

**EXHIBIT NO. \_\_\_(IP-3T)  
DOCKET UE-161123  
PSE SCHEDULE 451  
WITNESS: IRENE PLENEFISCH**

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**PUGET SOUND ENERGY,**

**Respondent.**

**Docket No. UE-161123**

**SUPPLEMENTAL PREFILED DIRECT TESTIMONY  
(NON-CONFIDENTIAL) OF  
IRENE PLENEFISCH  
ON BEHALF OF MICROSOFT CORPORATION**

**DECEMBER 15, 2016**

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**SUPPLEMENTAL PREFILED DIRECT TESTIMONY OF  
IRENE PLENEFISCH**

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1                                   **SUPPLEMENTAL PREFILED DIRECT TESTIMONY OF**  
2   **IRENE PLENEFISCH**

3   **I.       INTRODUCTION**

4   **Q.    Please state your name, business address, and position with Microsoft**  
5           **Corporation.**

6   A.    My name is Irene Plenefisch. My business address is 1 Microsoft Way, Redmond,  
7           WA 98052. I am a Government Affairs Director for Microsoft Corporation  
8           ("Microsoft").

9   **Q.    Have you previously submitted testimony in this proceeding?**

10   A.    Yes, Exhibit \_\_\_ (IP-T1) sets forth my initial prefiled direct testimony. It  
11           addresses my qualifications, Microsoft's goals for power supply, proposed  
12           Schedule 451, and the relationship of Schedule 451 to Colstrip retirement.

13   **Q.    What is the purpose of your supplemental testimony?**

14   A.    My supplemental testimony will provide (i) additional detail on Microsoft's  
15           commitment to renewable energy and carbon neutrality; (ii) our view of the role  
16           of the Energy Independence Act ("I-937") in this proceeding; and (iii) our view of  
17           the relationship between this proceeding and the process of allocating costs for  
18           Puget Sound Energy's ("PSE") anticipated retirement and decommissioning of  
19           Colstrip Generating Stations 1 and 2 (collectively, "Colstrip").

20   **Q.    Please summarize your supplemental testimony.**

21   A.    We believe the open access provided by Schedule 451 is good for the  
22           environment, our business and the local community. We are committed to carbon  
23           neutrality, and have operated as such since 2012. We actively procure clean

1 energy for our datacenters across the U.S. and around the world, and have a  
2 corporate commitment to increasingly acquiring and using more renewable  
3 energy (namely wind, solar and hydropower) to power our operations. These  
4 guiding principles and experience will be applied to our purchase of energy under  
5 Schedule 451, and as such, Microsoft will satisfy I-937's renewable portfolio  
6 standards. Microsoft does not view this proceeding as addressing the question of  
7 responsibility for Colstrip decommissioning and retirement costs. Microsoft  
8 expects that those costs will be determined and allocated in a separate proceeding  
9 and therefore should not be addressed here.

10 **II. MICROSOFT'S COMMITMENT TO CARBON NEUTRALITY AND**  
11 **RENEWABLE ENERGY**

12 **Q. Please describe Microsoft's commitment to carbon neutrality and how you**  
13 **have implemented that commitment.**

14 A. As noted in my initial prefiled testimony, Microsoft's operations have been  
15 carbon neutral since 2012. To ensure sustained carbon neutrality and  
16 accountability on a company-wide basis, Microsoft charges an internal carbon fee  
17 to its business groups for the costs of reducing carbon emissions associated with  
18 their energy use – which includes not just electricity, but also energy consumption  
19 and air travel. Funds collected through the carbon fee program are applied  
20 towards internal energy efficiency investments and purchases of renewable  
21 energy; for the energy we cannot reduce or eliminate, namely air travel, we fund  
22 externally certified carbon offset projects.

1 Since inception of the carbon fee, Microsoft has, among other things, purchased  
2 more than 14 million megawatt-hours of green power and reduced company-wide  
3 emissions by more than 9 million metric tons of carbon dioxide equivalent.

4 **Q. Has your implementation been successful?**

5 A. Yes, we believe we have been very successful and have provided a useful model  
6 for other organizations with sustainability goals. Microsoft's carbon fee program  
7 has been recognized nationally and internationally. The U.S. Environmental  
8 Protection Agency honored Microsoft with a 2016 Climate Leadership award.  
9 The United Nations Framework Convention on Climate Change spotlighted  
10 Microsoft's efforts with a 2015 Lighthouse Activity award in the Momentum for  
11 Change Initiative.

12 **Q. Does Microsoft report publicly on its efforts to reduce or eliminate its carbon  
13 footprint?**

14 A. Yes, we do. Microsoft is committed to transparency regarding its carbon footprint.  
15 Since 2005, Microsoft has voluntarily reported on the company's carbon  
16 emissions through the Carbon Disclosure Project (CDP).

17 **Q. Please describe Microsoft's commitment to renewable energy.**

18 A. Microsoft has over 100 datacenters around the world that are delivering a secure,  
19 trusted and responsible cloud. In May 2016, Microsoft announced a commitment  
20 to increase the percentage of wind, solar and hydro energy used to power those  
21 datacenters. As of 2016, roughly 44 percent of the electricity used by Microsoft  
22 datacenters comes from wind, solar and hydropower sources. Microsoft's goal is  
23 to increase that number to 50 percent by the end of 2018 and 60 percent by the

1 early 2020s. In November 2016, we outlined several principles that guide our  
2 work. One of these is a focus on accelerating a clean energy infrastructure in the  
3 markets in which we operate.

