**BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

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| **In the Matter of the Voluntary Request of Rocky Mountain Power for Approval of Resource Decision to Repower Wind Facilities** | **)<br>)<br>)<br>)<br>)<br>)<br>)<br>)<br>)<br>)** | **DOCKET NO. 17-035-39**<br>**Exhibit No. DPU 4.0 RESP**<br>**Response Testimony of**<br>**Charles E. Peterson** |

**THE DIVISION OF PUBLIC UTILITIES**
**DEPARTMENT OF COMMERCE**
**STATE OF UTAH**

**Response Testimony of**

**Charles E. Peterson**

**April 2, 2018**

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# Response Testimony of Charles E. Peterson

## I. INTRODUCTION

**Q. Please state your name, business address and title.**

A. My name is Charles E. Peterson. My business address is 160 East 300 South, Salt Lake City, Utah 84114. I am a Technical Consultant in the Utah Division of Public Utilities (Division or DPU).

**Q. On whose behalf are you testifying?**

A. The Division.

**Q. Did you previously file testimony in this docket?**

A. Yes. I have previously filed direct and surrebuttal testimony in this docket.

**Q. Is there anything that has been filed by the Company or intervening parties, or information from any other source, that causes you to change your conclusions and recommendations from your direct and surrebuttal testimony?**

A. No. My conclusions and recommendations are substantially the same as before.

**Q. What is the purpose of your response testimony?**

A. I provide brief updates to my direct testimony filed on September 20, 2017 in response to PacifiCorp's (Company) supplemental direct testimony filing on February 1, 2018. First I will update my evaluation, pursuant to UCA § 54-17-402(3)(b)(v), of the financial impacts of PacifiCorp's proposed wind repowering, which is part of the Company's "Energy Vision 2020" program. Next, I will comment on the status of the operating equipment to be removed from service as part of the repowering proposal (legacy equipment) and its continuing effect on the principle of intergenerational equity. I do not address whether or not the Commission should approve the Company's application. [1]

## II. FINANCIAL ANALYSIS

**Q. Please outline the analyses that you have performed to evaluate the Company's financial capacity to do the wind repowering projects that are expected to cost over $1.1 billion.**

A. In my direct testimony I outlined the approach I took to confirm that the Company probably would be able to undertake the wind repowering projects without significant risk to the Company's financial health. One of the underlying assumptions was that the Company would have access to the debt markets at costs (i.e. interest rates) that are similar to the Company's current borrowing rates. My overall conclusion was that the Company could finance the wind repowering projects without impairing its financial capacity, but that it would likely need to

[1] Dr. Zenger summarizes the Division's recommended rejection of the Application in her testimony.

reduce the dividend payouts to its parent company for two or three years, or, alternatively have the parent company make additional equity contributions that would keep the Company's capital structure roughly at 50 percent common equity and 50 percent debt.

**Q. Has anything changed between September 2017 and approximately March 31, 2018 that would alter your analysis?**

A. Three things have changed that would alter the analysis somewhat, but would not change the overall conclusion. One change is it now appears that borrowing costs to the Company likely will be higher than was originally assumed. The second change is that the Company's 2017 SEC Form 10-K indicated somewhat lower revenues and, consequently, profitability than I was forecasting for 2017. The third factor is the change in the federal income tax rate. This change will affect the Company's cash flows going forward by reducing deferred income taxes. This will require the Company to increase the use of outside debt or retain more equity to fund growth projects, which will ultimately put upward pressure on prices paid by ratepayers. How the near-term effects of the change in the federal income tax rates will play out in the regulatory arena are under discussion in Utah in Docket No. 17-035-69.

These three factors will, in my view, reduce slightly the Company's financial ability to fund these projects, but at this point, I do not believe they will substantially reduce the capacity to fund the projects, especially if its parent company keeps the Company's equity capital structure at about 50 percent as expected.

**Q. What is your conclusion?**

A. I continue to believe that it is likely well within the Company's financial capacity to construct the repowering projects.

## III. UPDATE ON USED AND USEFUL AND INTERGENERATIONAL EQUITY.

**Q. Please summarize your direct testimony regarding the used and useful issue?**

A. The Company is proposing to leave the net balances of the legacy equipment in rates even though it will no longer be "used and useful." To the extent the Company recovers any salvage value from the equipment, that value will be credited to the remaining balance of the equipment. The Company has stated that keeping the legacy equipment in rates is a requirement for the Company to continue to pursue the repowering projects.[2]

In my direct testimony I concluded that if the Commission determines the legacy equipment removal is an extraordinary retirement due to economic obsolescence, then it is an acceptable regulatory procedure to allow the Company recovery of that equipment.

