



U.S. Department
of Transportation
**Maritime
Administration**

Office of Ship Disposal

1200 New Jersey Ave., SE
Washington, DC 20590

Ref: 10 CFR 50.90

October 31, 2017

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

SUBJECT: Docket No. 50-238; License No. NS-1; N.S. SAVANNAH
License Amendment Request No. LAR 2017-01
License and Technical Specification Changes to allow Dismantlement and Disposal

Reference (a) Letter from Mr. Erhard W. Koehler (MARAD) to U.S. Nuclear Regulatory Commission (NRC), dated May 30, 2017, Availability of Funds for Decommissioning (Docket No. 50-238, License No. NS-1)

Pursuant to 10 CFR 50.90, the United States Maritime Administration (MARAD) hereby requests approval to amend the Nuclear Ship *SAVANNAH* (NSS) Facility Operating License, NS-1 (License) and incorporate the enclosed proposed changes into the NSS license.

As described in Reference (a), the Consolidated Appropriations Act for FY 2017 provides \$24 million to MARAD for N.S. *SAVANNAH* decommissioning. Decommissioning is planned in a 3-phase approach within a seven-year performance period based on previous surveys and characterizations. The working titles of the phases generally describe the activities that will take place in the phase. The phases are: (I) DECON Planning and Engineering – 2 years; (II) Industrial Dismantlement Activity – 4 years; and (III) License Termination – 1 year. The phase durations are approximate, and there will be overlap at the boundaries.

The proposed license amendment will modify the License to remove the License Condition 2.C.(2) that prevents dismantling and disposing of the facility without prior approval of the Commission. Instead, dismantling and disposal activities will be governed by License Condition C that states the license is subject “to the rules, regulations and orders of the Commission now or hereafter in effect...” Specifically, dismantling and disposal will be conducted in accordance with 10 CFR 50.59 and 10 CFR 50.82.

Note that based on available funding, Phase I dismantlement activities will eliminate the radiologically controlled areas outside of the Reactor Compartment and the Cold Chemistry Laboratory. The areas are listed in Enclosure 1.

The License Amendment Request is provided in three (3) enclosures to this letter. Enclosure 1 is an evaluation of the request. Enclosure 2 provides the existing license marked up to show the proposed changes. Enclosure 3 provides a retyped version of the proposed license changes.

MARAD has reviewed the proposed changes comparing them to the current license basis in accordance with 10 CFR 50.92 and concludes that they involve no significant hazards consideration.

AD20

Docket No. 50-238; License NS-1; N.S. SAVANNAH
License Amendment Request No. LAR 2017-01
October 31, 2017

Pursuant to 10 CFR 50.91(b), a copy of this letter has been forwarded to the State of Maryland. The Safety Review Committee has reviewed this request.

MARAD requests approval of the proposed License Amendment by March 31, 2018, for implementation within 30 days from the date of approval.

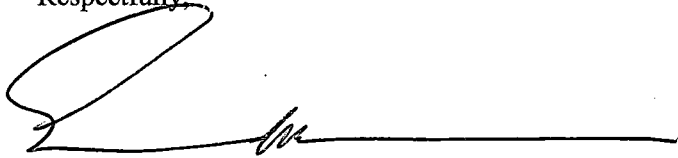
This letter contains no commitments.

If there are any questions or concerns with respect to any issue discussed in this request, please contact me at (202) 366-2631, and/or e-mail me at erhard.koehler@dot.gov.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on October 31, 2017

Respectfully,

A handwritten signature in black ink, appearing to be 'Erhard W. Koehler', written over a horizontal line.