4 **Q. Please describe Microsoft's commitment to energy efficiency and**  
5 **conservation.**

6 A. Microsoft invests in cutting-edge research and development to advance our  
7 energy responsibilities. We continue, in particular, to focus on R&D that will lead  
8 to further improvements in the efficiency of computing infrastructure, datacenters,  
9 servers and software performance. These have yielded practical solutions  
10 implemented in our datacenters. For example, the air cooling technologies used at  
11 Microsoft's datacenters result in 20-30 percent lower energy consumption  
12 compared to conventional chiller solutions. We also invest in fuel cells, biogas  
13 and energy storage technologies in partnership with local datacenter partners in  
14 Texas, Wyoming and Washington state.

15 Microsoft is also committed to energy efficiency in its buildings. With funding  
16 provided by our carbon fee, Microsoft created a software solution that helps us  
17 better manage our energy usage across our 15 million square foot campus in  
18 Redmond. Without requiring new hardware or retrofits of our buildings, the  
19 software overlay delivered very large energy and cost savings. We reduced  
20 associated carbon emissions by over 18,000 metric tons and saved over \$3.6  
21 million in annual energy costs.

1 **Q. Are there any documents that discuss Microsoft’s commitments to carbon**  
2 **neutrality, to renewable energy and/or to energy efficiency and conservation?**

3 A. Yes. For example, in November 2016 we published the report, “Climate and  
4 Energy.” Exhibit No. \_\_\_\_ (IP-4) contains a copy of this report. Brad Smith,  
5 Microsoft’s President and Chief Legal Officer, addressed our commitments in a  
6 May 2016 blog post titled, “Greener datacenters for a brighter future: Microsoft’s  
7 commitment to renewable energy.” Exhibit No. \_\_\_\_ (IP-5) contains a copy of this  
8 document.

9 **III. RELEVANCE OF I-937**

10 **Q. Please describe Microsoft’s position on the applicability of I-937 in this**  
11 **proceeding.**

12 A. Microsoft believes that I-937 applies to power supplied by utilities, but not to  
13 customers’ activities or to the activities of non-utility suppliers. In any event,  
14 Microsoft’s guiding principles on renewable energy procurement will be applied  
15 to our purchase of energy under Schedule 451. As a result, our energy  
16 procurement under Schedule 451 will satisfy I-937’s renewable portfolio  
17 standards.

18 **Q. Are you aware that hydropower from most existing hydropower facilities is**  
19 **not defined as “renewable” by I-937?**

20 A. Yes, but it’s important to keep the big picture in view. If Microsoft moves its  
21 Schedule 40 load off PSE’s resources, which are approximately 40% fossil-  
22 fueled, and onto hydropower, we would be making a big step forward in reducing  
23 carbon emissions in PSE’s service territory and in Washington, particularly as

1 Colstrip is decommissioned. In that eventuality, Microsoft's use of carbon free  
2 resources under Schedule 451 will replace fossil-based energy currently supplied  
3 to Microsoft under Schedule 40.

4 **Q. But if Microsoft purchases power from existing hydropower facilities, would**  
5 **your purchases meet the percentage thresholds of I-937?**

6 A. Yes, as needed we would use RECs to meet those percentages.

7 **IV. COSTS ASSOCIATED WITH COLSTRIP DECOMMISSIONING AND**  
8 **RETIREMENT**

9 **Q. What is your understanding of how costs associated with Colstrip**  
10 **decommissioning and retirement will be addressed?**

11 A. Microsoft understands that the costs associated with the decommissioning and  
12 retirement of Colstrip present a unique issue for PSE and its ratepayers, and that  
13 Colstrip costs will be determined and allocated in a separate proceeding, such as  
14 PSE's next general rate case.

15 **Q. What is the basis for your understanding of how costs associated with**  
16 **Colstrip decommissioning and retirement will be addressed?**

17 A. In March 2016, PSE, WUTC Staff, Public Counsel and several other parties asked  
18 the Commission to extend PSE's deadline for filing its next general rate case from  
19 April 1, 2016 until January 17, 2017. This joint petition was filed in Docket Nos.  
20 UE-121697, UG-121705, UE-130137 and UG-130138. The primary reason for  
21 the extension request was "to allow PSE additional time to work with  
22 stakeholders and to prepare a proposal addressing these units to include in its  
23 general rate case filing." Petition at paragraph 7. PSE stated that in the rate case,



1 it would provide a plan including, among other things, detailed information about  
2 and costs associated with decommissioning and remediation. Petition at paragraph  
3 8.b. After an extensive hearing, the Commission granted the extension.

4 **Q. Why shouldn't the Commission address Colstrip retirement and**  
5 **decommissioning costs in this proceeding on Schedule 451?**

6 A. The information about costs associated with decommissioning and remediation is  
7 not yet available so any decision would be premature. In addition, many parties  
8 who are not involved in this Schedule 451 case have a strong interest in Colstrip  
9 retirement and may wish to participate in any Commission proceeding on  
10 Colstrip.

11 **V. CONCLUSION**

12 **Q. Does this conclude your supplemental prefiled direct testimony?**

13 A. Yes.