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10CFR50, Appendix E

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U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: Peach Bottom Atomic Power Station, Units 2 & 3
Facility Operating License Nos. DPR-44 and DPR-56
NRC Docket Nos. 50-277 and 50-278

Limerick Generating Station, Units 1 & 2
Facility Operating License Nos. NPF-39 and NPF-85
NRC Docket Nos. 50-352 and 50-353

EP-MA-110-200, Revision 1, "Dose Assessment"

Enclosed is a revised Emergency Plan Procedure for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3, and Limerick Generating Station (LGS), Units 1 and 2. This procedure is required to be submitted within thirty (30) days of its revision in accordance with 10CFR50, Appendix E, and 10CFR50.4.

Also, enclosed are copies of a computer generated report index identifying the latest revisions of the LGS and PBAPS procedures.

If you have any questions or require additional information, please do not hesitate to contact us.

Very truly yours,

M. P. Gallagher
Director - Licensing & Regulatory Affairs
Mid-Atlantic Regional Operating Group

Enclosures

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A045

ATTACHMENT 1

LIMERICK GENERATING STATION, UNITS 1 & 2
PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 & 3

Docket Nos. 50-352
50-353
50-277
50-278

License Nos. NPF-39
NPF-85
DPR-44
DPR-56

EMERGENCY PROCEDURES

EP-MA-110-200, "Dose Assessment" - Revision 1

DOSE ASSESSMENT

1. PURPOSE

1.1. This procedure provides guidance for performing offsite radiological dose assessments during an emergency using Dose Assessment and Protective Action Recommendation (DAPAR) Program for Limerick Generating Station (LGS) and Peach Bottom Atomic Power Station (PBAPS).

1.1.1. As a Windows-based application designed in Microsoft ACCESS, DAPAR uses many standard user interfaces. Instructions are not provided in basic computer operations in the Windows® environment. The user must be familiar with these to efficiently operate the program. It is also assumed user is familiar with health physics fundamentals. Emergency Response Organization (ERO) training will provide an overview of dose assessment methodologies.

2. TERMS AND DEFINITIONS

2.1. Centerline (plume): An imaginary line drawn in the middle of the plume along its downwind travel direction. The plume concentrations and deposition are assumed to be the highest along the centerline.

2.2. Cloud Shine: Gamma radiation from radioactive materials in the air (plume).

2.3. Committed Dose Equivalent (CDE): Committed dose equivalent means the dose equivalent to organs or tissues of reference (T) that will be received from an intake of radioactive material by an individual during the 50-year period following the intake.

2.4. 2.4 Committed Effective Dose Equivalent (CEDE): Committed effective dose equivalent is the sum of the products of the weighting factors applicable to each of the body organs or tissues that are irradiated and the committed dose equivalent (CDE) to these organs or tissues. Thyroid values are taken from EPA-400, Table 5-4 to be consistent with the NRC RASCAL dose assessment program used by the Pennsylvania Emergency Management Agency (PEMA) / Bureau of Radiation Protection (BRP). Actual meteorology is used, since it gives the most accurate dose projection.

2.5. Core Damage: Damage to the components that comprise the reactor core. Core damage typically refers to the failure of fuel cladding and/or fuel melting as a result of overheating.

2.6. Curie (Ci): A unit of radioactivity equal to 3.7E+10 disintegrations per second.

2.7. DAPAR: Dose Assessment and Protective Action Recommendation (DAPAR) software provides two major functions (Quick Assessment and Full Assessment) in order to perform dose assessment. (Refer to Attachment 1 for a Basis System Flow Diagram.)

A. ***Quick Assessment*** is used by the Shift Dose Assessor to arrive at offsite dose projections and PARs, or to verify classifications in as prompt a time as possible during fast breaking events without taking too much time away from their event mitigating actions. A monitored release is the only method used in the quick assessment. Some assumptions and standard numbers are used to limit the amount of data Control Room personnel must enter prior to calculating a PAR.

B. ***Full Assessment*** is used by the called-in ERO Staff in the TSC/EOF and allows for more detailed assessment of a release. The following methods may be used to project offsite doses:

- ***Monitored Release***: Offsite radiological assessment related to a monitored value taken at one of several release locations (Plant Vent Stack, Waste Processing Vent Stacks and Turbine Building Vent Stack) within the plant.
- ***Containment Leakage / Failure***: Offsite radiological assessment related to a default, known, or predicted level of containment leakage or failure.
- ***Field Team Survey and Sample Analysis***: Offsite radiological assessment related to comparisons of field team radiological survey and isotopic sample concentrations with predicted plume dispersion.
- ***Release Point Sample Analysis***: Offsite radiological assessment related to a measured isotopic concentration taken at the point of release to the environment.

2.8. Delta T: The difference in temperature from the lower temperature sensor and the upper temperature sensor on the Exelon meteorological tower. Delta T is used to calculate stability class.

2.9. Deposition: The contamination found on the surface of the ground.

2.10. Dose Commitment: The dose that will be accumulated by a specific organ over a specified period following uptake.

2.11. Dose Conversion Factor (DCF): The dose equivalent per unit intake of a radionuclide (mrem/uCi) or the effects of exposure to a given concentration of an isotope in a plume. R/hr per uCi/cc.

2.12. Dose Projection: The calculation of individual radiation exposure at a given location at some time in the future. Dose projections are performed in response to an actual or anticipated release of radioactive material to the environment.

2.13. Emergency Planning Zone (EPZ): An area around a nuclear power plant in which plans are in place for an emergency at the plant. Plans are in place to take immediate protective actions for individuals located within 10 miles of the Nuclear Plants. This area is called the Plume Exposure Emergency Planning Zone. In addition, longer-term plans are in place for the Ingestion Pathway Emergency Planning Zone which is within 50 miles of the plant.

2.14. Evacuation Exposure Period: The period during which those being evacuated are exposed to the radioactive plume.

2.15. Millirem (mR): One one-thousandth of a Rem. The Rem is a unit of measure that defines the extent of biological injury that results to the body when it is exposed to radiation.

2.16. Emergency Preparedness Data System (EPDS): Electronic graphical display of plant, meteorological and radiological data needed for accident and dose assessment.

2.17. Protective Action Guidelines (PAGs): Radiation exposure guidelines established by the Environmental Protection Agency which are used to determine the appropriate protective actions to be taken on the part of emergency workers and the general public. These actions include sheltering and evacuation.

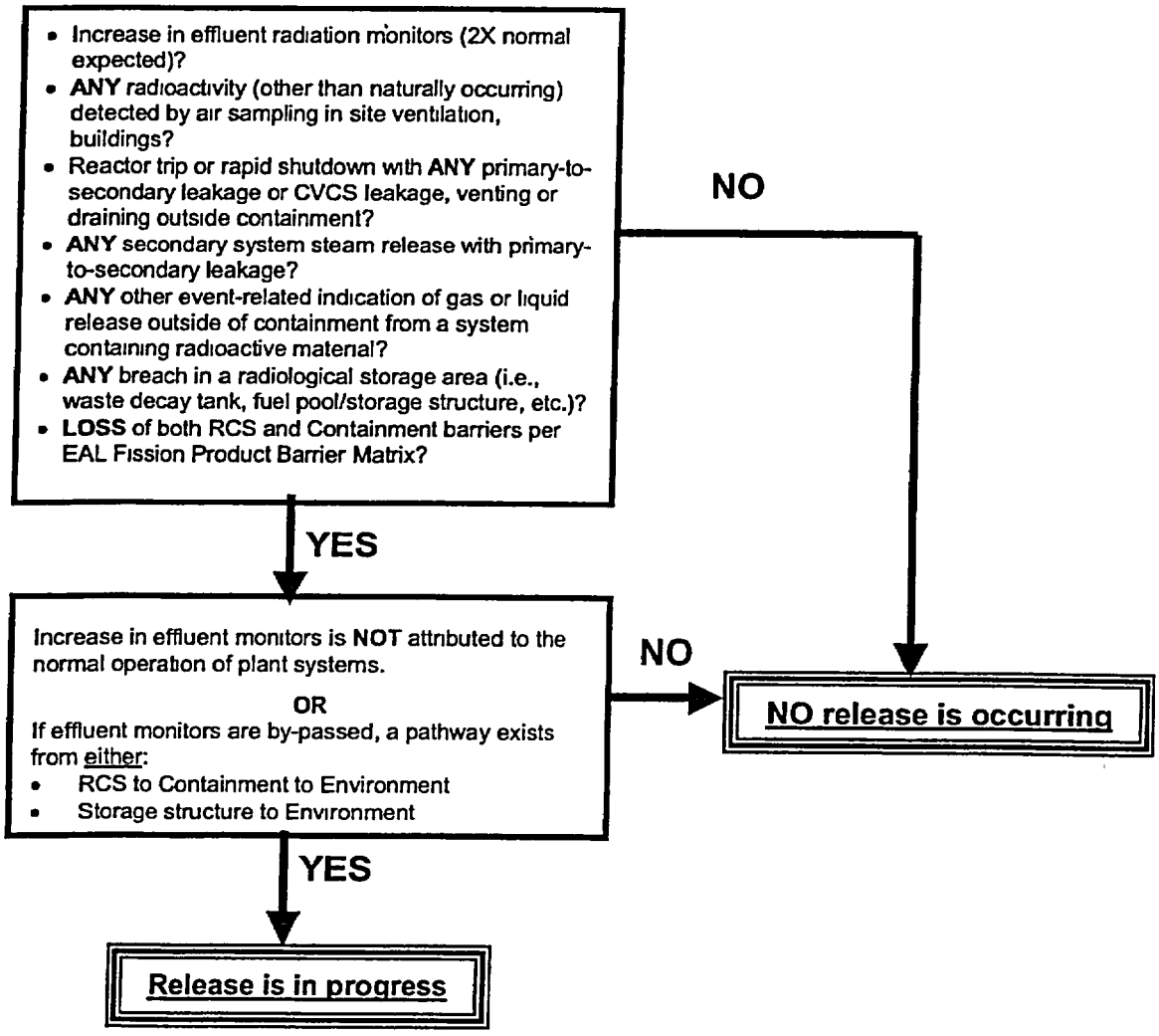
2.18. Protective Action Recommendations (PARs): A recommendation made by Exelon personnel to the offsite authorities on the appropriate protective actions to be taken on the part of the general public. The PARs are based on plant conditions or dose projections using the PAGs for guidance.

2.19. Radiological Release: The movement of radioactive materials, gaseous or liquid, beyond a protected area.. The definition requires the assessment of both plant conditions and effluent monitors to fully evaluate the situation.

2.20. Release in Progress: Defined as ANY radioactive release that is a result of, or associated with, the emergency event (not attributed to the normal operation of plant systems).

NOTE: The following guidelines may not cover every potential scenario. As such, judgment must be used in final determination, specifically in regards to field monitoring team survey results.

Have ANY of the following occurred:



2.21. Safety Relief Valve: A valve that serves to reduce excessive pressure in the Reactor Coolant System (RCS) to protect them from being damaged by excessive pressure.

2.22. Site Boundary: For classification and dose projection purposes, the Site Boundary is the Exclusion Area Boundary, a 2500-foot (LGS) / 2700-foot (PBAPS) radius around the plant. The actual boundary is specified in the ODCM.

2.23. Station Vent: That part of the plant's ventilation system through which the containment building and auxiliary building air may be processed to the outside atmosphere. The discharge of the station vent is continuously monitored for abnormal amounts of radiation and would be isolated long before radiation levels approach federal limits.

2.24. Sectors: Pre-designated areas offsite in which Protective Actions such as evacuation will be recommended.

2.25. Total Effective Dose Equivalent (TEDE): Total Effective Dose Equivalent (TEDE) means the sum of the deep-dose equivalent (for external exposures) and the committed effective dose equivalent (for internal exposures). For the purpose of this procedure TEDE also includes 4 days of deposition exposure.

3. RESPONSIBILITIES

3.1. An **on-shift Radiation Protection Technician (RPT) at the unaffected station** shall serve as the **Shift Dose Assessor** and perform required dose assessments prior to responsibility being transferred to either the Technical Support Center (TSC) or Emergency Operations Facility (EOF).

3.2. The **TSC Radiological Controls Coordinator** shall relieve the Shift Dose Assessor and perform required assessments if the transfer of PAR / dose assessment responsibilities to the EOF is delayed.

3.3. The **EOF Dose Assessor** shall relieve the TSC Radiological Controls Coordinator when directed by the EOF Dose Assessment Coordinator, and perform required dose assessments. Responsibility for dose assessments can be assumed directly from the Shift Dose Assessor.

4. MAIN BODY

4.1. Initiating Conditions:

4.1.1. An emergency has been declared; **AND**

4.1.2. Events require the calculation of radiological effects due to an actual or potential release of radioactive materials near or beyond the site boundary.

CAUTION

Use of the program to project doses based on normal plant readings would indicate offsite doses many magnitudes higher than actual offsite doses. The program should not be used to calculate the actual dose received by populations. As part of the post accident investigations, a more in depth analysis is needed to actually assign doses receives to members of the public.

4.2. Start Up

4.2.1. **If** the main computer screen has DAPAR icons, **then USE** left mouse click on the icon to start the program.

NOTE: Backups to the hard drive DAPAR software are a common network drive on the LAN and CD-ROM disk with each dose assessment computer.

The common drive paths are:

- Limerick Generating Station (LGS):
  \\PECO\.PBS2_DATA1.PBS_SRVS.PBS.PECO\EP_DAPAR
- Peach Bottom Atomic Power Station (PBAPS):
  \\PECO\.PBS2_DATA1.PBS_SRVS.PBS.PECO\EP_DAPAR

1. **If** the assigned Dose Assessment Computer cannot access the program over the Exelon LAN or the DAPAR program will not run, **then INSTALL** the program on any computer from backup CDs or Disks located in the OSC, TSC or the EOF.

