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Via Electronic mail

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Re: Sierra Club's Comments on Southwestern Electric Power Company Draft 2021 Integrated Resource Plan

Dear SWEPCO IRP Team:

On behalf of Sierra Club and over 2,900 Arkansan members, we submit the following comments in response to Southwestern Electric Power Company's ("SWEPCO") release of its 2021 Integrated Resource Plan ("IRP"). The IRP process and the participation of stakeholders is an important opportunity to proactively shape the region's energy future. These comments are intended to support SWEPCO's efforts towards developing a clean, reliable, and low-cost energy system for customers. We find that SWEPCO's IRP process fails to fully assess certain facets of long-term system planning and is lacking in six critical areas:

1. SWEPCO's accelerated IRP timeframe has limited the ability for meaningful stakeholder engagement. Still, Sierra Club recommends that SWEPCO include two sensitivities in its modeling: a high gas scenario and a 2027 Flint Creek retirement study.

2. SWEPCO’s high gas price forecast is far below current gas prices and therefore likely fails to adequately capture gas risk. At a minimum, SWEPCO should model each portfolio against a gas price forecast 25 percent higher than the current “high-case” forecast to reasonably assess gas price risk.
3. SWEPCO should analyze how each of its portfolios score in relation to the proposed Clean Energy Performance Program to inform its resource decision-making.
4. SWEPCO should incorporate an all-source RFP into its IRP process to provide the best information on supply- and demand-side resource options.
5. SWEPCO should study a 2027 Flint Creek retirement as a sensitivity.
6. SWEPCO should include public health and environmental justice impacts as a metric in its portfolios scorecard.

I. SWEPCO’s accelerated IRP schedule limits the ability to meaningfully engage stakeholders and incorporate stakeholder feedback.

SWEPCO’s overall timeframe is too short to fully and meaningfully incorporate stakeholder feedback into the Company’s capacity expansion modeling. SWEPCO has stated that its IRP must be submitted by December 2021. This means that stakeholder engagement—especially input on modeling decisions—must all occur in the remaining few months of 2021.

SWEPCO held a stakeholder workshop on September 15, 2021 and has been responsive to stakeholder questions and reasonably transparent about modeling choices. But the Company has not provided a timeframe sufficient for stakeholder feedback to be meaningfully integrated into the IRP process. Specifically, SWEPCO’s timeline does not allow sufficient time for stakeholders to: (1) thoroughly review initial modeling parameters and assumptions; (2) request adjustments to scenarios or request additional sensitivities be added to SWEPCO’s modeling; (3) have SWEPCO conduct the modeling runs and then share the preliminary results with stakeholders; (4) process feedback from stakeholders on updated runs and conduct necessary iterations; or (5) finalize the results, all before December 2021. To underscore the speed of this proceeding, a number of vital responses to stakeholder questions regarding energy efficiency inputs will only be available on October 16—eight days after this comment letter is due.

While there is wide variation in IRP processes across the country, SWEPCO’s rapid timeline differs from best practices for IRP proceedings that we see across the country. These processes can last for nine months or more and often contain multiple workshops and several iterations of modeling that allow for intervenor input. For example, Entergy Arkansas had its first IRP stakeholder meeting in August 2020 leading up to an IRP-filing date at the end of October 2021,¹ thus providing over a year to for stakeholders to engage in its resource planning.

¹ See https://www.entergy-arkansas.com/integrated_resource_planning/.

Entergy studied four portfolio sensitivities at the request of stakeholders.² Further, the Omaha Public Power District recently added a “Flexible Load” sensitivity to its modeling in response to stakeholder feedback.³ Although it appears unlikely that a similar request is feasible in SWEPCO’s condensed timeline, Sierra Club recommends that SWEPCO include two additional sensitivities in this letter: (1) a higher gas price sensitivity and (2) a 2027 Flint Creek retirement date sensitivity.

II. SWEPCO’s “high-case” gas price forecast is far below current gas prices and fails to capture the risk that high fuel prices may pose to SWEPCO customers.

While SWEPCO does include a low, medium, and high gas price forecast, the differentiation between these projections fails to capture the risk of high gas prices. SWEPCO applies a locational modifier to Henry Hub prices for the Eastern Panhandle TX-OK region, which reduces the gas prices from the Henry Hub price in each SWEPCO case. However, this modifier does not remove the risk of high gas prices. The application of a locational modifier to Henry Hub means that SWEPCO’s locational gas prices will still track the overall trajectory of Henry Hub prices.

