

# AGENDA

- Overview of Technical Specification (TS) 02-01
- Setpoint and Allowable Value Changes
- TS 02-01 Proposed Changes

## OVERVIEW OF TS 02-01

- Change Proposed to Resolve NRC Resident Inspector Issue – Nominal Trip Setpoint
- Consistent with TSTF-355 (TSB-20)
- For Reactor Trip (RT) and Engineered Safety Features (ESF) Limiting Condition of Operation (LCO):
  - ◇ Added “Nominal” Above Trip Setpoint Column and Consistently Revised the Use of “Nominal” Throughout the TSs
  - ◇ Deleted Inequalities Signs on Trip Setpoint Values
  - ◇ Corrected Reactor Coolant Pump (RCP) Under Voltage/Under Frequency Values
  - ◇ Revised Minimum Channels Operable Value for Auxiliary Feedwater (AFW) Loss of Power Timers

## OVERVIEW OF TS 02-01

- For Consistency With NUREG-1431 and to More Appropriately Accommodate the Safety Function for Some of the Functions Affected:
  - ◇ Four New LCOs Were Created
    - TS 3.3.3.11 – Containment Vent Isolation (CVI) Instrumentation
    - TS 3.3.3.12 – Auxiliary Building Gas Treatment System (ABGTS) Actuation Instrumentation
    - TS 3.3.3.13 - Control Room Emergency Ventilation System (CREVS) Actuation Implementation
    - TS 3.3.3.14 – Loss of Power (LOP) Diesel Generator (DG) Start Instrumentation
  - ◇ The Current Radiation Monitoring LCO (TS 3.3.3.1) was Deleted
  - ◇ The RCS Leakage Detection LCO SR (SR 4.4.6.1.a) was Modified

# OVERVIEW OF TS 02-01

- Containment Vent Isolation (CVI) Instrumentation (TS 3.3.3.11)
  - ◇ Actions Tied to Appropriate Containment Isolation TS
  - ◇ Applicability Column Utilized Consistent with TSTF-161
  - ◇ Setpoint Column Deleted and Allowable Value Relaxed From Current Value
  - ◇ Allowable Value (AV) Column Chosen to Allow Flexibility in Setting Radiation Monitor (RM) Setpoints

## OVERVIEW OF TS 02-01

- Auxiliary Building Gas Treatment System (AGBTS) Actuation Instrumentation – TS 3.3.3.12
  - ◇ Relaxed Applicability With Respect to Fuel in Spent Fuel Pool Versus Movement of Irradiated Fuel Assembly
  - ◇ Action Made More Conservative by Requiring AGBTS to be Declared Inoperable Versus Increased Monitoring
  - ◇ Setpoint Column Deleted and Added AV Column
  - ◇ New AV Value Calculated

## OVERVIEW OF TS 02-01

- Control Room Emergency Ventilation Systems (CREVs) Actuation Instrumentation – TS 3.3.3.13
  - ◇ Actions Have Been Aligned for the Different Modes of Applicability to Match the CREVs Function
  - ◇ Setpoint Column Deleted and Allowable Value Column Created
  - ◇ New AV Calculated

## OVERVIEW OF TS 02-01

- Loss of Power (LOP) DG Start Instrumentation – TS 3.3.3.14
  - ◇ Both sets of DG Start and Load Shed Timers and the SI/Degraded Voltage Logic Enable Timer Changed Required Channels from 2 to 1
  - ◇ Added Upper AV for Loss of Voltage and Degraded Voltage (DV) Sensors (Reference TSTF-365)
  - ◇ Added the Lower AV Limit for the DV DG Start and Load Shed Timer

## Setpoints and Allowable Values Changes

Change Description	Setpoint Methodology in TS 02-01	Impact of Change
Reactor Trip System – Undervoltage Reactor Coolant Pumps Allowable Value from $\geq 4739$ volts to $\geq 4952$ volts	Westinghouse methodology, Method 3 with T2 calculation check (WCAP-11239). NRC review of this WCAP performed in conjunction with TS Change 89-27 and Amendments 141 (U1) and 132 (U2)	More restrictive allowable value resulting from change in methodology
Reactor Trip System – Underfrequency Reactor Coolant Pumps Setpoint from $\geq 56.0$ Hz to Nominal 57 Hz	Westinghouse methodology, Method 3 with T2 calculation check (WCAP-11239). NRC review of this WCAP performed in conjunction with TS Change 89-27 and Amendments 141 (U1) and 132 (U2)	More restrictive Setpoint to accommodate new instrumentation and methodology change
Reactor Trip System – Underfrequency Reactor Coolant Pumps Allowable Value from $\geq 55.9$ Hz to $\geq 56.3$ Hz	Westinghouse methodology, Method 3 with T2 calculation check (WCAP-11239). NRC review of this WCAP performed in conjunction with TS Change 89-27 and Amendments 141 (U1) and 132 (U2)	More restrictive Setpoint to accommodate new instrumentation and methodology change
ESF Actuation System and Radiation Monitoring Instrumentation – Containment Purge Air Exhaust Radioactivity Monitor Setpoint from $\leq 8.5 \times 10^{-3}$ $\mu\text{Ci/cc}$ to no specified value	Not Applicable	Setpoint will be controlled in accordance with plant procedures and the setpoint methodology to ensure that the allowable value is properly maintained. Actual practice is to use a setpoint more conservative than required.
ESF Actuation System – Containment Purge Air Exhaust Radioactivity Monitor Allowable Value from $\leq 8.5 \times 10^{-3}$ $\mu\text{Ci/cc}$ to $\leq 100,000$ cpm in a new LCO for CVI actuation	TVA's TI-28 methodology, Method 3 without T2	Proposed Allowable Value is less restrictive than the current value.



