

**From:** Marvin Mendonca  
**To:** Chris Hamilton, Chuck Bassett, Ed Ehrlich, Fra...  
**Date:** Wed, Nov 1, 2000 3:53 PM  
**Subject:** Guidance on financial qualifications, decommissioning funding and license transfer

As I understand you all are privately owned. Because of that I am sending you electronically the guidance for the subject matters. This is for your information. Thanks

**CC:** Tad Marsh

[Federal Register: September 28, 1999 (Volume 64, Number 187)]  
[Notices]  
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NUCLEAR REGULATORY COMMISSION

Final Standard Review Plan on Foreign Ownership, Control, or  
Domination

AGENCY: Nuclear Regulatory Commission.

ACTION: Final Standard Review Plan.

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SUMMARY: The NRC is issuing its Final Standard Review Plan (SRP) on Foreign Ownership, Control, or Domination. The SRP documents procedures and guidance used by the staff to analyze applications for reactor licenses, or applications for the transfer of control of such licenses, with respect to the limitations contained in sections 103 and 104 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 50.38 against issuing a license for a production or utilization facility to an alien or an entity that is owned, controlled, or dominated by foreign interests.

EFFECTIVE DATE: The SRP was approved by the Commission on August 31, 1999.

ADDRESSES: Examine copies of comments received on the interim SRP, which preceded the final SRP, and copies of the attachments as stated in the final SRP at: The NRC Public Document Room, 2120 L Street, N.W. (lower level), Washington, D.C.

FOR FURTHER INFORMATION CONTACT: Steven R. Hom, Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, telephone (301) 415-1537, e-mail [srh@nrc.gov](mailto:srh@nrc.gov).

SUPPLEMENTARY INFORMATION: The SRP on Foreign Ownership, Control, or Domination, attached hereto, contains the review procedures used by the staff to evaluate applications for the issuance or transfer of control of a production or utilization facility license in light of the prohibitions in sections 103d and 104d of the Atomic Energy Act and in 10 CFR 50.38 against issuing such reactor licenses to aliens or

entities that the Commission ``knows or has reason to believe'' are owned, controlled, or dominated by foreign interests. The procedures expressly provide for requests for additional information and consideration of a negation action plan if the information described in

10 CFR 50.33(d) initially required to be provided in an application indicates that there may be some degree of foreign control of the applicant. The SRP also sets forth substantive guidance consistent with

existing Commission precedent on what may constitute foreign control. This SRP supersedes Section III.3 of NUREG-1577, Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning

Funding Assurance (Draft Report for Comment) (containing review procedures regarding foreign ownership) in its entirety.

An earlier interim version of the SRP was published in the Federal

Register on March 2, 1999 (64 FR 10166) for public comment. Four sets of comments were received from the Nuclear Energy Institute (NEI), AmerGen Energy Company, LLC (AmerGen), Florida Power and Light Company

(FPL), and PECO Energy (PECO). These comments, and the staff's response to them, are set forth below.

#### Comments and Responses

##### NEI and FPL

NEI stated that, in general, the criteria and review process outlined in the interim SRP provide an ``appropriate degree of regulatory flexibility.'' In addition, NEI specifically provided its view that ``a foreign entity should be allowed to own a significant share of a nuclear power plant,'' provided that special nuclear material is not under the control of the foreign entity, the foreign entity has no control over the day-to-day nuclear activities at the plant, and ownership would not be inimical to the common defense and security. Further, NEI stated its belief that foreign ownership of a licensee's parent company ``should be allowed unless the foreign entity has legal control over the conduct of licensee activities involving common defense and security.'' Such control can be ``overcome'' by ``special arrangements, such as special operating committees, which vest effective control and operation of licensed activities with U.S. citizens,'' according to NEI.<SUP>1</SUP>

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\\1\ NEI also stated its support for amendment of the Atomic Energy Act to remove the foreign ownership prohibition, while preserving the authority to protect the common defense and security.  
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FPL stated that it ``supports the approach set forth in the SRP.''

It also stated that it endorses NEI's comments.  
Response

Section 103d of the Atomic Energy Act of 1954, as amended, provides that no license may be issued to an alien, or to a corporation owned, controlled, or dominated by an alien, foreign corporation, or foreign government. As the SRP now indicates, a (U.S.) applicant that is partially owned by a foreign entity may still be eligible for a license under certain conditions. However, the intent of NEI's comment that a foreign entity ``should be allowed to own a significant share of a nuclear power plant'' is not entirely clear. If NEI is suggesting that a foreign entity may become a direct owner of a substantial percentage of the facility, its position would not appear to be consistent with the Commission's interpretation of the statute, even if the foreign entity is only a co-owner. In Public Service Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-459, 7 NRC 179, 200-01 (1978), the Appeal Board held that each proposed co-owner of a nuclear facility must be an applicant for a license. Accordingly, each co-owner is subject to the foreign ownership or control prohibition contained in the Act.

NEI's other major comment (i.e., that foreign ownership of a licensee's parent company should be allowed unless the foreign entity has legal control over common defense and security activities, which control is not overcome by special arrangements such as limiting such activities to U.S. citizens) appears to go beyond the guidance in the SRP that deals with foreign parent companies. The SRP states that (based on the Commission's determinations in the Hoffmann-LaRoche and initial Cintichem matters discussed in the attachments to the SRP), an

applicant with a foreign parent will not be eligible for a license, unless the Commission knows that the foreign parent's stock is largely

owned by U.S. citizens, and certain conditions or ``special arrangements'' are imposed, such as having only U.S. citizens within the applicant's organization be responsible for special nuclear material. NEI has not presented any compelling argument why the scenario it set forth, which is devoid of any indication of ultimate control of the parent by U.S. stockholders, is consistent with the statutory prohibition on foreign control, in light of the Commission's

interpretation in the Hoffmann-LaRoche and initial Cintichem matters.<SUP>2</SUP>

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\2\ However, for situations involving an applicant's proposed acquisition of less than a 100% interest in a reactor, see the discussion below in response to AmerGen's comments.

