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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

**IN THE MATTER OF PACIFICORP'S
2023 INTEGRATED RESOURCE PLAN**

**Docket No. 23-035-10
Comments from Utah Clean Energy**

Thank you for the opportunity to provide comments on PacifiCorp's 2023 Integrated Resources Plan ("IRP"). PacifiCorp ("Company," or "Utility") filed the 2023 IRP on May 31, 2023, and supplemental sensitivity studies on June 20, 2023. A technical conference was held on October 24, 2023. Utah Clean Energy's ("UCE") comments will focus on several of PacifiCorp's resource and technology decisions, beneficial electrification, PacifiCorp's incorporation of climate change into its IRP, and its plans for implementation. In sum, we recommend that the Utah Public Service Commission ("Commission") acknowledge the 2023 IRP due to the Company's selection of renewable resources and energy storage that represent the least-cost, least-risk plan, and are consistent with the long-run public interest. In these comments, Utah Clean Energy notes there are areas in the IRP development and stakeholder input processes that this party believes the Utility could improve in future cycles.

**I. UTAH INTEGRATED RESOURCE PLAN GUIDELINES AND
REQUIREMENTS**

The Commission established a set of guidelines for what utilities should include in their IRP process and report (“Utah IRP Guidelines” or “Guidelines”). The Guidelines define the IRP as “a utility planning process which evaluates all known resources on a consistent and comparable basis, in order to meet current and future customer electric energy services needs at the lowest total cost to the utility and its customers, and in a manner consistent with the long-run public interest.”¹ Utah law also requires PacifiCorp to file its action plan with the Commission so the Commission may review and issue any guidance for the Utility.² The Commission has previously described its review of an IRP as follows:

Under the Commission’s Guidelines, we consider whether to “acknowledge” [the] IRP []. Acknowledgment of the IRP means the filed IRP complies with regulatory requirements with regard to the planning process, but conveys no sense of regulatory approval of specific Company resource acquisition decisions. Instead, integrated resource planning is an open, public process through which all relevant supply-side and demand-side resources, and the factors influencing choice among them, are investigated in the search for the optimal set of resources given the expected combination of costs, risks and uncertainty over the long-run to provide electric service to customers.[] The Commission finds that acknowledgement of an IRP will not foreclose full prudence examination of the resource acquisition at an appropriate later time.³

The IRP Guidelines provide PacifiCorp and the Commission a forum for exploring short and long-term resource needs that are separate and distinct from the short-term resource procurement process. However, due to the suspension of the Company’s 2022 All-Source Request For Proposals (“2022 AS RFP”),⁴ the Commission should direct PacifiCorp to address how they intend to carry out the 2023 IRP Action Plan in the 2023 IRP Update, especially with respect to short-term resource procurement, meeting customer load, and reliability.

¹ Public Service Commission Docket No. 90-2035-01, Order issued on June 18, 1992 (“1992 Order”), page 41.

² Utah Code. Ann. § 54-17-301(1); Utah Administrative Code section R746-430-1.

³ Docket No. 05-2035-01, Public Service Commission Order Issued on July 21, 2005, page 3; Docket No. 11-2035-01, Public Service Commission Order issued on March 22, 2012, pages 3–4; Docket No. 13-2035-01, Public Service Commission Order issued on January 2, 2014, page 5; Docket No. 15-035-04, Public Service Commission Order issued on January 8, 2016, page 6; 1992 Order, at 6.

⁴ Docket No. 21-035-52, Application of Rocky Mountain Power for Approval of Solicitation Process for 2022 All Source Request for Proposals.

Overall, we are encouraged by the Company's planned increases of wind, solar, and storage resources in the 2023 IRP. Given the urgent need to decarbonize amid the worsening effects of climate change, these planned increases are directly in line with the long-run public interest which merits the Commission's "acknowledgement" of PacifiCorp's 2023 IRP.

