BOSTON EDISON

Pilgrim Nuclear Power Station
Rocky Hill Road
Plymouth, Massachusetts 02360

George W. Davis Senior Vice President -- Nuclear

> April 1, 1991 BECo Ltr. 91.044

U.S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, D.C. 20555

> Docket No. 50-293 License No. DPR-35

BOSTON EDISON'S REVIEW OF THE TRANSCRIPT OF THE FEBRUARY 25, 1991
PUBLIC MEETING BETWEEN BOSTON EDISON AND THE NRC TASK FORCE
ON OFFSITE EMERGENCY PLANNING FOR PILGRIM

Boston Edison has reviewed the transcript of the Februz, y 25, 1991 public meeting with the NRC Task Force on offsite emergency planning for Pilgrim. Enclosed are Boston Edison's responses to the Task Force's requests for additional information which were made at the meeting. We are also providing several additional clarifications and corrections to the transcript.

If you have any questions, please feel free to call me or Ron Varley at 508-747-9464.

G. W. Davis

EOF3698 Attachment

cc: Mr. William T. Russell
Associate Director for Inspection
and Technical Assessment
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

A001

U.S. Nuclear Regulatory Commission April 1, 1991 Page Two

cc (Continued)

Dr. Thomas Murley
Director, Office of Nuclear Reactor
Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Frank J. Congel
Director, Division of Radiation
Protection and Emergency Preparedness
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Steven A. Varga, Director Division of Reactor Projects - I/III Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Mr. Robert A. Erickson Chief, Emergency Preparedness Branch U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Mr. R. Eaton, Project Manager Division of Reactor Projects I/II Office of Nuclear Reactor Regulation Mail Stop 14D1 U.S. Nuclear Regulatory Commission 1 White Flint North 11555 Rockville Pike Rockville, MD 20852

Mr. John Macdonald Senior NRC Resident Pilgrim Nuclear Power Station Rocky Hill Road Plymouth, MA 02360

U.S. Nuclear Regulatory Commission Region I 475 Allendale Road King of Prussia, PA 19406

Mr. Richard Strome Regional Director Federal Emergency Management Agency J. W. McCormack Post Office & Court House Boston, MA 02109

BOSTON EDISON'S REVIEW OF THE TRANSCRIPT OF THE FEBRUARY 25, 1991 PUBLIC MEETING BETWEEN BOSTON EDISON AND THE NRC TASK FORCE

- Boston Edison's Response to Additional Information Requested by the NRC Task Force on February 25, 1991.
 - A. Transcript Pages: 97-101

Speaker: Blair Spitzburg, NRC Task Force

Topic: Information on Transportation Providers

Additional Information Requested:

Mr. Spitzburg requested information from Boston Edison regarding transportation providers. In addition to entering his request for information into the 2/25/91 transcript, Mr. Spitzburg also provided Boston Edison with a written version of his questions. (See Attachment 1).

Boston Edison Response:

On March 12, 1991, Boston Edison forwarded a written response to Mr. Spitzburg's questions. (See Attachment 2).

B. Transcript Page: 149

Speaker: Abby Mohseni, NRC Task Force

Topic: Jordan Hospital Staffing

Additional Information Requested:

Mr. Mohseni requested that Boston Edison follow-up with the Task Force on discussions with Jordan Hospital regarding a potential concern that 2 out of 3 shifts at the hospital do not have enough staff to conduct an evacuation of the hospital.

Boston Edison Response:

As a result of Mr. Mohseni's inquiry, the Boston Edison Community Representative for Plymouth contacted Mr. Tom Biga, the Jordan Hospital Administrator. Mr. Biga indicated that Jordan is currently in the process of verifying the number of individuals who would be available to assist in the event an evacuation of the hospital was required. Mr. Biga indicated that the results of this inquiry would be presented to Doug Hadfield, the Plymouth Civil Defense Director.

