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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

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In the Matter of the Application of Rocky  
Mountain Power to Implement Community  
Clean Energy Program Authorized by the  
Community Clean Energy Act

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DOCKET NO. 25-035-06

**DIRECT TESTIMONY OF**

**KARL G. BOOTHMAN**

**ON BEHALF OF**

**WESTERN RESOURCE ADVOCATES**

October 10, 2025

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Exhibit WRA ____ (KB-1)	Karl Boothman Resume
Exhibit WRA ____ (KB-2)	Selected Data Request Responses from Docket No. 25-035-06
Exhibit WRA ____ (KB-3)	Selected Data Request Response from Docket No. 25-035-T03

**I. INTRODUCTION AND QUALIFICATIONS**

**Q: Please state your name and business address.**

A: My name is Karl Boothman. My business address is 307 West 200 South, Suite 2000,  
Salt Lake City, UT 84101.

**Q: By whom are you employed and in what position?**

A: I am employed by Western Resource Advocates (WRA) in its Clean Energy Program as a  
Senior Policy Advisor. WRA is a regional nonprofit advocacy organization that fights  
climate change and its impacts to sustain the environment, economy, and people of the  
West. WRA's Clean Energy Program develops and implements policies to reduce the  
environmental impacts of utilities in the Interior West by advocating for a western  
electric system that provides clean, affordable, reliable energy, reduces economic risks,  
and protects the environment through the expanded use of energy efficiency, renewable  
energy resources, and other clean energy technologies. WRA has offices in Salt Lake  
City, Utah; Boulder and Denver, Colorado; Reno, Nevada; Phoenix, Arizona; and Santa  
Fe, New Mexico.

**Q: On whose behalf are you testifying in this proceeding?**

A: I am testifying on behalf of Western Resource Advocates.

**Q: Please describe your education and professional experience.**

A: I provide policy analysis and regulatory support to WRA in electric-industry-related  
matters. I have a B.A. in economics, conferred with distinction from the University of

Michigan. From 2013-2016, I was employed as a Staff Analyst with ApplEcon LLC, a consultancy based in Ann Arbor, Michigan that provides regulatory and econometric support in litigation related to antitrust, collusion, and price fixing. From 2016-2019, I was employed as a Consultant and from 2019-2022 as a Senior Consultant with 5 Lakes Energy LLC, an energy policy consultancy based in Lansing, Michigan. In this role, I provided analysis for clients on a wide range of topics in the energy industry, including but not limited to, cost of service and rate design, energy efficiency and demand response, energy siting, and integrated resource planning. Since 2022, I have been employed as a Senior Policy Advisor with Western Resource Advocates where I have worked on Utah energy policy. In addition to my formal education and work experience, I have completed professional development courses including power grid school, utility accounting and ratemaking, and the annual regulatory studies program at Michigan State University Institute of Public Utilities as well cost of service, rate design, and depreciation courses with EUCI. A more detailed description of my qualifications is attached as Exhibit WRA\_\_(KB-1).

**Q: Have you previously testified before the Public Service Commission of Utah (Commission)?**

**A:** Yes. I submitted direct, rebuttal, and/or surrebuttal testimony in Phase I, II, and III of Docket No. 24-035-04 (PacifiCorp General Rate Case) and Docket No. 20-035-34 (Application of Rocky Mountain Power for Approval of Electric Vehicle Infrastructure Program).

42 **Q: Have you previously testified before a Public Service Commission in another**  
43 **jurisdiction?**

44 A: Yes, I have submitted testimony in the following proceedings before the Michigan Public  
45 Service Commission:

- 46 • U-20561 (DTE Energy 2019 General Rate Case)
- 47 • U-20697 (Consumers Energy 2020 General Rate Case)
- 48 • U-20963 (Consumers Energy 2021 General Rate Case)

49 I have also filed comments and/or reply comments in the following non-litigated dockets  
50 before the Utah Public Service Commission:

- 51 • PacifiCorp's 2023 IRP (Docket No. 23-035-10)
- 52 • PacifiCorp's 2025 IRP (Docket No. 25-035-22)
- 53 • Investigation into Interconnection Rule Amendments (Docket No. 23-R312-01)<sup>1</sup>
- 54 • Schedule 37 Avoided Costs (Docket No. 25-035-T03)
- 55 • Solicitation Process for URC Program (Docket No. 24-035-55)

56 I have, or currently participate in, multiple stakeholder processes such as the DSM  
57 Steering Committee and DSM Advisory Group, RMP's Residential Time-of-Use  
58 Stakeholder workshops, RMP's wildfire workshops, RMP's Schedule 2E working group,  
59 RMP's Grid Modernization Collaborative, and the Multi-State Process (MSP).  
60

61 **Q: Please explain WRA's interest in participating in this proceeding.**

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<sup>1</sup>See *Comments of Western Resource Advocates*, Docket No. 23-035-10 (filed March 10, 2023; December 12, 2023; January 31, 2024; May 30, 2024; September 4, 2024); *Comments of Western Resource Advocates*, Docket No. 23-R312-01 (filed October 31, 2023); *Western Resource Advocates' Response to Proposed Amendments*, Docket No. 23-R312-01 (filed June 12, 2024).

62 A: As described in my introduction, WRA is a conservation organization that advocates for  
63 an electric system that provides affordable and reliable energy, reduces economic risks,  
64 and protects the environment with expanded use of energy efficiency, renewable energy,  
65 and other clean energy technologies. Our broader mission is to sustain the people,  
66 economies, and environments of the West by addressing climate change.

67 **Q: Are other witnesses testifying for WRA?**

68 A: No.

69 **II. SUMMARY**

70 **Q: Please summarize your testimony and recommendations.**

71 A: In my testimony, I identify aspects of the 2025 IRP that compromise its usefulness for  
72 Community Clean Energy Program (Program) resource valuation using the Schedule 38  
73 avoided cost pricing methodology. I recommend the Company instead perform a Present-  
74 Value Revenue Requirement differential (PVRR(d)) analysis using project-specific  
75 information received by the Agency for its resource solicitation.

76 **III. PROGRAM RESOURCE VALUATION METHOD**

77 **Q: What resource valuation methods have parties proposed for Program resources?**

78 A: Christopher Thomas, testifying on behalf of the Community Renewable Energy Agency  
79 (Agency or CREA), represented the Community Renewable Energy Board's (Board)  
80 position:

[The valuation of] Program Resources ... should be calculated by comparing Rocky Mountain Power's expected system costs with and without Program Resources over such Program Resources' expected operating or contract life in a manner that is *consistent with Rocky Mountain Power's own resource procurement process* ... with any deviations from such Utility Procurement Process clearly explained.<sup>2</sup>

This method is referred to as the present-value revenue requirement differential method (PVRR(d)).<sup>3</sup>

In contrast, Rocky Mountain Power (RMP) proposes using the "Schedule 38" avoided cost methodology applicable to non-standard Qualifying Facilities (QFs) as a starting point, supplemented with additional analyses. The net cost of the Program resource (not including administrative costs) would be the power purchase agreement (PPA) price, the value of renewable energy certificates (RECs) associated with Program resource generation, and any modifications necessary for interconnection or transmission upgrades, less the Schedule 38 avoided cost of the resource (i.e. the benefit).<sup>4</sup>

**Q: Please describe the PVRR(d) method used by the Company in its own resource procurement and valuation process.**

**A:** Resource procurements and valuation are usually addressed in rate case or resource procurement proceedings, where the Company must provide evidence that a resource, such as a new generation or transmission project, is just and reasonable and in the public

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<sup>2</sup> *Direct Testimony and Exhibits of Christopher Thomas on Behalf of the Community Renewable Energy Agency*, Docket No. 25-035-06 (filed July 18, 2025) at lines 341-346 (emphasis added).

<sup>3</sup> *See, e.g.,* WRA Exhibit\_\_ (KB-2), Selected Data Request Responses from Docket No. 25-035-06 (specifically CREA Response to OCS Data Request 1.1 and Rocky Mountain Power Response to CREA Data Request 4.1, addressing the PVRR(d) resource valuation method).

