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July 10, 2017

## VIA ELECTRONIC FILING

Ms. M. Lynn Jarvis, Chief Clerk North Carolina Utilities Commission Dobbs Building 430 North Salisbury Street Raleigh, North Carolina 27603

Re: 2017 Integrated Resource Plan of Virginia Electric and Power Company

Docket No. E-100, Sub 147

Dear Ms. Jarvis:

On May 1, 2017, Virginia Electric and Power Company (the "Company") filed with the North Carolina Utilities Commission (the "Commission") its 2017 Integrated Resource Plan (the "2017 Plan") pursuant to §§ 62-2 and 62-110.1 of the North Carolina General Statutes and Rule R8-60(h)(1) of the Rules and Regulations of the North Carolina Utilities Commission. The Company has since discovered an error on page 20 of the 2017 Plan.

Accordingly, enclosed please find for electronic filing in the above-captioned proceeding, corrected page 20 of the 2017 Plan, which is intended to replace the same page 20 as filed in its entirety. A blackline of page 20 is also included, for reference purposes.

Please do not hesitate to contact me if you have any questions. Thank you for your assistance in this matter.

Very truly yours,

/s/E. Brett Breitschwerdt

EBB:kjg

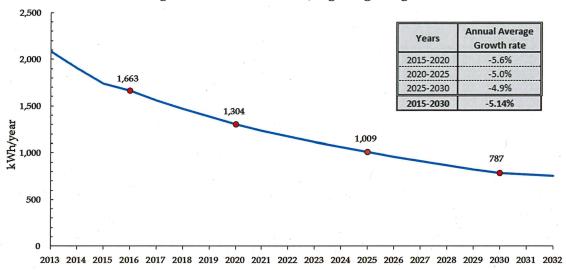


Figure 2.1.3 - Residential Lighting Usage

The Company's second model, the system model, utilizes hourly DOM Zone load data and is estimated in one stage. The DOM Zone load is modeled as a function of detailed specification of weather involving interactions between both current and lagged values of temperature, humidity, wind speed, sky cover, and precipitation for five weather stations in order to capture heating load and cooling load.

In addition to the two weather variables, the model uses estimates of non-weather sensitive load derived from the sales model and residential heating and cooling appliance stocks as explanatory variables. The equation also compensates for customer class proportions of total load acquired from the sales model. The hourly model also uses calendar month variables to capture time of day, day of week, holiday, other seasonal effects and unusual events such as hurricanes. Separate equations are estimated for each hour of the day.

Hourly loads for wholesale customers and other LSEs within the DOM Zone are also modeled as a function of the DOM Zone load since they face similar weather and economic activity. LSE peak and energy is based on a monthly 10-year average percentage. These percentages are then applied to the forecasted zonal peak and energy to calculate LSE peak and energy. DOM LSE load and firm contractual obligations are used as the total load obligation for the purpose of this 2017 Plan.

Forecasts are produced by simulating the model over actual weather data from the past 30 years along with projected economic conditions. Sales estimates from the sales model and energy output estimates from the system model are compared and reconciled appropriately in the development of the final sales, energy, and peak demand forecast that is utilized in this 2017 Plan.

## 2.2 HISTORY & FORECAST BY CUSTOMER CLASS & ASSUMPTIONS

The Company is typically a summer peaking system; however, during the winter period of both 2014 and 2015, all-time DOM Zone peaks were set at 19,785 MW and 21,651 MW respectively. The

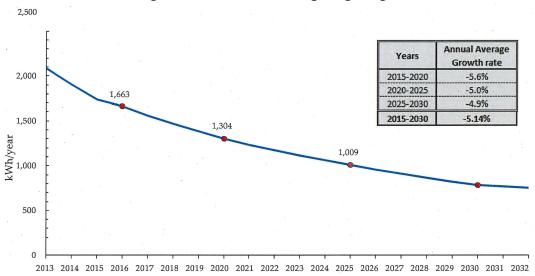


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## **CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing <u>Corrected Page 20 of 2017 Plan</u> submitted in Docket No. E-100, Sub 147 has been delivered via U.S. mail or electronically upon all parties of record in the above-captioned docket.

This, the 10<sup>th</sup> day of July, 2017.

s/ E. Brett Breitschwerdt

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