



DEPARTMENT CIRCULAR NO. DC 2016-02-0006 *ca*

**POLICY ON ACCOUNTABILITY OF ENTITIES ENGAGED IN POWER
GENERATION TO ENSURE
SUFFICIENT, RELIABLE, AFFORDABLE, AND SECURE SUPPLY OF ENERGY
IN THE COUNTRY**

WHEREAS, Republic Act (RA) No. 7638, otherwise known as the "Department of Energy (DOE) Act of 1992," as amended, declares it as a policy of the State to ensure a continuous, adequate, and economic supply of energy with the end in view of ultimately achieving self-reliance in the country's energy requirements through the judicious conservation, renewal and efficient utilization of energy to keep pace with the country's growth and economic development and taking into consideration the active participation of the private sector in the various areas of energy resource development;

WHEREAS, RA No. 9136, otherwise known as the "Electric Power Industry Reform Act of 2001" (EPIRA), states that it is the policy of the State to, among others: (i) ensure the quality, reliability, security and affordability of the supply of electric power; (ii) ensure fair and non-discriminatory treatment of public and private sector entities in the process of restructuring the electric power industry; (iii) protect the public interest as it is affected by the rates and services of electric utilities and other providers of electric power; and (iv) ensure transparent and reasonable prices of electricity in a regime of free and fair competition and full public accountability to achieve greater operational and economic efficiency and enhance the competitiveness of Philippine products in the global market;

WHEREAS, the EPIRA mandates the DOE to, among others: (i) promote a system of incentives to encourage industry participants, including new generating companies and end-users to provide adequate and reliable electric supply; (ii) develop policies and procedures and, as appropriate, promote a system of energy development incentives to enable and encourage electric power industry participants to provide adequate capacity to meet demand including, among others, reserve requirements; and (iii) monitor private sector activities relative to energy projects in order to attain the goals of the restructuring, privatization, and modernization of the electric power sector as provided for under existing laws, while providing for an environment conducive to free and active private sector participation and investment in all energy activities;

WHEREAS, RA No. 11646, otherwise known as the "Microgrid Systems Act" (MGSA), declares it as a policy of the State to, among others: (i) accelerate total electrification and ensure the provision of quality, reliable, and secure electricity service at reasonable rates in unserved and underserved areas; (ii) promote private sector participation in the electrification of unserved and underserved areas; (iii) provide a competitive environment for different kinds of energy sources while prioritizing low-cost, indigenous, renewable, and environment-friendly sources of energy; and (iv) ensure the adoption of a dynamic regulatory environment that does not impair nor inhibit end-users from accessing or enjoying the benefits of technologies and innovations in the electric power industry;

WHEREAS, the MGSA mandates the DOE to, among others, monitor the operations of all awarded Microgrid Service Providers (MGSPs) and their respective MGSP Service Contracts (MSCs), and authorizes the DOE, *motu proprio* or upon complaint, to conduct a review of an MGSP's operations and its corresponding MSC should it find reasonable grounds for noncompliance with the minimum technical and service performance standards and other provisions of the MSC;

WHEREAS, the Supreme Court has declared that the generation and supply sectors, while not considered public utilities, are not removed from the ambit of governmental regulation (*Fernando L. Hicap v. Energy Regulatory Commission (ERC), Manila Electric Company (MERALCO), and the Office of the Executive Secretary*, G.R. No. 210334, 01 August 2023), and that the EPIRA and its Implementing Rules and Regulations (IRR) instituted adequate safeguards to curb and altogether suppress any abuse or irregular activity by the generation and supply sectors.

NOW THEREFORE, in consideration of the foregoing premises, the DOE hereby issues, adopts, and promulgates the policy for the accountability of entities engaged in power generation pursuant to Section 6 (Generation Sector) or other relevant provisions of the EPIRA:

RULE I GENERAL PRINCIPLES

Section 1. Title. – This Circular shall be known and referred to as the “**Power Generator Accountability Policy.**”

Section 2. Rationale. – This Policy is promulgated to uphold the highest standards of electricity generation service delivery and ensure compliance and accountability of all entities engaging in power generation business, including their strict adherence to technical and operational standards, dispatch instructions, market rules, reportorial and assessment requirements, and obligations under their pertinent agreements with electric power industry participants and end-users.

Section 3. Scope and Coverage. – This Policy shall cover all entities owning and/or operating generation facility/ies regardless of size, location, resource type, plant technology, construction/completion status, and connection. This shall include the following entities:

- a. Generation Companies (GenCos);
- b. Energy Regulatory Commission (ERC);
- c. National Electrification Administration (NEA);
- d. Power Sector Assets and Liabilities Management Corporation (PSALM);
- e. National Power Corporation (NPC);
- f. Microgrid Service Providers (MGSPs);
- g. National Transmission Corporation (TransCo);
- h. Distribution Utilities (DUs);
- i. Market Operator (MO); and
- j. System Operator (SO), Small Grid Operator (SGO), Small Grid System Operator (SGSO), and other entities acting as such.

Section 4. Definition of Terms. – The following terms in this Policy shall be defined as follows:

- a. *“Certificate of Compliance”* or *“COC”* refers to a license issued by the ERC in favor of a person or entity to operate a power plant or other facilities used in the generation of electricity pursuant to Section 6 of RA No. 9136 and Section 4, Rule 5 of its IRR.
- b. *“Certificate of Endorsement”* or *“COE”* refers to an issuance by the DOE certifying that a generation facility is consistent with the Power Development Plan (PDP) or with the Missionary Electrification Development Plan (MEDP), if the generation facility is located in an Off-Grid Area. This endorsement is a prerequisite for the facility to secure a Certificate of Compliance (COC) or Provisional Authority to Operate (PAO) from the ERC;
- c. *“Committed Power Projects”* refer to projects that have already secured its firm financial closing, are already in the construction stage, or were awarded through the Green Energy Auction Program (GEAP);
- d. *“DOE Electric Power Database Management System”* or *“DEPDMS”* refers to the online portal established for the electronic submission of reportorial requirements by power industry stakeholders. It encompasses the platform and mechanism used for the systematic and timely submission of power industry data and information.
- e. *“Energy Virtual One-Stop Shop”* or *“EVOSS”* refers to an online system that provides a single decision-making portal for actions on applications for permits and/or certifications necessary for, or related to, an application of a proponent for new power generation, transmission, or distribution projects;
- f. *“Forced Outage”* refers to an outage that results in emergency conditions directly associated with a unit, requiring that it be taken out of service immediately, either automatically or as soon as switching operations can be performed. This may include outages due to human error, the improper operation of equipment, or a reserve shutdown state.
- g. *“Generation Company”* or *“GenCo”* refers to any person or entity authorized by the ERC to operate facilities used in the generation of electricity;
- h. *“Grid”* refers to the high voltage backbone system of interconnected transmission lines, substations and related facilities, located in Luzon, Visayas and Mindanao;
- i. *“Grid Operating and Maintenance Program”* or *“GOMP”* refers to the consolidated three-year planned outage programs, prepared by the System Operator, in consultation with the users, that contains the scheduled maintenance of grid components and/or facilities, its duration, estimated date and time of start and completion, to ensure the security and reliability of the Grid.
- j. *“Independent Power Producer”* or *“IPP”* refers to private entities that own and operate power generation facilities, that are connected to the Grid, and sell electricity through the Grid to DUs, end-users, or other buyers, that are not part of the NPC or PSALM;

- k. "*Indicative Power Projects*" refer to projects that are in the pre-development stage, have secured its Clearance to Undertake a System Impact Study with the NGCP, and are compliant with reportorial requirements, including the regular submission of its Monthly Accomplishment Report to the DOE;
- l. "*Maintenance Outage*" refers to an outage that does not require immediate removal from the in-service state but requires a unit to be removed from the available state before the next Planned Outage. This is scheduled at least seven (7) days in advance.
- m. "*Maximum Load (Pmax)*" refers to the maximum net output in MW that a Generating Unit can reliably sustain based on the Generating Unit Capability Tests.
- n. "*Microgrid System Provider*" or "*MGSP*" refers to a natural or juridical person whose business includes the installation, operation, and maintenance of microgrid systems in unserved or underserved areas nationwide;
- o. "*Microgrid System Provider Service Contract*" or "*MSC*" refers to the contract between the MGSP and the NPC whereby the MGSP performs the missionary electrification function on behalf of the NPC and provides integrated power generation and distribution services in an unserved and underserved area, and to receive subsidy whenever applicable Qualified Third Party Service and Subsidy Contract (QSSC), which were executed prior to the effectivity of RA No. 11646, shall be treated as an MSC;
- p. "*Monthly Accomplishment Report*" or "*MAR*" refers to the mandatory report submitted by project proponents to the DOE for the monitoring of Committed and Indicative Power Projects on a monthly basis. The MAR shall at all times bear the actual development status of the project in accordance with its approved workplan and Commercial Operations Date, as originally submitted to the DOE. Failure to submit the MAR for three (3) consecutive months shall be grounds for de-listing the project from the DOE's official database and non-issuance of a COE;
- q. "*New Power Provider*" or "*NPP*" refers to a private entity that owns and operates a power generation facility in an Off-Grid Area and sells the electricity to a DU, other similar service providers, or to electricity end-users;
- r. "*Off-Grid Area*" refers to an area that is not connected to the Grid;
- s. "*Outside Management Control (OMC) Outage*" refers to an outage wherein the cause is beyond the control of the GenCo and has not resulted from planning error or negligence. This includes: i) *force majeure* event; ii) grid connection or substation failure due to problems with transmission lines, substation, and switchyard equipment outside the responsibilities of the generating plant; iii) lack of fuel (water from rivers or lakes, coal mines, gas lines, etc.) where the GenCo is not in control of contracts, supply lines, or delivery of fuels; iv) special environmental limitations that could not be prevented by operator action; and v) labor strike;

- t. *"Planned Outage"* refers to the state in which a component/unit is unavailable due to inspection, testing, preventive maintenance or overhaul. This is scheduled with a pre-determined duration and is coordinated with the System Operator. The Planned Outage of a unit shall be reflected in the GOMP;
- u. *"Philippine Distribution Code"* or *"PDC"* refers to the set of rules, requirements, procedures, and standards governing the operation, maintenance, and development, connection and use of the distribution systems in the Philippines. It also defines and establishes the relationship of the distribution systems with the facilities or installations of the parties connected thereto.
- v. *"Philippine Electrical Code"* or *"PEC"* refers to the electrical safety code that establishes basic materials quality and electrical work standards for the safe use of electricity for light, heat, power, communications, signaling, and for other purposes.
- w. *"Philippine Grid Code"* or *"PGC"* refers to the set of rules, requirements, procedures and standards to ensure the safe, reliable, secured and efficient operation, maintenance, and development of the Grid and its related facilities.
- x. *"Philippine Small Grid Guidelines"* or *"PSGG"* refer to the rules, procedures, and requirements for the generation scheduling, dispatch, and control of active power, including provisions of ancillary service, if any, which are required to ensure power quality, reliability, and security of the Small Grid.
- y. *"Power Supply Agreement"* or *"PSA"* refers to an agreement between a power producer and a DU for supply of power;
- z. *"Provisional Authority to Operate"* or *"PAO"* refers to the interim authority granted by the ERC in favor of a person(s) or entity(ies) to operate generation facilities used in the generation of electricity, pending the completion of requirements for issuance of COC, and as the power demand and supply situation warrants, provided the requirements for grant of PAO is complied with, and that the government permits issued thereto are valid.
- aa. *"Significant Incident"* refers to a single or series of events that has a serious or widespread effect on the Grid, a distribution system, or a user's system. This includes events that impact the quality, reliability, and security of power supply. This includes those mentioned in the Philippine Grid Code and Philippine Distribution Code, as well as events that trigger alert states;
- bb. *"Small Grid"* refers to the backbone system of interconnected high voltage lines or medium voltage lines, substations and other related facilities not connected to the Grid;
- cc. *"System Operator"* or *"SO"* refers to the person or entity responsible for generation dispatch, or the implementation of generation dispatch schedule based on the nomination of the DU from its PSA with the generators, the provision of ancillary services and operation to ensure safety, power quality, stability, reliability and security of the Small Grid;
- dd. *"Small Grid Owner"* or *"SGO"* refers to the party that owns the backbone transmission or sub-transmission or distribution System, and is responsible for planning, operations and maintaining adequate capacity in Small Grid Areas;

ee. "Small Grid System Operator" or "SGSO" refers to the person or entity that is responsible for generation dispatch and real-time control of the power system in Off-Grid Areas through the management of operating reserves, reactive power support, black start and other operating requirements to ensure safety, power quality, stability, reliability and security of the Small Grid;

RULE II ACCOUNTABILITY OF THE GENERATION SECTOR

Section 5. General Accountability of the Generation Sector. – All GenCos shall observe the following responsibilities:

- a. Operate their facilities with a valid COC or PAO and maintain all necessary health, safety and environmental clearances, licenses, authorizations, and other similar documents from the DOE, ERC, and other relevant government agencies;
- b. Comply with all the terms, conditions, and obligations set upon such certificates, licenses, authorizations, and other similar documents;
- c. Satisfactorily maintain their facilities within the standards set by the applicable laws, rules, and regulations, including but not limited to the PGC, PEC, PDC, and PSGG, and consistent with the industry's best practices. For purposes of assessment and inspections, all GenCos shall ensure compliance with the parameters listed in Annex A and maintain records thereof, which shall be made available to the DOE and ERC or their duly authorized representatives as necessary;
- d. Comply with the conduct of periodic operational and technical assessment by the DOE or its duly authorized representatives;
- e. Timely submit accurate, complete, and transparent data, information, and reports to the DOE, ERC, NPC and all concerned agencies and entities in accordance with applicable laws, rules, regulations, and agreements; and
- f. Promptly report any Significant Incident that may or has actually posed risk to the security, reliability, and availability of power supply in any area. The report shall include details of the event and the corresponding workplan of the GenCo to restore the facility to its to its maximum available capacity.

Section 6. Safeguards of the GenCos. – Without prejudice to their responsibilities under this Policy and other applicable laws, rules and regulations, all GenCos shall be entitled to the following protections and assurances:

- a. Due process on the evaluation of its COC or PAO, and in the conduct of assessments and inspections on its facilities by the DOE or its authorized representative(s);
- b. The opportunity to submit and implement a compliance plan to address any findings arising from the DOE or its authorized representative(s) and/or any other relevant entities' assessment;

- c. Confidentiality of their submissions consistent with the applicable rules and regulations of the DOE, except as otherwise provided in this Policy;
- d. Timely and efficient processing, including transparent and uniform requirements for certificates, licenses, permits, authorizations and other requirements of the DOE, ERC, NPC, MO, and SO for the timely commercial operation of the GenCo's facilities. Failure to approve within the applicable timelines under RA No. 11234 or EVOSS Act shall deem such application as approved by the relevant entity; and
- e. Consulted, or at least given an opportunity to be consulted, in the development, amendment or enhancement of various rules and policies of the DOE which affects the viability and operation of the Generation Sector.

RULE III ACCOUNTABILITY OF POWER GENERATION SECTOR CONNECTED TO THE GRID

Section 7. Manner of Operation for GenCos Connected to the Grid. – All GenCos connected to the Grid shall operate and maintain their facilities in accordance with the following standards and responsibilities:

- a. **Grid Reliability.** All GenCos connected to the Grid or distribution system shall operate their facilities to ensure reliability and the continuous availability of supply and reserves. They shall strictly adhere to the standards and limits set by the DOE, ERC, MO, SO, and other relevant entities, including compliance with the Reliability Indices and Performance Standards under the PGC, PDC, PEC.
- b. **Maintenance Compliance.** All GenCos connected to the Grid shall conduct regular and preventive maintenance activities in accordance with manufacturer recommendations and the reliability standards adopted by the ERC. All maintenance schedules must be integrated in the GOMP, as approved by the DOE.
- c. **Market and Dispatch Obligations.** All GenCos connected to the Grid shall be responsible to fulfill their obligations in the WESM and adhere to all WESM Rules and Market Manuals. This shall include the Offered Capacity Compliance Standards (Must-Offer Rule), Dispatch Conformance Standards, Reserve Conformance Standards, Reserve Offer Capacity Compliance, and other substantive, procedural, and technical requirements set or to be issued by the MO or SO. Any violation or failure to comply with the foregoing shall, after due process, subject the GenCo to the appropriate liabilities and penalties under the WESM Penalty Manual.
- d. **Exhaustion of Economic Life.** GenCos operating non-renewable energy (non-RE) generating facilities shall be retired, replaced or repurposed upon the exhaustion of the facility's economic life. The DOE shall require the GenCo to submit a retirement, replacement or repurposing plan within a specified period prior to the projected exhaustion of the facility's economic life. The plan shall include the proposed course of action, technical assessment of the facility's condition, compliance status, implementation schedule, and such other information as the DOE may require.

The DOE shall direct the continued operation of a non-RE generating facility beyond its economic life where it determines that such operation is necessary to ensure energy security, system reliability, or adequacy of supply. Such continued operations shall be for a specified period subject to compliance with technical, environmental, safety, reliability, and other conditions as the DOE may impose, including required upgrades, rehabilitation measures, periodic inspections, and reporting obligations.

