously mapping out every entity and attribute that contributes to the website's data architecture.</li> <li>Dependency Assessment: Scrutinize the intricate dependencies between data elements, ensuring a thorough understanding of how various components interact with each other.</li> </ul>
Monitoring and Evaluation	This section outlines the monitoring and evaluation plan for the project. This may include information about the indicators that will be used to measure project progress and success and the methods used to collect and analyze data.

Implementati on Plan and Timeline	This section outlines the plan for project implementation, including timelines, budgets, and responsibilities for each project team member.
	<ul> <li>Strategic Engagement:</li> <li>Key Stakeholder Identification: Identify and engage with key stakeholders, including executives, department heads, and endusers, ensuring representation from all relevant sectors.</li> <li>Interactive Workshops: Facilitate interactive workshops (1-2x a week) and collaborative sessions to solicit detailed insights into existing data requirements, challenges, and areas for improvement.</li> <li>User Feedback Sessions: Conduct user feedback sessions (at least once a week) to gather firsthand experiences and expectations, fostering a user-centric approach.</li> </ul>
	<ul> <li>Communication Plan:         <ul> <li>Downtime Anticipation: Anticipate potential downtime during critical phases of the development, meticulously identifying key milestones where downtime may be unavoidable.</li> <li>Proactive Communication: Develop a proactive communication plan that clearly outlines the timeline, expected downtime, and reasons for each phase of the development process.</li> </ul> </li> <li>Stakeholder Engagement Channels: Utilize various communication channels such as official emails, newsletters, and dedicated meetings to disseminate information, ensuring stakeholders are well-informed at every stage.</li> </ul>
Conclusion	This section summarizes the key findings of the inception report and provides recommendations for the next steps in the project planning process.

# 2. System Requirements and Design Specifications (SRDS) Report

Section	Particulars
Introduction	This section should provide an overview of the report's purpose and the software system being developed.
Requirements	This section should outline the functional and non-functional requirements for the software system. This may include details about the system's features, user interface design, performance, security, and other technical specifications.
	Feature Identification and Prioritization:  • Stakeholder Input: Solicit input from key stakeholders to identify critical functionalities and features that need enhancement, modification, or introduction. Prioritize features based on their alignment with organizational goals and user needs.
Architecture	This section should describe the overall architecture and design of the software system. This may include details about the system's modules, interfaces, data storage, and other technical aspects.

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System Design	This section should describe the system design, including the system's data flow, algorithms, and any relevant diagrams or flowcharts.	
	<ul> <li>Design Alignment:         <ul> <li>Holistic Design Evaluation: Undertake an exhaustive and meticulous evaluation of the design requirements, leaving no facet un-scrutinized. Ensure that every design element aligns seamlessly with the overarching objectives of the system, encapsulating not just aesthetic considerations but also a deep understanding of expectations and DOE goals.</li> <li>Data Presentation Harmony: Delve into the intricacies of data presentation within the design, meticulously examining how data is visualized and communicated to end-users. Guarantee a harmonious integration of data presentation elements, ensuring clarity, accessibility, and a consistent visual language.</li> <li>Iterative Prototyping: Implement an iterative prototyping process that goes beyond superficial mockups. Provide stakeholders with tangible prototypes, allowing for immersive exploration and feedback on design elements, fostering a collaborative refinement process.</li> </ul> </li> </ul>	
Implementation Plan	This section should outline the plan for implementing the software system, including details about the development process, testing, and deployment.	
	<ul> <li>Quality Assurance and Testing:</li> <li>Comprehensive Testing: Conduct thorough testing of each functionality to identify and address any bugs, inconsistencies, or performance issues. Perform unit testing, integration testing, and user acceptance testing to ensure the robustness of the updated functionalities.</li> <li>User Feedback Integration: Integrate user feedback into the testing process, addressing reported issues and refining functionalities based on real-user experiences.</li> </ul>	
Risks and Mitigation Strategies	This section should identify any potential risks or challenges associated with the development and implementation of the software system and provide strategies for mitigating these risks.	
	<ul> <li>Issue Resolution:         <ul> <li>Proactive Issue Identification: Implement mechanisms for proactive issue identification by closely monitoring content-related elements throughout the development process. Anticipate potential challenges and discrepancies before they escalate, demonstrating a commitment to minimizing disruptions.</li> <li>Dynamic Issue Addressal: Develop a dynamic and responsive approach to issue resolution, swiftly identifying and addressing any content-related issues that may surface during development. Collaborate with content creators, editors, and stakeholders to implement timely solutions, ensuring the seamless flow of information.</li> </ul> </li> </ul>	
Conclusion	This section should summarize the essential findings and outcomes of the report and highlight any critical takeaways or recommendations.	

# 3. Terminal Report

Section	Particulars
Introduction	This section should provide an overview of the purpose of the report and the project objectives.
Methodology	This section should describe the approach taken to develop EDIMS. This may include details about the development tools and programming languages used and any testing or quality assurance processes employed.
Results	This section should provide a summary of the key outcomes of the project. This may include details about the system's functionality, any identified issues, and any improvements or enhancements made during the development process.
Bill of Materials (Please see Annex L)	This section will provide the Bill of Materials for all software licenses (perpetual), annual subscriptions, ICT hardware, services, etc.
Recommendations	This section should outline any recommendations for future improvements or enhancements to the web-based application system. This may include suggestions for additional functionality, improved user interface design, or better performance and scalability.
Conclusion	This section should summarize the essential findings and outcomes of the project and highlight any critical takeaways or lessons learned.

# Annex B - Specific System Components and Features

### A. GENERAL SYSTEM COMPONENTS AND FEATURES

# Import/upload and export/download of data or files

### 1.1 Data Input and Import/Upload of Data or Files

- a) Include a section/link in the platform for online submissions. This will be divided into two (2) sections: (1) Incident Reporting and (2) Database Updating.
- b) Create an interface that clearly presents the following options for input of data: manual input (Data Capture Forms), and file upload (templated).
- c) Data Provider can upload thematic maps in shapefiles in the GIS software to be approved by the Administrator.
- d) Users can choose the facility from points shown on the map. For both drop-down and map options, users can only see the facilities owned by their companies/agencies.
- e) For incident reporting, different event types should ask the user for a short description. For example, flood events will require input on flood depth while landslide events will require the user to report if an area is passable or not.
- f) The "Submit Report" button is unclickable if there are empty required fields. Input forms should also be validated prior to submission (i.e. Date, time, numeric, text).

### g) Manual Input Submission Features

<ul> <li>Utilize drop-drown options to lessen errors of manual</li> </ul>
input. Some fields will automatically be filled in
depending on the availability of information for each
facility in the database (e.g. Selecting a power
generation plant will automatically show the following
details in other fields: facility owner, technology type,
address, etc.).

		Enable	e copy	and	paste	in tl	he i	nput 1	form
--	--	--------	--------	-----	-------	-------	------	--------	------

- Manual input submissions may be downloaded as pdf, spreadsheet, or csv files, with text/watermark indicating if the submission has been validated and accepted.
- h) File Upload Submission Features

	☐ Efficient file upload through a button or area where users can easily select or drag and drop files.
	☐ Ensure the system accommodates various file types and specify any limitations or file size restrictions. These settings should be configurable by administrators.
	Develop an offline template for incident reporting. This should be in a spreadsheet file or other appropriate file type as recommended by the SP. Ensure the template has fields identical to the manual input form. Once uploaded to the system, data from the uploaded files may be viewed on a separate review page. The system should verify that data types and values comply with the required fields. Upon submission, the system must accurately map and interpret the values to the corresponding database columns.
	☐ The offline template must provide a dynamic download link with parameters (i.e. facility ID) that allow pre-filling of values based on the user account facility selections.
	☐ Enable attachment of photos with the submission for both manual and file upload submission of incident reports.
i)	For Data Providers:
	<ul> <li>Data providers may edit incident report forms after submission. Once validated, the submitted data cannot be edited.</li> </ul>
j)	For Content Validators:
	☐ Implement validation checks for both manual input and file uploads to ensure data accuracy and security. Submissions will be reviewed by content validators before publication on the platform.
	□ Validators may correct/edit submitted files and forms. Data providers will be notified of edits and corrections. These edits and corrections will be in red text in the filled-in manual input forms or downloadable csv or pdf files.
k)	For Administrators:
	<ul> <li>May edit manual input form and offline template file.</li> <li>Administrators may choose and edit which field requires input.</li> </ul>

l) Pro	For Administrators, Content Validators, and Data oviders:
	□ Receive notifications for each submission and revision. For data providers, this includes revisions and submissions from user groups below their levels (e.g. Facility Operators are notified when Facility Reporters below them submit their reports).
m)	Status and Tracking
	□ Dedicate a section for file/report submission status, indicating if the submission has been validated and accepted. This can be viewed by the users (showing the status only of their own submitted forms and data) and the administrators (showing the status of all submitted forms and data).
	□ Every action (upload, edit) should be stored in the

# 1.2 Export/Download of Data or Files

- a) Enable authorized users to export or download files from the platform.
- b) With Version Control to retrieve previous versions.
- c) With open-source Document Management System (DMS).

### 2. Central Database Repository

history log.

- **2.1** Provide a central data warehouse, a user-friendly dashboard that displays information, historical data, key metrics, trends, and alerts.
- **2.2** Organized and tailored information to specific sectors for focused analysis and response strategies, while ensuring that relevant and authorized stakeholders have access to insights.
- **2.3** Descriptive information (title, author, date, keywords) of documents for improved searchability.
- **2.4** For each facility in the EDIMS database, the unique ID field will be consistent with unique ID fields in other DOE systems (e.g. DEPDMS, DOOP) to allow for easy updating and access of data.
- **2.5** Information in the database can be updated by the relevant stakeholders in a timeframe determined by the TWG on EDIMS, as per data availability, or automatically as data in connected ICT systems (such as DOE-DEPDMS or DOE-DOOP) are updated.