Erhard W. Koehler
Senior Technical Advisor, N.S. SAVANNAH
Office of Ship Disposal

Enclosures (3)

**Docket No. 50-238; License NS-1; N.S. SAVANNAH
License Amendment Request No. LAR 2017-01
October 31, 2017**

Enclosures:

1. Evaluation of License Amendment Request
2. Proposed License Changes (marked-up)
3. Proposed License Changes (retyped)

Docket No. 50-238; License NS-1; N.S. SAVANNAH
License Amendment Request No. LAR 2017-01
October 31, 2017

cc:

Electronic copy

NSS ESC
NSS SRC

MAR 610, 612, 615

Hardcopy, cover letter only

MAR-600, 640, 640.2

Hardcopy w/ all enclosures

MAR-100, 640.2 (rf)

USNRC (Ted Smith, Mark C. Roberts)

USNRC Regional Administrator - NRC Region I

MD Department of the Environment (Eva S. Nair; George S. Aburn, Jr.)

NC Department of Environment & Natural Resources (Beverly O. Hall)

SC Department of Health & Environmental Control (Susan E. Jenkins; Aaron Gantt)

VA Department of Emergency Management (Michael M. Cline)

VA Department of Health (Leslie P. Foldesi)

EK/jmo



U.S. Department
of Transportation

**Maritime
Administration**

Office of Ship Disposal

1200 New Jersey Ave., SE
Washington, DC 20590

Docket No. 50-238; License No. NS-1; N.S. SAVANNAH

ENCLOSURE 1 EVALUATION OF LICENSE AMENDMENT REQUEST

Subject: License Change to allow Dismantlement and Disposal

Enclosure 1	EVALUATION of LICENSE AMENDMENT REQUEST.....	5
1.0	SUMMARY DESCRIPTION	6
2.0	DETAILED DESCRIPTION OF PROPOSED CHANGES.....	7
2.1	Proposed Change 1: Reissue the NS-1 License.....	7
2.2	Proposed Change 2: Remove License Condition 2.C.(2).....	7
3.0	TECHNICAL EVALUATION	7
4.0	REGULATORY SAFETY ANALYSIS.....	8
4.1	Applicable Regulatory Requirements/Criteria	8
4.2	Precedent	9
4.3	Proposed Determination of No Significant Hazards Consideration.....	9
4.4	Conclusions	10
5.0	ENVIRONMENTAL CONSIDERATION.....	11
6.0	REFERENCES.....	11
Enclosure 2	PROPOSED LICENSE CHANGES (MARKED-UP)	12
Enclosure 3	PROPOSED LICENSE CHANGES (RETYPED).....	19

1.0 SUMMARY DESCRIPTION

This evaluation supports a request to amend Operating License NS-1 for the Nuclear Ship *SAVANNAH* (NSS).

Maritime Administration (MARAD) is a modal agency of the United States Department of Transportation (DOT). It is a Federal licensee as defined by the NRC. As such, funds for decommissioning and termination of the NSS license are provided by Federal appropriations. As described in Reference (a), the Consolidated Appropriations Act for FY 2017 provides \$24 million to MARAD for N.S. *SAVANNAH* decommissioning. Decommissioning is planned in a 3-phase approach within a seven-year performance period based on previous surveys and characterizations. The working titles of the phases generally describe the activities that will take place in the phase. The phases are: (I) DECON Planning and Engineering – 2 years; (II) Industrial Dismantlement Activity – 4 years; and (III) License Termination – 1 year. The phase durations are approximate, and there will be overlap at the boundaries.

The proposed changes would revise the Operating License to remove License Condition 2.C.(2) and thereby allow dismantlement and disposal of the facility, based on available funding. Specifically, Phase I dismantlement activities will eliminate the radiologically controlled areas outside of the Reactor Compartment and Cold Chemistry Laboratory.¹ As described in Section 4, Regulatory Safety Analysis,² these activities will be evaluated as required by 10 CFR 50.59 and 10 CFR 50.82 prior to implementation.

Currently, License Condition 2.C.(2), of the license states:

- (2) The licensee shall not dismantle or dispose of the facility without prior approval of the Commission.

