SNC is proposing the following variations from the TS changes described in the TSTF-542 or the applicable parts of the NRC staff's safety evaluation. These variations do not affect the applicability of TSTF-542 or the NRC staff's safety evaluation to the proposed license amendment.

The HNP TS utilize different numbering than the Standard Technical Specifications (STS) on which TSTF-542 was based. Specifically, the HNP TS 3.8.8, "Distribution Systems – Shutdown" corresponds to the STS 3.8.10. This difference is administrative and does not affect the applicability of TSTF-542 to the HNP TS.

The Traveler and Safety Evaluation discuss the applicable regulatory requirements and guidance, including the 10 CFR 50, Appendix A, General Design Criteria (GDC). HNP Unit 1 was not licensed to the 10 CFR 50, Appendix A, GDC. The HNP Unit 1 construction permit was received under the 70 general design criteria issued in 1967. The 70 general design criteria issued in 1967 equivalents to the 10 CFR 50, Appendix A, GDC are shown below:

10 CFR 50 Appendix A Criterion	1967 General Design Criterion Equivalent
Criterion 13—Instrumentation and control	*Criterion 12 – Instrumentation and Control Systems* *Criterion 13 – Fission Process Monitors and Controls*
Criterion 14—Reactor coolant pressure boundary	*Criterion 33 – Reactor Coolant Pressure Boundary Capability* *Criterion 34 – Reactor Coolant Pressure Boundary Rapid Propagation Failure Prevention*
Criterion 30—Quality of reactor coolant pressure boundary	*Criterion 1 – Quality Standards*
Criterion 33—Reactor coolant makeup	Although there was not an equivalent 1967 criterion, this Appendix A criterion is met as discussed in Unit 1 FSAR Chapters 4.10 "Nuclear System Leakage Detection and Leakage Rate Limits," 4.7, "Reactor Core Isolation Cooling System," 6.0 "Emergency Core Cooling System," and 7.8 "Reactor Vessel Instrumentation".

This difference does not alter the conclusion that the proposed change is applicable to HNP Unit 1.

The HNP Technical Specifications contain a Surveillance Frequency Control Program (SFCP). Therefore, the Surveillance Requirement Frequencies for Specification 3.3.5.2 and 3.5.2 are "In accordance with the Surveillance Frequency Control Program." HNP is adopting the recommended frequencies in TSTF-542, except that SR 3.3.5.2.2 frequency to perform CHANNEL FUNCTIONAL TEST will be "92 days on an ALTERNATE TEST BASIS." This is consistent with the current licensing basis for existing SRs 3.3.5.1.2 and 3.3.6.1.2. Performing these CHANNEL FUNCTIONAL TEST SRs on an ALTERNATE TEST BASIS was approved in TS Amendment 234 (Unit 1) / 176 (Unit 2). In addition, since HNP is on two year fuel cycles, the [18] month frequencies in TSTF-542 will be 24 month frequencies for HNP.

The HNP TS contain requirements that differ from the Standard Technical Specifications on which TSTF-542 was based, but are encompassed in the TSTF-542 justification:

- HNP has not adopted TSTF-493, “Clarify Application of Setpoint Methodology for LSSS Functions,” or TSTF-51 “Revise containment requirements during handling irradiated fuel and core alterations”. Although these Travelers had no impact on the technical changes made in TSTF-542, they affected many of the same TS pages. Consequently, there are some tangential differences (e.g. footnote numbering) in the HNP markups and the TSTF-542 markups due to these two Travelers being incorporated into NUREG-1433. TS markup differences related to these two Travelers do not alter the conclusion that the proposed change is applicable to HNP Units 1 and 2.

- HNP Unit 1 and Unit 2 TS 3.3.5.1 Condition B.1, C.1, E.1 states “Declare supported feature(s) inoperable.” The TSTF-542 markups states (with underline added for effect) “Declare supported feature(s) inoperable <u>when its redundant feature ECCS initiation capability is inoperable.</u>” The completion time for both HNP and the STS states (with underline added for effect) “1 hour <u>from discovery of loss of initiation capability for feature(s) in both divisions</u>.” Based on when the completion time starts, the additional words in the STS are editorial.

