

# Republic of the Philippines ENERGY REGULATORY COMMISSION Pasig City

IN THE MATTER OF THE PETITION TO INITIATE RULE-MAKING FOR THE SUSPENSION OF ERC RESOLUTION NO. 10, SERIES OF 2020

ERC CASE NO. 2023-001 RM

PHILIPPINE INDEPENDENT POWER PRODUCERS ASSOCIATION INC.,

Petitioner.

Promulgated: December 07, 2023

X-----X

#### ORDER

On 23 January 2023, Philippine Independent Power Producers Association Inc. (PIPPA) filed a *Petition* to initiate rule-making for the suspension of the Commission's Resolution No. 10, Series of 2020¹ (Resolution No. 10).

On 29 March 2023, PIPPA filed a Motion to Suspend Proceedings and/or Hold in Abeyance Any Further Action dated 14 March 2023 (Motion to Suspend), praying for the suspension of the proceedings and/or hold in abeyance any further action in the instant case until such time that PIPPA submits an amended Petition with a proposed draft of benchmark for reliability indices and equivalent outage days per year of generating unit.

On 04 April 2023, PIPPA filed a *Motion to Admit Amended Petition* with the attached *Amended Petition*, both dated 03 April 2023.

(This space is intentionally left blank.)

<sup>&</sup>lt;sup>1</sup> Entitled, "A Resolution Adopting the Interim Reliability Performance Indices and Equivalent Outage Days Per Year of Generating Units."

In the *Amended Petition*, PIPPA alleged the following pertinent provisions:

#### PREFATORY STATEMENT

- 1. Through Energy Regulatory Commission Resolution No. 10, Series of 2020 dated 16 November 2020 ("ERC Resolution No. 10"), this Honorable Commission approved and adopted the Rules for the Interim Reliability Performance Indices and Equivalent Outage Days Per Year of Generating Units (the "Interim Outage Rules"), with the objective of setting a reliability performance benchmark per technology for all generating units to lessen outages and ensure predictable power supply and rate.<sup>2</sup>
- 2. Under the Interim Outage Rules, all generation companies ("GenCos") are required to monitor the actual planned and unplanned outage days of their generating units. Article V of the Interim Outage Rules sets out the allowable planned and unplanned outage days depending on the generating plant's technology, while Article VII thereof allows the imposition of sanctions, fines, and penalties for violations of the said rules.
- 3. While the Interim Outage Rules were promulgated to promote the accountability of generation companies and to achieve greater operations and economic efficiency, the current Interim Outage Rules is flawed insofar as its provisions fail to take into account the technical and economic realities faced by the generation sector. As it stands, the said Rules, aside from being interim in nature, are found wanting in several key areas on its interpretation as well as its process of implementation.
- 4. Petitioner respectfully submits that there is a need to: (a) repeal the provisions of the Interim Outage Rules insofar as it sets a limit for planned outages of power plants; (b) amend the definition of planned outage to include outages reflected in the revisions of the Grid Operating and Maintenance Program ("GOMP") or those approved by the System Operator ("SO"); (c) amend the prescribed unplanned outage allowance; (d) amend the scope of the Interim Outage Rules to clearly exclude run-of-river type of facilities which are considered as variable renewable energy; (e) amend the provisions on administrative sanctions; and (f) rescind all show cause orders and penalties previously issued and imposed pursuant to ERC Resolution No. 10.
- 5. Hence, in support of the instant Petition, Petitioner further submits its proposed Rules for Reliability Performance and Equivalent Forced Outage Days per Year of Generating Units, for the consideration of this Honorable Commission.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Article I(a) of the Interim Outage Rules.

<sup>&</sup>lt;sup>3</sup> A copy of the proposed Rules for Reliability Performance and Equivalent Forced Outage Days per Year of Generating Units is hereto attached as Annex "B" and made an Integral part hereof.

#### NATURE OF THE PETITION

- 6. This is a Petition to Initiate Rule-Making under Rule 21 of the Revised Rules of Practice and Procedure of the Energy Regulatory Commission (the "ERC Procedural Rules") for the amendment of the Interim Outage Rules.
- 7. Pursuant to Section 2, Rule 21 of the ERC Procedural Rules, interested persons may petition the Honorable Commission to adopt, amend, or repeal a rule, to wit:

Section 2. Petition to Initiate Rule-making. - Interested persons may petition the Commission to adopt, amend, or repeal a rule by filing a petition to initiate rule-making. The petition must contain the name, address, and email address of the petitioner, the specific rule or action requested, the reasons for the rule or action requested, and facts showing that the petitioner has a substantial interest in the rule or action requested. (Underscoring supplied)

#### PARTY TO THE PETITION

- 8. Petitioner is a domestic corporation duly organized and existing under and by virtue of Philippine laws, with principal office at Unit 2408, 24/F, Prestige Tower, F. Ortigas Jr. Avenue, Ortigas Center, Pasig City, Metro Manila, Philippines. It may be served pleadings, orders, and other legal process through the undersigned counsel at SYMECS Law, 3109 One Corporate Center, Julia Vargas corner Meralco Avenue, Ortigas Center, Pasig City; or through e-mail address at pleadings@symecslaw.com.4
- 9. Petitioner is a non-stock, non-profit corporation composed of twenty-eight (28) generator members. The members have a combined grilled installed capacity of around eighteen thousand one hundred thirty two megawatts (18,132 MW). It represents its members that are engaged in power generation and are covered by the outage limitations provided in the Interim Outage Rules. Thus, Petitioner has substantial interest in initiating this Petition, pursuant to Rule 21 of the ERC Procedure Rules.
- 10. At the onset, it must be stated that prior to the effectivity of the Interim Outage Rules, Petitioner had raised its comments and concerns before this Honorable Commission, through public consultations and written communications, regarding the draft resolution on reliability standards.
- 11. In a Letter dated 17 December 2020, the Petitioner sought clarifications from the Honorable Commission on the following matters involving the implementation of ERC

<sup>4</sup> Please see Annexes "A" and "A-2".

