BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,	)	DOCKETS UE-170033 and UG-170034 (Consolidated)
Complainant,	)	
v.	)	
PUGET SOUND ENERGY	)	
Respondent.	)	

CROSS ANSWERING TESTIMONY OF BRADLEY G. MULLINS
ON BEHALF OF THE INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES
AND THE NORTHWEST INDUSTRIAL GAS USERS

August 9, 2017

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TO THE CROSS-ANSWERING TESTIMONY OF BRAD MULLINS

EXHIBIT LIST

I. INTRODUCTION AND SUMMARY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Brad Mullins. My business address is 333 SW Taylor Street, Suite 400, Portland, Oregon 97204.

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS MATTER?

A. Yes. I previously filed responsive testimony in this matter—the 2017 General Rate Case of Puget Sound Energy ("PSE" or the "Company") – on behalf of the Industrial Customers of Northwest Utilities ("ICNU") and the Northwest Industrial Gas Users ("NWIGU") on issues regarding revenue requirement.

Q. WHAT IS THE PURPOSE OF YOUR CROSS-ANSWERING TESTIMONY?

A. The purpose of this testimony is to respond to the Response Testimony of other parties and update my revenue requirement calculations for gas and electric services. All Sections of my Cross-Answering Testimony apply to ICNU and only Sections I and III apply to NWIGU.

Q. WHAT IS THE UPDATED LEVEL OF REVENUE REQUIREMENT YOU PROPOSE IN THIS MATTER?

A. Based on my review of the testimony of other parties, I recommend base rate revenue requirement increases of $7.6 million for electric services and $2.1 million for gas services. Detail supporting these amounts are presented in Exhibit BGM-13 and Exhibit BGM-14 for electric services and gas services, respectively. The adjustment numbers used in those exhibits, as well as throughout this testimony, correspond to the adjustment numbers referenced in the Company's Direct Testimony.

Q. PLEASE SUMMARIZE THE CHANGES MADE RELATIVE TO YOUR RESPONSE TESTIMONY.

A. First, I updated the starting point of my recommendation to be based on the Company's Supplemental Direct Testimony filed on April 3, 2017. In addition, I made the following changes, based on my review of Response Testimony other parties submitted:

- Based on my review of the testimony and the recommendation of Mr. Hancock and Mr. McGuire on behalf of Staff as well as updated information on the level of production tax credit regulatory liability balances, I propose that, as an alternative to the recommendations made in my Response Testimony, the Commission use $177.0 million of the regulatory liability balances associated with production tax credits to offset the entirety of the end of life costs for Colstrip Units 1 and 2, including the Company's undepreciated investment.
- I support the recommendation of Ms. O'Connell to remove certain environmental remediation expenses from the environmental remediation deferral balance for gas services.
- I support the recommendation of Mr. Gomez regarding the capacity factors for wind resources.
- I support the recommendation of Ms. Cheesman related to rate case costs.
- I support the recommendation of Mr. Wright regarding the White River Regulatory asset.

II. COLSTRIP UNITS 1 AND 2

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS REGARDING THE END OF LIFE COSTS FOR COLSTRIP UNITS 1 AND 2.

A. Rather than accelerating depreciation for Colstrip Units 1 and 2 so that all depreciation expenses are recovered by 2022, as the Company has proposed, I recommended maintaining the existing depreciation accrual and transferring the unrecovered investment balance to a regulatory asset that earns interest at the Company's cost of debt. The regulatory asset would be recovered over a 12-year period ending in 2030. With respect to decommissioning and remediation costs, I recommended that the Commission not use regulatory liability accounts for treasury grants and production tax credits to offset these costs primarily on the basis that the Company expects to return much of these liabilities to customers within the next few years, whereas using these liabilities to fund decommissioning and remediation costs would result in the Company retaining these liabilities for many more years, up to 2051. To maintain rate stability, I proposed that the Company prospectively amortize its production tax credit balances over the four-and-one-half-year period until July 2022.

