

Exhibit No. ___ (JLB-1T)
Dockets UE-141335
Witness: Jason L. Ball

**BEFORE THE
WASHINGTON STATE UTILITIES AND TRANSPORTATION COMMISSION**

DOCKET UE-141335

**In the Matter of the
Petition of King County, Washington,
BNSF Railway, Frontier Communications
Northwest, Inc., Verizon Wireless, and
New Cingular Wireless PCS, LLC. For a
Declaratory Order to address the
degradation of service from Puget Sound
Energy due to the physical deterioration
of the Maloney Ridge Line underground
cable.**

TESTIMONY OF

Jason L. Ball

**STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

Economic Feasibility of the Maloney Ridge Line

November 19, 2014

TABLE OF CONTENTS

I. INTRODUCTION..... 1
II. ECONOMIC FEASIBILITY 3

LIST OF EXHIBITS

- Exhibit No. ___(JLB-2C) – Economic feasibility analysis
- Exhibit No. ___(JLB-3) – Maintenance options for the Maloney Line

1 I. INTRODUCTION

2
3 **Q. Please state your name and business address.**

4 A. My name is Jason L. Ball. My office address is the Richard Hemstad Building, 1300
5 South Evergreen Park Drive Southwest, P.O. Box 47250, Olympia, Washington
6 98504. My email address is jball@utc.wa.gov.

7
8 **Q. By whom are you employed and in what capacity?**

9 A. I am employed by the Washington Utilities and Transportation Commission
10 (Commission) as a Regulatory Analyst. Among other duties, I am responsible for
11 financial and accounting analysis, load forecasting, and power supply issues of the
12 investor-owned electric and gas utilities under the jurisdiction of the Commission.

13
14 **Q. How long have you been employed by the Commission?**

15 A. I have been employed by the Commission since June 2013.

16
17 **Q. Would you please state your educational and professional background?**

18 A. I graduated from New Mexico State University in 2010 with a Bachelor of Arts dual-
19 major in Economics and Government. In 2013, I graduated with honors from New
20 Mexico State University with a Masters of Economics specializing in Public Utility
21 Policy and Regulation. I testified on power supply and load forecasting in Avista
22 Corporation's general rate case Docket UE-140188. I filed joint testimony in Puget
23 Sound Energy's (PSE) power cost only rate case in docket UE-141141. I also filed

1 testimony in PacifiCorp's general rate case Docket UE-140762 on overall policy,
2 revenue requirement, inflation factors, and the Merwin Fish Collector accounting
3 deferral. Since joining the Commission I have participated in several dockets
4 providing analysis in support of other witnesses including: Avista Corporation
5 (Avista) Purchased Gas Adjustment in Docket UG-131748, Puget Sound Energy's
6 (PSE or Company) Power Cost Only Rate Case in Docket UE-130617, and Pacific
7 Power and Lights (PacifiCorp) general rate case in Docket UE-130043. I presented
8 Staff recommendations to the Commission at open meetings in Dockets UE-131623,
9 UE-131565, and UE-140617. I also reviewed Avista's Energy Recovery Mechanism
10 annual true-up in Docket UE-140540. I am the lead analyst for matters relating to
11 the Bonneville Power Administration's Residential Exchange Program, for
12 customers of Avista, PSE, and PacifiCorp.

13
14 **Q. What topic will you be testifying to?**

15 A. I will be discussing the economic feasibility of replacing the Maloney Ridge
16 Distribution Line ("Maloney Line"). My recommendations are used by Staff witness
17 David Nightingale in his analysis of the petitioners request for PSE to replace the
18 Maloney Line.