Resolution No. 10 whether: (a) planned outages beyond the prescribed limit shall be allowed in cases where power plants require longer outage days due to factors justified by the generator or identified by the SO in its report; (b) the reglementary period provided to non-compliant parties to comply and explain shall be adjusted in case circumstances exist which prevent immediate compliance; (c) outages due to major maintenance and overhauls which are conducted every four (4) to five (5) years be excluded in the accounting of the planned outage allowance; (d) outages outside management control shall be excluded in determining the outage allowance; and (d) the terms "Conventional" and "Non-Variable Renewable Energy Generating Power Plants" used in ERC Resolution No. 10 shall be defined.<sup>5</sup>

- 12. The Petitioner thereafter sent a Letter dated 20 January 2021 to follow-up on its clarification and to request for deferment in the implementation of ERC Resolution No. 10 pending clarification of the raised concerns which were unheeded.<sup>6</sup>
- 13. Through a Letter dated 17 May 2021, the Petitioner highlighted its concern on the applicability of the Interim Outage Rules to Conventional and Non-Variable Renewable Energy Generating Plants, which should exclude Run-Off-River ("ROR") since the latter is considered as variable renewable energy in the Philippine Grid Code and the Wholesale Electricity Spot Market.<sup>7</sup>
- 14. In *ERC Case No. 2022-003 RM*, Petitioner also submitted a Letter dated 11 April 2022 to further expound its position that reliability indices are already subsumed under the PSA of the GenCos with the DU and reliability indices should serve only as a guide; seek clarification on the 50<sup>th</sup> percentile methodology and, in lieu of the methodology, adopt a uniform outage allowance of thirty (30) days for planned outages and fifteen (15) days for unplanned outages; and to request for the suspension of the implementation of ERC Resolution No. 10.8

(This space is intentionally left blank.)

<sup>&</sup>lt;sup>5</sup> A copy of the Letter dated 17 December 2020 is attached hereto as Annex "C" and made an integral part hereof.

<sup>&</sup>lt;sup>6</sup> A copy of the Letter dated 20 January 2021 is attached hereto as Annex "D" and made an integral part hereof.

<sup>&</sup>lt;sup>7</sup> A copy of the Letter dated 17 May 2021 is attached hereto as Annex "E" and made an integral part hereof.

<sup>&</sup>lt;sup>8</sup> A copy of the Letter dated 11 April 2022 is attached hereto as Annex "F" and made an integral part hereof.

#### ARGUMENTS AND DISCUSSION

The Interim Outage Rules should be repealed and amended to pave way for a clear, definite, and permanent set of rules that will reflect the reliability standard of Philippine generation companies. The said Rules should likewise be modified to refer its applicability to "Forced Outage", in lieu of "Unplanned Outages", and provide a comprehensive definition of the term "Planned Outage".

- 15. Recognizing this Honorable Commission's objective of setting a reliability performance benchmark per technology for all generating units, Petitioner submits that the Interim Outage Rules, after adopting the proposed amendments hereinafter discussed, be repealed and entitled, as: Rules for the Reliability Performance and Equivalent Forced Outage Days Per Year of Generating Units.
- 16. As stated in its Objectives in Article I, the Interim Outage Rules aim, among others, to monitor the actual planned and unplanned outage days of generating units.
- 17. While the Interim Outage Rules provides a definition of the term "unplanned outage", Petitioner respectfully submits that the term "forced outages" as defined in ERC Resolution No. 21, Series of 2016, should be adopted, in lieu of "unplanned outage", to capture the other classifications of forced outages as enumerated under Section 1.1.2.2.1 of the said resolution. Thus, Petitioner respectfully submits that Article IV on Definition of Terms be amended to remove the definition of the term "unplanned outage" and include the following terms:

Extended Outage GOMP. This is 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.

Forced Outage. An outage that requires immediate removal of a unit from service, another outage state, or a reserve shutdown state:

Class o Forced Outage. (Starting Failure)
An outage, aside from outside
management control (OMC), that results
from unsuccessful attempt to place the
unit in-service.

Class 1 Forced Outage. (Immediate) An outage, aside from OMC, that requires immediate removal from the existing state. It can be measured within five (5) minutes of time of removal.

Class 2 Forced Outage. (Delayed) An outage, aside from OMC, that does not require immediate removal from the inservice state but requires removal beyond five (5) minutes but not exceeding six (6) hours. This type of outage can only occur while the unit is inservice.

Class 3 Forced Outage. (Postponed) An outage, aside from OMC, that can be postponed beyond six (6) hours but not exceeding seven (7) days. This type of outage can only occur while the unit is inservice.

Outside Management Control (OMC)
Outage. 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:

- 1. force majeure event;
- 2. grid connection or substation failure. This reason relates to problems with transmission lines, substation, and switchyard equipment outside the responsibilities of the generating plant;
- 3. lack of fuel (water from rivers or lakes, coal mines, gas lines, etc.) where the generation company is not in control of contracts, supply lines, or delivery of fuels;
- 4. special environmental limitations such as low cooling pond level, or water intake restrictions that could not be prevented by operator action; and (sic)
- 5. labor strike; and
- 6. change in annual planned maintenance schedules due to O&M of government facilities and/or system

### operator (i.e. NGCP, NCP, NIA).

18. Consequently, the provisions of the Interim Outage Rules, in so far as it refers to "unplanned outages", be modified to refer to "forced outages". Article I of the said rules is, thus, proposed to be amended as follows:

#### ARTICLE I - OBJECTIVES

#### These Rules aim to:

- (a) Set a reliability performance benchmark per technology for all generating units to lessen forced outages and ensure predictable power supply and rate;
- (b) Promote accountability of Generation Companies, the System Operator, and the Transmission Network Provider to achieve greater operations and economic efficiency; and
- (c) Monitor the actual **forced** outage days of generating units.
- 19. Petitioner additionally proposes that the definition of the term "Planned Outage", as stated in the Interim Outage Rules, be revised to include planned outages stated in approved revisions in the GOMP and to clearly exclude major maintenance and overhauls from the prescribed outage allowance.
- 20. Article IV of the Interim Outage Rules defines the term planned outages as "the state in which a Unit is unavailable due to inspection, testing, preventive maintenance or overhaul. A Planned Outage is scheduled with a predetermined 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)."
- 21. Notably, the said definition embraces preventive maintenance or overhaul which are distinct from major maintenance and overhauls.
- 22. Major maintenance and overhauls are crucial activities routinely done every three (3) to five (5) years, or based on running hours (for diesel and oil-fired power plants) by generation companies to ensure the reliability of the power plants.
- 23. It must be stated that these activities require a longer period of time to conduct and could not have been contemplated in the prescribed planned outage allowance.