4.2.2. **VERIFY** that the correct station version of the DAPAR program is being used.

NOTE: There is a different version of DAPAR for each Station. Refer to Figures 1-1 & 1-2. Each version takes into account different release points and gaseous effluent radiation monitor conversion factors.

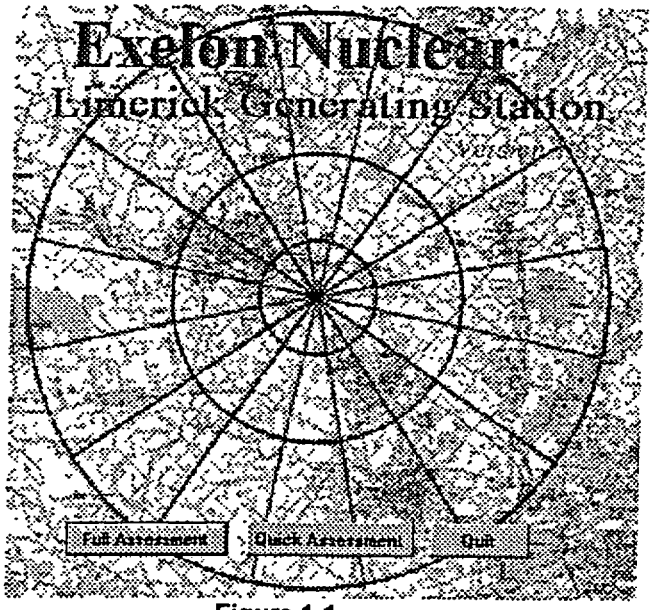


Figure 1-1

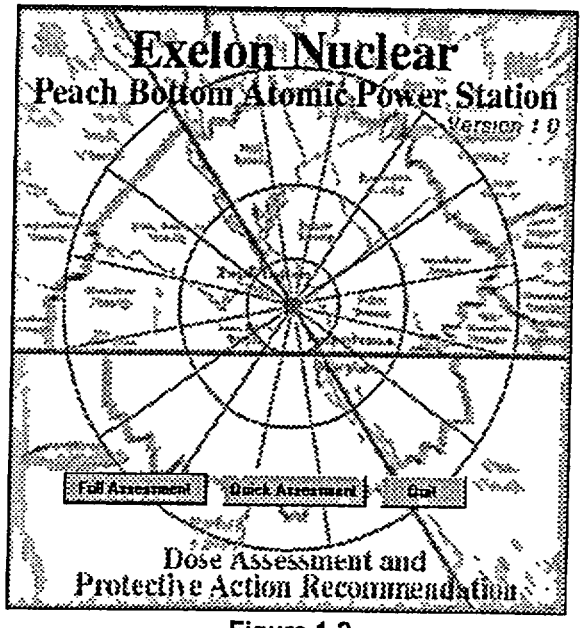


Figure 1-2

CAUTION

Once the User selects "Quick Assessment" or "Full Assessment," returning to the title screen will reset all program values.

4.2.3. From the Title Screen, **SELECT** either "Full Assessment" or "Quick Assessment" and then **GO TO** either:

1. QUICK ASSESSMENT – Section 4.3
2. FULL ASSESSMENT – Section 4.4

4.2.4. **PROVIDE** the DAPAR Input Sheet (Attachment 7) to the following individual, based on facility, for system / event status information:

- Control Room → STA/Independent Assessor (or Shift Manager)
- TSC → Operations Communicator (or Operations Manager)
- EOF → Operations Advisor (or Technical Support Manager)

4.3. Quick Assessment: (Figures 2-1 & 2-2)

NOTE: The Quick Assessment operations and calculations are identical to the Full Assessment method for a monitored release, but uses a default release path and core damage assumptions for the determination of offsite doses. This allows for a rapid assessment from the Main Control Room.

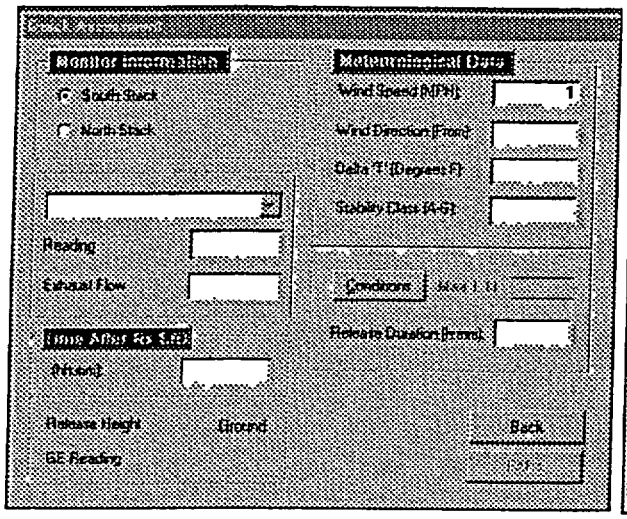


Figure 2-1: LIMERICK

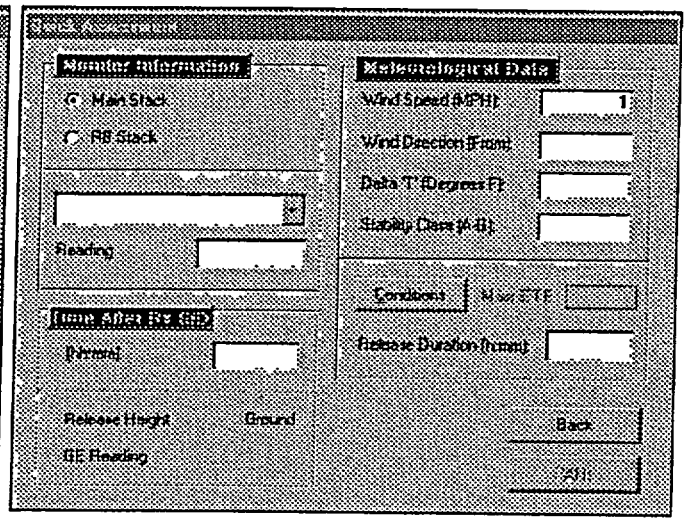


Figure 2-2: PEACH BOTTOM

4.3.1. *Monitor Information* – User chooses the appropriate monitor from the listed effluent monitors.

1. **SELECT** the applicable release point:

STATION	MONITOR	READOUT
Limerick	North Stack	µCi/sec
	South Stack	µCi/cc
Peach Bottom	Main Stack	µCi/sec
	Vent (Rx Bldg) Stack	µCi/sec
	Torus Vent	cpm

– **REFER** to Attachment 5 to obtain data from Emergency Preparedness Data System (EPDS) to input into DAPAR.

4.3.2. **ENTER** *Reading* Information – Enter the appropriate monitor reading.

4.3.3. **ENTER** *Time After Shutdown* Information – Enter the time since the reactor was shutdown in hours and minutes (hh:mm).

4.3.4. **ENTER** *Meteorological Data* – Enter the appropriate data from plant instruments as follows:

1. **If** meteorological data (wind speed / direction and stability class) are **NOT** available via EPDS or locally in Control Room, **then GO TO** Attachment 2.

NOTE: The conditions Good or Adverse in the following step are in relation to the weather. Adverse is heavy rain or any other condition that would hinder the flow of traffic.

4.3.5. **CLICK ON** the *Conditions* button to open the Weather Conditions Window (Figure 3).

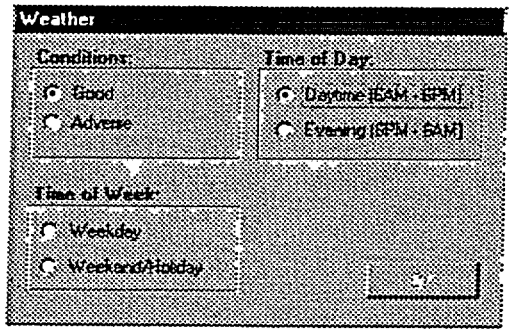


Figure 3

1. **SELECT** the appropriate conditions for the program to calculate the Maximum Evacuation Time Estimate (ETE).

NOTE: Once the user sets the evacuation conditions, the program will place the Max ETE value in the *Release Duration* and *Max ETE* text boxes.

4.3.6. Under *Release Duration*, **CHANGE** the displayed time to the known release duration.

1. **If** a good estimate of the release duration cannot be determined, **then USE** the default ETE value entered by the program.

4.3.7. **SELECT** the *PARs* button – The program will calculate the downwind doses based on user inputs and display Protective Action Recommendation Window. **GO TO** Section 4.9.

4.4. Full Assessment

The Full Assessment operations and calculations are identical to the Quick Assessment method for a monitored release, but it allows the user to make more choices in performing dose projection calculations.

Choosing the Full Assessment option directs the program to a baseline data entry window (Figure 4). The window is divided into four input areas.

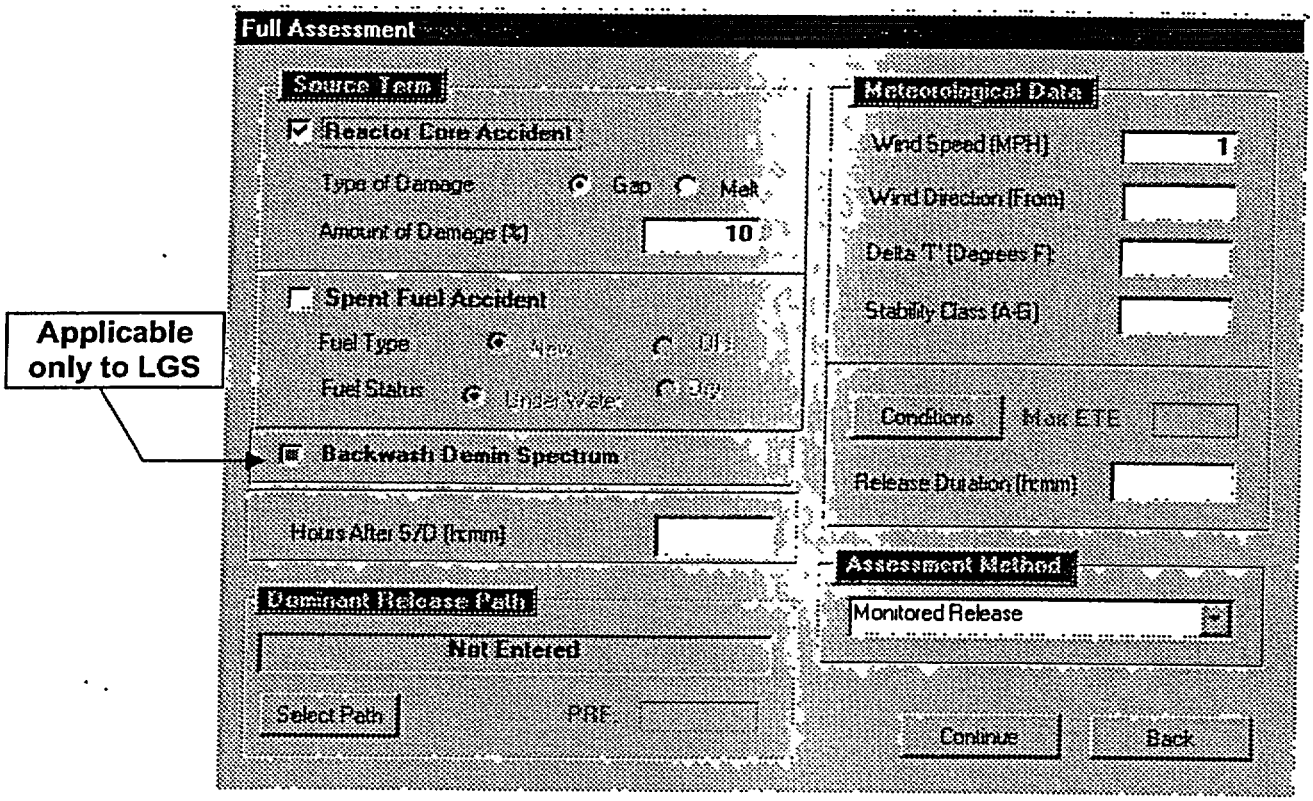


Figure 4

4.4.1. **Source Term** – This allows user to choose the appropriate source term depending on plant conditions and the type of accident that has occurred:

1. **SELECT** *Reactor Core Accident* if the source of the release is from the reactor core.

   A. Under "Type of Damage", **SELECT** *Gap* or *Melt*.

   B. **ENTER** the *% Damage* based on core damage estimates or known conditions in the plant.

2. **SELECT** *Spent Fuel Accident* if the release is caused by damage to the spent fuel.

   A. Under "Fuel Type", **CHOOSE** between *New Fuel* or *Old Fuel.*

   B. Under "Fuel Status", CHOOSE between *Under Water* or *Dry.*

NOTE: The program uses a gap release scenario and defaults to a reactor Time After Shutdown based on this choice.

Limerick only

3. **SELECT** *Backwash Demin Spectrum* if the release results from a backwash operation.