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AmerGen

AmerGen commented that the SRP should provide more detailed guidance by establishing ``safe harbors'' with respect to certain types

of ownership and/or operating arrangements.

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Specifically, AmerGen noted that although the SRP states that the Commission has not determined a specific threshold of stock ownership above which it would be concluded that the (foreign) owner would have control, it may be appropriate to establish a threshold below which there would be a presumption of no control, at least absent foreign involvement in management or operation. In addition, AmerGen stated that it might be helpful for the SRP to discuss specific types of activities in which a foreign entity could engage in connection with the operation of a reactor, and acknowledge that the statute does not preclude foreign nationals from ``holding senior management positions with an applicant and/or managing and supervising licensed activities at a reactor site.'' AmerGen also stated that in the guidance section of the SRP, the SRP should discuss specific arrangements involving foreign entities that the Commission has found acceptable with the imposition of certain conditions, and confirm that similar situations would be eligible for ``safe harbor'' treatment.

Noting the discussion in the SRP that provides that further consideration is required concerning the ownership of a less than 100 percent interest in a reactor by a U.S. company which has a foreign parent, AmerGen stated its opinion that relevant precedents should be addressed (suggesting Marble Hill and Cintichem). AmerGen also stated that additional guidance would be helpful concerning the ``further consideration,'' and concerning what additional information may be required from an applicant for such consideration. Finally, AmerGen believes the SRP should expressly confirm that where a particular applicant has recently been approved by the NRC subject to the imposition of certain license conditions, no material changes in the ownership or management of the applicant have since occurred, and the applicant agrees to similar conditions in connection with a subsequent

application, the applicant will essentially receive summary approval.  
Response

In general, it is recognized that articulating ``safe harbors'' in the SRP would be beneficial to license applicants by removing some degree of uncertainty from the license application process. However, in light of the perhaps limitless creativity involved in formulating corporate structures and arrangements, the difficulty in prescribing safe harbors is being able to account for every potential fact or circumstance that could be present in any given situation, which fact or circumstance may not be addressed in the stated safe harbor criteria, but which could still be material to a determination of foreign ownership or control.

Regarding AmerGen's suggestion that a stock threshold be considered below which there would be presumptive non-control absent foreign involvement in management or operation, it is notable that while earlier drafts of the Atomic Energy Act contained a stock threshold (five percent) above which foreign ownership would have been barred, the final version of the Act, of course, does not. Thus, Congress declined to establish any threshold. Also, other statutes such as the Public Utilities Holding Company Act, while establishing thresholds above which control is presumed, are silent on ``safe harbors.'' At

least until further experience is gained in this area, the flexibility of the SRP in this regard should be maintained.

Concerning AmerGen's comment on stating permissible activities that a foreign entity or foreign nationals could engage in regarding the operation or management of a reactor, it should be noted at the outset that the statutory prohibition applies to the issuance of licenses. Thus, as long as foreign entities or nationals are not engaged in activities requiring a license, the foreign control prohibition does not apply specifically to them. This is not to say that the actual licensee--the entity which does have control over licensed activities--is unrestricted in its use of foreign entities or personnel. As provided in the Act, no license may be issued if issuance would be inimical to the common defense and security. Entering into this analysis would be the licensee's use of foreign entities or personnel.

Because AmerGen's comment potentially involves considerations of the common defense and security, it would not appear that any meaningful purpose would be served for the SRP to attempt to simply list activities or positions in an organization that would presumptively not trigger the prohibition on foreign ownership or control when it would still be necessary to conduct a full separate analysis of whether a certain degree of foreign involvement would be inimical to the common defense and security.

With respect to AmerGen's comment that the SRP should discuss specific arrangements involving foreign entities that the Commission has found acceptable, the agency's dockets presently provide access to this information, which constitutes a substantial amount of material (agreements, organizational charts, by-laws, etc.) specific to each application which cannot be incorporated into the SRP, as a practical matter, due to their volume. Commission statements and analyses regarding applications involving the Babcock & Wilcox/McDermott and Union Carbide/Cintichem matters, which provide essentially a historical perspective and summary of the Commission's views on the foreign ownership prohibition, and which are more difficult to locate due to their age, are in a form that is more easily included as part of the SRP. These analyses were not published in the Federal Register notice requesting comments on the SRP, but are to be attachments to the SRP as indicated in Section 6, ``References,' ' of the SRP.

For situations involving an applicant which has, directly or indirectly, a foreign parent but which is seeking to acquire less than a 100% interest in a reactor, the attached version of the SRP has been expanded in response to AmerGen's comments concerning the ``further consideration' ' that is required. The SRP includes new proposed language providing that ``further consideration' ' will be given to:

- (1)

The extent of the proposed partial ownership of the reactor; (2)  
whether the applicant is seeking authority to operate the reactor; (3)

whether the applicant has interlocking directors or officers and details concerning the relevant companies; (4) whether the applicant would have any access to restricted data; and (5) details concerning ownership of the foreign parent company. The new language should provide applicants with a clear understanding of what facts will be considered and what type of information may need to be submitted.

