

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-100, SUB 172

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)	
Petition to Revise Commission)	ORDER ADOPTING AMENDMENTS
Rule R8-53)	TO COMMISSION RULE R8-53

BY THE COMMISSION: On May 17, 2021, the Public Staff filed a petition for rulemaking in the above-captioned docket requesting that the Commission amend Commission Rule R8-53. In summary, the Public Staff stated that Commission Rule R8-53 was adopted in 1984 and requires each public utility that uses fossil or nuclear fuel in the generation of electricity to file monthly summaries of base load power plant performance with the Commission. The Public Staff stated that when the Rule was adopted the backbone of the utilities' generation fleets was coal and nuclear units, but since that time, due to the low price of natural gas, the usage of natural gas-fired combined cycle plants has evolved from intermediate to base load generation. Further, the Public Staff stated that currently a substantial portion of the utilities' generation fleets is composed of natural gas-fired units providing base load generation, and that as renewable generation and battery storage evolve, additional types of generation may come to provide baseload generation.

The Public Staff noted that Rule R8-53 does not define "base load," but requires outage information for the utilities' nuclear and larger coal units, as well as generation summaries for base load generating units and generating units of 500 megawatts (MW) or greater maximum dependable capacity utilizing coal or nuclear fuel. According to the Public Staff, Rule R8-53 does not contemplate the use of natural gas-fired units as base load generation and, consequently, there has been a lack of clarity among the electric utilities and the Public Staff regarding the units for which information should be reported.

Attached to the Public Staff's petition as Attachment A were the Public Staff's proposed revisions to Rule R8-53 shown in redline and strike-through. The Public Staff submitted that the revisions would clarify for the utilities and the Public Staff the particular units for which information should be reported. According to the Public Staff, revised section (b)(1) would require that information should be reported for plants with a unit capacity of 400 MW or more, or with aggregate units of 600 MW or more, and projected in the utility's most recent integrated resource plan (IRP) to have an annual capacity factor of at least 35%. The Public Staff stated that these units generally make up the backbone of a utility's generation fleet and are the most important to monitor. Moreover, the Public Staff noted that this revision would be agnostic as to the type of generation and would allow for inclusion of evolving and new technologies that become part of a utility's core generation fleet.

With regard to proposed section (b)(2), the Public Staff stated that instead of specifying the units for which outage information should be reported, section (b)(2) would require that outages be reported for units projected in the most recent IRP to operate at a capacity factor of 65% or more, and that similar to section (b)(1) this provision would allow for the inclusion of evolving and new technologies that become part of a utility's core generation fleet.

In addition, the Public Staff explained that sections (c) and (d) of the proposed revisions to the Rule clarify and update the information to be provided regarding performance and outages, and that under the revised Rule the utilities would provide the information necessary for the Commission and the Public Staff to monitor the performance of the most critical units on a monthly basis, including the potential MW capacity, the MW generated, capacity factor, equivalent availability, and heat rate. Further, the Public Staff noted that the utilities would report any outages of these units, including the date(s), duration, cause, an explanation, remedial action, and the type of outage.

The Public Staff contended that the proposed revisions would modernize and simplify the current rule, reduce the amount of information required, and better provide information that is necessary for the Commission and Public Staff to monitor critical unit performance.

Finally, the Public Staff stated that it worked with Virginia Electric and Power Company d/b/a Dominion Energy North Carolina, Duke Energy Carolinas, LLC, and Duke Energy Progress, LLC, (collectively, electric utilities), to develop the proposed revisions and was authorized to represent that the electric utilities do not object to the proposed rule revisions.

On September 2, 2021, the Commission issued an Order Requesting Comments to be filed on or before September 30, 2021, and reply comments to be filed on or before October 14, 2021. In addition, the Commission ordered that the electric utilities be made parties to this proceeding without the need to file petitions to intervene. No other persons intervened in the docket, and no parties filed comments.

On March 8, 2022, the Public Staff filed a letter stating that due to an inadvertent error an incorrect version of Attachment A was attached to its petition. The Public Staff stated that it was filing a corrected Attachment A, as well as an Attachment B that is a clean version of Commission Rule R8-53 with the proposed revisions. Further, the Public Staff stated that it provided the electric utilities with the revised Attachments A and B prior to filing them and the electric utilities do not object to the filings.

Based on the foregoing and the record, the Commission finds good cause to adopt the Public Staff's proposed revisions to Commission Rule R8-53. The amended rule is attached hereto as Attachment A, with changes shown in a strike-through and underlined version, and as Attachment B in a clean version of the final rule.

The amended rule shall be applicable prospectively to all filings made on and after July 1, 2022.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 6th day of May, 2022.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in dark ink, appearing to read "Joann R. Snyder". The signature is written in a cursive, flowing style.