19
20 **Q. What are your conclusions regarding the economic feasibility of replacing the**
21 **Maloney Ridge Distribution Line?**

22 A. My analysis shows that it is not economically feasible for PSE to replace the
23 Maloney Line.

1 **II. ECONOMIC FEASIBILITY**

2

3 **Q. Why evaluate the economic feasibility of the petitioner’s request?**

4 A. First, it is necessary to determine if the Maloney Line customers impose costs on
5 PSE similar to other customers of the same Schedule. Second, as discussed in the
6 direct testimony of Mr. Nightingale, the current contract between the petitioners and
7 PSE refers to Schedule 80 of PSE’s electric tariffs stating: “[T]he company shall not
8 be required to provide service if to do so would be economically unfeasible.”¹ To
9 satisfy this test, I performed an economic feasibility study using data provided by the
10 Company.

11

12 **Q. Why is the cost relationship between the Maloney Line customers and the other**
13 **customers of the same schedule is important.**

14 A. Rate schedules are established for customers that are similarly situated. In electric
15 regulation, this means those customers have similar electric usage patterns, take
16 power at similar voltages, and use similar sized electric equipment such as
17 transformers or electrical conduit. This similarity leads to relatively similar costs to
18 serve the customers on any one schedule. These customers are then charged the same
19 price or rate. In Washington, rates are set through a process called rate spread in an
20 effort to achieve an overall amount of revenue to support the electrical system and
21 the company called revenue requirement.

¹ Puget Sound Energy Electric Tariff G, Schedule 80, Fourth Revision of Sheet No. 80-d., section 9. Refusal of Service, last paragraph, effective August 1, 2006.

1 Currently, the Maloney Line customers take service under PSE's tariff
2 Schedule 24, General Service (Secondary Voltage, Demand of 50 kW or less)

3
4 **Q. Why is this provision about economic feasibility important?**

5 A. Without a test for economic feasibility, the ratepayers of a single class would pay
6 inequitably high rates caused by any ratepayer whose costs to serve are uniquely and
7 extraordinarily greater than other customers of the same schedule. This is because,
8 rates are uniform for similar types of customers and set via the costs to serve the
9 entire class, the derived revenue requirement, and the classes' rate spread. For
10 instance, a customer living a significant distance from PSE's general distribution
11 system would impose relatively large costs to be served. Due to uniform rates, all
12 customers in the class would have to cover the additional expense necessary to serve
13 that distant customer.

14 Further, since PSE operates as a natural monopoly and is therefore regulated
15 questions about when it is economic to serve customers are answered using basic
16 economic principles. In a competitive market, a firm will continue to produce so
17 long as the marginal or incremental cost of the making the next product is equal to or
18 exceeded by the marginal or incremental revenues of selling that next product. If the
19 cost is greater than the benefits, it is not sound economics to continue production.
20 This economic principle is the same for public service companies, such as PSE, that
21 exchange monopolistic powers for regulation. As PSE is a public service company
22 with an obligation to serve, it must provide electricity to the remote customer, but
23 not at large additional expense for other similarly situated customers or reduced

1 profits for its shareholders. Regulation, acting as a surrogate for competition for
2 natural monopolies, allows the company to maintain its production only when it is
3 economically feasible to do so; that is where marginal revenue is greater than or
4 equal to marginal cost. Thus an economic feasibility study is required to determine
5 what, if anything, the customer must contribute to make a project economically
6 feasible.

7
8 **Q. What analysis did you conduct on the economic feasibility of the petitioner's**
9 **request?**

10 A. I compared the regulated costs that would be created from replacing the Maloney
11 Line with the level of potential revenues expected from the customers taking service
12 on the line over the new lines expected lifetime. Further, I studied the effects of an
13 extremely large increase in the revenues from customers on the Maloney Line.

14 As discussed Mr. Nightingale's testimony, the current customers served by
15 the Maloney Line pay 100 percent of all repair and maintenance expenses.

16 Therefore, I limited my study to just the revenue requirement associated with re-
17 building the Maloney Line and not the ongoing operations and maintenance cost.

