

January 22, 2003

LICENSEE: Rochester Gas and Electric Corporation (RG&E)  
FACILITY: R. E. Ginna Nuclear Power Station  
SUBJECT: SUMMARY OF NOVEMBER 26, 2002, TELEPHONE CONFERENCE WITH  
RG&E CONCERNING RESPONSES TO DRAFT REQUESTS FOR  
ADDITIONAL INFORMATION PERTAINING TO THE R. E. GINNA (GINNA)  
LICENSE RENEWAL APPLICATION

The U.S. Nuclear Regulatory Commission staff and representatives of RG&E held a telephone conference on November 26, 2002, to discuss RG&E's responses to draft requests for additional information (D-RAI) concerning the Ginna license renewal application.

The conference call was useful in clarifying the intent of the staff's D-RAIs. Several of these D-RAIs were resolved, while the balance will formally be sent to the applicant. The resolution of D-RAIs was based on information available in the license renewal application or in other docketed material.

Enclosure 1 provides a list of the telephone participants. Enclosure 2 contains a listing of the D-RAIs discussed with the applicant, including a brief description on the status of the items. Enclosure 3 documents the basis for resolving or disposing of the D-RAIs that will not be issued as final RAIs to the applicant.

The applicant has had an opportunity to review and comment on this summary.

*/RA/*

Russell Arrighi, Project Manager  
License Renewal Section  
License Renewal and Environmental impacts Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

Docket No.: 50-244

Enclosures: As stated

cc w/enclosures: See next page

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**November 26, 2002**

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Enclosure 1

CONFERENCE CALL WITH ROCHESTER GAS AND ELECTRIC CORPORATION (RG&E)  
R.E. GINNA  
LICENSE RENEWAL APPLICATION  
DRAFT REQUESTS FOR ADDITIONAL INFORMATION

NOVEMBER 26, 2002

During the November 26, 2002, conference call with representatives of RG&E, the NRC staff (the staff) discussed draft requests for additional information (D-RAIs) it had prepared for the R. E. Ginna (Ginna) license renewal application (LRA). The following D-RAIs were discussed during the telephone conference.

## 2.2 PLANT LEVEL SCOPING RESULTS

### D-RAI 2.2 -1

LRA Table 2.2-1, "Plant Level Scoping Results," states that the systems identified below are out-of-scope, but specific components of these systems were evaluated (i.e., scoped and screened) as part of other systems for the purposes of license renewal (LR):

- Plant Air
- Plant Sampling
- Circulating Water
- Fuel Handling
- Non-essential Ventilation

In addition to the systems listed above, components of the heating steam system were also evaluated as part of other systems. The heating steam system does not perform any nuclear safety function. However, localized pipe segments and equipment of the heating steam system are identified as being in the scope of LR as non safety components whose failure could prevent the satisfactory accomplishment of a safety function in accordance with 10 CFR 54.4(a)(2).

Title 10 of the *Code of Federal Regulations* (CFR) 54.21(a)(1) states, in part, that components and their intended functions that meet the scoping criteria of 10 CFR 54.4(a) and are subject to an aging management review (AMR) must be identified and listed, so that their aging effects can be adequately managed consistent with the current licensing basis (CLB). In order to confirm that structures, systems, and components (SSCs) with intended functions described in the UFSAR using traditional (i.e., CLB) nomenclature have been captured in the LR process, the staff needs to identify components from out-of-scope systems that were evaluated as part of the in-scope systems in the information provided in the LRA and the LR boundary drawings. Identify the components from out-of-scope systems (identified above) in the tables contained in LRA Section 2.3.

**Response:** RG&E indicated that the question is clear.

## 2.3 SCOPING AND SCREENING RESULTS — MECHANICAL SYSTEMS

### Generic Questions

#### D-RAI 2.3 -1

On page 2-30 of the LRA, Table 2.1-1 describes system function code S as “Special Capability Class Function.” The associated notes column for system function code S further explains that “Components within the system are safety significant (augmented quality). For the purposes of LR, components which are special capability class are treated under the Criterion 3 Codes Z1 through Z5.” However, in the subsections of LRA Section 2.3 that have components identified as code S, none of the adjacent system codes Z1-Z5 are check marked. Clarify the usage of system function code S. Specifically, are the components indicated as having augmented quality requirements by this system function code in the scope of LR? Identify the components and provide the basis for the augmented quality status for the containment spray system and hydrogen detectors system.

**Response:** RG&E indicated that the question is clear.

#### D-RAI 2.3 -2

The Ginna LR boundary drawings show numerous small pipe fittings without equipment identification numbers as being subject to an AMR. However, these components are not listed in many of the tables in LRA Section 2.3. Some tables have a component identified as “pipe” (for example, Table 2.3.2-2 for containment spray), while tables for other sections have components identified as “piping and fittings” (for example, reactor coolant, (class I). Please clarify whether the component group “pipe” includes all fittings such as reducers, enlargers, flanges, and end caps, shown as part of a piping run on the LR boundary drawings, or if these components are uniquely identified if subject to an AMR.

