PacifiCorp's 2023 IRP - Docket No. 23-035-10

Technical Conference Stakeholder Questions Grouped by Topic

List of stakeholders who submitted questions (listed in order as posted to PSC website):

- Utah Citizens Advocating Renewable Energy (UCARE)
- Vote Solar
- Utah Association of Energy Users (UAE)
- Western Resource Advocates (WRA)
- Salt Lake City Corporation (SLC Corp)
- Office of Consumer Services (OCS)
- Utah Division of Public Utilities (DPU)
- Fervo Energy Company (Fervo)
- Utah Clean Energy (UCE)
- Sierra Club

The questions have been grouped by topic for discussion at the October 24, 2023 technical conference. A few items to note:

- Similar questions that were asked by more than one stakeholder were combined.
- Questions were reordered for a more natural discussion.
- Some lengthier questions were abbreviated and noted where the original question contains additional detail.
- Only public information will be discussed at the technical conference.
- Due to the number of questions received, it is possible that not all questions will be addressed.
 Questions that are remaining at the end of the conference can be submitted to the Company as discovery.
- Written responses will not be provided as part of the technical conference. Parties wishing to receive a written response may submit their question through discovery.

2022 All Source RFP Impacts on 2023 IRP

Party	Question
DPU,	1. The Division would like to discuss effects of the suspension of the 2022 AS RFP on the 2023
OCS,	IRP. [see questions from listed parties for additional detail]
UAE,	
WRA,	
UCE,	
Sierra	
Club	
OCS	1. With the RFP suspension, please specify and explain what resources are now not available as
	anticipated in the 2023 IRP preferred portfolio and action plan.
OCS,	2. With the RFP suspension, please explain what updated information PacifiCorp will provide
WRA(6),	stakeholders and regulators on resource needs and the maintenance of system reliability.
UCE	

	Please indicate when this updated information will be provided. [see WRA and UCE questions
	for additional detail]
OCS	3. With the RFP suspension, please explain what updated information PacifiCorp will provide
	stakeholders and regulators showing that the 2023 IRP meets Utah's IRP Standards and
	Guidelines. Please indicate when this updated information will be provided.
OCS,	4. Please explain if the RFP suspension affects any coal or gas fired plant's planned retirement
UCE	date assumptions in the 2023 IRP. [more detail in UCE's question]
OCS,	6. Will the RFP suspension require PacifiCorp to rely more on FOTs (WRA: and/or other
WRA(5),	resources)? If so, explain whether sufficient access to FOTs will be available. [more detail in
UCE	WRA's and UCE's questions]
DPU,	2. Does the Company expect that the transmission projects in the 2023 Action Plan will be
OCS(5),	delayed as a result of the suspension of the 2022 AS RFP? The Company's "Second Notice of
UCE	Update to Schedule in 2022 All Source RFP" in Docket 21-035-52 states that one reason for the
	suspension of the 2022AS RFP is: "Wildfire risk and associated liability across our six-state
	service area and throughout the West." Will this associated liability affect the timing or costs of
	the transmission projects that were selected in the 2023 IRP as part of the Preferred Portfolio?
	Has the Company performed any modeling runs using an increased cost of debt/cost of capital?
	[more detail in OCS and UCE questions]
OCS,	7. With the 2022 RFP suspension, does PacifiCorp still plan to issue a 2024 RFP? Please explain.
UCE	[more detail in UCE's question]
WRA,	7. Provide an updated 2023 IRP Action Plan as a result of the suspension of the 2022 AS RFP
UCE	[see question for additional detail from WRA and UCE]
WRA	8. If the Company is unable to provide a revised Action Plan at this time, please provide a
	detailed timeline of steps the Company will complete to update the 2023 IRP modeling results
	and subsequent Action Plan.

2022 All Source RFP

Party	Question
WRA	1. In its 2023 RFP Announcement issued September 29, 2023, the Company identifies four "key
	drivers" for its decision to suspend the 22 All-Source RFP ("22AS RFP"). For each driver, please
	explain its role in the Company's decision to suspend the 2022AS RFP.
WRA	2) In the 2023 RFP Announcement the Company states: "No final shortlist will be announced
	while the 2022AS RFP is paused. Details on resumption and bid eligibility will be forthcoming."
	In what timeframe will these details be forthcoming?
WRA	3) PacifiCorp further states: "PacifiCorp will provide updates periodically until the 2022AS RFP is
	resumed or terminated."
	a) Please explain on what basis PacifiCorp will decide to "resume" or "terminate" the RFP.
	b) Please provide information on factors guiding the timing of its decision to terminate or resume
	the 2022AS RFP process. In what timeframe does the Company intend to make this decision?
WRA	4) If the Company decides to resume the 2022AS RFP, please explain whether bidders will have
	to resubmit bids or whether the received and scored bids will be reinstated.
UCE	In the 2021 IRP Action Plan Status Update action item 2a (pg 357), PacifiCorp anticipated filing
	for approval of the Community Renewable Energy Act program with the Utah PSC in 2022, with
	an associated RFP to procure resources for the program. In the status update in the 2023 IRP,
	PacifiCorp anticipated filing for approval of the program in 2023, yet to date it has not done so.
	Given the suspension of the 2022 AS RFP and associated procurement delays discussed above,

	minimizing delays to the Community Renewable Energy Act program is even more important. What is being done to get the Community Renewable Energy Act program back on track?
Vote	3. a Are distributed energy resources or energy efficiency/demand response resources permitted
Solar	to bid into a PacifiCorp Request for Proposals?
Vote	3.b How does PacifiCorp plan to ensure that future resource selections maximize the
Solar	benefits available through the IRA?
Vote	3. c What Information, if any, will PacifiCorp request of bidders to identify use of IRA
Solar	tax benefits?

