

Republic of the Philippines
ENERGY REGULATORY COMMISSION
Pasig City

RESOLUTION NO. 23, Series of 2026

**A RESOLUTION ADOPTING THE REVISED RULES
ON THE RELIABILITY PERFORMANCE INDICES AND
EQUIVALENT UNPLANNED OUTAGE DAYS PER YEAR FOR
GENERATING UNITS**

WHEREAS, Republic Act No. 9136, otherwise known as the “Electric Power Industry Reform Act of 2001” (*EPIRA*) provides the policy of the State to: (i) ensure the quality, reliability, security, and affordability of the supply of electric power; (ii) ensure full public accountability to achieve greater operational and economic efficiency; and (iii) protect the public interest as it is affected by the services of providers of electric power;

WHEREAS, to implement the said state policies, *EPIRA* mandated the Energy Regulatory Commission (ERC) to promulgate and enforce the Philippine Grid Code (PGC) and the Philippine Distribution Code (PDC), which shall include the performance standards of suppliers, considering the nature and function of the entities concerned;

WHEREAS, the PGC provides that the ERC shall impose a uniform system of recording and reporting of Grid reliability performance¹ and set the performance targets for each Grid after due notice and hearing;²

WHEREAS, consistent with the provisions of *EPIRA* and the PGC, the ERC, on 12 August 2013, issued Resolution No. 17, Series of 2013, entitled, “*A Resolution Adopting and Approving the Rules and Procedures to Govern the Monitoring of Reliability Performance of Generating Units and the Transmission System*”;

WHEREAS, on 24 August 2016, the ERC amended ERC Resolution No. 17, Series of 2013 and issued ERC Resolution No. 21, Series of 2016, entitled, “*A Resolution Adopting the Grid Management*

¹ 3.3.1.1 of the 2001 and 2016 Philippine Grid Code.

² 3.3.4.2 of the 2001 and 2016 Philippine Grid Code.

Committee’s Proposed Amendments to ERC Resolution No. 17, Series of 2013”;

WHEREAS, Article IV, Section 1 of ERC Resolution No. 21, Series of 2016 requires generation companies to submit Event Reports of outages, deratings, and reserve shutdown, including weekly summaries thereof;

WHEREAS, the submission of the abovementioned reports is made through the Grid Reliability Monitoring System (GRMS) Application. From these submissions, the ERC evaluates the performance of the generating units to determine their reliability;

WHEREAS, the ERC utilized the GRMS Application to enhance and automate the data gathering, monitoring, and analysis of the reliability performance of the generating plants;

WHEREAS, the ERC deemed that the information generated through the submissions under ERC Resolution No. 21, Series of 2016, from 2015 to 2019, as well as other information from other jurisdictions, are sufficient basis to establish the *Interim Reliability Performance Indices and Equivalent Outage Days Per Year of Generating Units* in order to achieve system adequacy, reliability, and security;

WHEREAS, in May 2019, the Joint Congressional Power Commission (JCPC) requested the ERC to conduct a study on the Outage Allowance of Generating Plants brought about by a series of unplanned outages involving generating units during the yellow and red alert status in the Luzon Grid from March to May 2019;

WHEREAS, in line with its mandate under *EPIRA* and pertinent rules and regulations, and taking into account the major outage events that transpired over the years, the ERC, on 30 January 2020, approved the proposed *Interim Reliability Performance Indices and Equivalent Outage Days per year of Generating Units (Interim Reliability Indices)*, based on the data generated from power plant operations and outages for the period January 2015 to May 2019;

WHEREAS, on 19 February 2020, upon the request of the Philippine Independent Power Producers Association, Inc. (PIPPA), a Round Table Discussion (RTD) was conducted;

WHEREAS, in May 2020, the Commission updated and recomputed the Interim Reliability Performance Indices to include the June to December 2019 outage data in order to complete the 2019 data, thereby completing the five (5) year significant events data for the period January 2015 to December 2019;

WHEREAS, on 16 November 2020, the ERC approved Resolution No. 10, Series of 2020, or “*A Resolution Adopting the Interim Reliability Performance Indices and Equivalent Outage Days Per Year of Generating Units*,” taking into consideration the comments of stakeholders and the updated data on power plant operations and outages for the period of January 2015 to December 2019;

WHEREAS, on 07 March 2022, CBK Power Company Limited (CBK) filed a Petition under ERC Case No. 2022-003RM, entitled, “*In the Matter of the Petition to Initiate Rule-Making for the Amendment of the Rules for the Interim Reliability Performance Indices and Equivalent Outage Days Per Year of Generating Units*” to amend Article V of the Rules to include “*Pumped-Storage Technology Plant*” in the list of generating plant technologies covered by the Rules;

WHEREAS, on 29 April 2022, the ERC conducted a Public Consultation in ERC Case No. 2022-003 RM to allow CBK to explain its position on its petition for Rule-Making and to gather comments from the Luzon, Visayas, and Mindanao stakeholders;

WHEREAS, on 23 January 2023, PIPPA filed a Petition under ERC Case No. 2023-001RM, entitled “*In the Matter of the Petition to Initiate Rule-Making for the Suspension of ERC Resolution No. 10, Series of 2020*,” to suspend the implementation of the Interim Reliability Performance Indices and propose a revised version thereof;

WHEREAS, in its *Order* dated 07 December 2023, the ERC directed all interested parties to submit their comments on PIPPA’s proposed amendment to the Interim Reliability Indices on or before 12 January 2024;

WHEREAS, on 19 January 2024, the ERC conducted an Expository Hearing via the Microsoft Teams application to determine compliance with jurisdictional requirements and to facilitate an expository presentation for the Luzon, Visayas, and Mindanao stakeholders;