Section 8. Responsibilities of GenCos Connected to the Grid. –

All GenCos connected to the Grid are accountable to maintain the validity of, and strictly observe and comply with the requirements, procedures, terms, and conditions of:

- a. Certificates, licenses, authorizations, and similar consents or documents from the DOE, ERC, MO, SO and other government agencies and entities;
- b. Power supply contracts with DUs and other entities;
- c. WESM Rules and Market Manuals;
- d. Reliability Indices and Performance Standards under the PGC, PDC, PEC;
- e. Dispatch instructions of the SO;
- f. GOMP;
- g. Reportorial requirements;
- h. Other obligations under pertinent DOE and ERC issuances;

Section 9. Monitoring of GenCos Connected to the Grid. – All GenCos shall diligently and consistently comply with the Reportorial Requirements under Department Circular (DC) No. DC2022-02-0001, otherwise known as “*Providing Policies for the Systematic Management of the DOE Reportorial Requirements for the Electric Power Industry Participants*,” and DC No. 2024-02-0008, otherwise known as “*Providing a Supplemental Policy for the Systematic Management of the DOE Reportorial Requirements of Electric Power Industry Participants–Generation Companies*,” unless otherwise amended or superseded.

The submitted reports and the gathering or processing of data from such reports may be used as evidence in court and other administrative proceedings in the following cases:

- a. The reports submitted by the GenCo are found to contain material misrepresentations or deviations from the actual data from other reliable sources;
- b. The DOE, *motu proprio* or upon complaint, finds it necessary to subdue any anti-competitive behavior, unfair practices, market manipulation or market power abuse by any electric power industry participant in any platform of the DOE, MO or SO; or
- c. The sufficiency of supply and reliability of the Grid or distribution network is in peril due to the behavior of the GenCo, as determined by the DOE with the MO, SO and concerned DU.

Further, non-submission of reports shall also be a ground for administrative penalties and other applicable sanctions, including non-issuance of the COE to the ERC or revocation of the COC.

Section 10. Assessment of GenCos Connected to the Grid. – The DOE shall conduct periodic assessment of all GenCos and their facilities in line with DC No. DC2017-12-0016, otherwise known as “*Adopting Guidelines for the Performance Assessment and Audit of All Power Generation, Transmission, and Distribution Systems and Facilities,*” and DC No. DC2017-05-0008, otherwise known as “*Providing for the Policies and Guidelines on the Conduct of Performance Assessment and Audit for All Power Generation, Transmission, and Distribution Systems and Facilities,*” unless otherwise amended or superseded. The DOE may call upon other entities to conduct the assessment.

The results of the assessment shall be referred to the ERC for the immediate commencement of further investigations and imposition of appropriate penalties, without prejudice to other legal remedies available to the DOE.

The DOE may likewise endorse its findings and recommendations to the Philippine Competition Commission (PCC), the Department of Justice (DOJ), and other relevant government agencies for the institution of appropriate administrative, civil or criminal liabilities, in accordance with their respective mandates and jurisdictions.

In the implementation of this Policy, the GenCo shall undertake the following:

- a. **Continuous Compliance through Self-Assessment.** The GenCo shall ensure its continuous compliance with operational and technical standards. For this purpose, the GenCo shall conduct annual self-assessment and submit the completed assessment form in **Annex “A”** (Parameters of Generator Compliances for On-Grid) of this Policy to the DOE, no later than March 31st of every year. The declarations made in Annex “A” shall serve as the primary basis for the DOE’s assessment and subsequent endorsement to the ERC for appropriate action.

This notwithstanding, the DOE may conduct facility visitations and on-site inspection to confirm the validity of the submission, subject to prior notification to the concerned GenCo. The DOE shall periodically update the parameters checklist to ensure consistency with new or amended DOE policies and/or ERC rules and regulations. Such updates shall be issued through an Advisory, duly published on the DOE website.

- b. **Report of Preventive Maintenance Findings.** Within forty-five (45) calendar days from the completion of its Preventive Maintenance Schedule (PMS) pursuant to the GOMP, each GenCo shall submit a report which shall detail the findings, recommendations, and the GenCo’s compliance plan to address the same. The DOE shall monitor the compliance to ensure its timely completion and may recommend necessary action in case of deviation in its implementation.

- c. **Report of Outages.** In case of Forced Outage, Maintenance Outage, OMC Outage, or other unplanned or unexpected shutdown, or derating of the generation facility or unit, the GenCo shall immediately inform the DOE of the details, including the cause of the outage and estimated time of the return to service of the facility. This information should be consistent with the report of the GenCos submitted to the ERC pursuant to ERC Resolution No. 04, Series of 2015 (“*Adopting the Procedure in the Reporting Generation Companies of Outage Events Affecting their Generating Facilities*”), as may be amended or superseded by a subsequent issuance.
- d. **Maintenance of Records.** The GenCo shall maintain complete and accurate compliance records, including the accomplished Checklist of Standards, PMS implementation results, and corrective actions undertaken. The DOE and ERC shall conduct validation activities every two (2) to three (3) years, on a risk-based schedule, or as necessary, through document reviews, on-site inspections, and performance assessments, including the Equivalent Forced Outage Factor, Equivalent Maintenance Outage Factor, Equivalent Planned Outage Factor, Equivalent Maintenance Outage Rate, Equivalent Force Outage Rate, Force Outage Rate or any other relevant operational indicators as may be prescribed by the DOE and the ERC.

The DOE, in coordination with the ERC, shall review and evaluate all submissions to ensure completeness and consistency with requirements of this Policy. In case deficiencies are found, the concerned generator shall be notified and required to provide clarifications and corrective measures within the prescribed period.

Section 11. Additional Grounds for Incidental/Special Assessment. – In addition to the grounds set in DC No. DC2017-12-0016, the following circumstances shall automatically trigger an Incidental/Special Assessment of Generation Facilities connected to the Grid:

- a. Facilities operating without a valid and subsisting certification, license, authorization, or other similar government consent;
- b. Generation facilities failing to provide the contracted capacity for the last three (3) months;
- c. GenCos which supply the contracted capacity solely via rental generation sets or deviation to the actual technology or resource indicated in such agreement, whichever applies, except in cases of *force majeure* or emergency situations; or
- d. Sustained derating of capacity not attributable to the availability of Renewable Energy resource for the past three (3) month period.

Section 12. Non-Compliant GenCos; Sanctions. – GenCos found non-compliant with any accountability requirement or performance standard, or that are otherwise found in violation of this Policy based on the results of an inspection or assessment, or due to recurring Forced Outages, valid complaints concerning the GenCo's performance, falsification or non-submission of reportorial requirements, and other acts or omissions contrary to this Policy, shall be subject to appropriate sanction(s):

The DOE and/or ERC, within their respective statutory mandates, may impose any of the following sanction(s), singly or in combination, as applicable:

- a. **Corrective Action Plan.** Direction to submit, implement, and/or periodically report on a Corrective Action Plan (CAP), including specific milestones, subject to verification by the DOE and/or ERC. Failure of the GenCo to submit and implement the CAP within the prescribed period shall likewise be subject to appropriate sanction(s);
- b. **Administrative Fines and/or Penalties.** Imposition of administrative fines and/or penalties in accordance with the EPIRA and prevailing ERC rules;
- c. **Regulatory Action on Permits or Authorizations.** Suspension, cancellation, withdrawal or revocation of the COE, COC, or any other permit, license, approval, or other authorization, in accordance with the EPIRA and prevailing rules and regulations issued by the DOE and ERC;
- d. **Blacklisting or Disqualification.** The blacklisting or disqualification of a GenCo shall result in its exclusion, for a specified period, from participation in any DOE-administered or DOE-authorized competitive selection, auction, or other award mechanisms, including capacity auctions or programs, subject to the applicable program rules. During such period, the DOE and/or ERC shall not issue, renew, or maintain any permits, licenses, approvals, or other authorizations necessary for the GenCo's conduct of business.
- e. **Cease and Desist Order.** Issuance of Cease and Desist Orders by the ERC after due notice and hearing, in accordance with the EPIRA and prevailing ERC rules; and
- f. **Other Remedial Measures.** The DOE and/or ERC may impose such other measures consistent with the law as may be necessary to stop and redress the GenCo's non-compliance and to improve the overall reliability of the facility.

RULE IV ACCOUNTABILITY OF POWER GENERATION SECTOR IN OFF-GRID AREAS

Section 13. *Manner of Operation in Off-Grid Areas.* – All NPPs, MGSPs, DUs, LGUs or any stakeholder operating a generation facility/ies in Off-Grid Areas for purposes of supplying electricity to end-users shall operate their facilities in a way that will not affect the availability of supply and reserves, and the reliability of the transmission and distribution network in Off-Grid Areas. They shall operate in close coordination with the NPC and/or the concerned DU, and TransCo in areas where it is the SO.

They shall observe all their obligations under applicable agreements with the NPC, TransCo and the respective DUs/counterparties, operate within the standards and limits set by the policies of the DOE and ERC, and ensure full synchronization of their facilities with the transmission and distribution network, as applicable. They shall always fulfill the full contracted supply and ensure provisions for reserves and support services in any contingent event in such area.

Section 7 (d) of this Circular shall also apply to GenCos operating non-RE generating facilities in Off-Grid Areas.

Section 14. Responsibilities of GenCos in Off-Grid Areas. – All GenCos in Off-Grid Areas are accountable to observe and comply with the requirements, procedures, terms, and conditions of:

- a. Certificates, licenses, authorizations, and similar consents or documents from the DOE, ERC, NPC, TransCo, and other government agencies and entities;
- b. All PSAs (including emergency and interim) with DUs and/or LGUs;
- c. MGSP notice of awards and any agreements with the DOE, NPC or the concerned DU, as applicable;
- d. Universal Charge for Missionary Electrification (UCME) Subsidy Agreement with the NPC, if applicable;
- e. Reliability Indices and Performance Standards under the Philippine Small Grid Guidelines and pertinent issuances of the DOE and ERC;
- f. Dispatch instructions of SGO or SGSO;
- g. Reportorial Requirements; and
- h. Other obligations under pertinent DOE and ERC issuances.

Section 15. NPC Accountability as Generator. – When NPC-Small Power Utilities Group (NPC-SPUG) performs generation functions in Off-Grid Areas, whether as default supplier, interim provider, or Supplier of Last Resort, it shall be accountable for meeting the same operational, technical, reporting, and coordination requirements imposed on all GenCos under this Policy. Accordingly, NPC-SPUG shall:

- a. Operate and maintain its generating facilities in accordance with DOE and ERC prescribed reliability, availability, and performance standards applicable to off-grid systems;
- b. Integrate the DOE accepted Distribution Development Plan, which includes the Power Supply Procurement Plan (PSPP), of its offtaker DUs, including capacity requirements, RE and hybridization deployment schedules aligned with the SO and DU on its MEDP;
- c. Coordinate continuously with the concerned DUs, TransCo, and NEA to ensure proper measures necessary to maintain uninterrupted service;
- d. Submit periodic operational reports, including generation levels, outages, derations, fuel status (where applicable), and any Significant Incidents, together with corrective action plans, to the DOE and relevant agencies for monitoring and enforcement;
- e. Implement timely corrective actions addressing deficiencies identified by DOE, NEA and TransCo, and participate fully in assessments, audits, and monitoring activities required under this Policy; and
- f. Fulfill all contractual obligations with DUs and/or LGUs.

Section 16. Monitoring of GenCos in Off-Grid Areas. – All GenCos in Off-Grid Areas and the NPC SPUG shall ensure transparent, complete and timely compliance with the Reportorial Requirements under DC No. DC2022-02-0001, and DC No. DC2024-02-0008, unless otherwise amended or superseded.

The submitted reports and the gathering or processing of data from such reports may be used as evidence in court and other administrative proceedings in the following cases:

- a. The reports submitted by the Off-Grid GenCo are found to contain material misrepresentations or deviations from the actual data from other reliable sources;
- b. The DOE, *motu proprio* or upon complaint, finds it necessary to subdue any anti-competitive behavior or unfair practices, market manipulation or market power abuse by any electric power industry participant in any Off-Grid Area; or
- c. The sufficiency of supply and reliability of the distribution system are in peril due to the behavior of the GenCos NPP(s) or MGSP(s), as determined by the DOE with the NEA, NPC and TransCo.

Further, non-submission of reports shall also be a ground for administrative penalties and other applicable sanctions, including non-issuance of the COE to ERC, or revocation of the COC.

Section 17. Assessment of GenCos and NPC SPUG in Off-Grid Areas. – The DOE, in collaboration with NEA, NPC, and TransCo shall conduct the monitoring and assessment of all GenCos and their facilities in line with DC No. DC2017-12-0016 and DC No. DC2017-05-0008, unless otherwise amended or superseded. The DOE may engage other recognized entities to assist in the conduct of such assessment.

The results of the assessment shall be referred to the ERC for the commencement of further investigations, revocation of relevant permits, and imposition of appropriate penalties.

The DOE may likewise endorse its findings and recommendations to the PCC, the DOJ, and other relevant government agencies for the institution of appropriate administrative, civil or criminal liabilities, in accordance with their respective mandates and jurisdictions.

In the implementation of this Policy, the GenCo and NPC SPUG shall ensure its continuous compliance with operational and technical standards. For this purpose, they shall conduct annual self-assessment and submit the completed assessment form in **Annex “B”** of this Policy to the DOE, no later than March 31st of every year. The declarations made in Annex “B” shall serve as the primary basis for the DOE’s assessment and subsequent endorsement to the ERC for appropriate action.

The DOE may conduct visitation and inspection to confirm the validity of the submission, subject to due notification to the concerned GenCo and NPC SPUG. This notwithstanding, the DOE may conduct facility visitations and on-site inspection to confirm the validity of the submission, subject to prior notification to the concerned GenCo. The DOE shall periodically update the parameters checklist to ensure consistency with new or amended DOE policies and/or ERC rules and regulations.

Such updates shall be issued through an Advisory, duly published on the DOE website.

Section 18. Additional Grounds for Incidental/Special Assessment. – In addition to the grounds set in DC No. DC2017-12-0016, the following circumstances shall automatically trigger an Incidental/Special Assessment of Generation Facilities in Off-Grid Areas:

- a. Facilities operating without a valid and subsisting certification, license, authorization, or other similar government consent;
- b. Generation facilities failing to provide the contracted capacity based on its PSA;
- c. GenCos and NPC-SPUG which supply the contracted capacity via rental generation sets or in deviation to the actual technology or resource indicated in the PSA or MSC, whichever applies, except in cases of *force majeure* or emergency situations; and
- d. Presence of potential or actual stranded generation in an Off-Grid Area.

**RULE V
ACCOUNTABILITIES OF GENERATION COMPANIES
ISSUED WITH CERTIFICATE OF ENDORSEMENT/S
FOR THE DEVELOPMENT OF NEW POWER PROJECTS**

Section 19. Application. – This Rule shall apply to the accountabilities of GenCos with ongoing power project developments with duly issued COEs by the DOE, for the GenCo's application for a COC with the ERC.

Section 20. Term of the COE. – The COE issued by the DOE shall have a term of three (3) years, or until the issuance of the COC by the ERC, whichever comes first.

Section 21. Grounds for Evaluation of the COE. – The DOE shall check the contribution, connection or consistency of the project with the Philippine Energy Plan, PDP, and MEDP, whichever is applicable.

In addition thereto, the DOE shall assess the COE application on the following criteria:

- a. Compliance with the reportorial requirements of the DOE for planned generation projects through the MAR, as indicated in **Annex "C"**. The MAR shall be submitted to the DOE on a monthly basis starting from the DOE's endorsement to the relevant Network Service Provider of the project's assessment for System Impact Study or Distribution Impact Study, as applicable.
- b. Performance of responsibilities under existing service contracts with the DOE, if applicable;
- c. Submission of PMS for the first two years of commercial operation which shall be considered as committed under the GOMP; and
- d. Other compliances as may be mandated under pertinent rules and regulations of the DOE.

Section 22. Process of COE Applications. – For COE applications of greenfield power plants, or of first instance or any amendment to the issued COE, the requirements and process, as indicated in **Annexes “D” and “E”**, respectively, shall be observed. Further, a request for COE issuance must be lodged as a new application in cases where the PAO issued by the ERC has already expired.

Section 23. COE is Not Evidence. – The COE shall be inadmissible as evidence of a GenCo’s compliance with the requirements, conditions, terms and commitments under pertinent laws, rules and regulations, except for matters relating to the COC. The COE shall not be construed, implied or expressly, as a waiver for the DOE or any concerned agency or entity to pursue any case, remedy or claim against the GenCo.