**Response:** RG&E indicated that the question is clear.

### 2.3.2 Engineered Safety Features Systems

#### 2.3.2.4 Containment Hydrogen Detectors and Recombiners

##### D-RAI 2.3.2.4 -1

License renewal boundary drawing 33013-1278, 2-LR shows two components identified as “Hot Box” at locations G9 and I9 as subject to an AMR. However, this component is not listed in LRA Table 2.3.2-4, which identifies the components of the containment hydrogen detectors and recombiners system that are subject to an AMR. Clarify where, in the LRA, these components are identified as subject to an AMR or justify their omission.

**Response:** RG&E indicated that the question is clear.

D-RAI 2.3.2.4 -2

The hydrogen recombiner system piping network branches with one path going to the hydrogen combustor and the other branch going to out-of-scope piping and components leading to the volume control tank. The branch leading to the volume control tank can be isolated at valve 1877, shown on LR boundary drawing 33013-1274-LR at location A9. This valve is shown as normally open; however, it forms the pressure boundary interface with an out-of-scope system. Although note 2 on drawing 33013-2241, "General Notes," states that the valve alignments are typical and the actual valve alignments are controlled by plant operating procedures, the staff is concerned that failure of the downstream, out-of-scope piping may affect the pressure boundary integrity intended function of this piping segment.

Provide additional information to support your determination that it is acceptable to terminate the in-scope portion of the hydrogen recombiner system piping at an open valve boundary. For example, discuss whether plant procedures specify closing this valve to mitigate hydrogen generation following a loss-of-coolant accident (LOCA) event, the amount of time required to complete these procedures, and the effect on system operation if the valves are not closed.

**Response:** RG&E indicated that the question is clear.

D-RAI 2.3.2.4 -3

Pipe segments, connectors, and flexible hoses downstream of isolation valves 1868 A-D and 1867A-D, which connect to the mobile hydrogen tanks are not shown as subject to an AMR on LR boundary drawing 33013-1274-LR at locations E6,E7 and E10,E11. However, operability of these piping segments and connectors is necessary for the hydrogen recombiner system to provide its intended function. Justify the omission of these components from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

**Response:** RG&E indicated that the question is clear.

D-RAI 2.3.2.4 -4

License renewal boundary drawing 33013-1278, 1-LR, shows an isolated section of piping at location J7 that runs from valve 946P to valve 931S as not being subject to an AMR, although both of the adjacent valves are subject to an AMR. Clarify if this run of pipe was intentionally excluded from being subject to an AMR, or if this is a typographical error. If this run of pipe was intentionally excluded, justify its omission.

**Response:** Question resolved (refer to Enclosure 3).

### **2.3.2.5 Containment Isolation Components**

D-RAI 2.3.2.5 -1

Containment penetrations are shown on the LR boundary drawings of multiple systems and discussed in several LRA sections (including containment spray, safety injection, CVCS, ventilation, main steam, feedwater, auxiliary feedwater, and spent fuel pool cooling as well as

containment isolation). Because of the large number of LR drawings and LRA sections that discuss penetrations, the staff are unable to determine with a reasonable assurance that all mechanical components of the containment penetrations shown in UFSAR Table 6.2-15a are within the scope of LR and subject to an AMR. Confirm that the mechanical portions of all containment penetrations are within the scope of LR and subject to an AMR, or identify and justify the exclusions.

**Response:** RG&E indicated that the question is clear.

#### D-RAI 2.3.2.5 -2

Unlike plants built after the introduction of the General Design Criteria, Appendix A to 10 CFR 50, some of the piping passing through containment penetrations at Ginna have both isolation valves outside the containment, and do not have inboard isolation valves. This situation was discussed as part of Topic VI-4, "Containment Isolation System," in the Ginna Systematic Evaluation Program (see page 4-19 of NUREG-0821). Some of these piping runs that penetrate containment and directly connect to piping are not subject to an AMR. The LR boundary drawings show the boundary of the piping segment subject to an AMR immediately at the inside of the containment wall (for example, see the piping runs through penetrations P129, P123, and P143 on LR boundary drawing 33013-1272, 1-LR at locations A11, B11, C11). Dynamic effects, such as pipe whip and jet impingement from rupture of the out-of-scope piping segments could result in a containment pressure boundary failure. Provide the justification for locating out-of-scope pipe segments in close proximity to containment penetrations instead of at some minimum distance or inboard of the nearest valve that closes on an isolation signal.