4.4.2. **Dominant Release Path** – This allows user to choose the most appropriate release path: (Figures 5-1 & 5-2)

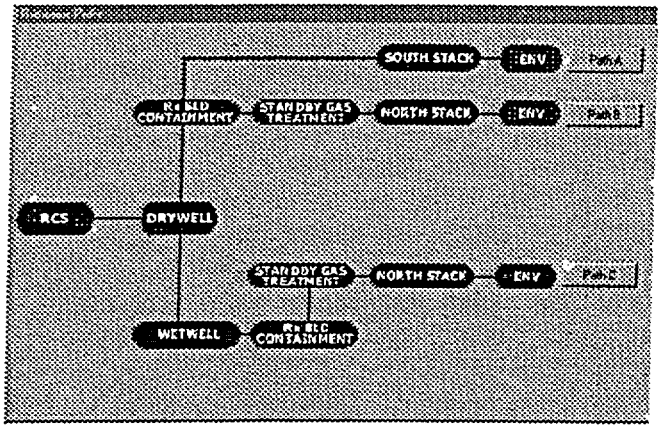


Figure 5-1: LIMERICK

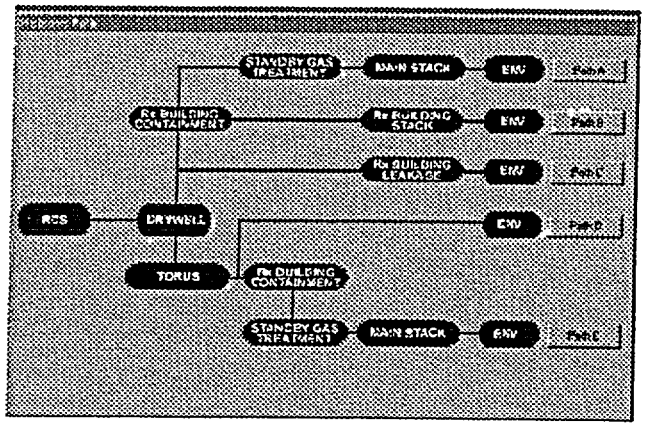


Figure 5-2: PEACH BOTTOM

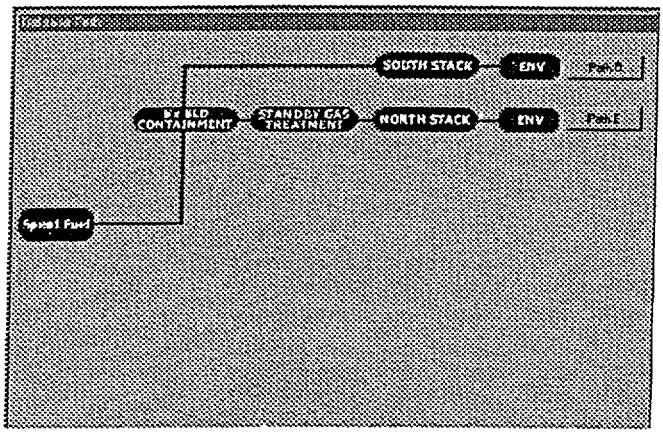


Figure 5-1: LIMERICK (Cont'd)

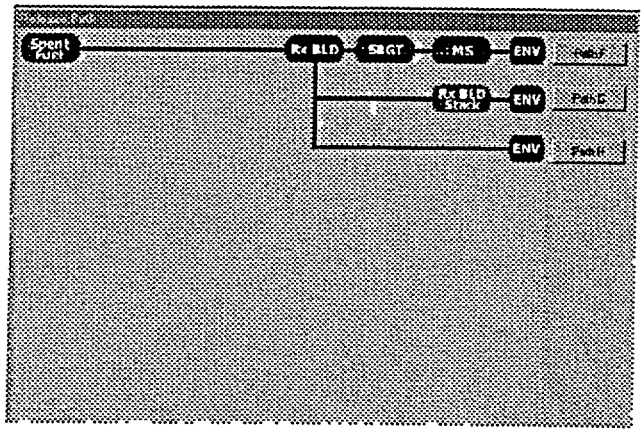
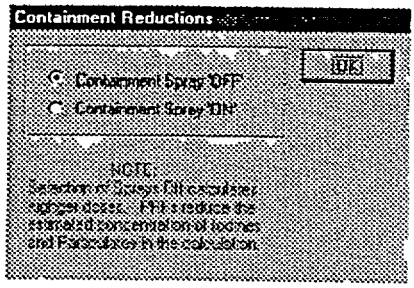


Figure 5-2: PEACH BOTTOM (Cont'd)

1. **If** a release through containment or drywell is chosen, **then DETERMINE** if containment sprays are 'ON' or 'OFF'. (Figure 6)



2. **DETERMINE Containment / Drywell holdup time, and SELECT the appropriate condition. (Figure 7)**

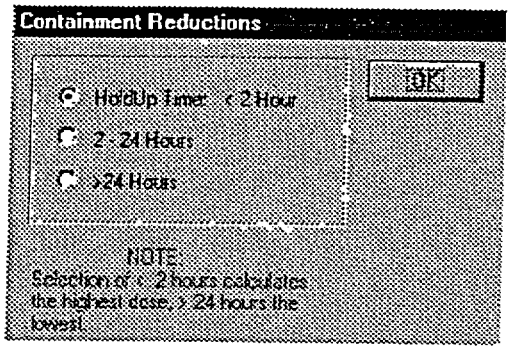


Figure 7

3. **If** a release through the Aux Bldg or Rx Bldg., **then DETERMINE** the building holdup time. (Figure 8)

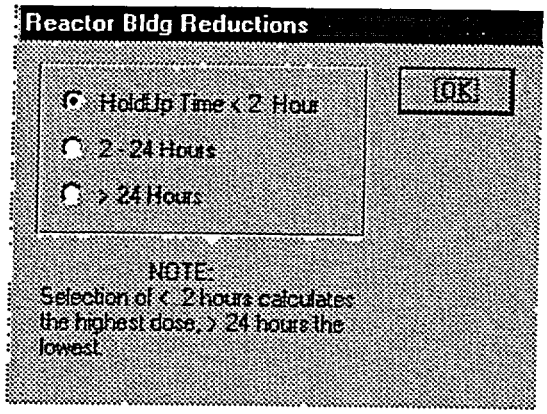


Figure 8

4. **SELECT** Torus - PBAPS (Figure 9a) or Wetwell – LGS (Figure 9b):

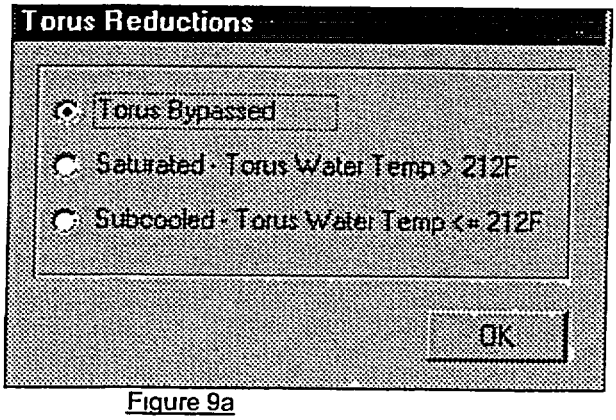


Figure 9a

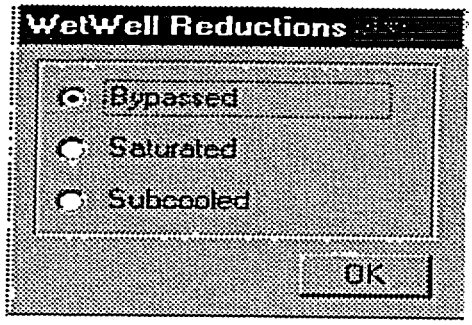


Figure 9b

5. **If** a release through a filtered Vent or SBGT, **then CHOOSE** if the filters are working or not. (LGS: Figure 10a & b / LGS: Figure 10c)

   NOTE: If the release has been ongoing for a long time or contains a large amount of liquids filters may not be working.

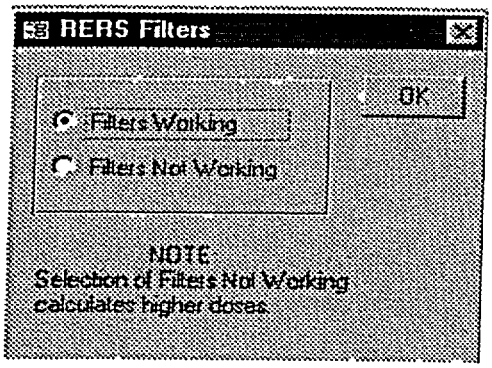


Figure 10a (LGS)

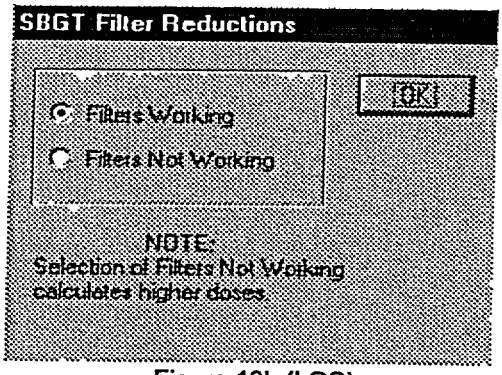


Figure 10b (LGS)

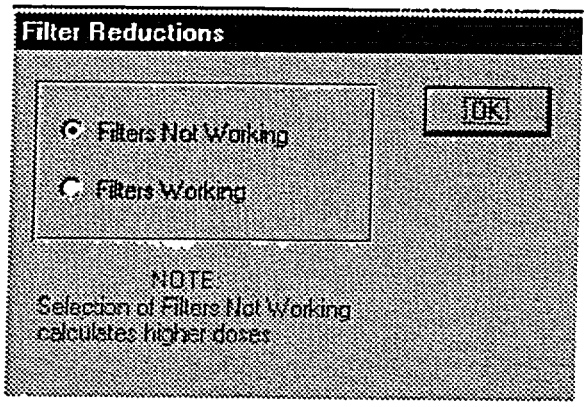


Figure 10c (PBAPS)

4.4.3. **ENTER** *Meteorological Data* – Enter the appropriate data from plant instruments.

4.4.4. *Assessment Methods* – **CHOOSE** the appropriate assessment method based on available inputs. Assessment methods:

1. *Monitored Release* – **SELECT** this method for a release through a monitored release point such as the main stack or Rx Bld vent stacks or through the Main Steam Relief Valves. **GO TO** Section 4.5.
2. *Containment Leakage* – **SELECT** this method for containment failure scenarios. **GO TO** Section 4.6.
3. *Field Team Data* – **SELECT** this method if field team survey or sample data is available. **GO TO** Section 4.7.
4. *Release Path* – **SELECT** this method if a sample of a release has been obtained and a release flow rate can be estimated. **GO TO** Section 4.8.

4.5. Monitored Release (Figure 11)

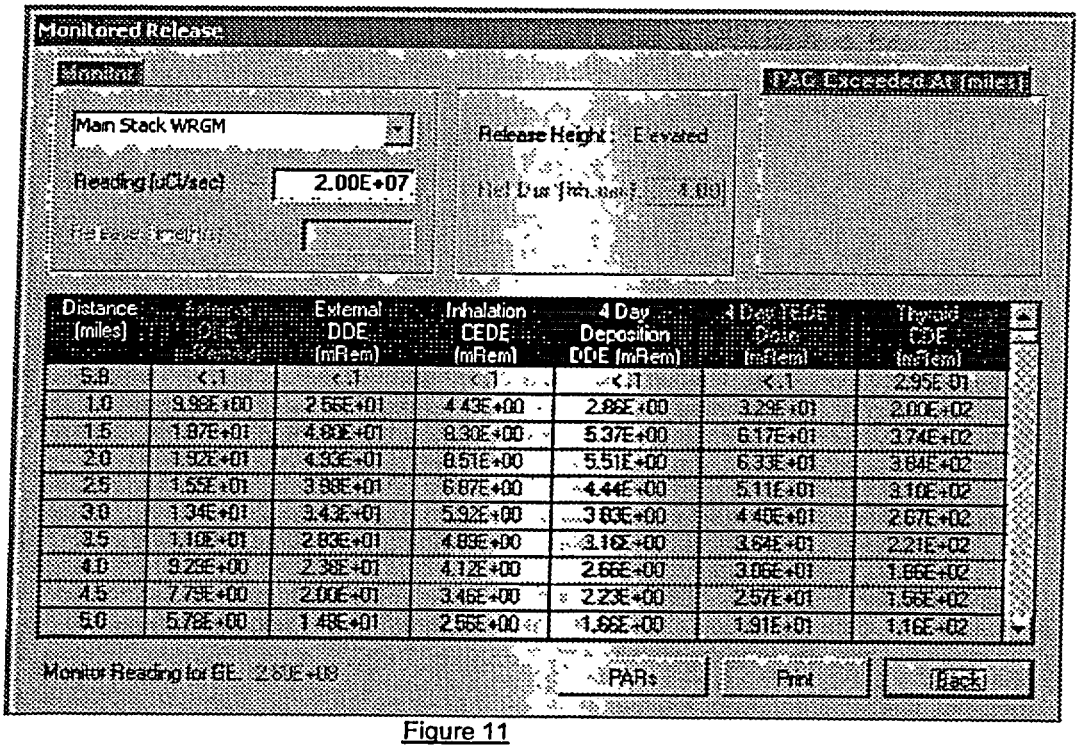


Figure 11

4.5.1. **SELECT** the applicable release point:

STATION	MONITOR	READOUT
Limerick	North Stack	µCi/sec
	South Stack	µCi/cc
Peach Bottom	Main Stack	µCi/sec
	Vent (Rx Bldg) Stack	µCi/sec
	Torus Vent	cpm

4.5.2. **ENTER** *Reading* Information – Enter the appropriate monitor reading.

4.5.3. **SELECT** the *Print* button to print a report of offsite dose projections based on the monitored release.

- **REFER** to Attachment 3, Dose Assessment Report (Printout).
- **REFER** to Attachment 6 to save report(s) as ADOBE Acrobat file.

1. **SELECT** a different monitor and/or change readings to recalculate doses.
2. **SELECT** the *Back* button to change input data on Full Assessment Form.

4.5.4. **SELECT** the *PAR* button to view PAR form – **GO TO** section 4.9.