<sup>4</sup> *Direct Testimony of Daniel J. MacNeil for Rocky Mountain Power*, Docket No. 25-035-06 (filed June 4, 2025) at lines 74-157 [hereinafter *MacNeil Direct Testimony*].

101 interest. To show this evidence, the Company uses its Integrated Resource Plan (IRP)  
102 modeling tool, PLEXOS, to calculate the change in system revenue requirement between  
103 modeling runs with and without the incremental resource(s). System revenue requirement  
104 is expressed as the present-value revenue requirement (PVRR) where capital costs are  
105 levelized over a fixed planning horizon and the sum of future system costs are expressed  
106 in present value terms. The Company runs multiple scenarios representing a range of  
107 future fossil fuel prices and proxy environmental costs known as price-policy scenarios  
108 but will select an “expected” price-policy scenario that represents the most likely future  
109 outcome at the time of modeling. The other price-policy scenarios are informative as to  
110 the robustness of the system costs or benefits of the incremental resource if future  
111 conditions differ from expectations. The difference in PVRR between a model run with  
112 the prospective resource and a model run without the prospective resource isolates the net  
113 system cost or benefit of the added resource(s). Each modeling run is endogenously  
114 optimized to account for the existence or lack of the prospective resource(s), such that the  
115 timing and necessity of other proxy resources and transmission across the system can  
116 change based on the impact or exclusion of the resource(s).

117 **Q: Please explain the Schedule 38 Avoided Cost method.**

118 A: The method for determining Schedule 38 avoided costs is the same as the Schedule 37  
119 Partial Displacement Differential Revenue Requirement (PDDRR) method but includes  
120 QF generators in the queue with executed power purchase agreements. Under the  
121 PDDRR method, a zero-cost QF displaces a capacity contribution equivalent amount of a  
122 proxy resource, with wind, solar, and thermal resources displacing proxy resources of the



123 same type (like-for-like displacement). The displaced megawatts of the proxy resource  
124 are removed from the portfolio, and the avoided fixed costs determine the QF's capacity  
125 payment.<sup>5</sup> This method uses the capacity expansion results from the most recent IRP,  
126 with minor periodic adjustments such as new fossil fuel and electricity market price  
127 forecasts. Avoided net power costs determine the QF's energy payment.

128 **Q: Do you recommend a specific Program Resource valuation methodology?**

129 A: Yes. I recommend the Company use the PVRR(d) method instead of a modified Schedule  
130 38 avoided cost (PDDRR) method.

131 **Q: Why should the Program Resource(s) be valued using the Present-Value Revenue**  
132 **Requirement Differential method instead of a modified Schedule 38 methodology?**

133 A: Given the nature of Program resources and the statutory goals of the Community Clean  
134 Energy Program (CCEP), the PVRR(d) valuation method is more appropriate. The  
135 Schedule 37/38 avoided cost methodologies allow RMP to offer indicative pricing at  
136 terms satisfying the Public Utility Regulatory Policy Act's (PURPA) "customer  
137 indifference" standard. A QF decides whether the Company's indicative pricing is  
138 satisfactory to cover its costs and necessary return on investment. If it does, the QF and  
139 the Company can move forward with a PPA. This PURPA-based approach to resource

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<sup>5</sup> See, e.g., *Rocky Mountain Power's Presentation for the June 18, 2025 Virtual Technical Conference*, Docket No. 25-035-T03 (filed June 18, 2025) at slide 4 [hereinafter *RMP's Sch. 37 Presentation*].