**Response:** NRC staff to clarify the question in the final RAI to be more specific.

### **2.3.3 Auxiliaries**

#### **2.3.3.2 Component Cooling Water System**

##### D-RAI 2.3.3.2 -1

License renewal boundary drawing 33013-1245-LR, location D5, shows an isolated section of piping from component cooling water (CCW) pump "A" to the seal pump drain tank as subject to an AMR. Clarify if the inclusion of this run of pipe in the scope of LR was intentional, or if this is a typographical error. If its inclusion is intentional, provide the intended function for this section of piping being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

**Response:** Question resolved (refer to Enclosure 3).

##### D-RAI 2.3.3.2 -2

A portion of the CCW system that is subject to an AMR ends at valves 747A and 747B, which are normally shown as open (see LR boundary drawing 33013-1245-LR at locations E8 and F8). There are also numerous portions of the component cooling water system that are subject to an AMR that end at valves that are normally open to 3/4 inch or less diameter tubing. Failure

of the downstream piping may affect the pressure boundary intended function. Section 2.3.3.2 of the LRA does not discuss why this approach is acceptable. Provide additional information to support the basis for this determination. For example, discuss the steps in the procedures for identifying the locations of breaks, for closing the valves, the amount of time required to complete these steps, and the consequences on system inventory if the valves are not closed.

**Response:** RG&E indicated that the question is clear.

#### D-RAI 2.3.3.2 -3

Section 9.2.2.4 of the Ginna UFSAR describes that the CCW system makeup capability is adequate to accommodate normal system leakage during normal and post-accident operation. This section of the UFSAR also states that the CCW lines supplying cooling to the reactor coolant pumps are not protected from dynamic effects associated with accidents and that, if a cooling line is severed, the water stored in the surge tank after a low-level alarm, together with makeup flow, provides the operator with time to close the valves external to the containment in order to isolate the leak. The UFSAR also identifies that the CCW system functions, of cooling the residual heat removal heat exchanger and the emergency core cooling system pumps, are essential. Therefore, the staff concludes that the SSCs necessary to supply makeup water from the reactor water makeup tank to the CCW system surge tank are within LR scope pursuant to 10 CFR 54.4. However, neither Section 2.3.3.2 nor Section 2.3.3.12 of the LRA identifies these SSCs as subject to an AMR. The CCW system LR flow diagram, 33013-1245-LR, indicates that only the safety-related section of piping from valves 823 and 729 (drawing location) D2 to the component cooling surge tank header is within the scope of LR. Please clarify whether the non safety-related piping, valve bodies, and pump casings that are necessary to provide a pressure retaining boundary, so that sufficient flow at adequate pressure is delivered from the reactor makeup water tank to the component cooling surge tank, are included within the scope of LR and subject to an AMR or justify their exclusion.

**Response:** RG&E indicated that the question is clear.

#### **2.3.3.4 Waste Disposal**

##### D-RAI 2.3.3.4 -1

LRA Section 2.4.2.1 states that auxiliary building interior floor drains are evaluated within the waste disposal system. LRA Section 2.4.2.2 states that the intermediate building contains a restricted access portion, whose buildings' interior floor drains are evaluated within the waste disposal system. A review of the drawings referenced in Section 2.3.3.4 of the LRA shows that the waste disposal system processes the discharge for floor drains and sump pumps, in the containment, the contaminated storage building sump pump, and the spent fuel pool pumps. However, prevention of internal flooding is not listed as an intended function of the waste disposal system. Verify that none of the floor drains and waste disposal system components are credited in the internal flooding analysis for Ginna.

**Response:** Question resolved (refer to Enclosure 3).

D-RAI 2.3.3.4 -2

The following waste disposal system components are not highlighted on the LR boundary drawings identified below as subject to an AMR, although they are relied upon to contain radiological releases in the event of an accident. Please confirm if these components are subject to an AMR. If not, justify their exclusion.

Drawing	Location	Components
33013-1270, 1	D1-2, E1-2, F1-2	Piping and valves from the aux. building sump to aux building sump tank pumps "A" and "B" to the waste holdup tank aux. building sump tank pumps "A" and "B."
33013-1272, 1	I4, I5	Containment sump pumps "A" and "B", piping, and valves from the pumps to penetration P107.
33013-1272, 2	G5-7	Piping run from valve 1731, 1001, and 1073 connected to in-scope piping to waste holdup tank.
	J4	Vertical ball valve 1020C from aux. bldg. sub basement and piping to aux. bldg. sump.
	J2-4	Buried piping from aux. bldg. sump to sump tank.

**Response:** NRC staff to clarify question in final RAI.

**2.3.3.5 Service Water System**

D-RAI 2.3.3.5 -1

"Essential Yard Structures," on page 2-312, LRA Section 2.4.2.11, states that the redundant service water discharge line is occasionally placed in service for such activities as surveillance testing or maintenance work. License renewal boundary drawing 33013-1250, 2-LR at location F11 shows a portion of the redundant service water discharge line as a corrugated metal pipe to Deer Creek. This corrugated metal pipe is not shown as being subject to an AMR on that drawing, nor could this pipe be identified in LRA Table 2.3.3-5 under either the pipe or the structure component groups. Obstruction of this flow path could prevent the service water system from performing its intended function when the primary flow path is not in service or unavailable. Justify the exclusion of this corrugated metal pipe from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

In addition, an inspection program was recommended for the Deer Creek culvert in the Ginna Systematic Evaluation Program (see page 4-7 of NUREG-0821) to minimize the potential for flooding of Deer Creek. Clarify if the corrugated metal service water (SW) discharge pipe empties into Deer Creek above or below the culvert identified by the SEP program report.