WHEREAS, on 26 January 2024, and on 02 and 16 February 2024, the ERC conducted Public Consultations for the Luzon, Visayas, and Mindanao stakeholders, respectively;

WHEREAS, during the public consultations, PIPPA was directed to submit additional documents to support its proposed amendments to the Interim Reliability Performance Indices, which PIPPA submitted on 06 March 2024;

WHEREAS, on 19 November 2024, the ERC issued Letter Directives to generation companies covered by the Interim Reliability Performance Indices that had no submission of operational and outage records to the ERC, for the submission of relevant data, which shall serve as an additional basis for setting new reliability performance standards;

WHEREAS, the ERC revalidated its generator performance data from 2015 to 2024 by incorporating the operational and outage data submitted by generation companies in compliance with the Letter Directives dated 31 October 2024,

WHEREAS, the ERC incorporated the derating data submitted by generation companies in the generator performance data from 2015 to 2024 and calculated the equivalent performance indices of each generating unit;

WHEREAS, a comprehensive review of the information submitted by PIPPA, comments from stakeholders, and the ERC's generator performance data from 2015 to 2024 was conducted;

WHEREAS, on 11 December 2025, the ERC approved for posting on its official website the proposed amendments to ERC Resolution No. 10, Series of 2020;

WHEREAS, in its *Order* dated 17 December 2025, the ERC directed all interested parties to submit their comments on the proposed amendments to the Interim Reliability Performance Indices and Equivalent Outage Days Per Year of Generating Units on or before 07 January 2026;

WHEREAS, on various dates, Public Consultations were conducted for the Luzon, Visayas, and Mindanao stakeholders. During the public consultations, stakeholders were directed to submit additional comments on or before 02 February 2026;

WHEREAS, on 02 February 2026, the ERC received additional comments on the proposed revisions to the Reliability Performance Rules from the following stakeholders: (1) ACEN Corporation (ACEN); (2) Aboitiz Power Corporation (APC); (3) Department of Energy (DOE); (4) PIPPA; (5) SN Aboitiz Power Group; (6) National Grid Corporation of the Philippines (NGCP); (7) National Power Corporation – Mindanao Generation (NPC-Mingen); and (8) Independent Electricity Market Operator of the Philippines Inc. (IEMOP).

WHEREAS, on 19 and 24 February 2026, coordination meetings between the ERC, DOE, and NGCP were conducted to align the relevant provisions of the DOE policy and the reliability rules pertaining to the preparation, monitoring, and implementation of planned outages of generating units;

WHEREAS, on 17 June 2026, the Commission approved the Revisions to ERC Resolution No. 10, Series of 2020, taking into consideration the Petitions of CBK and PIPPA, the comments of other stakeholders, and the updated generator performance data for the period January 2015 to December 2024;

NOW, THEREFORE, the ERC hereby **RESOLVES** to **ADOPT** the **Revised Rules on the Reliability Performance Indices and Equivalent Unplanned Outage Days Per Year for Generating Unit**, hereto attached as **Annex “A”** and made an integral part hereof.

This Resolution shall take effect fifteen (15) days after its publication in a newspaper of general circulation in the country or in the Official Gazette.

Let copies of this Resolution be furnished to all parties concerned and to the University of the Philippines Law Center – Office of the National Administrative Register (UPLC-ONAR), as well as published on the ERC website and such other online platforms available to the Commission.

Pasig City. July 06, 2026


FRANCIS SATURNINO C. JUAN
Chairperson and CEO


FLORESINDA G. BALDO-DIGAL
Commissioner


MARKO ROMEO L. FUENTES
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**Deliberated and approved during the 17 June 2026 Commission Meeting.*

REVISED RULES ON THE RELIABILITY PERFORMANCE
INDICES AND EQUIVALENT UNPLANNED OUTAGE DAYS PER
YEAR FOR GENERATING UNITS

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**REVISED RULES ON THE RELIABILITY PERFORMANCE
INDICES AND EQUIVALENT UNPLANNED OUTAGE DAYS PER
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**ARTICLE I
GENERAL PROVISIONS**

Section 1. Objectives.

These Revised Rules on the Reliability Performance Indices for Generating Units aim to:

- (a) Set a reliability performance benchmark per technology for all generating units to minimize unplanned outages and deratings, and to ensure predictable power supply and rates;
- (b) Promote accountability among Generation Companies and System Operators (SO) to achieve greater operational and economic efficiency;
- (c) Monitor the actual reliability performance of all generating units;
- (d) Promote reliable operations and the efficient conduct of planned maintenance of generating facilities and generating units; and
- (e) Clarify the processes and procedures for the approval and implementation of planned outage schedules of generating facilities and generating units in accordance with applicable policies.

Section 2. Governing Principles.

- 2.1 Republic Act No. 9136, otherwise known as the “Electric Power Industry Reform Act of 2001” (The Act) declares that the State shall: 1) ensure quality, reliability, security, and affordability of the supply of electric power; 2) ensure transparency in a regime of free and fair competition, with full public accountability to achieve greater operational and economic efficiency; and 3) protect the public’s interest as it is affected by the rates and services of electric utilities and other providers of electric power.

2.2 The Rules for the Reliability Performance Indices and Equivalent Outage Days Per Year for Generating Units are among the rules promulgated by the ERC to encourage generation companies to improve the performance of generating facilities/units and to instill discipline by establishing reliability metrics that will serve as the standard per technology for all generating units.