- **2.6** Data modifications or alterations can only be performed by authorized data providers. Prior to making any changes, it is essential to consult with the data providers for approval.
- **2.7** Provide and implement the following essential database tables:
  - a) Energy Facilities
  - b) Users
  - c) Events
  - d) History Logs
  - e) Restoration Status
- **2.8** Utilizes Cloud Production and Disaster Recovery System (DRS). (*Please see Annex D for specifications*)
- **2.9** The system should comply with the data classification requirements as mandated by the Cloud First Policy.

# 3. User Access and Permission (Please see Section 4.2 and Annex H for detailed information on User Groups)

- **3.1** User Groups based on shared roles to streamline the collective assignment of permissions such as document viewing, editing, and deletion.
- **3.2** There will be periodic review of users' access.
- **3.3** Stakeholders will be granted access to audit trail logs, indicating who granted access to whom.
- **3.4** Encryption will be used for user account information and personal information records both in transit and at rest.
- **3.5** The number of persons with access is limited to only those with clearance.
- **3.6** There shall be an email verification to be sent to the user's registered email after the approval of the system administrator. Log-in credentials must be between the user and the system. The role of the Administrator is approval only. Temporary passwords can be sent to the user's email and the account user is required to change the password during his/her first login.
- **3.7** User groups and corresponding access and permissions may be customizable by DOE administrators.
- **3.8** Create a registration page requiring different information based on the user account types.

# 4. Data Analytics

### 4.1 Geographic Mapping and Analytic Dashboard

- a) Provide a graphical user interface that shows the visualization of all the datasets, layers, maps, statistics, and other information included in EDIMS.
- b) Enable users to save preferences such as default basemap, visible layers, zoom level, and other preferences. There must also be an option to reset to default preferences.
- c) Provide an interface that allows the DOE to customize layers and their sub-layers as outlined (**See Annex E Map/Dashboard Layers**), including the ability to add a new layer with its name, description, event type, a URL link or an upload of a geospatial data file format, and other relevant information as needed.
- d) Provide basemap layer options, including satellite imagery, terrain views, simplistic designs, and other customizable styles.
- e) Basic functionality could include tools for tracing routes, measuring distances, and identifying facilities/areas through geotagged queries.
- f) Advanced analytical capabilities like overlaying hazard exposure data ang generating density maps may also be considered to enhance spatial analysis.

### 4.2 Generation of Reports and Monitoring Tool

- a) Generate VERIFIED situation reports after collating the submissions of different sectors. The reports will be available after review and approval and will contain the esignatures of Final Checkers. They will be available for public viewing on the platform.
- b) Generate UNCONFIRMED situation reports based on the quick reporting data or unverified reports. This is a report that will give a quick overview of what's happening in the field. This report should not be publicly available and can only be accessed by authorized users. Ensure that generated reports have a watermark to indicate its unconfirmed status and the user who generated the report.
- c) Create a visually pleasing and easy-to-understand situation report template. The report template should be customizable by the administrators.

- d) Reports may be available as a separate page or downloadable as MS Word and PDF file.
- e) Allow viewing of previous reports.
- f) Create a dashboard monitoring tool capable of identifying the status of affected facilities, including those that have submitted reports, unverified reports, and providing an overview of each facility's overall status. Additionally, enable the visualization of facility statuses by plotting them on a map, allowing for easy geographical tracking and analysis.

# 5. Alert and Notification System

- **5.1** Integrate in the system to send notifications (through email and Web Push) to energy stakeholders to send reports/updates during disasters, to update the database, and other information regarding the system.
- **5.2** Sends notifications to administrators and content validators every time data has been uploaded or modified.
- **5.3** Ensure that notifications are visible on their user profile page and include an indicator showing the number of unread notifications. Notifications should be greyed out once they have been read.
- **5.4** Shows current and recent hazards in the dashboard and maps using both visual and auditory cues for better distinction and accessibility.
- **5.5** Sends hazard notifications and warnings to affected energy facilities. To enable quick reporting, especially for multiple affected facilities for one entity, the system will implement the following mechanism:
  - When users click the alert notification, they will be redirected to their "Affected Facilities" page showing the facilities in a tabular form. There will be a column for each affected facility with the following choices: (1) Affected, (2) Partially Affected, and (3) Not Affected. Clicking on either of the choices will update the status of the specific facility without redirecting to another page.
- **5.6** Usage of OneSignal or other similar Web Push provider that has the ability to store custom attributes and creation of groups.
- **5.7** Alerts should appear on Web Push and user profiles.

# 6. Application Programming Interface (API) with Other ICT Systems

- **6.1** API should utilize security features such as API tokens with expiration. This connects EDIMS with other ICT systems within and outside DOE.
- **6.2** The SP shall provide technical assistance in the drafting of Memorandum of Agreement (MOA) and/other Data Sharing Agreements (DSA) in the implementation of the API integration of EDIMS to other systems even after the post-development support period.
- **6.3** The SP shall create a backend API that enables the system to receive reports, quickly update facility statuses, and perform similar tasks, accompanied by detailed API documentation.

### 7. Events

### 7.1 Manual Triggered Event

- a) Allow Administrators to create an event (e.g., election, oil spill, power interruptions) by specifying the affected facilities.
- b) Include in the information the required time interval for reportorial submission. For example, for an election event, the user needs to specify: the start date and time, reporting interval (e.g. every six hours), and end date and time. Facilities must begin submitting reports at the specified start time and continue at the set intervals until the end date.
- c) Include the required timeframe for the notification to be present if the user fails to acknowledge the event.

# 7.2 <u>Auto-Triggered Events</u>

a)

Earthquake Events
☐ Create a script that will enable the system to automatically scrape data from the PHIVOLCS latest earthquake information website.
☐ All scraped data that meets above the threshold magnitude level shall be stored in the events database and the system shall send notifications to all specified users.
☐ Ensure earthquake events must appear on the map dashboard and the user profile with relevant information.

☐ Provide an interface that will allow authorized users to upload a GeoTIFF file generated by the REDAS software.
☐ Using the embedded values from the uploaded GeoTIFF file, the system must automatically calculate the earthquake intensity of every facility.
☐ Ability to display the GeoTIFF layer on the map with color coding based on the PHIVOLCS Earthquake Intensity Scale (PEIS) color standard.
□ Weather-related Events
☐ Create a script to automatically retrieve current and forecast weather metrics from a reliable weather data provider. The weather metrics shall include rainfall, wind speed, temperature, heat index, and any other relevant weather data.
☐ Ability to display both current and forecasted weather metrics on the map dashboard as tile layers.
☐ Implement an automated system to calculate current and forecasted weather metrics for each facility based on its coordinates and cache the results. The results should also be stored in the events database. Ensure the system reevaluates the weather data whenever updated information becomes available.
ffected facilities" shall refer to the energy facilities that een affected by events as stated above, exceeding

- **7.3** "Affected facilities" shall refer to the energy facilities that have been affected by events as stated above, exceeding predefined threshold levels. These threshold levels can be configured for each event type, including warning (low), critical (medium), and severe (high) levels.
- **7.4** All affected facilities shall be notified, and users must acknowledge the notification. If a facility fails to acknowledge and submit a report within the specified default timeframe, the system shall resend the notification.
- **7.5** The notification should include the list of affected facilities. If a user has more than a certain number of affected facilities under their user account, the notification should aggregate the number of affected facilities by facility type.
- **7.6** Affected facilities shall be plotted on the map with markers using different icons or colors, based on the threshold level and event type, and this information should be presented on the map dashboard (e.g., Bootstrap cards or toast notifications), in a tabular format page, and on an interactive report page.
- **7.7** Different sounds should be played depending on the severity level of the event value.

# 8. Other User Interface (UI) Features

- **8.1** For multiple inputs (emails, contact numbers), use multi-tag inputs.
- **8.2** Email and mobile numbers should have input validators.
- **8.3** Add a search functionality inside a long dropdown list.
- **8.4** Utilize Philippine Standard Geographic Code (PSGC) coding from PSA for common address selection.
- **8.5** Offer users flexibility in inputting date and time by providing options to use date and time pickers or manual input based on desired formats.
- **8.6** Displaying of time, especially in notifications or events should utilize moment.js or similar methods (e.g. posted 1 minute ago, 3 hours ago).
- **8.7** For long loading times, a spinner or a visible loading indicator should appear, and buttons and other input elements should be disabled.
- **8.8** Critical actions (such as edit, delete, create, submit) should have a confirmation modal dialog box and must not be a native dialog box.
- **8.9** Confirm successful submissions with an information dialog box confirming the submission of a form/report.
- **8.10** All errors encountered by users should also appear on a dialog box with error type and detailed description and suggestions on how to resolve the issue.
- **8.11** All HTML tables with more than 20 rows should be in DataTables or similar HTML table enhancing library that provides handling and presenting of tabular data in HTML tables. This will have search, pagination, export, filter, sorting functionality.
- **8.12** All large database results should be done in server-side processing to improve loading performance.
- **8.13** All external links should open in a new tab.
- **8.14** All HTML components should have a modern look. CSS frameworks such as Material UI, Bootstrap or Tailwind or other similar CSS frameworks should be used.
- **8.15** Icons such as material UI or fontawesome or similar icon library should be incorporated for a modern user experience.
- **8.16** Web application shall all be mobile, tab, desktop, and large desktop responsive. Thus, usage of CSS grid system is required.