We respectfully request, however, that the Commission also direct PacifiCorp to provide preliminary modeling results to stakeholders in a more timely and consistent manner during the 2025 IRP planning cycle. We further recommend that PacifiCorp include preliminary modeling results to stakeholders, and create ample opportunities for stakeholders to provide constructive feedback on critical modeling inputs (e.g. the Private Generation study and Demand Side Management programs, etc.). We also recommend PacifiCorp evaluate Enhanced Geothermal Systems (EGS) on an equal basis as other emerging non-emitting resource technologies (e.g. non-emitting peakers and Small Modular Nuclear plants). Last, we recommend PacifiCorp incorporate the potential for future risks to the system posed by increased costs of carbon emissions into the Preferred Portfolio, and model specific scenarios laying out pathways to decarbonization by 2035.

a. RESOURCE AND TECHNOLOGY DECISIONS IN THE 2023 IRP

The Utah IRP Guidelines require the IRP to consider “all present and future resources, including future market opportunities (both demand-side and supply-side), on a consistent and comparable basis.”⁵ This includes an “assessment of all technically feasible generating technologies including: renewable resources, cogeneration, power purchases from other sources, and the construction of thermal resources.”⁶ The end result of the IRP’s analysis of these different resource options should be “the selection of the optimal set of resources given the expected combination of costs, risk and uncertainty.”⁷ This balanced process should “meet current and future customer electric energy service needs. . . in a manner consistent with the long-run public interest.”⁸

We are encouraged by the significant planned increase in wind, solar and storage resources in the 2023 IRP. These increases will yield economic and risk mitigating benefits including low costs and price stability that clean energy resources inherently provide to the grid and its customers. Further, the modeling shows that these resources are in line with both resource adequacy and reliability.

Importantly, the rapid deployment of clean energy is needed to prevent the worst impacts of the changing climate, in line with national, international, and industry-wide electric utility efforts to keep warming well below 2°C, and ideally keep 1.5°C within reach.⁹ The Company and customers are already seeing the impacts of climate change through hotter, dryer summers with

⁵ 1992 Order, at 14.

⁶ *Id.*, at 24.

⁷ *Id.* at 41.

⁸ *Id.*

⁹ Stockholm Environment Institute, International Institute for Sustainable Development, Overseas Development Institute, Climate Analytics, Center for International Climate Research and United Nations Environment Programme, *The Production Gap: The discrepancy between countries’ planned fossil fuel production and global production levels consistent with limiting warming to 1.5°C or 2°C*, (2019), at <http://productiongap.org/>,

increased energy demand, enhanced wildfire conditions, drought, extreme weather events, damage to property, elevated insurance costs, and costly lawsuits. The Company's selection of clean energy resources is directly consistent with the long-run public interest given the need to rapidly cut emissions from fossil fuel combustion for these reasons.¹⁰

However, many utilities across the country and globally are also making similar investments at the same time, which raises a risk for supply chain challenges and procurement delays. The Utility has indefinitely suspended the 2022 AS RFP, and at this time, has not provided any updates as to its future. It will be critical for the Company to stay on track with its 2023 Action Plan by continuing to pursue bids for procurement without delay.

The IRP Action Plan discusses some strategies to mitigate procurement risks.¹¹ Given the delay in the current RFP, we ask the Commission to direct the Company to provide more detail on how they plan to stay on track with their procurement in their 2023 IRP update. We also believe that the Action Plan should include accelerated acquisitions of energy efficiency, demand side management, and direct load control programs.

b. PUBLIC INPUT PROCESS AND MODELING INPUTS AND RESULTS

- i. The Commission should direct PacifiCorp to re-commit to a stakeholder process that reflects the Utility's obligation in the Standards and Guidelines to "provide ample opportunity for public involvement and the exchange of information during the development of its Plan" in the 2025 IRP cycle.*

The Guidelines stress that "[i]nformation exchange is the most reasonable method for developing and implementing integrated resource planning in Utah."¹² Further, the Guidelines

¹⁰ "The Public Utility Commission of Oregon and Public Service Commission of Utah cite 'long-run public interest' as part of their definition of integrated resource planning. Public interest pertains to adequately quantifying and capturing for resource evaluation any resource costs external to the utility and its ratepayers. For example, the Public Service Commission of Utah cites the risk of future internalization of environmental costs as a public interest issue that should be factored into the resource portfolio decision-making process." Docket No 21-35-10, Rocky Mountain Power's Integrated Resource Plan Vol. 1, at fn. 1.