2023 IRP Modeling and Inputs

Party	Question
UAE	1. IRP Modeling Process. During the public input process for the 2023 IRP, PacifiCorp did not provide the results of any portfolio modeling runs until it filed the preliminary IRP on March 31, 2023. Please explain why portfolio modeling results were not shared prior to this point.
DPU	3. Page 306 of Volume I of the IRP states: In consideration of current policies in motion and unmodeled risks for which ongoing trends recommend the adoption and development of tax-supported renewable projects, P-MM is determined as the preferred portfolio. Please elaborate on this statement. Was this determination done by comparing the effect of "current policies in motion and unmodeled risks" on the cases and rankings listed in Tables 9.14 through 9.17, or on some other lists? Please list the policies and unmodeled risks that were considered.
DPU	4. Please provide expanded versions of Tables 9.15, 9.16, and 9.17 to include as many of the Table 9.14 variant cases as possible.
DPU	5. Using the definition of "implementation time" the Company provides in response to confidential Division DR 3.1, what are the implementation times (actual or projected) for each resource selected as a result of the 2020AS RFP?
DPU	6. If different than the answer to the previous question, please list the time, for each resource selected for the 2020AS RFP, from the announcement of the final shortlist to the actual or projected "online" dates.
DPU	7. Do the costs for the small modular nuclear reactor on p. 182 of the IRP (base capital costs of \$5,706/kW, etc.) reflect the total projected costs of the project, or the total costs that PacifiCorp and/or the ratepayers would be expected to bear? If the latter, please explain how these costs were calculated. If the former, please discuss in general terms why the Natrium base capital costs are lower than some other common estimates of nuclear base capital costs. Please discuss in general terms how these cost estimates were made, and why they appear to be lower than some commonly used reference estimates. [see question for additional detail]
DPU	8. Although variant P20-JB3-4 CCUS performed well in the modeling (see Table 9.14, p. 268 of the IRP), the Company did not select it as the preferred portfolio, due to several reasons. These three technologies (CCUS, non-emitting hydrogen peakers, Natrium) appear to not be treated in a similar manner. Please discuss. [see question for additional details]
DPU	9. The Division's understanding is that dispatch of resources on an hourly (fifteen-minute) basis is generally governed by the WEIM.

	a. How in general terms does the IRP modeling forecast WEIM dispatch? How does the IRP ST model decide on coal and natural gas dispatch, if using modeling different than the WEIM uses?
	b. What assumptions are made in the IRP modeling about transmission and other dispatch
	limitations when performing hourly dispatch? Can the model differentiate or isolate limitations
	that are a result of the physical system (e.g. transmission constraints) and limitations that are
	partially driven by policy considerations (e.g. GHG adders from state policies)?
UAE	2. Plexos Modeling and Portfolio Evaluation. Chapter 8 of the 2023 IRP
	discusses the use of the Plexos models (LT, MT, ST) to create resource portfolios. Please discuss the following:
	a. Initial Portfolios (p. 241-242). On page 242, the IRP states that "All initial
	portfolios consider variations in retirement timing, the impact of regional haze
	compliance operating limits and options for gas conversion or CCUS retrofit for
	certain units. The initial portfolios differ based on planning assumptions around
	coal unit retirement options and retirement timing."
	i. How many initial portfolios are created and how do they differ from each
	other?
	ii. Please explain how the Company uses the initial portfolios to create the Pseries portfolios. The
	description in the IRP is not always clear. For
	example, Table 8.11 indicates that the initial portfolios are "optimized" for
	coal and gas retirements, but later the IRP asserts that the P-series
	portfolios are optimized for coal and gas retirements.
UAE	2b. Variants (p. 243-246). Please explain what is meant by the statement on page 243
0712	that each variant "begins with inputs and assumptions identical to the preferred
	portfolio (P-MM)." Each variant introduces a new assumption or set of
	assumptions. Was the model allowed to create a new portfolio with that
	assumption, or is the variant being used to test the cost of the P-MM portfolio if
	the variant's assumption occurs?
UAE	2c. Adjustments. Please explain how and when granularity adjustments and
UAL	reliability adjustments are calculated and applied.
UAE	2d. Spanning Conditions (p. 231-232). Please explain spanning conditions and
UAE	
1105	provide examples of spanning conditions used in modeling
UAE	2e ¹ . ST Model Run. On page 232 the IRP states "The ST model is then run again with
	the modified portfolio to calculate an initial PVRR which is risk-adjust by
	outcomes of MT model stochastics."
	i. If not explained in item "a" above, explain this ST run
	ii. Is this ST model run for all scenarios?
	iii. Are the results of this ST run published?
Sierra	2. Please explain the difference between the "Base Limited" and "Base" runs (initial LT
Club	model runs), including any difference in assumptions and inputs between the two runs.
	Please also specify which reliable portfolio/variant comes from the "Base" run:
	a. LT_6529_23I.LT.Initial Run.20.PA0EP.MM.Base Limited.
	b.LT_6530_23I.LT.IR.20.PA0EP.MM.Base
Sierra	3. Granularity Adjustments
Club	a. Please provide an intuitive explanation for why some coal units had larger granularity
	adjustments than gas units at the same location;

 $^{^{\}mathrm{1}}$ UAE listed question as a second part a. The company assumes UAE intended this to be part e.