Discuss the measures taken to prevent flooding of the alternate SW discharge, discussed above, if Deer Creek is flooded.

**Response:** RG&E indicated that the question is clear.

D-RAI 2.3.3.5 -2

A portion of the service water system piping that is not subject to an AMR connects two parallel portions of the service water system piping that are subject to an AMR at valves 4733, 4651B, and 4562B that are shown as normally open (see LR boundary drawing 33013-1250, 3-LR at locations I2, I7, and J7).

1. This piping run has two parallel trains containing air conditioning (AC) water chiller units SC103A and SC103B which cool the chilled water system. Drawing 33013-1920 for the chilled water system indicates that the chilled water system cools the control room ventilation system. These components are all identified as augmented quality on the drawings. Section 9.4.3 of the Ginna UFSAR states that the function of the control room ventilation system is, in part, to ensure the operability of control room components during normal operating, anticipated operational transient, and design-basis accident conditions. This statement apparently applies to the cooling function of the system because the filtration and boundary integrity functions do not support control room equipment operability. Section 6.4 of the UFSAR states that the control room ventilation system cools the recirculated air as required using chilled water coils. Neither Section 2.3.3.5, Section 2.3.3.10, nor Section 2.3.3.15 of the LRA provide an adequate basis for excluding the associated systems and components from an AMR. Provide information identifying important-to-safety portions of the service water, chilled water, and control room ventilation systems as systems and components subject to an AMR, or justify their exclusion from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).
2. Failure of the piping not subject to an AMR may affect the pressure boundary intended function of the piping that is subject to an AMR. Section 2.3.3.5 of the LRA does not discuss why this approach is acceptable. Provide additional information to support the basis for this determination. For example, discuss the steps in the procedures for identifying the locations of breaks, for closing the valves, the amount of time required to complete these steps, and the consequences if the valves are not closed following a break of the piping that is not subject to an AMR.

**Response:** RG&E indicated that the question is clear.

D-RAI 2.3.3.5 -3a

The LR boundary drawing locations listed below show the following pipe sections as subject to an AMR, but attached piping sections are not subject to an AMR. Clarify if the inclusion of these pipe sections in the scope of LR was intentional, or the result of typographical errors. If their inclusion is intentional, provide the intended function for these pipe sections and justify the exclusion of adjacent pipe sections from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

- A section of 2-inch piping between normally open valves 5022A and 5021 shown on drawing 33013-1908, 3-LR at location A3,
- A section of non safety class 10-inch piping beyond motor valve 4813 shown on drawing 33013-1250, 1-LR at location D6.

**Response:** Question resolved (refer to Enclosure 3).

D-RAI 2.3.3.5 -3b

License renewal boundary drawing locations listed below show isolated pipe sections as not subject to an AMR, although they connect to piping sections that are subject to an AMR. Clarify if the exclusion of these pipe sections from the scope of LR was intentional, or the result of typographical errors. If the exclusion of these sections is intentional, justify the exclusion of these pipe sections from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

- A section of 14-inch piping connecting to line 16-SW-125-1 shown on drawing 33013-1250, 1-LR at location C8,
- A section of piping between valves 8418 and 5021 shown on drawing 33013-1908, 3-LR at location A3.

**Response:** First bullet: RG&E indicated that the question is clear.

**Response:** Second bullet: Question resolved (refer to Enclosure 3).

D-RAI 2.3.3.5 -3c

License renewal boundary drawing 33013-1250,1-LR at location C7 shows a branch section of piping/tubing which connects to temperature indicator 2038 as not subject to an AMR. This segment is directly connected to pipe 4-SW-125-1, which is subject to an AMR, without a safety-class break flag to indicate that this branch segment was constructed to non safety-related quality standards. Clarify if the exclusion of this branch piping/tubing section from the scope of LR was intentional, or if this is a typographical error. If its exclusion is intentional, justify the exclusion of this piping/tubing section from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

**Response:** Question resolved (refer to Enclosure 3).

D-RAI 2.3.3.5 -3d

License renewal boundary drawing 33013-1885, 2 shows line 120-CW-50-1 as being subject to an AMR, but this line does not appear to be included with the service water system components subject to an AMR. Clarify where information on this section of piping is included in the LRA. If its exclusion is intentional, justify the exclusion of this piping/tubing section from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

**Response:** Question resolved (refer to Enclosure 3).

D-RAI 2.3.3.5 -4

Drawing 33013-1250, 2-LR shows that the service water side of the component cooling water heat exchangers is subject to an AMR. However, neither Table 2.3.3.2 nor Table 2.3.3.5 of the LRA identify a heat exchanger component exposed to a raw water environment that is subject to an AMR for the heat transfer intended function. Describe how the service water side of the component cooling water heat exchanger has been included in an AMR.