140 valuation allows for and encourages competition in the generation market up to, but not  
141 beyond, the point at which customers are indifferent in rates.<sup>6</sup>

142 In contrast, the Program is not bound by PURPA; rather, as a large-scale customer choice  
143 program, it is required that only participating customers pay a premium (or accrue  
144 benefits) for a Program resource. So, the CCEP requirements are already structured to  
145 account for additional costs or benefits. Within this construct, the CCEP's goal is to  
146 maximize incremental non-emitting generation given Program cost constraints to advance  
147 the Program's goal of 100% net-renewable energy by 2030. This is an important  
148 distinction and is a major reason for the Agency's solicitation process: the Agency is  
149 seeking to find the most cost-competitive mix of resources to maximize clean resource  
150 additions while maintaining a reasonable rate impact. A QF resource is not subject to  
151 competitive bidding and ratepayers are indifferent to resource development impacts  
152 because QF resources don't impact rates (theoretically).

153 Further, since a Program resource is not a QF, my understanding is that it will not be  
154 designated "must run" in PLEXOS modeling simulations.<sup>7</sup> Unlike QFs in Schedule 37/38  
155 avoided cost pricing,<sup>8</sup> IRP resources and bilaterally negotiated resources are not required  
156 to generate in the model. Treatment of the Program resource as a non-curtable QF in  
157 Schedule 38 valuation would be inconsistent. As a customer-funded resource, the

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<sup>6</sup> There are many interpretations of what constitutes "indifference."

<sup>7</sup> *Direct Testimony and Exhibits of Kevin C. Higgins on behalf of the Community Renewable Energy Agency*, Docket No. 25-035-06 (filed July 18, 2025) at lines 318-321 [hereinafter *Higgins Direct Testimony*].

<sup>8</sup> *Recorded Live Stream of Virtual Technical Conference Held on June 18, 2025*, Docket No. 25-035-T03 (filed June 18, 2025) at approximately 28:30 [hereinafter *Recorded Live Stream Sch 37 Tech Conference*].

158 calculation of net costs for the Program resource should reflect the actual price of the  
159 PPA, not a generic utility avoided cost.

160 My main concern with using the Schedule 38 avoided cost method for Program resource  
161 valuation is that the method leads to extremely volatile results that may not realistically  
162 reflect the system's avoided costs. It is heavily dependent on the timing and technology  
163 of proxy resources in the Company's Preferred Portfolio. These resource selections are in  
164 turn heavily dependent on the Company's modeling methods and inputs, chosen price-  
165 policy scenario, and other choices. Whether a QF (or Program resource) earns a capacity  
166 payment would have an enormous impact on the Program's economics and viability. To  
167 provide an example, in its most recent quarterly filing, the Company's indicative solar  
168 QF pricing under Schedule 38 dropped from roughly \$25 to \$6.<sup>9</sup>

169 In contrast, the PVRR(d) method includes the Program resource primarily to calculate the  
170 system *benefits* of the resource (the costs would be known from the PPA terms). System  
171 benefits would accrue from avoided fuel expense and front office transactions over the  
172 life of the resource, as well as any avoided or delayed fixed costs of proxy resources that  
173 drop out of the portfolio or are delayed after endogenous re-optimization. Compared to  
174 the PDDRR method, PVRR(d) costs are more thorough and depend on the system's  
175 embedded resource mix and forecasted costs that, while impacted by IRP inputs, are  
176 unlikely to change nearly as markedly between published IRPs.

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<sup>9</sup> *Rocky Mountain Power's Quarterly Compliance Filing – 2025.Q2 Avoided Cost Input Changes*, Docket No. 25-035-30 (filed September 30, 2025) at 3, available at [342021RMP2025Q2AvdCstInptChngs9-30-2025.pdf](#).

**Q: Do you have concerns with the Company's 2025 IRP that may impact the method and/or results of Program Resource valuation in this proceeding?**

A: Yes. While the comment period of the 2025 IRP is ongoing, several Utah parties (including WRA) have expressed concerns with the Company's modeling assumptions, results, public input process, and portfolio selection. Specifically related to Program resource valuation, my primary concern is that the Company's bifurcated plan and ad hoc resource additions render the 2025 IRP unusable for this purpose. The Utah Commission has not yet issued an Order on the 2025 IRP, but it is my opinion that use of a bifurcated plan to determine Program resource benefits or costs in this docket is inappropriate. The underlying bifurcated nature of the 2025 IRP Preferred Portfolio renders the Schedule 38 valuation method unsuitable for valuing a Program resource because the timing and location of proxy resources for displacement were hand-selected rather than determined from a system-wide optimized model run. The 2025 IRP requires a significant overhaul, far beyond updating input assumptions.