RULE VI
ROLES AND RESPONSIBILITIES OF GOVERNMENT AGENCIES AND
INSTRUMENTALITIES AND ELECTRIC POWER INDUSTRY STAKEHOLDERS

Section 24. Responsibilities of the DOE. – The DOE shall have the following responsibilities:

- a. Proactively monitor and supervise all activities of the Generation Sector;
- b. Assist and provide the necessary interventions for GenCos to other government agencies and entities relative to the permits, licenses, certifications and other government authorizations and consents necessary to ensure availability of supply of electric power;
- c. Validate submitted monthly reports with reference to other reliable sources to ensure the integrity, veracity, and accuracy of data and information. The conduct of validation shall include table-top review, on-site inspection and other modes as may be approved by the Secretary;
- d. Perform inspection of facilities and validation of submissions of the GenCos during the middle of the term of the COE and prior to the succeeding issuances of the COE, in cases of re-applications. The inspection and validation shall be performed by the bureau(s) or other related office(s) of the DOE with respect to the resource or technology of such generation facility;
- e. Immediately notify the GenCos which failed to submit the mandatory reportorial requirements for at least two (2) consecutive months. A patterned or erratic submission and non-submission of reports within a six (6)-month period shall likewise be a basis to notify the concerned GenCo;
- f. Coordinate with the NEA, NPC, TransCo, MO, SO, DUs and other relevant agencies, entities and stakeholders for the appropriate enforcement of this Policy and other relevant DOE and ERC issuances on the Generation Sector;
- g. Monitor the adequacy and enforcement, if triggered, of the Contingency Plan of the NPC and concerned DUs in Off-Grid Areas;

- h. Refer to the ERC and other related agencies all possible violations and non-compliance of erring GenCos for the institution of appropriate investigations or cases and imposition of appropriate penalties;
- i. Exercise supervision and, if necessary, assistance to the MO, SO and DUs in supervision and monitoring of GenCos;
- j. Issue the pertinent advisories in the implementation of this Policy; and
- k. Perform all other acts to achieve the objectives of this Policy.

Section 25. Regulatory Support from ERC. – The ERC shall have the following responsibilities:

- a. Promulgate the necessary guidelines and amendments to its existing policies to implement the provisions of this Policy, in accordance with its powers and functions under the EPIRA;
- b. Pursue investigations, initiate the necessary cases and impose appropriate sanctions and penalties against erring GenCos;
- c. Consider the enhancements introduced by the MO, SO, and SGSO in their respective systems or platforms pursuant to this Policy, and the reasonable allocation and/or recovery of costs and expenditures appurtenant thereto;
- d. Determine the economic life of each plant technology, with particular emphasis on non-renewable energy facilities that will be subject to retirement, replacement, or repurposing; and
- e. Perform all other acts to achieve the objectives of this Policy.

Section 26. Responsibilities of the NEA. – The NEA shall assist the DOE in the implementation and enforcement of this Policy. In this regard, NEA shall have the following responsibilities:

- a. Assist Electric Cooperatives (ECs) in ensuring the compliance GenCos to the terms of their PSAs;
- b. Provide the DOE with a monthly verified report and analysis on electricity service concerns and issues attributed to the performance and operation of GenCos in their respective areas;
- c. Provide technical, legal, and institutional guidance to ECs in the implementation and enforcement of their rights, privileges, and remedies under applicable PSAs and related agreements with regard to the GenCo(s) in their franchise; and
- d. Perform all other activities consistent with this Policy, as may be delegated by the DOE.

Section 27. Responsibilities of the NPC. – In accordance with its mandate under the EPIRA, MGSA, and other relevant laws, rules, regulations and agreements, the NPC shall have the following responsibilities:

- a. Ensure reliable, efficient, and affordable supply of electricity to all areas purely served by its SPUG;
- b. Exercise administrative supervision of GenCos in all Off-Grid Areas to ensure their compliance to their UCME agreements with NPC and to power supply contractual obligations with the concerned DUs;
- c. Study the necessary private sector participation in Off-Grid Areas, implement measures to encourage additional generation facilities from the private sector to participate, and ensure their efficient and smooth integration in Off-Grid Areas, in accordance with its UCME Graduation Plan under DC No. DC2019-01-0001, otherwise known as "*Prescribing the Omnibus Guidelines on Enhancing Off-Grid Power Development and Operation*";
- d. Maintain close coordination with DUs in the monitoring of GenCos and the enforcement of this Policy and other relevant laws, rules and regulations;
- e. Ensure that the NPC transmission system is planned, operated, and maintained in a manner that supports the efficient, reliable, and secure conveyance of power supply from GenCos to the concerned DUs and system operations of the TransCo;
- f. Act as the Supplier of Last Resort for generation in Off-Grid Areas, in the event of GenCo's failure to operate reliably and sufficiently, wherein the DU cannot take over due to technical, financial, or institutional limitations;
- g. Implement mechanisms for the equitable and efficient allocation of the UCME, consistent with its responsibility under DC No. DC2019-01-0001, with due regard to the performance and compliance of GenCos in Off-Grid Areas;

To this effect, the NPC may institute remedies that:

- i. Disqualify an Off-Grid GenCo to UCME, in case of substantial breach in its obligations and responsibilities, even if operating in such Off-Grid Area;
 - ii. Withhold UCME entitlements in case of failure to rectify errors cited by the NPC and technical improvements as prescribed by TransCo as SGSO or to implement the activities in an action plan. In such case, the end-users shall still enjoy the Subsidized Approved Generation Rate or Subsidized Approved Retail Rates, whichever applies in the area; and
 - iii. Recommend blacklisting a specific GenCo, for a certain period, operating in Off-Grid Areas;
- h. Institutionalize a Contingency Plan, as part of its Missionary Electrification Plan, to ensure sufficient, reliable, and secure supply of electricity in Off-Grid Areas, in cases of *force majeure*, or failure of GenCos to provide the contracted capacity;

- i. Act as Lead Entity, if designated as such by the DOE, or extend full assistance and participation in the audit of GenCos, once called upon by the DOE; and
- j. Perform all other activities consistent with this Policy, as may be delegated by the DOE.

Section 28. Responsibilities of the TransCo. – In addition to its functions under the EPIRA and DC No. DC2019-01-0001, the TransCo shall have the following responsibilities:

- a. Fulfill its mandate as the SGO and SGSO in Off-Grid Areas, in accordance with DC Nos. DC2019-01-0001 and DC2021-11-0039, otherwise known as the “Mandating the National Transmission Corporation as Small Grid System Operator in Specific Off-Grid Areas”;
- b. Assist the SGO in Off-Grid Areas, upon request or directive of the DOE, in the appropriate dispatch of GenCo(s) in such areas and other measures to ensure reliable and quality conveyance of generated power in the distribution systems therein;
- c. Collaborate with the NPC, upon request or directive of the DOE, in the performance of SO functions in other Off-Grid Areas;
- d. Submit to the ERC the appropriate and financial requirements relative to its operation as SGSO and other relevant documents as may be required by the Commission;
- e. Extend full assistance and participation in the audit of GenCos, once called upon by the DOE; and
- f. Perform all other activities consistent with this Policy, as may be delegated by the DOE.

Section 29. Responsibilities of the System Operator. – The SO shall have the following responsibilities:

- a. Establish all necessary safeguards for the transparent, efficient, complete, and strict enforcement of schedules of GenCos indicated in the GOMP with due consideration on the reliability of the system and sufficiency of supply in the Grid;
- b. Timely issue clear dispatch or redispatch instructions, as may be necessary, to maintain grid security and reliability, and maintain open communications with GenCos for the strict compliance with such instructions;
- c. Establish a platform or mechanism with the MO for the validation of the energy transfers of GenCos vis-a-vis actually delivered from the plant to the Grid or traded in the WESM;
- d. Closely coordinate with the DUs in the monitoring of GenCos and the enforcement of this Policy and other relevant laws, rules and regulations;
- e. Provide recommendations in the audit of GenCos, once called upon by the DOE; and

- f. Perform all other activities consistent with this Policy, as may be delegated by the DOE.

Section 30. Responsibilities of the Market Operator. – The MO shall have the following responsibilities:

- a. Establish a platform or mechanism with the SO for the validation of the energy transfers of GenCos vis-a-vis actually delivered from the plant to the Grid or traded in the WESM;
- b. Further introduce enhancements in the WESM to maintain the transparency and accountability of GenCos, and appropriately penalize any act of supply and/or price rigging, market manipulation and other anti-competitive behavior and unfair practices, either committed by a single GenCo or in collusion with other GenCo(s);
- c. Periodically review and revise, if necessary, the Penalty Manual, to trigger *motu proprio* investigations and imposition of penalties to uphold GenCo accountability in the WESM;
- d. Participate and provide recommendations in the audit of GenCos, once called upon by the DOE; and
- e. Perform all other activities consistent with this Policy, as may be delegated by the DOE.

Section 31. Responsibilities of DUs. – All DUs, either connected to the Grid or in Off-Grid Areas, shall have the following responsibilities:

- a. Actively supervise and monitor all GenCo activities in their respective franchise areas;
- b. Closely coordinate with their contracted GenCos and strictly enforce all provisions of their respective PSAs, particularly those that pertain to the delivery of contracted capacity and related to the pass-on rates to consumers;
- c. For Off-Grid Areas with a single GenCo, establish clear protocols to ensure reliable and sufficient supply in their franchise area.

To this effect, Off-Grid DUs shall prepare a Contingency Plan, as part of their Power Supply Procurement Plan to ensure reliable and sufficient supply of electricity during *force majeure* or failure of the GenCo(s) therein to supply the contracted capacity. In case of the ECs, the Contingency Plan shall undergo a review and approval of the NEA to ensure the provision of the necessary resources to implement the Plan;

For DUs with areas operated by MGSP(s), such Contingency Plan shall provide takeover provisions, among others, in MGSP areas before NPC acts as Supplier of Last Resort;

- d. Participate and provide recommendations in the audit of GenCos, once called upon by the DOE; and

- e. Perform all other activities consistent with this Policy, as may be delegated by the DOE.

RULE VI MISCELLANEOUS PROVISIONS

Section 32. Recognition of Vested Rights and Non-absolution of Pre-Existing Offenses. – Nothing in this Policy shall be construed to affect any vested rights that have appropriately accrued to any person under valid mechanisms prior to the commencement of this Policy.

This Policy shall likewise not absolve, condone, or exempt any non-compliances or violations committed by GenCos under applicable laws, rules, regulations, and agreements prior to the issuance of this Circular. Pre-existing offenses shall remain punishable under the laws, rules and regulations in force at the time of their commission.

Section 33. Exclusions. – The COE issued by DOE for the Authority to Operate of MGSPs shall be governed by the applicable rules and regulations pursuant to RA No. 11646.

Likewise excluded from this Policy are the monitoring and audit of the GenCos' responsibility to provide financial benefits to host communities. The rules and regulations, including its successor policies or amendments, shall continue to apply.


Section 34. Separability. – If for any reason, any section or provision of this Circular is declared invalid or unconstitutional, the other provisions not affected thereby shall remain valid and subsisting.

Section 35. Repealing Clause. – Pertinent provisions of DC Nos. DC2022-02-0001, DC2024- 02-0008, and DC2017-12-0016 are hereby amended by this Policy.

All other previous issuances, rules, and regulations inconsistent with the provisions of this Circular are likewise repealed or amended accordingly.

Section 36. Effectivity. – This Circular shall take effect immediately upon its publication in two (2) newspapers of general circulation or in the Official Gazette. A copy of this Circular shall be furnished to the University of the Philippines Law Center-Office of National Administrative Register (UPLC-ONAR).

Issued this 16 February 2026 at the DOE, Energy Center, Rizal Drive cor. 34th Street, Bonifacio Global City, Taguig City.


SHARON S. GARIN
Secretary



ANNEX A

Requirements for Certificate of Endorsement to the Energy Regulatory Commission (COE-ERC)

CHECKLIST OF REQUIREMENTS	WHERE TO SECURE
<p><i>Note:</i> The project should be in the Department of Energy's (DOE) List of Private Sector Initiated Power Projects with a Committed Status.</p> <p>For coal power projects, it must satisfy the requirements of coal moratorium advisory.</p>	
<p>1. Letter of Request addressed to Electric Power Industry Management Bureau Director indicating the nature of request, whether:</p>	<p><i>To be provided by the Client</i></p>
<p>1.1. For new application should include the official name of the project generating facility, nameplate capacity in three (3) decimal places, and complete location of the project;</p>	
<p>1.2. For amendment (amendment of Developer name, capacity, project name or location), previously issued COE number, the official name of the project, nameplate capacity in three (3) decimal places in MW, and complete location of the project including barangay, municipality, province; For consistency of information, if location is within highly urbanized city, kindly cite the province where the city is geographically located.</p>	
<p>2. Company Profile (if the request is for the amendment of company name or project developer, indicating the transition from the previous developer to the new developer);</p>	

3. Copy of the previously issued COE to ERC (if the request is for amendment);	
4. Project Background / Description including the following information:	
4.1. Name of the Generating Facility / Project;	
4.2. Nameplate capacity in three (3) decimal places in MW. For Solar Projects should be in MWDC and MWAC; For ESS Capacity in MW and MWh	
4.3. Clear copy of the photograph of the front view of Generator nameplate / Engine nameplate / rating capacity attached in each generating unit. For solar projects, sample photograph of the nameplate of the solar panels/modules and summary of serial numbers with corresponding specifications. For ESS, photograph of nameplate of the entire battery modules. In the absence of the clear photograph of the nameplate, kindly provide any of the following: a. Certification that the unit is already unreadable and providing the information in the nameplate photograph; or b. Copy of the manufacturer's booklet containing the specifications in the nameplate.	
4.4. Computation in converting the said generator rating per unit, from Mega-Volt Ampere (MVA) to Megawatt (MW), in three (3) decimal places;	
4.5. For Solar power projects, include also the computation in converting the Wp to MWp, in three (3) decimal places.	
4.6. For ESS projects, also include the computation for the battery capacity in terms of MWh.	
4.7. Summary of the nameplate / rating capacities per unit, in three (3) decimal places, if multiple generators, with the total capacity;	
4.8. Exact location of the power plant including the barangay, municipality, and province; For consistency of information, if	
the location is within highly urbanized city, kindly cite the province where the city is geographically located.	

4.9. For New Power Plant: Target Commercial Operation Date; For Existing Power Plant: Commencement of Operation Date;	
4.10. Summary of Off taker/s of the Electric Output with corresponding capacity (no need to provide if the power plant is already operational);	
4.11. Engineering, Procurement, and Construction (EPC) Contractor (no need to provide if the power plant is already operational);	
4.12. Jobs Generated during Construction and During Operation (current number of employees if the plant is already operational);	
5. Proof of Financial Closing, whichever is available (no need to provide if the power plant is already operational):	
5.1. For 100% Equity:	
5.1.1. Notarized Certificate of Availability of Funds indicating to finance 100% of project cost through Internally Generated Funds to be signed by the President or Treasurer of the Company with the following information: <ul style="list-style-type: none"> 5.1.1.1. Company / Developer's Name; 5.1.1.2. Official Project Name; 5.1.1.3. Capacity in 3 decimal places [MW and MWp (if solar)] [MW and MWh (if ESS)]; 5.1.1.4. Exact location of the power plant including barangay, municipality, and province; 5.1.1.5. Amount of Total project cost; and 5.1.1.6. Indicate that it will be financed 100% by the company 	<i>To be provided by the Client</i>
5.2. For Loan-Equity Ratio of the total project cost:	

<p>5.2.1 Notarized Certification from the company signed by the President or Treasurer of the Company with the following information:</p> <ol style="list-style-type: none"> a. Company / Developer's Name; b. Official Project Name; c. Capacity in 3 decimal places [MW and MWp (if solar)] [MW and MWh (if ESS)]; d. Exact location including barangay, municipality, and province; e. Amount of Total project cost; f. Amount of Project Cost to be financed by the company; and indicate the percentage of the project cost to be financed by the company. 	
<p>5.2.2 Bank Certification or Notarized Memorandum of Agreement or Loan Term Agreement indicating percentage and amount of financial assistance/loan to be provided for the development and construction of the project.</p>	
<p>5.3. For the Financier of the project</p>	
<p>5.2.3 Notarized Memorandum of Agreement / Loan Term Agreement between the Company and the financier on the percentage and amount of Financial Assistance / loan to be provided; or any equivalent documents</p>	
<p>6. Copy of Securities and Exchange Commission (SEC) Registration/Department of Trade and Industry (DTI) Registration, whichever is applicable:</p>	
<p>6.1. For SEC Registration, provide Articles of Incorporation and By-Laws / Articles of Limited Partnership of the Company;</p>	<p><i>To be provided by the Client</i></p>
<p>6.2. For DTI Registration (include attachments that the business is into power generation business);</p>	
<p>7. Latest General Information Sheet of the applicant and its stockholders – SEC form duly stamped received by the SEC for Partnership and Corporation.</p>	<p><i>To be provided by the Client</i></p>
<p>8. Historical Generation GWh for existing and operational power plants (at least 5 years);</p>	

<p>9. Notarized Certificate of Assumption of Accountability (applicable to the successor company that takes on the ownership and/or takes-over the operations of the generation company whether under a new name or using the same company names as the case may be);</p>	
<p>10. Copy of the Power Supply Agreement (PSA) with Off taker/s filed before the ERC / Copy Generation rate application filed before the ERC / Copy of the Board Resolution allowing the filing of the generation rate to ERC/Ancillary Services Purchase Agreement, or any equivalent document;</p>	
<p>11. For Leased Generating Facilities, provide Notarized Lease / Rental Agreement between the operator and the owner of the generating units;</p>	
<p>12. Certification of the location of the powerhouse.</p>	
<p>13. Copy of the Provisional Authority to Operate from the ERC.</p>	
<p>14. Additional for ERC Certificate of Compliance Renewal.</p>	
<p>14.1. Copy of the ERC Certificate of Compliance issued by the ERC being requested for renewal;</p>	
<p>14.2. Certification of new rated capacity, if applicable; and</p>	<p><i>To be provided by the Client</i></p>
<p>14.3. If the project name / capacity / location in the Certificate of Compliance is different from the one being requested to be endorsed provide certification of the correct project name / capacity / location;</p>	
<p>15. Additional Documents for Renewable Energy Power Projects:</p>	
<p>15.1. Copy of the Certificate of Registration (COR) as Renewable Energy (RE) Developer (developer's name, project name and location indicated should be consistent with the request for COE);</p>	

15.2. Copy of Certificate of Confirmation of Commerciality (COCOC) or Operating Contract (OC), whichever is available, containing the developer's name, official name of the generating facility, capacity in 3 decimal places, and location indicated should be consistent with the request for COE.

