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TO: GERLACH*ROSE M 01/27/2004
LOCATION: (DOCUMENT CONTROL DESK)
FROM: NUCLEAR RECORDS DOCUMENT CONTROL CENTER NUCSA-2)
THE FOLLOWING CHANGES HAVE OCCURRED TO THE HARDCOPY OR ELECTRONIC MANUAL ASSIGNED TO YOU:

130 - 130 - HP II DOSE CALCULATOR: EMERGENCY PLAN-POSITION SPECIFIC PROCEDURE

REMOVE MANUAL TABLE OF CONTENTS DATE: 10/30/2003

ADD MANUAL TABLE OF CONTENTS DATE: 01/26/2004

CATEGORY: PROCEDURES TYPE: EP
ID: EP-PS-130
REPLACE: REV:17

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REMOVE: PCAF 2003-1483 REV: N/A

ADD: PCAF 2003-1483 REV: N/A

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A045

TSC DOSE ASSESSMENT FLOWCHART

DEFAULT RATIOS
Noble Gas to I-131 = 1,000
Noble Gas to Particulate = 10,000

Field Threshold Values
RMS (Fixed & Mobile) Gamma detectors = 0.1 mr/hr
OSCAR Iodine monitor = 68.4 mrem/hr
Field Team I-131 Air Sample = 100 ncpm

SBGT In-service
In-service Flow Rate = ~1.00E+04 SCFM

Forward Calculations
Use measured Noble Gas (NG) Release Rate and default ratios or Chemistry supplied data

Back Calculations
Use measured gamma dose rate (EDE) and

OSCAR I-131 Conc (uci/cc) or
'A'('B) Field Team Manual Air Sample Data (ncpm) or
Default Selection

Source Term Selection
Power > 10%: Use ATWS with
Rx Trip time = Start of Release time/date

Power < 10%: Use LOCA (Clad Failure) as default selection

Fuel Handling Incident: Use Fuel Handling Accident

Ventilation Turnover Rates
Secondary Containment: 1 Volume/day with SBGT In-service
Turbine Bldg: 2.5 Volumes/hr with TB Ventilation system in operation

Containment High Radiation Monitor
Background @ 100% power ~ 3 R/hr

Proceed to the Control Room when:
* Paged
* Notified by Phone
* Directed by Supervisor

When directed, report to TSC & begin dose calculations

MONITOR EFFLUENT RELEASE AND PLANT STATUS
* PICSY Met Vent Data
* Field Team and Fixed Monitor Data
* In-Plant Conditions

Is Any PICSY Noble Gas Data White? — NO / YES

SBGT System Running? — YES / NO

White NG Data Is Only on Affected RB? — YES / NO

White NG Data Is Only on Unaffected Unit? — YES / NO

Use Noble Gas Vent Totals Until Alternate Data Is Available for vents which are white

Use Noble Gas Vent Totals with Default or Measured Noble Gas to Iodine (Particulate) Ratio

ALTERNATE DATA
Manual SPING Data (Sum of HI Alarm Channels)
Chemistry SPING Vent Data
PAVSS Noble Gas Readout
PAVSS Vent Samples
HP Air Samples

Is Alternate Vent Data Available? — YES / NO

Is a Release In progress? (note 1 pg.2) — YES / NO

FORWARD CALCULATION using Vent Data
MIDAS Menu B

For OSCAR CDE Dose Rate(s) < Threshold Values
Use Measured CDE = 0

If OSCAR Is not dispatched
Use Measured OSCAR EDE & CDE = 0

Is RMS or Field Data > Triggers? (note 2 pg. 2) — YES / NO

UNMONITORED RELEASE
MIDAS Menu E - W
Back Calculation

Calculate
Measured Oscar EDE/Projected EDE Ratio
&
Measured OSCAR CDE/Projected CDE Ratio

Are Ratios between 0.1 and 1? — YES / NO

High Field Readings
Perform Back Calculation
MIDAS Menu E-W

Release Is unmonitored
If Ratio > 5

Are Ratios > 1 ? — YES / NO

Low Field Readings < 0.1
LOCATE PLUME

Is Plume Located? — NO / YES

Use Forward Calculation Data

* Select appropriate TEDE and THY CDE
* Discuss Release Pathway and Source Term with TSC Engineering Staff
* Report Classification and PAR Triggers to ED
* Select PAR per PAR Guide