**Q: Briefly describe your concerns with the 2025 IRP.**

A: While I have concerns with modeling inputs, the public input process, and the Company's portfolio selection, my primary concern with respect to resource valuation is the Company's new, bifurcated jurisdictional integration method.<sup>10</sup>

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<sup>10</sup> For more detail on these concerns, see *Initial Comments of Western Resource Advocates*, Docket No. 25-035-22 (filed September 25, 2025).

195 A significant change introduced in the 2025 IRP was how the Company modeled and  
196 integrated three separate “Full Jurisdictional Portfolios” and imposed artificial siting and  
197 transfer limits to plan for a bifurcated, east-west system instead of an optimized single  
198 system. Just before the Final 2025 IRP was filed, the Company signaled that resources  
199 necessary to meet the resource adequacy and environmental compliance requirements of  
200 Oregon and Washington were constrained to being physically located on the west side of  
201 the system while Utah, Idaho, Wyoming, and California (UIWC) resources for resource  
202 adequacy were physically limited to the east side of the system, and **thermal units were**  
203 **reallocated to UIWC according to the policies of Oregon and Washington.**<sup>11</sup> To  
204 address the resulting compliance shortages, PacifiCorp hand-selected proxy resources in  
205 an ad hoc manner, such that there is little connection between the three system-optimized  
206 “Full Jurisdictional” portfolio runs and the final Preferred Portfolio. Altogether, the  
207 Company’s choices were a deliberate departure from the dynamically-allocated, single-  
208 system planning that is designed to be least cost and least risk and is well-documented as  
209 the desired allocation and modeling approach from the Utah Commission.<sup>12</sup>

210 The “UIWC Full Jurisdictional Portfolio” *may* be more indicative of PacifiCorp’s system  
211 needs than the bifurcated Preferred Portfolio, but whether it satisfied system resource  
212 adequacy requirements is indeterminable. The three Full Jurisdictional Portfolios (UIWC,  
213 OR, WA), despite being system-optimized runs, were modeled with Western Resource  
214 Adequacy Program (WRAP) compliance requirements to satisfy only a single

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<sup>11</sup> See *id.* at 13.

<sup>12</sup> See *id.* at 18-22, especially n.53.

jurisdiction's load plus planning reserve margin (PRM), as opposed to the PRM of the entire system.<sup>13</sup>

Additionally, in previous IRPs, the Company has modeled a proxy CO<sub>2</sub> price to capture the effect of policies that incent reduced emissions. In a departure from recent IRPs, for the 2025 IRP, the Company chose a medium fossil fuel price and no CO<sub>2</sub> price-policy scenario (MN price-policy scenario). This modeling decision reduces the value of non-emitting resources (like wind and solar) relative to emitting resources (like coal or natural gas). The decision runs counter to the Company's frequent use of expected price-policy scenarios to justify its own resource procurements. As recently as the Company's 2024 general rate case (GRC), Company witness Rick T. Link testified, "The Company's price-policy scenarios include varying levels of assumed CO<sub>2</sub> costs to reflect the fact **it is more likely than not that some policy will exist that will drive reduced emissions over the life of the Transmission Projects.**"<sup>14</sup> As demonstrated in Mr. Link's 2024 GRC testimony, there is precedent for the Company to choose a price-policy scenario that represents the *most likely conditions* over the planning period or more specifically, *over the life of a resource*. Mr. Link testified further that "the LN [low fossil fuel prices/no CO<sub>2</sub> price] and MN [medium fossil fuel price/no CO<sub>2</sub> price] scenarios **unrealistically fail to account for the risk that there will be some form of policy action taken to impute a cost or penalty on greenhouse gas emissions over the planning period.**"<sup>15</sup> Notably, this statement was used as justification to *ignore* the PVRR(d) results under the LN and

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<sup>13</sup> *Id.* at 40.