18
19 **Q. How did you perform this analysis?**

20 A. First, as shown in Exhibit No. ___ (JLB-2C) on page 3 line 2, I calculated the
21 average yearly revenues expected from the Maloney Ridge customers based on usage
22 and charge history. I then calculated the net present value of these revenues over a

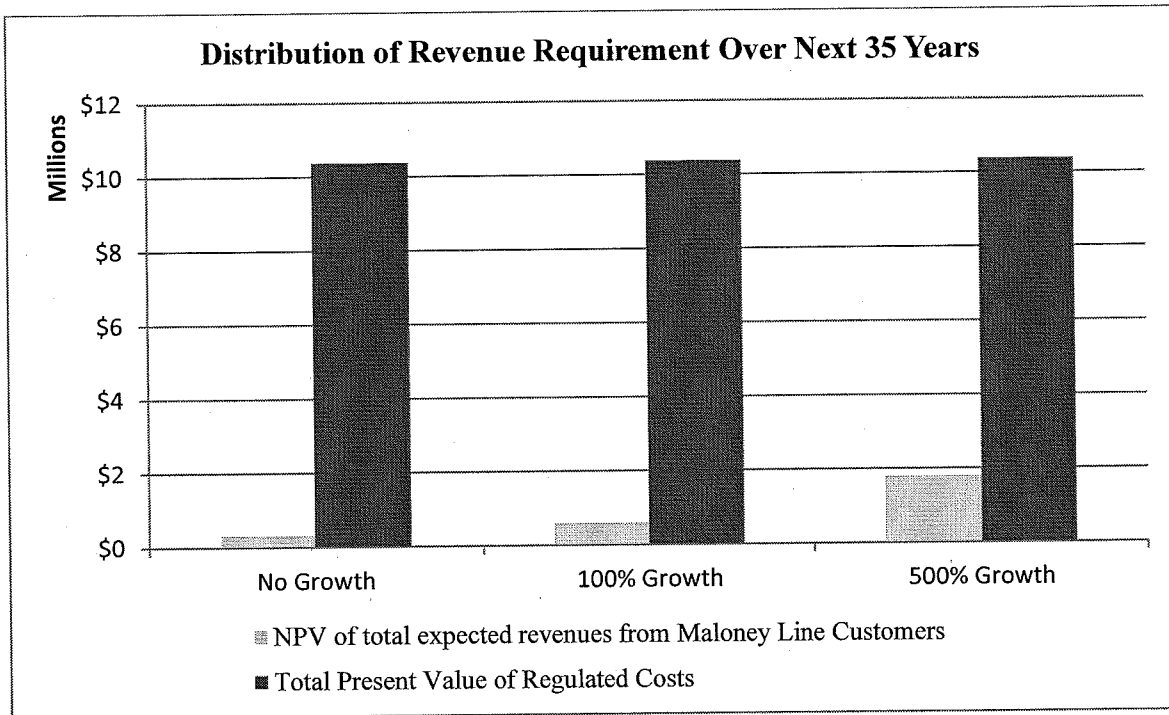
1 period of 35 years². To perform this calculation, I relied on the worksheet provided
2 by PSE in Attachment B to its response to Petitioners data request No. 001. As
3 discussed previously, I excluded from this calculation operations and maintenance
4 expense.

5
6 **Q. What does your analysis show?**

7 A. The expected level of revenue from the Maloney Ridge customers over the next 35
8 years is \$296,809 and the expected level of regulated costs of replacing the Maloney
9 Line using the same time period is \$10,071,832.³ This is a substantial and significant
10 difference that is driven by two factors: the high capital cost of the replacement line
11 and its low number of billed kilowatt hours. Even extraordinary growth of 500
12 percent in the revenues received from the Maloney Line would not adequately
13 justify, in my opinion, the Petitioners request. The chart below illustrates the
14 extraordinary gap between the total revenues expected to be received by the
15 customers served on the Maloney Line and the capital costs of replacing the Maloney
16 Line.