Although Boston Edison planners have met and worked with Jordan Hospital staff on numerous occasions, we were not

previously aware of any concern regarding staffing adequacy. If such a concern now exists, we will work with the Hospital in the ongoing planning and program updating process to address this matter as we would any emerging concern.

C. Transcript Pages: 150-151

Speaker: Edward Podolak, NRC Task Force

Topic: Mobilization of Massachusetts National Guard at Wellesley

Additional Information Requested:

Mr. Podolak requested information on mobilization of the Massachusetts National Guard at Wellesley and how it relates to the Governor's declaration of an emergency as described in Boston Edison's October 4, 1990 letter to the NRC (item Tr-70) and its February 21, 1991 memorandum on National Guard mobilization times.

Boston Edison Response:

Item Tr-70 of Boston Edison's October 4, 1990 letter to the NRC states:

The Massachusetts National Guard is activated for an emergency, when the Governor declares a State of Emergency. For a nuclear accident, this could occur as early as the Alert stage....

Boston Edison's February 21, 1991 memorandum entitled "Timely Mobilization of the Massachusetts National Guard to Staff Wellesiey" (p.2) states:

Applicable Radiological Emergency Response Plan (RERP) procedures call for the MNG to be notified and mobilized early on in an emergency at the Alert level....

This statement is qualified in the following footnote in the February 21, 1991 memorandum:

Pursuant to MNG procedures, the MNG does not activate until the Governor declares a state of emergency. The analysis contained in this memorandum does not quantify the time needed to obtain a Governor's declaration. That process may add some additional time to the mobilization sequence. However, based on discussions with MCDA, we understand that in the event of an immediate General Emergency at Pilgrim, action would be promptly initiated to establish a state of emergency.

Both the statements in the October 4, 1990 letter and those in the February 21, 1991 memorandum were intended to convey the same thought: Under RERP procedures, the MNG mobilizes at the Alert level. However, general (non-RERP specific) MNG procedures call for the Guard to be mobilized upon the

Governor's emergency declaration. From our discussions with MCDA, we understand that actions would be taken promptly to ensure that MNG personnel fulfill their RERP-rel. of responsibilities.

D. Transcript Pages: 152

Speaker: Edward Podolak, NRC Task Force

Topic: Status of Wellesley IP-17

Additional Information Coquested:

Mr. Podolak requested the status of Wellesley IP-17 dated February 1, 1990", which was discussed in Boston Edison's February 21, 1991 memorandum to the NRC on Mobilization of the Massachusetts National Guard at Wellesley.

Boston Edison Response:

IP-17 for Wellesley entitled, "Reception Center Set-up Wellesley State DPW Facility Wellesley, MA," IP-17 (Draft-3, February 1, 1991) was incorrectly dated February 1, 1990 in Boston Edison's February 21, 1991 memorandum to the NRC. The current status of IP-17 is as follows: On or about February 20, 1991, the Boston Edison planner for Wellesley gave a copy of the latest draft of IP-17 to the MCDA planner Julia Gabaldon for review and comment. The draft provided to MCDA incorporated comments received from MCDA on the prior draft IP submitted to MCDA early last year. It is Boston Edison's expectation that the procedure can be finalized in the near future.

E. Transcript Pages: 167-168

<u>Speaker</u>: Edward Podolak, GRC Task Force <u>Topic</u>: Status of Equipment Bridgewater

Additional Information Requested:

Mr. Podolak requested that Boston Edison provide the task force with information concerning interference problems associated with a computer located at the Bridgewater Fire Department.

Boston Edison Response:

On March 1, 1991, Boston Edison met with the Executive Secretary and three Selectmen for the Town of Bridgewater. Boston Edison agreed to provide funding for the purchase of a new computer for the Bridgewater Fire Department.

F. Transcript Pages: 187-188

Speakers: Abby Mohseni, NRC Task Force

Topic: Direct Torus Vent

Additional Information Requested:

Mr. Mohsen: equested a copy of the operator aide document used by the watch engineer when considering use of the direct torus vent.