- The HNP CS and LPCI subsystems have one flow transmitter per ECCS subsystem to detect the associated subsystems’ flow rates, whereas the STS assume one flow transmitter per ECCS pump to detect the associated subsystems’ flow rates. Each HNP CS subsystem has one CS pump, and each HNP LPCI subsystem has two LCPI pumps. SNC proposes to maintain the one channel per subsystem requirement for new Table 3.3.5.2-1. (Although for the CS subsystem this deviation of “1 per subsystem” versus “1 per pump” is editorial, keeping “1 per subsystem” will maintain consistency with the current language.)

- SNC is proposing to add a note to TS Table 3.3.5.2-1 (RPV WIC Instrumentation) to clarify the intent of allowing credit for an OPERABLE Low Pressure Coolant Injection subsystem when it is aligned and operating in the decay heat removal mode of RHR. This is appropriate since the associated RHR pump minimum flow valve (while operating in the decay heat removal mode) is closed and deactivated to prevent inadvertent vessel drain down events. Because the minimum flow valve is closed and deactivated, the associated TS Table 3.3.5.2-1 Function 2.b would not be required to be OPERABLE. Without the note, TS 3.3.5.2 Condition D would require that the associated RHR pump be declared inoperable, which would be contrary to the intent of the SR 3.5.2.4 (new SR 3.5.2.5) Note which allows the LPCI subsystem to be OPERABLE when aligned for decay heat removal.

- The HNP Unit 1 and Unit 2 TS do not include a manual initiation logic function for the CS or LPCI subsystems. Considering the logic design, there is not a “single” switch that will start all subsystems of the associated ECCS system as is assumed in the STS. HNP does, however, have the capability to manually start the ECCS pumps individually. Since the manual initiation logic function does not exist at HNP, manual initiation functions for LPCI and CS are not being included in Technical Specification 3.3.5.2, "Reactor Pressure Vessel (RPV) Water Inventory Control," Table 3.3.5.2-1. Additionally,

since the manual initiation functions are not included in Table 3.3.5.2-1, the associated Logic System Functional Test would likewise not be required for TS 3.3.5.2; therefore, TS 3.3.5.2 as proposed for HNP Unit 1 and Unit 2 TS does not include a Logic System Functional Test SR.

As an alternative, SNC proposes that Technical Specification 3.5.2, "Reactor Pressure Vessel (RPV) Water Inventory Control," include an SR to verify that the HNP Unit 1 and Unit 2 TS LPCI and CS subsystem can be manually operated through the manipulation of subsystem components from the Main Control Room (i.e., proposed SR 3.5.2.8 shown below).

SR 3.5.2.~~6~~8	----------NOTE---------- Vessel injection/spray may be excluded. ----------	
	Verify ~~each~~ the required ECCS injection/spray subsystem ~~actuates on an actual or simulated automatic initiation signal~~can be manually operated.	In accordance with the Surveillance Frequency Control Program

The manual operation of the LPCI and CS subsystems for the control of reactor cavity or RPV inventory are relatively simple evolutions and involve the manipulation of a small number of components. These subsystem alignments can be performed by licensed operators from the Main Control Room as described in HNP site procedures. This alternative is justified by the fact that a draining event is a slow evolution when compared to a design basis loss of coolant accident (LOCA), which is assumed to occur at full power, and thus there is adequate time to take manual actions (i.e., hours versus minutes). Adequate time to take action is assured since the proposed Technical Specification 3.5.2, Condition E, prohibits plant conditions that result in Drain Times that are less than one hour. Therefore, there is sufficient time for the licensed operators to take manual action to stop an unanticipated draining event, and to manually start an ECCS injection/spray subsystem or the additional method of water injection. Consequently, there is no need for manual initiation logic to actuate the required subsystem components.

Since the LPCI and CS subsystems can be placed in service using manual means in a short period of time (i.e., within the timeframes assumed in the development of TSTF-542), using controls and indications that are readily available in the Main Control Room, manual operation of the required subsystem would be an equivalent alternative to system initiation via manual initiation logic.

- The HNP TS Bases do not discuss Table 3.3.5.1-1 footnote (a). TSTF-542 deletes the TS Bases discussion to this footnote. Therefore, this change (deleting discussion of footnote (a)) is not needed for HNP.