- Petitioner is, thus, of the position that any outage on account 24. of major maintenance and overhaul should not be counted against the numbers of days allowed for planned outages.
- Maintenance schedules are important and should not be 25. shortened. In the Honorable Commission's draft Proposed Interim Benchmark of Reliability Performance Indices and Equivalent Outage Days per Year of Generating Units,9 the Honorable Commission considered "the use of the 50th percentile of reliability performance indices of generating units as an interim Benchmark for Reliability Performance indices for all technologies except for Oil-fired thermal", and ultimately became the basis and governing principle that resulted in the allowances set in ERC Resolution No. 10, series of 2020.10 By using the 50th percentile in calculating the reliability performance indices, the Honorable Commission may have inadvertently ignored the major maintenance schedules of base load plants. The current benchmark schedule is then biased at a higher standard, which may not be sustainable for the plants.
- PSAs between GenCos and their customers take into account 26. the outage requirements of the OEMs in order for the GenCo to reliably deliver the agreed energy quantities. Shortening the required outages below the OEM prescribed durations, as the effect of the Indices provided in the Resolution, will prevent GenCos from complying with OEM Good Utility Practices. This exposes GenCos to operational and financial risks which significantly affect the overall reliability and availability of the Plant. In turn, this would pose more threat to the energy security of the grid.
- 27. For such considerations, Petitioner respectfully submits that the term "Planned Outage" be revised, as follows:

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 Maintenance Program (GOMP) or any of its revisions as approved by the SO seven (7) days before the outage schedule. Any outage on account of major maintenance and overhaul shall not be counted against the number of days allowed for planned outages."

<sup>9</sup> ERC Case No. 2019-006 RM.

<sup>&</sup>lt;sup>10</sup> The whereas clauses in ERC Resolution No. 10, series of 2020 cites the rule-making procedure in ERC Case No. 2019-006 RM, and the initial Reliability Performance Indices were updated and recomputed in May 2020, to include the June to December 2019 Outage Data.

The provisions of the Interim Outage Rules, in so far as it limits the number of days allowed for planned outages, should be repealed to allow all planned outages.

- 28. Table 1, Article V of the Interim Outage Rules prescribes the maximum number of planned and unplanned outage days allowed for the following generating plant technologies, *i.e.*, pulverized coal, circulating fluidized bed, combined cycle, gas turbine, diesel, geothermal, hydroelectric, oil-fired thermal, and biomass.<sup>11</sup>
- 29. Article VI of the said Rules, which pertain to Outage Allowance Application, states that prescribed planned outage allowance shall be utilized by SO and transmission network providers ("TNP") as *indices* or *guide* in the preparation and implementation of the GOMP. Moreover, the said planned and unplanned outage allowances may also be used as *guide* by the Honorable Commission for its evaluation of cases and monitoring purposes.
- 30. The afore-cited provisions describe the nature of the prescribed planned outage allowance as "indices" or "guide", which is of recommendatory nature.
- 31. In case, however, that the SO and the TNP utilizes planned outages beyond the prescribed allowance, the rules require the SO and the TNP to provide a report to the Honorable Commission as to the reason for such consideration.<sup>12</sup>
- 32. Arguably, the requirement of submitting a report to the Honorable Commission, in case actual planned outages exceed the prescribed allowance, suggests that the outage allowance stated in Table 1, Article V of the subject rules is of mandatory nature.
- 33. It must be emphasized that planned outages are dependent on various factors including but not limited to plant age, technology type, and manufacturer specifications or requirements, availability of spares for pre-EPIRA plants.
- 34. Moreover, generators submit their GOMP with the National Grid of the Philippines (NGCP), also the SO, which should be the basis of planned outages.
- 35. Generators cannot change their planned outages, if only to comply with the Interim Outage Rules. Changing planned outages to a shorter period is unsafe and a health risk for the maintenance crew. The nuances of the size of the plants shall also be considered in planned outages as large coal plants will require a longer number of days to cool down as compared to smaller capacity plants. It also entails working on the units for

<sup>11</sup> Article V of the Interim Outage Rules.

<sup>12</sup> Ibid.

twenty-four (24) hours and effectively yields higher forced outages.

- 36. Thus, Petitioner proposes the removal of the planned outages under Article V, Table 1 of Annex A of the Interim Outage Rules, and instead, puts forward that all planned outages even beyond the allowance prescribed by the Interim Outage Rules, should be permitted without any threat of incurring administrative sanctions, as long as a report identifying the factors requiring such prolonged planned outages is provided to the Honorable Commission.
- 37. Likewise, the Interim Outage Rules should serve as a guide for the terms of reference, in the competitive selection process ("CSP") on allowable outages.
- 38. Petitioner respectfully submits that and Article VI of the Interim Outage Rules be revised, as follows:

### ARTICLE VI - OUTAGE ALLOWANCE APPLICATION

The planned outage allowance in days per year, as submitted by the generating plants, shall be used by the SO and TNP TO guide their preparation and implementation of the GOMP. All planned outages reflected in the GOMP, any of its revisions, or as approved by the so seven (7) days before the outage schedule shall be allowed. If the so approves the extended or revised planned outage schedule in less than seven (7) days before the outage schedule, such approval shall be immediately communicated to the ERC.

On the other hand, the **forced** outage allowance in days per year, **as determined under Article V**, will serve as the maximum or cap for **forced** outages per power plant technology.

The said planned and <u>forced</u> outage allowances may also be used as guide <u>in the competitive selection process and</u> by the Commission for its evaluation of cases and monitoring purposes.