<sup>14</sup> *Direct Testimony and Exhibits of Rick T. Link for Rocky Mountain Power*, Docket 24-035-04 (filed June 28, 2024) at lines 404-409 (emphasis added).

<sup>15</sup> *Id.* at lines 579-581.

235 MN scenarios (these scenarios eroded the system benefits of the transmission resources  
236 being modeled). The Company's decision to pick a 2025 IRP Preferred Portfolio  
237 optimized under the MN scenario (medium fossil fuel price/no CO<sub>2</sub> price) is questionable  
238 considering the 21-year planning horizon of the 2025 IRP. I find the preference given to  
239 the MN scenario in the 2025 IRP and in this docket to be misguided.<sup>16</sup> A resource that  
240 provides significant benefits under other price-policy scenarios is expected to provide  
241 reliable, long-term benefits over the life of the contract or resource.

242 The Company made a late-breaking and unilateral decision to significantly reduce its  
243 2025 IRP load forecast relative to the 2025 Draft IRP and the 2023 IRP Update. Again, in  
244 a departure from recent IRPs, the Company altered its treatment of large commercial  
245 (data center) loads by declaring these loads "outside of the traditional IRP planning  
246 process."<sup>17</sup> Removal of these loads was indiscriminate with respect to customer size,  
247 likelihood of coming online, and other important factors. The result of this decision was a  
248 reduction in proxy renewables and storage selected in the Final IRP and allocated to the  
249 UIWC jurisdiction.<sup>18</sup> As stated in WRA's IRP comments, the planning decision to  
250 remove large loads essentially provides a bookend scenario of what resources constitute  
251 an *underbuilt* Preferred Portfolio; if the Company connects even a single, incremental  
252 large commercial customer, all else equal, the system would be either resource

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<sup>16</sup> Mr. MacNeil explains that "the Company would not pursue resources that were not cost-effective under the MN scenario. As a result, the MN results should receive the highest weighting." *MacNeil Direct Testimony*, supra note 4, at lines 286-288.

<sup>17</sup> PacifiCorp, 2025 IRP Public Input Meeting (January 22-23, 2025), at slide 17, [https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/integrated-resource-plan/2025-irp/January\\_22-23\\_2025\\_IRP\\_Public\\_Input\\_Meeting.pdf](https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/integrated-resource-plan/2025-irp/January_22-23_2025_IRP_Public_Input_Meeting.pdf).

<sup>18</sup> Significant additions of wind and short duration battery storage were selected for UIWC in the Draft 2025 IRP but were delayed and/or decreased in the 2025 Final IRP.

insufficient or over-reliant on volatile market products. The Company's treatment of these loads was overly heavy-handed. Even Utah's SB 132 (2025), which allows non-utility generation for large loads if PacifiCorp is unable to provide service, applies specifically to customer requests greater than 100 MW.<sup>19</sup> The Company's "2026 Protocol" addresses new loads greater than 50 MW.<sup>20</sup> It's hard to believe that the challenge of serving a 1 MW load versus a 1,000 MW data center load request is equal, yet these two hypothetical requests both fall under the Company's blanket exclusion of large loads in the 2025 IRP.

Finally, the Company selected a suboptimal Preferred Portfolio (the Integrated Base MN Portfolio) based on the novel and speculative calculation of "end effects." Several portfolios outperformed the Preferred Portfolio on the established metrics of cost, stochastic risk, and environmental risk, but were ignored due to "end effects." This decision was not vetted with stakeholders and gave undue weight to highly uncertain modeling results outside of the planning horizon. Even in this proceeding, when discussing the valuation of a Program resource beyond the modeling horizon, the Company stated that extrapolating conditions from the last year of a planning horizon may "represent a transient condition...rather than something that is emblematic of all future years."<sup>21</sup>

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<sup>19</sup> See S.B. 132, 66<sup>th</sup> Gen. Assem., Reg. Sess. (Ut. 2025), <https://le.utah.gov/~2025/bills/static/SB0132.html>.