¹¹ Docket No. 23-035-10, Rocky Mountain Power's 2023 Integrated Resource Plan Vol I, at 359 *et seq.*

¹² 1992 Order, at 4.

require PacifiCorp to “provide ample opportunity for public involvement and the exchange of information during the development of its Plan.”¹³

Over the course of the 2023 IRP planning cycle, PacifiCorp was unable to provide stakeholders with preliminary model results, or any indication about how the model was operating. As a result, stakeholders did not have ample opportunity to adequately analyze modeling and participate in the development of the Plan, e.g. provide recommendations for potential scenarios and sensitivity analyses.

We recognize that PacifiCorp was working with a new model which presented technical challenges during the 2023 IRP planning cycle. However, since many of these technical challenges have now been overcome, we request that PacifiCorp provide stakeholders with up-to-date preliminary model results throughout the planning process of the 2025 IRP cycle. Stakeholders should have ample opportunity to publicly exchange information during the development of the Plan.

- ii. *PacifiCorp should have included preliminary modeling results to stakeholders and created more opportunities for stakeholders to provide constructive feedback on critical modeling inputs (e.g. the Private Generation study and Demand Side Management programs, etc.)*

Additionally, another area of concern is PacifiCorp’s engagement with stakeholders on input studies used to develop the IRP. As an example, PacifiCorp commissioned DNV to produce a Private Generation Forecast that was first discussed in the July 14-15, 2022 Public Input Meeting (“PIM”). The Utility released the final version of the Private Generation report on Feb. 2, 2023, and included it as Appendix L in the 2023 IRP. There were substantial revisions to the DNV Forecast between the July 2022 PIM and the release of the final version of the report. However, since the final version was released only two months before the 2023 IRP draft was released, there

¹³ *Id.*, at 21.

was no opportunity for stakeholder input regarding the substantive changes between the Forecast discussed at the July 2022 PIM, and the final version of the report.

The major problem with the Private Generation final report is that it lacks a realistic “high” private generation scenario, and in fact, the medium and high scenarios were nearly identical. Utah has a tremendous solar resource and opportunity for expanded distributed solar generation. Utah Clean Energy requests that the Commission ensure that in the upcoming planning cycle, PacifiCorp provide input reports such as the Private Generation Study earlier in the process to ensure that sufficient time is given to obtain constructive feedback before critical model constraints are finalized in the IRP modeling framework.

- iii. PacifiCorp should evaluate Enhanced Geothermal Systems (EGS) on an equal basis as other emerging non-emitting resource technologies (e.g. non-emitting peakers and Small Modular Nuclear plants).*

The 2023 IRP Chapter 7 section on Resource Types looks at a wide range of resources that are considered in the IRP. This is challenging because we are in a dynamic environment where significant technological innovation and falling prices for clean energy are occurring. Despite those challenges, PacifiCorp attempted to evaluate emerging technologies such as hydrogen-based, non-carbon emitting peaking plants, and the TerraPower First of a Kind (FOAK) Small Modular Nuclear Reactor. Those technologies need additional scrutiny within the IRP, and PacifiCorp should provide more engagement with stakeholders about them, but a larger issue is the exclusion from consideration of Enhanced Geothermal Systems (EGS). This exclusion is especially notable because Utah is home to the Utah Frontier Observatory for Research in Geothermal Energy (“FORGE”) project. Utah FORGE is a dedicated underground field laboratory sponsored by the Department of Energy (“DOE”) for developing, testing, and accelerating breakthroughs in Enhanced Geothermal Systems technologies to advance the uptake of geothermal resources around the world. Beyond Utah FORGE, there are also companies that are commercializing this

technology in Utah and are seeking opportunities to work with utilities in developing new EGS resources. Specifically, Fervo Energy is developing the 400 MW Cape Station project in Beaver County, Utah, which is anticipated to reach full operation in 2028. Since there is excellent EGS resource potential across Utah, and indeed across PacifiCorp's entire operational footprint, it is baffling why PacifiCorp has excluded EGS from their consideration of Resource Types.