Regarding AmerGen's interest in the SRP expressly confirming that a previously approved applicant will survive foreign ownership scrutiny where there have been no material changes since the last application and the same conditions are imposed, the agency intends to apply the law uniformly and consistently and not act in an arbitrary manner. Thus, there appears to be no necessity in essentially restating this principle specifically in the context of the SRP.

PECO

PECO commented that, at least in the context of making a non-inimicality finding with respect to the common defense and security, ``some degree of deference should be applied'' when the

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relevant foreign applicant is from a country with close ties to the United States. In addition, PECO stated its opinion that the focus of a

foreign control review as set forth in the SRP should be on ``who exerts control over the `safety and security' aspects of the licensee's

operations.'' With specific reference to section 3.2 of the SRP, PECO recommended that where a license condition is necessary to limit those

responsible for special nuclear material, the limitation should apply to officers and senior management of the applicant, rather than officers and employees, which latter term is used in the present SRP. Response

As pointed out in SECY-98-252, ``Preliminary Staff Views Concerning

Its Review of the Foreign Ownership Aspects of AmerGen, Inc.'s Proposed

Purchase of Three Mile Island, Unit 1'' (Oct. 30, 1998), previous Commission decisions regarding foreign ownership or control did not appear to turn on which particular nation the applicant was associated

with. Although the broader required finding of non-inimicality to the common defense and security may be based, in part, on the nation involved, the SRP concerns the specific foreign ownership prohibition and is not intended to cover all common defense and security issues, as

stated in Section 1.1 of the SRP. Thus, no changes in consideration of

PECO's first comment appear warranted.

Regarding PECO's second comment, it is true that the exertion of control over the ``safety and security aspects'' of reactor operations

(interpreting that phrase broadly for the purpose of this discussion) can be an important factor in the foreign ownership or control

analysis. However, it may not be the only important factor, given that the statute does not limit the foreign control prohibition to only those applicants who intend to be actively engaged in operation of the plant, or intend to ``exert control'' over operations. A statement of the ``focus'' of the analysis would appear to be somewhat premature at this time, given the limited experience the Commission has had in this area.

With respect to PECO's last comment concerning personnel responsible for special nuclear material, the term ``employees'' was used by the Commission in a previous condition of approval that required those responsible for special nuclear material to be U.S. citizens.<SUP>3</SUP> It appears reasonable to seek to ensure that all those employees responsible for special nuclear material have at least U.S. citizenship, not just senior management, when there is some issue of foreign control, and PECO has not provided a compelling reason why there should be any departure from a prior Commission decision.

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\\3\\ See letter from L. Manning Muntzing, Atomic Energy Commission, to General Atomic Company (Dec. 14, 1973), incorporating by reference letter from General Atomic Company to L. Manning Muntzing, Atomic Energy Commission (Dec. 14, 1973) with attachment (General Atomic Company Resolution of the Standing Committee of the Partnership Committee Adopted at a Meeting Thereof Held on December 14, 1973).

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Approval by the Commission

In approving the final SRP, the Commission approved new additional guidance (incorporated in the last paragraph of section 3.2 of the SRP) reflected in the foregoing response to AmerGen's comments concerning applicants seeking to acquire less than 100% of a reactor who have ultimate foreign parents. Also, the Commission directed that one additional change be made from the previous interim SRP, namely, the addition of a new footnote in Section 3.2 of the SRP.

Dated at Rockville, Maryland, this 21st day of September, 1999.

For the Nuclear Regulatory Commission.  
Annette L. Vietti-Cook,  
Secretary of the Commission.

Final Standard Review Plan on Foreign Ownership, Control and Domination

1. Areas of Review



### 1.1 General

The NRC is issuing this Standard Review Plan (SRP) to describe the process it uses to review the issue of whether an applicant for a nuclear facility license under sections 103 or 104 of the Atomic Energy Act of 1954, as amended (AEA or Act), is owned, controlled, or dominated by an alien, a foreign corporation or a foreign government. This SRP will be used as the basis for such reviews in connection with license applications for new facilities, or applications for approval of direct or indirect transfers of facility licenses.

Where there are co-applicants, each intending to own an interest in a new facility as co-licensees, each applicant must be reviewed to determine whether it is owned, controlled, or dominated by an alien, foreign corporation or foreign government. If a co-licensee of an existing facility owns a partial interest in the facility and is transferring that interest, the acquirer must be reviewed to determine whether it is owned, controlled, or dominated by an alien, foreign corporation or foreign government.

The foreign control determination is to be made with an orientation toward the common defense and security. However, this SRP does not address all matters relating to the determination of whether issuance of a license to a person would be inimical to the common defense and security.

This SRP reflects current NRC regulations and policy.

### 1.2 Relevant Statutory And Regulatory Provisions

Sections 103d and 104d of the Act provide, in relevant part, that no license may be issued to:

Any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government. In any event, no license may be issued to any person within the United States if, in the opinion of the Commission, the issuance of a license to such person would be inimical to the common defense and security or to the health and safety of the public.

(Section 103d also states that no license may be issued to an alien.)

Section 184 of the Act provides, in relevant part:

No license granted hereunder and no right to utilize or produce special nuclear material granted hereby shall be transferred, assigned or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of any license to any person, unless the Commission shall, after securing full information, find that the transfer is in accordance with the provisions of this Act, and shall give its consent in writing.

10 CFR 50.33(d), in relevant part, provides:  
Each application shall state:

(d)(1) If applicant is an individual, state citizenship.  
(2) If applicant is a partnership, state name, citizenship and address of each partner and the principal location where the partnership does business.  
(3) If applicant is a corporation or an unincorporated association, state:  
    (i) The state where it is incorporated or organized and the principal location where it does business;  
    (ii) The names, addresses and citizenship of its directors and of its principal officers;  
    (iii) Whether it is owned, controlled, or dominated by an alien, a foreign corporation, or foreign government, and, if so, give details.  
(4) If the applicant is acting as agent or representative of another person in filing the application, identify the

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principal and furnish information required under this paragraph with respect to such principal.

