

18A Emergency Procedure Guidelines

The information in this appendix of the reference ABWR DCD, including all subsections, tables, and figures, is incorporated by reference with the following departure.

STD DEP T1 2.14-1 ([Table I and Table 1](#))

~~The standard design departure describing the elimination of the hydrogen recombiners from the certified design was provided in ABWR Licensing Topical Report NEDE-33330P, "Advanced Boiling Water Reactor (ABWR) Hydrogen Recombiner Requirements Elimination," dated May 2007. The markup information on pages C-130 through C-135 of the Licensing Topical Report is incorporated by reference.~~

Table I
ABWR EPG Abbreviations

FGS	—	Flammability Gas Control System
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18A.5 Primary Containment Control Guideline

PC/H Monitor and control hydrogen and oxygen concentrations

If while executing the following steps:

- The hydrogen or oxygen monitoring system is or becomes unavailable, sample the drywell and suppression chamber for hydrogen and oxygen in accordance with [sampling procedure].
- Drywell or suppression chamber hydrogen concentration cannot be determined to be below 6% and drywell or suppression chamber oxygen concentration cannot be determined to be below 5%. EMERGENCY RPV DEPRESSURIZATION IS REQUIRED: enter [procedure developed from the RPV Control Guideline] at [Step RC-1] and execute it concurrently with this procedure; ~~secure and prevent operation of the FGS and;~~ initiate containment sprays in accordance with [Step PC/H-4] until drywell and suppression chamber hydrogen concentrations can be determined to be below 6% or drywell and suppression chamber oxygen concentrations can be determined to be below 5%.

PC/H-2

Monitor and control hydrogen and oxygen concentrations in the drywell.

PC/H-2.1

~~When drywell hydrogen concentration reaches [0.5% (minimum hydrogen concentration for recombiner operation or minimum detectable hydrogen concentration, whichever is higher)] but only if drywell hydrogen concentration is below [6% (maximum hydrogen concentration for recombiner operation or 6%, whichever is lower)] or drywell oxygen concentration is below [5% (maximum oxygen concentration for recombiner operation or 5%, whichever is lower)], and only if suppression pool level is below [11.70 m (elevation of bottom of suppression pool to lower drywell vent)], place FGS in service and enter [procedure developed from the RPV Control Guideline] at [Step RC-1] and execute it concurrently with this procedure.~~

PC/H-2.2

~~When drywell hydrogen concentration reaches [6% (maximum hydrogen concentration for recombiner operation or 6%, whichever is lower)] and drywell oxygen concentration reaches [5% (maximum oxygen concentration for recombiner operation or 5%, whichever is lower)], secure FGS operation.~~

PC/H-3

Monitor and control hydrogen and oxygen concentrations in the suppression chamber.

PC/H-3.1

~~When suppression chamber hydrogen concentration reaches [0.5% (minimum hydrogen concentration for recombiner operation or minimum detectable hydrogen concentration, whichever is higher)], but only if suppression pool level is below [11.70 m (elevation of bottom of suppression pool to lower drywell vent)], and only if drywell hydrogen concentration is below [6% (maximum hydrogen concentration for recombiner operation or 6%, whichever is lower)] or drywell oxygen concentration is below [5% (maximum oxygen concentration for recombiner operation or 5%, whichever is lower)], place FGS in service and enter [procedure developed from the RPV Control Guideline] at [Step RC-1] and execute it concurrently with this procedure.~~

18A.6 Secondary Containment Control Guideline

Table 1
Operating Values of Secondary Containment Parameters
(Cont.)

<u>Secondary Containment Parameter</u>	<u>Maximum Normal Operating Value</u>	<u>Maximum Safe Operating Value</u>
<u>Area Temperature</u>	<u>°C</u>	<u>°C</u>
<u>El. 12300 T.M.S.L. (Floor 400-1F)</u>		
■ FGS Area	65	100
<u>HVAC Cooler Differential Temperature</u>	<u>°C</u>	
FGS (B)	Hi Alarm	N/A
FGS (C)	Hi Alarm	N/A
<u>Area Radiation Level</u>	<u>10⁻⁵ Gy/h</u>	<u>10⁻⁵ Gy/h</u>
<u>El. 12300 T.M.S.L. (Floor 400-1F)</u>		
■ FGS Area	5	
<u>Area Water Level</u>	<u>cm</u>	<u>cm</u>
<u>El. 12300 T.M.S.L. (Floor 400-1F)</u>		
■ FGS Area	5	>20