b. Please explain if capital costs were factored into the granularity adjustment if so, why. Sierra 4. Please explain why PacifiCorp used incremental costs for Jim Bridger base coal than average costs, given that the IRP is a long-term planning exercise. Sierra 5. Please explain why PacifiCorp did not reoptimize all variant portfolios, includ and whether PacifiCorp anticipates that not re-optimizing the portfolios resu resources being included in the variant portfolios. Sierra Club were not paired with current fossil assets. Fervo Question 1. What are the selection criteria applied to supply side resources the inclusion in the preferred and sensitivity portfolios? If the portfolios are chose why is geothermal not selected when its costs are lower than those of SMR question] Fervo Question 2. The 2023 Renewables IRP report1 ("Renewables Report") prepare includes a review of geothermal costs and operational characteristics. How were assumptions developed? [more detail in question] Fervo Question 3. Why is geothermal not included in the capacity expansion analysis process for the Plexos LT modeling be described further to explain whether ge screened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Long duration storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resou "seasonal storage" patterns when selected within a portfolio. Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba resource." Can you please point to	fuel costs rather ling P18 and P19, lited in excessive orage resources of determine of based on cost, of [more detail in] d by WSP of the operational of Can the othermal was ted by the tool?
 Club than average costs, given that the IRP is a long-term planning exercise. Sierra 5. Please explain why PacifiCorp did not reoptimize all variant portfolios, includ and whether PacifiCorp anticipates that not re-optimizing the portfolios resuresources being included in the variant portfolios. Sierra 6. In PacifiCorp's modeling of surplus interconnections, please explain why st were not paired with current fossil assets. Fervo Question 1. What are the selection criteria applied to supply side resources the inclusion in the preferred and sensitivity portfolios? If the portfolios are chose why is geothermal not selected when its costs are lower than those of SMR question] Fervo Question 2. The 2023 Renewables IRP report1 ("Renewables Report") prepare includes a review of geothermal costs and operational characteristics. How were assumptions developed? [more detail in question] Fervo Question 3. Why is geothermal not included in the capacity expansion analysis process for the Plexos LT modeling be described further to explain whether ge screened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Corp Georgia Corp Corp (Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resource associated in the WSP study, PacifiCorp added a low capital cost long duration bardering provided in the WSP study, PacifiCorp added a low capital cost long duration bardering provided in the WSP study, PacifiCorp added a low capital cost long duration bardering provided in the WSP study, PacifiCorp added a low capit	ing P18 and P19, lted in excessive orage resources orage resources of determine hased on cost, or [more detail in orage of the operational of the eothermal was ted by the tool?
 Club than average costs, given that the IRP is a long-term planning exercise. Sierra 5. Please explain why PacifiCorp did not reoptimize all variant portfolios, includ and whether PacifiCorp anticipates that not re-optimizing the portfolios resuresources being included in the variant portfolios. Sierra 6. In PacifiCorp's modeling of surplus interconnections, please explain why st were not paired with current fossil assets. Fervo Question 1. What are the selection criteria applied to supply side resources the inclusion in the preferred and sensitivity portfolios? If the portfolios are chose why is geothermal not selected when its costs are lower than those of SMR question] Fervo Question 2. The 2023 Renewables IRP report1 ("Renewables Report") prepare includes a review of geothermal costs and operational characteristics. How were assumptions developed? [more detail in question] Fervo Question 3. Why is geothermal not included in the capacity expansion analysis process for the Plexos LT modeling be described further to explain whether ge screened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Corp Geotal in Question storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resours "seasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba 	ing P18 and P19, lted in excessive orage resources orage resources of determine hased on cost, or [more detail in orage of the operational of the eothermal was ted by the tool?
Club and whether PacifiCorp anticipates that not re-optimizing the portfolios resuresources being included in the variant portfolios. Sierra 6. In PacifiCorp's modeling of surplus interconnections, please explain why st were not paired with current fossil assets. Fervo Question 1. What are the selection criteria applied to supply side resources that inclusion in the preferred and sensitivity portfolios? If the portfolios are chose why is geothermal not selected when its costs are lower than those of SMR question] Fervo Question 2. The 2023 Renewables IRP report1 ("Renewables Report") prepare includes a review of geothermal costs and operational characteristics. How were assumptions developed? [more detail in question] Fervo Question 3. Why is geothermal not included in the capacity expansion analysis process for the Plexos LT modeling be described further to explain whether ge screened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Long duration storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resource "seasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba	orage resources It determine In based on cost, If more detail in It dby WSP It the operational It can the It determine It
resources being included in the variant portfolios. Sierra G. In PacifiCorp's modeling of surplus interconnections, please explain why st were not paired with current fossil assets. Fervo Question 1. What are the selection criteria applied to supply side resources the inclusion in the preferred and sensitivity portfolios? If the portfolios are chose why is geothermal not selected when its costs are lower than those of SMR question] Fervo Question 2. The 2023 Renewables IRP report1 ("Renewables Report") prepare includes a review of geothermal costs and operational characteristics. How were assumptions developed? [more detail in question] Fervo Question 3. Why is geothermal not included in the capacity expansion analysis process for the Plexos LT modeling be described further to explain whether ge screened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Long duration storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resources "seasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba	orage resources It determine In based on cost, If [more detail in] It dby WSP It the operational It determine
Sierra Club were not paired with current fossil assets. Fervo Question 1. What are the selection criteria applied to supply side resources that inclusion in the preferred and sensitivity portfolios? If the portfolios are chose why is geothermal not selected when its costs are lower than those of SMR question] Fervo Question 2. The 2023 Renewables IRP report1 ("Renewables Report") prepare includes a review of geothermal costs and operational characteristics. How were assumptions developed? [more detail in question] Fervo Question 3. Why is geothermal not included in the capacity expansion analysis process for the Plexos LT modeling be described further to explain whether ge screened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Corp dividing the detail in question of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resource associated in the WSP study, PacifiCorp added a low capital cost long duration bar	at determine in based on cost, or [more detail in detail
 Club were not paired with current fossil assets. Fervo Question 1. What are the selection criteria applied to supply side resources that inclusion in the preferred and sensitivity portfolios? If the portfolios are chose why is geothermal not selected when its costs are lower than those of SMR question] Fervo Question 2. The 2023 Renewables IRP report1 ("Renewables Report") prepare includes a review of geothermal costs and operational characteristics. How were assumptions developed? [more detail in question] Fervo Question 3. Why is geothermal not included in the capacity expansion analysis process for the Plexos LT modeling be described further to explain whether ge screened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Long duration storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resours "seasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration batterial provided in the WSP study, PacifiCorp added a low capital cost long duration batterial provided in the WSP study, PacifiCorp added a low capital cost long duration batterial provided in the WSP study, PacifiCorp added a low capital cost long duration batterial provided in the WSP study. 	at determine in based on cost, or [more detail in detail