4.6. Containment Leakage/Failure (Figure 12)

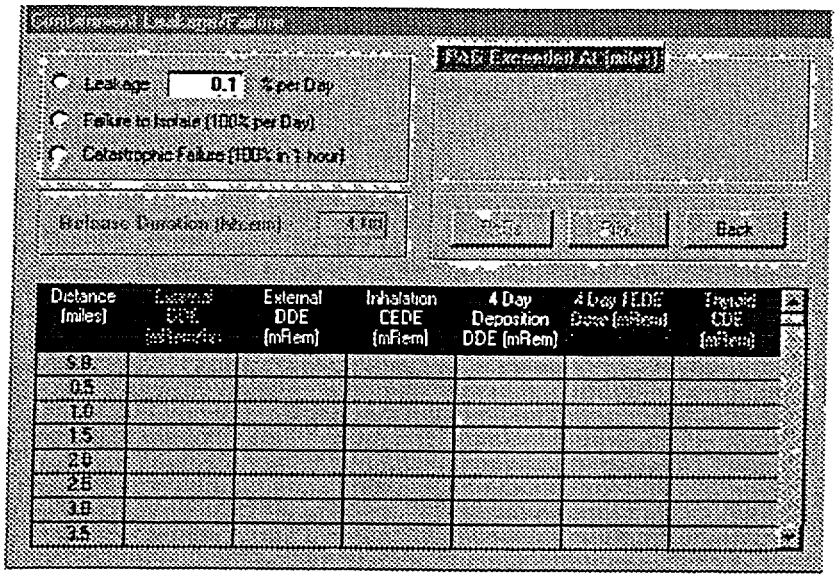


Figure 12

4.6.1. **SELECT** the appropriate containment release mode:

1. *Leakage* – Program defaults to the Design Leakage rate per the station UFSAR. If a different percentage of leak rate has been calculated by TSC engineers enter that value in the % per day text box.

2. *Failure to Isolate* – Assumes 100% of the isotopes available for release are released in a 24 hour time period.

3. *Catastrophic Failure* – Assumes 100% of the isotopes available for release are released in a 1 hour time period.

4.6.2. [After User enters data the program calculates offsite doses] **PERFORM** one of the following:

1. **SELECT** the *Print* button to print offsite dose projections based on containment failure.
   - **REFER** to Attachment 3, Dose Assessment Report (Printout).
   - **REFER** to Attachment 6 to save report(s) as an ADOBE Acrobat file.

2. **SELECT** the *Back* button to change input data on Full Assessment Form.

3. **SELECT** the *PAR* button to view PAR form – **GO TO** section 4.9.

4.7. Field Team Analysis (Figure 13)

The program calculates the plume Travel Time and Release Time to allow Dose Assessment personnel to compare previous dose assessment reports with data measured in the field.

4.7.1. *Dose Rate Survey* – **SELECT** this method if Field Team Survey Data is available.

4.7.2. *Air Sample Results* – **SELECT** this method if Field Team Air Sample Data is available.

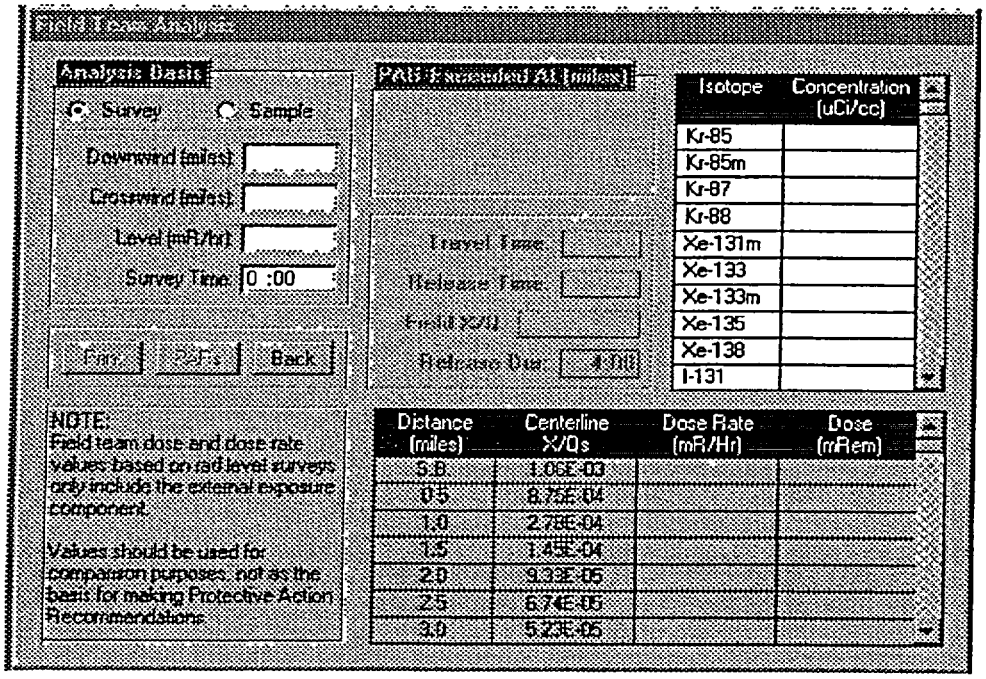


Figure 13

4.7.3. **ENTER** the Field Team information as follows:

NOTE: The program will not allow "mr/hr" readings for sample data or isotopic results for survey data.

1. **ENTER** *Downwind (miles)* – straight-line distance from release point to sample location.

2. **ENTER** *Crosswind (miles)* – the distance the team was away from the centerline when the sample was taken. The program will warn user if reported sample location is wider than expected plume width

3. **IF** the analysis basis is *Dose Rate Survey*– **ENTER** the Field Team Survey reading in "mR/hr" into the box labeled *Level.*

4. **IF** Analysis basis is *Air Sample Results* – **ENTER** the uCi/cc values for each known isotope in the table at the upper right section of the form.

   NOTE: Prior to obtaining analysis results from field air sample, the I-131 concentration, in uCi/cm^3, calculated using the KI Spreadsheet Program per EP-MW(MA)-110-100 shall be used.

5. **ENTER** *Survey Time* – Enter the time the survey or sample was taken.

4.7.4. [After User enters data the program calculates offsite doses] **PERFORM** one of the following:

1. **SELECT** the *Print* button to print offsite dose projection reports based on Field Team Analysis.
   – **REFER** to Attachment 3, Dose Assessment Report (Printout).

   A. **REFER** to Attachment 6 to save report(s) as an ADOBE Acrobat file.

2. **SELECT** the *Back* button to change input data on Full Assessment Form.

3. **IF** Field Team samples were the selected basis, **SELECT** the *PAR* button to view PAR form – **GO TO** section 4.9.

4.8. Release Point Analysis (Figure 14)

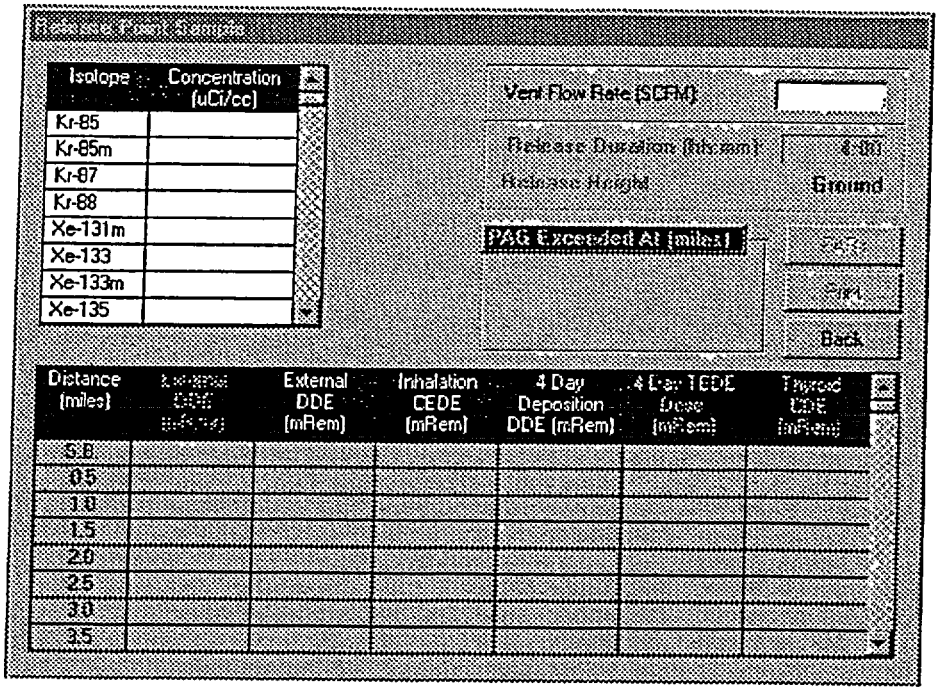


Figure 14

4.8.1. **ENTER** the known *Isotopic Concentration* for each isotope (if unknown leave blank).

4.8.2. **ENTER** *Vent Flow Rate* (or estimate flow rate for other releases) in SCFM.

4.8.3. [After User enters data the program calculates offsite doses] **PERFORM** one of the following:

1. **SELECT** the *Print* button to print offsite dose projections based on Release Point Analysis.
   - **REFER** to Attachment 3, Dose Assessment Report (Printout).
   - **REFER** to Attachment 6 to save report(s) as an ADOBE Acrobat file.
2. **SELECT** the *Back* button to change input data on Full Assessment Form.
3. **SELECT** the *PAR* button to view PAR form – **GO TO** section 4.9.

4.9. Protective Action Recommendations (Figure 15)

The Protective Action Recommendation (PAR) form displays a summary of the downwind dose projections with a map showing which Sectors (colored areas) where Protective Actions Recommendations should be made.

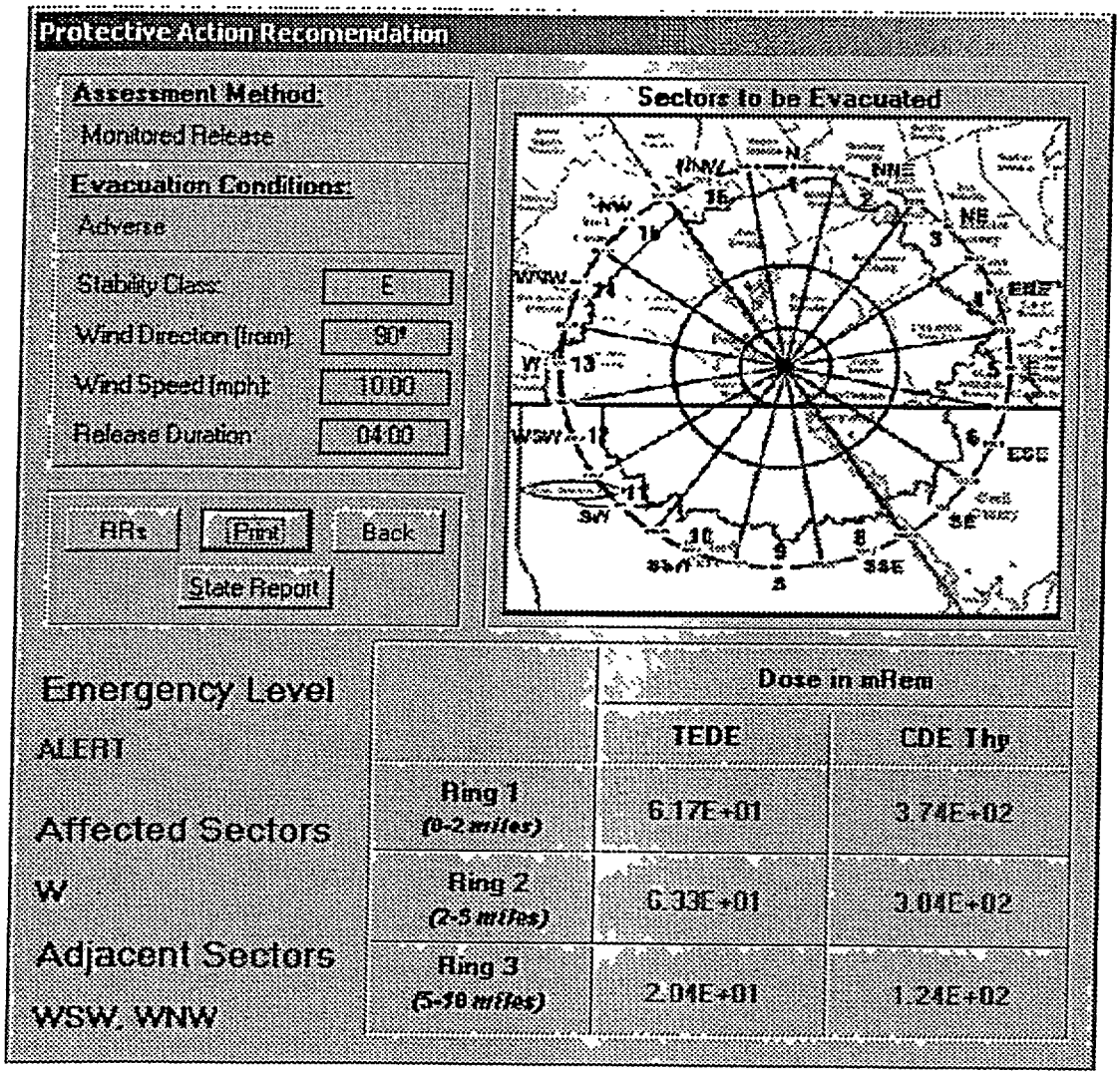


Figure 15

4.9.1. The *RR* button will display the total release rates for isotopic groups in Ci/sec. (Figure 16)

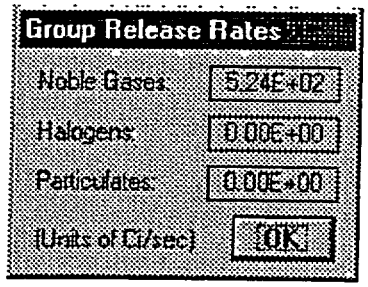


Figure 16

4.9.2. **SELECT** the *Go Back* button and modify inputs. This will return user to either Quick Assessment Form or one of the Assessment Method forms available in the Full Assessment mode.

