

**ENCLOSURE 6**

**MPS2 COMPARISON MATRIX**

**RCS POT. LOSS A.1**

**Dominion Energy Nuclear Connecticut, Inc. (DENC)**

**Millstone Power Station Unit 2**

**Table 4 – MPS2 Comparison Matrix**

Category F: Fission Product Barrier Degradation

<p>RCS P-Loss 1</p>	<p><b>RCS or SG Tube Leakage</b>  A. Operation of a standby charging (makeup) pump is required by <b>EITHER</b> of the following:  1. UNISOLABLE RCS leakage  <b>OR</b>  2. SG tube leakage.  <b>OR</b>  B. RCS cooldown rate greater than (site-specific pressurized thermal shock criteria/limits defined by site-specific indications).</p>	<p>RCS Pot. Loss A.1</p>	<p>1. UNISOLABLE RCS or SG tube leakage &gt; 50 gpm excluding normal reductions in RCS inventory (e.g. letdown, RCP seal leakage)</p>	<p>The pump capacity of a standby MPS2 positive displacement charging pump, started on decreasing pressurizer level, is not indicative of a potential loss of the RSC barrier. Control room indications are available to provide the operator adequate capability to maintain pressurizer level within specified limits and identify UNISOLABLE RCS or SG tube leakage &gt; 50 gpm excluding normal reductions in RCS inventory (e.g., letdown, RCP seal leakage).</p> <p>The design flow of the MPS2 positive displacement charging pumps is 44 gpm. Decreasing pressurizer level would be indicative of a &gt; 50 gpm leak rate with two charging pumps running (88 gpm), a minimum design letdown flow of approximately 28 gpm and assumed RCP bleedoff flow of up to 10 gpm. Therefore, continued decreasing level with two charging pumps running would not require operators to make a mass balance calculation. By contrast, two charging pumps running and system level stabilized would likely indicate leakage &lt; 50 gpm and not constitute an inability to maintain pressurizer level within specified limits.</p> <p>MPS2 has implemented the alternative threshold wording consistent with NEI 99-01, Rev. 6, RCS Potential Loss 1, Developers Notes.</p>
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