15.3. DOE approval on the transfer of assignment of Service Contract, Operating Contract, amended documents i.e., COCOC, COR, OC, if applicable;

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ANNEX B

Process for Certificate of Endorsement to the Energy Regulatory Commission (COE-ERC)

STEPS	DOE ACTIONS	FEES TO BE PAID	PROCESSING TIME	PERSON RESPONSIBLE
1. Online submission of Request with complete documents	1.1. EPIMB review of the submitted documents (review of completeness of documentary requirements) supporting documents)		3 Working Days	
2. Waiting on REMB Evaluation if project is qualified	2.1. For Renewable Energy Projects, REMB evaluation if the application is qualified and issuance of Notice to Proceed (NTP).		4 Calendar Days	<i>Staff, REMB</i>
	2.1.1. If the application was tagged as not qualified by REMB. End of process.			
	2.1.2. If the application was tagged as qualified by REMB but an NTP was not uploaded, the application will go to EPIMB for tagging of disapproval. End of process.			
	2.1.3. Uploading of NTP, If the application was tagged as qualified.			
	2.2. If the document is already complete (for RE project should have NTP from REMB uploaded in the			

	EVOSS System) proceed to evaluation / assessment if approved or disapproved. End of process if tagged as disapproved			
	2.3. Preparation of Letter of Payment			
	2.4. Uploading of Order of Payment and Letter for Payment.			
	3.1. Payment is 5 banking days, if not paid application is cancelled. End of process.	Payment of Processing Fee (online payment		
		Php 1,000.00 (1MW to less than 10MW)		
		Php 10,000.00 or Php 100.00 per MW of installed capacity whichever is higher for 10MW and above		
4. Waiting for signed copy of COE to ERC	4.1. Preparation of COE to ERC		4 Hours	Staff, PPDD
	4.2. Review and endorsement, edit if needed.		1 Calendar Day	Senior SRS and Chief, PPDD

	4.3. Review and endorsement, edit if needed.		1 Calendar Day	<i>Assistant Director, Electric Power Industry Management Bureau</i>
	4.4. Review, approval and signing.		1 Calendar Day	<i>Director, EPIMB</i>
	4.5. Uploading in the EVOSS System of the signed COE to ERC. End of process.			<i>Staff, PPDD</i>
5. Claim signed COE				<i>Client</i>

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DEPARTMENT OF ENERGY
 Electric Power Industry Management Bureau
 Monthly Accomplishment Report of Power Projects

Project Name : _____
 Technology : _____
 Project Proponent : _____
 Rated/Installed Capacity : _____
 Project Location : _____
 MAR Covered Month (mmm-yyyy) : _____

- FEASIBILITY STUDY
- ARRANGEMENT FOR SECURING THE REQUIRED LAND
- MARKETING OF GENERATING CAPACITIES
(Off-takers with the corresponding capacity)
- PERMITS AND OTHER REGULATORY REQUIREMENTS
(such as ECC, SIS, NWRB etc.)
- ESTIMATED NUMBER OF JOBS GENERATED
During Construction: _____
During Operation: _____
- GROUNDBREAKING SCHEDULES
- FINANCING ARRANGEMENTS
(Total Project Cost, Bank, Equity - Loan Ratio)
- CONSTRUCTION CONTRACTS FOR PLANTS AND EQUIPMENT
(EPC Contractor)
- COMMENCEMENT OF CONSTRUCTION
- TARGET TESTING AND COMMISSIONING
- TARGET COMMERCIAL OPERATION
- CONTACT PERSON(S) (email and mobile no.)
- OVERALL PROJECT DEVELOPMENT (in percentage)
- CONSTRUCTION PROGRESS (in percentage)
- STATUS OF T&C (if with FCATC or PCATC)
- DATE OF ISSUANCE OF PAO OR COC (dd-mmm-yyyy)

• OTHER CONCERNS / ISSUES ENCOUNTERED RE PROJECT DEVELOPMENT

• ISSUES ENCOUNTERED / REMARKS

This pertains to the project development in general. This may consist the following progresses on, but not limited to: permitting status, financing arrangements, construction progress
 This refers to the construction progress alone

*Please note that failure to submit three (3) consecutive monthly reports will subject to de-listing of the project from the DOE list posted on the DOE website.

Please send to: dce.epimb.powerprojects@gmail.com
 Email Subject: Company Name_Project Name_Month and Year of Project Update

Addressed to: **Engr. Noriel Christopher R. Reyes**
 OIC - Chief Science Research Specialist
 Electric Power Industry Management Bureau - Power Planning and Development Division (EPIMB-PPDD)

Annex D: Parameters of Generator Compliances for On-Grid

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision																																							
ERC Resolution 10, 2020	Compliance	<i>Annex A, Article V</i>																																							
"Rules for the Interim Reliability Performance Indices and Equivalent Outage Days Per Year of Generating Units"		<p>Table 1. Allowable Planned and Unplanned Outage Days</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">No. of Days of Planned Outage</th> <th style="text-align: center;">No. of Days on Unplanned Outages</th> <th style="text-align: center;">Total No. of Day Unavailable</th> </tr> </thead> <tbody> <tr> <td>Pulverized Coal</td> <td style="text-align: center;">27.9</td> <td style="text-align: center;">16.8</td> <td style="text-align: center;">44.7</td> </tr> <tr> <td>Circulating Fluidized Bed</td> <td style="text-align: center;">15.4</td> <td style="text-align: center;">16.9</td> <td style="text-align: center;">32.3</td> </tr> <tr> <td>Combined Cycle</td> <td style="text-align: center;">12.5</td> <td style="text-align: center;">7.7</td> <td style="text-align: center;">20.2</td> </tr> <tr> <td>Gas Turbine</td> <td style="text-align: center;">6.5</td> <td style="text-align: center;">22.7</td> <td style="text-align: center;">29.2</td> </tr> <tr> <td>Diesel</td> <td style="text-align: center;">5.0</td> <td style="text-align: center;">14.0</td> <td style="text-align: center;">19.0</td> </tr> <tr> <td>Geothermal</td> <td style="text-align: center;">6.0</td> <td style="text-align: center;">13.7</td> <td style="text-align: center;">19.7</td> </tr> <tr> <td>Hydroelectric</td> <td style="text-align: center;">23.1</td> <td style="text-align: center;">6.8</td> <td style="text-align: center;">29.9</td> </tr> <tr> <td>Oil-Fired Thermal</td> <td style="text-align: center;">30.8</td> <td style="text-align: center;">27.8</td> <td style="text-align: center;">58.6</td> </tr> <tr> <td>Biomass</td> <td style="text-align: center;">32.7</td> <td style="text-align: center;">7.0</td> <td style="text-align: center;">39.7</td> </tr> </tbody> </table> <p>ERC sets the standard unplanned outages for the generating plants to strictly observe. Not only shall this ensure that the generating plants will be properly maintained, consequently resulting to lesser incidents and occurrences of unplanned outages.</p>		No. of Days of Planned Outage	No. of Days on Unplanned Outages	Total No. of Day Unavailable	Pulverized Coal	27.9	16.8	44.7	Circulating Fluidized Bed	15.4	16.9	32.3	Combined Cycle	12.5	7.7	20.2	Gas Turbine	6.5	22.7	29.2	Diesel	5.0	14.0	19.0	Geothermal	6.0	13.7	19.7	Hydroelectric	23.1	6.8	29.9	Oil-Fired Thermal	30.8	27.8	58.6	Biomass	32.7	7.0
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DC2015-04-0002	Operation	<i>Section 2.1</i>																																							
"Reporting requirements for formulation of power supply and demand forecast of Power Development Plan"		Generation Companies including Embedded Generators and Independent Power Producer Administrators shall submit to the DOE-EPIMB, a Monthly Operations Report as per EPIMB_PPDD Form 04-002																																							
ERC Resolution 7, 2018 - DMC Islanding Guidelines	Operation	<p><i>Section 4 (c)</i></p> <p>The Distribution Utility, System Operator and Embedded Generation Company shall have an agreed Standard Operating Procedure for islanding and follow general procedures while performing Islanding, as per section 6.1 (unplanned islanding) and section 6.2 (planned islanding) of ERC resolution 7 of 2018</p>																																							
Philippine Distribution Code, 2017	Operation	<p><i>Chapter 4.8.7</i></p> <p>RTU and complete communication Equipment required for monitoring and control of Connection Point, installed by Intermediate Embedded Generation Company and communicating information as provided in section 4.8.7.3</p>																																							
	Operation	<p><i>Chapter 5.4.2</i></p> <p>Standard Planning Data - Submission of data by Embedded Generators as per section 5.4.2 of PDC</p>																																							
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	Operation	<i>Chapter 6.11.1.1</i>																																							

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision
		<p>Tests shall be conducted, in accordance with the agreed procedures and standards to confirm the compliance of Embedded Generating Units for the following:</p> <p>(a) Capability of Generating Units to operate within their registered generation parameters;</p> <p>(b) Capability of the Generating Units to meet the applicable requirements of the PGC and PDC;</p> <p>(c) Capability to deliver the Ancillary Services that the Generator had agreed to provide; and</p> <p>(d) Availability of Generating Units in accordance with their capability declaration</p>
Philippine Grid Code, 2016	Operation	<p>GP 5.2.2.2</p> <p>All relevant Users shall submit the relevant planning data for the previous year and the five (5) succeeding years by calendar week 27 of the current year, and any changes thereafter annually, to the Transmission Network Provider and to the ERC through the GMC. These shall include the updated Standard Planning Data and the Detailed Planning Data as per section 5.4 and section 5.5 of the PGC</p>
	Operation	<p>GO 6.5.2.4</p> <p>The User shall provide the Transmission Network Provider by week 27 of the current year a provisional Maintenance Program for the three (3) succeeding years. The following information shall be included in the User's provisional Maintenance Program or when the User requests for a maintenance schedule for its System or Equipment:</p> <p>(a) Identification of the Equipment and the MW capacity involved;</p> <p>(b) Reasons for the maintenance;</p> <p>(c) Expected duration of the maintenance work;</p> <p>(d) Preferred start date for the maintenance work and the date by which the work shall have been completed; and</p> <p>(e) If there is flexibility in dates, the earliest start date and the latest Completion Date.</p>
	Operation	<p>GO 6.2.4.1</p> <p>In Normal State, VRE Generating Facilities shall be operated in the Free Active Power Production control mode (as defined in GCR 4.4.3.6 or GCR 4.4.4.6, as applicable) or at any other control mode that may be decided upon by the VRE Generation Company.</p>
	Operation	<p>GO 6.2.4.2</p> <p>In any Alert State, the System Operator shall make its best endeavors to permit VRE Generating Facilities to continue operating in the Free Active Power Production control mode (as defined in GCR 4.4.3.6 or GCR 4.4.4.6, as applicable). However, if the System Operator considers it necessary in order to maintain security in the system, the System Operator may instruct VRE Generation Companies to change the Active Power control mode of their Wind Farms or PVS to any of those established in GCR 4.4.3.6 or GCR 4.4.4.6, as applicable, issuing at the same time the information regarding the set points to be established to implement the requested type of control. The System Operator can transmit the mentioned instructions verbally or utilizing the SCADA system if allowed in the Connection Agreement or Amended Connection Agreement.</p>
	Operation	<p>GO 6.2.4.3</p> <p>In Emergency States the System Operator is entitled to issue any kind of instruction to VRE Generation Companies regarding the operation of this type of facilities. For the avoidance of doubt, these instructions may include the immediate Disconnection of the VRE Generating Facilities from the network.</p>
	Operation	<p>GO 6.3.3.1</p>

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision
Philippine Grid Code, 2016	Operation	All Conventional Generation Companies shall ensure that their Generating Units are operating in Governor Control.
	Operation	GO 6.3.3.2
		The Generation Company is responsible for maintaining its Generating Units to fully deliver the capabilities declared in its Connection Agreement or Amended Connection Agreement. In the case of VRE Generating Facilities, the VRE Generation Company is responsible for maintaining its Generating Units to fully deliver the capabilities declared in its Connection Agreement or Amended Connection Agreement, depending on the Availability of the primary resource.
	Operation	GO 6.3.3.4
		The Generation Company shall maintain and operate its Equipment, generating facilities and installations to ensure they will not cause any adverse impact to the Stability, Security and Reliability of the Grid.
	Operation	GO 6.3.3.8
		The Generation Company shall be responsible for adjusting its Reactive Power Output as specified in GCR 4.4.2.1.3, in accordance with the instructions issued by the System Operator.
	Operation	GO 6.6.1.1.1
		All Generating Units shall operate in Governor Control mode and shall provide Primary Response to contribute to the correction of Frequency deviations in the Grid.
	Operation	GO 6.6.2.2
		All Generation Companies shall ensure that their Generating Units participates to the Frequency Response to maintain the system Frequency within predefined bounds by arresting Frequency deviations and supporting system Frequency until the Frequency is restored to its scheduled value.
	Operation	GO 6.7.1.3
		Each Generation Company shall maintain the Grid's Voltage or Reactive Power output as required by the System Operator within the reactive capability of the Generating Units. Generator step-up and auxiliary Transformers shall have their tap settings coordinated with the Grid Voltage requirements.
Operation	GPR 7.4.2.5	
	Where the Distribution Utility's or other Grid User's Equipment are connected to the Grid at 500 kV, 230 kV, or 138 kV and a Circuit Breaker is provided by the Distribution Utility or other Grid User at the Connection Point to interrupt fault currents at any side of the Connection Point, a Circuit Breaker fail protection shall also be provided by the Distribution Utility or other Grid User.	
Operation	GO 6.6.10.1	
	The User shall make arrangement that will enable it to disconnect its Customer immediately following the issuance by the System Operator of an instruction to implement Manual Load Dropping (MLD).	
Operation	GO 6.9.1.5	
	Safety coordination procedures shall be established for the coordination, establishment, maintenance, and cancellation of Safety Precautions on HV and EHV Equipment when work or testing is to be carried out on the Grid or the User System.	
Operation	GPR 7.4.1.2	

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision
		All Generation Companies shall submit the list and details of their protection system to the System Operator for approval prior to energization and shall provide a copy of the same to the GMC for information.
	Operation	<i>GPR 7.5.4</i> Generation protection system maintenance and testing programs, developed and implemented by the Generation Company
WESM Rules 2018	Operation	<i>Section 3.5.5.8</i> Must dispatch generating units shall comply with forecast accuracy standards, in respect of their projected outputs submitted under Clause 3.5.5.5 of WESM Rules, consistent with the Grid Code.
DC2010-03-0003		<i>Section 2.2 and 2.3</i>
"Ensure adequate and reliable electric power supply in country"	Technical	Adequate fuel stock inventory maintained (15 days for oil based generation and 30 days for coal-based generation) and monthly fuel inventory report submitted to DOE-EPIMB
	Technical	<i>Section 2.4</i> During scheduled maintenance of Malampaya natural gas facilities, 15 day running inventory of alternative fuel maintained by all affected generation companies and plant operated at full capacity
	Technical	<i>Section 2.8</i> Prior clearance secured from DOE for deactivation or mothballing of existing generation units or facilities critical to reliable operation of the Grid
ERC Resolution 21, Series of 2016		<i>Article I Section 4</i>
"A Resolution Adopting the Grid Management Committee's Proposed Amendments to ERC Resolution No. 17, Series of 2013"	Technical	Availability Factor (AF) is the ratio of Available Hours to the Period Hours of a Unit and/or Component, expressed in percent.
ERC Resolution 09, Series of 2022		Planned Outage Factor (POF) is the ratio of Planned Outage Hours to the Period Hours of a Unit and/or Component, expressed in percent.
"A Resolution Adopting the Rules and Procedures to Govern the Monitoring of Reliability Performance of Small Grid Generating Units"		Equivalent Forced Outage Factor (EFOR) is a measure of the probability that a generating unit will not be available due to planned outages and planned deratings. <i>For formula reference, please refer to Article II Section 6 of this ERC Resolution 21, Series of 2016..</i>
ERC Resolution 13, Series of 2021		<i>Article VIII, Section 1 (a), (c), (m) and Article IX, Section 1</i>
"A Resolution Adopting the Rules for the Monitoring of Variable Renewable Energy (VRE) Generating Facilities Performance"	Technical	Resource Equivalent Availability Factor (REAF) is the percentage of period that the plant was available. Resource Equivalent Planned Outage Factor (REPOF) is the percentage of period that the plant was in planned downtime. Resource Equivalent Forced Outage Rate (REFOR) is the probability of forced plant downtime when needed for load. <i>For formula reference, please refer to Article VIII for Wind Plants and Article IX for PVS of this ERC resolution.</i>
Philippine Distribution Code, 2017	Technical	<i>Section 3.2.2.2 and 4.2.1.2</i> Maintenance of fundamental Frequency by Distribution Utilities and Embedded Generators as close as possible to 60 Hz and within ± 0.3 Hz limit during normal conditions
	Technical	<i>Section 4.2.2.3</i>

