

**BEFORE THE**

**WASHINGTON STATE UTILITIES AND TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,

Complainant,

v.

PUGET SOUND ENERGY, INC.,

Respondent.

**DOCKET NOS. UE-011570  
UG-011571**

**DIRECT TESTIMONY**

**OF**

**JIM LAZAR**

**ON BEHALF OF**

**THE PUBLIC COUNSEL SECTION OF**

**THE WASHINGTON STATE ATTORNEY GENERAL'S OFFICE**

**TIME OF USE PILOT PROGRAM**

1  
2 **Q. PLEASE STATE YOUR NAME, ADDRESS, AND A BRIEF SUMMARY OF**  
3 **YOUR EXPERIENCE.**

4 A. My name is Jim Lazar, I am a consulting economist based at 1063 Capitol Way S. in  
5 Olympia, Washington, and have been engaged in electric and natural gas utility rate  
6 consulting since 1979. I have appeared before the Commission on more than fifty  
7 occasions, testifying in proceedings involving each of the regulated gas and electric  
8 utilities.

9 **Q. WHAT WAS THE NATURE OF YOUR INVOLVEMENT IN THE TIME OF**  
10 **USE COLLABORATIVE IN THIS PROCEEDING?**

11 A. I was retained by Public Counsel to review many issues in this proceeding, including  
12 the Company's proposed mandatory time of use rate designs. When the mandatory  
13 element was eliminated by the Interim stipulation and the proceeding moved into a  
14 negotiation phase, I continued to work on the TOU issue, and participated fully in each  
15 of the meetings of the TOU collaborative. I participated in the drafting of the  
16 Stipulation on TOU issues.

17 **Q. WHAT IS YOUR PRINCIPAL CONCLUSION WITH RESPECT TO THE**  
18 **FAIRNESS OF THE TOU STIPULATION?**

19 A. I believe that the Stipulation is a balanced approach to this issue, taking into  
20 consideration the issues raised by the Company, by Public Counsel, by Staff, and by  
21 other parties.

22 **Q. WHAT WERE PUBLIC COUNSEL'S PRINCIPAL CONCERNS WITH THE**  
23 **TOU RATES PROPOSED BY THE COMPANY?**

24 A. We were concerned with three different areas. The first was cost-effectiveness. The  
25 second was adverse environmental impacts. The final area was customer understanding  
and acceptance.

1 **Q. PLEASE SUMMARIZE YOUR EVALUATION OF THE ANALYSES**  
2 **PERFORMED ON COST-EFFECTIVENESS.**

3 A. I reviewed the information the Company presented in its original testimony with  
4 respect to the cost of implementing the TOU program. I prepared a long-run analysis,  
5 considering production, transmission, and distribution savings, as well as market  
6 energy cost savings, based on information contained in the testimony of Ms. Penny  
7 Gullickson and Mr. Eric Hirst, and data responses prepared by the Company. This  
8 analysis showed that the costs of the TOU program exceeded the benefits by a factor of  
9 approximately ten. I reviewed information assembled by Staff from PSE's monthly  
10 reports on the TOU pilot, which showed that the short-run costs of meter reading and  
11 billing greatly exceeded the short-run power market cost savings. During the  
12 collaborative process, the Company retained a consultant who prepared a number of  
13 scenarios at the request of the Collaborative members; those scenarios prepared at our  
14 request, which in our opinion properly recognized the cost of implementing TOU  
15 pricing showed that the program was not cost-effective.

16 **Q. HOW DOES THE STIPULATION ADDRESS THOSE CONCERNS?**

17 The stipulation addresses this complex issue in three ways. First, it extends the pilot  
18 program for an additional 15 months, so that additional data can be gathered on the cost  
19 of operating the program and the benefits derived from the program. Second,  
20 consistent with TOU programs across the country, it requires that participants pay a  
21 significant portion of the incremental meter reading and customer accounting expense  
22 associated with the program, so that these costs are not hidden from participants or  
23 shifted to non-participants. Finally, it establishes a collaborative study process to  
24 determine the cost-effectiveness of the program.  
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1 **Q. PLEASE SUMMARIZE THE ISSUE OF ENVIRONMENTAL IMPACTS, AND**  
2 **HOW THE STIPULATION ADDRESSES THOSE CONCERNS.**