2.3 The indices being prescribed were determined based on the computed Reliability Performance per Technology, as well as the number of Equivalent Unplanned Outage Days per Year, by utilizing information from Actual Events Reports from 2015 to 2024 submitted by generation companies in compliance with *ERC Resolution No. 21, Series of 2016¹*, as amended by *ERC Resolution No. 11, Series of 2020²*.

The ERC may, at any time, review and recalibrate the prescribed reliability indices, as may be warranted, to reflect evolving operating conditions and technological developments.

2.4 All generation companies shall submit a five-year Planned Outage (PO) schedule for their generating facilities/units on or before the 30th of April to the SO for inclusion in the Grid Operating Program (GOP) and Grid Operating and Maintenance Program (GOMP), for an optimal generation and transmission Planned Outage Schedule in accordance with the Philippine Grid Code (PGC) and Department of Energy (DOE) Department Circular No. *DC2020-02-0004³* and any amendments thereto.

a. The Planned Outage Schedule shall include relevant details on the PO activities, including, but not limited to, the type of maintenance, schedule of activities, and other information that would satisfy the proposed Preventive Maintenance Schedule (PMS) for each year.

b. Planned Outages of generating facilities/units for each year shall be consistent with the DOE-approved Final Revision of the GOMP.

2.5 Adjustments to the PO schedule initiated by the SO due to Grid requirements or circumstances that may result in insufficient operating margin shall be classified as PO.

¹ Entitled, "A Resolution Adopting the Grid Management Committee's Proposed Amendments to ERC Resolution No. 17, Series of 2013."

² Entitled, "A Resolution Amending the Scope of Application of ERC Resolution No. 21, Series of 2016."

³ Entitled, "Providing Guidelines on the Planned Outage Schedules of Power Plants and Transmission Facilities and the Public Posting of the Grid Operating and Maintenance Program."

The SO shall coordinate with and notify the generation company of the SO-initiated adjustment to the PO schedule prior to the actual implementation of such adjustments for proper planning purposes.

The classification of outages resulting from SO-initiated adjustments to the PO schedule shall be guided by the following conditions:

2.5.1 If the SO notifies the generation company of an adjustment to its PMS seven (7) days or less prior to the original PMS date, the outage shall remain classified as Planned Outage, regardless of whether the generation company proceeds with its original PMS or complies with the SO-initiated adjustment.

2.5.2 If the SO notifies the generation company of an adjustment to its PMS more than seven (7) days prior to the original PMS date, and the generation company opts to proceed with its original PMS instead of adopting the SO-revised schedule, such outage shall be classified as Maintenance Outage and shall be subject to penalties and sanctions as may be prescribed by the ERC.

Likewise, the SO shall notify the DOE and copy furnish the ERC, within thirty (30) minutes after the determination of the SO-initiated adjustments to the PMS schedule in the approved GOMP.

In the event of an emergency or other circumstances not attributable to the generation company that require adjustments to the approved PMS of the generating unit, as reflected in the GOMP, the SO may approve such adjustments through a formal written notification. The notification shall include the corresponding outage classification. Such approval may be granted provided that the adjustment will not result in a potentially low operating margin.

The SO shall issue a formal acknowledgement and response to Notices, Planned Unit Shutdown Requests (PUSRs), or any similar requests submitted by generation companies at least seven (7) days prior to the scheduled outage. The response shall indicate the classification of the outage to be implemented by the generation company.

2.6 All generation companies shall submit event reports affecting their generating facilities/units in accordance with ERC Resolution No. 21, Series of 2016, and any amendments thereto. For clarity, event reports shall include planned and unplanned outages, deratings, reserve shutdowns, and other related incidents affecting the operations and maintenance of generating facilities/units.

Outages reported as Outside Management Control (OMC) shall be supported with sufficient documentary evidence. Otherwise, the

duration of the OMC outage shall be part of the calculation of forced outage hours.

- 2.7 The reliability performance of generating units shall be evaluated based on the event reports submitted to the ERC in accordance with ERC Resolution No. 21, Series of 2016, and any amendments thereto.
- 2.8 The evaluation of the reliability performance of generating units shall be conducted annually, covering the period from 01 January to 31 December. The ERC may, at any time, conduct assessments of the reliability performance as it deems necessary.

Section 3. Scope and Application.

The Reliability Performance Indices shall apply to generation companies with Conventional and Non-Variable Renewable Energy generating facilities connected to the Grid, including Embedded generating facilities, which have an aggregated rated capacity of 5 MW and above.

- 3.1 Run-of-River (ROR) hydroelectric generating facilities, although considered as Variable Renewable Energy (VRE), shall have the same responsibilities and requirements as the conventional hydroelectric generating facilities and conventional generating facilities. Thus, they shall be covered by the scope and application of these Rules.
- 3.2 Pumped-Storage hydroelectric generating facilities shall be covered by the scope and application of these Rules.
- 3.3 The assessment of reliability performance shall be on a per-unit basis.
- 3.4 Generating facilities/units under mothballing state shall be exempted from the reliability performance for the duration of mothballing approved by the DOE, in accordance with DOE Department Circular No. DC2023-07-0022⁴.

The application of the reliability performance rules shall resume after the last day of the mothballing period approved by the DOE.

- 3.5 For decommissioned generating facilities/units, the exemption from the reliability performance rules shall take effect from the date of effectivity indicated in DOE's Letter of Confirmation (LOC), in accordance with DOE Department Circular No. DC2023-07-0022.

⁴ Entitled "Implementing Guidelines on the Decommissioning and Mothballing of a Generating Plant or Unit Pursuant to Section 2.8 of DOE Department Circular (DC) No. DC2010-03-0003"

Section 4. Definition of Terms.