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision
		All Equipment at the Connection Point shall comply with the requirements of the IEC Standards or their equivalent national standards
	Technical	<i>Section 4.2.9.5</i> Frequency Withstand Capability - Embedded Generation units operated in sync with Grid for atleast 5 seconds if Power System Frequency momentarily rises to 62.4 Hz or falls to 57.6Hz
	Technical	<i>Section 4.4.3.2</i> Black Start Capability as per section 6.7.4 for Embedded Generators
	Technical	<i>Section 4.4.4.2</i> Capability to automatically Start-Up in response to frequency-level relays within the range of 57.6 Hz to 62.4 Hz, for Embedded Generating Unit providing Ancillary Services for Fast Start
	Technical	<i>Section 4.4.5.3</i> Adherence to permissible voltage fluctuation limits by Embedded Generators, as per section 4.4.5.3 of PDC
	Technical	<i>Section 4.5.1</i> Large Conventional Embedded Generating Unit, capable of continuously supplying its Active Power output, within system Frequency range of 59.7 to 60.3 Hz and voltage variation of +/-5%
	Technical	<i>Section 4.5.2</i> Frequency Withstand Capability of Large Conventional Embedded Generators- Capable of operating for minimum period of time incases of increase/ decrease in frequency as per section 4.5.2 of PDC
	Technical	<i>Section 4.5.4</i> Large Conventional Embedded Generators, able to withstand without tripping, the Voltage Sags on unbalance loading
	Technical	<i>Section 4.5.5</i> Large Conventional Embedded Generators, able to supplying its Active Power output, within the limits of 85% Power Factor lagging and 90% Power Factor leading
	Technical	<i>Section 4.5.6</i> Large Conventional Embedded Generators, able to contribute to Voltage Control by continuous regulation of Reactive Power supplied to the Distribution System in any of the modes specified under section 4.5.6.1 of PDC
	Technical	<i>Section 4.6.1</i> Large VRE Embedded Generating Unit, capable of continuously supplying its Active Power output, depending on the availability of the primary resource, within system Frequency range of 59.7 to 60.3 Hz and voltage variation of +/-5% as per section 4.6.1 of PDC
	Technical	<i>Section 4.6.2</i>

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision
		Frequency Withstand Capability of Large VRE Embedded Generators- Capable of operating for minimum period of time incases of increase/ decrease in frequency as per section 4.6.2 of PDC
	Technical	<i>Section 4.6.3</i>
		Large VRE Embedded Generators, able to supply Reactive Power output within ranges defined in section 4.6.3 of PDC
	Technical	<i>Section 4.6.4</i>
		Large VRE Embedded Generators, able to contribute to Voltage Control by continuous regulation of Reactive Power supplied to the Distribution System in any of the modes specified under section 4.6.4 of PDC
	Technical	<i>Section 4.6.5</i>
		Large VRE Embedded Generating Plants equipped with an active power regulation control system
	Technical	<i>Section 4.6.6</i>
		Large VRE Embedded Generating Unit, able to withstand Voltage Sag at the Connection Point without disconnection, produced by fault or disturbances in the network as per section 4.6.6 of PDC
	Technical	<i>Section 4.7.1</i>
		Medium Embedded Generating Unit, capable of continuously supplying its Active Power output, within system Frequency range of 59.7 to 60.3 Hz and voltage variation of +/-5%
	Technical	<i>Section 4.7.2</i>
		Frequency Withstand Capability of Medium Embedded Generators- Capable of operating for minimum period of time incases of increase/ decrease in frequency as per section 4.7.2 of PDC
	Technical	<i>Section 4.7.3</i>
		Medium Embedded Generating Plant, able to maintain Power Factor at its Connection Point within the range of 98% Power Factor leading to 98% Power Factor lagging
	Technical	<i>Section 4.7.4</i>
Medium Embedded Generating Units equipped with an Active Power regulation control		
Technical	<i>Section 4.7.5</i>	
	Medium Embedded Generating Unit, able to withstand Voltage Sag at the Connection Point without disconnection, produced by fault or disturbances in the network as per section 4.6.6.2 of PDC	
Technical	<i>Section 4.7.7</i>	
	RTU and complete communication Equipment required for monitoring and control of Connection Point, installed by Medium Embedded Generation Company and communicating information as provided in section 4.7.7.3	
Technical	<i>Section 4.8.1</i>	
	Intermediate Embedded Generating Unit, capable of continuously supplying its Active Power output, within system Frequency range of 59.7 to 60.3 Hz and voltage variation of +/-5%	

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision
	Technical	<p><i>Section 4.8.2</i> Frequency Withstand Capability of Intermediate Embedded Generators- Capable of operating for minimum period of time incases of increase/ decrease in frequency as per section 4.8.2 of PDC</p>
	Technical	<p><i>Section 4.8.3</i> Intermediate Embedded Generating Plant, able to maintain Power Factor at its Connection Point within the range of 98% Power Factor leading to 98% Power Factor lagging</p>
	Technical	<p><i>Section 4.8.4</i> Intermediate Embedded Generating Units equipped with an Active Power regulation control</p>
	Technical	<p><i>Section 4.8.5</i> Intermediate Embedded Generating Unit, able to withstand Voltage Sag at the Connection Point without disconnection, produced by fault or disturbances in the network as per section 4.6.6.2 of PDC</p>
	Technical	<p><i>Section 4.9.1</i> Small and Micro Embedded Generating Unit, capable of continuously supplying its Active Power output, within system Frequency range of 59.7 to 60.3 Hz and voltage variation of +/-5%</p>
	Technical	<p><i>Section 4.9.2</i> Frequency variation within 58.2 to 61.8 Hz does not cause disconnection of Small or Micro Embedded Generating Units</p>
	Technical	<p><i>Section 4.9.3</i> Small or Micro Embedded Generating Plant, able to maintain the Power Factor of not less than 85% lagging at its Connection Point</p>
	Technical	<p><i>Section 4.9.4</i> Small or Micro Embedded Generating Unit, able to withstand Voltage Sag at the Connection Point without disconnection, produced by fault or disturbances in the network as per section 4.9.4 of PDC</p>
		<p><i>Section 7.2.2.2</i> The Embedded Generator is responsible for providing accurate and timely planning and operations data to the Distributor.</p>
		<p><i>Section 7.2.2.3</i> The Embedded Generator is responsible for executing the instructions of the Distributor during emergency conditions.</p>
Philippine Grid Code, 2016	Technical	<p><i>PST 3.2.5.3</i> The maximum Negative Sequence Unbalance Factor at the Connection Point of any User shall not exceed 1% during normal operating conditions</p>
	Technical	<p><i>PST 3.2.5.4</i></p>

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision
		The maximum Zero Sequence Unbalance Factor at the Connection Point of any User shall not exceed 1% during normal operating conditions
	Technical	<i>PST 3.2.6.6</i> The Flicker Severity at any Connection Point in the Grid shall not exceed the values given in Table 3.5-Maximum Flicker Severity of PGC
	Technical	<i>PST 3.3.4.4</i> Submission of annual Reliability Performance Report by Gencos to ERC
	Technical	<i>GCR 4.2.10</i> Adherence for equipment at connection point with IEC standards and quality assurance requirements of the ISO 9000 series
	Technical	<i>GCR 4.2.2.2</i> Generation units shall operate in sync with Grid for atleast 5 seconds if Power System Frequency momentarily rises to 62.4 Hz or falls to 57.6Hz
	Technical	<i>GCR 4.4.1.1.3 and 4.6.1.2</i> The Connection Point (with Large Generating Plants) and all sub-stations shall be controlled by a Circuit Breaker that is capable of interrupting the maximum short circuit current at the point of connection.
	Technical	<i>GCR 4.4.1.1.4 and 4.6.1.3</i> Disconnect switches shall also be provided and arranged to isolate the Circuit Breaker for maintenance purposes
	Technical	<i>GCR 4.4.1.2</i> The Generating Unit shall meet the requirements for Voltage Unbalance as specified in section 4.2.6 of PGC. The Generating Unit shall also be required to withstand without tripping, the unbalance loading during clearance by the Backup Protection of a close-up phase-to-phase fault on the Grid
	Technical	<i>GCR 4.4.1.3.1 and 4.6.2.1</i> If the Generating Plant's/ Distribution Utility's/ Grid User's Equipment are connected to the Grid at a Voltage that is equal to or greater than 115 kV, the high-voltage side of the Transformer shall be connected in Wye, with the neutral available for connection to ground
	Technical	<i>GCR 4.4.1.4</i> Integration of SCADA system with the Grid as per section 4.7 of PGC
	Technical	<i>GCR 4.4.2.1</i> The Generating Unit shall be capable of continuously supplying its Active Power output, as specified in the Generating Plant's Declared Data, within the Power System Frequency range of 59.4 to 60.6 Hz. Any decrease of power output occurring in the Frequency range of 59.4 to 57.6 Hz shall not be more than the required proportionate value of the Frequency decay.

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision
		The Generating Unit shall be capable of supplying its Active Power and Reactive Power outputs, as specified in the Generating Plant's Declared Data, within the Voltage Variations during normal operating conditions.
		The Generating Unit shall be capable of supplying its Active Power output, as specified in the Generating Plant's Declared Data, within the limits of 0.85 Power Factor lagging and 0.90 Power Factor leading at the Generating Unit's terminals, in accordance with its Reactive Power Capability Curve.
	Technical	<i>GCR 4.4.2.1.3</i>
		The Generating Unit shall be capable of supplying its Active Power output, as specified in the Generating Plant's Declared Data, within the limits of 0.85 Power Factor lagging and 0.90 Power Factor leading at the Generating Unit's terminals, in accordance with its Reactive Power Capability Curve.
	Technical	<i>GCR 4.4.2.2</i>
		If the Power System Frequency momentarily rises to 62.4 Hz or falls to 57.6 Hz, all Generating Units shall remain in synchronism with the Grid for at least five (5) seconds, as specified in section 4.2.2 of PGC. The Transmission Network Provider may waive this requirement, if there are sufficient technical reasons to justify the waiver.
	Technical	The Generation Company shall be responsible for protecting its Generating Units against damages for Frequency excursions outside the range of 57.6 Hz and 62.4 Hz. The Generation Company shall decide whether or not to disconnect its Generating Unit from the Grid.
		<i>GCR 4.4.2.3, 4.4.2.5.1 and 4.4.2.5.2</i>
		A Generating Plant connected to the Grid shall contribute to Voltage Control by continuous regulation of the Reactive Power supplied to the Grid by its Generating Units, following the instructions issued by the System Operator, provided the limits of the Reactive Power Capability Curves, as specified in the Generating Plant's Declared Data, are not exceeded.
		The Generating Unit shall be capable of contributing to Voltage Control by continuous regulation of the Reactive Power supplied to the Grid.
		The Generating Unit shall be fitted with a continuously acting automatic excitation control system to control the terminal voltage, Power Factor or Reactive Power, as it corresponds, without instability over the entire operating range of the Generating Unit.
Technical	<i>GCR 4.4.2.4</i>	
	All Generating Units shall operate in Governor Control mode in the case of Conventional Generating Plants.	

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision
		The speed-governing systems of the Generating Unit shall not have any kind of intentional delay. The System Operator shall propose a uniform required deadband applicable to all Generating Units providing Primary Reserve as an Ancillary Service.
		The Generating Unit shall be capable of contributing to Frequency Control by continuous regulation of the Active Power supplied to the Grid.
		The Generating Unit shall be fitted with a fast-acting speed-governing system to provide Frequency Control under normal operating conditions in accordance with section 6.6 of PDC. The speed-governing system shall have an overall speed-droop characteristic of five (5) percent or better. Unless waived by the Transmission Network Provider in consultation with System Operator, the speed-governing system shall be capable of accepting raise and lower signals from the Control Centre of the System Operator.
	Technical	<i>GCR 4.4.3.2</i> Frequency Withstand Capability for Large and Non-Large Wind Farms - Able to operate plant, within each frequency block, for atleast the time periods specified in table 4.1 of the PGC
	Technical	<i>GCR 4.4.3.3</i> Reactive Power Capability for Large Wind Farms - Able to supply reactive power output within ranges as described in section 4.4.3.3.1 of PGC
	Technical	<i>GCR 4.4.3.4</i> Performance During Network Disturbances for Large and Non-Large Wind Farms - able to withstand, without Disconnection, Voltage Sags at the Connection Point, produced by faults or disturbances in the network, as per section 4.4.3.4.1
	Technical	<i>GCR 4.4.3.5</i> Voltage Control for Large Wind Farms - able to contribute Voltage Control by continuous regulation of the Reactive Power, as determined by System Operator, in accordance with section 4.4.3.5 of PGC
	Technical	<i>GCR 4.4.3.6</i> Active Power Control System for Large Wind Farms - equipped with an Active Power regulation control system able to operate as per section 4.4.3.6 of PGC
	Technical	<i>GCR 4.4.3.7.4</i> Power Quality for Large and Non-Large Wind Farms - certification issued by the Wind Generating Facility manufacturer, stating that its Units comply with GCR 4.4.3.7.1 and 4.4.3.7.3 of PGC
	Technical	<i>GCR 4.4.4.2</i> Frequency Withstand Capability for Large and Non-Large Photovoltaic Stations - Able to operate plant, within each frequency block, for atleast the time periods specified in table 4.3 of the PGC
	Technical	<i>GCR 4.4.4.3</i>

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision
		Reactive Power Capability for Large and Non-Large Photovoltaic Stations - able to supply Reactive Power output, within limits of Power Factor 0.95 lagging and 0.95 leading
	Technical	GCR 4.4.4.4
	Technical	Performance During Network Disturbances for Large and Non-Large Photovoltaic Stations - able to withstand voltage sags, without Disconnection, produced by faults or disturbances in the network as per section 4.4.4.4 of PGC
	Technical	GCR 4.4.4.5
	Technical	Voltage Control for Large Photovoltaic Stations - able to contribute Voltage Control by continuous regulation of the Reactive Power, as determined by System Operator, in accordance with section 4.4.4.5 of PGC
	Technical	GCR 4.4.4.6
	Technical	Active Power Control System for Large Photovoltaic Systems - equipped with an Active Power regulation control system able to operate as per section 4.4.4.6 of PGC
	Technical	GCR 4.4.4.7.3
	Technical	Power Quality for Large and Non-Large Photovoltaic Stations - certification issued by the Photovoltaic Generating Facility manufacturer, stating that its Units comply with GCR 4.4.4.7.1 and 4.4.4.7.2 of PGC
	Technical	GCR 4.7.3
	Technical	Availability of signals as per section 4.7.3.1 of PGC, to NGCP at the Remote Terminal Unit, by VRE Generating Facilities connected at 69 kV or above
	Technical	GCR 4.7.4
	Technical	Gencos equipped with a data acquisition system, disturbance recorder and fault locator
	Technical	GP 5.2.5.1 and 6.3.4.2
	Technical	The Transmission Network Provider shall conduct Grid Impact Studies to assess the effect of any proposed User Development on the Grid and the Power System of other Users; The User shall be responsible in ensuring that its Power System will not cause the Degradation of the Grid. It shall also be responsible in undertaking all necessary measures to remedy any Degradation of the Grid that its System has caused
	Technical	GO 6.11.1.1
	Technical	Tests shall be conducted, in accordance with the agreed procedure and standards, to confirm the compliance of Generating Units for the following, in accordance with section 6.11 of PGC:
	Technical	(a) Capability of Generating Units to operate within their registered Generation parameters
	Technical	(b) Capability of the Generating Units to meet the applicable requirements of the Grid Code
	Technical	(c) Capability to deliver the Ancillary Service that the Generation Company had agreed to provide
	Technical	(d) Availability of Generating Units in accordance with their capability declaration
	Technical	(e) Annual testing of Over Frequency Relays (OFR) and Under Frequency Relays (UFR)
	Technical	GO 6.2.4