Boston Edison Response:

A copy of the relevant pages from the Draft EOP-EAL Operator Aide pertaining to use of the direct torus vent, only after a General Emergency has been declared, is attached as Attachment 3. This Operator Aide document is presently under internal review. For additional information on this subject, see Boston Edison Response to item G below.

G. Transcript Pages: 195-196

Speakers: Abby Mohseni, NRC Task Force

Topic: Direct Torus Vent

Additional Information Requested:

Mr. Mohseni requested that Boston Edison provide additional information about the procedural process for conducting dose projections and how it correlates with a particular anticipatory status.

Boston Edison Response:

There are several procedures which are used simultaneously by various members of the Emergency Response Organization to develop dose estimates and Protective Action Recommendations in the event of venting of the torus. A highlight of key areas is provided below, however, this is not inclusive of all capabilities.

Dose Assessment Engineers are continually performing dose projections from plant conditions, both real and projected, using EP-IP-300, "Offsite Dose Assessment." They continually perform this activity from guidance provided by the Offsite Radiological Supervisor as required by EP-IP-251, "Dose Assessment Area Activation and Response." Part of this assessment would be to calculate, using the dose code EDAP, the hypothetical dose expected from use of the direct torus vent with plant parameters as given by the Offsite Radiological Supervisor. Simultaneous to this assessment would be a comparison of existing plant conditions to any necessary Protective Actions which these conditions would dictate. This plant condition assessment is performed in accordance with Attachment 1 to EP-IP-400, "Protective Action

Recommendations" and in most cases would be more limiting than simple dose projection. It is the most limiting Protective Action Recommendation from these two assessment mechanisms which is actually recommended to the Emergency Offsite Manager and Emergency Director by the Offsite Radiological Supervisor.

Example: A plant condition of "large amounts of fission products are in containment and a release from containment is judged imminent" would warrant a plant condition driven Protective Action Recommendation of five mile radius and 10 mile downwind evacuation. One of the examples of "release from containment judged imminent" in EP-IP-400 states, "primary containment pressure approaching or in excess of the Primary Containment Pressure Limit (PCPL)." This wording appears in EAL 3.4.1.4 which is the EAL that requires declaration of a General Emergency prior to containment venting.

This plant driven Protective Action Recommendation would be more limiting than one required from hypothetical dose assessment. However, a comparison of the two would still be performed prior to making a final recommendation to the State.

Also, EP-IP-400 requires our Dose Assessors to reassess anytime "significant changes occur in meteorological conditions, release rates, or for any anticipated changes in plant status." This would include changes in containment source term, containment integrity, and length or duration of vent or release. This reassessment would be performed and Protective Action Recommendation verified, even though the Protective Action driven by plant conditions would in all likelihood exceed that required by dose projection.

- II. Areas From the February 25, 1991 Transcript Which Boston Edison Would Like to Clarify.
 - A. Transcript Page: 13

Speakers: Karen Sullivan, Boston Edison

Topic: Introduction of Boston Edison Personnel

Statement in Need of Clarification:

"I'm Karen Sullivan, and I work in the investigative area too."

Clarification:

The transcript should read: "I'm Karen Sullivan, and I work in the MCDA Area II."

B. Transcript Pages: 40, 42-43 Topic: Plymouth Equipment

Clarification:

The Transcript incorrectly identifies Mr. McDonough as speaking, when in fact, Mr. Leonardi (the Boston Edison Plymouth Community Representative) was speaking.

C. <u>Transcript Pages</u>: 89
<u>Speakers</u>: Albert Samano, Boston Edison
<u>Topic</u>: Transportation Resources

Statement in Need of Clarification:

"That information would come back and then be provided to area 2, or actually to the civil defense director and then up to area 2.

Clarification:

The transcript should read: "That information would come back and then be provided to Area 2, or actually to the Town Transportation Officer and then up to the Area 2 Transportation Officer."