Joann R. Snyder, Deputy Clerk

Rule R8-53. MONTHLY BASE-LOAD POWER PLANT PERFORMANCE REPORT.

(a) On or before the last day of each month, every public utility ~~which uses fossil and/or nuclear fuel in the generation of electric power for providing North Carolina retail electric service shall file a Base Load Power Plant Performance Report for the preceding month for review by the Commission, the Public Staff, and any other interested party.~~

(b) ~~The monthly Base Load Power Plant Performance Report shall list each outage during the period for each fossil and/or nuclear generating unit designated herein. Definitions and methodologies used shall be consistent with the latest revision of North American Electric Reliability Corporation (NERC) Generating Availability Data Systems (GADS) Data Reporting Instructions.~~

(1) The outage information shall include the following:

- ~~(i) Generating unit affected by outage;~~
- ~~(ii) Date(s) of each outage;~~
- ~~(iii) Duration of each outage;~~
- ~~(iv) Cause of each outage;~~
- ~~(v) Explanation for cause of outage, if known;~~
- ~~(vi) Remedial action to prevent recurrence of outage, if any; and~~
- ~~(vii) Classification of outage as forced or scheduled.~~

For purposes of subsection (c) of this rule, the performance of generating units or power plants that meet both of the following two conditions (Performance Reporting Plants), shall be reported:

(i) Having a (A) 400 or greater megawatt (MW) Gross Maximum Capacity (GMC) rating for one unit or (B) 600 or greater MW GMC rating for the aggregate of multiple generating units of the same type at a single generation plant, and projected in the most recently filed integrated resource plan or integrated resource plan update (as applicable) to operate at 35% or greater annual Capacity Factor for the most recent 12-month period commencing January 1st of the next calendar year.

(ii) For purposes of this subsection (b)(1)(ii), the determination of the Capacity Factor shall occur on an annual basis after the filing of the integrated resource plan or integrated resource plan update (as applicable) and prior to January 1st of the next calendar year. Once established, the Performance Reporting Plants shall remain unchanged for the entire calendar year.

(2) ~~The outage information shall be provided for each unit at the following generating plants:~~

- ~~(i) Duke Energy Progress, Inc.:~~
 - ~~(A) Brunswick~~
 - ~~(B) Mayo~~
 - ~~(C) Robinson (Unit 2 only)~~
 - ~~(D) Roxboro (Units 2, 3, 4 only)~~
- ~~(ii) Duke Energy Carolinas, LLC:~~
 - ~~(A) Belews Creek~~

- ~~(B) — McGuire~~
- ~~(C) — Oconee~~
- ~~(iii) — Virginia Electric and Power Company:~~
 - ~~(A) — Mt. Storm~~
 - ~~(B) — North Anna~~
 - ~~(C) — Surry~~
- ~~(iv) — Any subsequent base load generating units added by each affected electric utility.~~

For purposes of subsection (d) of this rule, the outage information shall be provided for each electric generating unit that is projected in the most recently filed integrated resource plan or integrated resource plan update (as applicable) to operate at 65% or greater annual Capacity Factor for the 12-month period commencing January 1st of the next calendar year (Outage Reporting Plants). For purposes of this subsection (b)(2), the determination of the Capacity Factor shall occur on an annual basis after the September 1st filing of the integrated resource plan or integrated resource plan update (as applicable) and prior to January 1st of the next calendar year. Once established, the Outage Reporting Plants shall remain unchanged for the entire calendar year.

(c) The monthly Base-Load Power Plant Performance Report shall provide summaries of the generation by each fossil and/or nuclear generation unit designated herein generating unit of all Performance Reporting Plants, with one summary for the reporting month and another summary for the 12-month period ending with the reporting month. The generation summaries for each generating unit of all Performance Reporting Plants shall include the following:

- ~~(1) The generation summaries shall be provided for each base load generating unit plus each generating unit of 500 MW or greater maximum dependable capacity (MDC) utilizing coal or nuclear fuel.~~
 - ~~(i) — Maximum Gross dependable Dependable capacity Capacity (MDGGDC) or Net Dependable Capacity (NDC) in megawatts (MW);~~
- ~~(2) The generation summaries for each base load generating unit plus each generating unit of 500 MW or greater shall include the following information:~~
 - ~~(ii) — Hours in period;~~
- ~~(3) The generation summaries for each base load generating unit shall include, in addition to the information already listed herein, the following information:~~
 - ~~(i) — MWh not generated during period due to full scheduled outages (in MWh and as % of total possible generation);~~
 - ~~(ii) — MWh not generated during period due to partial scheduled outages (in MWh and as % of total possible generation);~~
 - ~~(iii) — MWh not generated during period due to full forced outages (in MWh and as % of total possible generation);~~
 - ~~(iv) — MWh not generated during period due to partial forced outages (in MWh and as % of total possible generation);~~
 - ~~(v) — MWh not generated during period due to economic dispatch (in MWh and as % of total possible generation); and~~
 - ~~(vi) — Heat rate (in BTU per kWh).~~