Fervo Question 1. What are the selection criteria applied to supply side resources that inclusion in the preferred and sensitivity portfolios? If the portfolios are chose why is geothermal not selected when its costs are lower than those of SMR question] Fervo Question 2. The 2023 Renewables IRP report1 ("Renewables Report") prepare includes a review of geothermal costs and operational characteristics. How were assumptions developed? [more detail in question] Fervo Question 3. Why is geothermal not included in the capacity expansion analysis process for the Plexos LT modeling be described further to explain whether ge screened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Corp duration storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resou "seasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba	h based on cost, or [more detail in d by WSP ethe operational continued by the tool?
inclusion in the preferred and sensitivity portfolios? If the portfolios are chose why is geothermal not selected when its costs are lower than those of SMR question] Fervo Question 2. The 2023 Renewables IRP report1 ("Renewables Report") prepare includes a review of geothermal costs and operational characteristics. How were assumptions developed? [more detail in question] Fervo Question 3. Why is geothermal not included in the capacity expansion analysis process for the Plexos LT modeling be described further to explain whether ge screened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Long duration storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resours "seasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba	h based on cost, or [more detail in d by WSP ethe operational continued by the tool?
why is geothermal not selected when its costs are lower than those of SMR question] Fervo Question 2. The 2023 Renewables IRP report1 ("Renewables Report") prepare includes a review of geothermal costs and operational characteristics. How were assumptions developed? [more detail in question] Fervo Question 3. Why is geothermal not included in the capacity expansion analysis process for the Plexos LT modeling be described further to explain whether ge screened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Long duration storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resours "seasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration batters."	d by WSP the operational ? Can the tothermal was ted by the tool?
Fervo Question 2. The 2023 Renewables IRP report1 ("Renewables Report") prepare includes a review of geothermal costs and operational characteristics. How were assumptions developed? [more detail in question] Fervo Question 3. Why is geothermal not included in the capacity expansion analysis process for the Plexos LT modeling be described further to explain whether ge screened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Long duration storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resourseasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration battery."	d by WSP the operational Can the othermal was ted by the tool?
Fervo Question 2. The 2023 Renewables IRP report1 ("Renewables Report") prepare includes a review of geothermal costs and operational characteristics. How were assumptions developed? [more detail in question] Fervo Question 3. Why is geothermal not included in the capacity expansion analysis process for the Plexos LT modeling be described further to explain whether ge screened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Long duration storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resourseasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration battery."	e the operational ? Can the cothermal was ted by the tool?
includes a review of geothermal costs and operational characteristics. How were assumptions developed? [more detail in question] Fervo Question 3. Why is geothermal not included in the capacity expansion analysis process for the Plexos LT modeling be described further to explain whether ge screened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Long duration storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resourseasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration battery."	e the operational ? Can the cothermal was ted by the tool?
Fervo Question 3. Why is geothermal not included in the capacity expansion analysis process for the Plexos LT modeling be described further to explain whether geoscreened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Long duration storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resourse "seasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration batters."	? Can the othermal was ted by the tool?
process for the Plexos LT modeling be described further to explain whether go screened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Long duration storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resourseasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba	othermal was ted by the tool?
screened out prior to the modeling or included in the modeling but not select [more detail in question] SLC Long duration storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resourseasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration batters."	ted by the tool?
[more detail in question] SLC Long duration storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resourseasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba	
SLC Long duration storage: For the long duration battery supply side resource, who of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resourseasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba	
 Corp of Megawatts selected in 2028 in 4 of the 5 initial cases (P-LN, P-MN, P-HH, and the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resount "seasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration based to the provided in the WSP study. 	
the preferred portfolio case of P-MM? Were some resources "hand selected resource portfolio? [more detail in question] SLC Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resourseasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba	
resource portfolio? [more detail in question] SLC Corp Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resourseasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba	
SLC Corp Long duration storage: Could you please produce a slide that shows, over representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resourseasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba	i" for the P-IVIIVI
Corp representative year, in which hours a selected long duration resource is shown which hours it is shown to discharge? I'm curious to know if this supply side resourseasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba	
which hours it is shown to discharge? I'm curious to know if this supply side resorms seasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba	
"seasonal storage" patterns when selected within a portfolio. SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba	_
SLC Long duration storage: Page 172 of volume 1 of the IRP says that "In addition provided in the WSP study, PacifiCorp added a low capital cost long duration ba	irce type eximins
Corp provided in the WSP study, PacifiCorp added a low capital cost long duration ba	to hattery costs
	•
resource: can you picuse point to where this low capital cost long adiation ba	
is included in the supply side resource table?	itery teemiology
SLC Coal: Can you please explain why a portfolio like P04-Huntington RET 28 w	hich contains an
Corp earlier coal retirement than the preferred portfolio, PMM shows a lower Er	
value than the preferred portfolio?	<i>3,</i>
SLC Coal: In the preferred portfolio, in what year did assumed enforcement of the	ozone transport
Corp rule begin affecting coal dispatch?	·
SLC Coal: Does the tenth circuit court decision staying implementation of the ozone	transport rule in
Corp Utah affect the preferred portfolio selection or the action plan, and if so, how	}
UCARE 1. Would you please provide itemized data, in text and graphic depiction, th	at describes the
specific energy resources mix and capacity resources mix – current and 2028 [pre	
- for each of the Rocky Mountain Power (RMP) states. This data should help inte	
and renewable energy advocates better understand their state's relative status	rested customers
grid and identify resource areas where each state's energy portfolio objective	
may require initiatives. [more detail in question]	in the PacifiCorp
UAE 10. Capacity contribution. In response to a data request from Renewable Nort	in the PacifiCorp s can be met or
(RNW), the Company states "Capacity contribution analysis is very modeling into	in the PacifiCorp is can be met or hwest