- The HNP TS Bases contain an additional constraint that HNP is not to use the 24 hour allowance of TS 3.3.5.1 Required Action B.3 for Function 1.a (for CS Level 1 initiation) and Function 2.a (for LPCI Level 1 initiation) when in MODE 4 or 5. As discussed in

TSTF-542, these Functions are no longer required in MODE 4 or 5 since there is no longer a need for automatic initiation of ECCS to respond to an unexpected draining event. Therefore, this additional constraint in the HNP TS Bases is no longer applicable.

- TSTF-542 inadvertently omitted the corresponding TS Bases markup for the deletion of TS 3.3.6.1 Required Action J.2. HNP TS Bases changes are made consistent with this TS change.

- The HNP TS 3.3.7.1 Main Control Room Environmental Control (MCREC) System Instrumentation is formatted slightly differently than the STS. The APPLICABILITY of the HNP TS states “During operations with a potential for draining the reactor vessel (OPDRVs)” whereas the STS refers to Table 3.3.7.1-1. As discussed in TSTF-542, the prescriptive control room habitability requirements and corresponding automatic instrumentation Functions are no longer needed for these types of evolutions. TSTF-542 deletes the OPDRV applicability from Table 3.3.7.1-1, whereas for HNP the OPDRV applicability is being deleted from the APPLICABILITY section. The net effect is the same.

- The STS Note on LCO 3.5.2 regarding realignment to the Low Pressure Coolant Injection mode is located in HNP’s SR 3.5.2.4 (new SR 3.5.2.5). This has no effect on the adoption of the TSTF-542 and is an acceptable deviation.

- The Bases discussion for SR 3.5.2.2 and SR 3.5.2.3 has been slightly modified from TSTF-542 to more accurately reflect the SR requirements.

- HNP has different requirements for their secondary containment and their standby gas subsystems from that assumed in the STS. The secondary containment encompasses three separate zones: the Unit 1 reactor building (Zone I), the Unit 2 reactor building (Zone II), and the common refueling floor (Zone III). Zones can be excluded from the secondary containment OPERABILITY requirement during various plant operating conditions with the appropriate controls.

  The required number of SGT subsystems is dependent on the configuration required to meet LCO 3.6.4.1, "Secondary Containment." For secondary containment OPERABILITY consisting of all three zones, the required number of SGT subsystems is four. With secondary containment OPERABILITY consisting of one reactor building and the common refueling floor zones, the required number of SGT subsystem is three.

  The HNP 3.6.4.1 and 3.6.4.3 TS and TS Bases markups have updated accordingly.

- HNP TS 3.6.1.3 Condition F (which corresponds to STS Condition H) does not contain the phrase “or during operations with a potential for draining the reactor vessel (OPDRVs).” This phrase is being deleted from the STS per TSTF-542. Since OPDRVs are only preformed in MODE 4 or MODE 5, this phrase that was contained in the STS was unnecessary.

- HNP 3.6.4.3 Conditions D and F correspond to STS Conditions C and E, respectively.

- The HNP 3.8.5 Conditions are structured differently from the STS. Deleting HNP Required Action A.2.3 meets the intent of deleting STS Required Action B.2.3.

- The HNP Unit 1 TS Bases LCO discussion for B 3.8.2 does not mention mitigating the consequences of a reactor vessel draindown. Therefore, this change from the TSTF-542 B 3.8.2 LCO discussion is not needed.

- HNP does not have an “Inverters – Operating” or an “Inverters – Shutdown” TS. As stated in the HNP ITS Conversion, “Inverters, as utilized in the NUREG STS (i.e., inverters that power many required systems and that are required to be powered by the DC sources to meet accident analysis assumptions), do not exist in the HNP. As such, NUREG LCO 3.8.7 and LCO 3.8.8, their associated Bases, and all references to them have been deleted. The LCOs that follow have been renumbered to reflect this deletion. The only inverters that need to be powered from DC sources are the LPCI inverters, which only provide power to the LPCI subsystems. These two inverters are covered by an SR in NUREG LCO 3.5.1 (ECCS) since they only impact the LPCI subsystems.”