[2] Direct Testimony of Jeffrey K. Larsen, page 17, lines 366-368. Mr. Larsen's direct and surrebuttal testimonies were subsequently adopted by Company witness Joelle R. Steward. (See Supplemental Direct Testimony of Joelle R. Steward, February 2018, page 2, lines 22-24).

**Q. You subsequently argued that while in principle recovery of the legacy equipment could be allowed, the Company's proposal created an intergenerational equity issue. Please summarize what that issue is.**

A. The Company is proposing to amortize the remaining balance of the legacy equipment at the time it is removed from service over the next 30 years. Since the reason given for the repowering projects is the ability to receive production tax credits (PTCs) on the new equipment for 10 years, it means that beyond a certain date, new ratepayers will continue to pay the Company a return of and a return on the legacy equipment from which they will have received no benefit, neither from actual production of electricity nor from the PTCs that the removal of the legacy equipment facilitated. These future ratepayers could continue to pay for the legacy equipment for more than 20 years. This is unfair and should not occur.

**Q. Have your conclusions regarding the legacy equipment changed since your direct testimony?**

A. No. However, the Company has updated some of the numbers that have a small effect on my previous analysis. DPU Exhibit 4.1 RESP sets forth the updated numbers. The amortization figures for the legacy equipment are the same as in my direct testimony. The Division verified that these have not changed. The PTCs are somewhat lower as set forth in Company witness Ms. Joelle R. Steward's supplemental direct testimony. The other change that does affect the calculations is the change in the discount rate. Based on changes in the federal income tax rate, the Company's estimated tax-adjusted authorized weighted average cost of capital increases from 6.57 percent to 6.91 percent. This has the overall effect of increasing slightly the present value of the difference between amortizing the legacy equipment over 10 years instead of the Company's proposed 30 years. The difference, however, remains approximately $200 million.

**Q. What is your understanding of the regulatory treatment of equipment subject to extraordinary retirement and economic obsolescence?**

A. As I concluded in my Direct Testimony, utilities have generally been allowed recovery of such equipment. However, the time periods have been relatively short in the range of 3 to 5 years. The Company's request to continue to recover and earn on such equipment over 30 years is unprecedented. However, I have suggested that in order to minimize the intergenerational equity issue that the amortization period be reduced to match the availability of PTCs, or over about 10 years.

As set forth in the testimonies of other Division witnesses, the Division questions whether the removal of the current wind plant constitutes such an allowable extraordinary retirement due to economic obsolescence.

**Q. Do you have any recommendations to the Commission regarding the intergenerational equity issue?**

A. I continue to recommend that the Commission should at least be aware of and consider the intergenerational equity issue as it deliberates whether or not to approve the wind repowering proposals of the Company, since it is a clear detriment to future ratepayers. Any mitigation of the intergenerational equity issue will likely result in the overall reduction of net benefits to ratepayers today.

## V. CONCLUSIONS AND RECOMMENDATIONS

**Q. Overall, what are your conclusions and recommendations to the Commission?**

A. My conclusions and recommendations have not changed from my direct and surrebuttal testimony:

- The Company has the financial capacity to engage in the proposed repowering project. Therefore, the repowering proposal should not be denied based upon financial impacts to the Company.
- The "used and useful" issue has been subject to various regulatory treatments in different jurisdictions, including total disallowance. However, if there appears to be potential net benefits to ratepayers in the Company's proposal, the Commission might allow recovery of the legacy equipment, if the Commission finds that those net benefits are likely and approves the project. In order to guard against economic benefits not materializing, the Commission might wish to limit that recovery in some fashion as a ratepayer protection.
- The Commission needs to be aware of and consider in its deliberations the intergenerational equity issue that is created by the legacy equipment. If the

Commission determines to resolve or mitigate the issue, then the net present value of the repowering proposal will be diminished.