MARAD also requests that the NRC reissue the Operating License in its entirety to include the changes approved in License Amendment 12 that deleted the State of South Carolina Patriots Point Development Authority (PPDA) as a co-licensee (Reference b).

The envisioned Phase I end state includes:

1. Eliminating all current Radiologically Controlled Areas (RCAs) outside of the Reactor Compartment (RC) and Cold Chemistry Laboratory. These RCAs are as follows:
 - Hot Chemistry Laboratory;
 - Port and Starboard Buffer Seal Charge Pump rooms;
 - Port and Starboard Stabilizer Room;
 - A Deck Health Physics (HP) Laboratory; and,
 - B-1 Stateroom
2. Removing all insulation on the Primary Coolant System and any Reactor Plant Auxiliary Systems in the RC, CV and Cold Chemistry Laboratory.
3. Dismantlement of Reactor Plant Auxiliary Systems as necessary to implement envisioned end items 1 and 2.

MARAD requests approval of the proposed License Amendment by March 31, 2018 for implementation within 30 days from the date of approval.

¹ Note that in this document the term Cold Chemistry Laboratory includes the common open space from C Deck to D Deck between Frames 99 and 103 traditionally called the Cold Chemistry Laboratory for the space on C Deck port side, the Radiation Monitoring Room on C deck starboard side, the Gas Adsorption Equipment Room on D Deck port side and the Radiation Sampling Room on D Deck starboard side.

2.0 DETAILED DESCRIPTION OF PROPOSED CHANGES

2.1 PROPOSED CHANGE 1: REISSUE THE NS-1 LICENSE

The NS-1 license was last reissued in its entirety in Amendment 11 (Reference b) when the Possession-only license was renewed for co-licensees MARAD and the State of South Carolina Patriots Point Development Authority (PPDA) in 1986. In 1994, Amendment 12 (Reference c) removed PPDA as co-licensee and revised the license in essentially a “pen and ink change fashion” instead of reissuing the license in its entirety. It is likely this was appropriate at the time, since the license would be renewed and reissued in 1996. When 10 CFR 50.82, “Termination of license” was completely revised in 1996, the requirement to renew Possession-only licenses was deleted and the language of the license itself has remained as modified by Amendment 12.

Given that the license was last issued in its entirety in 1986, MARAD understands the NRC may make numerous other changes to the license to update it to 2017 content and format standards. For example, MARAD notes that Amendment 12 (1994) appropriately did not revise the Amendment 11 License Conditions 1.A and 2.D regarding the license renewal term since renewal was required until 1996.

MARAD is proposing the NRC reissue the NS-1 license in its entirety to include the Amendment 12 changes as well as the change requested below.

MARAD proposes revising the license as shown in Enclosure 2, “Proposed License Changes (marked-up)” and Enclosure 3, “Proposed License Changes (retyped).” Note that Enclosure 2 includes appropriate pages from License Amendment 12 to validate the markup.

2.2 PROPOSED CHANGE 2: REMOVE LICENSE CONDITION 2.C.(2)

License Condition 2.C.(2) currently does not allow any dismantlement or disposal of any portion of the facility without prior Commission approval. In 1976 when the Possession-only license was issued, this condition was required by the contemporary (1967) version of 10 CFR 50.82, “Application for Termination of Licenses.” 10 CFR 50.82(a) required the licensee to apply for the authority “to dismantle the facility and dispose of its component parts.”

The NSS Possession-only License (POL) states:

2.C. This amended license shall be deemed to contain and is subject to the conditions specified in 10 CFR Chapter I, Part 20, Section 30.34 of Part 30 and Sections 50.54 and 50.59 of Part 50, and to all applicable provisions of the Act, and to the rules, regulations and orders of the Commission now or hereafter in effect and is subject to the following *additional conditions* [emphasis added]:

- (1) The licensee shall not reactivate the reactor without prior approval of the Commission;
- (2) The licensee shall not dismantle or dispose of the facility without prior approval of the Commission

MARAD proposes deleting License Condition 2.C.(2) and revising the license as shown in Enclosure 2, “Proposed License Changes (marked-up)” and Enclosure 3, “Proposed License Changes (retyped).”