- (iii) ~~—~~ Total net megawatt hours (MWh) possible in period;
- (4) (iv) Net MWh generated during period;
- (5) (v) Capacity factor (as a % of ~~MDC~~ GDC or NDC);
- (6) (vi) Equivalent availability (~~(net MWh generation possible in period, less net MWh generation not available in period) divided by net MWh generation possible in period~~); and
- (vii) ~~Output factor (or MWh generated during period divided by hours of generation in period) as a % of MDC~~ Heat rate (in BTU per net kWh).

(d) The monthly Power Plant Performance Report shall list each outage during the period for each generating unit of the Outage Reporting Plants. The outage information shall include the following:

- (1) Generating unit affected by outage;
- (2) Date(s) of each outage;
- (3) Duration of each outage;
- (4) Cause of each outage;
- (5) Explanation for cause of outage, if known;
- (6) Remedial action to prevent recurrence of outage, if any; and
- (7) Whether the outage is forced or scheduled, and if scheduled, the classification of the outage.

(NCUC Docket No. E-100, Sub 47, 5/1/84; NCUC Docket No. M-100, Sub 128, 10/27/99; NCUC Docket No. M-100, Sub 140, 12/03/13.)

Rule R8-53. MONTHLY POWER PLANT PERFORMANCE REPORT.

(a) On or before the last day of each month, every public utility providing North Carolina retail electric service shall file a Power Plant Performance Report for the preceding month for review by the Commission, the Public Staff, and any other interested party.

(b) Definitions and methodologies used shall be consistent with the latest revision of North American Electric Reliability Corporation (NERC) Generating Availability Data Systems (GADS) Data Reporting Instructions.

(1) For purposes of subsection (c) of this rule, the performance of generating units or power plants that meet both of the following two conditions (Performance Reporting Plants), shall be reported:

- (i) Having a (A) 400 or greater megawatt (MW) Gross Maximum Capacity (GMC) rating for one unit or (B) 600 or greater MW GMC rating for the aggregate of multiple generating units of the same type at a single generation plant, and projected in the most recently filed integrated resource plan or integrated resource plan update (as applicable) to operate at 35% or greater annual Capacity Factor for the most recent 12-month period commencing January 1st of the next calendar year.
- (ii) For purposes of this subsection (b)(1)(ii), the determination of the Capacity Factor shall occur on an annual basis after the filing of the integrated resource plan or integrated resource plan update (as applicable) and prior to January 1st of the next calendar year. Once established, the Performance Reporting Plants shall remain unchanged for the entire calendar year.

(2) For purposes of subsection (d) of this rule, the outage information shall be provided for each electric generating unit that is projected in the most recently filed integrated resource plan or integrated resource plan update (as applicable) to operate at 65% or greater annual Capacity Factor for the 12-month period commencing January 1st of the next calendar year (Outage Reporting Plants). For purposes of this subsection (b)(2), the determination of the Capacity Factor shall occur on an annual basis after the September 1st filing of the integrated resource plan or integrated resource plan update (as applicable) and prior to January 1st of the next calendar year. Once established, the Outage Reporting Plants shall remain unchanged for the entire calendar year.

(c) The monthly Power Plant Performance Report shall provide summaries of the generation by each generating unit of all Performance Reporting Plants, with one summary for the reporting month and another summary for the 12-month period ending with the reporting month. The generation summaries for each generating unit of all Performance Reporting Plants shall include the following:

- (1) Gross Dependable Capacity (GDC) or Net Dependable Capacity (NDC) in megawatts (MW);
- (2) Hours in period;
- (3) Total net megawatt hours (MWh) possible in period;
- (4) Net MWh generated during period;

- (5) Capacity factor (as a % of GDC or NDC);
- (6) Equivalent availability (net MWh generation possible in period, less net MWh generation not available in period) divided by net MWh generation possible in period); and
- (7) Heat rate (in BTU per net kWh).

(d) The monthly Power Plant Performance Report shall list each outage during the period for each generating unit of the Outage Reporting Plants. The outage information shall include the following:

- (1) Generating unit affected by outage;
- (2) Date(s) of each outage;
- (3) Duration of each outage;
- (4) Cause of each outage;
- (5) Explanation for cause of outage, if known;
- (6) Remedial action to prevent recurrence of outage, if any; and
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(NCUC Docket No. E-100, Sub 47, 5/1/84; NCUC Docket No. M-100, Sub 128, 10/27/99; NCUC Docket No. M-100, Sub 140, 12/03/13.)