

**From:** Neil Sheehan *NS*  
**To:** INTERNET: KMoran@Reformer.Com  
**Date:** 6/18/04 2:20PM  
**Subject:** Information re: Vermont Yankee shutdown

Kevin,

Here are some examples of things that must happen before a nuclear power plant can resume power production following a shutdown:

\* A reactor shutdown report must be completed and approved by plant management, and the cause of the plant trip must be addressed. The NRC reviews the company's response to the event, including the thoroughness and comprehensiveness of its review. We pay close attention to the company's root cause analysis of the event.

\* All plant technical specifications must be satisfied. (Technical specifications are part of a plant license and, among other things, spell out equipment which must be operable and process parameters which must be met before allowing operation of the reactor.) An example of actions required to meet technical specifications would be refilling the condensate storage tanks to the appropriate levels and cooling the suppression pool to normal operating limits.

\* Systems must be aligned to support the startup.

\* A reactor criticality calculation must be performed to predict the control rod withdrawals need to achieve criticality, where the fission chain reaction becomes self-sustaining due to the increased neutron flux.

In general, it may require a day or more before a nuclear power plant can restart following a normal reactor trip. In the case of the event this morning at Vermont Yankee, a new main transformer will have to be installed and tested before the plant can return to service. You would need to check with the plant as to how long that might take.

Please let me know if you have any additional questions.

Regards,  
Neil Sheehan  
NRC Public Affairs  
(610) 337-5331

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