10 CFR 50.38 provides:

Any person who is a citizen, national, or agent of a foreign country, or any corporation, or other entity which the Commission knows or has reason to believe is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government, shall be ineligible to apply for and obtain a license.

10 CFR 50.80 provides, in pertinent part:

(a) No license for a production or utilization facility, or any right thereunder, shall be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the Commission shall give its consent in writing.

\* \* \* \* \*

(c) \* \* \* [T]he Commission will approve an application for the transfer of a license, if the Commission determines:

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(2) That the transfer of the license is otherwise consistent with applicable provisions of the law, regulations, and orders issued by the Commission pursuant thereto.

## 2. Information To Be Submitted by Applicant

### 2.1 Information Required By Regulation

At the time the applicant submits its application for a license or for approval of the transfer of a license, the applicant must submit information sufficient to comply with 10 CFR 50.33(d).

### 2.2 Additional Information

If the reviewer, based on the information required to be submitted by 10 C.F.R. 50.33(d), has reason to believe that the applicant may be owned, controlled, or dominated by foreign interests, the reviewer

should request and obtain the following additional information:

1. If the applicant's equity securities are of a class which is registered pursuant to the Securities Exchange Act of 1934, copies of all current Securities and Exchange Commission Schedules 13D and 13G, which are required to be **filed** by owners of more than 5% of such a class with the Securities and Exchange Commission, the security issuer

(applicant), and the exchange on which the issuer's securities are traded.

2. Management positions held by non-U.S. citizens.

3. The ability of foreign entities to control the appointment of management personnel.

#### 2.3 Negation Action Plan

If applicable under Section 4.4 infra, the applicant should also submit a Negation Action Plan, which is described in detail in Section

#### 4.4.

### 3. Acceptance Criteria

#### 3.1 Basic Statutory and Regulatory Limitations

License applications for new facilities or applications for approval of transfers of licenses required in the case of proposed new

ownership of existing facilities may involve foreign entities proposing

to own all or part of a reactor facility. Sections 103d and 104d of the

AEA prohibit the NRC from issuing a license to an applicant if the NRC

knows or has reason to believe that the applicant is owned, controlled,

or dominated by an alien, a foreign corporation, or a foreign government (or is an alien, in the case of section 103d).

Likewise, under 10 CFR 50.38,

Any person who is a citizen, national, or agent of a foreign country, or any corporation, or other entity which the Commission knows or has reason to believe is owned, controlled or dominated by an alien, a foreign corporation, or a foreign government, shall be ineligible to apply for and obtain a license.

#### 3.2 Guidance On Applying Basic Limitations

The Commission has not determined a specific threshold above which it would be conclusive that an applicant is controlled by foreign interests through ownership of a percentage of the applicant's stock. Percentages held of outstanding shares must be interpreted in light of

all the information that bears on who in the corporate structure exercises control over what issues and what rights may be associated with certain types of shares.

An applicant is considered to be foreign owned, controlled, or dominated whenever a foreign interest has the ``power,' ' direct or indirect, whether or not exercised, to direct or decide matters affecting the management or operations of the applicant. The Commission

has stated that the words ``owned, controlled, or dominated' ' mean

relationships where the will of one party is subjugated to the will of another. General Electric Co., 3 AEC at 101.

A foreign interest is defined as any foreign government, agency of a foreign government, or representative of a foreign government; any form of business enterprise or legal entity organized, chartered, or incorporated under the laws of any country other than the U.S. or its possessions and trust territories; any person who is not a citizen or national of the U.S.; and any U.S. interest effectively controlled by one of the above foreign entities.

The Commission has stated that in context with the other provisions of Section 104d, the foreign control limitation should be given an orientation toward safeguarding the national defense and security. Thus, an applicant that may pose a risk to national security by reason of even limited foreign ownership would be ineligible for a license.<SUP>4</SUP>

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\4\ In any event, a license would not be issued to any person if the Commission found that issuance would be inimical to the common defense and security or to the health and safety of the public. See, e.g., sections 103d and 104d of the AEA. Pursuant to this provision, the Commission has the authority to reject a license application that raises a clear proliferation threat, terrorist threat, or other threat to the common defense and security of the United States.

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Even though a foreign entity contributes 50%, or more, of the costs of constructing a reactor, participates in the project review, is consulted on policy and cost issues, and is entitled to designate personnel to design and construct the reactor, subject to the approval and direction of the non-foreign applicant, these facts alone do not require a finding that the applicant is under foreign control.

An applicant that is partially owned by a foreign entity, for example, partial ownership of 50% or greater, may still be eligible for a license if certain conditions are imposed, such as requiring that officers and employees of the applicant responsible for special nuclear material must be U.S. citizens.

Where an applicant that is seeking to acquire a 100% interest in the facility is wholly owned by a U.S. company that is wholly owned by a foreign corporation, the applicant will not be eligible for a license, unless the Commission knows that the foreign parent's stock is ``largely'' owned by U.S. citizens. If the foreign parent's stock is owned by U.S. citizens, and certain conditions are imposed, such as requiring that only U.S. citizens within the applicant organization be responsible for special nuclear material, the applicant may still be

eligible for a license, notwithstanding the foreign control limitation.