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision
		Operation of VRE Generation Facility in free active power production control mode, during normal state and adhering to instruction given by System Operator during emergency states
	Technical	<p><i>GO 6.3.4.1</i></p> <p>The User is responsible for assisting the System Operator in maintaining Power Quality in the Grid during Normal State by correcting any User facility that causes Power Quality problems</p>
	Technical	<p><i>GO 6.3.4.3</i></p> <p>The User is responsible for providing and maintaining voltage-control Equipment on its system to support the Voltage at the Connection Point</p>
	Technical	<p><i>GO 6.6.3.1</i></p> <p>Adherence to Frequency Response Obligation (FRO) as per clause 6.6.3.1 of the PGC to maintain 60 Hz starting frequency by generating stations</p>
	Technical	<p><i>GO 6.6.5.1</i></p> <p>Generating Unit providing Primary Reserve as an Ancillary Service, shall operate in Governor Control Mode</p>
	Technical	<p><i>GO 6.6.6.1</i></p> <p>Generating Unit providing Secondary Reserve as an Ancillary Service, shall operate in Automatic Generation Control (AGC) Mode</p>
	Technical	<p><i>GPR 7.4.1.3 and 7.4.2.1</i></p> <p>The protection of Generating Units/ Distribution Utility's Equipment and their connection to the Grid shall be designed, coordinated, and tested to achieve the desired level of speed, sensitivity, and selectivity in fault clearing and to minimize the impact of faults on the Grid</p>
	Technical	<p><i>GPR 7.4.1.5 and 7.4.2.5</i></p> <p>Where the Generating Plant's Equipment are connected to the Grid at 500 kV, 230 kV, or 138 kV and a Circuit Breaker is provided by the Generation Company at the Connection Point to interrupt the fault current at any side of the Connection Point, a Circuit Breaker fail protection shall also be provided by the Generation Company;</p> <p>Where the Distribution Utility's or other Grid User's Equipment are connected to the Grid at 500 kV, 230 kV, or 138 kV and a Circuit Breaker is provided by the Distribution Utility or other Grid User at the Connection Point to interrupt fault currents at any side of the Connection Point, a Circuit Breaker fail protection shall also be provided by the Distribution Utility or other Grid User.</p>
	Technical	<p><i>GPR 7.4.1.7</i></p> <p>All Generation Companies excluding VRE Generating Facilities shall provide protection against loss of excitation on the Generating Unit.</p>
	Technical	<p><i>GPR 7.4.1.8</i></p> <p>All Generation Companies excluding VRE Generating Facilities shall provide protection against pole-slipping on the Generating Unit.</p>

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision
	Technical	<p><i>GPR 7.5.1</i></p> <p>All synchronous generators connected to the Grid shall be operated with their excitation system in the automatic Voltage Control mode unless approved otherwise by the System Operator.</p>
WESM Rules		<p><i>2.3.1.1</i></p> <p>A to Generation Company with facilities directly connected a transmission system shall register with the Market Operator as a WESM Member. A Generation Company with embedded generator shall register with the Market Operator as a WESM Member if it meets the criteria under Clause 2.3.1.13; otherwise, it may register as a WESM Member on a voluntary basis.</p>
		<p><i>2.3.1.2</i></p> <p>To register as a WESM Member, a Generation Company shall:</p> <ul style="list-style-type: none"> (a) Classify each of the generating units which form part of the generating system it owns, operates or controls or from which it otherwise sources electricity as either a: (i) scheduled generating unit; or (ii) (iii) (iv) (v) (vi) non-scheduled generating unit; or must-dispatch generating unit; or priority dispatch generating unit; battery energy storage system; or pumped-storage unit. (b) Satisfy the Market Operator that those generating units and the connection points for those generating units comply with the relevant technical requirements set out in the WESM Rules, the Grid Code and Distribution Code; and (c) Satisfy the membership criteria specified in Clause 2.3.3.4.
		<p><i>2.3.1.7</i></p> <p>A Generation Company is taken to be a Scheduled Generation Company only so far as its activities relate to any scheduled generating unit.</p>
		<p><i>2.3.1.8</i></p> <p>A Generation Company is required to operate scheduled generating units and priority dispatch generating units in accordance with the scheduling and dispatch procedures described in Chapter 3, and in accordance with the dispatch conformance standards specified in accordance with Clause 3.8.5.</p>
		<p><i>2.3.1.11</i></p> <p>A Generation Company shall operate its battery energy storage system and pumped-storage unit in accordance with the scheduling and dispatch procedures described in Chapter 3, within the dispatch conformance standards specified in accordance with Clause 3.8.5 when it is scheduled to operate as Generation.</p>
		<p><i>2.3.1.12</i></p> <p>Generation Company shall register each of its connection points with the Market Operator.</p>
		<p><i>2.3.1.13</i></p> <p>A Generation Company of an embedded generator shall register with the Market Operator if:</p> <ul style="list-style-type: none"> (a) The Pmax of its generating unit is greater than or equal to 10 MW and is located in the Luzon grid, or 5 MW and is located in the Visayas or Mindanao grids; or (b) The Pmax of its generating unit is below the regional thresholds provided under Clause 2.3.1.3(a) but it has a bilateral contract outside its host distribution utility, or intends to sell to the WESM, or inject power to the transmission system; or

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision
		(c) Its generating unit is under the Feed-In Tariff system.
		3.5.5.1 Each <i>Generation Company</i> including <i>Generation Companies</i> with <i>bilateral contracts</i> shall submit a standing market offer equivalent to the <i>maximum stable load (Pmax)</i> or <i>available capacity</i> for each of its <i>scheduled generating units, battery energy storage systems, or pumped-storage units</i> for each <i>dispatch interval</i> in each <i>trading day</i> of the week in accordance with the <i>timetable</i> . If the submitted offer reflects a capacity that is less than the <i>maximum stable load (Pmax)</i> , the <i>Generation Company</i> shall include the reason for such in its standing offer. The standing market offer shall apply until revised or updated by the <i>Generation Company</i> .
		3.5.5.2 Each <i>scheduled generating unit</i> and <i>pumped-storage unit</i> operating on <i>generation mode</i> shall submit a <i>generation Offer</i> that includes the information specified in Appendix A1.1. Annex A1.1 Generation Offers Generation offers: (a) May include up to ten (10) <i>generation offer blocks</i> per (aggregate) unit, and the maximum combined capacity of <i>generation and reserve offers</i> must not be less than the available capacity of the generator; (b) Shall be for a minimum block size of one (1) MW; (c) Shall have monotonically increasing prices and quantity, starting from <i>zero generation</i> ; (d) May include negative prices; and (e) Shall include up to three (3) segments of ramp rate profiles for different quantity break-points. The ramp up/down rates shall range from the minimum to the maximum registered ramp rates.
		3.5.5.3 Each <i>Generation Company</i> operating a <i>battery energy storage system</i> shall submit an <i>energy storage systems Offer</i> that includes that information specified in Appendix A1.4.
		3.5.5.4 Each <i>Generation Company</i> shall submit <i>check data</i> to be used by the <i>Market Operator</i> , in accordance with Clause 3.5.12, to assist in determining the validity of any <i>generation offer</i> which may be submitted by the scheduled generator.
		3.5.5.5 Each <i>Non-Scheduled Generation Company</i> shall submit a standing nomination of <i>loading levels</i> for each of its <i>non-scheduled generating units</i> for each <i>dispatch interval</i> in each <i>trading day</i> of the week in accordance with the <i>timetable</i> . The standing nomination of <i>loading levels</i> shall apply until revised or updated by the <i>Non-Scheduled Generation Company</i> .
		3.5.5.6 <i>Generation Companies</i> shall provide to the <i>Market Operator</i> and the <i>System Operator</i> standing <i>projected outputs</i> in respect of their <i>must-dispatch generating units</i> and <i>priority dispatch generating units</i> for each <i>dispatch interval</i> in each <i>trading day</i> of the week in accordance with the relevant <i>Market Manuals</i> and provisions of the <i>Grid Code</i> . The standing <i>projected outputs</i> shall apply until revised or updated by the relevant <i>Generation Company</i> .
		3.5.5.7

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision
		A <i>Trading Participant</i> who fails to submit <i>projected outputs</i> for its <i>must-dispatch generating unit</i> or <i>priority dispatch generating unit</i> as provided under Clause 3.5.5.6 may be liable for sanctions imposed under Clause 7.2.
		3.5.5.8
		Each <i>Generation Company</i> shall submit check data to be used by the <i>Market Operator</i> , in accordance with the relevant <i>Market Manuals</i> , to assist in determining the validity of any <i>projected output</i> submitted in respect of a <i>must-dispatch generating unit</i> or a <i>priority dispatch generating unit</i> under Clause 3.5.5.6.
		3.5.5.9
		<i>Must-dispatch generating units</i> shall comply with forecast accuracy standards, in respect of their <i>projected outputs</i> submitted under Clause 3.5.5.6, consistent with the <i>Grid Code</i> .
		3.5.5.11
		A <i>Trading Participant</i> who fails to meet the requisite forecast accuracy standards set out in accordance with Clause 3.5.5.9, based on the results of an annual assessment, shall be liable for sanctions imposed under Clause 7.2 and the <i>WESM Penalty Manual</i> .
		3.5.5.13
		Each <i>Generation Company</i> that has secured a <i>Final Certificate of Approval to Connect</i> but with pending issuance of <i>Certificate of Compliance</i> from the <i>ERC</i> shall submit, as applicable: a) Standing nomination of the <i>loading levels</i> for each of its <i>scheduled generating units, battery energy storage systems, and pumped-storage units</i> ; or b) <i>Projected outputs</i> in respect of its <i>must-dispatch generating units</i> and <i>priority dispatch generating units</i> . The <i>Generation Company</i> shall submit its nomination of the <i>loading levels</i> or <i>projected outputs</i> for each <i>dispatch interval</i> on each <i>trading day</i> of the week in accordance with the <i>timetable</i> . The standing nomination of the <i>loading levels</i> and <i>projected outputs</i> shall apply until revised or updated by the <i>Generation Company</i> .
		3.5.5.14
		A <i>Generation Company</i> that has secured a <i>Final Certificate of Approval to Connect</i> but with pending issuance of the <i>Certificate of Compliance</i> from the <i>ERC</i> for its <i>must-dispatch generating unit</i> shall comply with the forecast accuracy standards in respect of its <i>projected outputs</i> which shall be evaluated by the <i>Enforcement and Compliance Office</i> , in accordance with Clauses 3.5.5.8 to 3.5.5.12.
		3.5.7 <i>Generation Company Reserve Offers</i>
		When applicable, subject to Clause 3.3.4.2, each <i>scheduled generating unit, battery energy storage system and pumped-storage unit</i> registered as an <i>Ancillary Services Provider</i> in respect of a <i>reserve facility</i> in a particular <i>reserve region</i> shall submit a <i>standing reserve offer</i> for each of its relevant <i>reserve facilities</i> in respect of that <i>reserve region</i> for each <i>dispatch interval</i> for each day of the week in accordance with the <i>timetable</i> . The <i>standing reserve offer</i> shall apply until revised or updated by the <i>scheduled generator</i> registered as an <i>Ancillary Services Provider</i> . Each <i>reserve offer</i> submitted by a <i>Generation Company</i> under Clause 3.5.7.2 shall: (a) Correspond to response capability of the relevant <i>reserve facility</i> which has been certified as meeting the relevant reserve response standards, for that <i>reserve facility category</i> , in accordance with the <i>Grid Code and Distribution Code</i> ; and (b) Include the information specified in Appendix A1.2.

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision
		Each <i>Generation Company</i> registered as an <i>Ancillary Services Provider</i> in respect of a <i>reserve facility</i> shall, in consultation with the <i>System operator</i> , submit check data to be used by the <i>Market Operator</i> , in accordance with Clause 3.5.12, to assist in determining the validity of any <i>reserve offer</i> which it submits.
		3.5.11 <i>Revision of Market Offers/Bids, Nomination of Loading Levels, and Projected Outputs</i>

	<p>Each <i>Trading Participant</i> which has submitted standing <i>offers</i> or bids for each of its <i>scheduled generating unit</i>, <i>battery energy storage system</i> and <i>pumped-storage unit</i> may revise any of its <i>market offers</i> or <i>market bids</i> equivalent to the <i>available capacity</i> and shall take into account the conditions under Clause 3.5.11.5 and Clause 3.5.11.6, for any <i>dispatch interval</i> in any trading day of the current week-ahead <i>market horizon</i>. Each revised <i>market offer</i> or <i>market bid</i> shall be submitted in accordance with the <i>timetable</i> subject to Clause 3.5.11.4 and contain all the information set out in Appendix A1.</p> <p>Each <i>Generation Company</i> which has submitted a nomination of <i>loading levels</i> for its <i>non-scheduled generating units</i> shall revise its nomination of <i>loading levels</i> if it reasonably expects that any of its anticipated <i>loading levels</i> will differ materially from those previously submitted.</p> <p>Each <i>Generation Company</i> which has submitted <i>projected outputs</i> for its <i>must-dispatch generating units</i> or <i>priority dispatch generating units</i> shall revise its <i>projected outputs</i> if it reasonably expects that any of its <i>projected outputs</i> will differ materially from those previously submitted.</p> <p>In submitting <i>market bids</i> or <i>market offers</i> for any <i>dispatch interval</i>, <i>Trading Participants</i> shall also take into account the following:</p> <ul style="list-style-type: none"> (a) The time remaining until the occurrence of the relevant <i>dispatch interval</i> involved; and (b) Provision of reasons or circumstances whenever the submitted <i>market bids</i> or <i>market offers</i> are cancelled or are less than the registered capacity of its <i>facility</i> or <i>generating unit</i>. <p><i>Trading Participants</i> shall immediately advise the <i>System Operator</i> and the <i>Market Operator</i> of any circumstances which may significantly result in material adverse change in the state of their facilities in any <i>dispatch interval</i> of any trading day in the current week-ahead <i>market horizon</i>. After the occurrence of the significant event referred to above, the <i>Trading Participant</i> shall submit to the <i>Market Operator</i> and <i>Enforcement and Compliance Office</i> a written report with supporting data on the significant event that occurred, immediately within the following trading day. Such report and data submitted shall also serve as compliance by the <i>Trading Participant</i> with its reporting obligation under Clause 7.2.2.2.</p>
	<p>3.8.4.1</p>
	<p>Scheduled generating units and priority dispatch generating units that are dispatched shall reach the target loading level by the end of that dispatch interval and generate in accordance with the dispatch schedules communicated pursuant to Clause 3.8.1 (g) and in accordance with the dispatch conformance standards specified in Clause 3.8.5 unless required to respond to a direction in accordance with Clauses 6.3 and 6.5.</p>
	<p>3.8.4.2</p>
	<p>A priority dispatch generating unit shall follow the dispatch schedule issued by the Market Operator, unless otherwise instructed by the System Operator under Clause 3.8.3.</p>
	<p>3.8.4.3</p>
	<p>If the projected output of a must-dispatch generating unit has been restricted, as communicated in accordance with Clause 3.8.1(h), the must-dispatch generating unit shall ensure its output does not exceed the value included in the dispatch schedule.</p>
	<p>3.8.4.4</p>

		A must-dispatch generating unit shall generate at its maximum available output at all times, unless the Market Operator or System Operator has instructed the generating unit to restrict output under Clauses 3.8.1(h) or 3.8.3.5.
	3.15.1	The purpose of the prudential requirements is to ensure the effective operation of the spot market by providing a level of comfort that WESM Members will meet their obligations to make payments as required under the WESM Rules.
	4.4.2	A Generation Company or Customer which is involved in the trading of energy shall not be registered as a Metering Services Provider for any market trading node assigned to it.

Annex E: Parameters of Generator Compliances for Off-Grid

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter
DC2019-01-0001		<i>Rule 6, 6.2.2</i>	General
Prescribing the Omnibus Guidelines on Enhancing Off-Grid Power Development and Operation		The NPC shall submit to the DOE the monthly status of the operation of its generation facilities in off-grid areas containing the following: 6.2.2.1 Installed and dependable capacity per power plant; 6.2.2.2 Heat rate; 6.2.2.3 Generation and sales; 6.2.2.4 Operating hours; 6.2.2.5 Fuel and lube oil consumption and prices; 6.2.2.6 Scheduled and unscheduled outages; 6.2.2.7 Efficiency parameters, including, but not limited to, fuel rate per unit generation and plant use and losses in accordance with relevant issuances of the DOE and ERC.	
		<i>Rule 6, 6.2.3</i>	
		NPPs/QTPs and other generators in a particular off-grid area shall submit to the DOE and ERC the quarterly updates on the following: 6.2.3.1 Declaration of Net Plant Capability based on the ERC guidelines; 6.2.3.2 Corrective maintenance plans for each power plant in the next twelve (12) months.	
DC2023-05-0014		<i>Rule 4, Section 12</i>	
Promulgating the Revised Rules and Guidelines Governing the Operationalization of the Renewable Portfolio Standards for Off-Grid Areas Pursuant to Section 12 of the Renewable Energy Act of 2008		<i>Mandated Participants.</i> Unless otherwise provided the following are mandated to comply with the Minimum Annual RE Generation/RPS Off-Grid Requirements as prescribed in this Circular: (a) Generation Companies including NPC-SPUG, NPPs, and MGSPs; (b) DUs and Local Government Unit/s (LGU/s) operating electric system/s in off-grid areas; and (c) Other entities which may later be identified by the DOE	
		<i>Rule 4, Section 13</i>	
		<i>Framework of RPS Compliance.</i> All Mandated Participants, as described below, shall comply with their obligations under Section 12 of the RE Act and this Circular: Case 1. A Missionary and Off-Grid Area with Single DU and Single Generation Company. The Generation Company, in coordination with the host DU or LGU-operated electric systems, shall: i. Determine the Optimal Supply Mix; and ii. Prepare and implement the RPS Requirements and Compliance Plan. The required volume or percentage of RE generation based on the Optimal Supply Mix, shall be the minimum annual RE Generation requirements of the Generation Company. The same shall be applicable to NPC-SPUG and MGSPs with respect to their respective service areas. Case 2. A Missionary and Off-Grid Area with Single DU and Multiple Generation Companies. The host DU shall: i. Determine the Optimal Supply Mix; and	

