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February 18, 2022 Kentucky Division of Water, Surface Water Permits Branch 300 Sower Boulevard, 3<sup>rd</sup> Floor Frankfort, KY 40601

## RE: KPDES No. KY0003221 Mill Creek Generating Station, Jefferson County, KY; 316b Rule Unit Retirement Certification Letter Agency Interest # A.I. 2122

The Louisville Gas and Electric Company (LGE) provides this submission to the Kentucky Division of Water (KDOW) to certify that LGE plans to retire Mill Creek Unit 1 in 2024, per the attached page from the Public Service Commission of Kentucky Integrated Resource Plan (IRP).

If you have any questions or concerns, please contact Michael O'Guin at (502) 627-2338 (or by email at michael.o'guin@lge-ku.com).

Sincerely,

DocuSigned by: Jurner flever Steven Turner

Vice President Power Production Louisville Gas and Electric Company

Enclosures (4)

1. Attachment 1: Public Service Commission of Kentucky IRP Page 5-17

Case No. 2022-00402 Attachment to Response to KCA-2 Question No. 1 Page 2 of 3 Bellar

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## **ATTACHMENT 1**

Public Service Commission of Kentucky

Integrated Resource Plan Page 5-17

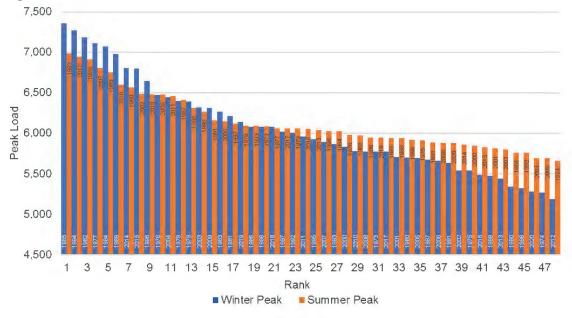


Figure 5-10: Distributions of Summer and Winter Peak Demands, 2025<sup>21</sup>

## 3. State and Federal Regulations

The 2020 ECR analysis demonstrated that installing the water treatment capacity needed to simultaneously operate all four coal units at the Mill Creek station and comply with the amended Effluent Limit Guidelines ("ELG") is not least-cost. In addition, there is some likelihood that a cooling tower will eventually be needed for Mill Creek Unit 1 to comply with Clean Water Act 316(b) regulations. For these reasons, the 2021 IRP assumes Mill Creek 1 will be retired in 2024, the Mill Creek station's deadline for ELG compliance.

After the Companies complete projects that are currently in progress to comply with the EPA's Coal Combustion Residual Rule ("CCR Rule") and amended ELG, all of the Companies' generating units will be in compliance with known state and federal regulations. All of the Companies' coal units are equipped with fabric filter baghouses ("baghouses") and flue-gas desulfurization equipment ("FGD"). After Mill Creek Unit 1 is retired, all but two coal units (Mill Creek Unit 2 and Ghent Unit 2) will be equipped with selective catalytic reduction ("SCR").

Significant changes in environmental regulations since the 2018 IRP are discussed in Section 6. Based on these changes and the analysis summarized in Exhibit LEB-2 in Case Nos. 2020-00349 and 2020-00350, the 2021 IRP assumes Mill Creek 2 and Brown 3 will be retired in 2028. Based on the current debate regarding new laws and regulations to reduce CO<sub>2</sub> emissions that is mainly

<sup>&</sup>lt;sup>21</sup> The year labels indicate the weather year on which the seasonal peaks are based.