For purposes of these Rules, the following terms shall be defined as follows:

- (a) “Aggregated Capacity” refers to the total combined rated capacity of generating units of the generating facility.
- (b) “Availability Factor (AF)” refers to the fraction of Active hours in which a unit was available without any unit outages.
- (c) “Available Hours” refer to the number of hours a unit is in the Available state.
- (d) “Conventional Generating Facility” refers to any generating unit/plant, which is not a Variable Renewable Energy (VRE) generating facility.
- (e) “Derating/Deration” refers to the reduction in the generating unit’s Net Maximum Capacity, either temporary or permanent, due to operational, environmental, or equipment-related factors.
- (f) “Derating State” refers to the state in operation of a generating unit at less than its Net Maximum Capacity.
- (g) “Embedded Generators” refer to generating units that are indirectly connected to the Grid through the Distribution Utilities’ lines or Industrial generating facilities that are synchronized with the Grid and supply power to their host Distribution Utility or the Grid.
- (h) “Equivalent” refers to a performance index adjusted to consider the effect of unit deratings.
- (i) “Equivalent Unplanned Outage Days Allowance (EUODA)” refers to the annual maximum allowable equivalent unplanned outage days of a generating unit set by the ERC.
- (j) “Extended Outage GOMP” refers to an Outage state that is the extension of the Planned Outage (GOMP) beyond its predetermined duration. Extended GOMP applies only in instances where the original scope of work requires more time to complete than originally scheduled.

(k) “Force Majeure Event” refers to an event beyond the reasonable control of the generation company claiming force majeure, which, through the exercise of due foresight and good industry practice, could not have been avoided and which generation company, despite the exercise of due diligence, is unable to overcome. Such events include, but are not limited to the following, to the extent that such event prevents performance of a generation company of an obligation:

- i. “Natural Disasters” refer to typhoon, storm, tropical depression, flood, lightning strikes, earthquake, volcanic eruption, fire, or any other natural calamity.
- ii. “Health and Public Safety Crises” refer to epidemic, national emergencies, or any similar public health threat.
- iii. “Civil and Political Unrest” refers to war, invasion, riot, civil disturbance, sabotage, insurrection, military or usurped power, or any act of a public enemy.
- iv. “Government and Legal Actions” refer to actions taken by any court, governmental authority, or civil/military authority, whether de facto or de jure.
- v. “Other Unforeseeable Events” refer to any other cause of a similar nature that is beyond the reasonable control of the generation company.

A strike or labor dispute shall not be considered a Force Majeure Event.

(l) “Forced Outage” refers to an outage that requires immediate removal of a unit from an In-Service, or a Reserve Shutdown State, or from another Outage State.

(m) “Forced Outage Factor (FOF)” refers to the fraction of Active hours in which a unit was not available due to Forced outages.

(n) “Forced Outage Rate (FOR)” refers to the ratio of Forced Outage Hours to the sum of the Service Hours and Forced Outage Hours of a Unit and/or Component, expressed in percent.

- (o) “Generating Plant” refers to a facility, consisting of one or more Generating Units, where electric energy is produced from some other form of energy by means of suitable apparatus.
- (p) “Generating Unit” refers to a unit conversion apparatus including auxiliaries and associated equipment functioning as a single unit, which is used to produce electric energy from some other form of energy.
- (q) “Generation Company” refers to any person or entity authorized by the ERC to operate a facility used in the generation of electricity.
- (r) “Grid” refers to the High Voltage backbone system of interconnected transmission lines, substations, and related facilities, each located in Luzon, Visayas, and Mindanao.
- (s) “Grid Operating and Maintenance Program (GOMP)” refers to the Operating Program of the Grid prepared by the System Operator that contains the Scheduled Maintenance of Grid components and/or facilities, its duration, estimated date and time of start and completion.
- (t) “Grid Operating Program (GOP)” refers to a periodic consolidated program prepared by the System Operations based on data submitted by Generators, which specifies the expected availability and aggregate capability of generation to meet forecasted demand consistent with Section 6.5.1 of the PGC.
- (u) “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 for at least seven (7) days in advance.
- (v) “Maintenance Outage Factor (MOF)” refers to the fraction of Active hours in which a Unit was not available due to Maintenance outages.
- (w) “Mothballing” refers to the temporary deactivation or removal from service of a generating plant or unit, within the specified period provided by the generation company, and to be restarted and used to supply power at a future date.
- (x) “Outage” refers to the state of a unit and/or component when it is not available to perform its intended function due to some event

directly associated with that unit and/or component. An Outage may or may not cause an interruption of service to customers.

- (y) “Outside Management Control (OMC)” refers to unforeseen events that render a generating unit unable to provide the power required by the customer due to causes or circumstances unrelated to the power plant equipment. An outage wherein the cause is beyond the control of the generation company and has not resulted from planning error or negligence. The following are considered under this classification:
 - i. Force Majeure Event;
 - ii. Grid connection or substation failure. This reason relates 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, geothermal steam and brine, etc.) where the generation company is not in control of contracts, supply lines, delivery of fuels, or resources;
 - iv. Special environmental limitations such as low cooling pond level, or water intake restrictions that could not be prevented by operator action; and
 - v. Labor strike.
- (z) “Period Hours” refer to the number of hours a unit was in the active state. A unit generally enters the active state on its service date, which is the date of the actual commercial operation of the plant, after testing and commissioning.
- (aa) “Planned Outage” refers to the state in which a unit is unavailable due to inspection, testing, preventive maintenance, or overhaul. A Planned Outage 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 Grid Operating and Maintenance Program (GOMP) as approved by DOE.
- (bb) “Planned Outage Factor (POF)” refers to the fraction of active hours in which a unit was not available due to planned outages.

