



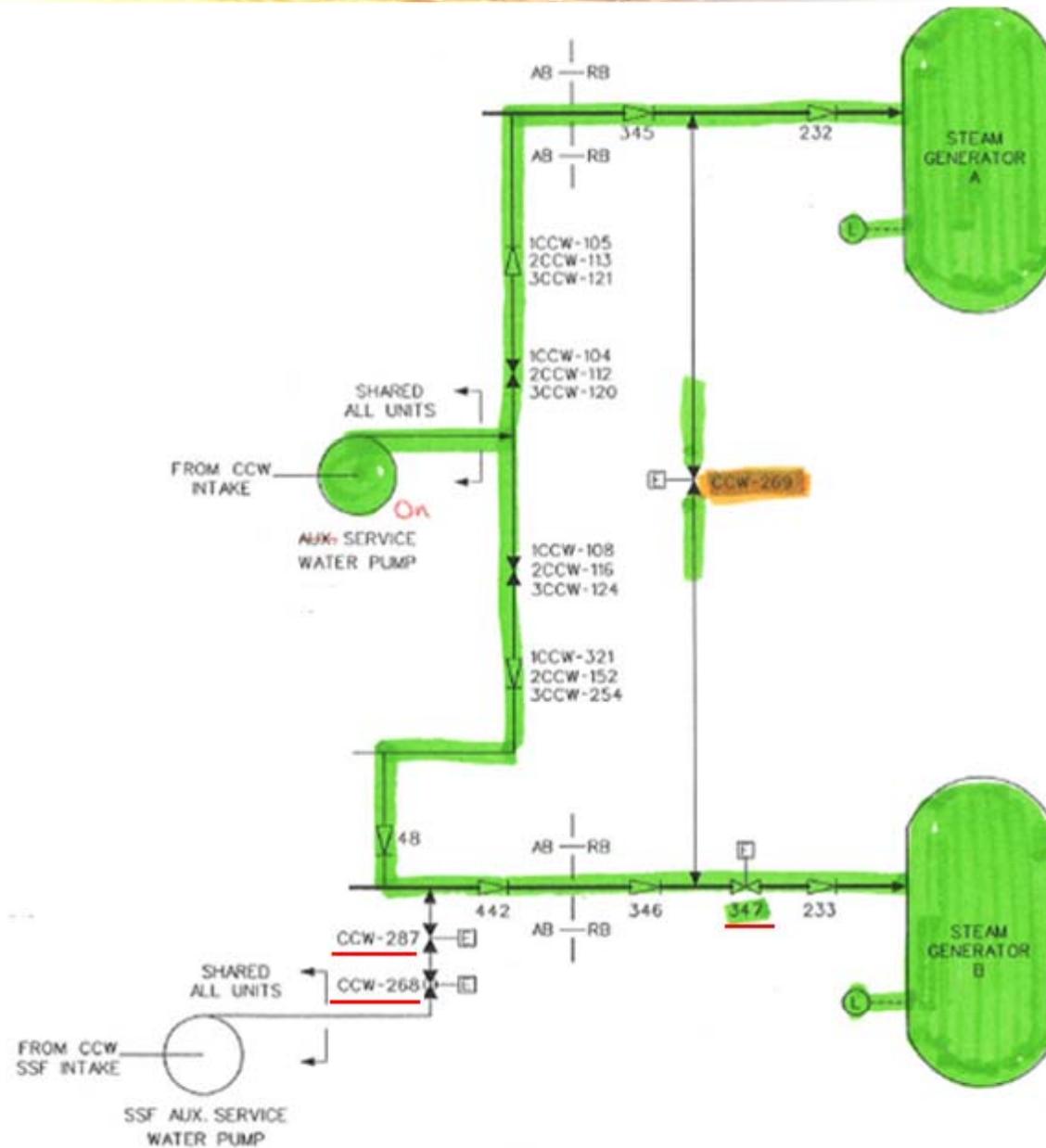
## Examples of Documenting Fulfillment of Nuclear Performance Safety Criteria for All Modes of Operation

AT POWER (Modes 1-2) & NON-POWER (Modes 3-6)

## Example 1

- At Power Issue (Modes 1-2) – A hot short spuriously closes valve 1FDW-347 creating a flow blockage to S/G B.
- VFDR is a separation issue
- Activity is required to demonstrate availability of a success path for the NSPC. Diversion issue
- Activity must be feasible – Feasibility cannot be demonstrated; valve may suffer damage due to IN 92-18 hot short
- Compliance will be evaluated using NFPA 805 § 4.2.4.2