The prescribed unplanned outage or forced outage allowance must be amended to reflect accurate data.

39. It must be stated that the Interim Outage Rules imposes a stricter rule on unplanned outages where generating plants

- cannot exceed the limits therein determined.<sup>13</sup> Any unplanned outage beyond the outage allowance is considered a violation that may warrant the imposition of administrative penalties.<sup>14</sup>
- 40. Considering that the provisions on unplanned outages or forced outages can be deemed punitive in nature, insofar as it allows the Honorable Commission to impose sanctions on non-compliant parties, there is all the more reason to revisit the data and methodology in prescribing the unplanned outage allowance. The resolution, being interim in nature, should serve as a guide and should not be punitive.
- Based on a review on the five (5) major jurisdictions globally, 41. it does not appear to be a standard practice to impose outage or reliability indices common to all generating units within a jurisdiction. These five (5) jurisdictions are (1) the Federal Energy Regulatory Commission (FERC) of the United States, (2) The Office of Gas and Electricity Markets (Ofgem) of the United Kingdom, (3)**Federal** network (Bundesnetzagentur (BNetzA) of Germany), (4) the Electricity Authority of New Zealand, and (5) the Au[s]tralian Ene[r]gy Market Commission (AEMC) of Australia. Notably, all of these jurisdictions have not imposed allowable outage days to GenCos.
- 42. All of the five (5) jurisdictions have similarities in managing electricity supply and demand with that of the Philippine through a systems operator, the electricity spot market. However, the only delimiting aspect in the Philippine jurisdiction is the setting of the interim outage caps/indices for all power plant technologies operating in the country.
- 43. As stated in ERC Resolution No. 10, the Interim Outage Rules is based on data generated from power plant operation and outages for the period of January 2015 to May 2019. The period, however, may be too short and there is also a limited number of power plant technologies operating in the Philippines to gather accurate data for the purpose of setting benchmarks or standards.
- 44. Generally, generators conduct their major overhaul maintenance every five (5) years while other technologies (e.g., diesel and oil-fired power plants) are based on running hours. As the data only covers one (1) major maintenance cycle, the said data are likely incorrect and inaccurate, and cannot be made to be representative of maintenance and reliability of plants. More cycles are needed to properly reference the data with regard to the study of reliability. In running data to be used as a statistical reference, there is always a need to analyze the distribution curve first, if normal or skewed. The objective should be the identification of outliers, as these are those to be subjected outside the

<sup>13</sup> Id., Article VI.

<sup>14</sup> Id., Article VII, Section 1.

reliability standard. The reliability standard should be within a confidence interval. Those outside the confidence interval are the outliers.

- 45. The 50th percentile is not a good statistical reference to base performance standards or targets. The 50th percentile already assures that fifty percent (50%) of the population will not be compliant with said targets. It is calculated by ranking all the values, including the frequency for each value. The 50th percentile is determined by dividing the frequency into two (2), then picking its value.
- 46. Setting the bar at 50th percentile of the performance of the existing power plants depending on the technology, poses high risk of non-conformance for the power plants and even revocation of permits/licenses in case the maximum number of violations as defined in the Resolution have been reached. This could be an inevitable reality since it is expected that fifty percent (50%) of the time of the GenCos for the next five (5) years will exceed the interim planned and unplanned outage indices.
- 47. The 50th percentile is similar to the median, which is also a measure of central tendencies in statistical terms. The other measures of central tendencies are the mean and mode. The mean, median and mode may have different values depending on the characteristic of the population curve.
- 48. Petitioner requested its member generators to provide the forced outage data (in days) from 2014 to 2022. The mean and standard deviation of the forced outage data were calculated with the following results:15

	Mean (days)	Standard Deviation (days)
Coal (CFB)	25.8	35.7
Diesel	20.2	52.3
Nat Gas	18.19	29.74
Geothermal	50.1	88.7
Hydro	7.3	22.0
Hydro (Pump-Storage)	13.5	19.6
Coal (Pulverized)	38.9	57.0

49. The measure of standard deviation is a very important statistical tool to determine the dispersion of data. In employing the standard deviation, the range of regular outages and those values which are considered as outliers can be determined. A high standard deviation means the outages of the outliers are far from the mean, while a lower value means that they are more clustered to the mean. In the table

<sup>&</sup>lt;sup>15</sup> A copy of the Consolidated Forced Outages from 2014 to 2022 and a copy of the Summary of Consolidated Forced Outages from 2014 to 2022 are hereto attached as Annexes "G" and "G-l", respectively.

above, Geothermal power plants tend to have a more variable number of outage days required, than that of coal.

- 50. It is well-established that the mean and standard deviations are used in the determination of performance. Note that in the Performance Based Regulation process of the regulated entities, transmission and distribution, the performance indicators are determined by the range of one (1) standard deviation from the mean. The penalties and rewards of these entities are hinged on these statistical methods. It is very erroneous that the reliability standards of generators were determined by the median of the population, while the standards of the regulated entities are determined by the one (1) standard deviation from the mean.
- 51. It can be observed in the results that the data on forced outages are dispersed. This explains the reason that generators are not willing to set one value for forced outages. The dispersion may come from different reasons, which cannot be readily determined; part of which may be due to the quarantine restrictions imposed from 2020 to 2022.
- 52. The use of one (1) standard deviation in the calculation of performance standards is hinged to the concept of confidence intervals. Confidence interval in statistics "refers to the probability that a population parameter will fall between a set of values for a certain proportion of times". "Statisticians and other analysts use confidence intervals to understand the statistical significance of their estimations, inferences, or predictions." 16
- 53. Alternative to the use of one (1) standard deviation is to calculate for confidence interval. The confidence interval is calculated by using the formula below:

Cl = (mean -t (s/sqrt(n)), mean + t (s/sqrt(n)))where,

t = assumed t distribution (tables shows the confidence level vs sample size, to determine value of t)n = number of samples

54. Depending on the confidence level and the sample size, the values of the confidence interval may vary. Usually, ninetynine percent (99%) or ninety-five percent (95%) confidence level is used in studies. The same may be used by the

Honorable Commission.