- (cc) “Run-of-River (ROR) Hydroelectric Generating Plant” refers to a water-based energy system that produces electricity by utilizing the kinetic energy of running water to turn a turbine generator has no or minimal storage capacity and whose generation is dependent on the timing and size of river flows.
- (dd) “System Operator (SO)” refers to the party responsible for generation dispatch, or the implementation of the generation dispatch schedule of the Market Operator, the provisions of ancillary services, and operation to ensure the safety, power quality, stability, reliability, and security of the Grid.
- (ee) “Unavailability Factor (UF)” refers to the ratio of Unavailable Hours to the Period Hours of a unit and/or component, expressed in percent. Alternatively, the UF may be computed as 1 minus the Availability Factor (AF).
- (ff) “Unplanned Outage” refers to the state in which a Unit is unavailable but is not in the Planned Outage state. Also, an Unplanned Outage starts when a Planned Outage (GOMP) ends but is extended due to unplanned work.
- (gg) “Unplanned Outage Factor (UOF)” refers to the fraction of Active hours in which a unit was not available due to Unplanned outages.
- (hh) “Variable Renewable Energy Generating Facility” refers to a facility consisting of one or more generating units, where electric energy is produced from a source that is renewable, cannot be stored by the facility owner or operator and has inherent intermittency that is beyond the control of the facility owner or operator.

Section 5. Unit State Classification.

The unit states shall be classified according to the state of the event as it occurs to a certain unit, as defined in these Rules.

5.1. *Active.* A unit generally enters the active state on its service date.

5.1.1. *Available.* The state in which a unit is capable of providing service, whether or not it is actually in service, and regardless of the capacity level that can be provided.

5.1.1.1. *In Service.* The state in which a unit is electrically connected to the Grid.

5.1.1.1.1. *No Derating.* The state in which a unit has the same maximum capacity and available capacity.

- 5.1.1.1.2. *Maintenance Derating*. A derating that can be deferred beyond seven (7) days but requires a capacity reduction before the next planned outage.
- 5.1.1.1.3. *Forced Derating*. Derating that can be classified according to the urgency with which the capacity reduction needs to be initiated.
- 5.1.1.1.4. *Planned Derating*. A unit derating or portion thereof is scheduled well in advance.
- 5.1.1.2. *Reserve Shutdown*. The state in which a unit is available but not in service or not electrically connected to the Grid. This also includes generating plants/units that are available but not scheduled in the WESM.
- 5.1.2. *Unavailable*. The state in which a unit is not capable of operation because of operational or equipment failures, external restrictions, testing, work being performed, or some adverse conditions. This includes all types of outages.

The unavailable state persists until the unit is made available for operation, either by being synchronized to the system (In-Service state) or by being placed in the Reserve Shutdown state.

- 5.1.2.1. *Planned Outage*. The state in which a unit is unavailable due to inspection, testing, preventive maintenance or overhaul. A Planned Outage 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 Grid Operating and Maintenance Program (GOMP).
- 5.1.2.2. *Unplanned Outage*. The state in which a unit is unavailable but is not in the Planned Outage state.

Unplanned Outage starts when Planned Outage (GOMP) ends but is extended due to unplanned work.

- 5.1.2.2.1. *Forced Outage*. An outage that requires immediate removal of a unit from service, another outage state, or a reserve shutdown state. Outside Management Control (OMC) Outage and Extended Outage GOMP are also categorized under this classification.

5.1.2.2.2. *Maintenance Outage.* 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 with clearance from the SO at least seven (7) days in advance.

5.2. *Inactive.* The state in which a unit is unavailable for service for an extended period of time for reasons not entirely related to the equipment.

5.2.1. *Deactivated Shutdown.* The state in which a unit is unavailable for service for an extended period of time for reasons not related to the equipment. The unit must be inactive for more than 60 days to be considered as under Deactivated Shutdown.

5.2.2. *Mothballed.* The state in which the unit is temporarily deactivated or removed from service, within the specified period provided by the generation company and to be restarted and used to supply power at a future date.

The period for mothballing of a unit must be approved by DOE pursuant to DOE Department Circular No. DC2023-07-0022.

5.2.3. *Decommissioned.* The state in which a generating unit is unavailable for service and not expected to return to service in the future.

The decommissioning of a unit must be approved by DOE pursuant to DOE Department Circular No. DC2023-07-0022.

Section 6. Capacity Terms.

The following capacity terms shall have the following meanings:

6.1. *Rated Capacity (RC).* The full-load continuous gross capacity of a unit under the specified conditions, as calculated from the electric generator nameplate based on the rated power factor.

6.2. *Maximum Capacity (MC).* The capacity that a unit can sustain over a specified period of time. The maximum capacity can be expressed as gross maximum capacity (GMC) or net maximum capacity (NMC).

6.3. *Gross Maximum Capacity (GMC).* The maximum capacity a unit can sustain over a specified period of time when not restricted by seasonal or other deratings.

- 6.4. *Net Maximum Capacity (NMC)*. The Gross Maximum Capacity less the unit capacity utilized for station service or auxiliaries.
- 6.5. *Dependable Capacity (DC)*. The maximum capacity when modified for ambient limitations for a specified period of time, such as a month or a season.
- 6.6. *Available Capacity (AC)*. The dependable capacity, modified for equipment limitation at any time.
- 6.7. *Seasonal Derating (SD)*. The reduction in maximum capacity is due to ambient limitations for a specified period of time.
- 6.8. *Unit Derating (UD)*. The reduction in maximum capacity is due to limitations associated with the unit and/or component at any time.

Section 7. Time Designations.