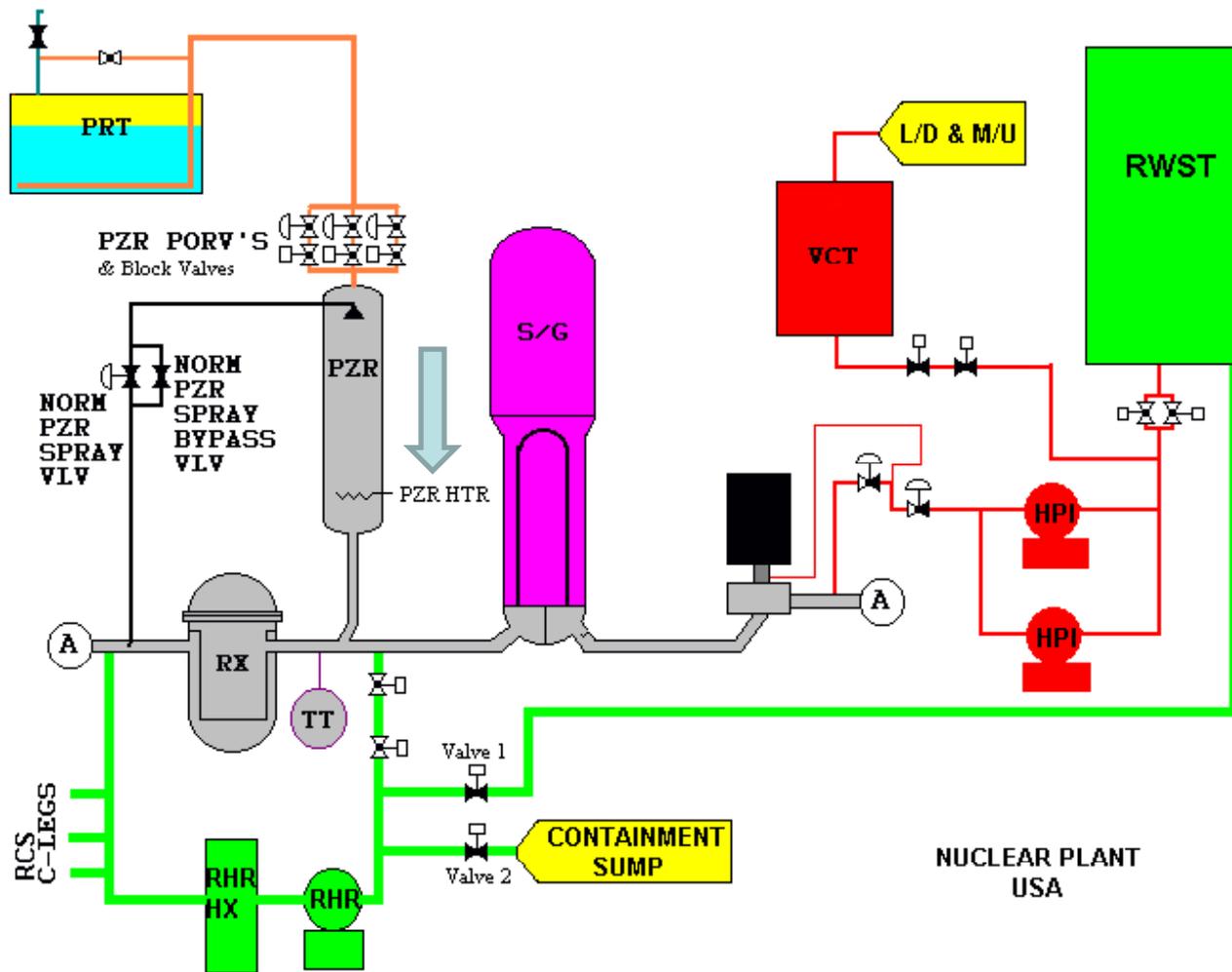
# Example 1



## Example 2

- NPO Issue (Modes 3-6) – A hot short spuriously actuates pressurizer heater bank. Cables are located in the FA.
- Activity is evaluated in the NPO pinch point analysis. Fire Area is a pinch point. KSF is pressure control.
- VFDR is a separation issue
- Activity is important to demonstrate availability of a success path for the NSPC
- Activity is feasible
- Not necessary to evaluate the additional risk of the recovery action
- Document compliance with NFPA § 4.2.3.1