**Response:** Question resolved (refer to Enclosure 3).

D-RAI 2.3.3.5 -5

Major portions of the service water system discharge lines, shown on drawings 33013-1250, 1-LR (downstream of expander at the end of pipe section 6-SW-125-1 at location I2), 33013-1250, 3-LR (downstream of valve 4614 at location H2), 33013-1885, 1-LR (beginning with pipe 14-SW-125-1 at location E12 and beginning with pipe section with identifier 125-9 at location J9), 33013-1885, 2-LR are identified as not being subject to an AMR. The drawings indicate that the discharge lines include sections of underground piping. Should these sections of piping fail to remove water from the service water system, the intended functions of the service water system will be impaired. Provide information identifying these sections of piping as components subject to an AMR or provide the basis for the determination that these piping sections should not be subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

For the cases cited above referencing LR drawings 33013-1885, 1-LR and 33013-1885, 2-LR, the transitions from piping sections requiring an AMR to those not subject to an AMR occur at boundaries between drawings. If the boundaries are not changed, provide information to precisely locate these boundaries between piping sections subject to an AMR and piping sections not subject to an AMR.

**Response:** RG&E indicated that the question is clear.

**2.3.3.6 Fire Protection**

D-RAI 2.3.3.6 -1

On LR boundary drawing 33013-1990, 1-LR, the fire water storage tank is shown as subject to an AMR. However, the fire service water booster pumps and piping and valves back to the service water system are excluded. Justify the exclusion of the fire service water pumps, associated piping components, and valve bodies from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

**Response:** RG&E indicated that the question is clear.

D-RAI 2.3.3.6 -2

LRA Table 2.3.3-6 references portions of Tables 3.4-1 and 3.4-2 of the LRA for aging management of the piping component group. However, none of the references in Tables 3.4-1 or 3.4-2 address internal corrosion of buried (underground) ductile iron piping. LRA Section 2.1.6, "Fire Protection Component Aging Management," states the licensee will continue to conduct flow tests as part of the fire water system program described in LRA Appendix B Section B2.1.14. Describe the aspects of this program that address aging management of buried (underground) ductile iron piping. Clarify how flow tests are intended to adequately manage the internal corrosion of the underground fire service water piping.

**Response:** RG&E indicated that the question is clear.

D-RAI 2.3.3.6 -3

LRA Section 2.3.3.6 lists "fire proofing - a passive cementitious coating applied to steel to provide fire resistance." LRA Table 2.3.3-6 includes a component group, "structure," that references Tables 3.4-1 and 3.4-2 for aging management. None of these references address fire proofing of structural steel. No reference was found to the fire proofing of structural steel in Section 2.4, "Scoping and Screening Results Structures," or in Section 3.6, "Aging Management of Structures and Components Supports." Verify that fire proofing is used in the plant as part of fire barriers. If so, identify where the LRA addresses the aging management of these components, or justify their exclusion.

**Response:** RG&E indicated that the question is clear.

D-RAI 2.3.3.6 -4

LRA Section 2.1.5.6 includes fire detection as part of the fire protection program necessary to meet the requirements of 10 CFR 50.48. LRA Section 2.3.3.6 includes the fire detection and alarm systems as part of scope. Neither LRA Table 2.3.3-6 nor LRA Section 2.5, "Screening Results of Electrical and I&C Systems," includes any reference to the aging management of these systems. LRA Section 3.7, "Aging Management of Electrical and I&C Systems," contains no specific reference to the components of the fire detection and alarm systems. Confirm that these systems are in-scope and identify where the LRA addressed the AMR of these components.

**Response:** RG&E indicated that the question is clear.

**2.3.3.7 Heating Steam**

D-RAI 2.3.3.7 -1

In Section 2.3.3.7 of the LRA, the applicant states that portions of the heating steam system are considered within the scope of LR because they contain non safety components whose failure could prevent the accomplishment of a safety function. Those portions of the heating steam system are contained in the diesel generator rooms and the auxiliary building. In Table 2.3.3-7 of the LRA, the applicant identifies component groups that are subject to an AMR; however,

the staff could not locate any of these components on the five drawings highlighted by the applicant as containing structures and components (SCs) subject to an AMR. The staff has identified some of the components as appearing on LR boundary drawing 33013-1914, 1-LR, but is uncertain of the exact LR boundary. Provide the drawing numbers and equipment identification numbers for the components which comprise the component groups listed in Table 2.3.3-7.

**Response:** RG&E indicated that the question is clear.

### **2.3.3.8 Emergency Power**

#### D-RAI 2.3.3.8 -1

Table 2.3.3-8 of the LRA lists “accumulator” as a component group subject to an AMR. However, accumulator(s) could not be located on any of the drawings referenced for the emergency power system. In addition, there is no discussion of an accumulator associated with the emergency power system in the Ginna UFSAR. Identify the accumulator components by equipment identification number or by drawing number and location.