The terms corresponding to the duration spent in the various unit states, as defined in Section 5, are described as follows:

- 7.1. *Active Hours (ACTH)*. The number of hours a unit was in active state.
 - 7.1.1. *Available Hours (AH)*. The number of hours a unit was in the available state and should be the total of the Service Hours (SH) and the Reserve Shutdown Hours (RSH).
 - 7.1.1.1. *Service Hours (SH)*. The number of hours a unit was in the in-service state and performing generating functions only.
 - 7.1.1.2. *Reserve Shutdown Hours (RSH)*. The number of hours a unit was in the reserve shutdown state.
 - 7.1.2. *Unavailable Hours (UH)*. The number of hours a unit was in unavailable state.
 - 7.1.2.1. *Planned Outage Hours (POH)*. The number of hours a unit was in the Planned outage state.
 - 7.1.2.2. *Unplanned Outage Hours (UOH)*. The number of hours a unit was in a Forced or Maintenance outage state.
 - 7.1.2.2.1. *Maintenance Outage Hours (MOH)*. The number of hours a Unit was in a Maintenance outage state.

7.1.2.2.2. *Forced outage hours (FOH)*. The number of hours a Unit was in Class 0, Class 1, Class 2, or Class 3 unplanned outage state.

The number of hours a unit is in OMC outage is not part of the calculation of the FOH.

7.2. *Inactive Hours (IACTH)*. The number of hours a unit was in the inactive state.

7.3. *Derating Hours*. Derated hours occur at the same time as Service hours or Reserve shutdown hours. At any one time, multiple deratings may be in effect.

7.3.1. *Seasonal Derated Hours (SDH)*. The available hours during which a Seasonal derating was in effect.

7.3.2. *Unit Derated Hours (UNDH)*. The available hours during which a unit's capability was reduced because of unit deratings.

7.3.2.1. *Planned Derated Hours (PDH)*. The available hours during which a Planned derating was in effect.

7.3.2.2. *Unplanned Derated Hours (UDH)*. The available hours during which an Unplanned derating was in effect.

7.3.2.2.1. *Maintenance Derated Hours (MDH)*. The available hours during which a Maintenance derating was in effect.

7.3.2.2.1.1. *In-Service Maintenance Derated Hours (IMDH)*. The In-service hours during which a Maintenance derating was in effect.

7.3.2.2.1.2. *Reserve Shutdown Maintenance Derated Hours (RSMDH)*. The Reserve shutdown hours during which a Maintenance derating was in effect.

7.3.2.2.2. *Forced Derated Hours (FDH)*. The available hours during which a Forced derating was in effect.

7.3.2.2.2.1. *In-Service Forced Derated Hours (IFDH)*. The In-service hours during which a Forced derating was in effect.

7.3.2.2.2. *Reserve Shutdown Forced Derated Hours (RSFDH)*. The Reserve shutdown hours during which a Forced derating was in effect.

Section 8. Equivalent Derated Hours.

The equivalent hours of a Unit under a time category involving a capacity reduction, as defined under Section 7.3, are described as follows:

8.1. *Equivalent Seasonal Derated Hours (ESDH)*. Seasonal derated hours converted to equivalent hours with respect to maximum capacity.

8.2. *Equivalent Unit Derated Hours (EUNDH)*. Unit derated hours converted to equivalent hours with respect to maximum capacity.

8.2.1. *Equivalent Planned Derated Hours (EPDH)*. Planned derated hours converted to equivalent hours with respect to maximum capacity.

8.2.2. *Equivalent Unplanned Derated Hours (EUDH)*. Unplanned derated hours converted to equivalent hours with respect to maximum capacity.

8.2.2.1. *(EMDH)*. Maintenance derated hours converted to equivalent hours with respect to maximum capacity.

8.2.2.2. *Equivalent Forced Derated Hours (EFDH)*. Forced derated hours converted to equivalent hours with respect to maximum capacity.

8.2.2.3. *Equivalent Reserve Shutdown Forced Derated Hours (ERSFDH)*. Reserve shutdown forced derated hours converted to equivalent hours with respect to maximum capacity. Reserve shutdown forced derated hours are, by definition, not during a period of demand for the unit to operate.

Section 9. Equivalent Factors and Rates.

The equivalent factors and rates derived from the outage hours, and equivalent derating hours as discussed under Sections 7 and 8, respectively, are as follows:

9.1. *Equivalent Availability Factor (EAF)*. The fraction of Active Hours in which a unit was available without any outages, or seasonal or unit deratings.

- 9.2. *Equivalent Unavailability Factor (EUF)*. The fraction of Active Hours in which a unit was not available due to outages or unit deratings.
- 9.3. *Equivalent Planned Outage Factor (EPOF)*. The fraction of Active hours in which a unit was not available due to Planned outages and Planned deratings.
- 9.4. *Equivalent Unplanned Unavailability Factor (EUUF)*. The fraction of Active hours in which a unit was not available due to Unplanned outages and Unplanned deratings.
- 9.4.1. *Equivalent Maintenance Outage Factor (EMOF)*. The fraction of Active hours in which a unit was not available due to Maintenance outages and Maintenance deratings.
- 9.4.2. *Equivalent Forced Outage Factor (EFOF)*. The fraction of Active hours in which a unit was not available due to Forced outages and Forced deratings.
- 9.5. *Equivalent Forced Outage Rate (EFOR)*. The average proportion of a unit’s capacity that was not available due to Forced outages and Forced deratings during Service hours and Forced outage hours.
- 9.6. *Equivalent Maintenance Outage Rate (EMOR)*. The average proportion of a unit’s capacity that was not available due to Maintenance outages and Maintenance deratings during Service hours and Maintenance outage hours.