If the applicant is seeking to acquire less than a 100% interest, further consideration is required. Further consideration will be given

to: (1) the extent of the proposed partial ownership of the reactor; (2) whether the applicant is seeking authority to operate the reactor;

(3) whether the applicant has interlocking directors or officers and details concerning the relevant companies; (4) whether the applicant would have any access to restricted data; and (5) details concerning ownership of the foreign parent company.

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#### 4. Review Procedures

##### 4.1 Threshold Review and Determination

The reviewer should first analyze all of the information submitted by the applicant sufficient to comply with 10 CFR 50.33(d), as well as other relevant information of which the reviewer is aware, to determine whether there is any reason to believe that the applicant is an alien or citizen, national, or agent of a foreign country, or an entity that is owned, controlled, or dominated by an alien, a foreign corporation, or foreign government. If there is no such reason to believe based on the foregoing information, no further review is required and the reviewer should proceed to make a recommendation regarding whether there is any foreign control obstacle to granting the application. On the other hand, if there is any reason to believe that the applicant may be owned, controlled, or dominated by foreign interests, the reviewer should request and obtain the additional information specified in Section 2.2.

##### 4.2 Supplementary Review

If it is necessary to obtain the additional information specified in Section 2.2, the reviewer should consider the acceptance criteria above, and consult with the Office of the General Counsel on Commission precedent. Information related to the items listed below may be sought and may be taken into consideration in determining whether the applicant is foreign owned, controlled, or dominated. The fact that some of the below listed conditions may apply does not necessarily render the applicant ineligible for a license.

1. Whether any foreign interests have management positions such as directors, officers, or executive personnel in the applicant's organization.

2. Whether any foreign interest controls, or is in a position to control the election, appointment, or tenure of any of the applicant's directors, officers, or executive personnel. If the reviewer knows that

a domestic corporation applicant is held in part by foreign stockholders, the percentage of outstanding voting stock so held should be quantified. However, recognizing that shares change hands rapidly in the international equity markets, the staff usually does not evaluate power reactor licensees to determine the degree to which foreign entities or individuals own relatively small numbers of shares of the licensees' voting stock. The Commission has not determined a specific threshold above which it would be conclusive that an applicant is controlled by foreign interests.

3. Whether the applicant is indebted to foreign interests or has contractual or other agreements with foreign entities that may affect control of the applicant.

4. Whether the applicant has interlocking directors or officers with foreign corporations.

5. Whether the applicant has foreign involvement not otherwise covered by items 1-4 above.

#### 4.3 Supplementary Determination

After reviewing the additional information specified in Section 2.2, if the reviewer continues to conclude that the applicant may be an alien or owned, controlled, or dominated by foreign interests, or has some reason to believe that may be the case, the reviewer shall determine:

1. The nature and extent of foreign ownership, control, or domination, to include whether a foreign interest has a controlling or dominant minority position.

2. The source of foreign ownership, control, or domination, to include identification of immediate, intermediate, and ultimate parent organizations.

3. The type of actions, if any, that would be necessary to negate the effects of foreign ownership, control, or domination to a level consistent with the Atomic Energy Act and NRC regulations.

On the other hand, if the reviewer determines after reviewing the additional information specified in Section 2.2 that there is no further reason to believe that the applicant is an alien or owned, controlled, or dominated by a foreign person or entity, no additional review is necessary.

#### 4.4 Negation Action Plan

If the reviewer continues to conclude following the Supplementary Determination that an applicant may be considered to be foreign owned, controlled, or dominated, or that additional action would be necessary to negate the foreign ownership, control, or domination, the applicant shall be promptly advised and requested to submit a negation action plan. When factors not related to ownership are present, the plan shall provide positive measures that assure that the foreign interest can be effectively denied control or domination. Examples of such measures that may be sufficient to negate foreign control or domination include:

1. Modification or termination of loan agreements, contracts, and

other understandings with foreign interests.

2. Diversification or reduction of foreign source income.

3. Demonstration of financial viability independent of foreign interests.

4. Elimination or resolution of problem debt.

5. Assignment of specific oversight duties and responsibilities to board members.

6. Adoption of special board resolutions.

## 5. Evaluation Findings

The reviewer should verify that sufficient information has been provided to satisfy the regulations and this Standard Review Plan. In consideration of the guidance of this Standard Review Plan, the reviewer should then draft an analysis and recommendation, based on the applicable information specified in Sections 2 and 4 above, concerning

whether the reviewer knows, or has reason to believe that the applicant is an alien, or is a corporation or other entity that is owned, controlled, or dominated by an alien, a foreign corporation, or foreign government, and whether there are conditions that should be imposed before granting the application so as to effectively deny foreign control of the applicant.

## 6. References

1. Sections 103, 104, and 184 of the Atomic Energy Act of 1954, as amended (42 USC 2133, 2134, and 2234).

2. Part 50 ``Domestic Licensing of Production and Utilization Facilities'' of Title 10 of the Code of Federal Regulations (10 CFR Part 50).

3. General Electric Co. and Southwest Atomic Energy Associates, Docket No. 50-231, 3 AEC **99** (1966).

4. Letter from W. Dircks to J. MacMillan (Dec. 17, 1982) (Re: Babcock & Wilcox/McDermott) (attached).

5. Letter from N. Palladino to A. Simpson (Sept. 22, 1983) w/ attachment (Re: Union Carbide/Cintichem) (attached).

[FR Doc. **99-25182 Filed** 9-27-**99**; 8:45 am]

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# **Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance (NUREG-SR1577r1)**

## **Publication Information**

Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance  
Technical Report Number SR1577r1

## **Abstract**

The NRC is issuing this final Standard Review Plan to describe the process it uses to review the financial qualifications and methods of providing decommissioning funding assurance required of power reactor licenses. A separate SRP was issued for the NRC's antitrust review responsibilities in 1997. This Standard Review Plan is being used as the basis for reviews as the electric utility industry moves from an environment of rate regulation toward greater competition. Although this final Standard Review Plan reflects current regulations and policy, and has been updated to reflect changes to the regulations resulting from responses to the Advance Notice of Proposed Rulemaking and the Draft Statement, it will be updated for any future initiatives. The NRC is concerned that rate deregulation and disaggregation resulting from various restructuring actions involving power reactor licensees could have adverse effects on the protection of public health and safety.