Speakers: Karen Sullivan, Boston Edison Topic: Transportation Resources

Statement in Need of Clarification:

"If an emergency were to happen today, the numbers that are most current as available to the town planners and to the town are currently in the Area 2 Transportation Officers and are evidenced within the matrix...."

Clarification:

The transcript should read: "If an emergency were to happen today, the numbers that are most current as available to the town planners and to the town are currently in the Area 2 Transportation Officer's IP and are evidenced within the updated matrix..."

E. <u>Iranscript Page</u>: 113
<u>Speakers</u>: Karen Sullivan, Boston Edison
<u>Topic</u>: Transportation Resources

Statement in Need of Clarification:

"But, again if it should happen today for schools, the area 2 transportation officer IP and matrix indicate those numbers."

Clarification:

The transcript should read: "But, again, if it should happen today for schools, the Area 2 Transportation Officer IP and updated matrix indicate those numbers."

F. <u>Transcript Pages</u>: 140-142 <u>Speakers</u>: Albert Samano, Boston Edison <u>Topic</u>: Bridgewater Reception Center

Statement in Need of Clarification:

Discussion regarding handicapped ramp at Bridgewater State College

Clarification:

There has been some confusion over whether a handicapped ramp exists at the front entrance of the Bridgewater State College gymnasium building (which is designated for use as the monitoring and decontamination location). Such a ramp does exist between the exterior of the building and the first floor. However, about nine steps separate the first floor area from the second floor monitoring and decontamination area. The Task Force made a site visit to the College on February 26, 1991.

G. Transcript Page: 179
Speakers: John Gerety, Boston Edison
Topic: Direct Torus Vent

Statement in Need of Clarification:

"We made sure that the EAL's and EOP's were directly tied together, in that if conditions systematically should lead to the use of a vent...."

Clarification:

"We made sure that the EAL's and EOP's were directly tied together, in that if conditions symptomatically should lead to the use of a vent...."

H. Transcript Page: 188

Speakers: Ron Varley, Boston Edison
Topic: Direct Torus Vent

Statement in Need of Clarification:

"Then there's an operations advisor in the EOF who follows along with the operator aide to remind the emergency director that we are not approaching that point in the EOP's..."

Clarification:

"Then there's an Operations Advisor in the EOF who follows along with the operator aide to remind the Emergency Director that we are now approaching that point in the EOP's...."

NOTE: The referenced operator aide document is presently under internal review. See response to item F above.

I. Transcript Page: 193

Speakers: John Gerety, Boston Edison

Topic: Direct Torus Vent

Statement in Need of Clarification:

"You get a combustible mixture where you have greater than 5 percent hydrogen and you have greater than 6 percent oxygen at the same time...."

Clarification:

"You get a combustible mixture where you have greater than 6 percent hydrogen and you have greater than 5 percent oxygen at the same time...."

Attachment I

QUESTIONS CONCERNING LDAS, TRANSPORTATION RESOURCES, AND RELATED

Task force team 3 has received and reviewed copies of the LDAs from MCDA and from BECD. During the review of the LDAs, we have attempted to establish a clear understanding of the resources that would currently be available during an emergency, the circumstances which might affect their availability and response, and the consistency of the information we establish with that provided to us in previous

Many questions have already been raised with BECO during our working lavel meeting of 1/29/91, and subsequent telephone calls with your staff on 2/7/91, and with your staff and MCDA on 2/13/91. The questions related largely to the LOAs and the July 1990 transportation matrix. I would like to take this opportunity to ask our understanding of some of the questions you have previously answered for us.