Annex E: Parameters of Generator Compliances for Off-Grid

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter
		<p>ii. Prepare and implement the RPS Requirements and Compliance Plan.</p> <p>The required volume or percentage of RE generation based on the Optimal Supply Mix shall be shared pro-rata to all Generation Companies, based on the contracted energy (MWh) of each Generation Company, which shall serve as basis of the Generation Companies respective minimum annual RE Generation requirements.</p> <p>Case 3. A Missionary and Off-Grid Area with Multiple DU and Multiple Generation Companies. NEA and/or TransCo, in coordination with the Mandated Participants, and in consideration of the total power supply requirements of the concerned off-grid area, shall:</p> <p>i. Determine the Optimal Supply Mix; and ii. Assist the preparation and implementation of the RPS Requirements and Compliance Plan.</p> <p>The required volume or percentage of RE generation based on the Optimal Supply Mix shall be shared pro-rata to all Generation Companies, based on the contracted energy (MWh) of each Generation Company per DU, which shall serve as basis of the Generation Companies' respective minimum annual RE Generation requirements.</p>	
DC2015-04-0002		<p><i>Rule 7, Section 20</i></p> <p><i>Reportorial Requirements.</i> The Mandated Participants shall submit compliance reports to the DOE no later than 15 March of each year. In the case of DUs, all data sets and information shall be consistent with their most recent DDP submission. Pursuant to Section 35 of the RE Act, the DOE shall impose appropriate sanctions against any Mandated Participant for noncompliance or violation of this Circular, including non-submission of any of the following documents per Missionary and Off-Grid Areas;</p> <p>(a) 10-Year Power Supply Demand Situation; (b) Optimal Supply Mix Simulations; (c) RPS Requirements and Compliance Plan; (d) Power Supply Agreements and Details; and (e) Other data sets and information deemed necessary by the DOE to establish and monitor a database required for the implementation of the Revised RPS Off-Grid Rules.</p>	
"Reporting requirements for formulation of power supply and demand forecast of Power Development Plan"	Operation	<p><i>Section 2.1</i></p> <p>Generation Companies including Embedded Generators and Independent Power Producer Administrators shall submit to the DOE-EPIMB, a Monthly Operations Report as per EPIMB_PPDD Form 04-002</p>	
ERC Resolution 7, 2018 - DMC Islanding Guidelines	Operation	<p><i>Section 4 (c)</i></p> <p>The Distribution Utility, System Operator and Embedded Generation Company shall have an agreed Standard Operating Procedure for islanding and follow general procedures while performing Islanding, as per section 6.1 (unplanned islanding) and section 6.2 (planned islanding) of ERC resolution 7 of 2018</p>	Critical
IRR of EPIRA	Operation	<p><i>Part II, Rule 13, Section 3 (b)</i></p>	General

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Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter
		Requirements and prospects of commercial viability, periodically assessed by SPUGs, on area-by-area basis	
Philippines Small Grid Dispatch Protocol		<i>Section 3.1.</i>	
		All Generators shall establish communication facilities to allow coordination between Generators and the System Operator.	
		<i>Section 4.3</i>	
		The Generator shall be responsible for: 4.3.1. Submitting the Capability and Availability Declaration, Dispatch Scheduling and Dispatch Parameters, and other data for its Scheduled Generating Units to the System Operator; 4.3.2. Maintaining its Generating Units to fully deliver the capabilities declared in its Connection Agreement or amended Connection Agreement; 4.3.3. The Generator, with a Scheduled Generating Unit, shall be responsible for ensuring that all Dispatch Instructions from the System Operator are implemented within the Dispatch tolerances; 4.3.4. Ensuring that its Generating Units can provide the necessary services when scheduled or instructed by the System Operator to do so; 4.3.5. Providing accurate and timely planning and operations data to the Small Grid Owner and the System Operator; 4.3.6. Ensuring that its Generating Units will not disconnect from the Small Grid during disturbances, except when the frequency and/or Voltage Variation would damage Generator's equipment, or when the System Operator has agreed for the Generator to do so; and 4.3.7. Executing instructions of the System Operator during normal and/or emergency conditions.	
		<i>Section 6.2.2.1.</i>	
		All Generators connected to the Small Grid shall submit to the System Operator the week-ahead plant/unit capacity nomination (Week-Ahead Plant Nomination or WAPN) on or before 1400H of Thursday of the current week (see Annex B for the sample format of WAPN). The WAPN should have taken into consideration the following: a. Fuel Stock and Deliveries (Oil/Coal); b. Water Elevation/Inflow (Hydro); c. Feedstock Inventory and Deliveries (Biomass); d. Historical Generation (Others); e. Approved Maintenance Schedule; and f. Approved and Issued Outage Requests.	
		<i>Section 6.2.3.3.</i>	
		Generators shall submit by 1000H of the current day the dayahead plant/unit capacity nomination (Day-Ahead Plant Nomination or DAPN) (see Annex H for the sample format of DAPN) of all their Generating Units to satisfy the generation requirement forecast by the System Operator.	
		<i>Section 6.2.3.4.</i>	
		Likewise, Generators shall submit by 1100H of the current day the Generator's Day-Ahead Contract Allocation (DACA) to the System Operator.	

Annex E: Parameters of Generator Compliances for Off-Grid

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter
		<i>Section 6.3.5.</i>	
		Generators and Distribution Utilities connected to the Small Grid shall acknowledge and comply with the Dispatch Instructions issued by the System Operator.	
		<i>Section 6.4.1.1</i>	
		All Generators, upon receipt of their corresponding Day-Ahead Dispatch Schedule, shall communicate and seek clearance from the System Operator for the target loading schedule for each interval during the hourly Dispatch implementation.	
		<i>Section 6.4.1.2.</i>	
		All Dispatch Instructions issued by the System Operator to all Small Grid Users shall be recorded through operator logs or by any means of recording facilities for purposes of audit and surveillance.	
		<i>Section 6.4.2.1</i>	
		The Generator/s failed to comply to follow a certain intervals of the Day-Ahead Dispatch Schedule as instructed by the System Operator.	
		<i>Section 6.4.2.2</i>	
		The Generator/s failed to comply with the Dispatch Instructions issued by the System Operator to address threat in the security and reliability of the Small Grid.	
		The System Operator shall report immediately in writing to ERC, through the DMC, citing the adverse material effect as a result of the non-compliance of the Small Grid Users with the Dispatch Instructions.	
		The System Operator shall continuously monitor the Small Grid to ensure compliance with Dispatch Instructions by Small Grid Users. All non-compliance to Dispatch Instructions shall be reported to the ERC, through the DMC.	
		<i>Section 6.4.2.3.</i>	
		In all cases in which compliance with the Dispatch Instructions is disputed, both the System Operator and Small Grid Users shall document their communication, agreements, disagreements and reasons for their actions, to enable settlement of the dispute as specified in the Philippine Distribution Code.	
		<i>Section 7.5</i>	
	All Generators shall immediately inform the System Operator of any change or potential change in the current status of any Generating Units that are under the Dispatch control of the System Operator.		
	<i>Section 7.6.3</i>		
	All Generators supplying power to the Small Grid shall submit quarterly a monthly report on its operation to the DOE and ERC through the DMC for the determination of Small Grid power requirements and inclusion to the Philippine Development Plan.		
Philippines Small Grid Guidelines		<i>Section 3.1.1.1</i>	
		For all Categories, the Generators and Small Grid Owner shall ensure that at any Connection Point in the Small Grid, the following standards shall be complied with:	

Annex E: Parameters of Generator Compliances for Off-Grid

Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter
		<p>For Category 1 and Category 2, the nominal fundamental frequency shall be 60 Hz and shall be maintained within the limits of 59.4 Hz and 60.6 Hz during normal conditions.</p> <p>For Category 3, Category 4 and Category, the nominal fundamental frequency shall be 60 Hz and shall be maintained within the limits of 59.2 Hz and 60.8 Hz during normal conditions.</p>	
		<i>Section 4.3.2</i>	
		<p>The Generating Unit shall be capable of continuously supplying its Active Power output, as specified in the Generator's Declared Data, within the Power System Frequency range of 59.7 to 60.3 Hz. Any decrease of power output occurring in the frequency range of 59.7 to 57.6 Hz shall not be more than the required proportionate value of the frequency decay.</p> <p>The Generating Unit shall be capable of supplying its Active Power and Reactive Power outputs, as specified in the Generator's Declared Data, within the Voltage Variations specified in Section 3.2.3 (Voltage Variations), Chapter 3 of the PDC and any amendments thereto, during normal operating conditions.</p> <p>The Generating Unit shall be capable of supplying its Active Power output, as specified in the Generator's Declared Data, within the limits of 0.85 Power Factor lagging and 0.90 Power Factor leading at the Generating Unit's terminals, in accordance with its Reactive Power Capability Curve.</p>	
		<i>Section 4.3.3</i>	
		<p>If the Power System frequency momentarily rises to 62.4 Hz or falls to 57.6 Hz, all Generating Units shall remain in synchronism with the Small Grid for at least five (5) seconds, as specified in Section 3.1.1.1 (Frequency Variations). The Small Grid Owner may waive this requirement, if there are sufficient technical reasons to justify the waiver.</p> <p>The Generator shall be responsible for protecting its Generating Units against damage from frequency excursions outside the range of 57.6 Hz and 62.4 Hz. The Generator shall decide whether or not to disconnect its Generating Unit from the Small Grid.</p>	
		<i>Section 4.3.3</i>	
		<p>The Generating Unit shall meet the requirements for Voltage Unbalance as specified in Section 3.1.1.2 (Voltage Unbalance).</p> <p>The Generating Unit shall also be required to withstand without tripping, the unbalance loading during clearance by the backup protection of a closeup phase-to-phase fault on the Small Grid.</p>	
		<i>Section 4.3.4</i>	
		<p>The Generating Unit shall meet the requirements for Voltage Unbalance as specified in Section 3.1.1.2 (Voltage Unbalance).</p>	

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Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter
		The Generating Unit shall also be required to withstand without tripping, the unbalance loading during clearance by the backup protection of a close-up phase-to-phase fault on the Small Grid. <i>Section 4.3.5</i>	
		The Generating Unit shall be capable of contributing to Frequency Control by continuous regulation of the Active Power supplied to the Small Grid. The Generating Unit shall be fitted with a fast-acting speed-governing system to provide Frequency Control under normal operating conditions in accordance with Section 6.5 (<i>Frequency Control and Voltage Control</i>). The speed-governing system shall have an overall speed-droop characteristic of five percent (5%) or less. Unless waived by the Small Grid Owner in consultation with the Distributor, the speed-governing system shall be capable of accepting raise and lower signals. <i>Section 4.3.6</i>	
		The Generating Unit shall be capable of contributing to Voltage Control by continuous regulation of the Reactive Power supplied to the Small Grid. The Generating Unit shall be fitted with a continuously acting automatic excitation control system to control the terminal voltage without instability over the entire operating range of the Generating Unit. <i>Section 4.5.1.2</i>	
	Operation	Each Small Grid User shall provide the complete communication equipment required for the monitoring and control of the Connection Point and the Generating Units <i>Section 4.5.2.1</i>	Critical
		Each Small Grid User must provide a communications facility manned during its hours of operations and capable of receiving Dispatch Instructions issued by the System Operator. <i>Section 4.5.2.3</i>	
		Each Small Grid User must maintain a dedicated communication line available during its hours of operations for immediate access by the Dispatcher. <i>Section 6.1.3.2</i>	
		The Small Grid User shall design, coordinate, and maintain its protection system to ensure the desired speed, sensitivity and selectivity in clearing faults on the Small Grid User's side of the Connection Point. Such protection system shall be coordinated with the Small Grid Owner's protection system. <i>Section 6.2.3.1.</i>	
		The Generator is responsible for maintaining its Generating Units to fully deliver the capabilities declared in its Connection Agreement or Amended Connection Agreement. <i>Section 6.2.3.2.</i>	
		The Generator is responsible for providing accurate and timely planning and operations data to the Small Grid Owner and/or System Operator. <i>Section 6.2.3.3.</i>	

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Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter	
		The Generator shall be responsible for ensuring that its Generating Units will not disconnect from the Small Grid during disturbances except when the Frequency and Voltage Variation would damage Generator's Equipment and when the System Operator has agreed for the Generator to do so.		
		<i>Section 6.2.3.4.</i>		
		The Generator is responsible for executing the instructions of the System Operator during emergency conditions.		
		<i>Section 6.2.4.1.</i>		
		The Small Grid User is responsible for assisting the System Operator in maintaining power quality in the Small Grid during normal conditions by correcting any Small Grid User facility that causes power quality problems.		
		<i>Section 6.2.4.2.</i>		
		The Small Grid User shall be responsible for ensuring that its power system will not cause the degradation of the Small Grid. It shall also be responsible for undertaking all necessary measures to remedy any degradation of the Small Grid that its system has caused.		
		<i>Section 6.2.4.3.</i>		
		The Small Grid User is responsible for providing and maintaining voltage-control Equipment on its system to support the voltage at the Connection Point.		
		<i>Section 6.2.4.4.</i>		
		The Small Grid User is responsible for providing and maintaining Reactive Power supply facilities on its system to meet its own Reactive Power Demand.		
		<i>Section 6.2.4.5.</i>		
		The Small Grid User is responsible for executing the instructions of the System Operator during emergency conditions.		
		<i>Section 6.3.1.2</i>	A Significant Incident Notice shall be issued by the System Operator, the Small Grid Owner or any Small Grid User if a Significant Incident has transpired on the Small Grid or the Power System of the User, as the case may be. The notice shall be issued within 15 minutes from the occurrence of the Significant Incident, and shall identify its possible consequences on the Small Grid and/or the other Small Users and any initial corrective measures that were undertaken by the System Operator, the Small Grid Owner, or the Small Grid User, as the case may be.	Critical
		<i>Section 6.3.1.3</i>	Planned Activity Notice shall be issued by a Small Grid User to the Small Grid Owner and the System Operator for any planned activity such as a planned shutdown, or scheduled maintenance of its Equipment at least seven (7) days prior to the actual shutdown or maintenance. The System Operator shall notify the Small Grid User of its approval or disapproval of the Small Grid User's request at least (5) days before the actual work commences.	Critical
		<i>Section 6.4.2.4.</i>		

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Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter
		The Small Grid User shall provide the Small Grid Owner and/or the System Operator by week 27 of the current year a provisional Maintenance Program for the three (3) succeeding years. The following information shall be included in the Small Grid User's provisional Maintenance Program or when the Small Grid User requests for a maintenance schedule for its System or Equipment: (a) Identification of the Equipment and the MW or kW capacity involved; (b) Reasons for the maintenance; (c) Expected duration of the maintenance work; (d) Preferred start date for the maintenance work and the date by which the work shall have been completed; and (e) If there is flexibility in dates, the earliest start date and the latest completion date.	
		<i>Section 6.4.2.7.</i>	
		If the Small Grid User is not satisfied with the Maintenance Schedule allocated to its Equipment, it shall notify the Small Grid Owner to explain its concern and to propose changes to the Maintenance Program. The Small Grid Owner and the Small Grid User shall discuss and resolve the problem. The Maintenance Program shall be revised by the Small Grid Owner based on the resolution of the Small Grid User's concerns.	
	Operation	<i>Section 6.5.1.2</i> Small Grid User prepared its Automatic Load Dropping (ALD) program	Critical
		<i>Section 6.7.1.3.</i>	
		The Small Grid User shall furnish the Small Grid Owner a copy of its Safety Rules and Local Safety Instructions relating to the Safety Precautions on its secondary voltage and primary voltage equipment.	
		<i>Section 6.7.3.1.</i>	
		The Small Grid Owner and the Small Grid User shall maintain Safety Logs to record, in chronological order, all messages relating to Safety Coordination. The Safety Logs shall be retained for at least one (1) year.	
	Operation	<i>Section 6.10.2.2</i> The Small Grid Owner or the Small Grid User shall be responsible for the provision and installation of a clear and unambiguous label showing the Site and Equipment Identification at their respective System.	Critical
		<i>Section 7.1.2.2.</i>	
		The Generator with a Scheduled Generating Unit shall be responsible for ensuring that all Dispatch Instructions from the System Operator are implemented within the Dispatch Tolerances.	
		<i>Section 7.1.2.3.</i>	
		The Generator shall be responsible for ensuring that its Generating Units can provide the necessary services when scheduled or instructed by the System Operator to do so.	
		<i>Section 7.2.1.5.</i>	
		Small Grid Users shall submit scheduling and dispatch information that will enable the System Operator to prepare a timely and accurate Dispatch Schedule.	