Q. WHAT WAS STAFF'S POSITION WITH RESPECT TO THE END OF LIFE TREATMENT FOR COLSTRIP UNITS 1 AND 2?

A. Both Mr. McGuire and Mr. Hancock testified on behalf of Staff regarding the end of life ratemaking treatment for Colstrip Units 1 and 2. Mr. McGuire testified to the appropriate methodology to allow the Company to recoup its undepreciated investment upon retiring the units early, whereas Mr. Hancock testified about the method for providing the Company with recovery for decommissioning, removal and remediation expenses.

Mr. McGuire's testimony outlines a framework to evaluate the plant balances at Colstrip Units 1 and 2 based on a theoretical reserve balance, the hypothetical depreciation reserve if the Company had perfectly foreseen the early retirement date. Based on this concept, he recommends a $1.4 million increase to depreciation expense and the transfer of $127.6 million of undepreciated plant balances to a regulatory asset that is amortized over an 18-year period.[1/] This regulatory asset would not earn interest. In contrast, my proposal was to maintain the existing depreciation accrual and transfer

1/ Exh. No. CRM-1T at 17:4-18:4.

$130.3 million of plant balances to the end-of-life account, subject to a 12-year amortization.

Mr. Hancock describes the nature of the Company's decommissioning and remediation expenditures, which are expected to be incurred over a long period of time (through 2051). He proposes to use the regulatory liability balances associated with Treasury Grants to develop a sinking fund, which may be used to fund future decommissioning and remediation expenditures.[2/]

Q. HOW DO YOU RESPOND TO MR. MCGUIRE'S ANALYSIS OF THE COMPANY'S UNDEPRECIATED INVESTMENT?

A. While we made slightly different recommendations, the principles underlying Mr. McGuire's testimony are largely aligned with mine. Similar to my testimony, Mr. McGuire did not support the use of accelerated depreciation to provide the Company with a full return of the remaining capital invested in Colstrip Units 1 and 2. His reasoning is primarily based on intergenerational equity—customers should pay for assets at a level that roughly corresponds to their use of those assets.

Mr. McGuire's analysis, however, views the Company's unrecovered investment in a somewhat different manner than I do. Mr. McGuire calculates the unrecovered investment based on an analysis of the loss in service value of the facility, whereas my analysis calculates the unrecovered investment based on the plant balances expected at the time of retirement if the existing depreciation accrual is maintained. In addition, Mr. McGuire also proposes a modest increase in depreciation expenses for the remaining life of Colstrip Units 1 and 2, whereas my analysis kept the existing depreciation accrual.

2/ Exh. No CSH-1CT at 17:4-18:7.

Finally, Mr. McGuire proposes to account for the end of life costs through base rates, rather than through a separate surcharge.

Q. DID STAFF ADDRESS DEFERRED TAX IMPACTS?

A. No. In my analysis, I transferred the deferred income taxes expected to remain on the Company's books at the time of retirement to the regulatory asset account. Since this asset continues to be amortized over time, deferred taxes will remain on the Company's books throughout the life of the regulatory asset, until the investment has been fully written off. Accordingly, I accounted for the deferred tax impacts as an addition to the regulatory account that occurs gradually over the life of the account. This initially results in an approximate $28.6 million reduction to the regulatory asset account, which can be noted in Table 1-CA, below, and Exhibit No. BGM-15. Subsequently, the account balance includes annual increases to account for the eventual elimination of the deferred tax balance, as the plant balances are written off.

Q. ARE THERE MANY WAYS IN WHICH THE COMMISSION MIGHT ACCOUNT FOR THE END OF LIFE COSTS AT COLSTRIP UNITS 1 AND 2?

A. Yes. There are no hard and fast rules for how the end of life of major resources ought to be handled for ratemaking. As such, the Commission should be guided by general principles of ratemaking. These include ensuring that rates are just, fair, reasonable and sufficient; that intergenerational inequity is minimized to the extent possible; and that, when consistent with these principles, stable rates are preferable to rates that fluctuate significantly from year to year.