### 9. Security and Compliance

### 9.1 Compliance

The SP shall adopt the following during development:

- a) International Cybersecurity Standards
- b) ISO 27000 Family Standards
- National Institute of Standards and Technology (NIST)
   Framework
- d) Data Privacy Act of 2012
- e) Other secure software development guidelines and practices such as Open Worldwide Application Security Project (OWASP).
- **9.2** Implement a session timeout and management system that allows different expiration times based on user types. Ensure that sensitive actions trigger re-authentication, even within a session. Sessions for Read-only users and Public Users have longer expiration times.
- **9.3** Ensure the system is secure from unauthorized access, implementing security measures such as firewalls, intrusion detection, and prevention systems.
- **9.4** Ensure that all software components (core frameworks, JavaScript/CSS components, drivers, plugins, etc.) used are upto-date and free from any vulnerabilities.
- **9.5** Provide and install security measures such as the Secure Socket Layer (SSL) Certificate, DDoS Attack Prevention System, Captcha System, One-Time-Pin (OTP) security system, and other data privacy security measures aligned with the DOE Data Privacy Compliance.
- **9.6** Implement essential security headers, including:
  - a) Strict-Transport-Security (HSTS) to enforce HTTPS usage;
  - b) Content-Security-Policy (CSP) to mitigate XSS attacks;
  - c) X-Content-Type-Options to prevent MIME sniffing;
  - d) X-Frame-Options to prevent clickjacking;
  - e) Referrer-Policy to control information leakage in the Referer header.
- **9.7** Session Cookie Security: Set the session cookie with the "Secure" attribute to ensure it is only sent over secure connections (HTTPS). Additionally, consider setting the "HTTPOnly" attribute to prevent client-side access to cookies.

# 9.8 **Input Handling:**

- a) Escape, validate, and sanitize all user input on both the frontend and backend:
- b) Use parameterized queries or prepared statements to prevent SQL injection;
- c) Employ input validation to ensure that data matches expected formats and ranges;
- d) Implement client-side validation for improved user experience but always validate on the server-side to prevent bypassing.
- **9.9** Include anti-CSRF tokens in the forms to protect against Cross-Site Request Forgery attacks. Verify these tokens on the server side.
- **9.10** Content Security Policy (CSP) and CORS: Fine-tune CSP to allow only trusted sources for scripts, styles, and other resources. Configure CORS headers to permit only necessary origins for cross-origin requests.
- **9.11** Implement two-factor authorization (2FA) as minimum for the log-in page to enhance security by requiring users to provide verification for system access. This includes One-Time PIN via email, One-Time PIN via SMS, and Google Authenticator. Administrators have the authority to assign the level of authentication required for each user group. For Public Users, 2FA is optional.
- **9.12** As part of the registration process, users are required to provide their basic information, mobile number, email address, among others. These details shall be verified by receiving PIN, sent to their email address, which must be entered into the registration form before completion.
- **9.13** Only username and password shall be the required login credentials by default. Existing users shall undergo verification of their email addresses. Upon activating their 2FA option, they will be required to enter the PIN sent to their email addresses to validate the accuracy and legitimacy of their email addresses intended for 2FA purposes.
- **9.14** Enforce strong password policies, including complexity requirements (alpha numeric). Passwords should utilize library to check if a password is in the list of a database such as but not limited to "Have I Been Pwned" online database. Passwords shall be stored securely using strong, one-way hashing algorithms (e.g., bcrypt) with unique salts for each user.

- **9.15** During user registration and other public forms submissions, implement a Captcha system to protect against automated attacks. Set up comprehensive logging for user activities, login attempts, and potential security events. Notify Administrators for possible suspicious activities.
- **9.16** Allow file uploads, validate file types, limit file sizes, and store uploaded files in a secure location. Ensure that uploaded files cannot be executed as scripts (exe, php, py). Ensure filenames are renamed into safe filenames.
- **9.17** Users must be able to reset passwords using their registered email and a recovery token with expiry.
- **9.18** Users with no activity within a certain configurable timeframe will be temporarily disabled. They will receive a notification via their registered email prompting them to reactivate their account.
- **9.19** Authorized users can disable a user account. Useful if the user is not anymore connected with the company.
- **9.20** Perform regular security audits, including code reviews and vulnerability assessments, to identify and address potential security issues.

### B. SYSTEM DELIVERY AND ADOPTION

# 10. Delivery, Installation, Testing and Deployment

- **10.1** SP shall deliver alpha and beta versions for testing (User Acceptance Testing/UAT) and approval of the end-users before the final version. The SP shall provide **UAT scripts and documents**.
- **10.2** SP shall deliver and turn over the complete source code, ensuring it is well-structured with clear, readable variables, functions, classes, and related components. Moreover, the SP shall provide comprehensive comments and descriptions within the codebase to facilitate understanding and future maintenance efforts.
- **10.3** SP shall provide access to system accounts, database accounts, web hosting accounts, online accounts, and any other necessary credentials or permissions required for the operation and management of the web application.
- **10.4** SP must deploy the web application to a chosen reliable web hosting service, while also ensuring deployment to the disaster recovery site as a backup measure, thereby guaranteeing redundancy and availability.

- **10.5** SP shall configure the web hosting to utilize a subdomain of doe.gov.ph.
- **10.6** SP must ensure no monthly subscription fees are billed to the DOE before the project's final acceptance.
- **10.7** The SP must ensure that EDIMS undergo a Vulnerability Assessment and Penetration Testing (VAPT) conducted by an independent, certified provider approved by the Department of Information and Communications Technology (DICT). This testing should occur post-deployment in the production environment and must result in a report demonstrating the absence of critical, high, medium, or low severity vulnerabilities. The VAPT Report shall be submitted to the end- user. The system shall also be subject to the CERT-PH's VAPT to ensure that the service provider has remediated all vulnerabilities before the end-user's acceptance.
- **10.8** Conduct a Privacy Impact Assessment (PIA) to assess the privacy implications of the system. This assessment should cover the collection, processing, storage, and transmission of personal information within the system. The PIA should highlight potential privacy risks and vulnerabilities, along with suggesting mitigation measures to address them. The SP shall provide a PIA Report.
- **10.9** Ensure a seamless experience as far as practicable with minimal downtime, slowdowns, freezing systems, or bugs. The SP must provide a report that EDIMS passed the following tests:
  - a) Load Testing involves simulating real-world usage by subjecting the application to a high volume of simultaneous users to evaluate its performance under heavy load;
  - b) Stress Testing pushes the application beyond its limits to identify the breaking point. It helps determine how the application behaves under extreme conditions, including heavy traffic and resource constraints;
  - c) Performance Testing focuses on measuring various performance metrics, such as response time, throughput, and resource utilization, to ensure the application functions optimally under a heavy load.

# 11. System Adoption

- 11.1 The SP shall provide the following trainings while shouldering the venue, meals, and training materials. Minutes of the meetings, presentation materials/training modules, training certificates, invoice/statement of account, and delivery receipt shall be provided after the training:
  - a) Business Process Owners (User) Training;

- b) Administrators' (System and Database) Training which shall include certification trainings;
- c) Applications Training for at least twenty (20) DOE personnel. The training shall include how EDIMS was created, installed, configured, and integrated.
- **11.2** The SP shall develop and submit procedural manuals and instructional AVPs on EDIMS, subject to the approval of the End-User.
- **11.3** The SP shall submit a **Terminal Report** summarizing the project's findings, results, and recommendations. The report provides an overview of the project objectives, methodology, key outcomes, and any issues encountered during contract duration.
- **11.4** The SP shall include in the Terminal Report the After Sales Certification and other necessary documents for the whole duration of the technical support.
- 11.5 Submission of all required documents/artifacts: Go Live Acceptance Certificate, software licenses certificates (or equivalent), cloud subscription certificates (or equivalent), source codes, User and Administrator Manuals, Instructional AVP Materials, API Specifications, Database Documentation, server/database/account credentials, among others.
  - **11.6** The SP must provide a Non-Disclosure Agreement (NDA) subject to the approval of the end-user.
  - **11.7** Warranty Support Services (for post-development)
    - a) The SP shall provide twelve (12) months of maintenance and technical support after the six (6) months project implementation period. The warranty support includes but is not limited to:

☐ 24/7 support on system bug and error correction adhering to agreed-upon response timeframes
□ Data migration
$\hfill \square$ Switching to the on-premise backup system in case the cloud server fails
☐ To ensure optimal performance, the SP shall regularly check the systems and cloud server health which shall include the deployment of system updates, security patches, and other necessary upgrades during the project implementation and warranty support period.
☐ Other technical consultations

b) The SP shall fix any system bugs without additional cost even after the post- development period. c) SP shall guarantee immediate response to any hacking attempts or critical events that may compromise data privacy or result in data breaches. The SP shall deploy immediate support to address such incidents swiftly and ensuring minimal disruption to system effectively, operations and safeguarding data integrity. d) SP shall cover web hosting expenses and any necessary subscriptions for at least one year following the final project turnover.

# ANNEX C - Data and Information Creation and Publication Mechanism

### 1. Data Input

Data providers or contributors input relevant information into the platform using the Online Submission Section/Page. This could include incident reports, updating or uploading data to the energy facilities database, and other information.

# 2. Quality Assurance

Data providers ensure the accuracy, relevance, and quality of the data, following established guidelines and standards. This step is critical to maintaining the integrity of the information. Further, data providers must also categorize the data and information based on its nature: for public knowledge or internal only within TFER.

### 3. Review Process

The submitted data undergoes a review process, where Validators or Administrators assess its appropriateness, encryption protocol, and alignment with platform objectives. Higher-level Data Provider User Groups may review the submissions of Data Provider User Groups below them.

For incident reporting, content validators will check for the accuracy and correctness of submitted data and the draft-generated situation reports. Limits on review times for reports could be considered to ensure timely publication during incident response. Validated situation reports will then be approved for publication by the final checkers.

# 4. Approval for Publication

After successful review, the data may require approval for publication from the Administrators. This step ensures that only verified and relevant information is made available to platform users.

Situation reports need to be approved by Final Checkers before publication to the platform. This is done in two (2) levels, first by the TFER Head Secretariat and then by the TFER Chairperson. Both Final Checkers affix their esignatures on the document.