ED/RPC
* Approve PAR Forms
* Contact DEP/BRP
  - About every 30 Minutes
  - Classification or PAR Change

* Control Exposure and Dose
  < 4 Rem WB
  > 4 Rem WB - w/Emerg. Extension
  < 5 Rem Thy CDE/Shift
  < 10 Rem Thy CDE Total
* Initiate Thy CDE Tracking & consider Respiratory Protection for Oscar
  > 1000 mrem/hr Thy CDE
  > 1200 ncpm (cartridge)
* Consider WBC

Release Terminated? — YES / NO

* Consider transition from plume to post-plume phase

Reference:
SSES Contamination Response Plan

DOSE ASSESSMENT EMERGENCY ACTION LEVELS

NOTE 1 VENT RELEASE TRIGGERS	NOTE 2 RMS/FIELD TRIGGERS	NOTE 3 DEFAULT ACCIDENT TRIGGERS	NOTE 4 NUREG 1228 TRIGGERS	NOTE 5 LIQUID RELEASE TRIGGERS
♦ AIRBORNE RELEASE Total NG Release Rate > 1.0E6 µci/min** or Entry into one of the following EALs* or EAL 3, 15, 17, 18 or 21 with a DSC breached or Initiation of SBGT for treatment of activity within Containment* or A release above normal levels attributable to a declared event* or An unmonitored release is in progress * Perform one calculation unless directed otherwise ** Perform dose projections every 15 minutes	♦ AIRBORNE RELEASE** ≥ 0.1 mrem/hr EDE (ASP1 or RMS gamma reading) ≥ 68.4 mrem/hr Thy CDE (OSCAR RMS Iodine) ≥ 100 ncpm on Iodine Cartridge ** Perform dose projections every 15 minutes	♦ INDICATION OF FUEL DAMAGE > 10 R/hr CHRM	♦ UNFILTERED VENT RELEASE ♦ RELEASE RATE > DESIGN BASIS 1%/DAY ♦ CORE UNCOVERED > 15 MINUTES ♦ SPENT FUEL POOL RELEASE	♦ LIQUID RELEASE Liquid Effl. ≥ TRM
♦ EAL 15.1 (Unusual Event) >2.0E6 µci/min NG for 60 min. or longer				♦ EAL 15.1 Liquid Effl. ≥ 2 x TRM for 60 min
♦ EAL 15.2 (Alert) >2.0E8 µci/min NG for 15 min. or longer		EAL 3.2 SEVERE CLAD DEGRADATION >200 R/hr CHRM or >300 µci/cc DE Iodine-131		♦ EAL 15.2 Liquid Effl. ≥ 200 x TRM for 15 min
♦ EAL 15.3 (Site Area Emergency) >6.2E8 µci/min NG for greater than15 min & dose projection not available Note: If dose projection cannot be made within 15 minute period, then declaration to be made on valid sustained NG release rate. PROJECTED DOSE @ EPB >100 mrem TEDE or >500 mrem THY CDE	♦ EAL 15.3 RMS PERIMETER MONITORING SYSTEM > 100 mR/hr for 15 min or longer FIELD TEAM SURVEY RESULTS @ EPB > 100 mR/hr & expected for 60 min or ≥ 500 mrem THY CDE for one hour of inhalation	♦ EAL 3.3 SEVERELY DEGRADED CORE > 400 R/hr CHRM or > 1000 µci/cc DE Iodine-131		
♦ EAL 15.4 (General Emergency) >6.2E9 µci/min NG for greater than15 min & dose projection not available Note: If dose projection cannot be made within 15 minute period, then declaration to be made on valid sustained NG release rate. PROJECTED DOSE @ EPB ≥ 1000 mrem TEDE or ≥ 5000 mrem THY CDE	♦ EAL 15.4 RMS PERIMETER MONITORING SYSTEM > 1000 mR/hr for 15 min or longer FIELD TEAM SURVEY RESULTS @ EPB > 1000 mR/hr & expected for 60 min or ≥ 5000 mrem THY CDE for one hour of inhalation	♦ EAL 3.4 CORE MELT > 400R/hr CHRM plus listed conditions or > 1000 µci/cc DE Iodine-131 or > 2000 R/hr CHRM		