With these principles in mind, I believe there is merit in the analysis Mr. McGuire performed in developing the depreciation expense for Units 1 and 2 through 2022 and his proposal for the unrecovered investment following these units' retirement. Mr. McGuire's proposal is guided primarily by the principle that customers should pay for the costs of these units that align with their use of these units.

That is not to say, however, that his approach is the only valid approach, nor that it best balances the interests of ratepayers and shareholders with respect to the end of life costs. Mr. McGuire's analysis, for instance, relies on retroactively reviewing what the depreciation expense for Colstrip Units 1 and 2 would have been if PSE had had perfect foresight of its retirement date. While I do not oppose Mr. McGuire's methodology, I continue to support the framework outlined in my Response Testimony, which maintains the existing accrual and establishes the unrecovered investment amount based on the expected plant balance in July 2022.

Q. WHAT IS YOUR POSITION ON STAFF'S PROPOSAL NOT TO ALLOW FOR A RETURN ON THE UNRECOVERED INVESTMENT BALANCE?

A. Based on my review of Mr. McGuire's testimony, the position that the Company should not be provided with a return on the unrecovered investment regulatory asset account balances is reasonable. Mr. McGuire notes that the Company has earned a return on its investment in Units 1 and 2, which has compensated it for the risk of obsolescence.[3/] My Response Testimony recommended that the Company earn a return on the unrecovered investment at the cost of debt, which was based on precedent from other jurisdictions, primarily the treatment of Trojan. Based on the Trojan precedent, the Oregon Public Utility Commission typically allows a return on unrecovered plant balances based on the 5-year treasury bond rate plus 100 basis points. This sort of approach is designed not to

3/ Exh. No. CRM-1T at 33:1-20.

be remunerative, but to compensate only for the time value of money. Washington tends to have stronger "used and useful" requirements than Oregon. Accordingly, based on the totality of evidence in this case, I recommend that in no event should the carrying charge on unrecovered investment balances exceed the 5-year treasury rate plus 100 basis points, as used in Oregon.

As will be discussed below, however, I believe that the regulatory liability balances associated with production tax credits and Treasury Grants should also be considered when evaluating the carrying charge to apply the end of life costs at Colstrip Units 1 and 2. If regulatory liability balances are used to offset the regulatory asset associated with the unrecovered investment in Colstrip Units 1 and 2, including a sinking fund structure for ongoing environmental remediation expenditures, the account will carry liability balance for the majority of its life. Due to the liability balance, applying a higher carrying charge to such an account benefits customers. Accordingly, there are different considerations that need to be taken into account when dealing with a sinking fund structure, rather than the amortization of a regulatory asset balance. Mr. Hancock discussed many of these considerations in Response Testimony.[4/] For purposes of my analysis, I have modeled the sinking fund account using the Company's authorized rate of return. This level of return is appropriate for the reasons discussed in Mr. Hancock's testimony with respect to decommissioning and remediation expenditures, as well as for the unrecovered investment because once the Company is able to use production tax credits, which it projects will occur within the next few years, it should incur interest on

[4/] Exh. No. CSH-1CT at 19:4-23:7.

these production tax credits until it returns them to customers. Placing them in the sinking fund earning interest at the Company's authorized rate of return accomplishes the same treatment. Additionally, in contrast to amounts used to fund decommissioning and remediation expenses, which may remain in the sinking fund for many years and, thus, accumulate significant interest, the Company is likely to be able to offset the unrecovered investment relatively quickly, and perhaps instantly, once this investment is transferred to a regulatory asset following closure of Units 1 and 2.