# 5. User Accessibility

Authorized users are granted access to the data based on their permissions. Data Providers are responsible for authorizing specific users for dataset accessibility.

# 6. Utilization by Stakeholders

The public and other stakeholders utilize the platform to access, analyze, and collaborate on the available data. They may contribute feedback.

# Annex D - Minimum Server and Software Specification Requirements

One each for the 1) Production Environment and 2) Disaster Recovery Site:

a. Cloud (Virtual) Server Minimum Requirements (for 12 months to commence from the acceptance of the enduser)

### **Production Environment**

- Cloud Server (Application)
- OS platform: Linux/Unix
- CPU: At least 4-Core CPUs
- RAM: At least 8GB memory
- Storage: At least 300 GB

# **Disaster Recovery Site**

- Cloud Server (Database)
- OS platform: Linux/Unix
- CPU: At least 4-Core CPUs
- RAM: At least 8GB memory
- Storage: At least 100 GB
- b. General Software Subscription Requirements (for 12 months to commence from the acceptance of the end-user)
  - Map API (1 license)
  - SMS two-factor authentication (1 license)
  - IONCube or equivalent (1 license)
  - Account for Email API (1 license)
  - BI online software (1 license)
  - Security for cloud server (1 license)
  - Acronis Backup Solution (1 license)
  - 1 TB Cloud Storage (1 license)
  - GIS Software (1 license)
  - WebPush (1 license)
  - Weather Provider data (1 license)

### ANNEX E - Map/Dashboard Layers

The following are the layers to be included, but not limited to, in the map/dashboard:

### 1. Manual Triggered Events

- a. Elections
- b. Large-scale power interruptions

#### 2. Boundaries

- a. Philippine Area of Responsibility
- b. Regional Boundaries
- c. Provincial Boundaries per region
- d. Municipality/City Boundaries per province
- e. Barangay Boundaries per municipality
- f. Electric Cooperatives Franchise Areas boundaries
- g. Private Distribution Utilities

#### 3. Natural Hazards

- a. Tropical Cyclones
- b. Shear line
- c. Earthquakes
- d. Landslide
- e. Volcanic Activity
- f. Tidal Waves
- g. River System Hazards
- h. El Niño
- i. La Niña

#### 4. Critical Facilities

a. Dams

- b. Hospitals
- c. Military Camps/ Installations
- d. Evacuation Centers
- e. Polling Centers

#### 5. Generator Sets Inventory

- a. Military Facilities
- b. Health Facilities
- c. Distribution Utilities

#### 6. Other Layers

- a. Marine Pathways
- b. Road Networks
- c. Population Data
- d. Existing and Future Bridges

#### 7. Damage and Loss

- a. Baseline data
- b. Actual data

#### 8. Resiliency Metric

# 9. Near Real-time and Forecasted weather data

- a. Rain
- b. Winds
- c. Temperature
- d. Others

#### 10. Basemaps

# ANNEX F - Alerts and Notifications Matrix

Action	Final Checker	Administrator	Content Validator	Facility Administrator	Facility Owner	Facility Operators	Facility Reporters	Read-Or User
Facility Update / Creation		Δ	* (4)	* 🛕	* 🛕	Орегатога	Reportera	0361
Registering as				-	1			
Final Checker, Technical Support, Content Validator, Read-Only User, Public User		<b>≜ ⊆</b> E						
Facility Administrator		<b>A</b>	* 🔔					
Facility Owners		A	* 🛕	* 🔔				
Facility Operators		A	* 🛕	* 🔔	* 🔔			
Facility Reporters		<b>A</b>	* 🔔	* 🔔	* 🔔	* 🔔		
REDAS GeoTiff Earthquake Simulation			Ä					
File Uploaded		4	4					
New Weather Data		<b>A</b>						
Active Earthquake Detected	AB	AQ	10	<b>A B</b>		AD		<u>A</u> <u>C</u>
Affected Facilities see note 1 Earthquake, Weather Events, Manual Events	40	<b>A A</b>	<b>A B</b>	<b>A Q</b>	<b>A B</b>	<b>A D</b>	<b>A D</b>	<u> </u>
Facility Reporter Edited, Verified or			* 🛕	* 🛕	* 🛕	* 🛕		
Submitted Report  Facility Operator Edited, Verified or			* 🛕	* 🛕	* 🛕	-	* 🛕	
Submitted Report  Facility Owner Edited, Verified or				100 100	-		> 10 - 1 <b>W</b>	
Submitted Report			* 4	* 🔔		* 🔔	* 4	
Facility Administrator Edited, Verified or Submitted Report			* 🛕		* 🔔	* 🛕	* 🔔	
Content Validator Edited, Verified or Submitted Report		4		* 🔔	* 🔔	* 🔔	* 🔔	
Administrator Edited, Verified or Submitted the Situation Report	4	<u> </u>						
Other Final Checker Edited, Verified or Submitted the Situation Report	Δ	<b>A</b>						
Final Checker Approved the SitRep		<u>A</u> <u>0</u>	<b>A Q</b>	<u>A</u> <u>Q</u>	<b>A Q</b>	<b>A Q</b>	<u>A</u> <u>Q</u>	A 0
Suspicious Activity Detected		A A E						
Suspicious Activity Detected		-8.						

have more than a certain number of facilities, the notification should be aggregated to the number of affected facilities per facility type

# ANNEX G - Application Programming Interface (API) Requirements

API Requirement	Description
API Design and Implementation	The systems shall include a well-defined Application Programming Interface (API) designed to facilitate interoperability and seamless data exchange with external stakeholders. The API shall adhere to industry standards and best practices for web services.
Data Format Compatibility	The API shall support multiple data formats to ensure compatibility with a wide range of systems and stakeholders. This includes but is not limited to JSON, XML, and CSV.
Security Protocols	The API shall implement robust security protocols to safeguard data during transit and at rest. This includes encryption, authentication mechanisms, and access control measures to protect sensitive information from unauthorized access or tampering.
Documentation	Comprehensive documentation for the API shall be provided, including endpoints, request/response formats, authentication procedures, error handling, and usage examples. This documentation shall be regularly updated to reflect any changes or enhancements to the API.
Scalability and Performance	The API infrastructure shall be designed to scale efficiently to accommodate increasing data volumes and user loads. Performance benchmarks shall be established and monitored to ensure optimal system responsiveness and reliability.
Compliance and Standards	The API shall comply with relevant industry standards or any other applicable laws, guidelines, and regulations governing data sharing and interoperability.
Versioning and Backward Compatibility	The API shall support versioning to allow for the introduction of new features or changes without disrupting existing integrations. Backward compatibility with previous API versions shall be maintained to ensure seamless transition for users and stakeholders.
Monitoring and Analytics	The system shall include monitoring tools to track API usage, performance metrics, and error rates. Analytics capabilities shall be provided to analyze data exchange patterns and identify areas for optimization or improvement.
Support and Maintenance	Technical support and maintenance services shall be provided to address any issues or challenges encountered with the API implementation. This includes troubleshooting, bug fixes, and periodic updates to address security vulnerabilities or improve functionality.

Collaboration	Close collaboration with relevant stakeholders shall
with Stakeholders	be maintained throughout the API development
	process to gather requirements, solicit feedback,
	and ensure alignment with business objectives and
	user needs.

# The following are the ICT systems to be integrated with EDIMS:

ICT System	<b>Description</b>		Integration
ICT System  DOE Electric Power Database Management System (DEPDMS)	analytical database for the effective and efficient acquisition, warehousing, and management of	Integration Access to details of facilities (that are relevant to EDIMS) and automatic addition, removal, or updating of facilities based on data uploaded	Readiness Through direct database connection
MGSP	An online platform that indicates the status and other data of microgrids.	Access to details of facilities (that are relevant to EDIMS) and automatic addition, removal, or updating of facilities based on data uploaded through MGSP. Status of facilities will come from MGSP.	Through direct database connection
OERA	A system where data of energy- contracted areas such as petroleum, coal, solar, hydro, and energy facilities are uploaded.	Access to facility data (especial ly geographic coordinates) that may be relevant to EDIMS.	Under development; no integration yet

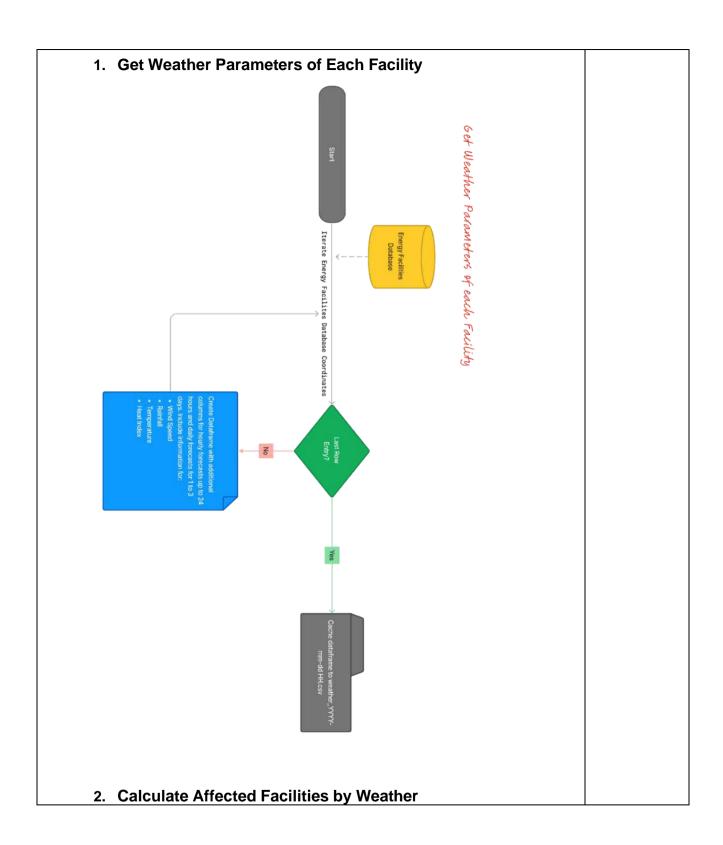
Downstream Oil Online Platform (DOOP)		facilities (that are relevant to EDIMS)	development;
Energy Resiliency Management System (ERMS)	An online platform that will be developed to streamline and digitize the Resiliency Compliance Plan (RCP) submission and energy resilience assessment process. Part of the system would be an online version of the Energy Resilience Scorecard (ERS) to assess the resilience level of energy facilities based on standardized indicators.	details including geographic coordinates will be shared by EDIMS to ERMS. ERS and RCP data may also be accessed by EDIMS for analysis with vulnerability and risk data of	Under development; no integration yet

