



Philippines

October 4, 2018

**Bid Bulletin No. 5
PHL-RFP-2018-062**

Subject: Development of Software, Supply and Delivery of Hardware for the Implementation of Philippine Renewable Energy Market System (PREMS)

Dear All,

We are pleased to provide you our official responses for the queries received through e-mail.

1. Question on SLA and availability:

You state that there is no HA requirement for this project. However, you also state that SLA is 99.9% and availability is 99.5%. You have also confirmed that the concurrent users is 4,000 using at least Two Factor Authentication. You have now stated that the load balancer is not required. It is not possible to meet this SLA with a single firewall, single AD server, single web/app server and single database server (and therefore no-load balancer). 99.9% allows 10 minutes a week, or 40 minutes a month for maintenance & post patching server reboots which is impossible to attain. Even if a single Web/App server is sized to handle 4,000 users – the risk level is such that we cannot even maintain the server O/S let alone the application in the window allowed.

If you take the backup site offline & patch, then move the live users to the backup site for the maintenance window, you are exposed to a single point of failure - and the SLA would be breached immediately. Therefore, please advise the overriding requirement: SLA of 99.9% and availability of 99.5% or a single Web/App and single database and single AD server system configuration with no HA components and clusters or load balancing, it is not possible to have both at the same time.

Answer 1:

For clarity on the hardware infrastructure design requirement, it is indicated in the PREMS System Infrastructure Design shown in Figure 3 Annex B of the Terms of Reference that, "The number of hardware (servers, network equipment and other components/peripherals) to be allocated for each environment (production – main and back-up sites; and development/test) must be determined by the Contractor in order to run the proposed solutions for the PREMS in accordance with the performance standards set in the Terms of Reference."

We expect that the Contractor will determine and identify the specifications and appropriate number of hardware (e.g., how many servers, network equipment, etc.) based on the software solution it will propose to run the PREMS.



For clarity on Non-Functional Requirement - Dependability:

For this Project, the Non-Functional Requirement enumerated below for High Availability (HA) or redundancy of nodes to failover the application/database processes within site is required. The Contractor is expected to ensure that all the Functional Requirements indicated in the TOR must be met and satisfied in the proposed PREMS System Infrastructure accordingly. The proposed solution should be able to handle and accommodate 4000 simultaneous user access.

May we clarify that the software that will be developed by the Contractor shall be running and available for functional processing 99.9% of the time. (Please note that this is only software and is not affected by the hardware requirement for this Project). Furthermore, please be clarified that the annual availability requirement of 99.5%, measured on a 24x7 basis, should still be achieved during the development period until it is accepted by the Evaluation Team. The PEMC/DOE as the user of the system will be responsible for maintaining the Up-Time requirement during commercial operations.

2. Question on Security

The Firewall was removed from the diagram and it was replaced with "Secure Internet." However, we are still responsible for system security and have to comply with all relevant local laws, namely RA10173 and RA10175. Will your single person shift technician have control to manage the existing firewalls at both sites protecting the "Secure Internet?" If not, who is going to manage the 4,000 MFA accounts? Please note that with no firewall provisioning, we cannot be held accountable for Intrusion Detection, Prevention and Logging & reporting as per the above laws.

What is the overriding factor to be proposed: please advise if we are responsible for system security and legal compliance, meaning we need to provide and manage firewalls and MFA or do all requirements for security and legal compliance fall under the responsibility of the DoE and their "Secured Internet?" If DoE will provide and manage, please confirm that your firewall is capable of supporting 4,000 concurrent users for the PREMS application.

Answer 2:

The latest diagram provided (With Secure Internet) is a streamlined representation of the hardware configuration shown in Figure 3 Annex B of the Terms of Reference. The Contractor still needs to propose the hardware configuration (including the needed network equipment such as firewall, switches, etc.) in order to comply with all relevant local laws, namely RA10173 and RA10175, on system security. the successful bidder will not manage the servers and therefore cannot be held responsible for security during operations. However, during acceptance testing, any security test is fair to ensure compliance with requirements and regulations. Bidders should design a solution that will pass those tests and demonstrate full compliance. Please see our reply in item #1 above.

3. Question on the AD server

This server will be used to manage the 4,000 external users linked to the security system using LDAP and will also allow internal user access and since no firewalls are required, how will you provide a DMZ and segmented network for internal, external and system support users?

Answer 3:

The firewall is still required as part of the Secure Internet design to be proposed by the vendor. Please refer to related response in Item 2 on Security.

Please be guided accordingly.

Thank you.