s = standard deviation

<sup>&</sup>lt;sup>16</sup> Investopedia. https://www.investopedia.com/terms/c/confidenceinterval.asp

#### For simplicity of calculation. Petitioner proposes 55. that the upper limit of the forced outage reliability targets should be set at mean plus one (1) standard deviation, as follows:

	Mean (days)	Standard Deviation (days)	Proposed Allowable Unplanned Outage (days)
Coal (CFB)	25.8	35.7	61.5
Diesel	20.2	52.3	72.6
Nat Gas	18.19	29.74	47.93
Geothermal	50.1	88.7	138.8
Hydro	7.3	22.0	29.3
Hydro (Pump-Storage)	13.5	19.6	33.1
Coal (Pulverized)	38.9	57.0	95.9

- With regard to the reliability standards, standard deviation is 56. found in the Rules for Setting Distribution Wheeling Rates for Privately- owned Electricity Distribution Utilities Operating under Performance Based Regulation ("RDWR")17 and the Rules for Setting Transmission Wheeling Rates ("RTWR").18
- In the example cited, regulated entities are required to collect 57. information about the performance levels of each Grid against these indices over the Previous Regulatory Period. The data to be collected shall then be used to determine the final performance bands.
- For each performance index, five (5) performance bands will 58. be used. The resulting performance in each band would result in the allocation of a simple performance assessment value to the index being assessed which shall be referred as "Perf"values.
- The five (5) performance bands to be used for each index and 59. their corresponding values are as follow:
  - "Band 1" is greatly below target; with Perf-value a.
  - "Band 2" is target is not achieved; with Perfb. value of -0.5.
  - "Band 3" is performance as per expectation; C. with Perf-value of o.
  - d.
  - "Band 4" is target exceed; with Perf-value of 0.5.
    "Band 5" is target greatly exceeded; it will have a value of 1.

<sup>&</sup>lt;sup>17</sup> A copy of the Rules for Setting Distribution Wheeling Rates for Privately-owned Electricity Distribution Utilities Operating Under Performance Based Regulation is hereby attached as Annex "H" and made an integral part hereof.

<sup>&</sup>lt;sup>18</sup> A copy of the Rules for Setting Transmission Wheeling Rates is hereby attached as Annex "I" and made an integral part hereof.

- 60. The ERC shall set the expected performance target for each performance index for the Subsequent Regulatory Period. It may set the target at either (1) the historical performance level of a Regulated Entity against that index, based on the average annual performance against this index for the five-year period; or (2) an improvement over the historical performance level of a Regulated Entity against that index, as determined by the ERC based on benchmarking against the performance of the other similar international utilities. Such benchmarking will allow for the normalization of physical, economic and regulatory differences, and the results will be subject to public consultation prior to setting performance targets.
- 61. Since the ERC has already set a precedent in using standard deviation for its regulated entities, this means for the sake of uniformity, the use of standard deviation is acceptable as well to deregulated entities such as the generation sector in developing a performance index.
- 62. Petitioner, thus, respectfully submits that the Article II and Article V of the Interim Outage Rules be repealed and modified, as follows:

#### ARTICLE II - GOVERNING PRINCIPLES

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.

The Rules for the Reliability Performance and Equivalent <u>Forced</u> Outage Days Per Year of Generating Units are among the rules promulgated by ERC to drive generating plants to perform better and instil (*sic*) discipline by setting outage allowance in days per year that will serve as the standard per technology for all generating units.

The Number of <u>Forced</u> Outage Days per year <u>was based</u> by utilizing information from Actual Events Reports from <u>2014 TO 2022</u> as submitted by generation companies in compliance with *ERC Resolution No. 21, Series of 2016*.

#### X X X

#### ARTICLE V - FORCED OUTAGE DAYS

### TABLE 1. ALLOWABLE FORCED OUTAGE IN DAYS

TECHNOLOGY	ALLOWABLE FORCED OUTAGE (DAYS)
COAL (CFB)	64.0
DIESEL	75.1
NAT GAS	47.93
GEOTHERMAL	138.8
HYDRO	29.3
HYDRO (PUMP-STORAGE)	33.1
COAL (PULVERIZED)	95.9

ERC recognizes the technical capabilities of the SO and the TNP, being the primary entities in maintaining and ensuring the security and reliability of the grid, in so far as the determination of the reasonable <u>Planned</u> outages are concerned <u>and shall be determined through the application procedure outlined in Article VI.</u>

Likewise, ERC sets the standard <u>Forced</u> 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 <u>forced</u> outages. <u>Forced outages that are classified as outside management control outages shall not be counted against a generating unit's forced outage allowance.</u>

The definition of "Force Majeure Event" should be modified to include outages caused by matters outside the control of management.

- 63. Outages that are outside the control of the management of the power plants must not be included in the counting of outage allowances, planned or forced. Of particular note are force majeure events which are unforeseeable or nonetheless inevitable, as well as those similar in nature, such as the lack of water for hydro based facilities.
- 64. For such purpose, the definition of a force majeure event, as provided in Article IV of the Interim Outage Rules, be modified, as follows:

Force Majeure Event. An event beyond the reasonable control of the Participant claiming force majeure which, through the exercise of due foresight and Good Industry Practice, the

Participant could not have avoided and which, by exercise of due diligence, the Participant is unable to overcome. Such events include, but are not limited to the following, to the extent that such event prevents performance of a Participant of an obligation: typhoon; storm; tropical depression; flood or inundation; lightning strikes; earthquake; volcanic eruption; fire; epidemic; war; invasion; riot; national emergencies, civil disturbance; sabotage; explosion; insurrection; military or usurped power; action of any court or governmental authority; or any civil or military authority de facto or de jure; natural calamity or act of public enemy; or any other event or cause of a similar nature beyond the reasonable control of the Participant claiming force majeure. A strike or labor dispute is not a Force Majeure Event. Outages that are outside the control of management such as events that are unforseeable (sic) or nonetheless inevitable, as well as those similar in nature such as lack of water for hydro based facilities, and other similar cases shall be considered under this section.

other factors affecting outages such as: (i) the older the facility, the more likely it will experience outages, thus degradation factor shall be considered; (ii) depending of the unit size, availability of spare parts become more challenging during forced outage; (iii) resource constraints affects outages including fuel availability; (iv) plant location affects availability of equipment and experts/manpower especially during major typhoons; and (v) network configuration plays critical considerations specifically when the power plant has no 1:1 generating unit/step-up transformers. The above classifications were considered in ERC Resolution No. 21, Series of 2016 in identifying the types of forced outages.