Q. PLEASE EXPLAIN OTHER PARTIES' PROPOSALS FOR FUNDING THE END OF LIFE COSTS AT COLSTRIP UNITS 1 AND 2.

A. Staff witness Christopher Hancock proposes to fund the Company's decommissioning and remediation costs by applying $63.9 million of the Company's Treasury Grant funds to offset Colstrip costs. This $63.9 million, which is based on estimates of the present value cost of decommissioning and remediation expenditures, which are expected to extend to 2051, would be transferred to a separate interest-bearing account and will no longer offset the Company's rate base, as it currently does. Further, the Company would pay interest into this account at its authorized rate of return so that the balance grows to theoretically cover costs when they arise.[5/] This would allow current ratepayers to cover Colstrip decommissioning and remediation costs, leaving the Company responsible to cover future inflation and contingency reserves. Staff's proposal would increase rate base by $69.6 million and amortization expense by $2.4 million.[6/]

5/ Id. at 17:9-19.
6/ Id. at 18:4-7.

Q. HAS THERE BEEN ANY NEW INFORMATION SINCE YOUR RESPONSE TESTIMONY THAT IMPACTS YOUR RECOMMENDATION?

A. Yes. In my Response Testimony, I noted that the Company's response to ICNU DR 016 identified a regulatory liability balance for production tax credits of $290.8 million. I assumed this was an error, however, because it was far larger than the $197.2 million the Company reported in response to ICNU DR 011. After the Company reviewed my Response Testimony, however, it issued a revised response to ICNU DR 015 indicating that the amount reported in ICNU DR 016 was, in fact, accurate.

In Table 1-CA, below, I've summarized my understanding of the regulatory liability balances as well as the expected end of life costs for Colstrip Units 1 and 2.

TABLE 1-CA
Colstrip 1 and 2 End of Life Costs vs. Regulatory Liability Balances
(Whole Dollars)

	Reg. Asset	Reg. Liability
Colstrip 1 & 2 Unrecovered Investment*	130,255,176	
Colstrip 1 & 2 Allow. for Def. Inc. Taxes*	(28,632,185)	
Decomm. Rmvl. & Remdtn. ($2016)	74,993,954	
Prod. Tax Credits Pre-July 2010 (12/2016)		93,615,823
Prod. Tax Credits Post-July 2010 (12/2016)		197,197,183
Treasury Grants (12/2017)		95,819,884
Total	**176,616,944**	**386,632,890**
Net Balance		**210,015,946**

* As of 7/2022, assuming no change to depreciation accural

As can be noted in the above table, the regulatory liability balances associated with production tax credits and Treasury Grants exceed the end of life costs at Colstrip Units 1 and 2 by approximately $210.0 million. In fact, the 12/31/2016 regulatory liability balance associated with production tax credits is $290.8 million, which is more than sufficient to mitigate all of the end of life costs for Colstrip Units 1 and 2 by a wide margin, including decommissioning and remediation expenditures.

Q. HOW SHOULD THE COMMISSION CONSIDER THESE OFFSETTING AMOUNTS?

A. As the Commission evaluates how the offsetting balances in Table 1-CA will impact rates in the coming years, I recommend that a key consideration be rate stability. Circumstances where rates are increased by a material amount in one year, followed by a dramatic reduction the next year, should be avoided. For example, if the Company's forecast of production tax credit utilization is correct and its rate increase is approved, customers could see an increase to rates in 2018 followed by rate reductions in the coming years as the amounts associated with those balances are returned to customers. Subsequently, when the liability funds are exhausted, ratepayers would be subjected to another offsetting increase.

My proposal in Response Testimony to amortize production tax credits prospectively until July 2022 was an attempt to avoid such large variations in rates, which could occur if the Company passed these credits back to customers as they are used on its tax returns because the Company may be able to use many production tax credits in one year but only a few the next. However, with an additional nearly $93.6 million in production tax credits above what I understood to exist in my Response Testimony, customers could still see a large rate swing if this amount is amortized through July 2022.