Low gas prices observed in the wake of the fracking boom are not likely to continue into the future. This year, gas prices have reached highs not seen since 2008. Just this week, Henry Hub futures went above \$6/MMBtu—approximately 50 percent higher than the highest levels in SWEPCO’s current “high-case” gas price forecast.⁴ As Henry Hub prices are at their highest point since 2008, it appears likely that real-time gas prices for SWEPCO’s region are also higher than any of their modeled IRP gas price scenarios. SWEPCO should be more transparent about how its gas price forecast was developed, including providing the baseline Henry Hub assumptions and the regional modifiers that were applied to it.

The current reality of high gas prices should be incorporated into SWEPCO’s IRP. Given the volatility of gas prices, it is critical that SWEPCO understand the risks to ratepayers from continued reliance on gas resources. These risks take the form of high fuel costs for existing gas

² See EAL IRP Modeling Results, pages 15-19, summarizing results of stakeholder requested sensitivities, available at: https://cdn.energy-arkansas.com/userfiles/content/IRP/2021/EAL_IRP_Stakeholder_Modeling_Materials.pdf?_ga=2.101205257.984284952.1633713727-224608826.1633713727.

³ OPPD, Workshop 5 Informative Session, 04 August 2021, Slide 37, available at: <https://www.oppdcommunityconnect.com/10206/widgets/31503/documents/22312>.

⁴ J. Robinson, “Henry Hub Gas Futures Prices Flirt With \$6 Level Amid Sustained Supply Crunch,” *S&P Global*, 04 October 2021; SWEPCO, Draft IRP, p. 81, available at: <https://www.spglobal.com/platts/en/market-insights/latest-news/natural-gas/100421-henry-hub-gas-futures-prices-flirt-with-6-level-amid-sustained-supply-crunch>.

resources, and stranded asset risk for existing, and especially new gas resources, that will be uneconomic sooner than projected if gas prices continue to rise. By using such low gas prices, SWEPCO has not assessed how ratepayers will be impacted if gas prices are significantly higher than projected moving forward.

SWEPCO's current portfolios hard-wire gas additions into the model (meaning the model does not choose to build gas, it is told to build it) and also use gas plants as "placeholders" in the 2030s. Taking this approach to capacity expansion modeling, while neglecting to analyze the threat that high gas prices pose to gas-reliant portfolios, is a disservice to ratepayers, who will bear the cost of insufficient planning. SWEPCO should model the performance of each portfolio against a gas price forecast 25 percent higher than the current "high-case" forecast to fully assess the impact on ratepayers of SWEPCO's proposed portfolios if high gas prices persist. Because SWEPCO already locked in many of its gas additions, this sensitivity will provide clarity on (1) which scenarios are least impacted by high gas prices, and therefore protect customers most from potential future volatility, and which scenarios are most impacted and therefore leave customers most at risk; and (2) the magnitude of the potential risk exposure in each scenario.

III. SWEPCO should consider the impact of the federal Clean Electricity Performance Program when conducting IRP modeling.

The Clean Electricity Performance Program ("CEPP") is currently under consideration in Congress. Whether the CEPP becomes law is unknown at this time. Still, it is likely that some form of federal clean energy legislation that impacts every load-serving entity and/or penalizes utilities that fail to procure clean energy is likely to be enacted in the next few years. SWEPCO's IRP would benefit from consideration of the CEPP, given its broad potential impact on resource planning choices.

In SWEPCO's responses to stakeholder questions after the workshop, SWEPCO indicated a willingness to "evaluate the compliance position the 2021 IRP candidate portfolios assuming a "simple" 2019/2020 baseline and accounting for the amount of new qualifying generation added to each portfolio between 2023-2030. This analysis would compare the resulting benefit or costs to SWEPCO's customers associated with achieving or failing to achieve the annual incremental clean energy targets defined in the currently proposed draft CEPP language."⁵ We request that SWEPCO undertake this proposed analysis and provides the compliance position of each IRP portfolio in relation to the CEPP.

⁵ SWEPCO, "Responses to Stakeholder Questions After Workshop on 15 September 2021," Carbon Emissions Section Question 1.

IV. SWEPCO should base its cost inputs for new resources on the results of an All-Source RFP.

Current best practices in IRPs include the use of All-Source request for proposals (“RFPs”) to develop resource cost inputs for modeling purposes.⁶ When done properly, an All-Source RFP captures regional cost dynamics and ensure that bids reflect current technological trends. All-Source RFPs also allow utilities to consider a mix of resources instead of single large resources. This is critical in assessing alternative options to replace the energy and capacity services of a single fossil generation unit. An All-Source RFP also provides a venue for project developers to problem-solve and present alternative resource solutions that can compete and outperform the business-as-usual resource selections.

In its IRP, SWEPCO includes new gas in its portfolios and also places gas combustion turbines as placeholders in later years of the study period. But solar and storage—especially when paired with energy efficiency and demand-side management—can provide many of the same services as a gas plant, and potentially at lower cost.