4.9.3. **SELECT** *Print* to print the PAR report.

- **REFER** to Attachment 4, PAR Report (Printout).
- **REFER** to Attachment 6 to save report(s) as an ADOBE Acrobat file.

4.9.4. **SELECT** the STATE REPORT button to display DAPAR BRP PARAMETER REPORT and **PRINT** copy of form.

4.9.5. After each dose calculation is performed, **FAX** STATE REPORT and copies of associated Dose Assessment and PAR Reports to the Pennsylvania Emergency Operations Center (EOC) – Attention "BRP".

5. DOCUMENTATION:

None

6. REFERENCES

6.1. Exelon DAPAR Program Software Requirements Specification

6.2. Commitments - None

7. ATTACHMENTS

7.1. Attachment 1, Basic Program Flow Diagram

7.2. Attachment 2, Determination of Stability Class

7.3. Attachment 3, Sample Dose Assessment Report

7.4. Attachment 4, Sample Protective Action Recommendation (PAR) Report

7.5. Attachment 5, EPDS Radiological and Meteorological data

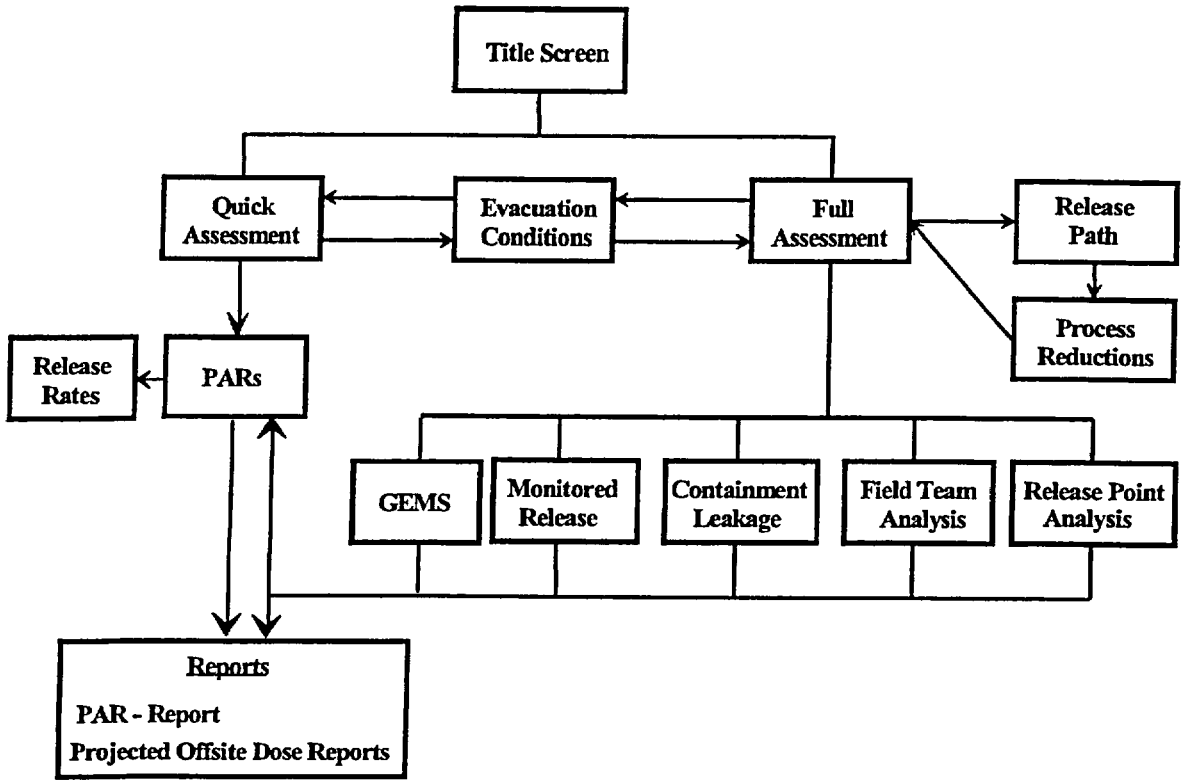
7.6. Attachment 6, ADOBE Acobat File Saving

7.7. Attachment 7, DAPAR Input Sheet

7.8. Attachment 8, DAPAR BRP Report – Full Assessment (EXAMPLE)

ATTACHMENT 1

BASIS PROGRAM FLOW DIAGRAM



The above diagram shows basic tasks that can be performed by the DAPAR program and how a user would navigate between them.

There are two methods available to perform calculations:

1. **Quick Assessment** - Normally used by the Control Room and TSC Dose Assessors to quickly determine the appropriate Protective Action Recommendation for a gaseous effluent monitored release point. Program automatically picks conservative choices, limiting the number of user inputs needed to get results.

2. **Full Assessment** - Normally used by EOF Dose Assessor, and TSC Dose Assessor if EOF activation is delayed. Program allows for more choices and user inputs to provide analysis of different releases and/or field monitoring data.

ATTACHMENT 2

DETERMINATION OF STABILITY CLASS

Page 1 of 2

1. If Met Tower data is unavailable from ERO Applications' programs or via local indications in the Control Room, another source of meteorological data may be used such as the Meteorological Vendor, National Weather Service or a local TV or Radio broadcast stations.

   a. Wind Speed (MPH) – Obtain and enter wind speed in Miles per Hour (MPH)

   b. Wind Direction (From) – Obtain and enter the direction the wind is coming FROM in degrees. (0°-360°)

   c. Stability Class (A-G) – Obtain and enter the stability class.

Stability Class Categories	
A	Extremely unstable conditions
B	Moderately unstable conditions
C	Slightly unstable conditions
D	Neutral conditions
E	Slightly stable conditions
F	Moderately stable conditions
G	Extremely stable conditions

2. If the stability class is not available or provided, use the following tables to choose appropriated value:

   NOTE: Meteorological Vendor normally provides $\Delta T/\Delta z$ or σ_θ.

   a. **If** Surface Wind Speed (in mph) is available, **then USE** Table 1-1.

   b. **If** delta temperature (ΔT) or sigma theta (σ_θ), **then USE** station-specific table (if provided).

      NOTE: The conditions Good or Adverse in the following step are in relation to the weather. Adverse is any weather condition, which would hinder the flow of traffic.

ATTACHMENT 2
DETERMINATION OF STABILITY CLASS
Page 2 of 2

Table 1-1

Surface Wind Speed (mph)	Daytime Conditions				Nighttime Conditions		
	Summer\ Clear Sky	Spring &Fall Clear Sky	Winter	Heavy Overcast or Rain	Thin overcast (>1/2 cloud cover)	< 3/8 cloud cover	Heavy Overcast or Rain
< 9	A	A-B	B	D	F	G	D
To 9.0	A-B	B	C	D	E	F	D
To 13.5	B	B-C	C	D	D	E	D
> 13.5	C	C-D	D	D	D	D	D

Table 1-2

Limerick (Tower 1)

Class	ΔT (°F)	σ_θ (degrees)
A	< -2.5	25
B	-2.5 to -2.3	20
C	-2.2 to -2.0	15
D	-1.9 to -0.7	10
E	-0.6 to +1.9	5
F	+2.0 to +5.2	2.5
G	> +5.2	1.7

Table 1-3

Peach Bottom (Tower 2)

Class	ΔT (°F)	σ_θ (degrees)
A	< -2.9	25
B	-2.9 to -2.7	20
C	-2.6 to -2.4	15
D	-2.3 to -0.8	10
E	-0.7 to +2.3	5
F	+2.4 to +6.2	2.5
G	> +6.2	1.7

ATTACHMENT 3
SAMPLE DOSE ASSESSMENT REPORT
Page 1 of 2

Peach Bottom Dose Assessment

Method: Monitored Release Time: 16:50 Date: 08/09/2002

Relase Path : <RCS>-<DryWell>-<Torus>-<RBCont>-<SBGT>-<MnStack>-<ENV> PRF: 0.16

Core Damage : 10% Gap Time After S/D (hours): 0.30

Wind Direction (from) : 1° Release Duration (hours): 4.00

Monitor : Main Stack WRGM Release Height : Elevated

Reading (uCi/sec) :1.00E+06

Monitor Reading for GE : 3.32E+05

Distance (miles)	External DDE (mR/hr)	External DDE (mRem)	Inhalation CEDE (mRem)	4 Day Deposition DDE (mRem)	4 Day TEDE Dose (mRem)	Thyroid CDE (mRem)
S.B.	< .1	< .1	2.55E-01	1.82E-01	4.75E-01	1.16E+01
1.0	1.18E+01	2.58E+01	1.72E+02	1.23E+02	3.21E+02	7.82E+03
1.5	2.22E+01	4.84E+01	3.23E+02	2.31E+02	6.02E+02	1.47E+04
2.0	2.28E+01	4.97E+01	3.32E+02	2.36E+02	6.18E+02	1.50E+04
2.5	1.84E+01	4.01E+01	2.68E+02	1.91E+02	4.98E+02	1.21E+04
3.0	1.58E+01	3.45E+01	2.31E+02	1.64E+02	4.30E+02	1.05E+04
3.5	1.31E+01	2.85E+01	1.91E+02	1.36E+02	3.55E+02	8.65E+03
4.0	1.10E+01	2.40E+01	1.61E+02	1.14E+02	2.99E+02	7.28E+03
4.5	9.24E+00	2.02E+01	1.35E+02	9.60E+01	2.51E+02	6.11E+03
5.0	6.86E+00	1.50E+01	9.99E+01	7.12E+01	1.86E+02	4.53E+03
5.5	7.33E+00	1.60E+01	1.07E+02	7.61E+01	1.99E+02	4.84E+03
6.0	6.47E+00	1.41E+01	9.42E+01	6.72E+01	1.76E+02	4.27E+03
6.5	5.72E+00	1.25E+01	8.34E+01	5.94E+01	1.55E+02	3.78E+03
7.0	4.18E+00	9.12E+00	6.09E+01	4.34E+01	1.13E+02	2.76E+03

PAG Exceeded At (Miles): TEDE: None CDE (thyroid) : 4.5 miles

ATTACHMENT 3
SAMPLE DOSE ASSESSMENT REPORT
Page 2 of 2

Peach Bottom Dose Assessment

Method: Monitored Release — Time: 16:52 — Date: 08/09/2002

Relase Path : <RCS>-<DryWell>-<Torus>-<RBCont>-<SBGT>-<MnStack>-<ENV> — PRF: 0.16

Core Damage : 10% Gap — Time After S/D (hours): 0:30

Wind Direction (from) : 1° — Release Duration (hours): 4:00

Monitor : Main Stack WRGM — Release Height : Elevated

Reading (uCi/sec) : 1.00E+06

Monitor Reading for GE : 3.32E+05

Distance (miles)	External DDE (mR/hr)	External DDE (mRem)	Inhalation CEDE (mRem)	4 Day Deposition DDE (mRem)	4 Day TEDE Dose (mRem)	Thyroid CDE (mRem)
7.5	3.64E+00	7.95E+00	5.31E+01	3.78E+01	9.89E+01	2.41E+03
8.0	3.47E+00	7.56E+00	5.05E+01	3.60E+01	9.40E+01	2.29E+03
8.5	2.93E+00	6.39E+00	4.27E+01	3.04E+01	7.95E+01	1.94E+03
9.0	2.55E+00	5.55E+00	3.71E+01	2.64E+01	6.91E+01	1.68E+03
9.5	2.40E+00	5.24E+00	3.50E+01	2.50E+01	6.52E+01	1.59E+03
10.0	2.52E+00	5.51E+00	3.68E+01	2.62E+01	6.85E+01	1.67E+03

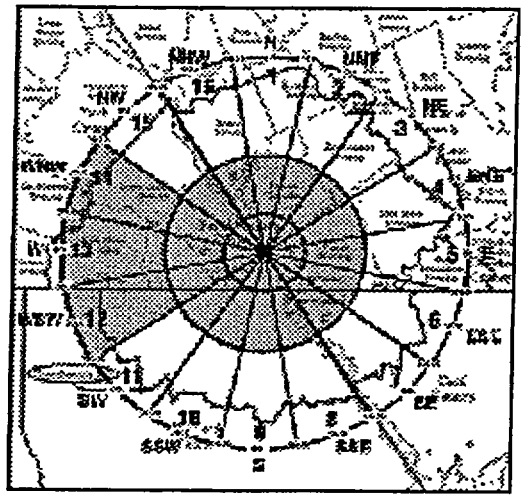
PAG Exceeded At (Miles): TEDE: None — CDE (thyroid) : 4.5 miles

ATTACHMENT 4
SAMPLE PROTECTIVE ACTION RECOMMENDATION (PAR) REPORT
Page 1 of 1

Peach Bottom Dose Based Protective Action Recommendations

Time: 12:41 Date: 07/18/2002

Sectors to be Evacuated



Assessment Method:
Monitored Release

Evacuation Conditions:
Adverse

Stability Class:	D
Wind Direction (from):	90°
Wind Speed (mph):	1.00
Release Duration (hrs):	03:40

Generalized Guidance

Evacuate when dose is:

1) >= 1000 mRem TEDE
2) >= 5000 mRem Thyroid

Shelter when evacuation is not possible.