<sup>20</sup> *In the Matter of the Application of Rocky Mountain Power for Approval of the 2026 Inter-Jurisdictional Cost Allocation Protocol*, Docket No. 25-035-47.

<sup>21</sup> WRA Exhibit\_\_ (KB-2), Selected Data Request Responses from Docket No. 25-035-06, specifically RMP Response to OCS Data Request 2.9.



For these reasons, the 2025 IRP is unsuitable to use for Program Resource valuation using a Schedule 38 avoided cost method, where avoided costs vary greatly based on resource timing and location.

**Q: Given these concerns with the IRP, what is your conclusion about the usefulness of the 2025 IRP for valuing a Program Resource?**

A: My conclusion is that the 2025 IRP does not comply with the Commission's Guidelines and misidentifies *system* resource needs based on artificial locational constraints and is uninformative in its current form for a reliable determination of Program resource costs or benefits over the life of the resource. Handpicked resource additions and fabricated siting and transmission constraints compromise the key IRP outputs, most critically the location and timing of proxy resource needs. The validity of these outputs is foundational to technology-specific displacement of proxy resources, as in the PDDRR resource valuation method proposed by the Company; thus, a bifurcated plan should not be used.

**Q: If the Commission approves the Company's proposal to use the Schedule 38 method, do you have any recommendations?**

A: Yes. Because the avoided cost method is so dependent on the timing and location of proxy resources selected in the IRP, I would simply reiterate the importance of system planning over bifurcated planning. If the Schedule 38 method is approved, I recommend that the Company use an updated resource portfolio that accounts for *system* needs and resource adequacy requirements in addition to updated inputs like load forecast, resource costs, and tax credit developments.

292 **Q: If the 2025 IRP is unsuitable for use in an avoided cost context, is it usable for a**  
293 **PVRR(d) comparison?**

294 A: The 2025 IRP Preferred Portfolio is not usable for a PVRR(d) comparison due to its  
295 bifurcated nature, but the Company could use its resource planning tool (PLEXOS), as  
296 informed by the 2025 IRP process, with updates, to simulate the Company's system with  
297 and without Program resources ("with-and-without" PVRR(d) analysis). I recommend the  
298 Company use the PLEXOS model to run with and without PVRR(d) analysis for the  
299 entire system using bids from the Agency's resource solicitation to evaluate resource  
300 value.

301 **Q: Did the Company state why it prefers the PDDRR method over the PVRR(d)**  
302 **method?**

303 A: The Company indicated that it intends to use the best available portfolio information as  
304 part of the Schedule 100 resource valuation (i.e. update the Preferred Portfolio with  
305 known changes) but believes that endogenous re-optimization of the portfolio with the  
306 Schedule 100 resource may not be precise enough given the "relatively small change" to  
307 the Company's portfolio.<sup>22</sup> I find this argument unconvincing for two reasons. First,  
308 PLEXOS is run at the hourly level of granularity. I see no reason why the precision of the  
309 model is incapable of accurately calculating benefits of, say, a 120 MW resource, yet the  
310 same model can presumably inform the value of smaller contracted resources, such as  
311 four new 80 MW battery storage projects (Enterprise, Escalante, Granite Mountain, Iron

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<sup>22</sup> MacNeil Direct Testimony, *supra* note 4, at lines 364-370.

Springs) or Hornshadow I Solar (100 MW).<sup>23</sup> If the model is precise enough to justify Company resources, it should be precise enough for a Program resource.