We request that going forward, PacifiCorp work with stakeholders and EGS companies to ensure that EGS resources are adequately evaluated and represented in the upcoming 2025 IRP planning process, just like other emerging technologies like non-emitting peakers and SMRs. Beyond that, we encourage PacifiCorp to engage with any companies working on emerging technologies that could provide reliable and affordable non-emitting resources on an equal basis and include those technologies in the Resource Options of future IRPs. PacifiCorp should solicit information from its broad base of stakeholders, many of whom are market experts on emerging technologies, to find viable technologies that ought to be evaluated, and work with subject matter experts to ensure those technologies are accurately reflected in their analysis of potential resource types.

- iv. *PacifiCorp should incorporate the potential for future risks to the system posed by increased costs of carbon emissions into the Preferred Portfolio and model specific scenarios laying out pathways to decarbonization by 2035.*

Another area of specific concern is the risk that carbon-emitting resources and climate change pose to the system. Indeed, while reviewing whether the Utility must consider environmental externalities in its planning process, the Commission underscores that,

“future internalization of environmental costs is a risk that is currently facing the electric utility industry. . . an analysis of environmental risk must be included in the Company's IRP. . . . Both the IRP plan and the Company's action plan should address the Company's approach to environmental risk.”¹⁴

¹⁴ *Id.*, at 12–13.

As stated, recent climate-fueled events are already directly impacting PacifiCorp and their customers. Utah Clean Energy respectfully requests more time and attention in modeling of these critical risks during future IRP planning cycles, especially in light of the Utility's decision to indefinitely suspend the 2022 AS RFP. We appreciate that PacifiCorp modeled the social cost of carbon and other carbon prices in the 2023 IRP, however the risks in those modeled scenarios are not reflected in the final preferred portfolio.¹⁵ In future IRP cycles, PacifiCorp should analyze least-cost scenarios for pathways to decarbonize by 2035, explore options to incorporate those results into the preferred portfolio, and provide ample opportunity for public and stakeholder input on these critical planning decisions.

II. RECOMMENDATIONS

In sum, Utah Clean Energy respectfully recommends that the Commission take the following actions:

- Issue an Order acknowledging the 2023 IRP on the basis that it provides the least-cost, least-risk plan that is in line with the long-run public interest. Such public interests include a cost-effective strategy to meet electricity needs that also addresses the urgent need to reduce greenhouse gas emissions from electricity generation facilities that are contributing to the changing climate. Not incidentally, rapid changes in the climate system caused by greenhouse gas emissions are also having a direct impact on PacifiCorp's operations, such as enhanced wildfire risks, drought, extreme heat, and other extreme weather impacts. As such, the accelerated deployment of clean energy resources in the 2023 IRP should be acknowledged.

¹⁵ Docket No. 21-035-10, RMP's Integrated Resource Plan, Vol 1, at 248, 286–269.

- Direct PacifiCorp to address how they intend to carry out the 2023 IRP Action Plan in the 2023 IRP Update (especially with respect to short-term resource procurement, meeting customer load, and reliability) due to the suspension of the Company's 2022 All-Source Request For Proposals.
- Direct PacifiCorp to include preliminary modeling results to stakeholders and create ample opportunities for stakeholders to provide constructive feedback on critical modeling inputs (e.g. the Private Generation study and Demand Side Management programs, etc.). We hope that future stakeholder processes can be more collaborative, clear, timely, and consistent.
- Direct PacifiCorp to evaluate all emerging non-emitting resource technologies on an equal basis. Specifically, in the 2025 IRP planning process, PacifiCorp should evaluate Enhanced Geothermal Systems (EGS) that have enormous potential in Utah and across PacifiCorp's service territory as a source of affordable, clean, and dispatchable electricity generation.
- Direct PacifiCorp to better incorporate the potential for future risks to the system posed by increased costs and risks of carbon emissions into the Preferred Portfolio, and to model specific scenarios to develop least-cost pathways to decarbonization by 2035.

DOCKET NO. 23-035-10

Respectfully submitted this 12th day of December 2023,

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was e-filed and served by email this 12th day of December, 2023, as follows:

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