3 A. From the beginning, we were concerned about the adverse environmental impacts of  
4 TOU pricing. One principal reason that off-peak power is cheaper than on-peak power  
5 is that there are coal-fired generating plants that are often not fully utilized during off-  
6 peak periods, and they have lower incremental fuel and operating costs than other  
7 available resources. Shifting load from on-peak periods (when the incremental  
8 generating fuel is usually natural gas) to off-peak periods could result in a shift of  
9 generation from gas to coal. To the extent that such a shift in generation results from  
10 TOU pricing, it could result in about a three-fold increase in carbon dioxide emissions,  
11 and greatly increased emissions of sulphur dioxide, oxides of nitrogen, particulates,  
12 mercury, and other contaminants. While sulphur dioxide is a regulated emission, and  
13 carries a price in the market, there is no price assigned to the other emissions  
14 contaminants of coal-fired generation in the hourly market for electricity. If off-peak  
15 power is dirtier than on-peak power, which I believe is the case, no recognition of that  
16 environmental cost is present in the wholesale power market.

17 The Stipulation addresses this concern in two ways. First, the Collaborative process is  
18 to study the environmental impacts of TOU pricing during the coming year, and will  
19 hopefully develop a better understanding of whether this environmental impact is a  
20 serious matter. Second, the Stipulation precludes the Company from making any  
21 environmental claims about the program during the remaining duration of the extended  
22 pilot program. We anticipate that at the end of the Collaborative process, we will know  
23 much more about the environmental impacts of load shifting, and be able to better  
24 determine if the benefits of TOU exceed the costs, including the environmental  
25 impacts.

1 **Q. PLEASE SUMMARIZE THE ISSUE OF CUSTOMER ACCEPTANCE, AND**  
2 **DISCUSS HOW THE STIPULATION ADDRESSES THESE CONCERNS.**

3 A. We were very concerned about a mandatory TOU program imposing additional costs  
4 on customers, and not providing them a reasonable opportunity to avoid these costs.

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6 At the time of the Company's initial filing, it appeared that these costs were about  
7 \$3.00 per customer per month. Since the market cost differential of electricity is only  
8 about a half-cent/kWh, this would require a 600 kWh/month shift in usage to offset the  
9 costs of TOU metering. This is simply impossible for typical residential users, whose  
10 TOTAL on-peak consumption seldom exceeds this amount in a month. The average  
11 participant, as shown in Mr. Gullickson's testimony, was only shifting 14 kWh/month,  
12 or about a \$.07/month savings in power supply cost. Based on this analysis, we  
13 initially favored termination of the program.

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15 The Company demonstrated that many customers have a favorable disposition toward  
16 the program, and denying them participation might have adverse consequences. In  
17 addition, it appears that the cost per customer has declined by about half, meaning that  
18 there is some prospect that the largest residential customers might be able to achieve  
19 economic savings.

20 The Stipulation addresses these concerns in several ways. First, the costs of the TOU  
21 program have been removed from the general rate case revenue requirement, and are  
22 being collected in a manner that varies with the number of customers participating.

23 Second, customers will receive periodic notification of whether their participation is  
24 saving them money, so they can make an informed judgment on whether to remain in  
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1 the pilot or opt out of the pilot. Third, at the end of the pilot, the Stipulation requires  
2 the Company to notify TOU customers of their savings or additional costs from  
3 participation, and to default them to the non-TOU rate schedule in September, 2003 if  
4 they are not saving enough to offset the incremental \$1.00 charge for TOU meter  
5 reading and billing.

6 **Q. TAKEN AS AN INTEGRATED PACKAGE, DO YOU BELIEVE THAT THE**  
7 **TOU STIPULATION IS IN THE PUBLIC INTEREST?**

8 A. Yes, I believe it balances sharply differing perspectives among the parties. It ensures  
9 that needed information is acquired and evaluated before the end of the Pilot program,  
10 and it provides for consumers to be informed as to whether their participation in the  
11 program is economic during the remaining term of the Pilot program. The Stipulation  
12 should be approved as being consistent with the public interest.

13 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

14 A. Yes.  
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