

# TERMS OF REFERENCE FOR THE PROCUREMENT OF CLOUD SUBSCRIPTION/SERVICES FOR THE NATIONAL ELECTRIFICATION ADMINISTRATION'S BUSINESS INTELLIGENCE (NEA-BIT) PROJECT

## I. BACKGROUND

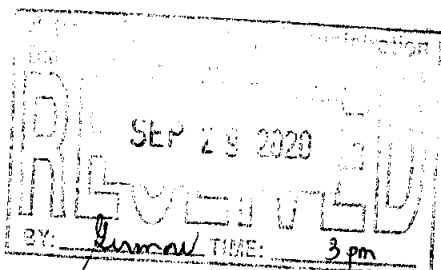
In 2015, the National Electrification Administration has availed of the Technical Assistance (TA) through a grant from the European Union (EU) and administered by the World Bank (WB) for NEA's major IT systems upgrade. The TA includes the development of a Business Intelligence (BI) System for NEA, Web Portal for Data submission of the 121 Electric Cooperatives (under NEA's supervision) and the complex ground-up Data Warehouse to help the ECs to be technically and financially proficient.

The highly proprietary customized system, Business Intelligence Technology (BIT) was developed for NEA by the WB's selected private contractor. In February 2017, NEA BIT was implemented with the contractor providing the Operations and Maintenance (O&M) including Cloud Services under Microsoft Azure under a three (3) year Enterprise Service Agreement from 2017 to 2019. MS Azure was contracted to provide the cloud infrastructure for NEA BIT reporting which has been operating successfully (with more than 1500 online users nationwide). The NEA BIT system was officially adopted through a policy as the official reporting tool of the Electric Cooperatives in fulfilling the mandate of R.A. 10531 towards the completion of rural electrification in forging sustainable development (An Act Strengthening the National Electrification Administration, further amending for the Purpose P.D. 26, as amended). Otherwise known as the NATIONAL ELECTRIFICATION ADMINISTRATION Decree".

To address the remaining correctives and enhancements of the NEA BIT for year 2020, the agency intends to acquire cloud services/subscription was implemented using Microsoft Azure as its cloud computing platform and infrastructure to support the requirements of the proprietary - based software applications and licenses such as MS SQL, Power BI and Windows active Directory System. The cloud computing platform was used for deploying and managing and deploying the NEA BIT application and services through a global network of Microsoft-managed data centers. This being said, it is important that the same provider for the duration of completing the remaining correctives and system enhancements be retained. Consequently, changing service providers at this point is not reasonable since it will take more time, resources and human intervention to switch subscriptions which can severely affect the implementation of this mission-critical system.

## II. OBJECTIVE

The main objective is to continue and acquire a cloud service subscription service which will ensure full compatibility, satisfy all NEA-BIT's platform requirements and provide the necessary software licenses, hardware accessories, services, and the necessary counterpart technical support and coordination with NEA and the NEA BIT's Operations and Maintenance Service provider. Subscription with the same cloud service platform/provider will no longer need extensive migration efforts because of the familiarity in the operations of the existing system which will guarantee no possible delays in the implementation which is advantageous to NEA and to the government as a whole.





### III. SCOPE OF WORK AND TECHNICAL REQUIREMENTS

1. The Cloud Service Provider (CSP) through its local counterpart technical support will be responsible for provisioning the required cloud platforms, services and associated licenses with the following specifications to ensure compatibility and NEA BIT's continuous service as follow:

Service Feature .	Requirements
Disaster Recovery and Business Continuity	Automate the recovery of services when a site outage happens at the primary datacenter. Bring over applications in an orchestrated way to help restore services quickly.
Automation	<p>A cloud-based automation and configuration service that provides consistent management across cloud platform. Must have the following capabilities:</p> <ul style="list-style-type: none"> <li>-Orchestrate process using graphical, Powershell, and Phyton runbooks</li> <li>-Collect inventory</li> <li>-Track changes</li> <li>-Assess compliance</li> <li>-Schedule update installation</li> <li>-Role based access control</li> <li>-Heterogenous</li> </ul>
Traffic Management	Capability to control the distribution of traffic across your application endpoints, Continuous monitoring of endpoint health and automatic failover when endpoints fail.
Data Management	<p>SQL Database, Data Storage, Import/Export Capabilities and File Services.</p> <p>Must support Microsoft SQL Server 2012 and higher.</p>
Identity Management	Capability to run Windows Active Directory to tie the local network and the cloud network together
IP Requirement	Provide Public IP resources to communicate with other cloud resources, on-premises network, and the Internet.
Security	<p>Inclusion of unified security management platform that includes the following features:</p> <ul style="list-style-type: none"> <li>• security health monitoring for both cloud and on-premises workloads</li> <li>• security threat blocking through access and app controls</li> </ul>



