LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
2.a. From and after the date that the safety valve function of one relief valve is made or found to be inoperable, continued reactor operation is permissible only during the succeeding thirty days unless such valve function is sooner made operable.	2. At least one of the relief valves shall be disassembled and inspected each refueling outage.
b. From and after the date that the safety valve function of two relief valves is made or found to be inoperable, continued reactor operation is permissible only during the succeeding seven days unless such valve function is sooner made operable.	
3. If Specification 3.6.D.1 is not met, an orderly shutdown shall be initiated and the reactor coolant pressure shall be reduced to atmospheric within 24 hours.	3. With the reactor pressure $\geq$ 100 psig and turbine bypass flow to the main condenser, each relief valve shall be manually opened and verified open by turbine bypass valve position decrease and pressure switches and thermocouple readings downstream of the relief valve to indicate steam flow from the valve once per operating cycle.
E. Jet Pumps	E. Jet Pumps
1. Whenever the reactor is in the RUN mode, all jet pumps shall be OPERABLE. If the requirements of 4.6.E.1.a or .b are not met, perform the surveillance requirements of 4.6.E.2 within 24 hours. If one or more jet pumps do not meet the requirements of 4.6.E.2 and	1. Jet pump operability shall be verified daily, following startup of a recirc pump and after any unexplained changes in either core flow, jet pump loop flow, recirculation loop flow, or core plate differential pressure (ΔP), by recording the jet pump diffuser to lower plenum ΔP's, recirculation pump flows, recirculation pump speeds, and jet pump loop flows and verifying that:
a. the recirculation pump speed is less than 60% of rated, continue to monitor the jet pump(s) performance per 4.6.E.2 daily until the evaluation can be performed at pump speed greater than 60%.	a. The recirculation pump flow to pump speed ratio does not vary from the normal expected operating range by more than 5%, and

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENT
b. the recirculation pump speed is greater than or equal to 60% of rated, evaluate the reason for the deviation and if the evaluation verifies the jet pump(s) to be INOPERABLE, the reactor shall be placed in COLD SHUTDOWN within 24 hours.	b. The jet pump loop flow to recirculation pump speed ratio does not vary from the normal expected operating range by more than 5%.
	2. Record the individual jet pump ΔP's and verify that the individual jet pump ΔP percent deviation from the average loop ΔP does not vary from its normal expected operating range by more than 20%.
	3. The surveillance requirements of 4.6.E.1 and .2 do not apply to the idle recirculation loop and associated jet pumps when in SLO.
	4. Following each REFUEL OUTAGE, as soon as practical after reaching 60% of rated pump speed, update the baseline data used to perform the above evaluations. Baseline data for SLO shall be updated as soon as practical after entering SLO.
F. Jet Pump Flow Mismatch	F. Jet Pump Flow Mismatch
1. When both recirculation pumps are in steady state operation, the speed of the faster pump may not exceed 122% of the speed of the slower pump when core power is 80% or more of rated power or 135% of the speed of the slower pump when core power is below 80% of rated power.	1. Recirculation pump speeds shall be checked and logged at least once per day.
2. If Specification 3.6.F.1 cannot be met, one recirculation pump shall be tripped. The reactor may be started and operated, or operation may continue in SLO provided that:	2. a. Prior to SLO and core thermal power greater than the limit specified in Figure 3.3-1, establish baseline APRM and LPRM* neutron flux noise levels, provided that baseline values have not
	*Detector levels A and C of one LPRM string per core octant plus detector levels A and C of one LPRM string in the center of the core shall be monitored.

3.6.E & 4.6.E BASES:

Jet Pumps

Failure of a jet pump nozzle assembly hold down mechanism, nozzle assembly and/or riser increases the cross sectional flow area for blowdown following the postulated design basis double-ended recirculation line break, i.e., the design basis LOCA. Therefore, if such a failure occurs, repairs must be made to assure the DAEC LOCA evaluations remain valid, and the plant does not operate outside its analyzed envelope.

The following factors form the basis for the surveillance requirements:

a. Recirculation Pump Flow/Speed Ratio: the pump operating characteristic is determined by the flow resistance from the loop suction through the jet pump nozzle. Since this resistance is essentially independent of core power, the flow is linearly proportional to pump speed, making their ratio a constant (flow/RPM is constant). A decrease in the ratio indicates a plug, flow restriction, or loss in pump hydraulic performance. An increase indicates a leak or new flow path between the recirculation pump discharge and jet pump nozzle.

b. Jet Pump Loop Flow/Recirculation Pump Speed Ratio: this relationship is an indication of overall system performance.

c. Jet Pump Differential Pressure Relationships: if a potential problem is indicated, the individual jet pump differential pressures are used to determine if a problem exists since this is the most sensitive indicator of significant jet pump performance degradation.

However, these tests are not very accurate below 60% of rated recirculation pump speed due to the instrument accuracy and the significant influence of natural circulation at core flows less than 50% of rated. Therefore, anomalous readings should be evaluated at higher pump speeds before declaring a jet pump inoperable.

After CORE ALTERATIONS, particularly when new fuel designs are loaded into the core, the established relationships for monitoring recirculation system performance may be affected. Hence the requirement to reevaluate the data base after each refuel outage to determine if the baseline data for normal expected operation range remain valid. As stated above, the data is not very reliable below 60% of rated pump speed; thus, the reevaluation of the data base should be performed after reaching 60% pump speed.

Agreement of indicated core flow with established power-core flow relationships provides the most assurance that recirculation flow is not bypassing the core through inactive jet pumps. This bypass flow is reverse with respect to normal jet pump flow. The indicated total core flow is a summation of the flow indications for the sixteen individual jet pumps. The total core flow measuring instrumentation sums reverse jet pump flow as though it were forward flow in the case of a failed jet pump. Thus the indicated flow is higher than actual core flow by

at least twice the normal flow through any backflowing jet pump.* Reactivity inventory is known to a high degree of confidence so that even if a jet pump failure occurred during a shutdown period, subsequent power ascension would promptly demonstrate abnormal control rod withdrawal for any power-flow operating map point.

A nozzle-riser system failure could also generate the coincident failure of a jet pump body; however, the converse is not true.

The lack of any substantial stress in the jet pump body makes failure impossible without an initial nozzle riser system failure.

*Note: In the case of SLO, when the recirculation pump is tripped, the flow through the inactive jet pumps is subtracted from the total jet pump flow, yielding the correct value for the total core flow.