ARTICLE II
RELIABILITY PERFORMANCE INDICES AND EQUIVALENT
UNPLANNED OUTAGE DAYS

Table 1 provides the Equivalent Unplanned Outage Days Allowance for the different generating plant technologies:

Table 1. Allowable Equivalent Unplanned Outage Days

Technology	Equivalent Unplanned Outage Days
Biomass	32.06
Circulating Fluidized Bed	27.32
Pulverized	32.15
Gas Turbine	26.92
Combined Cycle	14.35
Diesel	21.09

Technology	Equivalent Unplanned Outage Days
Geothermal	22.98
Oil-fired Thermal	37.03
Hydro Conventional	12.72
Pumped-Storage Hydro	18.98
Run-of-River Hydro	12.03

The equivalent unplanned outage allowance may be used by the ERC as a reference benchmark for monitoring and evaluating the reliability performance of generating units. The use of such allowance shall not preclude the ERC from undertaking further review or assessment, as may be appropriate, in consideration of system conditions and reliability objectives.

The ERC shall publish on its official website annual performance data on generating units per technology, which may serve as a reference in terms of generator capacity and availability for the SO’s reliability assessment of the Grid. The performance indices shall include, but are not limited to, the following:

- a. Equivalent Forced Outage Factor
- b. Equivalent Maintenance Outage Factor
- c. Equivalent Planned Outage Factor
- d. Equivalent Force Outage Rate
- e. Force Outage Rate
- f. Other Related Performance Indices

ARTICLE III
OUTAGE ALLOWANCE APPLICATION

Section 1. Application of Planned Outage Schedule

All generation companies shall satisfactorily maintain their facilities within the standards set by applicable laws, rules, and regulations, including, but not limited to, the PGC, Philippine Distribution Code (PDC), and Philippine Electrical Code (PEC), and consistent with the industry’s best practices, in accordance with Item (c), Section 5, Rule II of DOE Department Circular No. DC2026-02-0006⁵.

⁵ Policy on Accountability of Entities Engaged in Power Generation to Ensure Sufficient, Reliable, Affordable, and Secure Supply of Energy in the Country.

All generation companies shall implement the Planned Outage Schedules of generating units based on the GOMP approved by the DOE.

All reported Planned Outages not consistent with the GOMP shall be treated as classified in the GOMP report or as Maintenance Outages and accounted for under Unplanned Outages, unless sufficient proof is duly submitted establishing that such outages were approved or justified as Planned Outages in accordance with the GOMP.

Within forty-five (45) calendar days upon completion of the PMS, generation companies shall submit a PMS Completion Report to the DOE and the ERC. The report shall indicate the completion rate of all scheduled activities, and the findings, recommendations, and commitment plan to address such findings, in accordance with Item (b), Section 10, Rule III of DOE Department Circular No. DC2026-02-0006.

The SO shall ensure that all approved Planned Outage Schedules are duly reflected in the GOMP on a per-unit basis. Likewise, all actual outages incurred by the generating units shall be consistently and accurately reflected in the GOMP Report.

Section 2. Application of Equivalent Unplanned Outage Allowance

The equivalent unplanned outage allowance, in days per year, shall serve as the maximum or cap for unplanned outages and deratings per generating unit per technology that shall be strictly observed. This shall ensure that the generating units are properly maintained, resulting in fewer incidents and occurrences of unplanned outages and deratings.

Any outage event reported as an OMC shall be supported with documentary evidence. Otherwise, the duration of the OMC outage shall be part of the calculation of forced outage hours and accounted for under Unplanned Outages.

For guidance, the documentary evidence to be submitted shall support to prove that the reason for the OMC outage was beyond control and has not resulted in planning errors or negligence of the generation company. On a case-to-case basis, the ERC may consider supporting documents including, but not limited to, the following:

- Operations Logbooks, SCADA Logs, SO Advisories, and Significant Incident Notices for grid/distribution system induced outages;
- Irrigation Diversion Requirement (IDR) Notice;

- Reservoir Level or Water Resource Records and Flow Rate Requirement;
- Geothermal Steam Resource Records and Flow Rate or Pressure Requirement;
- Natural Gas Resource Records and Flow Rate Requirement;
- Fuel Supply Curtailment Notices from Supplier (For Biomass, Geothermal, and Natural Gas); and
- And other similar documents.

Section 3. Determination of Violations

All events or instances, regardless of duration or capacity, shall be considered in the calculation of the total accumulated equivalent unplanned outage days. Non-compliance with the Reliability Performance Indices shall be determined based on any excess over the allowable equivalent unplanned outage days.

The determination of a violation of these Rules shall be on a per-unit basis.

A violation of these Rules exists when a generating unit fails to comply with the Reliability Performance Indices based on the annual evaluation, as determined by the Commission.

Section 4. Compliance Plan

Should non-compliance with these Rules persist for two (2) or more consecutive years, the ERC may direct the generation company to submit a Compliance Plan not later than forty-five (45) days upon receipt of the Letter Directive, specifying the identified issues resulting in non-compliance, immediate programs, detailed corrective measures, and definite timelines to be implemented to improve the reliability of the generating unit.

Failure to submit the Compliance Plan as directed by the ERC may be subject to the issuance of a Show Cause Order and the imposition of appropriate penalties in accordance with the Administrative Sanctions under Article IV of these Rules and any amendments thereto.

The completion of the Compliance Plan shall be subject to monitoring and validation of the ERC through the conduct of inspections, as it may deem necessary. This shall be part of the assessment of the reliability performance of the generating unit.

ARTICLE IV
FINAL PROVISIONS

Section 1. Administrative Sanctions.