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Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter
		<i>Section 7.2.1.6.</i>	
		Small Grid Users shall follow all Dispatch Instructions issued to them.	
		<i>Section 7.2.2.2.</i>	
		The Generators shall submit their generation scheduling and dispatch information to the System Operator in an accurate and timely manner, with the following details: (a) Nominations of available generating capacities for dispatch of energy and reserve. (b) Forced and scheduled outages including de-rating of facilities which will prevent Generating Units from delivering energy or providing Ancillary Service to the Small Grid. (c) Other information which will pose additional constraints in the operation of their Generating Units.	
		<i>Section 7.2.2.3.</i> Other Small Grid Users shall submit the following scheduling and dispatch information to the System Operator in an accurate and timely manner: (a) Hourly load forecasts of the Scheduling Day. (b) Constraints on its Distribution System (or Small Grid User System) which the System Operator may need to take into account in Scheduling and Dispatch.	
		<i>Section 7.2.3.4.</i> Generators and other Small Grid Users connected to the Small Grid shall acknowledge and comply with Dispatch Instructions issued by the System Operator.	
ERC Resolution 09, Series of 2022		Section 1	
"A Resolution Adopting the Rules and Procedures to Govern the Monitoring of Reliability Performance of Small Grid Generating Units"		If the Generating Unit, is the Unavailable and/or Derating State, the Generation Company must submit an event report withing forty-eight (48) hours from the occurrence of the event. Thereafter, the Generation Company shall submit a Monthly summary report every 15 th day of the month following the month in review. The monthly report must also contain the Reserve Shutdown states of the previous month. The submission of the Generation Company shall be in portable document format (pdf) to the System Operator, Department of Energy (DOE), and to the Energy Regulatory Commission (ERC) and in spreadsheet file (excel) format to the ERC through the Grid Reliability Monitoring System (GRMS) application. The format of the report shall be as prescribed by the ERC.	
ERC Resolution 13, Series of 2021		Article VIII, Section 1 (a), (c), (m) and Article IX, Section 1	
"A Resolution Adopting the Rules for the Monitoring of Variable Renewable Energy (VRE) Generating Facilities Performance"	Technical	Resource Equivalent Availability Factor (REAF) is the percentage of period that the plant was available. Resource Equivalent Planned Outage Factor (REPOF) is the percentage of period that the plant was in planned downtime. Resource Equivalent Forced Outage Rate (REFOR) is the probability of forced plant downtime when needed for load. <i>For formula reference, please refer to Article VIII for Wind Plants and Article IX for PVS of this ERC resolution.</i>	Critical

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Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter
Philippine Distribution Code, 2017	Technical	<i>Section 3.2.2.2 and 4.2.1.2</i>	Critical
		Maintenance of fundamental Frequency by Distribution Utilities and Embedded Generators as close as possible to 60 Hz and within ± 0.3 Hz limit during normal conditions	
	Technical	<i>Section 4.2.2.3</i>	Critical
		All Equipment at the Connection Point shall comply with the requirements of the IEC Standards or their equivalent national standards	
	Technical	<i>Section 4.2.9.5</i>	General
		Frequency Withstand Capability - Embedded Generation units operated in sync with Grid for atleast 5 seconds if Power System Frequency momentarily rises to 62.4 Hz or falls to 57.6Hz	
	Technical	<i>Section 4.4.3.2</i>	Critical
		Black Start Capability as per section 6.7.4 for Embedded Generators	
	Technical	<i>Section 4.4.4.2</i>	Critical
		Capability to automatically Start-Up in response to frequency-level relays within the range of 57.6 Hz to 62.4 Hz, for Embedded Generating Unit providing Ancillary Services for Fast Start	
	Technical	<i>Section 4.4.5.3</i>	Critical
		Adherence to permissible voltage fluctuation limits by Embedded Generators, as per section 4.4.5.3 of PDC	
	Technical	<i>Section 4.5.1</i>	Critical
		Large Conventional Embedded Generating Unit, capable of continuously supplying its Active Power output, within system Frequency range of 59.7 to 60.3 Hz and voltage variation of $\pm 5\%$	
Technical	<i>Section 4.5.2</i>	Critical	
	Frequency Withstand Capability of Large Conventional Embedded Generators- Capable of operating for minimum period of time incases of increase/ decrease in frequency as per section 4.5.2 of PDC		
Technical	<i>Section 4.5.4</i>	Critical	
	Large Conventional Embedded Generators, able to withstand without tripping, the Voltage Sags on unbalance loading		
Technical	<i>Section 4.5.5</i>	Critical	
	Large Conventional Embedded Generators, able to supplying its Active Power output, within the limits of 85% Power Factor lagging and 90% Power Factor leading		
Technical	<i>Section 4.5.6</i>	Critical	
	Large Conventional Embedded Generators, able to contribute to Voltage Control by continuous regulation of Reactive Power supplied to the Distribution System in any of the modes specified under section 4.5.6.1 of PDC		

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Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter
	Technical	<i>Section 4.6.1</i>	Critical
		Large VRE Embedded Generating Unit, capable of continuously supplying its Active Power output, depending on the availability of the primary resource, within system Frequency range of 59.7 to 60.3 Hz and voltage variation of +/-5% as per section 4.6.1 of PDC	
	Technical	<i>Section 4.6.2</i>	Critical
		Frequency Withstand Capability of Large VRE Embedded Generators- Capable of operating for minimum period of time incases of increase/ decrease in frequency as per section 4.6.2 of PDC	
	Technical	<i>Section 4.6.3</i>	Critical
		Large VRE Embedded Generators, able to supply Reactive Power output within ranges defined in section 4.6.3 of PDC	
	Technical	<i>Section 4.6.4</i>	Critical
		Large VRE Embedded Generators, able to contribute to Voltage Control by continuous regulation of Reactive Power supplied to the Distribution System in any of the modes specified under section 4.6.4 of PDC	
	Technical	<i>Section 4.6.5</i>	Critical
		Large VRE Embedded Generating Plants equipped with an active power regulation control system	
	Technical	<i>Section 4.6.6</i>	Critical
		Large VRE Embedded Generating Unit, able to withstand Voltage Sag at the Connection Point without disconnection, produced by fault or disturbances in the network as per section 4.6.6 of PDC	
	Technical	<i>Section 4.7.1</i>	Critical
		Medium Embedded Generating Unit, capable of continuously supplying its Active Power output, within system Frequency range of 59.7 to 60.3 Hz and voltage variation of +/-5%	
	Technical	<i>Section 4.7.2</i>	Critical
		Frequency Withstand Capability of Medium Embedded Generators- Capable of operating for minimum period of time incases of increase/ decrease in frequency as per section 4.7.2 of PDC	
Technical	<i>Section 4.7.3</i>	Critical	
	Medium Embedded Generating Plant, able to maintain Power Factor at its Connection Point within the range of 98% Power Factor leading to 98% Power Factor lagging		
Technical	<i>Section 4.7.4</i>	Critical	
	Medium Embedded Generating Units equipped with an Active Power regulation control		
Technical	<i>Section 4.7.5</i>	Critical	
	Medium Embedded Generating Unit, able to withstand Voltage Sag at the Connection Point without disconnection, produced by fault or disturbances in the network as per section 4.6.6.2 of PDC		

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Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter
	Technical	<i>Section 4.7.7</i>	Critical
		RTU and complete communication Equipment required for monitoring and control of Connection Point, installed by Medium Embedded Generation Company and communicating information as provided in section 4.7.7.3	
	Technical	<i>Section 4.8.1</i>	Critical
		Intermediate Embedded Generating Unit, capable of continuously supplying its Active Power output, within system Frequency range of 59.7 to 60.3 Hz and voltage variation of +/-5%	
	Technical	<i>Section 4.8.2</i>	Critical
		Frequency Withstand Capability of Intermediate Embedded Generators- Capable of operating for minimum period of time incases of increase/ decrease in frequency as per section 4.8.2 of PDC	
	Technical	<i>Section 4.8.3</i>	Critical
		Intermediate Embedded Generating Plant, able to maintain Power Factor at its Connection Point within the range of 98% Power Factor leading to 98% Power Factor lagging	
	Technical	<i>Section 4.8.4</i>	Critical
		Intermediate Embedded Generating Units equipped with an Active Power regulation control	
	Technical	<i>Section 4.8.5</i>	Critical
		Intermediate Embedded Generating Unit, able to withstand Voltage Sag at the Connection Point without disconnection, produced by fault or disturbances in the network as per section 4.6.6.2 of PDC	
	Technical	<i>Section 4.9.1</i>	General
Small and Micro Embedded Generating Unit, capable of continuously supplying its Active Power output, within system Frequency range of 59.7 to 60.3 Hz and voltage variation of +/-5%			
Technical	<i>Section 4.9.2</i>	General	
	Frequency variation within 58.2 to 61.8 Hz does not cause disconnection of Small or Micro Embedded Generating Units		
Technical	<i>Section 4.9.3</i>	General	
	Small or Micro Embedded Generating Plant, able to maintain the Power Factor of not less than 85% lagging at its Connection Point		
Technical	<i>Section 4.9.4</i>	General	
	Small or Micro Embedded Generating Unit, able to withstand Voltage Sag at the Connection Point without disconnection, produced by fault or disturbances in the network as per section 4.9.4 of PDC		
Philippines Small Grid Guidelines	Technical	<i>Section 3.1.1</i>	Critical
		For all Categories, the Generators and Small Grid Owner shall ensure that at any Connection Point in the Small Grid, the following standards shall be complied with:	

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Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter
		For Category 1 and Category 2: The nominal fundamental frequency shall be 60 Hz and shall be maintained within the limits of 59.4 Hz and 60.6 Hz during normal conditions.	
		For Category 3, Category 4 and Category 5: The nominal fundamental frequency shall be 60 Hz and shall be maintained within the limits of 59.2 Hz and 60.8 Hz during normal conditions.	
	Technical	<i>Section 3.1.1.3</i> The maximum Voltage Unbalance at the Connection Point of any Small Grid User or any Generator shall not exceed 2.5 percent during normal operating conditions	Critical
	Technical	<i>Section 3.2.1.1</i> The Small Grid Owner, Generator and the System Operator shall develop, operate, and maintain the Small Grid in a safe manner and shall always ensure a safe work environment for their employees. In this regard, the ERC adopts the Philippine Electrical Code (PEC) Part 1 and Part 2 set by the Professional Regulations Commission and the Occupational Safety and Health Standards (OSHS) set by the Bureau of Working Conditions of the Department of Labor and Employment	Critical
		<i>Section 4.1</i> For Category 1 and Category 2 , the Small Grid Owner and all Small Grid Users other than DUs shall ensure that at any Connection Point in the Small Grid, the following standards shall be complied with: 4.1.1. During normal operating conditions, the Small Grid frequency shall be within the limits specified in Section 3.1.1.1 (Frequency Variations). 4.1.2. The maximum Voltage Unbalance at the Connection Point of any Small Grid User and any Generators shall be within the limits specified in Section 3.1.1.2 (Voltage Unbalance) during normal operating conditions. 4.1.3 The Small Grid Owner shall specify the grounding requirements and the applicable Earth Fault Factor at the Connection Point. 4.1.4.1. All Equipment at the Connection Point shall comply with the requirements of the IEC Standards or their equivalent national standards. 4.1.4.2 The prevailing standards at the time when the Connection Point was designed or modified rather than the Test and Commissioning date or the Asset Transfer Date, shall apply to all Equipment at the Connection Point. 4.1.5.1. All Equipment at the Connection Point shall be operated and maintained in accordance with international standards or its equivalent national standards and in a manner that shall not pose a threat to the safety of any personnel or cause damage to the Equipment of the Small Grid Owner or the Small Grid User.	

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Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter
		4.1.5.2. The Small Grid User shall maintain a log containing the test results and maintenance records relating to its Equipment at the Connection Point and shall make this log available when requested by the Small Grid Owner.	
	Technical	<p><i>Section 4.3.1.3 and 4.4.1.3</i></p> <p>Disconnect switches shall also be provided and arranged to isolate the circuit breaker for maintenance purposes.</p>	General
	Technical	<p><i>Section 4.3.10.1 and 4.4.3.1</i></p> <p>If the Generator's Equipment is connected to the Small Grid, the high-voltage side of the transformer shall be connected in Wye, with the neutral available for connection to ground.</p>	Critical
	Technical	<p><i>Section 4.3.2.1</i></p> <p>The Generating Unit shall be capable of continuously supplying its Active Power output, as specified in the Generator's Declared Data, within the Power System Frequency range of 59.7 to 60.3 Hz. Any decrease of power output occurring in the frequency range of 59.7 to 57.6 Hz shall not be more than the required proportionate value of the frequency decay.</p>	Critical
	Technical	<p><i>Section 4.3.2.2</i></p> <p>The Generating Unit shall be capable of supplying its Active Power and Reactive Power outputs, as specified in the Generator's Declared Data, within the Voltage Variations specified in Section 3.2.3 (Voltage Variations), Chapter 3 of the PDC and any amendments thereto, during normal operating conditions.</p>	Critical
	Technical	<p><i>Section 4.3.2.3</i></p> <p>The Generating Unit shall be capable of supplying its Active Power output, as specified in the Generator's Declared Data, within the limits of 0.85 Power Factor lagging and 0.90 Power Factor leading at the Generating Unit's terminals, in accordance with its Reactive Power Capability Curve.</p>	Critical
		<i>Section 4.3.3.1</i>	
		If the Power System frequency momentarily rises to 62.4 Hz or falls to 57.6 Hz, all Generating Units shall remain in synchronism with the Small Grid for at least five (5) seconds, as specified in Section 3.1.1.1 (Frequency Variations). The Small Grid Owner may waive this requirement, if there are sufficient technical reasons to justify the waiver.	
		<i>Section 4.3.3.2</i>	
		The Generator shall be responsible for protecting its Generating Units against damage from frequency excursions outside the range of 57.6 Hz and 62.4 Hz. The Generator shall decide whether or not to disconnect its Generating Unit from the Small Grid.	
		<i>Section 4.3.4.1</i>	
		The Generating Unit shall meet the requirements for Voltage Unbalance as specified in Section 3.1.1.2 (Voltage Unbalance).	
		<i>Section 4.3.4.2</i>	

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Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter
		The Generating Unit shall also be required to withstand without tripping, the unbalance loading during clearance by the backup protection of a closeup phase-to-phase fault on the Small Grid.	
	Technical	<i>Section 4.3.5.1</i> The Generating Unit shall be capable of contributing to Frequency Control by continuous regulation of the Active Power supplied to the Small Grid.	Critical
	Technical	<i>Section 4.3.5.2</i> The Generating Unit shall be fitted with a fast-acting speed-governing system to provide Frequency Control under normal operating conditions in accordance with Section 6.5 (Frequency Control and Voltage Control). The speed-governing system shall have an overall speed-droop characteristic of five percent (5%) or less. Unless waived by the Small Grid Owner in consultation with the Distribution Utility, the speed-governing system shall be capable of accepting raise and lower signals.	Critical
	Technical	<i>Section 4.3.5.3</i> When a Generating Unit becomes isolated from the Small Grid, the speed governing system shall provide Frequency Control to the resulting Island Grid. Exemptions from this requirement shall be specified in the Connection Agreement or Amended Connection Agreement	Critical
	Technical	<i>Section 4.3.6.1</i> The Generating Unit shall be capable of contributing to Voltage Control by continuous regulation of the Reactive Power supplied to the Small Grid.	Critical
	Technical	<i>Section 4.3.6.2</i> The Generating Unit shall be fitted with a continuously acting automatic excitation control system to control the terminal voltage without instability over the entire operating range of the Generating Unit.	Critical
	Technical	<i>Section 4.3.6.3</i> The performance requirements for excitation control facilities, including power system stabilizers, where necessary for power system operations shall be specified in the Connection Agreement or Amended Connection Agreement.	Critical
		<i>Section 4.3.7.2</i>	
		The Generator shall specify in its application for a Connection Agreement or Amended Connection Agreement if its Generating Unit has a Black Start capability.	
		<i>Section 4.3.8.1 and 4.3.8.2</i>	
		The Generator shall specify in its application for a Connection Agreement or Amended Connection Agreement if its Generating Unit has a Fast Start capability. The Generating Unit shall automatically start-up in response to frequency level relays with settings in the range of 57.6 Hz to 62.4 Hz.	
		<i>Section 4.3.9.1.</i>	

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Reference Document (Standards, Rules, Regulations, Codes, Policies, Laws)	Description	Provision	Critical Parameter
		The protection of Generating Units and Equipment and their connection to the Small Grid shall be designed, coordinated, and tested to achieve the desired level of speed, sensitivity, and selectivity in fault clearing and to minimize the impact of faults on the Small Grid.	
		<i>Section 4.3.9.2.</i>	
		The Small Grid Owner and the Small Grid User shall be solely responsible for the protection system of the electrical equipment and facilities at their respective sides of the Connection Point.	
		<i>Section 4.3.9.7 and 4.4.2.7</i>	
	Technical	The ability of the protection scheme to initiate the successful tripping of the circuit breakers that are associated with the faulty Equipment, measured by the System Protection Dependability Index, shall be not less than ninety nine percent (99%).	Critical
		<i>Section 6.8.1.1</i>	
	Technical	System Test, which involves the simulation of conditions or the controlled application of unusual or extreme conditions that may have an impact on the Small Grid or the Small Grid User System, shall be carried out in a manner that shall not endanger any personnel or the general public	General
		<i>Section 6.9.1.1</i>	
		Tests shall be conducted in accordance with the agreed procedure and standards to confirm the compliance of Generating Units for the following:	
	Technical	(a) Capability of Generating Units to operate within their registered Generation parameters (b) Capability of the Generating Units to meet the applicable requirements of the Small Grid Guidelines (c) Capability to deliver the Ancillary Service that the Generator had agreed to provide (d) Availability of Generating Units in accordance with their capability declaration Data Storage and Handling; Network security management; Incident Planning and Response; Access control; Technical vulnerability management; Risk Management and Implementation etc.	General