was insufficient time to complete it between the development of the preferred portfolio and the publishing of PacifiCorp's 2023 IRP. PacifiCorp expects to perform this analysis in the future."2 a. Will this analysis be completed for the 2023 IRP? b. When will this analysis be completed? c. How will this information be published to interested parties?

Ozone Transport Rule

Party	Question
UAE	3. Ozone Transport Rule. The 2023 IRP Preferred Portfolio assumes the enforceability of the Ozone Transport Rule ("OTR") requirements in Utah. In July, a court enjoined the EPA from enforcing those requirements (at least for now). a. Does the Company have a sense as to how the preferred portfolio would change generally if the model were to assume that the OTR does not apply to Utah? b. What, if anything, is being done regarding SNCR procurement at Hunter & Huntington?
UAE	4. Ozone Transport Rule. The 2023 IRP describes on variant that assumes that Wyoming would not be subject to the OTR (P09-No WY OTR). The IRP filing states that "[t]his variant does not change resource selections from that assumed in the preferred portfolio, but instead removes the federal Ozone Transport Rule (OTR) compliance obligation for thermal resources located in the state of Wyoming." [2023 IRP Vol. I at 280]. In response to a stakeholder feedback question, the Company stated that this sensitivity "required the model to keep the same selections as the preferred portfolio but evaluated the cost of said portfolio under the assumption that Wyoming would not be subject to OTR rules." [See 2023.048. JDRS Law 4-28-23 (with response)]. a. What was the purpose of this variant? b. Did the Company run a variant or sensitivity that assumed Wyoming would not be subject to the OTR but also allowed the model to select different resources than those selected in the preferred portfolio? i. If so, why was that variant or sensitivity not included in the IRP? ii. If not, why not

Hunter Plant Retirement

Party	Question
UAE	5. Hunter Plant Retirement. The preferred portfolio proposes to accelerate the
	retirement of the Hunter plant from prior IRPs. The Company indicated in response to a
	stakeholder feedback question that "in general, agreement with co-owners is required to retire
	a unit," and that it "will work with the co-owners of the Hunter units to coordinate retirement
	of any unit." [See 2023.048. JDRS Law 4-28-23 (with response)]. Please provide an update on
	the Company's efforts to work with the co-owners on this issue.

Transmission

Party	Question
UAE	6. Transmission. In response to a stakeholder feedback form, PacifiCorp indicated

that the Shirley Basin – Anticline 500 kV transmission line, which had formerly been identified as a network upgrade in interconnection studies, was included in PacifiCorp's long-term transmission plan in Q3 of 2022. [See 2023.048. JDRS Law 4-28-23 (with response)].

a. Can the Company explain how PacifiCorp makes decisions about whether a project that has been identified as a network upgrade (where construction costs are imposed on the interconnection customer) should be included in the Company's long-term transmission plan (where construction costs are borne by the Company and then reimbursed by ratepayers)?

Nuclear

Party	Question
UAE	7. Advanced Nuclear Plants. In response to a stakeholder feedback question
	regarding risks associated with the addition of nuclear generation plants, the Company stated
	that
	"[r]isks related to delay in the nuclear project and cost overruns are a separate consideration of
	project risk. This has not been analyzed or included in the results. The company intends to
	mitigate the risk of project delays and cost overruns through contracts yet to be assigned to
	protect customers and stakeholders." [See 2023.048. JDRS Law 4-28-23 (with response)]
	a. Please elaborate on the types of "contracts yet to be assigned" referred to in this
	response. Does this refer to contracts for the construction for the nuclear plant(s),
	contracts for market purchases, contracts for other generation resources, some combination of these two, or something else?
	b. Does the Company model risks related to delays or cost overruns with respect to
	any other generation resources?
	i. If not, why not?
	ii. Is it too speculative to include such risks in a risk assessment or is there
	some other reason?
UAE	8. Advanced Nuclear Projects. Figure 1.6 of the IRP filing shows how the
	Company's plans regarding advanced nuclear reactors have changed from the 2021 IRP to the 2023 IRP. In the 2021 IRP, the Natrium demonstration project was planned to be placed in service by 2028 and to run for approximately 10 years before the next such advanced nuclear reactor was added. This timing allowed for the completion of that project and for the Company to gain significant operational experience with it before committing to additional advanced nuclear projects. The 2023 IRP preferred portfolio does not include the same sort of ramp-up period. Compared to the 2021 IRP, the 2023 IRP delays the start of the first plant to 2030 and advances the remaining two plants to start in 2032 and 2033. a. When would the Company need to commit to construct the first Natrium plant in order for it to achieve COD by summer of 2030?
	i. What is the estimated time to construct the Natrium plant and to place it in
	service?
	ii. Are there any other timing requirements
	b. Would the Company need to commit to construct the second and/or third
	advanced nuclear plant prior to COD of the first plant in order to achieve a 2032 or 2033 COD?
SLC	For the 500 MW advanced nuclear resource selected in 2030 in the preferred portfolio, what is
Corp	the resource cost and does that cost appear in the supply-side resource table?

