**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**

To derive the CAPM risk premium estimate, three quantities are required: the risk-free rate (RF), beta (β), and the MRP, (RM - RF).

Q. How did you arrive at the risk-free rate estimate of 4.6% in the CAPM and risk premium analyses?

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

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

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

**Revised**

**February 5, 2015**