3.0 TECHNICAL EVALUATION

There are no technical issues associated with either proposed change.

4.0 REGULATORY SAFETY ANALYSIS

4.1 APPLICABLE REGULATORY REQUIREMENTS/CRITERIA

These proposed changes are administrative in nature and do not alter compliance with any applicable regulatory requirements or criteria.

Proposed Change 1

There are no regulatory requirements that require issuing a commercial reactor license in its entirety. Traditionally, a license is reissued in its entirety to authorize construction, operation, possession-only [archaic] and renewal.

MARAD's request to reissue the NS-1 license in its entirety is simply to have a clean license that does not require concurrent reading of Amendments 11 and 12 in order to understand the license.

Proposed Change 2

After the 1996 revision to 10 CFR 50.82, it has been appropriate to delete License Condition 2.C.(2) that states:

The licensee shall not dismantle or dispose of the facility without prior approval of the Commission.

and instead invoke current the regulation "10 CFR 50.59, Changes Tests and Experiments."

As quoted from the License in Section 2.2 above, certain regulations were deemed so important that they were explicitly called out in the POL in License Condition C.

One of these, 10 CFR 50.59, is germane to this LAR. It was completely revised in 1999. Its applicability to NSS and other Possession-only licensee is explicitly called out as follows:

- (b) This section applies to each holder of an operating license issued under this part or a combined license issued under part 52 of this chapter, including the holder of a license authorizing operation of a nuclear power reactor that has submitted the certification of permanent cessation of operations required under § 50.82(a)(1) or § 50.110 or a reactor licensee whose license has been amended to allow possession of nuclear fuel but not operation of the facility. [Emphasis added]

The statements of consideration pertinent to Possession-only licenses are found in 64 FR 53613, Oct. 4, 1999 and 66 FR 64738, Dec. 14, 2001.

Recall that prior to 1999, the applicability of the regulation was included in 50.59(a)(1) and (c) as "The holder of a license authorizing operation of a production or utilization facility ..." Note that neither of these applicability statements included Possession-only licensees.

When the Possession-only license was issued in 1976 (Reference d), the contemporary (1967) version of 10 CFR 50.82(a) required the licensee to apply for the authority "to dismantle the facility and dispose of its component parts." In essence, a Possession-only licensee's use of 10 CFR 50.59 was severely limited. Effectively, the proposed change deletes an archaic requirement that no longer exists in the current version of 10 CFR 82 and is allowed by the current version of 10 CFR 50.59.

Since its approval in April 2009, MARAD implements the requirements of 10 CFR 50.59 by the procedure STS-004-010, "10 CFR 50.59 & 50.82 Review." This procedure is based on NEI 96-07, Revision 1, "Guidelines for 10 CFR 50.59 Implementation;" November, 2000

which is endorsed by NRC Regulatory Guide 1.187, "Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments."

STS-004-010 requires written applicability determinations, screenings and evaluations, as appropriate. Additionally, the procedure includes requirements to evaluate 50.82(a)(6) limitations on decommissioning activities, 50.82(a)(7) limitations on schedule changes and decommissioning cost increases and 50.82(a)(9)(ii) limitations on changes to a previously approved license termination plan.

MARAD has evaluated these procedural requirements as consistent with NRC Inspection Manual, Manual Chapter 2561, "Decommissioning Power Reactor Inspection Program," Section 06.11 Modifications or Changes to the Facility.

MARAD will perform both major and minor decommissioning activities with the goal of reaching the end state described in Section 1. Note that the systems being dismantled are deactivated, disabled, drained to the extent practical and perform no active function.

