

NEI POSITION STATEMENT Guidance to Licensees on Complying with the Licensed Power Limit
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1.0 ISSUE DESCRIPTION

On August 23, 2007, the NRC published Regulatory Issue Summary (RIS) 2007-21, "Adherence to Licensed Power Limits," to remind licensees that there is no existing regulatory guidance condoning or authorizing operation of any nuclear power plant in excess of the maximum power level specified in the facility's operating license (i.e., the "licensed power limit"). In addition, the RIS notes that internal NRC inspection guidance is provided for use by NRC inspectors and is not intended as operational guidance to licensees.

The RIS recognizes that normal changes in plant parameters can cause small fluctuations in thermal power. However, licensees are expected to take prompt action to reduce thermal power whenever it is found above the licensed limit. More importantly, licensees may not intentionally operate or authorize operation above the maximum power level specified in the license.

2.0 CURRENT SITUATION

The NRC is in the process of revising its guidance to the regional inspection staff for use in determining when enforcement action related to exceeding the licensed power limit is appropriate. Previous NRC guidance dating from the 1980s has been superseded. The revised inspection guidance will be used in conjunction with the Reactor Oversight Process (ROP) to screen and disposition performance issues related to exceeding the maximum power level for a reactor.

The purpose of this NEI Position Statement is to provide guidance to licensees that will complement NRC guidance to inspectors with respect to compliance with the licensed power limit.

3.0 INDUSTRY POSITION

This paper proposes a standard framework for identifying, evaluating, correcting, and reporting overpower situations.

4.0 GUIDANCE TO LICENSEES

4.1 Steady State

The term "steady state" implies that temperatures, pressures, and flows are stable such that the nominal value of reactor power remains stable, subject to statistical uncertainties and normal fluctuations (e.g., bi-stable flow for BWRs and feedwater oscillations for PWRs).

4.2 Licensed Power Limit

Operating reactor compliance with the Licensed Power Limit (LPL) is demonstrated by the following process:

- (1) No actions are allowed that would intentionally raise core thermal power above the LPL for any period of time. Small, short-term fluctuations in power that are not under the direct control of a license reactor operator (e.g., fluctuations caused by bi-stable

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flow in some boiling water reactors and secondary-side control valve oscillations for PWRs) are not considered intentional.

- (2) Closely monitor thermal power during steady state power operation with the goal of maintaining the two-hour thermal power average at or below the LPL. If the core thermal power average for a 2-hour period is found to exceed the LPL, take timely action to ensure that thermal power is less than or equal to LPL.
- (3) The core thermal power average for a shift is not to exceed the LPL. For the purpose of this guidance, a shift can be no longer than 12 hours.

4.3 Pre-planned Evolutions

For pre-planned evolutions that could affect primary or secondary temperatures, pressures, or flows:

- (1) Determine if the evolution is expected to cause a transient increase in reactor power.
- (2) If the evolution is expected to cause a transient increase in reactor power that could exceed the LPL value, prudent action based on prior performance or evaluations should be taken to reduce power prior to performing the evolution.

4.4 Performance Deficiency Examples

- (1) Intentionally raising power above the LPL for any period time.
- (2) Failure to ensure that thermal power is less than or equal to the LPL when the 2-hour average exceeds the LPL.
- (3) Permitting the core thermal power average for a shift to exceed the LPL.
- (4) Failure to take prudent action prior to a pre-planned evolution that could cause a power increase to exceed the LPL.

4.5 Reporting

Comply with the reporting requirements of 10 CFR 50.72 and 10 CFR 50.73.