SLC	Was the 500 MW advanced nuclear resource selected in 2030 "hand selected" for the preferred
Corp	portfolio, or was it selected as part of a least-cost optimization? If this resource was selected as
	part of a least-cost optimization, what is the cost of this resource?
SLC	For the 1,000 additional MW of advanced nuclear resources selected by the end of 2032, what
Corp	is the resource cost and does that cost appear in the supply-side resource table?
SLC	Was the small modular reactor nuclear supply side resource selected in any of the portfolios?
Corp	
SLC	Would PacifiCorp consider running a preferred portfolio variant that does not allow selection of
Corp	the advanced nuclear Natrium resource type but does allow selection of the small modular
	reactor nuclear resource?
UCARE	9. Would you please describe how and when actual, incremental progress in developing
	proposed nuclear EGU resources and their associated required fuel supplies and disposal
	facilities will be assessed and reported by PacifiCorp, RMP, TerraPower, and other parties?

Tax Credits

Party	Question
UAE	9. Treatment of ITC for storage and standalone solar resources. In a data
	request, Sierra club asks "why tax credits are not included for the storage and standalone solar
	resources" in the IRP Supply Side Resource Tables (IRP Tables 7.1 & 7.2). PacifiCorp responds
	as follows: "Not including tax credits for storage and standalone solar resources was an oversight as storage would receive investment tax credit (ITC) benefits and standalone solar would receive
	production tax credit (PTC) benefits" but asserts that "these tax credits were included in the
	PLEXOS model for these proxy resources, where tax credits were allowed through 2037."1
	1 See PacifiCorp response to Sierra Club data request 11(a) in Oregon PUC Docket No. LC 82, produced in response
	to Sierra Club's first set of data requests in this docket (Attach Sierra Club 1.1-1 1st Supp).
	a. Please clarify how the ITC is applied to IRP resources in Plexos
	b. How would IRP Tables 7.1 & 7.2 (Supply-Side Resource Tables) change if the
	ITC for storage and stand-alone solar resources was represented in them?
	c. Are there any other instances where IRP Tables 7.1 & 7.2 are different from
	Plexos input assumptions?

Demand Side Management (DSM) and Private Generation

Party	Question
UCE	We reiterate our request from earlier this year (from our Stakeholder Feedback Form to the
	March 31, 2023 IRP) that PacifiCorp run a meaningful high Private Generation scenario S-05 that
	is at least 30-50% higher than the 2023 base case to adequately assess the impact of increased
	uptake of private generation. We request an update on the status of this sensitivity study in the
	Technical Conference and look forward to seeing the revision included in the 2023 IRP Update.
	[see question for additional detail]
Vote	1. Private Generation Forecast assessment completed by DNV:
Solar	DNV's assessment models lower technology costs and higher energy prices to forecast a
	"high" private generation forecast, but finds that the "high" forecast results in only 0.5%
	Additional Cumulative capacity Additions compared to the base case. For comparison