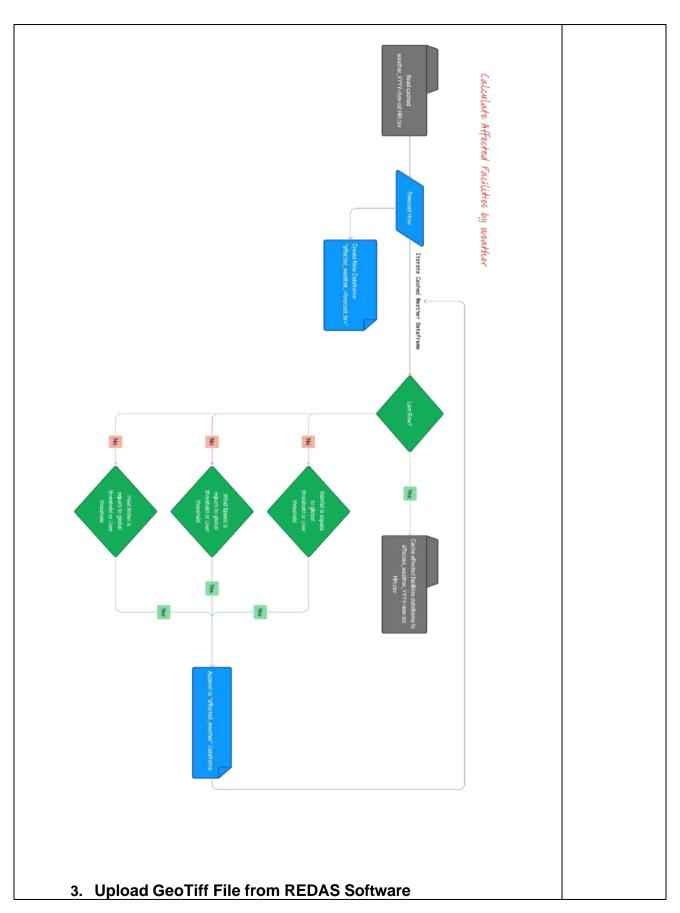
ICT System	Description	Scope of Integration	Integration Readiness
GeoRiskPH	A platform that allows the user to quickly and easily generate hazards assessment reports		Through API
PhilAWARE	A system based on DisasterAWARE platform that serves as an early warning system and multihazard monitoring platform. This provides situational awareness, modeled impact assessment, decision support, information exchange capabilities, and verified geospatial data and visualization for decision makers and disaster managers.	data layers relevant to	

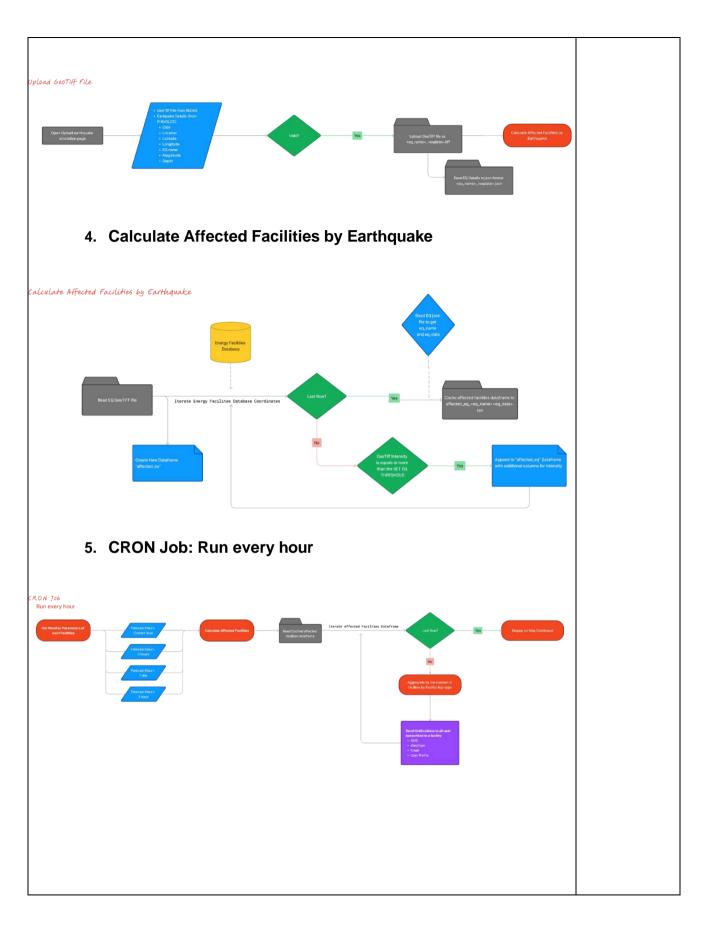
Philippine	A GIS-based information	Access to	Through
Disaster	management system that	data layers	dir
Resilience	houses relevant and up-	relevant to	ect database
Foundation -	to-date disaster	EDIMS	connection
Hazard	information that can be		
an	used to monitor active		
d Disaster	hazards, risks		
Analysis	assessments and		
for	response planning. It is a		
Business	decision support tool that		
Resilience	can support both the		
(PDRF-	corporate/business needs		
HANDA)	as well as the safety and		
,	security/emergency		
	operations of PDRF's		
	member companies.		
Rapid	A software that can	Integration	Through
Earthquake	simulate earthquake		dir
Damage	hazards such as ground	of	ect database
Assessment	shaking, liquefaction,	earthquake	connection
System	landslides, and tsunami. It	simulation	
(REDAS)	can also compute	files for	
		analysis in	
	terms of physical	EDIMS	
	damage, casualties and		
	economic loss.		
NEA	An online platform from the		Through
Digit	National Electrification		dir
al Dashboard	Administration that		ect database
	monitors and collates		connection or
	reports from		API
	Electric Cooperatives.		

# ANNEX H - Mechanisms for Auto-Triggered Events

This section shows the flowcharts for auto-triggered events. These are subject to change depending on discussion during the conceptualization/inception stage with the SP.







# ANNEX I - Data Privacy Requirements

Data Privacy Requirement	Description
Data Handling and Protection	The system must be designed to ensure that personal data is collected, processed, stored, and disposed of in accordance with the law. This includes implementing appropriate technical measures to protect against unauthorized access, disclosure, alteration, or destruction of personal information.
Consent Management	The system shall incorporate mechanisms for obtaining and managing user consent for the collection and processing of personal data in compliance with the requirements of the Data Privacy Act. This includes providing clear and transparent information to users regarding the purposes for which their data is being collected and processed, as well as obtaining explicit consent where necessary.
Data Minimization and Retention	The system shall be designed to employ data minimization by limiting the collection and retention of personal information to what is necessary for the specified purposes. Personal data shall be retained only for as long as required to fulfill the purposes for which it was collected, and shall be securely disposed of once no longer needed, in accordance with the retention periods specified in the Data Privacy Act.
Security Safeguards	The system shall implement appropriate security safeguards to protect personal data against unauthorized access, disclosure, alteration, or destruction, as required by the Data Privacy Act. This includes but is not limited to encryption, access controls, and pseudonymization to mitigate risks to data security.
Conduct of Privacy Impact Assessment (PIA)	The service provider shall conduct a Privacy Impact Assessment (PIA) to evaluate the privacy implications of the proposed information system.  The PIA shall assess the collection, processing, storage, and transmission of personal information within the information system.  The PIA shall identify potential privacy risks, vulnerabilities, and mitigation measures associated with the information system.
Submission and approval of PIA Report	The service provider shall submit a comprehensive PIA report to the DOE upon completion of the assessment.  The PIA report shall include an executive summary, detailed analysis of privacy risks, recommendations for mitigating risks, and any other relevant documentation. The PIA report shall be subject to review and approval by DOE.