	<ul style="list-style-type: none"> <li><input type="checkbox"/> adjustable security policies for maintaining regulatory and standards compliance</li> <li><input type="checkbox"/> security vulnerability discovery tools and patches</li> <li><input type="checkbox"/> advanced threat detection through security</li> </ul>
<b>Privacy</b>	<p>alerts and analytics must be resilient to attack, able to safeguard user access to the cloud environment, and keep customer data secure.</p> <p>Must offer continuous security-health monitoring For entire environment across public cloud and on premise infrastructure Must be covered by the Data Privacy Act.</p>
<b>Back up Capability</b>	Must include automated back ups and database replication and redundancy capabilities
<b>Scalable Resources</b>	<p>Provide the capability to increase/decrease resources, as needed, to support any periods of unpredictable high/low usage.</p> <p>Scalable resources include but not limited to:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Bandwidth</li> <li><input type="checkbox"/> Servers</li> <li><input type="checkbox"/> Storage</li> <li><input type="checkbox"/> Database instances</li> </ul>
<b>Software licenses requirements</b>	Cloud provider will be responsible for licensing, including but not limited to operating systems, servers, databases and applications.
<b>Period of Performance</b>	The period of performance for this subscription is One (1) year pay as you go service, subject to renewal upon satisfactory delivery of the provider
<b>Vendor Support</b>	Virtual Machine Connectivity to at least one instance must be at least 99.90% of the time.
	Vendor must provide online/telephone and onsite support as agreed according to Service Contract. Vendor will provide onsite support after four (4) hours of downtime.
<b>Knowledge transfer</b>	Vendor must provide knowledge transfer/handover technical session and training on the side of the provider for NEA Key Technical Personnel. (Cloud Administration, Basic troubleshooting, management and operations.
<b>Services</b>	Vendor/provider shall migrate all resources from current cloud computing service platform or its current site, to the new cloud computing service



	<p>platform in coordination/collaboration with the NEA and its NEA BIT's O &amp; M System Provider</p> <p>Vendor shall provide counterpart technical support in configuring &amp; setting-up the required infrastructure &amp; monitoring the cloud infrastructure performance to align with NEA's requirements in collaboration with NEA Bit's O &amp; M system provider.</p> <p>Vendor technical support/fulfiller must have a minimum at least 4 years experience in providing licenses/subscription and managing &amp; administering <u>the same</u> cloud platform. Should have certified technical personnel of the said platform.</p>
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**NEA BIT INFRASTRUCTURE REQUIREMENTS**

<b>Service Feature</b>	<b>Requirements</b>
<p><b>Virtual Machines</b></p> <p><b>Production Environment (~ 540 hours up monthly/ VM)</b></p> <p><b>Performance Environment (~180 hours up monthly/ VM)</b></p> <p><b>Pre-Production Environment (~180 hours up monthly/ VM)</b></p> <p><b>QA Environment (~180 hours up monthly/ VM)</b></p>	<p>Standard D3 v2 (4 vcpus, 14 GiB memory) with DB  Standard D12 v2 (4 vcpus, 28 GiB memory)with DB  Standard A2 v2 (2 vcpus, 4 GiB memory)  Standard D2 v2 (2 vcpus, 7 GiB memory)  Standard DS4 v2 (8 vcpus, 28 GiB memory)  Standard D3 v2 (4 vcpus, 14 GiB memory) with DB</p> <p>Standard D3 v2 (4 vcpus, 14 GiB memory) with DB  Standard D3 v2 (4 vcpus, 14 GiB memory) with DB  Standard A2 v2 (2 vcpus, 4 GiB memory)  Standard D2 v2 (2 vcpus, 7 GiB memory)  Standard D2 v2 (2 vcpus, 7 GiB memory)  Standard D3 v2 (4 vcpus, 14 GiB memory) with DB</p> <p>Standard D3 v2 (4 vcpus, 14 GiB memory) with DB  Standard D3 v2 (4 vcpus, 14 GiB memory) with DB  Standard D2 v2 (2 vcpus, 7 GiB memory) with DB  Standard D2 v2 (2 vcpus, 7 GiB memory)  Standard D2 v2 (2 vcpus, 7 GiB memory)  Standard A1 Basic ( 1 vcpus, 2 GiB memory)  Standard D3 v2 (4 vcpus, 14 GiB memory)</p>