	purposes, the "high" forecast used in the 2021 IRP was approximately 53% higher than
	the corresponding "base" forecast.
	a) Please explain why the "high" and "base" case forecasts in DNV's analysis are so
	similar
Vote	1.b Please explain how the Assumptions and methodologies used to develop the private
Solar	Generation forecast for the prior 2021 IRP differ from those used in the 2023 IRP
Vote	1.c Please describe how actual distributed solar Adoption compares to the forecasts
Solar	prepared as part of the prior 2021 IRP. For example, does actual distributed solar
	Adoption in the years 2021 – 2023 most closely resemble the "low," "base," or
	"high" forecast provided in the 2021 IRP?
Vote	1.d Does the IRP modeling process account for the Location of distributed solar
Solar	and/or storage resources, or evaluate whether distributed solar and/or storage
	resources in a specific location provide higher value (for example, in areas where
	transmission constraints exist)
Vote	2. Regarding the Inflation Reduction Act: a) Vote Solar submit a stakeholder feedback form
Solar	requesting additional information about how DNV's private generation forecast accounts for the
	impacts of the Inflation Reduction Act (IRA).1 On July 13 2023, PacifiCorp responded that "Our
	study does not Estimate the content and location (beyond the State level) of proxy customer
	private generation resource installations and therefore does not include explicit assumptions
	around these credits."2 Is PacifiCorp evaluating how the location- and income-qualified
	provisions of the IRA apply within its service territory, and how they will affect adoption of
	private generation and/or customer-sited storage?
Vote	2.b Is PacifiCorp evaluating how provisions of the IRA will impact adoption of other customer-
Solar	sited technologies, such as electrified appliances or electric vehicles?
Vote	2.c Are the impacts of location- and income-qualified tax credits offered through the IRA
Solar	accounted for when developing the 2023 IRP load forecast?
Solar Vote	accounted for when developing the 2023 IRP load forecast? 2.d Has PacifiCorp evaluated how the location- and income-qualified provisions of the IRA are
Solar	accounted for when developing the 2023 IRP load forecast? 2.d Has PacifiCorp evaluated how the location- and income-qualified provisions of the IRA are likely to apply to new generation resources built within its territory? For example, has PacifiCorp
Solar Vote	accounted for when developing the 2023 IRP load forecast? 2.d Has PacifiCorp evaluated how the location- and income-qualified provisions of the IRA are likely to apply to new generation resources built within its territory? For example, has PacifiCorp evaluated which parts of its service territory are "energy communities," low-income"
Solar Vote Solar	accounted for when developing the 2023 IRP load forecast? 2.d Has PacifiCorp evaluated how the location- and income-qualified provisions of the IRA are likely to apply to new generation resources built within its territory? For example, has PacifiCorp evaluated which parts of its service territory are "energy communities," low-income" communities, or Tribal lands per the definitions of the IRA?
Solar Vote Solar Vote	accounted for when developing the 2023 IRP load forecast? 2.d Has PacifiCorp evaluated how the location- and income-qualified provisions of the IRA are likely to apply to new generation resources built within its territory? For example, has PacifiCorp evaluated which parts of its service territory are "energy communities," low-income" communities, or Tribal lands per the definitions of the IRA? 2.e Did PacifiCorp model availability of the Energy Communities bonus adder when determining
Solar Vote Solar Vote Solar	accounted for when developing the 2023 IRP load forecast? 2.d Has PacifiCorp evaluated how the location- and income-qualified provisions of the IRA are likely to apply to new generation resources built within its territory? For example, has PacifiCorp evaluated which parts of its service territory are "energy communities," low-income" communities, or Tribal lands per the definitions of the IRA? 2.e Did PacifiCorp model availability of the Energy Communities bonus adder when determining supply-side resource costs?
Solar Vote Solar Vote	accounted for when developing the 2023 IRP load forecast? 2.d Has PacifiCorp evaluated how the location- and income-qualified provisions of the IRA are likely to apply to new generation resources built within its territory? For example, has PacifiCorp evaluated which parts of its service territory are "energy communities," low-income" communities, or Tribal lands per the definitions of the IRA? 2.e Did PacifiCorp model availability of the Energy Communities bonus adder when determining supply-side resource costs? What is driving the massive incremental increase in Energy Efficiency and Demand Response in
Solar Vote Solar Vote Solar	accounted for when developing the 2023 IRP load forecast? 2.d Has PacifiCorp evaluated how the location- and income-qualified provisions of the IRA are likely to apply to new generation resources built within its territory? For example, has PacifiCorp evaluated which parts of its service territory are "energy communities," low-income" communities, or Tribal lands per the definitions of the IRA? 2.e Did PacifiCorp model availability of the Energy Communities bonus adder when determining supply-side resource costs? What is driving the massive incremental increase in Energy Efficiency and Demand Response in the year 2042? If it is possible to add ~1600 MW of Energy Efficiency and Demand Response in
Solar Vote Solar Vote Solar	accounted for when developing the 2023 IRP load forecast? 2.d Has PacifiCorp evaluated how the location- and income-qualified provisions of the IRA are likely to apply to new generation resources built within its territory? For example, has PacifiCorp evaluated which parts of its service territory are "energy communities," low-income" communities, or Tribal lands per the definitions of the IRA? 2.e Did PacifiCorp model availability of the Energy Communities bonus adder when determining supply-side resource costs? What is driving the massive incremental increase in Energy Efficiency and Demand Response in the year 2042? If it is possible to add ~1600 MW of Energy Efficiency and Demand Response in 2042, why do no other years have incremental increases greater than ~300 MW? Is this a
Solar Vote Solar Vote Solar	accounted for when developing the 2023 IRP load forecast? 2.d Has PacifiCorp evaluated how the location- and income-qualified provisions of the IRA are likely to apply to new generation resources built within its territory? For example, has PacifiCorp evaluated which parts of its service territory are "energy communities," low-income" communities, or Tribal lands per the definitions of the IRA? 2.e Did PacifiCorp model availability of the Energy Communities bonus adder when determining supply-side resource costs? What is driving the massive incremental increase in Energy Efficiency and Demand Response in the year 2042? If it is possible to add ~1600 MW of Energy Efficiency and Demand Response in 2042, why do no other years have incremental increases greater than ~300 MW? Is this a modeling error or is PacifiCorp underestimating the maximum level of DSM throughout the
Solar Vote Solar Vote Solar	accounted for when developing the 2023 IRP load forecast? 2.d Has PacifiCorp evaluated how the location- and income-qualified provisions of the IRA are likely to apply to new generation resources built within its territory? For example, has PacifiCorp evaluated which parts of its service territory are "energy communities," low-income" communities, or Tribal lands per the definitions of the IRA? 2.e Did PacifiCorp model availability of the Energy Communities bonus adder when determining supply-side resource costs? What is driving the massive incremental increase in Energy Efficiency and Demand Response in the year 2042? If it is possible to add ~1600 MW of Energy Efficiency and Demand Response in 2042, why do no other years have incremental increases greater than ~300 MW? Is this a
Solar Vote Solar Vote Solar UCE	accounted for when developing the 2023 IRP load forecast? 2.d Has PacifiCorp evaluated how the location- and income-qualified provisions of the IRA are likely to apply to new generation resources built within its territory? For example, has PacifiCorp evaluated which parts of its service territory are "energy communities," low-income" communities, or Tribal lands per the definitions of the IRA? 2.e Did PacifiCorp model availability of the Energy Communities bonus adder when determining supply-side resource costs? What is driving the massive incremental increase in Energy Efficiency and Demand Response in the year 2042? If it is possible to add ~1600 MW of Energy Efficiency and Demand Response in 2042, why do no other years have incremental increases greater than ~300 MW? Is this a modeling error or is PacifiCorp underestimating the maximum level of DSM throughout the modeling horizon? [see question for additional detail]
Vote Solar Vote Solar UCE	accounted for when developing the 2023 IRP load forecast? 2.d Has PacifiCorp evaluated how the location- and income-qualified provisions of the IRA are likely to apply to new generation resources built within its territory? For example, has PacifiCorp evaluated which parts of its service territory are "energy communities," low-income" communities, or Tribal lands per the definitions of the IRA? 2.e Did PacifiCorp model availability of the Energy Communities bonus adder when determining supply-side resource costs? What is driving the massive incremental increase in Energy Efficiency and Demand Response in the year 2042? If it is possible to add ~1600 MW of Energy Efficiency and Demand Response in 2042, why do no other years have incremental increases greater than ~300 MW? Is this a modeling error or is PacifiCorp underestimating the maximum level of DSM throughout the modeling horizon? [see question for additional detail]
Solar Vote Solar Vote Solar UCE	accounted for when developing the 2023 IRP load forecast? 2.d Has PacifiCorp evaluated how the location- and income-qualified provisions of the IRA are likely to apply to new generation resources built within its territory? For example, has PacifiCorp evaluated which parts of its service territory are "energy communities," low-income" communities, or Tribal lands per the definitions of the IRA? 2.e Did PacifiCorp model availability of the Energy Communities bonus adder when determining supply-side resource costs? What is driving the massive incremental increase in Energy Efficiency and Demand Response in the year 2042? If it is possible to add ~1600 MW of Energy Efficiency and Demand Response in 2042, why do no other years have incremental increases greater than ~300 MW? Is this a modeling error or is PacifiCorp underestimating the maximum level of DSM throughout the modeling horizon? [see question for additional detail]