Examples of activities that are not considered major decommissioning activities (i.e., minor) are defined in NRC Inspection Manual 2561 "Decommissioning Power Reactor Inspection Program," Section 06.11, "Modifications or Changes to the Facility" include:

- (1) Those that could be performed under normal maintenance and repair;
- (2) Removal of certain, relatively small radioactive components, such as control rod drive mechanisms, control rods, pumps, and valves;
- (3) Removal of components similar to that for maintenance and repair;
- (4) Removal of non-radioactive components and structures not required for safety; and,
- (5) Activities related to radiation and contamination characterization.

Major and minor decommissioning activities that modify the NSS will be evaluated in accordance with 10 CFR 50.59 as required by NSS procedures. Modify means removing a component with no intention of reinstalling that component to the as-found condition. For example, if removal of a pump requires moving a ventilation duct and the duct will not be reinstalled, then a 10 CFR 50.59 screening will be performed for removing both the pump and the duct.

4.2 PRECEDENT

The precedent is established in the April 20, 1998 Issuance of Amendment No. 15 to Amended Facility License No. DPR-4—GPU Nuclear, Inc. and Saxton Nuclear Experimental Corporation (SNEC) (Reference e). Note that this amendment deleted 2.C.(2) in the SNEC license.

4.3 PROPOSED DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION

MARAD has evaluated whether or not a significant hazards consideration is involved with the proposed amendment(s) by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below.

- 1) Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed changes are administrative and do not involve modification of any plant equipment or affect basic plant operation.

The NSS's reactor is not operational and the level of radioactivity in the NSS has significantly decreased from the levels that existed when the 1976 Possession-only License was issued. No aspect of any of the proposed changes is an initiator of any accident previously evaluated. Consequently, the probability of an accident previously evaluated is not significantly increased.

Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

- 2) Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

Both of the proposed changes are administrative and do not involve physical alteration of plant equipment that was not previously allowed by Technical Specifications. These proposed changes do not change the method by which any safety-related system performs its function. As such, no new or different types of equipment will be installed, and the basic operation of installed equipment is unchanged. The methods governing plant operation and testing remain consistent with current safety analysis assumptions.

Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

- 3) Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No.

Both of the proposed changes are administrative in nature. No margins of safety exist that are relevant to the ship's defueled and partially dismantled reactor. As such, there are no changes being made to safety analysis assumptions, safety limits or safety system settings that would adversely affect plant safety as a result of the proposed changes. The proposed changes involve revising the language of the license to clearly state previously approved changes, and to delete archaic requirements.

Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

Based on the above, MARAD concludes that the proposed amendment(s) present no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

4.4 CONCLUSIONS

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

5.0 ENVIRONMENTAL CONSIDERATION

The proposed amendment request is confined to (i) changes to surety, insurance, and/or indemnity requirements, or (ii) changes to recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(10). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

6.0 REFERENCES

- a. Letter from Mr. Erhard W. Koehler (MARAD) to U.S. Nuclear Regulatory Commission (NRC), dated May 30, 2017, Availability of Funds for Decommissioning (Docket No. 50-238, License No. NS-1)
- b. Letter from Mr. John F. Stoltz (NRC) to Dr. Zelvin Levine (MARAD) and Mr. J. E. Guerry, Jr (PPDA), dated July 15, 1986, Renewal of facility Possession Only License No. NS-1 for the N.S. SAVANNAH
- c. Letter from Mr. Alexander Adams, Jr. (NRC) to Dr. Zelvin Levine (MARAD) and Mr. James H. Flatley (PPDA), dated June 29, 1994, Issuance of Amendment 12 to Amend License No. NS-1 - N.S. SAVANNAH (TAC No. M89505)
- d. Letter from Mr. Robert W. Reid (NRC) to U.S. Department of Commerce, Maritime Administration, dated May 19, 1976, No Title [Issuance of Amendment 8, Possession-only License]
- e. Letter from Mr. Alexander Adams, Jr. (NRC) to Mr. G. A. Kuehn, Jr. (SNEC), dated April 20, 1998, Issuance of Amendment No. 15 to Amended Facility License No. DPR-4—GPU Nuclear, Inc. and Saxton Nuclear Experimental Corporation (TAC Nos. M97155 and M97388)
- f. Letter from Mr. Erhard W. Koehler (MARAD) to Document Control Desk (NRC), dated August 7, 2006, License Amendment Request No. 2006-01, Technical Specifications Changes to Support Pre-Decommissioning Activities
- g. Letter from Mr. Erhard W. Koehler (MARAD) to Document Control Desk (NRC), dated December 15, 2006, License Amendment Request No. 2006-01, Response to Request for Additional Information