## ANNEX J - Incident Management Guidelines for Observed/Notified Application Issues

The SP adheres to providing an enterprise-grade incident management tool for fully managed applications and infrastructure-related incidents. This will be utilized as the main ticketing tool to monitor, and update reported incidents from the software solution provided. Below is the Service- Level Agreement that the Service Provider should comply with:

 Table 1. Investigation/Response Time of Reported Application Issue

Severity Level	Agreed Investigation and Response/Resolution Time to End User	
4 – Low	Within eight (8) working days from notification	
3 – Medium	Within four (4) working days from notification	
2 – High	Within two (2) calendar days from notification	
1 – Very High	Within one (1) calendar day from notification	

Non-performance of the required responsibilities and non-compliance of the minimum performance standard can be considered as a ground for the imposition of liquidated damages and/or blacklisting as provided under the applicable provisions of Republic Act 9184, its IRR or related issuances of the Government Procurement Policy Board

Table 2. Priority Level Classifications

Priority Level	Description	Example Request	
1 – Very High	Issues that compromise the data- security and integrity of the System (data theft / loss / alteration) and / or prevents the access of Users to the System.	generated and continuous	
2 – High	Issues that lead to the inability to process system actions (at any part of the process) but does not pose any of the risks covered by Priority Level 1.	Issues that disable application submission / approval / evaluation	
3 – Medium	Issues that comprise of errors that trigger confusion for the users which lead to an increased difficulty in operations or the requirement of workarounds but does not result to risks as high as either Priority Level 1 or 2.	Very Slow System Response, Problems with Auto-Generated Files, Inability to upload or download files	

4 – Low	Issues that comprise of minimum risk errors that do not have a direct effect on the normal functionality of the System or the experience of the Users but should still be corrected.	wrong volues showing up	

### ANNEX K - EDIMS User Groups and Facilities Accounts

The system should enable the creation of accounts for user groups and facilities. There will be different levels of accessibility and role permissions depending on the user group, which are detailed as follows:

## 1. User Groups' Roles and Responsibilities, and Level of Accessibility

ategory Units Iser roup)	Roles and Responsibility	Level of Accessibility
dministrator TFER Secretariat, designated ITMS and other DOE administrators	<ul> <li>Manage user accounts by creating, modifying, disabling, resetting passwords, or deleting user accounts.</li> <li>Manage data sources, including adding new sources, modifying existing ones, or removing outdated sources.</li> <li>Approval of contents/data as recommended by content validators or moderators.</li> <li>Manage default global settings/configurations for web applications.</li> </ul>	<ul> <li>Has full access to all features of the systems (including approval of publication and account creation)</li> <li>Layers and sub layers creation</li> <li>Allow to change system settings such as threshold levels and other configurations</li> </ul>

Data Providers	DOE and energy stakeholders	<ul> <li>Permission to add, edit, import, and export content to the EDIMS platform.</li> <li>Ensure the accuracy, relevance, and quality of the content. This involves adhering to established guidelines and standards for data accuracy and contextual significance.</li> <li>Maintain open communication with platform moderators, validators, or administrators. This includes responding promptly to queries, providing additional information when requested, and actively</li> </ul>	<ul> <li>Add content, editing</li> <li>Importing and exporting of data depending on level of accessibility</li> <li>Access to map contents depending on level of accessibility</li> <li>Access to dashboard</li> <li>Initiate manual updates when needed</li> <li>Generation of reports for usage analysis and data insights</li> </ul>

	Providers.	
Checker Secre	<ul> <li>Head etariat</li> <li>FER person</li> <li>Approves the situation report before publication or the platform.</li> </ul>	<ul> <li>Full access to map contents</li> <li>Access to dashboard</li> <li>Access to generated situation reports</li> <li>Gives final approval of reports before publication to the platform</li> </ul>

Categor y (User Group)	Units	Roles and Responsibility	Level of Accessibility
Technica Support	TFER Secretariat and Service Provider	<ul> <li>Providing resolution of issues including user support, technical troubleshooting, and maintaining data integrity.</li> <li>Regular maintenance tasks involve database backups, software updates, and performance optimization.</li> </ul>	Deletion, importing, and exporting

		<del>-</del>		
Read-Only Users	DOE Executives and the Presidential Managemen t Staff	<ul> <li>Observing and accessing information for reference and research but not modifying or adding content. Users in this category primarily observe and reference the information available on the platform. This could include studying reports, analyzing data, or extracting insights without making alterations.</li> <li>Can be decision-makers within an organization who can extract relevant information for informed decision-making.</li> <li>Restricted from making</li> <li>Restricted from making</li> <li>Restricted from making</li> <li>The existing content. However, allows the conduct of research activities within the platform. They can explore datasets, reports, and other resources to gather information for their specific needs.</li> </ul>	<ul> <li>Full access to map contents</li> <li>Access to dashboard</li> <li>Limited to viewing and exporting/downloadin g content (both internal and external data) without the ability to make changes</li> <li>Access to and downloading of published data/information</li> </ul>	

Public General Users Public, media, and other stakeholders	Granted general access to the platform, allowing them to navigate and explore only publicly available information including the dashboard	<ul> <li>Access to map contents depending on level of accessibility</li> <li>Access to dashboard</li> <li>Access to and downloading of published data/information</li> </ul>
--	---	--

Cotogory			
Category (User	Units	Roles and	Level of
Group)	Ullits	Responsibility	Accessibility
Огоару		and maps with	Accessibility
		limited zoom	
		level.	
		Reference the	
		information	
		presented on	
		the platform.	
		Public users	
		can engage in	
		learning,	
		understanding,	
		and staying	
		informed about	
		the status of	
		the energy	
		sector.	
		<ul> <li>Access and</li> </ul>	
		download	
		published	
		situation	
		reports.	
		<ul> <li>While public</li> </ul>	
		users may not	
		contribute	
		directly and are	
		explicitly	
		restricted from	
		making	
		modifications or	
		contributions to	
		the content,	
		they can	
		provide feedback on the	
		user	
		experience.	
		Reporting	
		issues,	

	suggesting improvements, or highlighting the value of specific features contributes to the overall platform enhancement.		
--	--	--	--

### 2. Role Permissions for Report Submission User Groups

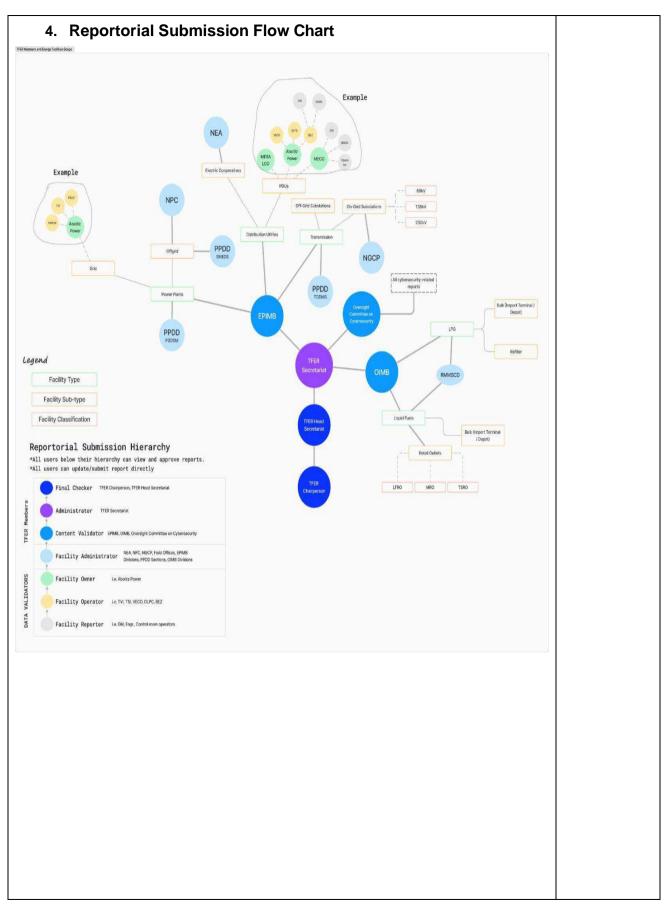
Report Submission User Groups	Units	Units Role Permissions		
Content Validator	EPIMB for Power facilities OIMB for Oil and Gas facilities	<ul> <li>Same as Data Providers</li> <li>User account creation /designation of the facility administrator, owners, operators, and reporters</li> <li>Edit / Validate reports from the administrators, owners or operators or reporters</li> <li>Submit reports</li> </ul>		
Facility Administrator	NEA, NPC, NGCP  DOE-FOs, EPIMB Divisions, OIM B Divisions	<ul> <li>Same as Data Providers</li> <li>User account creation/designation of the facility owners, operators, and reporters</li> <li>Edit / Validate reports from the owners or operators or reporters</li> <li>Submit reports</li> </ul>		
Facility Owners	Energy Stakeholders i.e. Aboitiz Power	<ul> <li>Same as Data Providers</li> <li>User account creation of the facility operators and reporters</li> <li>Edit / Validate reports from the operators or reporters</li> <li>Submit reports</li> </ul>		

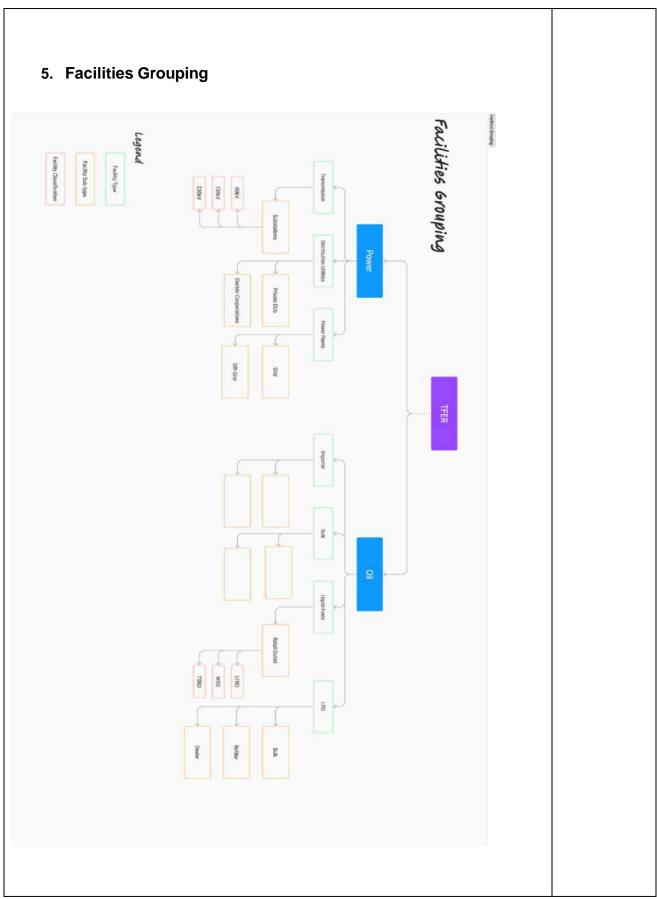
Facility Reporter  Energy Stakeholders  i.e. plant operation manager, control  Access to map and specific to facilities assign  Submit reports	Facility Reporter  Energy Stakeholders  • Access to map and specific to facilities assign	Facility Operators	Energy Stakeholders i.e. Therma Visayas Inc., EAUC	<ul> <li>Access to map and dashboard specific to facilities assign</li> <li>User account creation of the facility reporters</li> <li>Edit / Validate reports from the reporter</li> <li>Submit reports</li> </ul>
room operator		Facility Reporter	i.e. plant operation manager, control	specific to facilities assign