Evacuate: All sectors between 0 to 5 miles, and sectors WSW, W, WNW between 5 to 10 miles

Affected Area Dose Tables

Emergency Level
GENERAL EMERGENCY

Affected Sectors
W

Adjacent Sectors
WSW, WNW

	Dose in mRem	
	TEDE	CDE Thy
Ring 1 *(0-2 miles)*	1.15E+05	3.54E+05
Ring 2 *(2-5 miles)*	8.97E+04	2.77E+05
Ring 3 *(5-10 miles)*	2.50E+04	7.72E+04

Group Release Rates (uCi/sec)

	Noble Gases	Halogens	Particulates
True (NRC):	5.00E+09	1.40E+07	3.83E+05

ATTACHMENT 5
EPDS RADIOLOGICAL AND METEOROLOGICAL DATA
Page 1 of 1

DAPAR input data is obtained through EPDS. Instructions for use of the EPDS system use procedure EP-MA-110-100, "ERO Computer Applications".

The EPDS menu contains a DAPAR screen selection:

STEP 1: Using the mouse, **MOVE** the arrow to the menu bar

STEP 2: **CLICK** on station of interest

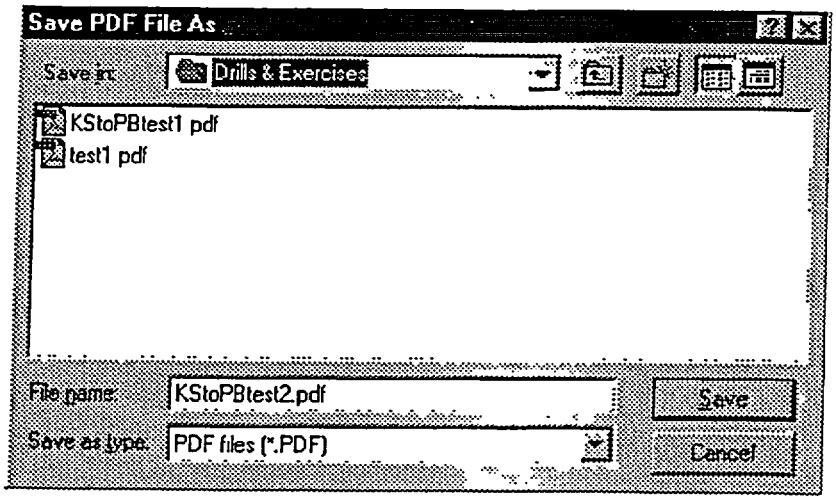
STEP 3: **CLICK** on unit of interest

STEP 4: **SCROLL** down to "DAPAR".

STEP 5: **CLICK** on "DAPAR"

ATTACHMENT 6
ADOBE ACROBAT FILE SAVING
Page 1 of 2

STEP 1: From the DAPAR PAR report tool bar left mouse click on "File", scroll down left mouse click on print. The following text box appears:



STEP 2: **SAVE** report in appropriate file:

- **If** this is a drill, **then SAVE** the dose projection in the "Drills and Exercises" folder in the site common drive.
- **If** this is a real event, **then SAVE** the dose projection in the "Real Event" folder in the site common drive.

  The common drive paths are:

  Limerick Generating Station (LGS):
  \\PECO\.PBS2_DATA1.PBS_SRVS.PBS.PECO\EP_DAPAR

  Peach Bottom Atomic Power Station (PBAPS):
  \\PECO\.PBS2_DATA1.PBS_SRVS.PBS.PECO\EP_DAPAR

STEP 3: **If** the assigned Dose Assessment Computer cannot access the program, **then PERFORM** the following:

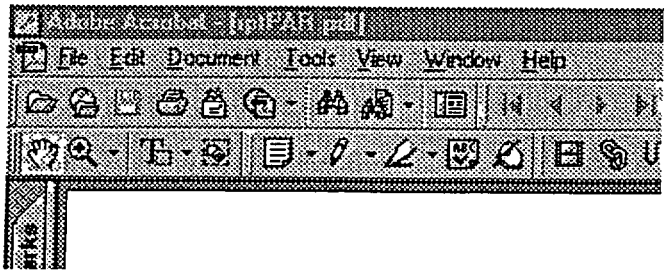
1. **TYPE** in a file name
2. **SAVE** file type as PDF
3. Left mouse **CLICK** on the "Save" command button

NOTE: The dose projection should appear as an Adobe PDF file.

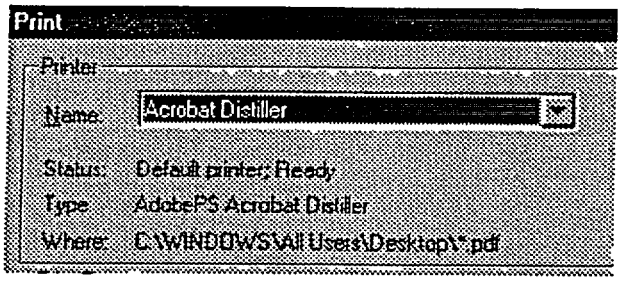
ATTACHMENT 6
ADOBE ACROBAT FILE SAVING
Page 2 of 2

STEP 4: **If** the Adobe PDF does not appear, **then** left mouse **CLICK** on the Adobe icon on the bottom of the screen.

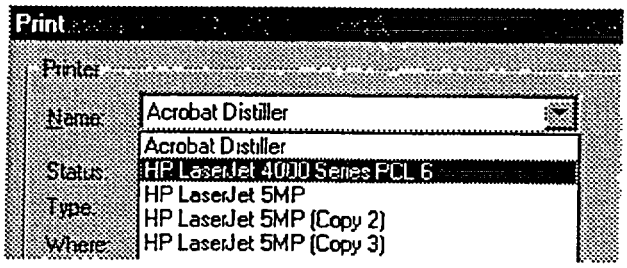
1. Left mouse **CLICK** on the Abobe print button from the tool bar



2. When the adobe 'Print" box appears, left mouse **CLICK** on the printer "Name" drop down menu arrow.



3. Scroll down and **HIGHLIGHT** the desired printer



4. When the desired printer appears in the "Name" field, left mouse **CLICK** "OK" command button to print.

STEP 5: Left mouse **CLICK** the X in the upper right hand corner to return to the DAPAR PAR report.

ATTACHMENT 7
DAPAR INPUT SHEET
Page 1 of 1

Date: ___/___/___ Time: _____ Station / Unit: _____

OBTAIN FROM: CR (STA/IA) / TSC (Ops. Communicator) / EOF (Operations Advisor)		
MONITOR INFORMATION		
RELEASE POINT #1:	LIMERICK: [ ] North Stack [ ] South Stack [ ] UNMONITORED	PEACH BOTTOM: [ ] Main Stack [ ] Vent Stack [ ] Torus Hard Pipe Vent [ ] UNMONITORED
DESCRIBE FROM RPV TO RELEASE POINT:		
RELEASE DURATION: [ ] No Release in Progress	START TIME:_____ / STOP TIME:_____	Total Duration: ____hrs
RELIEF INPUTS (PWR ONLY)	S/G PRESSURE: ____ psig / NO. SRVs OPEN: ____ / PORV OPEN: [ ]YES / [ ] NO	
TIME AFTER RX SHUTDOWN	RX POWER: ____ % / RX TRIP at: ____ hrs. / ATWAS: [ ]YES / [ ] NO	
CNTMT VENTING EXPECTED	[ ] NO / [ ] YES – REASON:	
CONTAINMENT REDUCTIONS	SPRAYS: [ ] ON / [ ] OFF	HOLD UP TIME: [ ] < 1 HR / [ ] 2-24 HRS / [ ] > 24 HRS
AUX. / RX BLD REDUCTIONS	HOLD UP TIME: [ ] < 1 HR / [ ] 2-24 HRS / [ ] > 24 HRS / [ ] NOT APPLICABLE	
TORUS/WETWELL REDUCTIONS	[ ] BYPASSED / [ ] SATURATED / [ ] SUBCOOLED	
SBGT FILTER REDUCTIONS	[ ] FILTERS WORKING / [ ] FILTERS NOT WORKING	
S/G REDUCTIONS (PWR ONLY)	[ ] SECONDARY BOILING / [ ] SECONDARY SOLID / [ ] SECONDARY DRY	

OBTAIN FROM: CR (STA/IA) / TSC (Core/Hydraulic Engr.) / EOF (Techncial Advisor)	
SOURCE TERM	
☐ REACTOR CORE ACCIDENT	☐ SPENT FUEL ACCIDENT
TYPE OF DAMAGE: ☐ GAP / ☐ MELT	FUEL TYPE: ☐ NEW / ☐ OLD
AMOUNT OF DAMAGE: ____%	FUEL STATUS: ☐ UNDER WATER / ☐ DRY
OTHER:	

ATTACHMENT 8
DAPAR BRP PARAMETER REPORT – FULL ASSESSMENT (EXAMPLE)
Page 1 of 2

NOTE: "QUICK ASSESSMENT" Report also provided.

DAPAR BRP PARAMETER REPORT - FULL ASSESSMENT

SITE	LIMERICK STATION	Date Aug 09,2002	Time 05:19:41 PM
Release Pathway	<RCS>-<DW>-<WetWell>-<RBCont>-<SBGT>-<NorthStack>-<ENV>		
Plume Height	37.8 meters	Time After S/D	0.00 hours

SOURCE TERM		MET DATA	
☑ Reactor Core Accident		Wind Speed	1 miles/hr
Type of Damage	⊙ Gap ○ Melt	Wind Direction	1 degrees
Amount of Damage	10%	Delta T	1
☐ Spent Fuel Accident		Stability Class	E
Fuel Type	⊙ New ⊙ Old	Release Duration	4.00 hours
Fuel Status	⊙ Under Water ⊙ Dry	Release Flow Rate	1.89E+08 cm3 sec-1
☐ Backwash Demin Spectrum		Weather Conditions	Adverse

RELEASE CONCENTRATIONS (uCi/cc)		
Noble Gases	Halogens	Particulates
5.89E-00	1.19E-05	2.90E-07

RELEASE %	
Noble Gases	Halogens
99.7922 %	0.2028 %

Reduction Factors

Drywell Containment	WetWell Reductions	Rx Bldg
⊙ Containment Spray 'OFF'	⊙ Bypassed	⊙ Holdup Time < 2 Hour
○ Containment Spray 'ON'	○ Saturated	○ 2 - 24 Hours
⊙ Holdup Time: < 2 Hour	○ Subcooled	○ > 24 Hours
○ 2 - 24 Hours	SBGT Filter Reductions	RERS Filter Reductions
○ >24 Hours	⊙ Filers Not Working	○ Filers Not Working
	○ Filers Working	⊙ Filers Working
		TOTAL PRF 0.0012

ATTACHMENT 8
DAPAR BRP PARAMETER REPORT – FULL ASSESSMENT (EXAMPLE)
Page 2 of 2

DAPAR BRP PARAMETER REPORT - FULL ASSESSMENT

ASSESSMENT METHOD

☑ Monitored Release

Monitor North Stack RE Reading 1111111 uCi/sec

☐ Containment Leakage/Failure

- ○ Leakage % per day
- ⊠ Failure to Isolate (100% per day)
- ○ Catastrophic Failure (100% in 1 hour)

☐ Field Team Analysis

Basis

- ⊠ Survey Downwind Level (mR/hr)
  Crosswind Survey Time
- ○ Sample Downwind Survey Time
  Crosswind Field X/O

☐ Release Point Samples

Flow Rate

ATTACHMENT 2

LIMERICK GENERATING STATION, UNITS 1 & 2
PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 & 3

Docket Nos. 50-352
50-353
50-277
50-278

License Nos. NPF-39
NPF-85
DPR-44
DPR-56

EMERGENCY PROCEDURES

REPORT INDEXES

PROCEDURE INDEX REPORT:

FAC	DOC TYPE	PROC TYPE	PROCEDURE NUMBER	CURR REV NBR	TITLE	EFFECTIVE DATE	RESP GROUP	SYSTEM NBR
LG	PROC	EP	EP-AA-110	0003	ASSESSMENT OF EMERGENCIES	08/30/02		
LG	PROC	EP	EP-AA-110-301	0000	CORE DAMAGE ASSESSMENT (BWR)	08/30/02		
LG	PROC	EP	EP-AA-110-302	0000	CORE DAMAGE ASSESSMENT (PWR)			
LG	PROC	EP	EP-AA-111	0004	EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS	08/30/02		
LG	PROC	EP	EP-AA-112	0006	EMERGENCY RESPONSE ORGANIZATION (ERO)/EMERGENCY RESPONSE FACILITY (ERF) ACTIVATION AND OPERATION	08/30/02		
LG	PROC	EP	EP-AA-112-100	0004	CONTROL ROOM OPERATIONS	08/30/02		
LG	PROC	EP	EP-AA-112-200	0003	TSC ACTIVATION AND OPERATION	08/30/02		
LG	PROC	EP	EP-AA-112-201	0000	TSC COMMAND AND CONTROL	08/30/02		
LG	PROC	EP	EP-AA-112-202	0000	TSC FACILITY SUPPORT GROUP	08/30/02		
LG	PROC	EP	EP-AA-112-203	0000	TSC OPERATION GROUP	08/30/02		
LG	PROC	EP	EP-AA-112-204	0000	TSC TECHNICAL SUPPORT GROUP	08/30/02		
LG	PROC	EP	EP-AA-112-205	0000	TSC MAINTENANCE GROUP	08/30/02		
LG	PROC	EP	EP-AA-112-206	0000	TSC RADIATION PROTECTION/CHEMISTRY GROUP	08/30/02		
LG	PROC	EP	EP-AA-112-300	0003	OPERATIONS SUPPORT CENTER ACTIVATION AND OPERATION	08/30/02		
LG	PROC	EP	EP-AA-112-400	0003	EMERGENCY OPERATIONS FACILITY ACTIVATION AND OPERATION	08/30/02		
LG	PROC	EP	EP-AA-112-401	0000	NUCLEAR DUTY OFFICER (NDO)	08/30/02		
LG	PROC	EP	EP-AA-112-402	0000	EOF COMMAND AND CONTROL	08/30/02		
LG	PROC	EP	EP-AA-112-403	0000	EOF LOGISTICS SUPPORT GROUP	08/30/02		
LG	PROC	EP	EP-AA-112-404	0000	EOF TECHNICAL SUPPORT GROUP	08/30/02		
LG	PROC	EP	EP-AA-112-405	0000	EOF PROTECTIVE MEASURES GROUP	08/30/02		
LG	PROC	EP	EP-AA-112-500	0004	EMERGENCY ENVIRONMENTAL MONITORING	08/30/02		
LG	PROC	EP	EP-AA-112-600	0004	JOINT PUBLIC INFORMATION CENTER (JPIC) ACTIVATION	08/30/02		
LG	PROC	EP	EP-AA-112-601	0000	EMERGENCY NEWS CENTER (ENC) OPERATIONS	08/30/02		
LG	PROC	EP	EP-AA-112-602	0000	JPIC ACTIVATION AND OPERATION	08/30/02		
LG	PROC	EP	EP-AA-113	0004	PERSONNEL PROTECTIVE ACTIONS	08/30/02		
LG	PROC	EP	EP-AA-114	0003	NOTIFICATIONS	08/30/02		
LG	PROC	EP	EP-AA-115	0001	RECOVERY FROM A CLASSIFIED EVENT	08/30/02		
LG	PROC	EP	EP-AA-120	0000	EMERGENCY PLAN ADMINISTRATION			
LG	PROC	EP	EP-AA-120-1001	0002	10 CFR 50.54(Q) CHANGE EVALUATION	10/09/02		
LG	PROC	EP	EP-AA-120-1002	0000	STORM/EVENT RESTORATION	10/09/02		
LG	PROC	EP	EP-AA-122	0002	DRILLS AND EXERCISES	10/09/02		
LG	PROC	EP	EP-AA-122-1001	0001	DRILL DEVELOPMENT, CONDUCT AND EVALUATION	10/09/02		
LG	PROC	EP	EP-AA-122-1002	0001	EXERCISE DEVELOPMENT, CONDUCT AND EVALUATION	10/09/02		
LG	PROC	EP	EP-AA-122-1003	0001	SCHEDULING OF DRILLS AND EXERCISES	10/09/02		
LG	PROC	EP	EP-AA-122-1004	0001	DEMONSTRATION CRITERIA	10/09/02		
LG	PROC	EP	EP-AA-123	0002	COMPUTER PROGRAMS	11/05/02		
LG	PROC	EP	EP-AA-124	0000	INVENTORIES AND SURVEILLANCES			
LG	PROC	EP	EP-AA-125	0000	EMERGENCY PREPAREDNESS SELF EVALUATION PROCESS			
LG	PROC	EP	EP-AA-125-1001	0000	EP PERFORMANCE INDICATOR GUIDANCE			
LG	PROC	EP	EP-AA-125-1002	0000	ERO PERFORMANCE - PERFORMANCE INDICATORS GUIDANCE			
LG	PROC	EP	EP-C-1-2	0003	DEVELOPMENT AND MAINTENANCE OF THE NUCLEAR EMERGENCY PLAN AND EMERGENCY RESPONSE PROCEDURES CANCELLED	08/06/96		
LG	PROC	EP	EP-C-2	0008	EMERGENCY PREPAREDNESS CORRECTIVE ACTION PROCESS SUPERCEDED BY LS-AA-125	07/24/01		
LG	PROC	EP	EP-C-2-1	0001	IFA FOR ACTION ITEM TRACKING SYSTEM CANCELLED	03/10/97		
LG	PROC	EP	EP-C-2-2	0001	ACTION/REQUEST EVALUATION NUMBERS AND TREND CODES DELETED	07/20/99		

PROCEDURE INDEX REPORT:

FAC	DOC TYPE	PROC TYPE	PROCEDURE NUMBER	CURR REV NBR	TITLE	EFFECTIVE DATE	RESP GROUP	SYSTEM NBR
LG	PROC	EP	EP-C-3-1	0000	DEVELOPMENT AND MAINTENANCE OF THE EMERGENCY RESPONSE FACILITIES AND EQUIPMENT (ERF/E) PROGRAM CANCELLED	07/20/98		
LG	PROC	EP	EP-C-4-1	0000	FLOWCHART FOR THE DESIGNATION, TRAINING AND MAINTENANCE OF NUCLEAR ERO CANCELLED	03/10/97		
LG	PROC	EP	EP-C-5-1	0000	INTERFACE AGREEMENT FOR OFFSITE ORGANIZATION MATRIX REVIEW CANCELLED	03/10/97		
LG	PROC	EP	EP-C-5-2	0000	INTERFACE AGREEMENT MATRIX FOR OFFSITE ORGANIZATIONS CANCELLED	04/10/00		
LG	PROC	EP	EP-C-6	0004	PREPARATION, CONDUCT, AND EVALUATION OF EMERGENCY RESPONSE DRILLS AND EXCERCISES - SUPERCEDED BY EP-MA-122	02/26/02		
LG	PROC	EP	EP-C-6-1	0000	DRILL OBJECTIVES CANCELLED	03/10/97		
LG	PROC	EP	EP-C-6-2	0000	ANNUAL EXCERCISE SCENARIO SUBMITTAL GUIDELINES CANCELLED	03/10/97		
LG	PROC	EP	EP-C-6-3	0000	SCENARIO MANUAL FORMAT CANCELLED	03/10/97		
LG	PROC	EP	EP-C-6-4	0000	DRILL ACTIVITY CHECKLIST CANCELLED	03/10/97		
LG	PROC	EP	EP-C-6-5	0000	DRILL REPORT FORMAT CANCELLED	03/10/97		
LG	PROC	EP	EP-C-7-1	0000	IFA FOR ROUTINE ADMINISTRATION AND TESTING CANCELLED	03/10/97		
LG	PROC	EP	EP-C-7-2	0000	IFA FOR EMERGENCY SIREN MAINTENANCE CANCELLED	03/10/97		
LG	PROC	EP	EP-MA-110-100	0000	ERO COMPUTER APPLICATIONS	08/30/02		
LG	PROC	EP	EP-MA-110-200	0001	DOSE ASSESSMENT	11/18/02		
LG	PROC	EP	EP-MA-112-406	0000	MAROG OFFSITE LIAISONS	08/30/02		
LG	PROC	EP	EP-MA-113-100	0000	ASSEMBLY AND SITE EVACUATION	08/30/02		
LG	PROC	EP	EP-MA-114-100	0001	MAROG NOTIFICATIONS	10/28/02		
LG	PROC	EP	EP-MA-122	0000	EXERCISES AND DRILLS	02/26/02		
LG	PROC	EP	EP-MA-122-1001	0002	DRILL DEVELOPMENT, CONDUCT AND EVALUATION SUPERCEDED BY EP-AA-122-1001	10/09/02		
LG	PROC	EP	EP-MA-122-1002	0002	EXERCISE DEVELOPMENT, CONDUCT AND EVALUATION SUPERCEDED BY EP-AA-122-1002	10/09/02		
LG	PROC	EP	EP-MA-122-1003	0000	SCHEDULING OF DRILLS AND EXERCISES SUPERCEDED BY EP-AA-122-1003	10/09/02		
LG	PROC	EP	EP-MA-122-1004	0000	DEMONSTRATION CRITERIA SUPERCEDED BY EP-AA-122-1004	10/09/02		
LG	PROC	EP	EP-MA-125-1003	0001	COLLECTION AND EVALUATION OF DATA FOR INDICATOR R.EP.02, "EMERGENCY RESPONSE ORGANIZATION PARTICIPATION"	10/07/02		
LG	PROC	EP	EP-100	0003	CANCELLED 4/03/92 (SUPERCEDED BY ERP-200)			
LG	PROC	EP	EP-100-1 APP.	0003	CANCELLED 04/03/92 (SUPERCEDED BY ERP-200 APP.1)			
LG	PROC	EP	EP-101	0013	CANCELLED 04/03/92 (SUPERCEDED BY ERP-101)			
LG	PROC	EP	EP-102	0015	CANCELLED INCORPORATED INTO EP100 &EP112		LWE	
LG	PROC	EP	EP-102 APP.1	0010	CANCELLED INCORPORATED INTO EP100 & EP112		LWE	
LG	PROC	EP	EP-103	0018	CANCELLED INCORPORATED INTO EP100 & EP112		LWE	
LG	PROC	EP	EP-103 APP.1	0009	CANCELLED INCORPORATED INTO EP100 & EP112		LWE	
LG	PROC	EP	EP-104	0017	CANCELLED INCORPORATED INTO EP100 & EP112		LWE	

PROCEDURE INDEX REPORT:

FAC	DOC TYPE	PROC TYPE	PROCEDURE NUMBER	CURR REV NBR	TITLE	EFFECTIVE DATE	RESP GROUP	SYSTEM NBR
LG	PROC	EP	EP-104 APP.1	0009	CANCELLED INCORPORATED INTO EP100 & EP112		LWE	
LG	PROC	EP	EP-105	0017	CANCELLED INCORPORATED INTO EP100 & EP112		LWE	
LG	PROC	EP	EP-105 APP.1	0009	CANCELLED INCORPORATED INTO EP100 & EP112		LWE	
LG	PROC	EP	EP-106	0009	CANCELLED 04/03/92 (SUPERCEDED BY ERP-106)			
LG	PROC	EP	EP-110	0015	CANCELLED 04/03/92			
LG	PROC	EP	EP-112	0006	CANCELLED 04/03/92 (SUPERCEDED BY ERP-110)			
LG	PROC	EP	EP-120	0009	CANCELLED 04/03/92 (SUPERCEDED BY ERP-C-1200)			
LG	PROC	EP	EP-201	0012	CANCELLED (4/3/92) INCORPORATED INTO ERP-800			
LG	PROC	EP	EP-202	0012	CANCELLED 04/03/92 (SUPERCEDED BY ERP-230)			
LG	PROC	EP	EP-203	0012	CANCELLED 04/03/92 (SUPERCEDED BYERP-C-1200)			
LG	PROC	EP	EP-204	0001	CANCELLED(08/20/90)		LWE	
LG	PROC	EP	EP-208	0015	CANCELLED 04/03/92 (SUPERCEDED BY ERP-500)			
LG	PROC	EP	EP-210	0016	CANCELLED (4/3/92) INCORPORATED INTO ERP-300			
LG	PROC	EP	EP-211	0009	CANCELLED (4/3/92) INCORPORATED INTO ERP-340			
LG	PROC	EP	EP-220	0000	CANCELLED			
LG	PROC	EP	EP-221	0000	CANCELLED		LWE	
LG	PROC	EP	EP-222	0000	CANCELLED		LWE	
LG	PROC	EP	EP-225	0003	CANCELLED 04/03/92 (SUPERCEDED BY ERP-700)		LWE	
LG	PROC	EP	EP-230	0015	CANCELLED 04/03/92 (SUPERCEDED BY ERP-400)			
LG	PROC	EP	EP-231	0019	CANCELLED (3/15/91)			
LG	PROC	EP	EP-232	0000	CANCELLED			
LG	PROC	EP	EP-233	0010	CANCELLED (3/22/91)		LWE	
LG	PROC	EP	EP-234	0010	CANCELLED (3/22/91)			
LG	PROC	EP	EP-235	0009	CANCELLED (3/15/91)			
LG	PROC	EP	EP-236	0007	CANCELLED (3/15/91)			
LG	PROC	EP	EP-237	0013	CANCELLED (3/13/91)			
LG	PROC	EP	EP-238	0007	CANCELLED (3/15/91)			
LG	PROC	EP	EP-240	0000	CANCELLED			
LG	PROC	EP	EP-241	0014	CANCELLED 04/03/92 (SUPERCEDED BY ERP-410)		LWE	
LG	PROC	EP	EP-242	0007	CANCELLED 04/03/92 (SUPERCEDED BY ERP-420)			
LG	PROC	EP	EP-243	0012	CANCELLED 04/03/92 (SUPERCEDED BY ERP-430)			
LG	PROC	EP	EP-244	0005	CANCELLED 04/03/92 (SUPERCEDED BY ERP-440)			
LG	PROC	EP	EP-250	0009	CANCELLED (4/3/92) INCORPORATED INTO ERP-600			
LG	PROC	EP	EP-251	0005	CANCELLED (4/3/92) INCORPORATED INTO ERP-620			
LG	PROC	EP	EP-252	0016	CANCELLED 04/03/92 (SUPERCEDED BY ERP-500)			
LG	PROC	EP	EP-253	0000	CANCELLED			
LG	PROC	EP	EP-254	0005	CANCELLED (4/3/92) INCORPORATED INTO ERP-630		LWE	
LG	PROC	EP	EP-255	0005	CANCELLED (4/3/92) INCORPORATED INTO ERP-260			
LG	PROC	EP	EP-256	0001	CANCELLED (09/26/91)			
LG	PROC	EP	EP-257	0002	CANCELLED (09/26/91)			
LG	PROC	EP	EP-260	0004	CANCELLED			
LG	PROC	EP	EP-261	0010	CANCELLED 04/03/92 (SUPERCEDED BY ERP-800)		LWE	
LG	PROC	EP	EP-272	0000	CANCELLED			
LG	PROC	EP	EP-273	0000	CANCELLED		LWE	
LG	PROC	EP	EP-275	0000	CANCELLED		LWE	
LG	PROC	EP	EP-276	0013	CANCELLED(11/19/90)		LWE	
LG	PROC	EP	EP-277	0021	CANCELLED(11/19/90)		LWE	
LG	PROC	EP	EP-278	0015	CANCELLED		LWE	
LG	PROC	EP	EP-279	0020	CANCELLED(11/13/90)		LWE	
LG	PROC	EP	EP-280	0021	CANCELLED(11/13/90)			

