

EXHIBIT NO. ___(JAD-10)
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

**FIFTH 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: Friday, June 16, 2006 12:35 PM

To: ymariam@wutc.wa.gov

Cc: Story, John; Karzmar, Karl; Molander, Lorin I; jad@caltech.edu; Dodge, Kirstin (Perkins Coie)

Subject: MARS Outputs and Documentation



mda.pdf



ATT00021.htm



newday.R



newday.log

Attachments:

Hi Yohannes,

Per our meeting this morning, below are the MARS output and R code using daily data from 2002-2004 from Jeff.

<<newday.log>> <<newday.R>>

Below also are the link to CRAN (Comprehensive R Archive Network) where you can download R program, and the manual for MARS.

<<ATT00021.htm>> <<mda.pdf>>

As mentioned in our meeting, while MARS points to lower temperature cut off points that may vary by month, some of the temperature cut points are so close to each other that this could give rise to multicollinearity problems later. MARS may also indicate a cooling degree type variable in the winter months or a heating degree type variable in the summer which is counter-intuitive. So a bit of caution is needed when using the output of MARS. Please give me a call if you have further questions.

Thanks,
Villamor