- 1. As we have previously discussed, the LOA data sheets have been completed in a variety of ways and therefore, in order to understand the commitments, the precise nature of the variations must be noted in connection with these respective LOA. In this regard, I would like to itemize some understandings we have concerning the LOAs, and have you respond whether our understanding is accurate.
 - a. Data sheets have columns for the number of vehicle: to be expected during operating and non-operating hours. Individual LOAs have been completed with the data in these columns, indicative of resources that are either 1) cumulative, or 2) non-cumulative. The following is our understanding of the nature of these columns. Please inform us if our understanding

resources expressed cumulatively:
Chaulk Ambulance
JUDCD
Norfolk-Bristol
Stavis Ambulance
Transportation Network
resources expressed non-cumulatively:
Brockton Area Transit
Foxborough
Madieros

b. The matrix shows the Governor Edward Winslow school in Marshfield to require 13 busses to be provided by C.A.Phillips We understand that the needs are now 12 busses (611 students, 26 staff) which match the Phillips commitment of 12 busses.

- C. We understand that the provider of the 2 busses assigned to New Testament school in Plymouth has been changed from Crowell. at reflected in the matrix, to Ryder.
- d. As discussed in our telephone conference call of 2/13/91, it appears that according to the TSA assignments made, 34 Norfolk-Bristol liftvans have been assigned to Sagamore TSA, while this provider has committed only 31 liftvans during on-hours. How have you corrected this descrippancy?
- e. As discussed in our telephone conference call of 2/13/91, 11 busses to be provided by Rockland Motors to the Silverlake and Martinson TSAs will not be available during summer. Have you assigned a provider for these busses if an emergency occurred during the summer?
- f. With respect to the BECD response submittal of 10/4/90, table Tr-117-1, we counted 14 busses to be provided to day care centers by M.S. Marritt instead of the 16 indicated in your table. Is this correct?
- Q. With respect to the same table, we counted 2 busses to be selfprovided by day care centers instead of the 3 indicated in your table. Is this correct?
- h. We have compared the set of LDAs received from BECD on 1/29/91 with the set received from Arelaney MCDA on 2/20/91 and it appears as if neither are complete. With respect to those you provided please to the following descrepancies with the set
 - 1. We did not receive from you a copy of an LOA by Marlborough
 - 2. The Swanses LOA you provided did not have a data sheet dated 11/15/67 as did MCDAs.
 - 3. We did not receive from you a copy of an '.DA by Commonwealth Ambulance.