<b>Disaster Recovery Environment</b> <b>(Standard A2 v2 ~ 540 hours up monthly;</b> <b>other VMs ~ 180 hours up monthly / VM</b>	Standard D3 v2 (4 vcpus, 14 GiB memory) with DB Standard A2 v2 (2 vcpus, 4 GiB memory) with DB Standard D2 v2 (2 vcpus, 7 GiB memory) Standard D2 v2 (2 vcpus, 7 GiB memory) Standard D3 v2 (4 vcpus, 14 GiB memory) with DB
<b>Automation</b>	Process Automation Capability: 500 included minutes and 500 additional minutes, 1 Watchers x 744 hours
<b>Backup</b>	VMs and Database Type, 1 Instance(s) x 1 TB, GRS Redundancy, High Average Daily Churn, 30 Daily RPs, 1 Weekly RPs, 1 Monthly RPs, 1 Yearly RPs, After 1st month duration, 3174 Total Storage
<b>Data Transfer</b>	150GB (increase if needed)
<b>VPN Gateway</b>	Express Route Gateway, Standard tier, 840 gateway hour(s), 10 s2s tunnels, 128 P2S tunnels, Zero(0) GB, Inter-VNET VPN gateway type, Load Balancer
<b>VPN Gateway</b>	VPN Gateways, Basic VPN tier, 744 gateway hours, 10 S2S tunnels, 128 P2S tunnels, 140 GB, Inter- VNET outbound VPN gateway type
<b>Traffic Manager</b>	1 million DNS queries/mo, 9 endpoint(s), 0 Fast endpoint(s), 0 External endpoint(s), 0 Fast external endpoint(s), 0 million(s) of user Measurements, 0 million(s) of data points processed
<b>IP Addresses</b>	6 Dynamic IP Addresses. 23 Static IP Addresses
<b>Storage Accounts</b>	<ol style="list-style-type: none"> <li>1. 1 Block Blob Storage, General Purpose V1, LRS Redundancy, 2 TB Capacity - Pay as you go,</li> <li>2. 1 Block Blob Storage, General Purpose V1, LRS Redundancy, 600 GB Capacity - Pay as you go,</li> <li>3. 1 Block Blob Storage, General Purpose V1, LRS Redundancy, 588 GB Capacity - Pay as you go,</li> <li>4. 1 Block Blob Storage, General Purpose V1, LRS Redundancy, 567 GB Capacity - Pay as you go,</li> <li>5. 1 Block Blob Storage, General Purpose V1, LRS Redundancy, 395 GB Capacity - Pay as you go,</li> <li>6. 1 Block Blob Storage, General Purpose V1, LRS Redundancy, 267 GB Capacity - Pay as you go,</li> <li>7. 1 Block Blob Storage, General Purpose V1, LRS Redundancy, 200 GB Capacity - Pay as you go</li> </ol>
<b>Should conform to all requirement of this Terms of Reference (TOR)</b>	

#### IV. SERVICE LEVEL AGREEMENT

##### Service Commitment

Cloud provider and its technical support will use commercially reasonable efforts to make the cloud subscription available with a Monthly Uptime Percentage (defined below) of at least 99.90% in each case during any monthly billing cycle ( "Service Commitment). In the event the CSP does



not meet the Service Commitment, Agency will be eligible to receive a Service Credit as described below:

**Service Commitments and Service Credit**

Service Credits are calculated as a percentage of the total charges paid by agency for cloud subscription affected for the monthly billing cycle in which unavailability occurred in accordance with the schedule below:

<b><u>Monthly uptime Percentage</u></b>	<b><u>Service Credit Percentage</u></b>
Less than 99.90% but equal to or greater than 99.0%	10%
Less than 99.0%	30%

**V. SECURITY**

- 1.) The CSP should meet international security standards and should abide by all relevant Philippine Laws and industry standards.
- 2.) Data that can be migrated to the public cloud will need to meet security requirements for accreditation and be verified by internationally recognized security assurance frameworks.
- 3.) Accepted international security assurance controls include ISO/IEC 27001 and 2708. Data will be encrypted using industry-tested and accepted standards and algorithms. Data privacy law will apply in the processing of personal information.

Encryption Requirements - AES (128 bits and Higher)

**VI. DATA OWNERSHIP, RETRIEVAL AND INTEROPERABILITY**

**Data Ownership**

NEA will retain full control and ownership over their data, with CSP identity and access controls available to restrict access to customer infrastructure and data. CSSPs should provide customers with a choice as to how they store, manage, and protect their data, and not require a long-term contract of exclusivity.

**Ownership**

Service contracts and other SLAs related to provisioning of cloud services for Government agencies shall clearly provide that any data migrated to the cloud remains the property of the agency regardless of who owns, manages or operates the cloud. NEA will retain rights of data access, retrieval, modification and deletion regardless of the physical location of the cloud services, including the right to approve, deny and revoke access by third parties.

**Access**

Access, retrieval modifications and deletion of data remains the right of the NEA and will be reflected in the relevant service contracts. The policies and data processes pertaining to data access will be defined according to the needs of the agency and specified in the agreement between the NEA and the cloud provider.



**Interoperability**

CSP shall allow NEA to move data on and off the cloud platforms as needed . Interoperability of all cloud workload shall consider the Philippine eGovernment Interoperability Framework(PeGIF).

**VII. APPROVED AGENCY BUDGET**

The Cloud Service Contract for the National Electrification Administration is **Five Million Pesos (P5,000,000)** inclusive of VAT, broken down as follows (please itemize costing in the Financial Bid Proposal)

- *Subscription Cost  
(itemized breakdown for the hardware/software components)*
- *Power BI Pro (10 licenses)*
- *Migration Services and other cost*

Itemized/detailed costing/breakdown of the cost components of the project proposal shall be submitted/included in the financial bid proposal.

**VIII. SCHEME OF PAYMENT**

Cloud service subscription will be paid on a monthly basis subject to issuance of Statement of Account (SOA) by the CSP on the basis of the pre-computed rate under the Cloud Subscription program for NEA or equivalent.

**IX. PROJECT DURATION**

The duration of the Cloud Service Contract for NEA is twelve (12) months which will commence within 30 calendar days upon issuance of the Notice to Proceed (NTP) subject to extension.

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