Q. DO YOU AGREE WITH STAFF'S PROPOSAL TO USE TREASURY GRANTS TO OFFSET DECOMMISSION AND REMEDIATION EXPENDITURES?

A. I support Mr. Hancock's proposal to establish a sinking fund to cover these costs. However, I believe it is more desirable to transfer a portion of the regulatory liability associated with production tax credits to this fund to offset these amounts rather than Treasury Grants. Treasury Grants are currently being amortized at relatively stable and predictable levels over an extended period of time.[7/] In contrast, the production tax credit regulatory liability is subject to amortization whenever the Company is able to utilize the credits, which is expected to occur sporadically over the next few years. Transferring the production tax credits balances, rather than the Treasury Grant accounts, to the regulatory liability balances will result in avoiding the sporadic amortization pattern and better support the goals of rate stability. Accordingly, I believe the production tax credit regulatory liability balances should be used to offset the end of life costs, first, before considering using the Treasury Grant liability amounts.

Q. DO YOU AGREE THAT THE REGULATORY LIABILITY BALANCES SHOULD APPLY <u>ONLY</u> TO DECOMMISSIONING AND REMEDIATION EXPENDITURES?

A. No. To the extent practicable, I now recommend the Commission use the regulatory liability balances to offset <u>all</u> of the end of life costs at Colstrip Units 1 and 2. Thus, in addition to using the funds to offset decommissioning and remediation expenditures, I recommend the regulatory liability accounts also be used to address the Company's unrecovered investment. In contrast, Staff's proposal only applied regulatory liability amounts to decommissioning and remediation expenditures. My approach, which is

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7/ <u>See</u>, for example, the Staff Workpaper titled "170033-Staff-WP-CSH-Hydro T Grants 14.12" detailed in Exhibit No. BGM-15, will produce greater rate stability over time. Of the $290.8 million regulatory liability balance associated with production tax credits, only approximately $177.0 million is necessary to satisfy all of the end of life costs at Colstrip Units 1 and 2, including the unrecovered investment. This leaves a residual balance of $113.8 million which is still available to be returned to customers.

Q. HOW SHOULD THE RESIDUAL BALANCES BE HANDLED?

A. Similar to the recommendation in my Response Testimony, I continue to recommend that the Commission begin prospectively amortizing the residual balances beginning in the rate year over a 4.5 year period beginning in 2018. This treatment will ensure that the liability amounts due to customers are returned to customers in a timely manner.

Q. DO YOU HAVE ANY OTHER COMMENTS ON COLSTRIP UNITS 1 AND 2?

A. Yes. In my Response Testimony I recommended that Microsoft Corp. be allocated a portion of the remaining unrecovered investment in these units based on the transition charge it agreed to pay in Docket No. UE-161123. I am now withdrawing this recommendation.

III. ENVIRONMENTAL REMEDIATION

Q. HAVE YOU REVIEWED THE TESTIMONY OF MS. O'CONNELL ON BEHALF OF STAFF ON ENVIRONMENTAL REMEDIATION EXPENDITURES?

A. Yes. Staff reached a conclusion similar to the conclusion that I reached with respect to deferred environmental remediation expenditures. Staff reviewed the Commission orders authorizing the environmental remediation deferral mechanism,[8/] and concluded that

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8/ See Exh. No. ECO-1T at 8-9.

insurance receipts are not appropriately excluded from the balance when calculating amortization expense.

Q. IS THERE ANY BASIS FOR THE COMMISSION TO CHANGE ITS POLICY IN THIS MATTER?

A. No. The Company did not explicitly argue for the Commission to change its policy. For that reason, there is no reasonable basis to make any changes to the Commission policy in this matter.

Q. HOW DOES YOUR REVENUE REQUIREMENT ADJUSTMENT COMPARE TO STAFF'S?

A. On the electric side, Staff's adjustment is identical to the adjustment that I calculated. Both Staff and I have recommended a revenue requirement adjustment of approximately $0.6 million, relative to the Company's filing. On the gas side, however, there are some minor differences. Ms. O'Connell proposes to eliminate certain remediation expenditures associated with the Tacoma Tar Pits.[9/] Accordingly, Staff's adjustment produced revenue requirement that was approximately $0.8 million less than the requirement of my adjustment.