Attachment 2

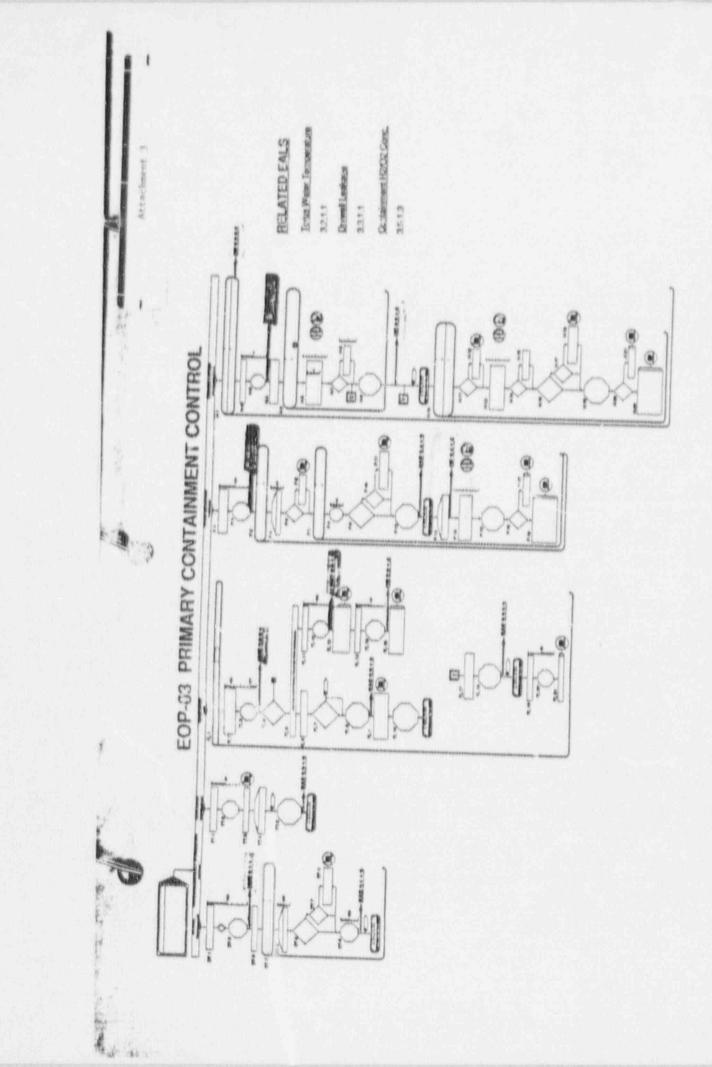
PNPS EPZ Transportation Issues

The following is forwarded in response to the worksheet entitled. "Questions Concerning LOAs, Transportation Resources, and Related Ambiguities". This worksheet with associated questions was received by Boston Edison from the NRC Task Force Team 3 during the NRC/FEMA/BECU Public Meeting held on February 25, 1991.

- a. and b. The expressed assumptions are correct, with the exception that liftvans and vans for the Town of Foxborough are expressed cumulatively.
 - c. The CD Director for the Town of Plymouth has expressed an interest to keep the assignment for the Manomet Elementary School with Crowell. As such, the current assignment for Crowell is Manomet Elementary (8 buses), Indianbrook (13 buses), and New Testament (2 buses), Ryder is assigned South Elementary (14 buses).
 - d. The clerical error which listed 34 versus 31 liftvans during on-hours as estimated being available from Norfolk-Bristol has been corrected in the Transportation Provider Data Sheets and TSA Transportation Matrix. This discrepancy does not affect the total adequacy of the transportation resources available at the TSAs to respond to identified estimated transportation needs since assignments are made from the surplus of vehicles prestaged at the TSAs at the time of the emergency.
 - e. The buses estimated to be available from Rockland Motors have been assigned to TSAs for assignment at the time of the emergency. Their estimated unavailability during the summer months does not affect the total adequacy of the transportation resources available at the TSAs since the pool of resources prestaged at the TSA exceed estimated needs and assignments are made at the time of the emergency.
 - f. The Jack and Jill Day Care and Happy Day Nursery School in Plymouth have indicate: a request for transportation assistance through the Town. This assistance for 1 bus each has been matched with the Merrit Bus Company. Thus Merrit Bus currently has assignments for 16, not 14, of its estimated 20 available buses.
 - g. Two buses are indicated on the Matrix as being required for transport for the South Shore Headstart program. This facility in actuality possesses three buses which would be available for assistance in transporting students.
 - h. 1. The Malborough Hudson Bus Company is no longer in existence, having been bought out by Alves-Ruggerio Ambulance, doing business as Community Ambulance Service. It is Boston Edison's understanding that this LOA is no longer valid.
 - Boston Edison is aware of the updated data sheet for the Swansea Ambulance; the data sheet was inadvertently not provided by BECo to the Task Force on January 29, 1991.
 - 3. The Commonwealth Ambulance Company is no longer in existence, having been bought out by Norfolk-Bristol Ambulance. It is Boston Edison's understanding that this LOA is no longer valid.