## Setpoints and Allowable Values Changes (continued)

Change Description	Setpoint Methodology in TS 02-01	Impact of Change
ESF Actuation System – AFW and EDG loss-of-power start allowable value added for upper limit of $\leq 5688$ volts	TVA's TI-28 methodology, Method 3 without T2. This is a new value but determined consistent with other loss of voltage and degraded voltage values. These values and the associated Calculation SQN-EEB-MS-T106-0008 reviewed by NRC with TS Change 93-09 and Amendments 182 (U1) and 174 (U2).	Current TSs do not utilize an upper limit, therefore, this addition is more restrictive. This addition supports the NRC requested change to ITS.
ESF Actuation System – EDG degraded voltage start allowable value added for upper limit of $\leq 6522.5$ volts. Results in the deletion of the current reset value of $\leq 6595.5$ volts	TVA's TI-28 methodology, Method 3 without T2. This is a new value but determined consistent with other loss of voltage and degraded voltage values. These values and the associated Calculation SQN-EEB-MS-T106-0008 reviewed by NRC with TS Change 93-09 and Amendments 182 (U1) and 174 (U2).	Current TSs do not utilize an upper limit, therefore, this addition is more restrictive. This addition supports the NRC requested change to ITS. This change replaces the current reset value which served a similar purpose and results in a more restrictive value.
ESF Actuation System – EDG degraded voltage start and load shed timer allowable value added for lower limit of $\geq 218.6$ seconds.	TVA's TI-28 methodology, Method 3 without T2. This is a new value but determined consistent with other loss of voltage and degraded voltage values. These values and the associated Calculation SQN-EEB-MS-T106-0008 reviewed by NRC with TS Change 93-09 and Amendments 182 (U1) and 174 (U2).	Current TSs do not utilize a lower limit, therefore, this addition is more restrictive. Conservative addition to better indicate allowable operating ranges for the timer and for consistency with other timers.
Radiation Monitoring Instrumentation – Fuel Storage Pool Area Monitor, relocated to new LCO for ABGTS actuation and current setpoint of $\leq 200$ mR/hr not utilized in lieu of an allowable value	Not applicable	Setpoint will be controlled in accordance with plant procedures and the setpoint methodology to ensure that the allowable value is properly maintained. Actual practice is to use a setpoint more conservative than required.

## Setpoints and Allowable Values Changes (continued)

Change Description	Setpoint Methodology in TS 02-01	Impact of Change
ABGTS Actuation Instrumentation – Fuel Storage Pool Area Radiation Monitor, new LCO for ABGTS actuation and an allowable value of $\leq 307$ mR/hr utilized	TVA's TI-28 methodology, Method 3 without T2	Addition of an allowable value that protects the safety limit is an alternative approach to current requirements to only provide a setpoint. The proposed LCO for ABGTS provides a more safety function oriented approach that supports accident mitigation functions. The proposed allowable value is less restrictive than the current setpoint.
Radiation Monitoring Instrumentation – Control Room Isolation Monitor, relocated to new LCO for CREVS actuation and current setpoint of $\leq 400$ cpm not utilized in lieu of an allowable value	Not applicable	Setpoint will be controlled in accordance with plant procedures and the setpoint methodology to ensure that the allowable value is properly maintained. Actual practice is to use a setpoint more conservative than required.
CREVS Actuation Instrumentation – Control Room Intake Radiation Monitor, new LCO for CREVS actuation and an allowable value of $\leq 43,400$ cpm utilized	TVA's TI-28 methodology, Method 3 without T2	Addition of an allowable value that protects the safety limit is an alternative approach to current requirements to only provide a setpoint. The proposed LCO for CREVS provides a more safety function oriented approach that supports accident mitigation functions. The proposed allowable value is less restrictive than the current setpoint.

