VERIFICATION

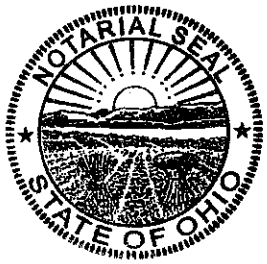
The undersigned, John F. Torpey, being duly sworn, deposes and says he is the Director Integrated Resource Planning for American Electric Power, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge and belief

John F. Torpey

STATE OF OHIO)
) Case No. 2016-00413
COUNTY OF FRANKLIN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by John F. Torpey, this the 3 day of March 2017.

Notary Public



Princess M. Brown
Notary Public, State of Ohio
My Commission Expires 04-19-2020

My Commission Expires: 4/19/2020

Case No. 2016-00413
Commission Staff's First Set of Data Requests
Item No. 3

Witness: John F. Torpey

Q-3 Refer to the IRP, page 15 of 1497, where it states, in relevant part, "the Plexos® modeling was performed through year 2035, so as to properly consider various cost- based 'end effects' for the resource alternatives being considered ." In Kentucky Power's 2013 IRP, the modeling was performed through 2040, whereas, in the 2016 IRP the modeling was performed through 2035.

a. Explain why Kentucky Power shortened the term of the modeling from what was used in its 2013 IRP.

b. Identify and explain what changes the term of the modeling had on the various cost-based end effects and on the assumptions and conclusions made for the 15-year period of the IRP.

A-3 a. The modeling period was performed through 2035 to accommodate the complexities the complexities associated with modeling potential Clean Power Plan compliance options. Modeling the potential CPP compliance options would require significant computational resources that result in model performance issues as the modeling period increases. The 15-year period used in this IRP is long enough for resource planning purposes but is not so long that these modeling performance issues arise.

b. The cost-based end effects were greater using the shorter modeling period because the end effects are discounted over a shorter period of time. The change in the modeling term from 27 years to 19 years would not affect the near term conclusions made with respect to this IRP, and would likely have no significant impact on resources selected toward the end of the 15 year period of this IRP.