The NRC is publishing Revision 1 to NUREG-1577 to include footnote information omitted in the original version published February 1999.

## **Review Responsibilities**

Primary—Generic Issues and Environmental Projects Branch (PGEB)

Secondary—None

## **I. Areas of Review**

The NRC is issuing this Standard Review Plan (SRP) to describe the process it uses to review the financial qualifications and methods of providing decommissioning funding assurance required of power reactor license applicants and licensees. A separate Standard Review Plan on Antitrust Reviews was issued in December, 1997 (NUREG-1574). Also, a draft SRP Regarding Foreign Ownership, Control, or Domination of Applicants for Reactor License will be issued shortly. The issue of foreign ownership, control, or domination is a policy matter that is under active consideration by the Commission. Each of these SRPs will be used as a basis for reviews as the electric utility industry moves from an environment of rate regulation toward greater competition and the attendant corporate restructuring that competitive forces will likely engender. The NRC issued a draft of this SRP in January, 1997 (NUREG-1577), and received 6 public comment letters as a result. This SRP, like the draft, reflects current NRC regulations and policy. Thus, some of the public comments received that suggested changes to current requirements for financial qualifications could not be considered. However, the NRC has adopted comments on existing processes and procedures in this SRP, where appropriate. Since the NRC issued the draft SRP, a final rule on decommissioning funding assurance was issued on September 22, 1998 (63 FR 50465). This SRP reflects the changes to the NRC's decommissioning funding assurance requirements that the final rule implemented. Additionally, on October 24, 1997, the NRC staff issued SECY-97-253, "Policy Options for Nuclear Power Reactor Financial Qualifications in Response to Restructuring of the Electric Utility Industry." On January 15, 1998, the Commission responded to the staff's proposals in a staff requirements memorandum and indicated that the NRC should continue its current approach to evaluating the financial qualifications of license applicants and licensees of operating nuclear power



plants. The Commission reconfirmed this view in a staff requirements memorandum dated December 9, 1998 on SECY-98-153— “Update of Issues Related to Nuclear Power Reactor Financial Qualifications in Response to Restructuring of the Electric Utility Industry.” If the NRC decides to change its financial qualifications review criteria in the future, or if other changes to relevant NRC policies and requirements are adopted, the NRC will revise this SRP to reflect such changes.

## **II. Acceptance Criteria**

### **1. Financial Qualifications**

Section 182.a. of the Atomic Energy Act of 1954, as amended, (AEA) provides that “Each application for a license... shall specifically state such information as the Commission, by rule or regulation, may determine to be necessary to decide such of the technical and financial qualifications of the applicant ... as the Commission may deem appropriate for the license.” The NRC's regulations governing financial qualifications reviews of applications for licenses to construct or operate nuclear power plants are in section 50.33(f) of Title 10 of the Code of Federal Regulations. Guidance for Construction Permit (CP) financial qualifications reviews is provided in Appendix C to 10 CFR Part 50. Transfers of licenses are governed by 10 CFR 50.80. If a license amendment is required by, for example, the addition of a new or renamed entity to the license, the provisions of 10 CFR 50.90, 50.91, and 50.92 would be applicable. The reviewer will accept applications for licensing actions that provide required information pursuant to the relevant sections cited above.

### **2. Decommissioning Funding Assurance**

Decommissioning funding assurance for nuclear power plants is governed by 10 CFR 50.33(k), 50.75, and 50.82 in a three-stage process. First, as required in section 50.33(k), on or before July 26, 1990, licensees were required to submit a report, including a certification, specifying how financial assurance for decommissioning would be provided. An applicant for an operating license (OL) under 10 CFR Part 50 or a combined license under 10 CFR Part 52 is required, pursuant to 10 CFR 50.33(k)(1), to submit information in the form of a report indicating how reasonable assurance will be provided that funds will be available to decommission the facility. Second, licensees are required to adjust annually the amount of decommissioning funding assurance, using an amount equal to or greater than that required under the formula in section 50.75(c)(2), and report on the status of their decommissioning funds as provided by 10 CFR 50.75(f). Periodic adjustments to the funding amount should be made in coordination with a licensee's rate regulator, if applicable, or by itself. Third, in accordance with section 50.75 (f), 5 years before permanent cessation of operations, a licensee must submit a preliminary decommissioning cost estimate that includes plans for adjusting levels of funds assured for decommissioning to demonstrate that a reasonable level of assurance will be provided that funds will be available when needed to cover the cost of decommissioning. By the time of submission of the post-shutdown decommissioning activities report (PSDAR) required in section 50.82, licensees should have either (1) funds plus an estimate of expected earnings on the fund, or (2) a guarantee, insurance, or other funding assurance method for the total estimated decommissioning cost, as provided in 10 CFR 50.75(e). Final funding plans, and adjustments to them during any safe storage period, are also required, as necessary. For those licensees that shut down their power plants prematurely (that is, before the scheduled end of their operating license term), section 50.82 provides that the schedule for collecting any balance of funds estimated to be needed for decommissioning will be determined on a case-by- case basis. Section 50.75(e) describes allowable funding assurance mechanisms and the circumstances under which licensees may use them. Section III.2. of this SRP provides additional discussion of decommissioning funding assurance. The reviewer will accept the reports, information, and applications for licensing actions that conform to the requirements of these sections of the NRC's regulations.