Non-compliant parties should be provided a reasonable time to comply with the joint requirement of compliance and explanation.

- 66. Under Article VII, Section 1 of the Interim Outage Rules, a non-compliant party shall be given a Notice of Non-Compliance and shall be required to comply with the Rules and to explain the reason or reasons for its infraction, within seven (7) days from receipt of said notice.
- 67. Notably, the Interim Outage Rules do not consider situations where circumstances, *i.e.*, technical difficulties, logistical problems, may prevent the SOs and the TNPs to fulfil the joint requirement of compliance and explanation within the time prescribed of seven (7) days.

- 68. While the joint requirement of compliance and explanation can be treated as the non-compliant party's administrative remedy, the same is rendered nugatory due to the short period of time allowed for its compliance.
- 69. In this regard, the Rules should be amended to take into account circumstances where both compliance and explanation are impossible to be fulfilled within seven (7) days. Thus, Petitioner submits the following change to Section 1, Article VII of the Interim Outage Rules:

## ARTICLE VII -**TRANSITORY AND** FINAL PROVISIONS

**Administrative** Section 1. **Sanctions.** In case of non-compliance by any person or entity with any of the provisions of these Rules, ERC shall review such noncompliance and issue a Notice of Non-Compliance with an Order to comply and to explain, within **fifteen (15) days** from receipt of the same, the reason or reasons therefor. After the Notice and Order shall have been issued by ERC and the person or entity still refuses and fails to comply within the reglementary period of what is incumbent upon the person or entity, ERC shall impose the necessary fines and penalties.

Violations of these Rules shall be subject to the imposition of appropriate sanctions, fines, and penalties in accordance with SECTION 5 OF ERC Resolution No. 3, Series of 2009, entitled a "Resolution Amending the Guidelines to Govern the Imposition of Administrative Sanctions in the Form of Fines and Penalties Pursuant to Section 46 of Republic Act No. 9136," or any other issuances that may be adopted by ERC in the future. For the avoidance of doubt, one day (24 hours) of outage involving one hundred percent (100%) of the dependable capacity of the generating unit in excess of the allowable forced outage shall be treated as one incident subject to penalty. Violations of these Rules shall be without prejudice to sanctions or penalties for violations of other applicable laws or rules.

The Scope of Interim Outage Rules should be amended to clearly exclude variable renewable energy, such as run-of-river.

70. The Interim Outage Rules provide for an interim benchmark to generation companies with conventional and non-variable

renewable energy plants that are connected to the grid, including embedded generating plants with an aggregated capacity of five (5) MW and above.

- 71. Worthy to note is that the terms (a) Conventional, (b) Non-variable and (c) Variable Renewable Energy are not defined by the Rules as to restrict the interpretation of the terms and embody the intent behind the Rule.
- 72. Variable renewable energy is one that is non-dispatchable such as solar and wind.<sup>19</sup> This renewable energy source is fluctuating and can only produce energy under right weather conditions.<sup>20</sup>
- 73. A "run-of-the-river" system relies on natural flowrates of rivers as it uses the force of the river's current to apply pressure on turbines,<sup>21</sup> and is thus considered as variable renewable energy.
- 74. Despite the fact that the run-of-river in accordance with the 2016 PGC, as a variable renewable energy, is outside the scope and application of the Interim Outage Rules, the Honorable Commission issued a Notice of Non-Compliance against generators which utilize run-of-river facilities.
- 75. In issuing the Notice of Non-Compliance, the Honorable Commission effectively treats run-of-river as non-variable renewable energy without any factual or legal basis.
- 76. To cast all doubt as to the applicability of the Rules to non-variable renewable energy, such as run-of-river generating units, Petitioner submits the following changes to Article III of the Interim Outage Rules:

#### ARTICLE III - SCOPE AND APPLICATION

The <u>forced outage days</u> shall apply to Generation Companies with Conventional and Non-Variable Renewable Energy Generating Plants connected to the Grid, including Embedded Generating Plants, which have an aggregate capacity of 5 MW and above. <u>These rules shall not apply to variable renewable energy such as run-of river generating units.</u>

<sup>&</sup>lt;sup>19</sup> Variable renewable energy in Central America, available at https://www.irena.org /-/media/Files/IRENA/Agency/Events/2018/May/IRENA-presentation—VRE-grid-integration—23-May.pdf?la=en&hash=1928E2467EEBB0ED8CAS8F8BF940A397CAB4E4F7 last accessed on 4 December 2022.

Variable Renewable Energy: An Introduction, available at https://crsreports.congress.gov/product/pdf/IF/IF11257 last accessed on 4 December 2022.

The Honorable Commission is limited to impose penalties in accordance with CRC Resolution No. 3, Series of 2009.

- 77. Under of Section 43 (I) RA 9316 or the "Electric Power Industry Reform Act of 2001" (EPIRA), the ERC was delegated with authority to impose fines, to wit:
  - (I) Impose fines or penalties for any noncompliance with or breach of this Act, the IRR of this Act and the rules and regulations which it promulgates or administers;
- 78. The Interim Outage Rule anchored its imposable penalty to ERC Resolution No. 3, Series of 2009, to wit:

Section 5. Non-compliance with the Provisions of the Act and its IRR, Grid and Distribution Codes, Rules, Regulation Orders, Resolutions and Other Laws of the ERC. - xxx xxxx xxx

