

**EXHIBIT NO. \_\_\_(JAD-11)  
DOCKET NO. UE-060266/UG-060267  
2006 PSE GENERAL RATE CASE  
WITNESS: JEFFREY A. DUBIN**

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**PUGET SOUND ENERGY, INC.,**

**Respondent.**

**Docket No. UE-060266  
Docket No. UG-060267**

**SIXTH EXHIBIT (NONCONFIDENTIAL) TO THE  
PREFILED REBUTTAL TESTIMONY OF  
JEFFREY A. DUBIN  
ON BEHALF OF PUGET SOUND ENERGY, INC.**

**AUGUST 23, 2006**

**From:** Gamponia, Villamor B [villamor.gamponia@pse.com]

**Sent:** Wednesday, March 09, 2005 9:13 AM

**To:** ymariam@wutc.wa.gov

**Cc:** Story, John; Karzmar, Karl; Cass, Mei; LeHouillier, Cam M; Molander, Lorin I; Sant, James D

**Subject:** PSE's Weather Station Data



StnCorrel.prg

PSEStationAvgTmps1  
.xls

**Attachments:**

Yohannes,

Attached is a file with the daily average temperature data for various weather stations within PSE's service territory. The starting date for this data is January 1, 2001 since billed sales by county is only available starting in 2001 also. The file has two worksheets: Data and Correlations-Equality Tests. Data contains the raw data, adjustments to the data to replace missing values, computation of HDD65 and CDD65, and a display of normal HDD65/CDD65 for each station. Correlations-Equality Tests show the computed correlation coefficients across stations including SeaTac and tests for equality of the means and variances.

Here's a few notes about the data:

- 1) While there could be at least one or more than one weather station for each county, many stations have missing values for a few days or a month at a time. This data is displayed in Data: D6-BJ1132. This limits the usefulness of many stations, but helps in determining which one station we might want to keep for each county.
- 2) For key stations, we replaced missing average daily temps with projected daily temps based on regressions of key station temps against nearby stations' temps. The 8 key stations are: Anacortes, Bremerton, Centralia, Ellensburg, Everett, Port Townsend, Sand Point, and Tacoma. The adjusted average daily temps are displayed in Data:BV6-CH1132. The EViews program used to generate these regressions is also attached (StnCorrel.prg).
- 3) With the adjusted average daily temps, we computed the HDD65 and CDD65. The daily HDDs/CDDs are displayed in Data:CJ6-DH1132 while the monthly actual and normal(NOAA's) HDDs/CDDs are displayed in Data:CJ1137-EG1173.
- 4) The correlation coefficients were estimated based on the monthly HDDs. The correlation coefficients are close to one, however, Ellensburg-Kittitas station's HDD shows the lowest correlation.
- 5) Excluding Kittitas, tests for equality of the means and equality of variances across stations show that the null hypothesis of equality cannot be rejected.

Since this is still preliminary analysis, I would appreciate any comments or suggestions on other ways of looking at or presenting the data from our collaborative group. Please feel free to send me an email if you have questions, comments or suggestions. Also, please feel free to forward this email to others not listed above but would be interested in looking at the data. Thank you.

Villamor