**Response:** Question resolved (refer to Enclosure 3).

#### D-RAI 2.3.3.8 -2

Atmospheric vents are shown to be within the scope of LR and subject to an AMR on the following LR boundary drawings:

- |                    |                               |
|--------------------|-------------------------------|
| - 33013-1239, 1-LR | locations D8, D9, E2, and J2  |
| - 33013-1239, 2-LR | locations D3, D4, E9, and J10 |
| - 33013-2288-LR    | locations A8 and E5           |

However, the staff is unable to locate these vents in Table 2.3.3-8 of the LRA. Clarify whether these vents are included in a component group already listed in the table. If not, justify the exclusion of these vents from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

**Response:** Question resolved (refer to Enclosure 3).

#### D-RAI 2.3.3.8 -3

Manways associated with the diesel generator fuel oil storage tanks are shown to be subject to an AMR on LR boundary drawings 33013-1239-LR, sheets 1 and 2, at locations J2 and J10, respectively. A similar bolted access cover associated with the diesel generator cooling water expansion tanks are shown to be subject to an AMR on LR boundary drawings 33013-1239-LR, sheets 1 and 2, at locations A5 and A7, respectively. However, the manways and access covers have not been included in Table 2.3.3-8 or Tables 3.4-1 and 3.4-2. Furthermore, in Section 9.5.4 of the Ginna UFSAR, it states that watertight doors have been installed on the concrete manways of the underground diesel-oil storage tanks. The purpose of the doors is to prevent the accumulation of water in the manways. Water might seep into the oil through the

flanged manhole on the top of each storage tank. Justify the exclusion of the manways, access covers, watertight doors, and bolting mechanisms from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

**Response:** RG&E indicated that the question is clear.

D-RAI 2.3.3.8 -4

Foot valves 5919 on LR boundary drawing 33013-1239, 1-LR and 5920 on LR boundary drawing 33013-1239, 2-LR are shown to be subject to an AMR. Note 4 on these drawings indicates that the valve contains a screen. However, Table 2.3.3-8 does not list any screens as a component group subject to an AMR. Clarify if the screens associated with these valves are subject to an AMR. If not, justify the exclusion of these screen from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

**Response:** RG&E indicated that the question is clear.

D-RAI 2.3.3.8 -5

License renewal boundary drawing 33013-1239, 1-LR, shows an isolated section of piping at location G4 in the middle of starting air pipe run 150-4 as not being subject to an AMR, although the connecting pipe on both ends of this section are subject to an AMR. Similarly, LR boundary drawing 33013-1239, 1-LR, shows an isolated section of piping at location F3 in the middle of the starting air pipe run between valve 5971 and the transition to drawing 33013-1239, 2-LR as not being subject to an AMR, although the connecting pipe on both ends of this section are subject to an AMR. Clarify if these runs of pipe were intentionally excluded from the scope of LR, or if this is a typographical error. If these runs of pipe were intentionally excluded, justify their omission from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

**Response:** Question resolved (refer to Enclosure 3).

## **2.3.4 Steam and Power Conversion**

### **2.3.4.4 Turbine-Generator and Supporting Systems**

D-RAI 2.3.4.4 -1

Section 7.2.6 of the Ginna UFSAR states that the anticipated transient without scram (ATWS) mitigation system actuation circuitry (AMSAC) is a non-Class 1E system designed to trip the turbine and start the auxiliary feedwater pumps if main feedwater flow is lost with reactor power above 40 percent. The valves and piping associated with the pressure transmitters have been included in the scope of LR and are listed in LRA Table 2.3.4-4 as being subject to an AMR. Section 2.3.4.4 of the LRA states that pressure sensors for the turbine first-stage pressure provide a signal used in the AMSAC. The turbine stop valves are also identified as being subject to an AMR on LR boundary drawing 33013-1232 at locations B6 and E6. However, the LRA system function listing for code Z4 does not cite the turbine stop valves as having an ATWS intended function. Intended functions should be identified in accordance with the

requirements of 10 CFR 54.4(a)(3). Clarify the intended function of the turbine stop valves that led to their inclusion in the scope of LR and being subject to an AMR.

**Response:** RG&E indicated that the question is clear.

CONFERENCE CALL WITH ROCHESTER GAS AND ELECTRIC CORPORATION (RG&E)  
R. E. GINNA  
LICENSE RENEWAL APPLICATION  
RESOLUTION OF DRAFT REQUESTS FOR ADDITIONAL INFORMATION

NOVEMBER 26, 2002

During the November 26, 2002, conference call with representatives of RG&E, the NRC staff (the staff) discussed draft requests for additional information (D-RAIs) it had prepared for the R. E. Ginna (Ginna) license renewal application (LRA). The following D-RAIs were resolved during the call and will not be issued as a final RAI to the applicant because the information was in the LRA or other docketed material.