NT CTT' 1	D '	4 1 1 1 1 D 1 1 1 11
No. of Violation	Basic Amount of	Additional Penalty shall
	Penalty	be Imposed for Any
		Willful Delay in the
		Implementation
1 <sup>st</sup> and 2 <sup>nd</sup>	Php 100,000.00	a) 10% of the basic
violation		amount of penalty if
$3^{rd}$ and $4^{th}$	Php 300,000.00	the compliance was
violation		made after one (1)
5 <sup>th</sup> and subsequent	Php 500,000.00 and	month from notice.
violations	Cancellation of the	b) 50% of the basic
Space of the Control	Certificate of Public	amount of penalty if
	Convenience and	the compliance was
	Necessity (CPCN),	made after two (2)
	License and the	months from notice.
	Franchise for	c) 100% of the basic
	Consortium	amount of penalty if
	100 (1 to 100 to 10 to 1	the compliance was
		made after three (3)
		months from notice

79. However, the ERC imposed a different penalty formula in its 2021 decisions, to wit:

Total Penalty = Base Penalty + (Duration x PhP 100,000 x 40%) + (Magnitude x PhP 100,000 x 60%)

Base Penalty = PhP100,000 for 1st-2nd violation, PhP300,000 for 3rd-4th violation, PhP500,000 for >4th violation
Duration = outage days in excess of allowed

Magnitude = rated capacity of the unit divided by highest rated capacity in the grid where the unit is located

- 80. The inconsistencies between penalties imposed is detrimental to the interest of the stakeholders as there is no clear basis on what penalty is to be imposed for violation thereof.
- 81. Thus, the penalty imposed by the Honorable Commission in its 2021 decisions must be abandoned for lack of sufficient basis even in its own rules. The rescission of show cause orders and penalties and withdrawal of pending cases for violations of the Interim Outage Rules may be included through an addition of the following provisions:

# ARTICLE VII - TRANSITORY AND FINAL PROVISIONS

#### Section 1. Administrative Sanctions.

In case of non-compliance by any person or entity with any of the provisions of these Rules, ERC shall review such non-compliance and issue a Notice of Non-Compliance with an Order to comply and to explain, within **fifteen (15) days** from receipt of the same, the reason or reasons therefor. After the Notice and Order shall have been issued by ERC and the person or entity still refuses and fails to comply within the reglementary period of what is incumbent upon the person or entity, ERC shall impose the necessary fines and penalties.

Violations of these Rules shall be subject to the imposition of appropriate sanctions, fines, and penalties in accordance with SECTION 5 OF ERC Resolution No. 3, Series of 2009, entitled a "Resolution Amending the Guidelines to Govern the Imposition of Administrative Sanctions in the Form of Fines and Penalties Pursuant to Section 46 of Republic Act No. 9136," or any other issuances that may be adopted by ERC in the future. For the avoidance of doubt, one day (24 hours) of outage involving one hundred percent (100%) of the dependable capacity of the generating unit in excess of the allowable forced outage shall be treated as one incident subject to penalty. Violations of these Rules shall be without prejudice to sanctions or penalties for violations of other applicable laws or rules.

Section 2. <u>Disposition of Show Cause</u> <u>Orders. Cases, and Penalties. All</u> <u>previously issued show cause orders,</u> pending cases, and penalties imposed for violations of the interim reliability performance indices and equivalent outage days per year of generating units under Resolution 10 Series of 2020, prior to the effectivity of these Rules, are hereby withdrawn and rescinded.

#### XXX

Section 4. Repealing Clause. The Interim Reliability Performance Indices and Equivalent Outage Days Per Year of Generating Units under Resolution 10, Series of 2020 and any rule or regulation inconsistent with the provisions of these Rules is hereby repealed and modified accordingly.

- 82. While the Interim Outage Rules aims to promote accountability of generation companies and achieve greater operations and economic efficiency, its continuous application, however, may very well defeat its objectives.
- 83. In view of the foregoing and the temporary nature of the contested Interim Outage Rule, the Petitioner respectfully submits that there is a need to amend the Interim Outage Rules to pave way for a clear and definite set of rules that will truly reflect the reliability standard of Philippine generation companies.

#### **PRAYER**

WHEREFORE, Petitioner respectfully prays that this Honorable Commission to:

- a. SUSPEND the implementation of the Interim Reliability Performance Indices and Equivalent Outage Days Per Year of Generating Units until the resolution of this petition for rules change or at the very least, until end of 2023;
- b. REPEAL, AMEND, and MODIFY the Interim Reliability Performance Indices and Equivalent Outage Days Per Year of Generating Units and ADOPT a revised Interim Reliability Performance Indices with clearer and more defined mandate;
- c. RESCIND any previously issued show cause orders by the ERC; and
- d. RESCIND any penalty imposed for violation of the interim rules until the ERC decides on this Petition to Initiate Rule-making.

Other just and equitable relief are likewise prayed for.

Finding the *Amended Petition* to be in order and to be sufficient in form, the same is hereby set for hearing and public consultation on the following dates and online platform for the conduct thereof, pursuant to Resolution No. 09, Series of 2020<sup>22</sup> and Resolution No. 01, Series of 2021<sup>23</sup> (ERC Revised Rules of Practice and Procedure):

Date and Time	Venue	Activity
19 January 2024 (Friday) at two o'clock in the afternoon (2:00 P.M.)		Determination of compliance with jurisdictional requirements and expository presentation for Luzon, Visayas, and Mindanao Stakeholders
26 January 2024 (Friday) at two o'clock in the afternoon (2:00 P.M.)	Microsoft Teams Application	Public Consultation for Luzon Stakeholders
O2 February 2024 (Friday) at two o'clock in the afternoon (2:00 P.M.)		Public Consultation for Visayas Stakeholders
o9 February 2024 (Friday) at two o'clock in the afternoon (2:00 P.M.)		Public Consultation for Mindanao Stakeholders

Accordingly, Petitioner PIPPA is hereby directed to:

1) Cause the publication of the attached *Notice of Proposed Rule-Making* once (1x) in a newspaper of nationwide circulation in the Philippines at its own expense, with the date of publication to be made not later than ten (10) days

<sup>&</sup>lt;sup>22</sup> A Resolution Adopting the Guidelines Governing Electronic Applications, Filings and Virtual Hearings Before the Energy Regulatory Commission.

