

Agenda Date: August 9, 2018
Item Number: E1

Docket: UE-180091
Company: Puget Sound Energy

Staff: Jason Ball, Deputy Assistant Director

Recommendation

Grant the petition by Puget Sound Energy for an exemption from rule concerning coding requirements under WAC 480-80-105(4)(b).

Take No Action thereby allowing the proposed revision to Schedule 85 – Line Extensions and Service Lines to become effective September 1, 2018, by operation of law.

Background

On January 31, 2018, Puget Sound Energy (PSE or company) filed with the Washington Utilities and Transportation Commission (commission) proposed revisions to its electric line extensions and service lines extensions tariff. This revision, and its subsequent updates, is the result of discussions between commission staff (staff) and the company over the past two and a half years. In 2015, the company and staff agreed to several commitments to improve the electric line extension tariff:¹

1. PSE will update the Schedule 85 margin allowances to reflect any changes in the company's electric Cost-of-Service studies that are accepted in its next general rate case.
2. PSE will develop a more granular cost study for electric residential service line charges in the fall of 2015 and implement it in 2016.
3. PSE and staff will meet again at the end of fall of 2016 to discuss the results of the new electric residential service line cost study and other Schedule 85 updates, identify any necessary changes to the study, and redevelop Schedule 85 with a targeted effective date shortly after the conclusion of PSE's next general rate case.
4. At the completion of the 2016 process outlined above, PSE will file Electric Line Extension Costs Studies at a minimum every two years starting 2018.

These commitments were later updated through conversations with staff to reflect the changed timeline of the company's general rate case filing. Staff has worked closely with the company since the 2015 commitments were made. We express our appreciation to the company for engaging with staff to improve the overall tariff.

¹ Staff Memo for Docket UE-150200 (August 13, 2015).

Proposed Changes

PSE proposes several changes to improve and update the Schedule 85 Tariff:

1. Reorganization of Schedule 85 - The majority of changes to the language in Schedule 85 is designed to reduce the complexity of the tariff and provide a more logical outline. Due to the extent of the changes, the company filed a petition for a waiver of rules related to the marking of changes in the tariffs.
2. Line Extension Costs - PSE provided updated tariff prices based on the most recent cost study. In an effort to mitigate the potential impact of the increase of costs, PSE initially proposed to increase the rates for certain extensions in Schedule 85 by less than the Cost Study results. However, based on conversations with staff, the company has proposed to increase prices to their full cost level. Included as Appendix A is a summary of these changes.
3. Margin Allowances – The margin allowances have been updated based on the Perpetual Net Present Value methodology.

Discussion

Cost Study

Staff reviewed the proposed cost study by the company and agrees with the findings. The costs are determined using the average-rate method. As in prior updates, the proposed tariffed rates are designed to match the average cost for specific elements of line extensions. These rates are based on a large sample of actual line extensions performed by the company during 2016.² A summary of the cost study results as compared to the current rates is included in Appendix A.

Because the differences between the proposed rates and the rates currently in the tariff were relatively large, PSE initially proposed changes that capture only a portion of the cost increase in an effort to moderate the impact to customers. However, the change to the margin allowance calculation renders the moderate change unnecessary, as the calculated margin allowance is close to the full increase in cost.

Margin Allowances

A margin allowance is an offset to the costs of new line extension in recognition of the incremental revenue that a new customer provides. While margin allowances help new customers overcome a financial barrier to connecting to the system, the incremental revenue the

² Analyzing line extensions is difficult however because many involve costs that are “non-normal.” For example, conversion to underground facilities, permitting, trenching, and upsizing transformers are all costs that are directly assigned to the requesting customer. Before calculating an average rate for each element of a line extension, these costs must be removed. (See PSE Response to UTC Staff Informal Data Request No. 005)

new customer brings to the system can be expected to make the whole ratepayer population indifferent to the cost of the margin allowance. For that reason, the margin allowance is typically set to match the net benefit to the system of each new customer.

PSE currently uses the Facilities Investment Analysis (FIA) model to calculate its margin allowance. The FIA model uses certain information to predict the annual energy usage of typical customers. This requires various cost assumptions that can extend for well over 30 years. Predicting costs and usage for the next thirty years is a difficult and complicated exercise with little value in the end.

Staff proposed that PSE instead adopt the Perpetual Net Present Value (PNPV) method. This calculation simply divides the estimated incremental revenue from an average customer³ by the company's after-tax rate of return. The resulting ratio is the net present value of the customer's presence on the system. This metric is a good proxy for the financial break-even point of adding new customers to the system⁴ by estimating the maximum line extension allowance that is economically-viable for the company.

Staff has supported this method in previous tariff filings for natural gas service with Avista, Cascade and PSE.⁵ In the present electric filing, PSE has agreed to use the PNPV methodology. A summary of the changes in the margin allowances is included in Attachment A.

Estimated Impact on Customers

Not all line extensions are eligible for margin allowances. As the table below illustrates, only around half of all line extensions will be affected by the proposed changes.