U.S. Department
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**Maritime
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Office of Ship Disposal

1200 New Jersey Ave., SE
Washington, DC 20590

Docket No. 50-238; License No. NS-1; N.S. SAVANNAH

ENCLOSURE 2 PROPOSED LICENSE CHANGES (MARKED-UP)

Strikethrough indicates deletions. Text Boxes include insertions when needed.

Docket 50-238; License No. NS-1; N.S. SAVANNAH
Enclosure 2 to License Amendment Request No. LAR 2017-01
PROPOSED LICENSE CHANGES (MARKED-UP)
October 31, 2017

Proposed Change 1:
Note deletion

~~STATE OF SOUTH CAROLINA~~
~~PATRIOTS POINT DEVELOPMENT AUTHORITY~~
~~AND U.S. MARITIME ADMINISTRATION~~
~~DOCKET NO. 50-238~~
~~N.S. SAVANNAH~~
~~AMENDED FACILITY LICENSE~~

Proposed Change 1:
Revise to appropriate
amendment number
XX

Amendment No. 11
License No. NS-1

Proposed Change 1: Note
deletion. License Renewal is
no longer required after 1996.
Insert the word "Deleted."

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. ~~The application for renewal of Facility License No. NS-1 by the State of South Carolina Patriots Point Development Authority, and the U.S. Maritime Administration (the licensees) dated August 20, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;~~
 - B. The facility will be maintained in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amended license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The licensees are technically and financially qualified to engage in the activities authorized by this amended license in accordance with the rules and regulations of the Commission;
 - E. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;

Proposed Change 1:
Insert "licensee is"

Proposed Change 1:
Insert "licensee has"

Docket 50-238; License No. NS-1; N.S. SAVANNAH
Enclosure 2 to License Amendment Request No. LAR 2017-01
PROPOSED LICENSE CHANGES (MARKED-UP)
October 31, 2017

-2-

- F. The issuance of this amended license will not be inimical to the common defense and security or to the health and safety of the public;
- G. The possession and storage of the byproduct material as authorized by this amended license will be in accordance with the Commission's regulations in 10 CFR Part 30, including Section 30.33;
- H. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, Facility License No. NS-1 is hereby amended in its entirety to read as follows:

- A. This amended license applies to the facility owned by the U.S. Maritime Administration consisting of a pressurized water nuclear reactor (hereinafter "the reactor") and associated components and equipment, which are located aboard the NS SAVANNAH, and are described in the application for license dated April 30, 1965, and amendments thereto.

Proposed Change 1: Note deletion.

- B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses ~~the State of South Carolina Patriots Point Development Authority and~~ the U.S. Maritime Administration:

- (1) Pursuant to Section 104b, of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, but not operate, the reactor as a utilization facility in accordance with the procedures and limitations set forth in this license; and

Proposed Change 1:
Insert
"Domestic"
before
"Licensing."

- (2) Pursuant to the Act and 10 CFR Part 30, "Rules of General Applicability to Licensing of Byproduct Material," to possess, but not to separate, such byproduct material as may have been produced by operation of the facility.

- C. This amended license shall be deemed to contain and is subject to the conditions specified in 10 CFR Chapter I, Part 20, Section 30.34 of Part 30 and Sections 50.54 and 50.59 of Part 50, and to all applicable provisions of the Act, and to the rules, regulations and orders of the Commission now or hereafter in effect and is subject to the following additional conditions:

Proposed Change 1:
Note that "licensees"
should be "licensee."

