APR 1 7 2020

PUBLIC SERVICE COMMISSION Freddie coleman

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Before the PSC: Case No. 2019-00443

Pertaining to: 1.5 Significant Changes from the 2016 IRP Ehibit1

The proposed carbon tax has been moved to begin in 2028 instead of 2024. I ask the PSC to deny any proposed carbon tax because:

O President truimp withdrew amenica

from the paris accord

andue burdeons on 145 customens and the poor

By power customers are already paying for two power plants, construction prejects, and are overloaded with tariffs from debt.

Industrial revolution began in 1880 was around 45 yrs. of age. Today 2020 1,fe expectancy is 78+ years. Carbon does not Beally hurt anyone.

I also abk the PSC Not to approve the Rockport upa agreement in the 2019 IRP Plan, because:

O its not needed because of the coal mines and industry that has closed down

@ unfain because you can buy electricity on the grid without paying a lease.

Pertaining to 3.4 current demand side

program: which proposes a tariff to reduce
energy consumption either at time of
peak Consumption or through out the
day/yr. I ask PSC to deny the propose
tariff and DR programs because:

O Kypco customers are already
paying for and to maintain enough

generation plus extra generation for Surge on high peak days. Kypco Customer should not be penalized for using this electricity on warm and cold days.

D kypco customers pay for enough generation which is put on the ptm grid to cover high peak days.

glan to make more profits

@ If Kypco Customers cannot use the electricity they Dut on the PJM arid

without being penalized, then PJM must not be a very good thing for Kypco customers.

Pertaining to: 3.5.2 Transmission planning process

I ask the PSC to deny AEP and Kypco expansion plan because:

O AEP said in its IRP report that demand is decreasing. I think the transmission system already in place is sufficient for Kypco customens needs.

2 These expansions for PJM to Carry more load is not needed in the Kypco castomer juridictional area, which will only benefit people in other states.

3) These transmission expansions only benefit AEP and its affailates with more profits while overloading its customers with debt.

4) AEP is using PIM as an excuse to get to do more projects which is not needed to make more profits.

I ask the PSC to get control of AEP and Kypco debt. they are overloading it customers with Debt: Respectifully



Table 2. Natural Gas and Coal Prices in 2016 IRP and 2019 IRP, in 2018 \$

	Nat. Gas TCO - Delivered		Illinois Basin Coal		PRB Coal	
	2016 IRP	2019 IRP	2016 IRP	2019 IRP	2016 IRP	2019 IRP
2019	4.96	3.07	42.00	42.94	17.43	12.43
2020	4.97	3.20	43.99	39.87	19.36	12.37
2021	4.98	3.19	42.97	38.81	20.26	12.34
2022	5.03	3.26	41.98	38.79	20.38	12.36
2023	5.04	3.38	41.03	38.86	18.36	12.36
2024	5.13	3.45	43.63	39.39	18.73	12.37
2025	5.22	3.56	44.41	39.77	19.65	12.38
2026	5.31	3.64	42.91	40.55	21.56	12.40
2027	5.42	3.70	43.47	41.10	20.22	12.44
2028	5.53	3.86	42.13	40.94	20.42	12.38
2029	5.64	3.88	40.55	40.11	23.29	12.21
2030	5.78	3.91	41.51	39.23	22.17	11.98
2031	5.90	4.01	42.29	37.17	24.48	11.58
2032	6.03	4.00	43.90	36.23	25.24	11.53
2033	6.11	4.04	44.60	35.93	26.90	11.73
2034	6.20	4.12	44.66	34.06	28.07	12.42

Finally, a carbon proxy remains in the forecast, beginning in 2028 at \$15/metric ton of CO₂ emissions, escalating at 3.5% per annum on a nominal basis. The 2016 forecast assumed costs associated with CO₂ emissions would begin in 2024, and those costs would start at \$3/ton, but escalate to \$20/ton by 2030.

Changes in the load forecast, commodity price forecast, and resource pricing assumptions have resulted in a resource plan recommendation that is different than the one proposed in 2016. A key assumption in the 2016 Preferred Plan that is not included in the current IRP was the extension of the UPA from the Rockport Units (393 MW).