Finally, the ultimate size of the change to the portfolio is unestablished. The size of the resource is ultimately dependent on the terms of bids received in the Agency's solicitation, as well as the resolution of all other outstanding issues in this docket that may impact the Program rate. For a concrete example, one must look no further than the discrepancy in Program resource size proposals between the Company (120 MW) and the Agency (600 MW). Surely a resource between 120 MW and 600 MW would not be considered small. When considering that the potential Program load of participating communities represents *more than half of Utah load*, the ultimate system impact of Program resources could be large.<sup>24</sup>

#### IV. REC VALUATION

**Q: Why should the Company not retain the RECs associated with a Program Resource?**

A: With respect to RECs, I echo the position of Agency witness Mr. Kevin Higgins in opposing the Company's proposal. Put simply, the Company proposes that the Program *purchase*, from non-participating customers, RECs associated with resources the Program itself acquires on behalf of participants. This is a nonsense proposal based on tenuous

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<sup>23</sup> Or any of the Company's fourteen owned wind projects under 120 MW. *See* PacifiCorp's 2025 IRP Volume I at Chapter 6.

<sup>24</sup> RMP's Response to WRA Data Request 1.15 shows that on an energy basis load in participating communities has averaged roughly 52% over the past five years. WRA Exhibit\_\_ (KB-2), Selected Data Request Responses from Docket No. 25-035-06.

assumptions: that a Program resource will displace an IRP proxy resource that the Company would otherwise acquire; that the Company will necessarily be entitled to the RECs associated with that resource, even if it is a power purchase agreement; and that PacifiCorp will be able to monetize the RECs on behalf of customers at a specific value forecast years before (but not included in resource planning).

Agency witness Mr. Higgins points to flaws in the Company's proposal.<sup>25</sup> First, to paraphrase Mr. Higgins, if recent changes to PTCs are incorporated, it is an open question as to whether a Program resource will displace a resource of the same technology. A Program resource is an *incremental* resource funded by Program revenues from participating customers with an interest in being served by non-emitting generation. The acquisition of a Program resource need not adhere to the PURPA customer indifference standard of a Schedule 37 or Schedule 38 Qualifying Facility, nor does it displace a system resource in the near term. RECs should remain with the customers paying for the incremental costs of the resource, as it would not have been built by the Company but for the Program.

Second, allowing the Company to retain the RECs associated with the Program resource applies REC monetization benefits inconsistently across the resource planning and Program resource valuation venues. The Company does not incorporate a specific dollar value for RECs in IRP modeling and there is no assumed value for RECs relevant to Utah customers.<sup>26</sup> If RECs were valued in resource planning, the Company may have a better

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<sup>25</sup> For a discussion of RECs, see *Higgins Direct Testimony*, *supra* note 9, at lines 407-438.

<sup>26</sup> Exhibit WRA\_\_\_(KB-3), RMP's Response to WRA Data Request 2.14 in Docket No. 25-035-T03.

claim to retaining RECs. In this hypothetical, however, more renewables would have been selected by the model in the first place, making deferral of a planned system resource more likely.

The Company has no basis for claiming with any degree of certainty that Program resources will deprive non-participating customers of future REC revenues, let alone guess a price for such lost revenue years in advance. Hypothetical lost REC revenues are too uncertain to quantify in resource planning and therefore too uncertain to quantify here.

While it is not my preferred option, I also agree with Mr. Higgins that if the Commission finds that customers participating in the Program resource are obligated to compensate the Company for RECs, the Program should have the option of not retiring RECs on behalf of the Program and instead turn them over to the system, thereby eliminating the “lost value of RECs.”<sup>27</sup>

## **V. RECOMMENDATIONS**

**Q: Please summarize your recommendations.**

**A:** I recommend the following:

- The Commission should find that the PVRR(d) valuation method is more appropriate for Program resource valuation than the avoided costs (PDDRR) method.
- The Commission should direct the Company to use PLEXOS for system-optimized analysis as opposed to analysis based on bifurcated planning.

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<sup>27</sup> See Higgins Direct Testimony, *supra* note 9, at lines 443-462.

371                   • The Commission should reject the Company's proposal to charge participating  
372 customers for hypothetical, uncertain, and unquantifiable lost value of RECs.

373   **Q:   Does this conclude your testimony?**

374   **A:   Yes.**

I have read this filing and believe that it is supported in fact and in law.

Respectfully submitted,

WESTERN RESOURCE ADVOCATES

A handwritten signature in black ink, appearing to read 'SH', is written over a horizontal line.

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