3.0 Primary Containment

GENERAL	SAE	ALERT	UNUSHAL EVENT
	3.1.1.3 Bulk drywell temperature cannot be maintained < 280° F as determined by P. toaddire 2.1.7, Unywell Temperature Indication*	1	3.1.1.1 Built drywell temperature centrot be maintained < 150° F as defermined by Procedure 2.1.27 Torywell Temperature Indication* - and - Primary Contaminent Integrity is required
	3.2.1.3 Torus water temperature cannot be maintained below the Head Capacity Temperature I, first (HCTL) EOP Figure 3		3.2.1.1 Bulk torus water temperature > 110° F
3.3.1.4 Primary containment water level carnot be resintained < 77 ft.	3.3.1.3 Both tonis water level and RPV pressure cannot be maintained below the "SRV Tall Pipe Level Limit" (SRVTPLL) EOP Figure 2	3.3.1.2 Forum state ferver cannot be maintained < 180 fm.	Pseachs coolant system to dywell unidentified leakage > 5 gpm with reactor coolant temperature > 212° F Reactor coolant system to drywell total wakage > 25 gpm with reactor coolant system to drywell total wakage > 25 gpm with reactor coolant temperature > 212° F 3.3.3.1 Torus water level cannot be maintained:
3.4.1.4 Torus pressure approaching the "Primary Containment Pressure Limit" (PCPL) EOP Figure 7 (prior to initiation of containment venting)	3.4.1.3 Torus bottom pressure cannot be maintainer helper the Pressure Suppression Pressure* (PSP) EOP Figure is	3.4.1.2 Primary containment proscure cannot be maintained < 2.5 pstg. (except doring testang such as IERT, etc.)	
2.5.1.3 4 Drywell or torus hydrogen concentration > 6% 200 Crywell or torus avygen concentration > 5% 3.5.2.4 Enywell or torus hydrogen concentration cannot be determined to be < 6% 200 Crywell or torus oxygen concentration cannot be determined to be < 5%	3.5.1.3 Dryweil or torus hydrogen concentration > 1% Aud Dryweil or torus orygen concentration > 4%	3.5.1.2 Drywell or torus hydrogen. concentration > 1%.	



3.0 Primary Containment

MEE.	GENERAL	SAE	ALERT	UNUSUAL EVENT
Apriled Mearyst 1.4		3.1.1.3 Bulk dyself temperature cannot be maintained < 280° F as determined by Procedure 2.1.7. Drywell Temperature indication:		3.1.1.1 Bolk drywell temperator connot be maintained < 150° F ab determined by Procedure 2.1.27 Thyseell Temperature Indication*
Agran T. wata W.		3.2.1.3 Torst water temperature cannot be maintained below the Head Capacity Temperature Limit (HCTL) EOP Figure 3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3.2.1.1 Bulk torus water temperature > 110°F
T THE REAL PROPERTY AND PARTY OF THE PARTY O	3.3.1.4 Primary containment water level cannot be maintained < 77 ft.	Both torus water level and RPV pressure cannot be maintened below the "SRV Tall Pipe Level Limit" (SRVTPLL) EOF Figure 2 > 7°, /r. Torus water level cannot be maintained below the "14 Capacity" Temperature Limit" (HSTL) EOP Figure 3	3.3.1.2 Torus water level cannot be maintained < 180 in.	Fleactor contain system to dywell unidentified leakage > 5 gpm with reactor coolant temperature > 212° F Reactor coolant system to dywell total leakage > 25 gpm with reactor coolant temperature > 212° F 3.3.2.2 Totals water level cannot be maintained: <
DECEMBER OF THE PARTY OF THE PA	3.4.1.4 Torus pressure approaching the "Primary Containment Pressure Limit" (PCPL) EOP Figure 7 (prior to initiation of containment venting)	34.1.3 Torus bottom pressure cannot be maintained below the Pressure Suppression Pressure (PSP) EOP Figure 6	3.4.1.2 Primary containment pressure Cannot be maintained < 2.5 crog (accord during testing such as R.RT. etc.)	Designation of the second of t
OCTOR STREET, WALLES AND MAKE A PLYSIA STREET, BANKS	35.1.3 4 Drywell or torus hydrogen concentration > 6% - 312.4 Drywell or torus oxygen concentration > 5% 3.5.2.4 Drywell or torus hydrogen concentration cannot be determined to be < 6% - 310 Drywell or torus oxygen concentration cannot be determined to be < 5%	Drywell or tonus hydrogen concentration > 1% Application of tonus oxygen concentration > 4%	25.1.2 Dynast or Louis hydrogen concentration > 1%	