**SECTION 2.3 SCOPING AND SCREENING RESULTS – MECHANICAL SYSTEMS**

2.3 Plant-Level Scoping Results

D-RAI 2.3.2.4 -4

License renewal boundary drawing 33013-1278, 1-LR, shows an isolated section of piping at location J7 that runs from valve 946P to valve 931S as not being subject to an aging management review (AMR), although both of the adjacent valves are subject to an AMR. Clarify if this run of pipe was intentionally excluded from being subject to an AMR, or if this is a typographical error. If this run of pipe was intentionally excluded, justify its omission.

**Resolution:** The applicant stated that the exclusion of the piping segments was a drafting error and should be in the scope of license renewal (LR). Section 2.1.4 on page 2-5 of the LRA states that components designated as SC-1, SC-2, or SC-3 are classified as safety-related and, as such, are necessarily within the scope of LR. This section of piping is classified as SC-2 as indicated on drawing 33013-1278, 1-LR.

D-RAI 2.3.3.2 -1

License renewal boundary drawing 33013-1245-LR, location D5 shows an isolated section of piping from component cooling water (CCW) water pump "A" to the seal pump drain tank as subject to an AMR. Clarify if the inclusion of this run of pipe in the scope of LR was intentional, or if this is a typographical error. If its inclusion is intentional, provide the intended function for this section of piping being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

**Resolution:** The staff was unable to determine the justification for inclusion of this section of piping in the scope of LR in accordance with 10 CFR 54.4(a) and 10 CFR 54.21(a)(1). The applicant stated that the inclusion of this segment of piping was a drafting error and should not be in the scope of LR. This section of piping is not classified as SC-1, SC-2, or SC-3 on drawing 33013-1245-LR.

Enclosure 3

D-RAI 2.3.3.4 -1

LRA Section 2.4.2.1 states that auxiliary building interior floor drains are evaluated within the waste disposal system. LRA Section 2.4.2.2 states that the intermediate building contains a restricted access portion whose buildings interior floor drains are evaluated within the waste disposal system. A review of the drawings referenced in Section 2.3.3.4 of the LRA shows that the waste disposal system processes the discharge for floor drains and sump pumps in the containment, the contaminated storage building sump pump, and the spent fuel pool pumps. However, prevention of internal flooding is not listed as an intended function of the waste disposal system. Verify that none of the floor drains and waste disposal system components are credited in the internal flooding analysis for Ginna.

**Resolution:** The information requested by the staff is contained in Section 2.3.3.4 on page 2-114 of the LRA. Prevention of flooding is within the scope of LR, Code Y. The comment states that “Components in the Waste Disposal system perform this associated design system function. (Flood protection, backflow of oil through floor drains.)” The floor drains and waste disposal system components are in scope of LR.

D-RAI 2.3.3.5 -3a

The LR boundary drawing locations listed below show the following pipe sections as subject to an AMR, but attached piping sections are not subject to an AMR. Clarify if the inclusion of these pipe sections in the scope of LR was intentional, or the result of typographical errors. If their inclusion is intentional, provide the intended function for these pipe sections and justify the exclusion of adjacent pipe sections from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

- A section of 2-inch piping between normally open valves 5022A and 5021 shown on drawing 33013-1908, 3-LR at location A3.
- A section of non safety class 10-inch piping beyond motor valve 4813 shown on drawing 33013-1250, 1-LR at location D6.

**Resolution:** Bullet 1: The staff was unable to determine the justification for inclusion of this section of piping in the scope of LR in accordance with 10 CFR 54.4(a) and 10 CFR 54.21(a)(1). The applicant stated that the inclusion of the piping segments was a drafting error and should not be in the scope of LR. This section of piping is not considered to be part of the containment boundary and, as such, is not considered to be within the scope of LR. This section of piping is not classified as SC-1, SC-2, or SC-3 on drawing 33013-1908, 3-LR.

Bullet 2: Typographical error in the staff’s question. The valve number in question is 4613 vice 4813. The staff was unable to determine the justification for inclusion of this section of piping in the scope of LR in accordance with 10 CFR 54.4(a) and 10 CFR 54.21(a)(1). The applicant stated that the inclusion of the piping segments was a drafting error and should not be in the scope of LR. This section of piping is not classified as SC-1, SC-2, or SC-3 on drawing 33013-1250, 1-LR. However, as stated in the LRA, page 2-8, under SR/NSS Piping Interface, actual safety boundaries extend to the weld after the first seismic support beyond the P&ID depicted class change.

D-RAI 2.3.3.5 -3b

License renewal boundary drawing locations listed below show isolated pipe sections as not subject to an AMR, although they connect to piping sections that are subject to an AMR. Clarify if the exclusion of these pipe sections from the scope of LR was intentional, or the result of typographical errors. If the exclusion of these sections is intentional, justify the exclusion of these pipe sections from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

- A section of 14-inch piping connecting to line 16-SW-125-1 shown on drawing 33013-1250, 1-LR at location C8.
- A section of piping between valves 8418 and 5021 shown on drawing 33013-1908, 3-LR at location A3.