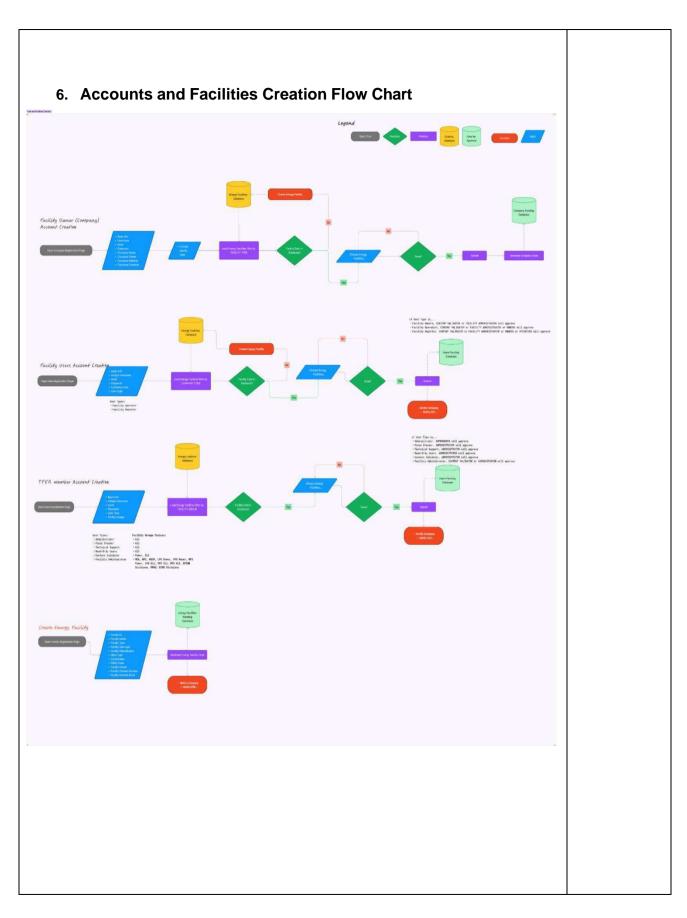
### 3. Table of Actions Permitted per User Groups

es Level of Accessition

Action	System Adminis	Final Chec	Adminis trator	Tech Support	Content Valida	Facility Adminis	Facility Owner	Facility Opera	Facility Repor	Read- Only	Public User
	trator	ker			tor	trator	-	tor	ter	User	
Approve or Modify Facility Update / Creation			<b>V</b>		* 🗸	* 🗸	* 🗸				
Approve, Create, Modify, or Delete User Registration if User is:											
Administrator		V									
<ul> <li>Final Checker, Technical Support, Read-Only Users, Content Validator, Public Users</li> </ul>			V								
Facility Administrator			V		* 🗸						
Facility Owners					*	-					
Facility Operators					- 🗸	-	*				
Facility Reporters					*~	*	*V	**			
allow to change system settings such as threshold levels, ayer customization, and other configurations				V							
Jpload of layer geospatial data files (i.e. shp, geojson)			V	V	*	*					
Can Delete unconfirmed Data/Report				<b>V</b>							
an Approve / Can Edit Report submitted by:											
Facility Reporter					V		~				
Facility Operator			<b>~</b>		V	V	V				
Facility Owner			V		V	V					
Facility Administrator			~		V						
Content Validator											
Administrator		<b>V</b>									
Other Final Checker		<b>V</b>									
Access to generated SitReps both verified and inconfirmed		V	<b>Z</b>		*	-					
view and download generated SitRep including previous sitRep		~								V	V
ccess to Public Dashboard and Maps									V	V	~
access to Map Dashboard including Layers		V	V	V	-	-				V	
Approve request for API token/access			<b>Z</b>								
Perform full backup of system, files, and database	V										
Database syncing and restoration											
riewing and analyzing network logs, system logs, server ogs, access logs, error logs, application logs, security ogs, audit logs, site statistics, and performance metric	V										







### ANNEX L - Bill of Materials (BOM) - Sample Only

Item No.	Description	Qty	Unit	Unit Price (PhP)	Total (PhP)
EDIMS					
1	Perpetual License  – Specify (if any)	1	License	1.00	1.00
2	Subscription License – Map API	1	License	1.00	1.00
3	ICT hardware - Training toolkits	1	Unit	1.00	1.00
4	Service – System Enhancement	1	Service	1.00	1.00
5					
6					
Total C	ost				4.00

### Legend:

Item No.: Sequential numbering of items.

**Description:** Name or description of the item (e.g., specific perpetual software license, specific annual software subscription, specific ICT hardware, specific service description).

Quantity: Number of units/licenses/subscriptions.

**Unit:** Type of unit (e.g., License, Unit, Service).

Unit Price: Price per unit in PhP.

Total Price: Total cost for the quantity specified in PhP.

Total Cost: Overall total cost of all items listed in PhP

## Section VIII. Checklist of Technical and Financial Documents

### Checklist of Technical and Financial Documents (Requirement during the Opening of Bids) and Documentary Requirements for Post-qualification

### I. TECHNICAL COMPONENT ENVELOPE

### Class "A" Documents

Legal D	<u>ocuments</u>
(a)	Valid PhilGEPS Registration Certificate (Platinum Membership) (all
	pages).
	<u>Or</u>
(b)	Registration certificate from Securities and Exchange Commission
	(SEC), Department of Trade and Industry (DTI) for sole
	proprietorship, or Cooperative Development Authority (CDA) for
	cooperatives or its equivalent document;
	And
(c)	Mayor's or Business permit issued by the city or municipality where
	the principal place of business of the prospective bidder is located, or
	the equivalent document for Exclusive Economic Zones or Areas;
(1)	And Tay also rough for F.O. No. 200 at 200F, as finally reviewed and
(d)	Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and
	approved by the Bureau of Internal Revenue (BIR).
Technic	al Documents
(e)	Statement of the prospective bidder of all its ongoing government and
	private contracts, completed contracts, including contracts awarded
	but not yet started, if any, whether similar or not similar in nature and
	complexity to the contract to be bid (Bidding Form Annex A); and
(f)	Statement of the bidder's Single Largest Completed Contract (SLCC)
	(Bidding Form Annex B) similar to the contract to be bid, except
	under conditions provided for in Sections 23.4.1.3 and 23.4.2.4 of the
	2016 revised IRR of RA No. 9184, within the relevant period as
	provided in the Bidding Documents; and
(g)	Original copy of Bid Security. If in the form of a Surety Bond, submit
	also a certification issued by the Insurance Commission; or original
	copy of Notarized Bid Securing Declaration (Bidding Form Annex
	<b>C)</b> ; <u>and</u>
(h)	Conformity with the Technical Specifications under Section VII by
	signing the bidder's compliance column of the TOR/Technical
	Specification and submission of the following:
	production/delivery schedule;
	manpower requirements/organizational structure; and
	3. Guarantee for after sale services for Services; and
(i)	Original duly signed Omnibus Sworn Statement (OSS) (Bidding
	Form Annex D); and if applicable, Original Notarized Secretary's
	Certificate in case of a corporation, partnership, or cooperative; or
	Original Special Power of Attorney of all members of the joint venture
	giving full power and authority to its officer to sign the OSS and do

acts to represent the Bidder.

	<u>Financia</u> ☐ (j)	I Documents The Supplier's audited financial statements, showing, among others, the Supplier's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized
	(k)	institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission; and The prospective bidder's computation of Net Financial Contracting Capacity (NFCC); or a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation.
		Class "B" Documents
	(I)	If applicable, a duly signed joint venture agreement (JVA) in case the joint venture is already in existence; or <b>duly</b> notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.
II.	FINANCI	AL COMPONENT ENVELOPE
	(m)	Original of duly signed and accomplished Financial Bid Form (Bidding Form Annex E); and
	(n)	Original of duly signed and accomplished Price Schedule(s) (Bidding Form Annex F).
	Other do	ocumentary requirements under RA No. 9184 (as applicable)
	(o)	[For foreign bidders claiming by reason of their country's extension of reciprocal rights to Filipinos] Certification from the relevant government office of their country stating that Filipinos are allowed to
		participate in government procurement activities for the same item or product.
	(p)	Certification from the DTI if the Bidder claims preference as a Domestic Bidder or Domestic Entity.

### III. Post-Qualification Requirements:

- 1. In case only the PhilGEPS Registration Certificate (Platinum Membership) was submitted during the bid opening, submit the certified true copies of the following:
  - (a) Registration certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives or its equivalent document;
  - (b) Mayor's or Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas; and
  - (c) Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).
- 2. Latest Income/Business Tax Returns;
- 3. Certificate of PhilGEPS Registration;
- 4. Pictures of its principal place of business;
- 5. In case of Goods, submit brochures/prototype/actual sample of the products being offered or in case of Services, concept paper/write-up or description of the services being offered; which must be submitted on the date indicated in the post-qualification letter, addressed to the end-user, and certifies that it is the bidder's official and final offer. Non-submission of this requirement may be a ground for disgualification.
- 6. In case of procurement for manpower services, proof of contribution/remittance for SSS, Philhealth and Pag-ibig for the last six (6) months from the opening of bid; and
- 7. Other appropriate licenses and permits required by law as stated in the bidding documents/post-qualification letter.

