

~~PROPRIETARY INFORMATION~~

021(b)

Original, August 24, 2000

Quad Cities Station Time Line for Drill #3 Changes with the incorporation of a Loss of Offsite Power (LOOP) Coincident with the SCRAM

On August 24, 2000, Quad Cities Station ran the timeline for Drill #3 with the assumption of a loss of Off Site Power occurring at the same time. The initial conditions in the simulator were setup the same as the original timeline validation. The only change was that a Loss of Offsite Power was initiated coincident with the SCRAM taken on the notification of

The following changes were noted from the previous scenario:

Reactor cool down would be performed using a combination of

Information in this record was deleted in accordance with the Freedom of Information Act, exemption 4
FOIA 2001-0226

Water level was being controlled manually using up to the point of at approximately 30 inches. was placed back in automatic prior to versus having due to an automatic -59-inch reactor water level signal. With these differences, the reactor parameters of pressure and level were established to approximately the same values as during the initial Time Line as represented below:

	Initial Timeline	Timeline with LOOP
Level	+35 inches	+30 inches
Pressure	396 psig	400 psig

With these parameters established at the same values at the the remainder of the timeline and parameters would be unaffected.

The ability to establish the above parameters would be expected with or without Offsite Power available for the following reasons:

- The combination of is adequate to reduce reactor pressure without the in the time allowed during the scenario
- are adequate without the aid of to restore and maintain water level, with a reactor cool down in progress.

Reactor Pressure was not lowered to the point at which the in the scenario timeline that did not consider the loss of offsite power.

~~Proprietary information pursuant to 2.790(d) - contains information concerning physical protection of the facility. Exemption 4.~~

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Revised August 24, 2000

QUAD CITIES STATION TIME LINE FOR DRILL #3

On August 16, 2000, the following time line was derived using Quad Cities Station's simulator to model plant response. The reactor core model used was

Ex 4

The initial conditions were:

Both reactors operating at 100% thermal power, normal feed water level control is operating with all systems available. The times shown

Ex 4

Example: 06: [redacted] Actions shown are for one unit. The other unit would be

handled in the same manner.

06: Manually scram both reactors from 100% power.

06: The reactor scram procedure, [redacted] applies for each unit. Reactors are stable, all rods in, reactor pressure is at 870 psig, Reactor water level is at +10 inches recovering to the normal level.

Ex 4

06: Commenced reactor cool down by manually opening main turbine bypass valves. Reactor level swells to > 48 inches which trips the Reactor Feed Pumps. There is no high-pressure injection at this time. [redacted] and [redacted] both provide consistent direction for this.

06: Reactor level is at -59 inches. [redacted] automatically start and inject to the vessel. Reactor pressure is at 425 psig. This is an automatic system response. [redacted] to the limit specified in

06: [redacted] both [redacted] Reactor pressure is at 396 psig going down slowly. Reactor level is at +35 inches going up due to [redacted] injection. [redacted] will automatically trip off at +48 inches Reactor level.

Ex 4

06: [redacted] Reactor level indicated is +55 inches, and Reactor pressure is 388 psig for both units.

06: Information point only: Reactor level -25 inches and Reactor pressure 180 psig.

06: The procedure [redacted] directs the Unit Supervisor and NSO to take [redacted] and proceed to their respective [redacted]

The Shift Manager decides overall station priorities while the Unit Supervisors control their own units. This timeline assumes the operators arrive at

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their [redacted] From the [redacted] the Unit Supervisors were able to monitor reactor level and pressure.

EX 2

Personnel were dispatched to the [redacted] Operation of these systems for each unit was directed by the respective Unit Supervisors. The procedure [redacted] directs the operation of these injection systems.

06 Information point only: Reactor level is at -45 inches and reactor pressure is 138 psig

06 Evacuated [redacted]

06 Started injecting into the reactor vessel with the [redacted] locally from the room. Reactor level is at -76 inches and Reactor pressure is at 106 psig.

EX

06 Operation of the [redacted] is in accordance with Procedure [redacted] Reactor level is at -78 inches and reactor pressure is at 76 psig. At this point

06 [redacted] would be isolated and unavailable due to low reactor pressure.

06 Reactor level is maintained at -78 to -79 inches with [redacted] The discharge of the [redacted] can be alternated between units locally in the [redacted] room to control level on both units. [redacted] steps are available to inject to either unit, however no specific steps for swapping between units explicitly direct this.

At this point there are low pressure injection systems such as RHR and Core Spray that can be lined up and used for injection to control level in the [redacted] local manual mode.

At no time did core damage occur during the running of this model.