### **3. Foreign Ownership**

License applications for new facilities or for transfers of ownership of existing facilities may include requests by foreign entities to own all or part of a reactor facility. Section 103d of the AEA prohibits the NRC from issuing a license to an applicant if the NRC knows or has reason to believe that the applicant is owned, controlled, or dominated by an alien, foreign corporation, or foreign government.<sup>1</sup> The reviewer will accept applications having foreign ownership considerations that address issues and provide information as described in the draft SRP Regarding Foreign Ownership, Control, or Domination of Applicants for Reactor Licenses.

## **III. Review Procedures**

The reviewer uses the review procedures described in this section of the SRP as may be appropriate for a particular case.

### **1. Financial Qualifications**

#### **a. Construction Permit Reviews**

The NRC does not currently have any CP applications for review. All reviews for any new CP applications will be performed under the following procedures. Section 50.33(f)(1) requires CP applicants to submit information that “demonstrates that the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated construction costs and related fuel cycle costs.” Appendix C to 10 CFR Part 50 provides more specific directions for evaluating the financial qualifications of CP applicants. Reviewers should confirm that applicants have provided at least 3 types of information: (1) an estimate of construction costs, including plant costs ascribable to the nuclear plant itself; general and overhead plant costs, including any transmission and distribution costs ascribable to the plant; and nuclear fuel cost for the first core load; (2) the source(s) of construction funds, including a financial plan describing internal and external sources of funds; and (3) the latest published annual financial reports, together with any current interim financial statements that are pertinent, including income, balance sheet, and cash flow statements.

In addition, the reviewer should determine whether applicants are subject to section 50.33(f)(3) and Appendix C to 10 CFR Part 50, which require newly-formed entities to provide information showing: (1) the legal and financial relationships they have or propose to have with their stockholders, corporate affiliates, and others (such as financial institutions) upon which they are relying for financial assistance; (2) information to support the financial capability of stockholders, corporate affiliates, and others to meet their current or intended commitments to the applicant(s); (3) any other information considered necessary by the Commission to enable it to determine applicants' financial qualifications; and (4) applicants' statements of assets, liabilities, and capital structure as of the date of the application.

As provided in 10 CFR 50.33(f)(3), additional information is required of newly-formed entities<sup>2</sup> when they are organized for the primary purpose of constructing or operating a nuclear power plant. Thus, for example, the reviewer should treat such an operating company as a newly-formed entity and should review information that is typically contained in operating or participation agreements. The reviewer should also evaluate the ability of the plant owners to meet their obligations to the operating company. If, for example, the owners of an operating company meet the definition of an “electric utility” as provided in 10 CFR 50.2, less detailed information will be required. (As described in the section on OL reviews, a newly-formed entity that is an “electric utility” will not be subject to further review.)

The reviewer should evaluate new companies formed as the result of mergers to determine their status as “electric utilities” or, if they do not meet this definition, evaluate their projected combined financial statements and other relevant information as described in this SRP to determine their financial qualifications. Similarly, the NRC will evaluate formations of new holding companies over existing licensees to determine the potential financial impact of the new company on the existing licensee, but will perform only a limited review if the licensee is an

“electric utility”. A newly-formed entity that has been formed to buy and operate a nuclear plant as its only significant asset (e.g., a “merchant plant”, a “GENCO,” or an exempt wholesale generator (EWG)) would normally be expected to submit more detailed information to support its financial qualifications, unless it meets the definition of “electric utility,” than other applicants. Corporate reorganizations (e.g., functional unbundling of nuclear plant operations from other corporate activities) or initiation of contracts with other parties to provide nuclear plant operational support would not normally be considered to fall within the definition of “newly-formed entities,” although such changes may be subject to review pursuant to 10 CFR 50.80, as described below. The reviewer will determine the financial qualifications of a license applicant for a CP based on the adequacy of the relevant information provided and the applicant's ability to meet the standards stipulated in the NRC's regulations.

The NRC believes that this framework is sufficient to provide reasonable assurance of the financial qualifications of both electric utility and non-electric-utility applicants under the various ownership arrangements currently contemplated. These ownership arrangements include: (1) holding companies; (2) operating, generating, or service company subsidiaries; (3) merged companies; (4) independent power producers (IPPs); (5) exempt wholesale generators; and (6) “hybrid” companies with characteristics of various combinations of these organizations. If entities using unanticipated ownership arrangements apply for new CPs, the reviewer may use the authority under section 50.33(f) either to require adequate information to assure himself or herself that the applicant has demonstrated reasonable assurance of obtaining adequate funds for the safe construction of the facility or to deny issuance of a CP.

