



MEMORANDUM

Date: July 2, 2020

To: The Honorable Chairman and Members
Pima County Board of Supervisors

From: C.H. Huckelberry 
County Administrator

Re: **Support for Tucson Electric Power's 2020 Integrated Resource Plan**

On Friday, June 26, 2020 Tucson Electric Power (TEP) presented their final 2020 Integrated Resource Plan (IRP) to the IRP Advisory Council, a diverse group of customers, local government representatives, and interest group advocates who were invited by the utility to meet, review and provide input into the IRP planning materials. The IRP, which has been submitted to the Arizona Corporation Commission (ACC), outlines the utility's non-binding path towards increasing renewable energy in their portfolio over the next 15 years: <https://www.tep.com/tep-2020-integrated-resource-plan/>.

I represented Pima County on the Advisory Council, along with my Executive Assistant Nicole Fyffe and the County's Sustainability Manager, Julie Robinson. The Council met on average every month for the past year. County staff also convened regular internal meetings to share and discuss the planning materials with Pima County's Department of Environmental Quality and Facilities Management, and ultimately developed a set of criteria and a matrix from which to compare TEP's initial 24 resource portfolios across the 15-year timespan. The selected criteria considered rate impacts on consumers and the goals and targets of the Sustainable Action Plan for County Operations (SAPCO) to reduce greenhouse gas emissions, conserve water and reduce air pollution. The County's matrix was also shared with other members of the Advisory Council and used to develop recommendations. The Board received a copy of our recommendations to TEP dated May 21, 2020.

Ultimately, TEP chose to submit portfolio referred to as "P17aL1M1E1" for their IRP submission to the ACC. According to the utility, this portfolio will reduce TEP's carbon emissions 80 percent below 2005 levels by 2035, retire all coal by 2032, and bring online 2,457 megawatts (MW) of new wind and solar power systems, including 457 MW that will be online by 2021, add 1,400 MW of new energy storage systems and continue energy efficiency programs. TEP states this portfolio will eliminate surface water reliance by 2032 and also decrease groundwater use by 70 percent by 2035. According to TEP, this timeline would allow the utility to reduce the plant's workforce through attrition rather than layoffs while providing time for the company to help the local community mitigate the impact of the units' retirement. In a cost analysis, TEP indicates that the selected portfolio offers "the best balance of affordability, reliability and sustainability of the possible options considered." Attached is a page from the IRP depicting implementation of this portfolio over time.

Of particular significance to this IRP effort, was TEP's recruitment of University of Arizona researchers from the Institute of the Environment, to analyze TEP's emissions relative to a global target of limiting temperature rise. While this analysis cannot provide a definitive correlation between the utility's future emissions reductions and global temperature goals to hold warming below 2.0°C, it marked a significant effort to develop a science-based emission target for each of the utility's proposed portfolios. According to the University of Arizona's analysis, early and substantial reductions in emissions result in less warming than would occur if those reductions were delayed. While not definitive, the analysis demonstrated that TEP's chosen portfolio, P17aL1M1E1, is consistent with limiting warming within a 1.5°C target range based on the best available information.

As a result of the Advisory Council process and the outcome, which is a great expansion of renewable energy resources in TEP's resource portfolio and greenhouse gas reductions, I intend to submit a letter of support to the ACC, and congratulate the utility on the comprehensive, inclusive and transparent process that was developed for integrating stakeholder questions and comments throughout the planning year. Additionally, through the involvement of the University of Arizona, a top-tier research institution, the Advisory Council and the public can feel confident that the utility is on track to make significant progress in curbing greenhouse gas emissions to combat climate change, an effort the County and community is aligned with.

Lastly, the benefit associated with the reduction in the utility's emissions also transfers to the County and other stakeholders who track and report their own greenhouse gas inventories since these rely on TEP's emissions factor for calculations. I have directed the Office of Sustainability and Conservation to update the County's projected emissions for SAPCO based on the new emission factor provided by the utility and I will share that information with the Board when it is ready.

Attachment

CHH/dr

c: Jan Leshar, Chief Deputy County Administrator
Carmine DeBonis, Deputy County Administrator for Public Works
Ursula Nelson, Director, Department of Environmental Quality
Lisa Josker, Director, Facilities Management
Linda Mayro, Director, Sustainability and Conservation
Nicole Fyffe, Executive Assistant to the County Administrator
Patrick O'Leary, Energy Manager, Facilities Management
Julie Robinson, Manager of Sustainability Programs, Sustainability and Conservation

The Development of TEP's Preferred Portfolio

For the 2020 IRP, TEP undertook an extensive portfolio analysis culminating in the development of 15 independent portfolios. Certain portfolios were required by order of the Arizona Corporation Commission (ACC). Several portfolios are based on proposals relating to the ACC's development of new energy rules. The remaining portfolios were developed by TEP or at the request of Advisory Council members.

TEP's Preferred Portfolio takes the next step in TEP's pursuit of a more sustainable energy supply. Over the next 12 years TEP will end its use of coal-fired generation entirely, which represents a key milestone in the Company's energy transition. There were several factors that contributed to this decision.

- The very real possibility that TEP may be unable to find a future coal supply for Springerville Units 1 and 2 that is economical and allows the units to meet certain environmental requirements.
- The realization that the economics of coal-fired generation have shifted.
- The need to make cost-effective reductions in CO₂ emissions.

TEP's 2020 IRP Preferred Portfolio

TEP's 2020 IRP Preferred Portfolio calls for 70 percent of our customer's energy coming from renewable resources. Between 2020 and 2022, TEP will bring online 476 MW of new wind, solar and energy storage resources. Beyond 2022, TEP plans to add an additional 2.0 gigawatts (GW) of new renewables and 1.4GW of new energy storage resources. Finally, TEP plans to implement cost-effective EE programs consistent with historical levels targeting 1.5 percent incremental energy savings over the prior year's retail load in each year through 2024. The figure below details the 2020 – 2035 timeline.

TEP's 2020 IRP Preferred Portfolio Timeline