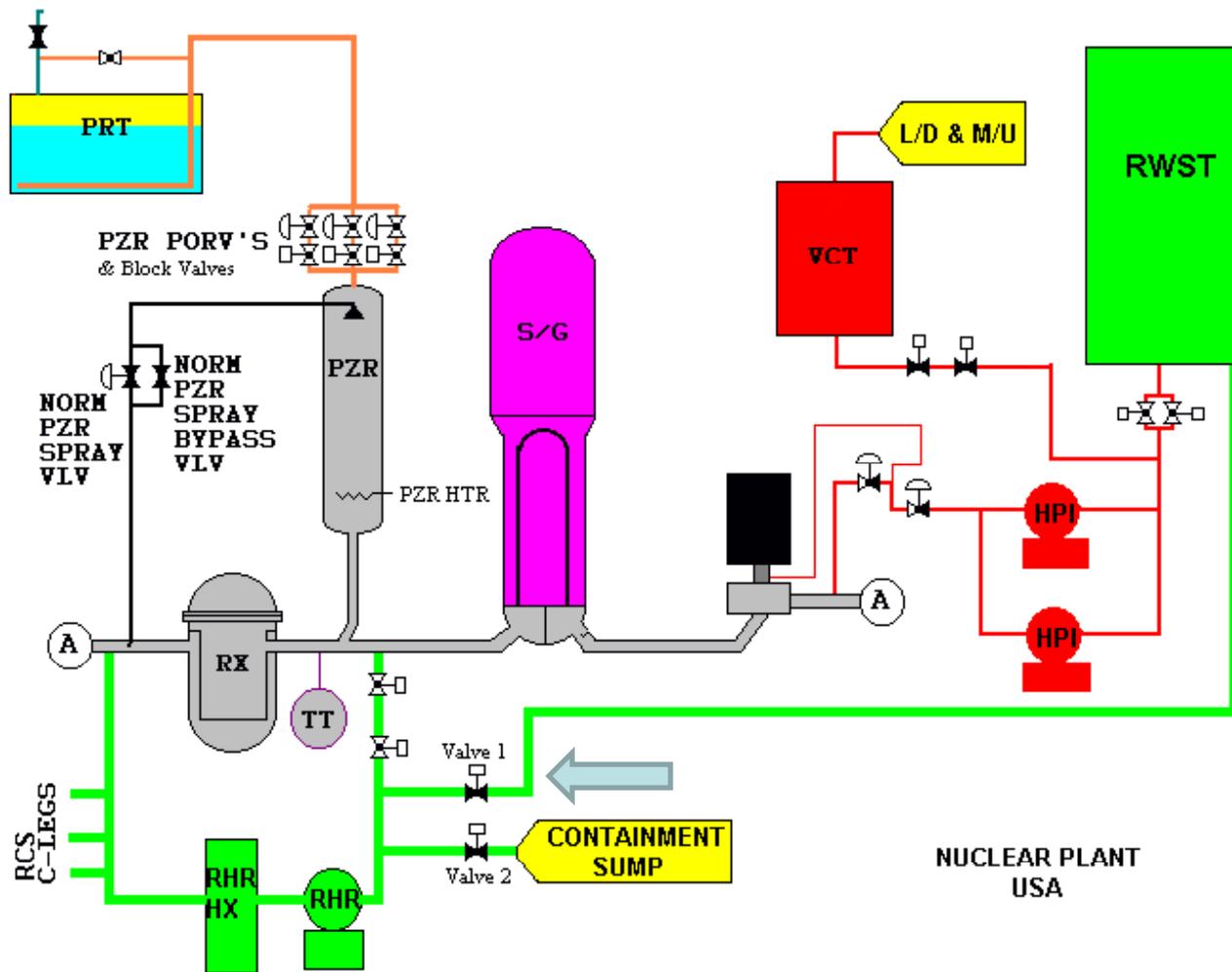
# Example 2



## Example 3

- At Power Issue (Modes 1-2) - Spurious operation or a loss of power and control due to the cable failures of valve 1 may cause a diversion of RWST. The failure of 1 combined with the spurious operation of valve 2 may provide a diversion flow path for RWST to the containment sump.
- Diversion to the containment sump can quickly deplete RWST which is required for CSD; therefore manual actions may be required to isolate RWST during HSB to protect inventory (locally shut valve(s)).
- VFDR is a separation issue
- Activity is important to demonstrate availability of a success path for the NSPC
- Activities must be feasible.
- Not necessary to evaluate the additional risk of the recovery action
- Document compliance with NFPA § 4.2.3.1

# Example 3



## Example 4

- At Power Issue (Modes 1-2) – Service water swap over from large water source to small source (ex. lake vs. pond) may be lost due to failure of non-credited train in swap-over logic. Plant normally operates in parallel mode. Valves can be aligned from Control Room.
- Activity is required to demonstrate availability of a success path for the NSPC. Need to ensure lineup is achieved to maintain service water system.
- Activity is a pre-existing OMA. A procedure exists to perform activity from the control room – feasibility achieved.
- Activity takes place in the main control room, therefore not a recovery action
- Document compliance with NFPA 805 § 4.2.3

## Example 5

- At Power Issue (Modes 1-2) – A hot short spuriously opens PORV RC-66 and block valve RC-4 resulting in a loss of sub cooling.
- VFDR is a separation issue
- Activity is important to demonstrate availability of a success path for the NSPC
- Activity must be feasible – feasibility demonstrated
- Not necessary to evaluate the additional risk of the recovery action
- Document compliance with NFPA § 4.2.3.1