IRP and Ratemaking

Party	Question
UCARE	2. Would you please present data from the Multi-State Process' (MSP) current iteration explaining
	what could happen to current allocation of costs and benefits from Colstrip Unit 4 and Jim Bridger

	Units 1-4 and from the Chehalis and Hermiston units if Washington's allocation changes with expiration of the WIJAM / 2020 PacifiCorp Protocol after December 21, 2023. [see Vol II, p. 409]. How might RMP's energy mix and capacity mix numbers change; and, how might RMP's Utah
UCARE	a. Would you please describe what data model and/or methodology PacifiCorp-RMP uses to determine that "cost shifting" has not occurred as an IRP is implemented? For example, how has PacifiCorp/RMP convinced the Utah Public Service Commission that \$50 million from [PacifiCorp] customers to cover costs of Utah's Electric Vehicle Charging Infrastructure Amendments (HB 396; see 2022 IRP Vol.L. p. 74) not unduly shifted costs to customers that do not own or operate EVs2
UCARE	see 2023 IRP Vol I, p.74) not unduly shifted costs to customers that do not own or operate EVs? 4. Would you please provide data disclosing cost allocation of wildfire and extreme weather mitigation measures and resources across the six-state PacifiCorp grid network? The data should explain how these measures and resources are monetized and how costs are projected to affect PacifiCorp customers' utility rates collectively and also by state jurisdictional rate schedules over the IRP's 20-year horizon.
UCARE	5. For purposes of analyzing costs that might be added and shared during the 2023 IRP process and in subsequent IRPs, would you please explain how PacifiCorp distinguishes between potential third-party Wildfire Claims expenses anticipated in Utah PSC Docket 23-035-30 [withdrawn], Wildland Fire Mitigation expenses now under consideration in Utah PSC Docket 23-035-27, Insurance Costs now being considered in Utah PSC Docket 23-035-40, and those wildfire-related costs actually included in the 2023 IRP?
UCARE	6. With some wildfire mitigation expenses doubling between 2021 and 2022 [see OCS Attachment 1.2-1 in 23-035-27] and insurance expenses increasing tenfold since last year [see RMP filing in 23-035-40], would you please describe the extent to which RMP is concerned that ratepayers' exposure to these growing climate-change related costs should be considered within the context of RMP-PacifiCorp's near-term IRP choices between fossil fuel resources and those resources of proven, non-nuclear renewable energy generation and storage? Does RMP acknowledge that expenses addressed in Utah PSC Dockets 23-035-30, 23-035-27, and 23-035-40 are related to decisions made during past, current, and future integrated resource plans?
UCARE	7. Would you please explain what data and/or regulatory directives [current or potential] drive PacifiCorp and RMP policy(ies) and regulatory relief requests as decisions are made whether to include specific costs and associated ratepayer allocations within an IRP or, instead, to request "deferred accounts" for specific costs such as those to cover increasing insurance premiums?
UCARE	8. Though only passing reference is made to insurance costs in the 2023 IRP [see Vol. 1, p.194], the issue is raised. Would you please explain which PacifiCorp insurance costs are to be covered exclusively by its ratepayersresidential and commercial; and how PacifiCorp will ensure equitable sharing of insurance costs between customer groups and across state regulatory jurisdictions? How will that be reflected in data gathering for the 2025 IRP?