<sup>&</sup>lt;sup>23</sup> A Resolution Adopting the Revised Rules of Practice and Procedure of the Energy Regulatory Commission.

before the date of the scheduled initial hearing;

- 2) Furnish with copies of this *Order* and the attached *Notice* of *Proposed Rule-Making* the Offices of the Solicitor General (OSG), the Commission on Audit (COA), and the Committees on Energy of both Houses of Congress. They are hereby requested, if they so desire, to send their duly authorized representatives and attend the scheduled hearing; and
- 3) Furnish with copies of the *Amended Petition* and its attachments all those making requests therefor, subject to the resolution of the prayer for confidential treatment of information, if any, and reimbursement of reasonable photocopying costs.

Within five (5) calendar days prior to the date of virtual hearing, PIPPA must submit to the Commission via electronic mail (e-mail) at <a href="mailto:docket@erc.ph">docket@erc.ph</a>, and copy furnish the Legal Service through <a href="mailto:legal@erc.ph">legal@erc.ph</a>, the scanned copies of its written compliance with the aforementioned jurisdictional requirements, following methodically arranged and duly marked documents:

- The evidence of publication of the attached *Notice of Proposed Rule-Making* consisting of the affidavit of the Editor or Business Manager of the newspaper where the said *Notice of Proposed Rule-Making* was published, and the complete issues of the said newspaper;
- 2) The evidence of receipt of copies of this *Order* and the attached *Notice of Proposed Rule-Making* by the OSG, the COA, the Committees on Energy of both Houses of Congress;
- 3) The evidence of receipt of copies of the *Amended Petition* and its attachments by all those making requests therefor, if any; and
- 4) Such other proof of compliance with the requirements of the Commission.

Moreover, PIPPA is hereby required to post on its bulletin board, the scanned copies of the foregoing jurisdictional requirements and submit proof of its posting thereof.

Petitioner PIPPA must ensure that all the documents or exhibits proposed to be presented have already been duly submitted to the Commission at least five (5) calendar days before the date of the scheduled virtual hearing.

Failure of Petitioner PIPPA to comply with the above requirements within the prescribed period shall be a ground for cancellation of the scheduled hearing, and the resetting of which shall be six (6) months from the said date of cancellation.

Petitioner PIPPA must also be prepared to make an expository presentation of the instant *Amended Petition*, aided by whatever communication medium that it may deem appropriate for the purpose, in order to put in plain words and explain, for the benefit of the consumers and other concerned parties, the nature of the *Amended Petition*. Relevant information and pertinent details substantiating the reasons and justifications for the *Amended Petition* must be cited in support thereof.

Petitioner PIPPA is further directed to file a copy of its Expository Presentation via e-mail at <a href="docket@erc.ph">docket@erc.ph</a>, and copy furnish the Legal Service through <a href="legal@erc.ph">legal@erc.ph</a>, at <a href="least five">least five</a> (5) calendar days prior to the scheduled virtual hearing. Petitioner PIPPA shall also be required, upon the request of any stakeholder, to provide an advance copy of its expository presentation, at <a href="least five">least five</a> (5) calendar days prior to the scheduled virtual hearing.

All interested stakeholders may submit its comments and/or clarifications (both in hard and soft copies) on the proposed Rule-change on or before 12 January 2024. Electronic copies may be sent to docket@erc.ph, and copy furnish the Legal Service through legal@erc.ph. The Commission shall give priority to the stakeholders who have duly submitted their respective comments and/or clarifications, to discuss the same and propound questions during the course of the expository presentation.

Petitioner PIPPA is further directed to submit, through personal service, registered or ordinary mail/private courier, one (1) set of the original or certified true hard copies of its Jurisdictional Compliance and Expository Presentation, **within five (5) working days** from the date that the same were electronically submitted, as reflected in the acknowledgment receipt e-mail sent by the Commission.

Finally, PIPPA, including its authorized representatives and witnesses, are hereby directed to provide the Commission, through legal.virtualhearings@erc.ph, their respective e-mail addresses upon receipt of this *Order*. The Commission will send the access link/s to the aforementioned hearing platform within five (5) working days prior to the scheduled hearing and public consultation.

### SO ORDERED.

Pasig City, 07 December 2023.

FOR AND BY AUTHORITY OF THE COMMISSION:

Monalisa C. Dimalanta Chairperson and CEO

**ERC**Office of the Chairperson and CEO

MCD 2023-011582

LS: CNR/LSP/MCCG

### ERC CASE NO. 2023-001 RM ORDER / 07 DECEMBER 2023 PAGE 27 OF 27

#### Copy Furnished:

Philippine Independent Power Producers Association, Inc. (PIPPA)
 Petitioner
 Unit 2408, 24/F, Prestige Tower, F. Ortigas Jr. Avenue,
 Ortigas Center, Pasig City, Metro Manila, Philippines
 Email Address: pleadings@symecslaw.com;

SYMECS Law
 Atty. Albert G. Cukingnan, Jr., Atty. Diane Margret V. Uy, and Atty. Xian Justin R. Alden Counsels for PIPPA
 3109 One Corporate Center, Julia Vargas corner
 Meralco Avenue, Ortigas Center, Pasig City
 Email Address: pleadings@symecslaw.com;

- 3. The Office of the Solicitor General Amorsolo St., Legaspi Village, Makati City docket@osg.gov.ph
- 4. The Commission on Audit
  Don Mariano Marcos Avenue, Diliman, Quezon City
  citizensdesk@coa.gov.ph
- 5. Senate Committee on Energy Senate of the Philippines GSIS Bldg., Roxas Blvd., Pasay City senateenergycommittee@gmail.com
- 6. The House of Representatives Committee on Energy House of Representatives
  Batasan Hills, Quezon City
  Committee.energy@house.gov.ph
- 7. Regulatory Operations Service
  Energy Regulatory Commission
  Exquadra Tower, 1 Jade Drive, Ortigas Center,
  San Antonio, Pasig City
  ros@erc.ph
- 8. Market Operations Service
  Energy Regulatory Commission
  Exquadra Tower, 1 Jade Drive, Ortigas Center,
  San Antonio, Pasig City
  mos@erc.ph