**Resolution:** Second bullet only: The applicant stated that the section of piping between valves 8418 and 5021, shown on drawing 33013-1908, 3-LR at location A3, is correct. The adjacent section of piping depicted as in-scope was a drafting error (refer to question D-2.3.3.5- 3a bullet 1; the in-scope portion on the drawing should depict the containment boundary function only).

D-RAI 2.3.3.5 -3c

License renewal boundary drawing 33013-1250, 1-LR at location C7 shows a branch section of piping/tubing which connects to temperature indicator 2038 as not subject to an AMR. This segment is directly connected to pipe 4-SW-125-1, which is subject to an AMR, without a safety-class break flag to indicate that this branch segment was constructed to non safety-related quality standards. Clarify if the exclusion of this branch piping/tubing section from the scope of LR was intentional, or if this is a typographical error. If its exclusion is intentional, justify the exclusion of this piping/tubing section from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

**Resolution:** The applicant stated that the exclusion of the piping segments was a drafting error and should be in the scope of LR. Section 2.1.4 on page 2-5 of the LRA states that components designated as SC-1, SC-2, or SC-3 are classified as safety-related and, as such, are necessarily within the scope of LR. This section of piping is classified as SC-3 as indicated on drawing 33013-1250, 1-LR.

D-RAI 2.3.3.5 -3d

License renewal boundary drawing 33013-1885, 2-LR shows line 120-CW-50-1 as being subject to an AMR, but this line does not appear to be included with the service water system components subject to an AMR. Clarify where information on this section of piping is included in the LRA. If its exclusion is intentional, justify the exclusion of this piping/tubing section from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

**Resolution:** The information requested by the staff is contained in Table 2.4-1 on page 3-107 of the LRA. Table 2.4-1, line 16 lists components in or serviced by open-cycle cooling water

system. The line in question is an underground concrete pipe and is included under this line item.

D-RAI 2.3.3.5 -4

Drawing 33013-1250, 2-LR shows that the service water side of the component cooling water heat exchangers is subject to an AMR. However, neither Table 2.3.3.2 nor Table 2.3.3.5 of the LRA identify a heat exchanger component exposed to a raw water environment that is subject to an AMR for the heat transfer intended function. Describe how the service water side of the component cooling water heat exchanger has been included in an AMR.

**Resolution:** The information requested by the staff is contained in Table 2.3.3-2 on page 2-103 of the LRA. Table 2.3.3-2 under heat exchanger references Table 3.4-1, Line Number (120). Table 3.4-1, line (120), on page 3-132 of the LRA, lists the environment of heat exchanger as raw water.

D-RAI 2.3.3.8 -1

Table 2.3.3-8 of the LRA lists accumulator as a component group subject to an AMR. However, accumulator(s) could not be located on any of the drawings referenced for the emergency power system. In addition, there is no discussion of an accumulator associated with the emergency power system in the Ginna UFSAR. Identify the accumulator components by equipment identification number or by drawing number and location.

**Resolution:** The information requested by the staff is contained on drawing 33013-1239, 1-LR, grid location A3, and 33013-1239, 2-LR, grid location A8. The applicant stated that "accumulators" are identified on the drawings as surge dampers with equipment identification numbers SDG03 and SDG04.

D-RAI 2.3.3.8 -2

Atmospheric vents are shown to be within the scope of LR and subject to an AMR on the following LR boundary drawings:

- |                    |                               |
|--------------------|-------------------------------|
| - 33013-1239, 1-LR | locations D8, D9, E2, and J2  |
| - 33013-1239, 2-LR | locations D3, D4, E9, and J10 |
| - 33013-2288-LR    | locations A8 and E5           |

However, the staff is unable to locate these vents in Table 2.3.3-8 of the LRA. Clarify whether these vents are included in a component group already listed in the table. If not, justify the exclusion of these vents from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

**Response:** The applicant stated that the atmospheric vents depicted on the drawings are open ends of pipes. Table 2.3.3-8 on page 2-141 of the LRA list pipe as a component group.

D-RAI 2.3.3.8 -5

License renewal boundary drawing 33013-1239, 1-LR, shows an isolated section of piping at location G4 in the middle of starting air pipe run 150-4 as not being subject to an AMR, although the connecting pipe on both ends of this section are subject to an AMR. Similarly, LR boundary drawing 33013-1239, 1-LR, shows an isolated section of piping at location F3 in the middle of the starting air pipe run between valve 5971 and the transition to drawing 33013-1239, 2-LR as not being subject to an AMR, although the connecting pipe on both ends of this section are subject to an AMR. Clarify if these runs of pipe were intentionally excluded from the scope of LR, or if this is a typographical error. If these runs of pipe were intentionally excluded, justify their omission from being subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1).

**Resolution:** The applicant stated that the exclusion of the piping segments was a drafting error and should be in the scope of LR. Section 2.1.4 on page 2-5 of the LRA states that components designated as SC-1, SC-2, or SC-3 are classified as safety-related and, as such, are necessarily within the scope of LR. This section of piping is classified as SC-3 as indicated on drawing 33013-1239, 2-LR.