Recent RFPs demonstrate that renewables, and increasingly a combination of renewables-plus-storage, represent the lowest cost energy and capacity resources available to a utility. The Northern Indiana Public Service Company (“NIPSCO”) issued All-Source RFPs as part of its 2018 IRP that resulted in solar, wind, demand-side resources, and hybrid renewable-plus-storage resources emerging as the least-cost options. The winning renewable bids were the most cost-effective options even after accounting for transmission interconnection costs. The success of NIPSCO’s RFP led to the announced retirement of all NIPSCO coal units by 2028 and an IRP that reduced the cost of the utility’s system by \$1.1 billion.⁷⁸ SWEPCO should incorporate an all-source RFP into its IRP process to provide the best data on supply- and demand-side resource options.

⁶ See Making the Most of the Power Market: Best Practices for All-Source Electric Generation Procurement, Wilson et al, APRIL 2020, available at: https://resourceinsight.com/wp-content/uploads/2020/05/All-Source-Utility-Electricity-Generation-Procurement-Best-Practices_EI_SACE.pdf.

⁷ Julia Gheorghiu, NIPSCO to replace coal with 2.3 GW of solar, storage in latest RFP, *Utility Dive*, (Oct. 9, 2021), Available at: <https://www.utilitydive.com/news/nipsco-to-replace-coal-with-23-gw-of-solar-storage-in-latest-rfp/564427/>

⁸ Herman Trabish, “Xcel’s record-low-price procurement highlights benefits of all-source competitive solicitations,” *Utility Dive*, (June 1, 2021). Available at: <https://www.utilitydive.com/news/xcel-s-record-low-price-procurement-highlights-benefits-of-all-source-compe/600240/>.

V. SWEPCO should continue to assess the viability of Flint Creek.

SWEPCO indicated at the stakeholder workshop that it intends to complete retrofits to comply with the U.S. Environmental Protection Agency’s (“EPA’s”) Effluent Limitation Guidelines (“ELG”) and Coal Combustion Residuals (“CCR”) regulations at the Flint Creek coal plant that will allow the plant to operate through 2038 instead of the 2028 retirement that would avoid the need for this new capital spending. It does not appear that any IRP scenario assessed the impact of an alternative retirement date for Flint Creek.

We understand that the Company conducted a limited analysis of Flint Creek’s economics during 2020, but energy market conditions continue to evolve, and it would be imprudent and unreasonable for the Company to proceed with avoidable capital projects at this plant without reviewing up-to-date modeling results before doing so. Numerous inputs, from peak forecasts to fuel price forecasts, have changed since previous analysis was conducted. Therefore, we request that SWEPCO test at least one scenario that retires Flint Creek in 2027 and avoids the capital outlay associated with the CCR/ELG retrofits.

VI. SWEPCO should include public health and environmental justice impacts as a metric in its portfolio scorecard.

In developing its IRP and selecting a preferred portfolio, Sierra Club encourages SWEPCO to include quantified consideration of the health impacts of each portfolio. To achieve this, SWEPCO should document the public health cost that air pollutants—sulfur dioxide, nitrogen oxides, and particulate matter—have on public health, which include increased instances of asthma attacks, respiratory infections, hospital admissions, missed school and work days, and a variety of other health problems. Air pollution contributes significantly to increased morbidity and mortality, and existing, publicly available modeling tools—such as EPA’s BenMAP⁹ or the Clean Air Task Force’s “Toll From Coal”¹⁰—can be used to translate air pollution into social cost estimates.

SWEPCO should also consider the environmental justice implications associated with its ultimate selection of its preferred plan because the communities that are harmed most by persisting reliance on fossil-burning power plants are often the communities who should benefit the greatest from reduced emissions, coal retirements, and investments in renewable energy. Sierra Club therefore suggests that SWEPCO assess the environmental justice implications of its resource selections, including its existing resources, in this planning process —by using and

⁹ <https://www.epa.gov/benmap>.

¹⁰ [https://www.tollfromcoal.org/#/map/\(title:none//detail:none//map:none/US\)](https://www.tollfromcoal.org/#/map/(title:none//detail:none//map:none/US)).

EPA's EJ Screen¹¹ tool. In response to this issue, Entergy Arkansas stated that it plans to outline measures the Company has taken and plans to take to address environmental justice concerns and public health impacts in their operations and in their IRP process,¹² and we similarly urge SWEPCO to address these issues directly and with the attention they merit.

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We appreciate the opportunity to engage throughout this IRP process. If you have any questions or would otherwise like to discuss this letter, please do not hesitate to contact us. Thank you for your consideration.

Sincerely,

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¹¹ <https://www.epa.gov/ejscreen>.

¹² EAL Response to Stakeholder Group (Sept. 30, 2020).