Q. DO YOU SUPPORT STAFF'S PROPOSAL TO EXCLUDE THE TACOMA TAR PIT COSTS?

A. Yes. Given the information presented by Staff, the Company should have no expectation of recovery for the amounts Staff identified.

Q. HAVE YOU UPDATED THE IMPACT OF YOUR RECOMMENDATION TO REMOVE THE TACOMA TAR PIT AMOUNTS?

A. Yes. For gas services, I have adopted the adjustment calculations of Staff with respect to environmental remediation expenditures.

[9/] Id. at 10:11-14.

IV. WIND CAPACITY FACTORS

Q. WHAT TESTIMONY DID MR. GOMEZ PROVIDE WITH RESPECT TO THE CAPACITY FACTOR OF WIND RESOURCES REFLECTED IN VARIABLE POWER COSTS?

A. Mr. Gomez noted on behalf of Staff that the Company proposes to reduce the capacity factors of wind resources used to model variable net power costs in this matter.[10/] He notes that this is not the first time that the Company has reduced the capacity factors for wind resources, and that the Company is now assuming, for ratemaking purposes, that the output from these facilities will be materially less than what was originally assumed when the resources were placed into service. Mr. Gomez provided a list of proposed capacity factors, which he proposes to be modeled in the Company's power cost compliance filing at the end of this case.[11/]

Q. DOES ICNU SHARE THE CONCERNS OF STAFF WITH RESPECT TO WIND CAPACITY FACTORS?

A. Yes. When justifying new wind resources, there has been a recurring pattern with many utilities in the Northwest, where the operating attributes experienced from these resources ultimately end up being less favorable than assumed when the prudence of the resource decision was originally evaluated. This is a concern to ICNU because these resource decisions have been made based on faulty assumptions.

Q. WHY IS IT PROBLEMATIC THAT THE CAPACITY FACTORS HAVE CHANGED?

A. There is no way of knowing whether the wind resources identified by Mr. Gomez would have been found to be prudent if considered on the basis of the less favorable capacity

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10/ Exh. No. DCG-1CT at 24:9-33:15.

11/ Id.

factors. It is also possible that a different resource would have scored higher in the Company's selection process. For these reasons, it is important from a ratepayer perspective for a utility to be held accountable for the assumptions that are made with respect to these resources.

Q. HAVE YOU INCORPORATED THIS ADJUSTMENT INTO YOUR ELECTRIC REVENUE REQUIREMENT RECOMMENDATION IN EXHIBIT NO. BGM-13?

A. No. Similar to Mr. Gomez, I recommend the Company make the change in its power cost compliance filing at the end of this proceeding.

V. ELIMINATION OF SCHEDULE 40

Q. WHAT IS STAFF'S PROPOSAL FOR SCHEDULE 40?

A. Staff witness Jason Ball proposes to eliminate Schedule 40 by closing it to new customers and transitioning existing customers to other schedules one year after rates go into effect in this case. Mr. Ball reasons that this schedule only serves 14 customers, is unnecessarily complex, and has rate elements that he considers to be nonsensical. The bill impact of Mr. Ball's proposal on Schedule 40 customers ranges from an approximately 6.5% to an over 28% increase, depending on the customer.[12/]

Q. WHAT IS YOUR RESPONSE TO STAFF'S PROPOSAL?

A. ICNU does not oppose Mr. Ball's recommendation to eliminate Schedule 40 over time. However, given the significant bill impacts for some Schedule 40 customers, I recommend that the Commission provide these customers with at least a two-year grace period, rather than the one year Mr. Ball proposes. Two years will give these customers more time to negotiate special contracts with the Company, if that is warranted, and if

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12/ Exh. No. JLB-1T at 50 (Figure 7).

not, then to prepare for their transition to other rate schedules and adjust their budgets and operations accordingly.

Q. DOES THIS CONCLUDE YOUR CROSS-ANSWERING TESTIMONY?

A. Yes.