In case of possible non-compliance by any person or entity with any of the provisions of these Rules or any directive by the Commission, the ERC shall, in accordance with ERC Resolution No. 1, Series of 2020,⁶ and any amendments thereto, issue a Show Cause Order directing the concerned person or entity to submit a Verified Explanation within fifteen (15) days from receipt thereof.

Violations of these Rules shall be subject to the imposition of appropriate sanctions, fines, and penalties in accordance with the applicable penalties provided below.

Penalty = Base Penalty Rate x Non-Compliance Duration

Base Penalty Rate (BPR) *Determined based on the rated capacity of the generating unit and the number of violations of these Rules, as reflected in Table 2 below.*

Non-Compliance Duration (NCD) *Total duration of equivalent unplanned outage days (EUOD) in excess of the allowable EUOD per year*

A. Base Penalty Rate (BPR) Determination

$BPR_n = BPR_o \times (1 + r)^n$

Where:

BPR_n = base penalty rate for n violations

BPR_o = base penalty rate

r = rate of increase for every violation

n = number of violations

Table 2. Base Penalty Rate per Rated Capacity Range

Rated Capacity	BPR per Excess EUOD	Increment per Violation
5MW and Below	PHP 50,000.00	+ 10% of the BPR per Violation as determined by the Commission
Above 5MW to 10MW	PHP 75,000.00	
Above 10MW to 50MW	PHP 100,000.00	
Above 50MW to 100MW	PHP 125,000.00	
Above 100MW to 200MW	PHP 150,000.00	
Above 200MW	PHP 200,000.00	

⁶ Entitled, “A Resolution Adopting the Revised Rules of Practice and Procedure of the Energy Regulatory Commission.”

Violations of these Rules shall be without prejudice to the imposition of sanctions or penalties for violations of other applicable laws or regulations.

Section 2. Transitory Provision.

These Rules shall apply to the performance and compliance assessment periods covering Calendar Year 2026 and all periods thereafter.

All previously issued Show Cause Orders, and those pending issuance, arising from non-compliance with the Interim Reliability Performance Indices and the Equivalent Outage Days per Year of generating units, shall be evaluated in accordance with ERC Resolution No. 10, Series of 2020, and all applicable prior ERC rulings.

Section 3. Separability Clause.

If, for any reason, any provision of these Rules is declared unconstitutional or invalid by final judgement of a competent court, the other parts or provisions hereof that are not affected thereby shall continue to be in full force and effect.

Section 4. Repealing Clause.

Any rule or regulation inconsistent with the provisions of these Rules is hereby repealed and modified accordingly.

Section 5. Exception Clause.

Where good cause appears, the ERC may allow an exception to any provision of these Rules, if such exception is found to be in the public interest and is not contrary to law or any other related rules and regulations.

Section 6. Effectivity.

These Rules shall take effect fifteen (15) days after publication in a newspaper of general circulation or in the Official Gazette.

APPENDIX A
FORMULA FOR DETERMINING THE RELIABILITY
PERFORMANCE INDICES

The following formulas are used for the computation of the Reliability Performance Indices to be used in determining the Unit's reliability:

1. Equivalent Seasonal Derated Hours (ESDH)

$$ESDH = \left(\sum SD \times T \right) \div NMC$$

2. Equivalent Unit Derated Hours (EUNDH)

$$EUNDH = \left(\sum UND \times T \right) \div NMC$$

3. Equivalent Planned Derated Hours (EPDH)

$$EPDH = \left(\sum PD \times T \right) \div NMC$$

4. Equivalent Unplanned Derated Hours (EUDH)

$$EUDH = \left(\sum UD \times T \right) \div NMC$$

5. Equivalent Maintenance Derated Hours (EMDH)

$$EMDH = \left(\sum MD \times T \right) \div NMC$$

6. Equivalent Forced Derated Hours (EFDH)

$$EFDH = \left(\sum FD \times T \right) \div NMC$$

7. Equivalent Reserve Shutdown Forced Derated Hours (ERSFDH)

$$ERSFDH = \left(\sum RSFD \times T \right) \div NMC$$

8. Equivalent Availability Factor (EAF)

$$EAF = \frac{ACTH - (POH + FOH + MOH + EPDH + EFDH + EMDH + ESDH)}{ACTH}$$

9. Equivalent Unavailability Factor (EUF)

$$EUF = \frac{POH + FOH + MOH + EPDH + EFDH + EMDH}{ACTH}$$

10. Equivalent Planned Outage Factor (EPOF)

$$EPOF = (POH + EPDH) \div ACTH$$

11. Equivalent Unplanned Unavailability Factor (EUUF)

$$EUUF = (FOH + EFDH + MOH + EMDH) \div ACTH$$

12. Equivalent Maintenance Outage Factor (EMOF)

$$EMOF = (MOH + EMDH) \div ACTH$$

13. Equivalent Forced Outage Factor (EFOF)

$$EFOF = (FOH + EFDH) \div ACTH$$

14. Equivalent Forced Outage Rate (EFOR)

$$EFOR = (FOH + EFDH) \div (SH + FOH + ERSFDH)$$

Legend:

ACTH – Active Hours
FD – Forced Derating
FOH – Forced Outage Hours
NMC – Net Maximum Capacity
MD – Maintenance Derating
MOH – Maintenance Outage Hours
PD – Planned Derating

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Unplanned Outage Days per Year for Generating Units**
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POH – Planned Outage Hours
RSFD – Reserve Shutdown Forced Derating
SD – Seasonal Derating
SH – Service Hours
T – Time in hours
UD – Unplanned Derating
UND – Unit Derating