**Q. Does that conclude your testimony?**

A. Yes.

## DPU Exhibit 4.1 RESP, Analysis of Intergeneration Cost/Benefit Transfer

# Analysis of Intergeneration Cost/Benefit Transfer

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| | **Year** | **Production Tax Credits Per Company Witness Steward** | **Present Value of Future PTCs at Given Year** | **Legacy Equipment Amortization over Company's Assumed 30 Years** | **Present Value of Future Amortization of Legacy Equipment at Given Year** | **Difference of Present Value of Future PTCs less Future Amortizaton of Legacy Equipment** | **Legacy Equipment Amortization over Assumed 10 Years to Approximately Match PTC Benefits** |
| 1 | 2019 | $ 25,725,414 | $ 832,837,907 | $ (25,672,658) | $ (321,474,579) | $ 511,363,327 | $ (38,508,986) |
| 2 | 2020 | 100,819,440 | $ 864,661,592 | (25,672,658) | $ (318,015,815) | $ 546,645,777 | (77,017,973) |
| 3 | 2021 | 119,919,257 | $ 823,590,268 | (25,672,658) | $ (314,318,051) | $ 509,272,217 | (77,017,973) |
| 4 | 2022 | 119,919,257 | $ 760,581,098 | (25,672,658) | $ (310,364,770) | $ 450,216,328 | (77,017,973) |
| 5 | 2023 | 124,531,536 | $ 693,217,995 | (25,672,658) | $ (306,138,319) | $ 387,079,677 | (77,017,973) |
| 6 | 2024 | 124,531,536 | $ 616,587,823 | (25,672,658) | $ (301,619,819) | $ 314,968,004 | (77,017,973) |
| 7 | 2025 | 129,143,815 | $ 534,662,505 | (25,672,658) | $ (296,789,091) | $ 237,873,415 | (77,017,973) |
| 8 | 2026 | 129,143,815 | $ 442,463,870 | (25,672,658) | $ (291,624,559) | $ 150,839,310 | (77,017,973) |
| 9 | 2027 | 133,756,094 | $ 343,894,308 | (25,672,658) | $ (286,103,159) | $ 57,791,149 | (77,017,973) |
| 10 | 2028 | 133,756,094 | $ 233,901,311 | (25,672,658) | $ (280,200,230) | $ (46,298,919) | (77,017,973) |
| 11 | 2029 | 107,541,236 | $ 116,307,797 | (25,672,658) | $ (273,889,408) | $ (157,581,611) | (38,508,986) |
| 12 | 2030 | 17,964,547 | $ 16,803,430 | (25,672,658) | $ (267,142,509) | $ (250,339,079) | 0 |
| 13 | 2031 | 0 | 0 | (25,672,658) | $ (259,929,398) | $ (259,929,398) | 0 |
| 14 | 2032 | 0 | 0 | (25,672,658) | $ (252,217,862) | $ (252,217,862) | 0 |
| 15 | 2033 | 0 | 0 | (25,672,658) | $ (243,973,459) | $ (243,973,459) | 0 |
| 16 | 2034 | 0 | 0 | (25,672,658) | $ (235,159,368) | $ (235,159,368) | 0 |
| 17 | 2035 | 0 | 0 | (25,672,658) | $ (225,736,222) | $ (225,736,222) | 0 |
| 18 | 2036 | 0 | 0 | (25,672,658) | $ (215,661,938) | $ (215,661,938) | 0 |
| 19 | 2037 | 0 | 0 | (25,672,658) | $ (204,891,520) | $ (204,891,520) | 0 |
| 20 | 2038 | 0 | 0 | (25,672,658) | $ (193,376,867) | $ (193,376,867) | 0 |
| 21 | 2039 | 0 | 0 | (25,672,658) | $ (181,066,551) | $ (181,066,551) | 0 |
| 22 | 2040 | 0 | 0 | (25,672,658) | $ (167,905,592) | $ (167,905,592) | 0 |
| 23 | 2041 | 0 | 0 | (25,672,658) | $ (153,835,211) | $ (153,835,211) | 0 |
| 24 | 2042 | 0 | 0 | (25,672,658) | $ (138,792,566) | $ (138,792,566) | 0 |
| 25 | 2043 | 0 | 0 | (25,672,658) | $ (122,710,475) | $ (122,710,475) | 0 |
| 26 | 2044 | 0 | 0 | (25,672,658) | $ (105,517,111) | $ (105,517,111) | 0 |
| 27 | 2045 | 0 | 0 | (25,672,658) | $ (87,135,686) | $ (87,135,686) | 0 |
| 28 | 2046 | 0 | 0 | (25,672,658) | $ (67,484,105) | $ (67,484,105) | 0 |
| 29 | 2047 | 0 | 0 | (25,672,658) | $ (46,474,599) | $ (46,474,599) | 0 |
| 30 | 2048 | 0 | 0 | (25,672,658) | $ (24,013,336) | $ (24,013,336) | 0 |
| **Total** | | **$ 1,266,752,041** | | **$ (770,179,726)** | | | **$ (770,179,726)** |
| **NPV** | | **$ 832,837,907** | | **$ (321,474,579)** | | | **$ (525,645,122)** |

**Change in the Net Present Value of Legacy Equipment amortization by going from 30 years to 10 years: $ (204,170,543)**

Discount rate 6.91%

Sources: 1. The PTC values were obtained from Joelle R. Steward exhibits supporting her direct testimony and can be found in the Company Excel workbook entitled Joelle R. Steward Workpapaers 2-01-2018, tab 'NPC and Cost Rollup'.

2 The depreciation values were obtained from an excel spreadsheet prepared by the Company and submitted in response to DPU data request 22.1 in the 17-035-039 docket. Net book value of the equipment to be retired was calculated by the Company to be $770,179,726 at the date of repower.

3 The discount rate is the same used by the Company as set forth in the Supplemental Direct Testimony of Rick Link, page 9, lines 153-154.