These changes resulted in a 2019 resource plan recommendation that is different than the one proposed in 2016. Renewable resources in the 2019 Preferred Plan include solar resources totaling 455 MW by 2034 compared to only 130 MW by 2031 in the 2016 plan and only 200 MW of wind by 2034 compared to 300 MW in 2031 in the 2016 plan. The 2019 plan no longer includes a Combined Heat and Power (CHP) installation that was included in the 2016 plan and instead, includes a 122 MW aeroderivative unit. Demand-side programs including Volt VAR Optimization (VVO) and Energy Efficiency (EE) programs are greatly reduced in the 2019 plan, including only 10 MW compared to 89 MW in the 2016 plan. Battery Storage is excluded in the 2019 plan.

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Ehibit 2

the DOJ, EPA, and other parties, was approved by the United States District Court for the Southern District of Ohio, Eastern Division. The Third Joint Modification deferred the installation of higher efficiency FGD technology on Units 1 and 2 until December 31, 2025, and December 31, 2028, respectively. In the interim, the Rockport Units were required to install DSI control technology by April 16, 2015.

In 2019, the parties to the Consent Decree entered into a Fifth Joint Modification. This modification removes the requirements to install the specifically defined FGD controls at both Rockport Units, and instead requires installation of Enhanced DSI systems in 2020 at a much lower cost. The Fifth Modification contains plant-wide 30-day rolling average emission limitations for SO₂ and NOx emissions at Rockport beginning in 2021. Rockport Unit 1 will retire at the end of 2028, and the SO₂ emissions cap at the Rockport Plant will decline to 5,000 tons per year. Rockport Unit 2 has no further obligations to install additional controls after 2020. The AEP System caps for SO₂ and NOx will decrease to 89,000 tons per year and 44,000 tons per year, respectively, by 2029. On July 18, 2019, the Fifth Joint Modification of Consent Decree was approved by the United States District Court for the Southern District of Ohio.

3.4 Current Demand-Side Programs

DSM refers to, for the purposes of this IRP, utility programs, including tariffs, which encourage reduced energy consumption, either at times of peak consumption or throughout the day/year. Programs or tariffs that reduce consumption at the peak are DR programs, while around-the-clock measures are typically categorized as EE programs. The distinction between DR and EE is important, as the solutions for accomplishing each objective are typically different, but not necessarily mutually exclusive.

There are no demand or energy impacts associated with Kentucky Power's EE programs included in the load forecast discussed in Section 2.0 of this Report. The existing DR programs are discussed in Section 3.4.2.1. As will be discussed later, within the IRP process, the potential

Next Report.

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Ehibit 3

comprehensive plan has been developed that will address these issues, and has been the subject of past and present filings before the Kentucky Public Service Commission.⁹

3.5.2 Transmission Planning Process

AEP, working on behalf of Kentucky Power and PJM coordinate the planning of the transmission facilities in the AEP System-East Zone through a "bottom up/top down" approach. AEP will continue to develop transmission expansion plans to meet the applicable reliability criteria in support of PJM's transmission planning process. PJM will incorporate these expansion plans with those of other PJM member utilities and then collectively evaluate the expansion plans as part of its Regional Transmission Expansion Plan (RTEP) process. The PJM assessment will ensure consistent and coordinated expansion of the overall bulk transmission system within its footprint. In accordance with this process, AEP will continue to take the lead for the planning of its local transmission system under the provisions of Schedule 6 of the PJM Operating Agreement. By way of the RTEP, PJM will ensure that transmission expansion is developed for the entire RTO footprint via a single regional planning process, ensuring a consistent view of needs and expansion timing while minimizing expenditures. When the RTEP identifies system upgrade requirements, PJM determines the individual member's responsibility as related to construction and costs to implement the expansion. This process identifies the most appropriate, reliable and economical integrated transmission reinforcement plan for the entire region, while blending the local expertise of the transmission owners such as Kentucky Power with a regional view and formalized open stakeholder input.

Limitations, constraints, and future potential deficiencies on the Kentucky Power transmission system are identified using the AEP planning criteria, which are posted on the AEP

⁹ Application Of Kentucky Power Company For Certificate Of Public Convenience And Necessity To Construct A 161 kV Transmission Line In Perry And Leslie Counties, Kentucky And Associated Facilities, KPSC Case Nos. 2017-00328 and 2019-00154.