PROCEDURE INDEX REPORT:

FAC	DOC TYPE	PROC TYPE	PROCEDURE NUMBER	CURR REV NBR	TITLE	EFFECTIVE DATE	RESP GROUP	SYSTEM NBR
LG	PROC	EP	EP-282	0016	CANCELLED (8/13/91)			
LG	PROC	EP	EP-284	0013	CANCELLED (8/13/91)			
LG	PROC	EP	EP-287	0006	CANCELLED - 11/02/88		LWE	
LG	PROC	EP	EP-291	0026	CANCELLED 04/03/92 (SUPERCEDED BY ERP-140)			
LG	PROC	EP	EP-292	0018	CANCELLED (4/24/90)		LWE	
LG	PROC	EP	EP-294	0020	CANCELLED(6/29/90)INCORP. INTO EP-305		LWE	
LG	PROC	EP	EP-301	0003	CANCELLED INCORPORATED INTO EP305		LWE	
LG	PROC	EP	EP-302	0002	CANCELLED 04/03/92 (SUPERCEDED BY ERP-800)			
LG	PROC	EP	EP-303	0004	CANCELLED 04/03/92 (SUPERCEDED BY ERP-120)			
LG	PROC	EP	EP-304	0007	CANCELLED 04/03/92 (SUPERCEDED BY ERP-120)			
LG	PROC	EP	EP-305	0010	CANCELLED 04/03/92 (SUPERCEDED BY (ERP-120)			
LG	PROC	EP	EP-306	0006	CANCELLED 04/03/92 (SUPERCEDED BY ERP-500)			
LG	PROC	EP	EP-307	0004	CANCELLED 04/03/92 (SUPERCEDED BY ERP-C-1500)			
LG	PROC	EP	EP-312	0011	CANCELLED (4/3/92) INCORPORATED INTO ERP-350			
LG	PROC	EP	EP-313	0007	CANCELLED (4/3/92) INCORPORATED INTO ERP-660			
LG	PROC	EP	EP-314	0003	CANCELLED(01/03/91)			
LG	PROC	EP	EP-315	0009	CANCELLED		LWE	
LG	PROC	EP	EP-316	0004	CANCELLED		LWE	
LG	PROC	EP	EP-317	0014	CANCELLED (4/3/92) INCORPORATED INTO ERP-370			
LG	PROC	EP	EP-318	0004	CANCELLED (4/3/92) INCORPORATED INTO ERP-350			
LG	PROC	EP	EP-319	0002	CANCELLED		LWE	
LG	PROC	EP	EP-320	0002	CANCELLED(09/21/90)		LWE	
LG	PROC	EP	EP-321	0003	CANCELLED(09/21/90)		LWE	
LG	PROC	EP	EP-322	0000	CANCELLED(09/21/90)		LWE	
LG	PROC	EP	EP-322 APP.9	0001	CANCELLED(11/05/90)		LWE	
LG	PROC	EP	EP-324	0000	CANCELLED (4/3/92) INCORPORATED INTO ERP-300			
LG	PROC	EP	EP-324 APP. 5	0000	CANCELLED (4/3/92) INCORPORATED INTO ERP-300			
LG	PROC	EP	EP-324 APP.6	0000	CANCELLED (4/3/92) INCORPORATED INTO ERP-300			
LG	PROC	EP	EP-325	0010	CANCELLED (4/3/92) INCORPORATED INTO ERP-370			
LG	PROC	EP	EP-327	0002	CANCELLED (4/2/92) INCORPORATED INTO ERP-370			
LG	PROC	EP	EP-328	0000	CANCELLED (4/2/92) INCORPORATED INTO ERP-370			
LG	PROC	EP	EP-330	0007	CANCELLED (4/2/92) INCORPORATED INTO ERP-640			
LG	PROC	EP	EP-333	0002	CANCELLED (4/3/92) INCORPORATED INTO ERP-360			
LG	PROC	EP	EP-401	0005	CANCELLED (4/3/92) INCORPORATED INTO ERP-650			
LG	PROC	EP	EP-410	0013	CANCELLED 04/03/92 (SUPERCEDED BY ERP-C-1900)			
LG	PROC	EP	EP-500	0002	CANCELLED		LWE	

** END OF REPORT **

PEACH BOTTOM ATOMIC POWER STATION

PROCEDURE INDEX REPORT:

FAC	DOC TYPE	PROC TYPE	PROCEDURE NUMBER	CURR REV NBR	TITLE	EFFECTIVE DATE	RESP GROUP	SYSTEM NBR
PB	PROC	EP	EP-AA-1000	0013	STANDARIZED RADIOLOGICAL EMERGENCY PLAN	08/30/02	PWE	
PB	PROC	EP	EP-AA-1007	0002	RADIOLOGICAL EMERGENCY PLAN ANNEX FOR PEACH BOTTOM ATOMIC POWER STATION	11/18/02	PWE	
PB	PROC	EP	EP-AA-110	0003	ASSESSMENT OF EMERGENCIES	08/30/02	PWE	
PB	PROC	EP	EP-AA-110-301	0000	CORE DAMAGE ASSESSMENT (BWR)	08/30/02	PWE	
PB	PROC	EP	EP-AA-111	0004	EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS	08/30/02	PWE	
PB	PROC	EP	EP-AA-112	0006	EMERGENCY RESPONSE ORGANIZATION (ERO)/EMERGENCY RESPONSE FACILITY (ERF) ACTIVATION AND OPERATION	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-100	0004	CONTROL ROOM OPERATIONS	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-200	0003	TSC ACTIVIATION AND OPERATION	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-201	0000	TSC COMMAND AND CONTROL	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-202	0000	TSC FACILITY SUPPORT GROUP	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-203	0000	TSC OPERATION GROUP	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-204	0000	TSC TECHNICAL SUPPORT GROUP	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-205	0000	TSC MAINTENANCE GROUP	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-206	0000	TSC RADIATION PROTECTION/CHEMISTRY GROUP	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-300	0003	OPERATIONS SUPPORT CENTER ACTIVIATION AND OPERATION	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-400	0003	EMERGENCY OPERATIONS FACILITY ACTIVATION AND OPERATION	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-401	0000	NUCLEAR DUTY OFFICER (NDO)	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-402	0000	EOF COMMAND AND CONTROL	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-403	0000	EOF LOGISTICS SUPPORT GROUP	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-404	0000	EOF TECHNICAL SUPPORT GROUP	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-405	0000	EOF PROTECTIVE MEASURES GROUP	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-500	0004	EMERGENCY ENVIRONMENTAL MONITORING	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-600	0004	PUBLIC INFORMATION ORGANIZATION ACTIVATION AND OPERATIONS	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-601	0000	EMERGENCY NEWS CENTER (ENC) OPERATIONS	08/30/02	PWE	
PB	PROC	EP	EP-AA-112-602	0000	JPIC ACTIVATION AND OPERATION	08/30/02	PWE	
PB	PROC	EP	EP-AA-113	0004	PERSONNEL PROTECTIVE ACTIONS	08/30/02	PWE	
PB	PROC	EP	EP-AA-114	0003	NOTIFICATIONS	08/30/02	PWE	
PB	PROC	EP	EP-AA-115	0001	RECOVERY FROM A CLASSIFIED EVENT	08/30/02	PWE	
PB	PROC	EP	EP-AA-120-1001	0002	10 CFR 50.54(Q) CHANGE EVALUATION	10/18/02	PWE	
PB	PROC	EP	EP-AA-120-1002	0000	STORM/EVENT RESTORATION	10/18/02	PWE	
PB	PROC	EP	EP-AA-121-1001	0002	AUTOMATED CALL-OUT SYSTEM MAINTENANCE	10/18/02	PWE	
PB	PROC	EP	EP-AA-122	0002	DRILLS AND EXERCISES	10/18/02	PWE	
PB	PROC	EP	EP-AA-122-1001	0001	DRILL DEVELOPMENT, CONDUCT AND EVALUATION	10/18/02	PWE	
PB	PROC	EP	EP-AA-122-1002	0001	EXERCISE DEVELOPMENT, CONDUCT AND EVALUATION	10/18/02	PWE	
PB	PROC	EP	EP-AA-122-1003	0001	SCHEDULING OF DRILLS AND EXERCISES	10/18/02	PWE	
PB	PROC	EP	EP-AA-122-1004	0001	DEMONSTRATION CRITERIA	10/18/02	PWE	
PB	PROC	EP	EP-AA-123	0002	COMPUTER PROGRAMS	11/12/02	PWE	
PB	PROC	EP	EP-C-2	0008	EMERGENCY PREPAREDNESS CORRECTIVE ACTION PROCESS - CANCELLED REPLACED BY LS-AA-125	07/24/01	PWE	
PB	PROC	EP	EP-C-2-1	0001	IFA FOR ACTION ITEM TRACKING SYSTEM - CANCELLED - NO REPLACEMENT	03/10/97	PWE	
PB	PROC	EP	EP-C-2-2	0001	ACTION/REQUEST EVALUATION NUMBERS AND TREND CODES CANCELLED - NO EWPLACEMENT	12/18/98	PWE	
PB	PROC	EP	EP-C-3-1 EXH	0000	DEVELOPMENT AND MAINTENANCE OF THE EMERGENCY RESPONSE FACILITIES AND EQUIPMENT (ERF/E) PROGRAM - CANCELLED - NO REPLACEMENT	04/17/95	PWE	
PB	PROC	EP	EP-C-4-1	0000	FLOWCHART OF DESIGNATION, TRAINING AND MAINTENANCE OF NUCLEAR ERO CANCELLED - NO REPLACEMENT	03/10/97	PWE	
PB	PROC	EP	EP-C-5-1	0000	INTERFACE AGREEMENT FOR OFFSITE ORGANIZATION MATRIX REVIEW - CANCELLED - NO REPLACEMENT	03/10/97	PWE	

PEACH BOTTOM ATOMIC POWER STATION
PROCEDURE INDEX REPORT:

FAC	DOC TYPE	PROC TYPE	PROCEDURE NUMBER	CURR REV NBR	TITLE	EFFECTIVE DATE	RESP GROUP	SYSTEM NBR
PB	PROC	EP	EP-C-5-2	0000	INTERFACE AGREEMENT MATRIX FOR OFFSITE ORGANIZATIONS CANCELLED - NO REPLACEMENT CANCELLED - NO REPLACEMENT	04/10/00	PWE	
PB	PROC	EP	EP-C-6	0004	PREPARATION, CONDUCT, AND EVALUATION OF EMERGENCY RESPONSE DRILLS AND EXCERCISES CANCELLED - REPLACED BY EP-MA-122	02/21/02	PWE	
PB	PROC	EP	EP-C-6-1	0000	DRILL OBJECTIVES - CANCELLED - NO REPLACEMENT	03/10/97	PWE	
PB	PROC	EP	EP-C-6-2	0000	ANNUAL EXCERCISE SCENARIO SUBMITTAL GUIDELINES - CANCELLED - NO REPLACEMENT	03/10/97	PWE	
PB	PROC	EP	EP-C-6-3	0000	SCENARIO MANUAL FORMAT - CANCELLED - NO REPLACEMENT	03/10/97	PWE	
PB	PROC	EP	EP-C-6-4	0000	DRILL ACTIVITY CHECKLIST - CANCELLED - NO REPLACEMENT	03/10/97	PWE	
PB	PROC	EP	EP-C-6-5	0000	DRILL REPORT FORMAT - CANCELLED - NO REPLACEMENT	03/10/97	PWE	
PB	PROC	EP	EP-C-7-1	0000	IFA FOR ROUTINE ADMINISTRATION & TESTING CANCELLED - NO REPLACEMENT	03/10/97	PWE	
PB	PROC	EP	EP-C-7-2	0000	IFA FOR EMERGENCY SIREN MAINTENANCE CANCELLED - NO REPLACEMENT	03/10/97	PWE	
PB	PROC	EP	EP-MA-110-100	0000	ERO COMPUTER APPLICATIONS	08/30/02	PWE	
PB	PROC	EP	EP-MA-110-200	0001	DOSE ASSESSMENT	11/18/02	PWE	
PB	PROC	EP	EP-MA-112-406	0000	MAROG OFFSITE LIASONS	08/30/02	PWE	
PB	PROC	EP	EP-MA-113-100	0000	ASSEMBLY AND SITE EVACUATION	08/30/02	PWE	
PB	PROC	EP	EP-MA-114-100	0001	MAROG NOTIFICATIONS	10/18/02	PWE	
PB	PROC	EP	EP-MA-122	0000	EXERCISE AND DRILLS - CANCELLED REPLACED BY EP-AA-122	10/18/02	PWE	
PB	PROC	EP	EP-MA-122-1001	0002	DRILL DEVELOPMENT, CONDUCT AND EVALUATION - CANCELLED REPLACED BY EP-AA-122-1001	10/18/02	PWE	
PB	PROC	EP	EP-MA-122-1002	0002	EXERCISE DEVLOPMENT, CONDUCT AND EVALUATION - CANCELLED REPLACED BY EP-AA-122-1002	10/18/02	PWE	
PB	PROC	EP	EP-MA-122-1003	0000	SCHEDULING OF DRILLS AND EXERCISES - CANCELLED REPLACED BY EP-AA-122-1003	10/18/02	PWE	
PB	PROC	EP	EP-MA-122-1004	0000	DEMONSTRATION CRITERIA - CANCELLED REPLACED BY EP-AA-122-1004	10/18/02	PWE	
PB	PROC	EP	EP-MA-125-1003	0001	COLLECTION AND EVALUATION OF DATA FOR INDICATOR R.EP.02, "EMERGENCY RESPONSE ORGANIZATION PARTICIPATION""	10/18/02	PWE	

** END OF REPORT **