- (1) The licensees shall not reactivate the reactor without prior approval of the Commission;

- (2) ~~The licensees shall not dismantle or dispose of the facility without prior approval of the Commission.~~

Proposed Change 2 delete C.
(2) and insert the word
"Deleted."

Proposed Change 1: Note deletion and Insert ", as revised through Amendment No. XX, are hereby incorporated in the license."

(3) Technical Specification

Proposed Change 1: Insert "licensee"

The Technical Specifications contained in Appendix A attached hereto are hereby incorporated as limiting conditions of this license. The licensee shall maintain the facility in accordance with the Technical Specifications, as revised.

D. This amended license is effective as of the date of issuance and shall expire at midnight July 15, 1996, unless sooner terminated.

Proposed Change 1: Note deletion. License Renewal is no longer required after 1996.

FOR THE NUCLEAR REGULATORY COMMISSION

Frank J. Miraglia
Frank J. Miraglia, Director
Division of PWR Licensing-B

Proposed Change 1: Note deletion.

Enclosure:
Appendix A Technical Specifications

Date of Issuance: ~~JUL 15 1986~~

Proposed Change 1 and 2: Note deletion and insert appropriate name and title.

Proposed Change 1 and 2: Note deletion and insert appropriate date.

Docket 50-238; License No. NS-1; N.S. SAVANNAH
Enclosure 2 to License Amendment Request No. LAR 2017-01
PROPOSED LICENSE CHANGES (MARKED-UP)
October 31, 2017

Pages from License Amendment 12 to validate the License markup.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

STATE OF SOUTH CAROLINA PATRIOTS POINT DEVELOPMENT AUTHORITY

U.S. MARITIME ADMINISTRATION

DOCKET NO. 50-238

N.S. SAVANNAH

AMENDED FACILITY LICENSE

Amendment No. 12
License No. NS-1

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to Amended Facility License No. NS-1 filed by the State of South Carolina Patriots Point Development Authority and the U.S. Maritime Administration, dated May 19, 1994, as supplemented on May 24 and 27, 1994, and June 3, 1994, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the regulations of the Commission as stated in 10 CFR Chapter I;
 - B. The facility will be maintained in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public and (ii) that such activities will be conducted in compliance with the regulations of the Commission;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the regulations of the Commission and all applicable requirements have been satisfied;

Docket 50-238; License No. NS-1; N.S. SAVANNAH
Enclosure 2 to License Amendment Request No. LAR 2017-01
PROPOSED LICENSE CHANGES (MARKED-UP)
October 31, 2017

- 2 -

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the enclosure to this license amendment, and the license is amended to read as follows:

- (a) The title on page 1 of the license shall read:

U.S. MARITIME ADMINISTRATION
DOCKET NO. 50-238
N.S. SAVANNAH
AMENDED FACILITY LICENSE

- (b) Paragraph 1.D. of the license shall read:

The licensee is technically and financially qualified to engage in the activities authorized by this amended license in accordance with the rules and regulations of the Commission;

- (c) Paragraph 1.E. of the license shall read:

The licensee has complied with the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;

- (d) Paragraph 2.B. of the license shall read:

Subject to the conditions and requirements incorporated herein, the Commission hereby licenses the U.S. Maritime Administration:

(1) Pursuant to Section 104b of the Act and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," to possess, but not operate, the reactor as a utilization facility in accordance with the procedures and limitations in this license; and

(2) Pursuant to the Act and 10 CFR Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material," to possess, but not separate, such byproduct material as may have been produced by operation of the facility.

- (e) Paragraph 2.C.(1) of the license shall read:

The licensee shall not reactivate the reactor without prior approval of the Commission;

- (f) Paragraph 2.C.(2) of the license shall read:

The licensee shall not dismantle or dispose of the facility without prior approval of the Commission.