### **Bidding Forms**

Mandatory Submission of Bidding Forms

### ANNEX A

### STATEMENT OF ONGOING, COMPLETED AND/OR AWARDED CONTRACTS

The Bids and Awards Committee
Department of Energy
Energy Center, Rizal Drive, Bonifacio Global City
Taguig, Metro Manila

Ongoing, completed or awarded but not yet started projects for the period: last two (2) years, where applicable.

Procuring Entity / Date of Contract	Kinds of Goods Sold and/or Services Offered	Amount of Contract and Value of Outstanding Contracts	Date of Delivery	End-user's Acceptance if Completed (date)	Specify whether a Prospective Bidder is a Manufacturer, Supplier, Distributor or Service Provider	Indicate whether "Similar "or "Not Similar"

Submitted By:	
(Signature over Printed Name)	

### Note:

- 1. May be reproduced, if necessary
- 2. Please attach end-user's certificate of acceptance

### ANNEX B

### STATEMENT OF SINGLE LARGEST COMPLETED CONTRACT

The Bids and Awards Committee
Department of Energy
Energy Center, Rizal Drive, Bonifacio Global City
Taguig, Metro Manila

Single Largest Completed Contract (SLCC) for the period: last two (2) years, where applicable.

Procuring Entity / Date of Contract	Kinds of Goods Sold and/or Services Offered	Amount of Contract and Value of Outstanding Contracts	Date of Delivery	End-user's Acceptance if Completed (date)	Specify whether a Prospective Bidder is a Manufacturer, Supplier, Distributor or Service Provider	Indicate whether "Similar "or "Not Similar"

Submitted By:	
	_
(Signature over Printed Name)	

### Note:

- 1. May be reproduced, if necessary
- 2. Please attach end-user's certificate of acceptance

Annex C

## Bid Securing Declaration Form [shall be submitted with the Bid if bidder opts to provide this form of bid security]

REPUBLIC OF THE PHILIPPINES)	
CITY OF	_) S.S.

## BID SECURING DECLARATION Project Identification No.: [Insert number]

To: [Insert name and address of the Procuring Entity]

I/We, the undersigned, declare that:

- 1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid Securing Declaration.
- 2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any procurement contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1(f),of the IRR of RA No. 9184; without prejudice to other legal action the government may undertake.
- 3. I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:
  - a. Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
  - b. I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right; and
  - c. I am/we are declared the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this \_\_\_\_ day of [month] [year] at [place of execution].

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE] [Insert signatory's legal capacity] Affiant

### [Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

#### Annex D

## Omnibus Sworn Statement [shall be submitted with the Bid]

REPUBLIC OF THE PHILI	,
CITY/MUNICIPALITY OF _	) S.S.
	ΔFFIDΔVII

- I, [Name of Affiant], of legal age, [Civil Status], [Nationality], and residing at [Address of Affiant], after having been duly sworn in accordance with law, do hereby depose and state that:
- [Select one, delete the other:]
   [If a sole proprietorship:] I am the sole proprietor or authorized representative of
   [Name of Bidder] with office address at [address of Bidder];
   [If a partnership, corporation, cooperative, or joint venture:] I am the duly
   authorized and designated representative of [Name of Bidder] with office address
   at [address of Bidder];
- 2. [Select one, delete the other:] [If a sole proprietorship:] As the owner and sole proprietor, or authorized representative of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached duly notarized Special Power of Attorney
  - [If a partnership, corporation, cooperative, or joint venture:] I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable;)];
- 3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;
- 4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
- 5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;
- 6. [Select one, delete the rest:] [If a sole proprietorship:] The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project

Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

[If a partnership or cooperative:] None of the officers and members of [Name of Bidder] is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree; [If a corporation or joint venture:] None of the officers, directors, and controlling stockholders of [Name of Bidder] is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

- 7. [Name of Bidder] complies with existing labor laws and standards; and
- 8. [Name of Bidder] is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
  - a. Carefully examining all of the Bidding Documents;
  - b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract:
  - c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
  - d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.
- 9. [Name of Bidder] did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
- 10. In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.

<b>IN WITNESS WHEREOF</b> , I have hereunto set my hand this	_day of .	, 20	_ at
, Philippines.			

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE] [Insert signatory's legal capacity] Affiant

### [Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

### Annex E

## Bid Form for the Procurement of Goods and Services [shall be submitted with the Bid]

BID FORM
Date :
Project Identification No.:  To: [name and address of Procuring Entity]  Having examined the Philippine Bidding Documents (PBDs) including the Supplemental or Bid Bulletin Numbers [insert numbers], the receipt of which is hereby duly acknowledged, we, the undersigned, offer to [supply/deliver/perform] [description of the Goods] in conformity with the said PBDs for the sum of [total Bid amount in words and figures] or the total calculated bid price, as evaluated and corrected for computational errors, and other bid modifications in accordance with the Price Schedules attached herewith and made part of this Bid. The total bid price includes the cost of all taxes, such as, but not limited to: [specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties], which are itemized herein or in the Price Schedules, If our Bid is accepted, we undertake:  a. to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements of the Philippine Bidding Documents (PBDs);
<ul> <li>b. to provide a performance security in the form, amounts, and within the times prescribed in the PBDs;</li> </ul>
<ul> <li>to abide by the Bid Validity Period specified in the PBDs and it shall remain binding upon us at any time before the expiration of that period</li> </ul>
[Insert this paragraph if Foreign-Assisted Project with the Development Partner:
Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:  Name and address Amount and Purpose of Agent Currency/Commission or gratuity
/if none otate "None") 7

(if none, state "None") ]

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your Notice of Award, shall be binding upon us.

We understand that you are not bound to accept the Lowest Calculated Bid or any Bid you may receive.

We certify/confirm that we comply with the eligibility requirements pursuant to the PBDs.

The undersigned is authorized to submit the bid on behalf of [name of the bidder] as evidenced by the attached [state the written authority].

We acknowledge that failure to sign each and every page of this Bid Form, including the attached Schedule of Prices, shall be a ground for the rejection of our bid.

Name:	
Legal capacity:	
Signature:	
Duly authorized to sign the Bid for and behalf of:	
Date:	

### Annex F

## Price Schedule for Goods Offered from Abroad [shall be submitted with the Bid if bidder is offering goods from Abroad]

lame 	of Bidder			oods Offered P	Page of			
1	2	3	4	5	6	7	8	9
Item	Description	Country of origin	Quantity	Unit price CIF port of entry (specify port) or CIP named place (specify border point or place of destination)	Total CIF or CIP price per item (col. 4 x 5)	Unit Price Delivered Duty Unpaid (DDU)	Unit price Delivered Duty Paid (DDP)	Total Price delivered DDP (col 4 x 8)
.egal Signa	Capacity: ture			or and behalf				

### Annex F

# Price Schedule for Goods Offered from Within the Philippines [shall be submitted with the Bid if bidder is offering goods from within the Philippines]

For Goods Offered from Within the Philippines  Name of Bidder Project ID No Page								of	
1	2	3	4	5	6	7	8	9	10
Item	Description	Country of origin	Quantity	Unit price EXW per item	Transportation and all other costs incidental to delivery, per item	Sales and other taxes payable if Contract is awarded, per item	Cost of Incidental Services, if applicable, per item	Total Price, per unit (col 5+6+7+ 8)	Total Price delivered Final Destination (col 9) x (col 4)
_ega Signa	I Capacity ature:	/:			d behalf				

### **Contract Agreement Form for the Procurement of Goods (Revised)**

[Not required to be submitted with the Bid, but it shall be submitted within ten (10) days after receiving the Notice of Award]

### **CONTRACT AGREEMENT**

THIS AGREEMENT made the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_ between [name of PROCURING ENTITY] of the Philippines (hereinafter called "the Entity") of the one part and [name of Supplier] of [city and country of Supplier] (hereinafter called "the Supplier") of the other part;

WHEREAS, the Entity invited Bids for certain goods and ancillary services, particularly [brief description of goods and services] and has accepted a Bid by the Supplier for the supply of those goods and services in the sum of *[contract price in words and figures in specified currency]* (hereinafter called "the Contract Price").

### NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

- In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
- 2. The following documents as required by the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184 shall be deemed to form and be read and construed as integral part of this Agreement, *viz.*:
  - i. Philippine Bidding Documents (PBDs);
    - i. Schedule of Requirements;
    - ii. Technical Specifications;
    - iii. General and Special Conditions of Contract; and
    - iv. Supplemental or Bid Bulletins, if any
  - Winning bidder's bid, including the Eligibility requirements,
     Technical and Financial Proposals, and all other documents or statements submitted;

Bid form, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents submitted (*e.g.*, Bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;

- iii. Performance Security;
- iv. Notice of Award of Contract; and the Bidder's conforme thereto; and
- v. Other contract documents that may be required by existing laws and/or the Procuring Entity concerned in the PBDs. Winning bidder

agrees that additional contract documents or information prescribed by the GPPB that are subsequently required for submission after the contract execution, such as the Notice to Proceed, Variation Orders, and Warranty Security, shall likewise form part of the Contract.

- 3. In consideration for the sum of [total contract price in words and figures] or such other sums as may be ascertained, [Named of the bidder] agrees to [state the object of the contract] in accordance with his/her/its Bid.
- The [Name of the procuring entity] agrees to pay the above-mentioned sum in accordance with the terms of the Bidding.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of the Republic of the Philippines on the day and year first above written.

[Insert Name and Signature] [Insert Name and Signature]
[Insert Signatory's Legal Capacity]
[Insert Signatory's Legal Capacity]

[Insert Name and Signature]

for: Department of Energy

for: [Insert Name of Supplier]

Witness for DOE [Position Title]

Witness for Supplier [Position Title]

Helen C. Roldan OIC - Chief, Accounting Division Witness

### <u>Acknowledgment</u>

[Format shall be based on the latest Rules on Notarial Practice]