

EXHIBIT NO. ___(RAM-1T)
DOCKET NO. UE-121697/UG-121705
DOCKET NO. UE-130137/UG-130138
WITNESS: DR. ROGER A. MORIN

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

v.

PUGET SOUND ENERGY, INC.,

Respondent.

DOCKET NOS. UE-121697
and UG-121705 (*consolidated*)

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

v.

PUGET SOUND ENERGY, INC.,

Respondent.

DOCKET NOS. UE-130137
and UG-130138 (*consolidated*)

**PREFILED DIRECT TESTIMONY (NONCONFIDENTIAL) OF
DR. ROGER A. MORIN
ON BEHALF OF PUGET SOUND ENERGY, INC.**

NOVEMBER 5, 2014

**REVISED
FEBRUARY 5, 2015**

1 To derive the CAPM risk premium estimate, three quantities are required: the
2 risk-free rate (R_F), beta (β), and the MRP, ($R_M - R_F$).

3 **Q. How did you arrive at the risk-free rate estimate of 5.04.6% in the CAPM**
4 **and risk premium analyses?**

5 A. To implement the CAPM and risk premium methods, an estimate of the risk-free
6 return is required as a benchmark. I relied on noted economic forecasts, which
7 call for a rising trend in interest rates in response to the recovering economy,
8 renewed inflation, and record high federal deficits.

9 **Q. Why did you rely on long-term bonds instead of short-term bonds?**

10 A. The appropriate proxy for the risk-free rate in the CAPM is the return on the
11 longest term Treasury bond possible. This is because common stocks are very
12 long-term instruments more akin to very long-term bonds rather than to short-
13 term Treasury bills or intermediate-term Treasury notes. In a risk premium
14 model, the ideal estimate for the risk-free rate has a term to maturity equal to the
15 security being analyzed. Since common stock is a very long-term investment
16 because the cash flows to investors in the form of dividends last indefinitely, the
17 yield on the longest-term possible government bonds, that is the yield on 30-year
18 Treasury bonds, is the best measure of the risk-free rate for use in the CAPM.
19 The expected common stock return is based on very long-term cash flows,
20 regardless of an individual's holding time period. Moreover, utility asset
21 investments generally have very long-term useful lives and should
22 correspondingly be matched with very long-term maturity financing instruments.