Docket 50-238; License No. NS-1; N.S. SAVANNAH
Enclosure 2 to License Amendment Request No. LAR 2017-01
PROPOSED LICENSE CHANGES (MARKED-UP)
October 31, 2017

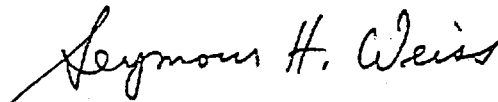
- 3 -

(g) Paragraph 2.C.(3) of the license is amended to read as follows:

The Technical Specifications contained in Appendix A, as revised through Amendment No. 12, are hereby incorporated in the license. The licensee shall possess the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Seymour H. Weiss, Director
Non-Power Reactors and Decommissioning
Project Directorate
Division of Operating Reactor Support
Office of Nuclear Reactor Regulation

Enclosure:
Appendix A Technical
Specifications Changes

Date of Issuance: June 29, 1994



U.S. Department
of Transportation

**Maritime
Administration**

Office of Ship Disposal

1200 New Jersey Ave., SE
Washington, DC 20590

Docket No. 50-238; License No. NS-1; N.S. *SAVANNAH*

ENCLOSURE 3 PROPOSED LICENSE CHANGES (RETYPE)

Docket 50-238; License No. NS-1; N.S. SAVANNAH
Enclosure 3 to License Amendment Request No. LAR 2017-01
PROPOSED LICENSE CHANGES (RETYPE)
October 31, 2017

U.S. MARITIME ADMINISTRATION
DOCKET NO. 50-238
N.S. SAVANNAH
AMENDED FACILITY LICENSE

Amendment No. XX
License No. NS-1

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. Deleted;
 - B. The facility will be maintained in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amended license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The licensee is technically and financially qualified to engage in the activities authorized by this amended license in accordance with the rules and regulations of the Commission;
 - E. The licensee has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
 - F. The issuance of this amended license will not be inimical to the common defense and security or to the health and safety of the public;
 - G. The possession and storage of the byproduct material as authorized by this amended license will be in accordance with the Commission's regulations in 10 CFR Part 30, including Section 30.33;
 - H. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, Facility License No. NS-1 is hereby amended in its entirety to read as follows:
 - A. This amended license applies to the facility owned by the U.S. Maritime Administration consisting of a pressurized water nuclear reactor (hereinafter "the reactor") and associated components and equipment, which are located aboard the N.S. SAVANNAH, and are described in the application for license dated April 30, 1965, and amendments thereto.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses the U.S. Maritime Administration:
 - (1) Pursuant to Section 104b, of the Act and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," to possess, but not operate, the reactor as a utilization facility in accordance with the procedures and limitations set forth in this license; and

Docket 50-238; License No. NS-1; N.S. SAVANNAH
Enclosure 3 to License Amendment Request No. LAR 2017-01
PROPOSED LICENSE CHANGES (RETYPE)
October 31, 2017

- (2) Pursuant to the Act and 10 CFR Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material," to possess, but not to separate, such byproduct material as may have been produced by operation of the facility.
- C. This amended license shall be deemed to contain and is subject to the conditions specified in 10 CFR Chapter I, Part 20, Section 30.34 of Part 30 and Sections 50.54 and 50.59 of Part 50, and to all applicable provisions of the Act, and to the rules, regulations and orders of the Commission now or hereafter in effect and is subject to the following additional conditions:
 - (1) The licensee shall not reactivate the reactor without prior approval of the Commission;
 - (2) Deleted.
 - (3) Technical Specification
The Technical Specifications contained in Appendix A, as revised through Amendment No. XX, are hereby incorporated in the license. The licensee shall maintain the facility in accordance with the Technical Specifications.
- D. This amended license is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

[Insert Appropriate Name and Title]

Date of Issuance: [Insert Appropriate Date]

Enclosure: Appendix A Technical Specifications