Job Orders by In-Service Year ⁶	Percent of Job Orders with Refundable Billing
2015	56%
2016	61%
2017	58%
Total	58%

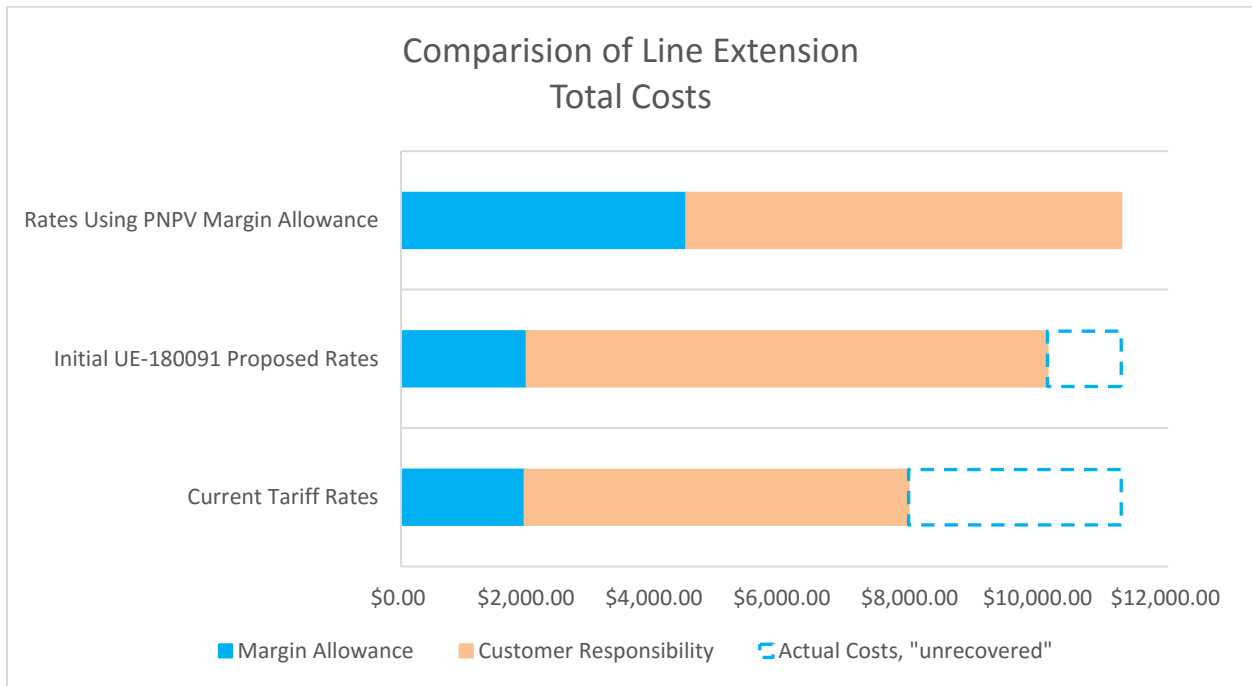
³ The anticipated revenue from the customer is the annual revenue from the basic charge plus the decoupled revenue per customer, after "backing out" the rate of return component. The company earns a rate of return on the portion of the line extension not paid for by the Customer when the line extension is added to rate base.

⁴ A key assumption in this methodology is that the recovery period approaches infinity. Mathematically, this is approximate to the book life of distribution assets, usually around 30 to 50 years. See Dockets UG-152394 and UG-160967 for a more robust discussion of this approach.

⁵ Additionally, literature supports the use of this method. See *Line Extensions for Natural Gas: Regulatory Considerations*, by Ken Costello. February 2013, National Regulatory Research Institute at 20.

⁶ Information provided through PSE Response to Commission Staff Informal Data Request No. 001.

The proposed change to the margin allowance helps offset the impact of the overall cost increases. As summarized in the chart below, under both the current tariff rate and the rates proposed by PSE certain costs would remain “unrecovered.” This portion represents the difference between the actual costs of building a line extension, and the amount allowed to be billed through the tariff.



Conclusion

PSE has improved its line extension tariff with revised language and structure. The proposed tariff rates are based on actual data and in line with overall expectations. However, PSE’s current line extension margin allowance methodology is far too complex. Switching to the PNPV method simplifies the calculation while offsetting the automatic need for a second rate increase in line extensions costs in 2019. Further, the PNPV method reduces the impact of a significant cost increase on all customers seeking line extensions.

Recommendation

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Appendix A

<i>Category</i>	<i>Tariff Sheet</i>	<i>Tariff Rate</i>	<i>Jan-Dec 2016 Cost Study Results</i>	<i>\$ Variance</i>	<i>% Change</i>
Services - OH from OH Distribution Within 250'	85-h, 3. b)	\$628	\$939	\$311	49.5%
Services - UG from OH Distribution Within 250'	85-g, 1. c)	\$919	\$1,362	\$443	48.2%
Services - UG from OH Distribution Over 250' - \$/ft	85-g, 1. c)	\$8	\$10	\$2	22.0%
Services - UG from UG Distribution Within 250'	85-g, 1. c)	\$533	\$718	\$185	34.7%
Services - UG from UG Distribution Over 250' - \$/ft	85-g, 1. c)	\$8	\$10	\$2	22.0%
Line Extension - OH Single Family					
Primary - Base Cost	85-e, 2	\$4,552	\$5,500	\$948	20.8%
Primary - \$/ft	85-e, 2	\$14	\$14	\$0	2.2%
Secondary - Base Cost	85-e, 2	\$3,826	\$6,000	\$2,174	56.8%
Secondary - \$/ft	85-e, 2	\$10	\$18	\$8	79.6%
Line Extension-UG Single Family			\$0		
Primary - Base Cost	85-e, 2	\$5,646	\$7,952	\$2,306	40.9%
Primary - \$/ft	85-e, 2	\$5	\$8	\$2	42.5%
Secondary - Base Cost	85-e, 2	\$2,000	\$5,403	\$3,403	170.1%
Secondary - \$/ft	85-e, 2	\$7	\$9	\$2	22.6%
Line Extension - Plat	85-e, a)	\$51	\$54	\$4	7.1%

Margin Allowance (\$/Customer)

Schedule	FIA Method	NPV Method
7	\$1,988	\$4,460
24	\$2,960	\$9,388
25	\$50,213	\$129,367
26	\$210,442	\$644,729
31	\$222,056	\$729,905