

Attachment IV
R.E. Ginna Nuclear Power Plant

Mark-up of Existing Ginna Station Technical Specifications

Included pages:

4.0-1
5.0-20
5.0-21

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PDR ADOCK 05000244
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4.0 DESIGN FEATURES

4.1 Site Location

The site for the R.E. Ginna Nuclear Power Plant is located on the south shore of Lake Ontario, approximately 16 miles east of Rochester, New York.

The exclusion area boundary distances from the plant shall be as follows:

<u>Direction</u>	<u>Distance (m)</u>
N (including offshore)	8000
NNE	8000
NE	8000
ENE	8000
E	747
ESE	640
SE	503
SSE	450
S	450
SSW	450
SW	503
WSW	915
W	945
WNW	701
NW	8000
NNW	8000

4.2 Reactor Core

4.2.1 Fuel Assemblies

The reactor shall contain 121 fuel assemblies. Each assembly shall consist of a matrix of zircalloy clad fuel rods with an initial composition of natural or slightly enriched uranium dioxide (UO_2) as fuel material. Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff approved codes and methods and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in nonlimiting core regions.

or ZIRLO

C.2

C.1.3

zircalloy, ZIRLO

C.1.3

NRC

cycle specific

C.1.3

(continued)

5.6 Reporting Requirements

5.6.5 COLR (continued)

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

1. WCAP-9272-P-A, "Westinghouse Reload Safety Evaluation Methodology," July 1985.
(Methodology for LCO 3.1.1, LCO 3.1.3, LCO 3.1.5, LCO 3.1.6, LCO 3.2.1, LCO 3.2.2, LCO 3.2.3, and LCO 3.9.1.)
2. WCAP-9220-P-A, "Westinghouse ECCS Evaluation Model-1981 Version," Revision 1, February 1982.
(Methodology for LCO 3.2.1.)
3. WCAP-8385, "Power Distribution Control and Load Following Procedures - Topical Report," September 1974.
(Methodology for LCO 3.2.3.)
4. WCAP-8567-P-A, "Improved Thermal Design Procedure," February 1989.
(Methodology for LCO 3.4.1 when using ITDP.)
5. WCAP 11397-P-A, "Revised Thermal Design Procedure," April 1989.
(Methodology for LCO 3.4.1 when using RTDP.)
6. WCAP-10054-P-A and WCAP-10081, "Westinghouse Small Break ECCS Evaluation Model Using the NOTRUMP Code," August 1985.
(Methodology for LCO 3.2.1) ^{Revision}
7. WCAP-10924-P-A, Volume 1, ^{Rev. 1} and Addenda 1,2,3, "Westinghouse Large-Break LOCA Best-Estimate Methodology, Volume 1: Model Description and Validation," December 1988.
(Methodology for LCO 3.2.1) ^{Revision}
8. WCAP-10924-P-A, Volume 2, ^{Rev. 2} and Addenda, "Westinghouse Large-Break LOCA Best-Estimate Methodology, Volume 2: Application to Two-Loop PWRs Equipped with Upper Plenum Injection," December 1988.
(Methodology for LCO 3.2.1) ^{and Addenda 1}

(continued)

5.6 Reporting Requirements.

5.6.5 COLR (continued)

C.1.1

9. WCAP-10924-P-A, Rev. 2 and WCAP-12071, "Westinghouse Large-Break LOCA Best Estimate Methodology, Volume 2: Application to Two-Loop PWRs Equipped With Upper Plenum Injection, Addendum 1: Responses to NRC Questions," December 1988.
(Methodology for LCO 3.2.1)

C.1.1

10. WCAP-10924-P-A, Volume 1, Rev. 1, Addendum 4, "Westinghouse Large-Break LOCA Best Estimate Methodology Model Description and Validation Model Revisions," August 1990 March 1991
(Methodology for LCO 3.2.1)

Large Break

- c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.
- d. The COLR, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5.6.6 Reactor Coolant System (RCS) PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)

- a. RCS pressure and temperature limits for heatup, cooldown, criticality, and hydrostatic testing as well as heatup and cooldown rates shall be established and documented in the PTLR for the following:
- LCO 3.4.3, "RCS Pressure and Temperature (P/T) Limits"
- b. The power operated relief valve lift settings required to support the Low Temperature Overpressure Protection (LTOP) System, and the LTOP enable temperature shall be established and documented in the PTLR for the following:
- LCO 3.4.6, "RCS Loops - MODE 4";
LCO 3.4.7, "RCS Loops - MODE 5, Loops Filled";
LCO 3.4.10, "Pressurizer Safety Valves"; and
LCO 3.4.12, "LTOP System."

(continued)

INSERT 1

2. WCAP-13677-P-A, "10 CFR 50.46 Evaluation Model Report: WCOBRA/TRAC Two-Loop Upper Plenum Injection Model Updates to Support ZIRLO™ Cladding Option," February 1994 .
(Methodology for LCO 3.2.1).

INSERT 2

4. WCAP-12610-P-A, "VANTAGE + Fuel Assembly Reference Core Report," April 1995.
(Methodology for LCO 3.2.1).

Attachment V
R.E. Ginna Nuclear Power Plant

Proposed Ginna Station Technical Specifications

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(continued)

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5.6.5 COLR (continued)

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 2. WCAP-13677-P-A, "10 CFR 50.46 Evaluation Model Report: WCOBRA/TRAC Two-Loop Upper Plenum Injection Model Updates to Support ZIRLO™ Cladding Option," February 1994.
(Methodology for LCO 3.2.1.)
 3. WCAP-8385, "Power Distribution Control and Load Following Procedures - Topical Report," September 1974.
(Methodology for LCO 3.2.3.)
 4. WCAP-12610-P-A, "VANTAGE + Fuel Assembly Reference Core Report," April 1995.
(Methodology for LCO 3.2.1).
 5. WCAP 11397-P-A, "Revised Thermal Design Procedure," April 1989.
(Methodology for LCO 3.4.1 when using RTDP.)
 6. WCAP-10054-P-A and WCAP-10081-A, "Westinghouse Small Break ECCS Evaluation Model Using the NOTRUMP Code," August 1985.
(Methodology for LCO 3.2.1)
 7. WCAP-10924-P-A, Volume 1, Revision 1, "Westinghouse Large-Break LOCA Best-Estimate Methodology, Volume 1: Model Description and Validation Responses to NRC Questions," and Addenda 1,2,3, December 1988.
(Methodology for LCO 3.2.1)

(continued)

5.6 Reporting Requirements

5.6.5 COLR (continued)

8. WCAP-10924-P-A, Volume 2, Revision 2, "Westinghouse Large-Break LOCA Best-Estimate Methodology, Volume 2: Application to Two-Loop PWRs Equipped with Upper Plenum Injection," and Addendum 1, December 1988.
(Methodology for LCO 3.2.1)
9. WCAP-10924-P-A, Volume 1, Revision 1, Addendum 4, "Westinghouse Large-Break LOCA Best-Estimate Methodology, Volume 1: Model Description and Validation, Addendum 4: Model Revisions," March 1991.
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- c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.
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