² According to PSE's response to Petitioners data request No. 009, the estimated expected useful life for replacing the Maloney Line is 35 years.

³ This estimate is based on Option 1 included in the list of maintenance options for the Maloney Line, attached as Exhibit No. ____ (JLB-3).



1

2

3 **Q. Have you performed this analysis on an annual basis?**

4 A. Yes. Below is a table showing the annual regulated costs for the capital investments
 5 associated with replacing the Maloney Line and the expected level of annual
 6 revenues from the customers currently on the Maloney Line.

	No Growth	100% Growth	500% Growth
Annualized Revenues from Maloney Line Customers	\$19,929	\$39,857	\$119,572
Annualized Costs for replacing the Maloney Line	\$696,184	\$696,184	\$696,184
Difference	\$(676,255)	\$(656,326)	\$(576,611)

7

8 As the last row of the table shows, even with extraordinary growth the expected
 9 annual revenue from the customers of the Maloney Line is drastically lower than the
 10 annual regulated costs to replace the line.

11

1 **Q. Did you perform an analysis of any options other than the replacement of the**
2 **entire Maloney Line?**

3 A. Yes. Attached as Exhibit No. ___ (JLB-3) is Attachment A from PSE's response to
4 Petitioners data request No. 009 describing the five different replacement options for
5 the Maloney Line. I focused my analysis above on the first option which replaces
6 most of the Maloney Line. Page 4 of my Exhibit No. ___ (JLB-2C) compares the
7 other options to the expected revenues from the Maloney Line customers over the
8 next 35 years.

9
10 **Q. Are any of these other options, in your opinion, economically feasible?**

11 A. No. The expected revenues over the next 35 years from the Maloney Ridge
12 customers represent at most 11 percent of the total regulated costs for any of the four
13 additional options.

14
15 **Q. Whose interests did your analysis take into account?**

16 A. My analysis was performed from the public's economic interest in PSE replacing the
17 Maloney Line. The size and cost of replacement dwarfs any potential revenues from
18 customers serviced by the line. Without phenomenal growth in billed kilowatt-hours
19 to justify the increased revenue requirement of building the Maloney Line, PSE's
20 other customers in Schedule 24 would suffer a disproportionately large increase in
21 their rates.

22

1 **Q. Are there any other factors which may impact your analysis and their results?**

2 A. Yes. The current line has experienced a high rate of failure over the last 20 years.
3 As a result, the facility's repair and maintenance costs have increased significantly.⁴
4 These costs are exacerbated by the terrain and remoteness of its location. I did not
5 include repair and maintenance costs in my analysis because of their speculative
6 nature and because the Petitioners currently have a contract with PSE which deals
7 with them separately. However, if the repair and maintenance costs are incurred by
8 PSE over the life of the facility the line replacement would be even more
9 economically unfeasible proposition.

10 Additionally, my analysis does not take into account the cost of delivering
11 power from PSE's main distribution system to the Maloney Line. This includes also
12 the cost of producing the power for the Maloney Line customers. Rather than
13 complicate the analysis with complex projections of future power and distribution
14 costs and given that the petitioners use a relatively small amount of kilowatt-hours, I
15 chose to limit my analysis to the capital costs of building the line.

16 Finally, the capital costs included in my analysis are based on PSE's
17 estimates for replacing most of the Maloney line and use injection on a small
18 portion.⁵ If this is the case, the portion of the line that receives injection only could
19 need to be replaced⁶ before the 35 years in my calculations. If this occurred, the
20 Maloney Line replacement costs would increase. This would further increases the
21 level of capital costs necessary to continue service on the Maloney Line.

⁴ PSE Response to Staff Data Request No. 005, Attachment A

⁵ PSE response to Petitioners Data Request No. 009

⁶ PSE response to Staff Data Request No. 040

1 Q. Does this conclude your testimony?

2 A. Yes.

3