#### **b. Operating License Reviews**

“Electric utilities” as defined in 10 CFR 50.2 are exempt under 10 CFR 50.33(f) from financial qualification reviews for OL applications. If the reviewer determines that OL applicants are “electric utilities” and that all of their corporate owners (i.e., parent companies) have been identified, such applicants will not be subject to further NRC financial qualifications review. OL applicants that are not “electric utilities” are required under section 50.33(f)(2) to submit information that demonstrates that they possess or have reasonable assurance of obtaining the funds necessary to cover estimated operating costs for the period of the license. The reviewer will confirm that non-electric utility OL applicants have submitted estimates for total annual operating costs for each of the first 5 years of operation of their facilities, and have also indicated the source(s) of funds to cover operating costs. Information on the sources of funds should include projections of the market price of power in the area in which the plant will be located, any long-term contracts that the applicant has for the plant, contracts or other arrangements with relevant transmission or grid reliability authorities that designate the plant as a “must-run” facility, government-required charges designated for nuclear plant operations (e.g., non-bypassable wires charges), corporate revenues from other sources that may be used at the nuclear plant, and any other information relevant to the source of revenues. The reviewer will evaluate this information for reasonableness and will compare it to plants of similar size, design, and location. If applicable, the reviewer will also use information from *Moody's*, *Standard and Poors*, and *Value Line* or other widely accepted rating organizations to assist in his or her review. If a license applicant has an “investment-grade” rating or equivalent from at least two of these sources, or has demonstrated that it has met the electricity supply and demand test described above, the reviewer will find such applicants financially qualified. If an applicant cannot meet these criteria, the reviewer will also consider other relevant financial information (i.e., information on cash or cash equivalents that would be sufficient to pay fixed operating costs during an outage of at least 6 months, the amount of decommissioning funds collected or guaranteed for the plant in relation to the current estimated decommissioning cost, and any other relevant factors). An OL applicant that is a newly-formed entity organized for the primary purpose of operating the facility is required to submit the information described in 10

CFR 50.33(f)(3). On the basis of the information submitted, the reviewer will issue findings with respect to the financial qualifications of such OL applicants. If the reviewer determines that a license applicant does not meet these financial qualification standards, he or she will either deny issuance or transfer of the OL, condition the OL, or recommend initiation of other regulatory action to mitigate financial qualifications concerns.

#### **c. Combined License Applications**

As authorized in 10 CFR Part 52, applicants may apply for a combined CP and OL license. In accordance with section 52.77, all such applications must contain all of the information required under section 50.33, including information regarding financial qualifications. The review procedures as described in Sections III.1.a. and b. will be used to review any combined applications that the NRC receives.

#### **d. Post-OL Non-transfer Reviews**

The NRC does not systematically review its power reactor licensees once it has issued an OL, other than for transfers discussed in Section III.1.e. However, section 50.33(f)(4) states: "The Commission may request an established entity or newly-formed entity to submit additional or more detailed information respecting its financial arrangements and status of funds if the Commission considers this information to be appropriate. This may include information regarding a licensee's ability to continue the conduct of the activities authorized by the license and to decommission the facility." The NRC has used this provision only in limited situations and normally will not require licensees, including those that are not "electric utilities," to report on their financial qualifications at specified intervals.<sup>3</sup> However, reviewers have and will continue to conduct general follow-up reviews of all licensees by screening trade and financial press reports, and other sources of information. Reviewers will use this information to determine whether to recommend any additional NRC action, including requests for additional information and the assignment of additional inspection resources to monitor the adequacy of plant safety performance.

#### **e. Reviews of Transfers of Licenses**

NRC regulations in 10 CFR 50.80 require Commission review of and written consent to direct as well as indirect transfers of operating licenses, including licenses for nuclear power plants owned or operated by "electric utilities."<sup>4</sup> When the transfer involves a change in the licensee listed on the NRC license, the applicant must also apply for a license amendment under section 50.90. The reviewer will determine whether, in the case of a direct transfer, a proposed transferee is qualified to hold the license, or whether, in the case of an indirect transfer, the holder of the license is qualified to hold the license. Section 50.80(b) requires license transfer applicants to include as much of the information with respect to, among other things, the financial qualifications of the proposed holder of the license as required in section 50.33(f). Thus, the reviewer will use the criteria described in other sections of III.1. of this SRP, as appropriate, to conduct his or her license transfer reviews.

To date, the NRC has evaluated transfers involving mergers, acquisitions, formations of holding companies, and sales of portions of facilities to other parties. The reviewer should evaluate the financial qualifications associated with these transfers by: (1) determining whether the proposed holder of the license will remain an "electric utility" following the direct or indirect transfer; (2) for non- "electric-utility" applicants, reviewing the recent financial performance of the proposed transferee, or, if the proposed transferee is a new entity such as an operating, generating, or service company subsidiary, evaluating the ownership or participation agreement with its owners or other responsible party; and (3) identifying all parent companies that are not licensed by the NRC or did not undergo an NRC section 50.80 review.

The reviewer should treat applications involving changes of ownership, mergers, formation of holding companies, and other restructuring proposals that go beyond corporate name changes or internal reorganizations as potential transfers of licenses, directly or indirectly, through

transfer of control of the license, as subject to section 50.80 review, and not merely subject to a section 50.90 license amendment review. In some cases, a reviewer will need to conduct a “threshold” review to determine whether the proposed action does, in fact, constitute a transfer subject to section 50.80.

Approval of a transfer under section 50.80 will be accomplished by order. When appropriate, a conforming license amendment will be issued. (A name change of a licensee that does not involve license transfer considerations under section 50.80 will be effected by a license amendment issued administratively under section 50.90.) In addition, reviewers should review transfers for their potential impact on the licensee not only to determine the adequacy of funds for safe operation and decommissioning, but to ensure that the licensee maintains adequate technical qualifications and organizational control and authority over the facility.<sup>5</sup> All orders approving section 50.80 transfers are signed by the Director, Office of Nuclear Reactor Regulation (NRR). Additionally, the Director, NRR, will consult with the Commission on all applications for transfers of licenses that represent new or unusual approaches or organizations.

For mergers and restructuring actions involving the formation of holding companies, the reviewer determines whether the surviving licensed owner or operator will remain an “electric utility” as defined in section 50.2. Because of the concern that the establishment of a holding (parent) company over a licensee could eventually result in the parent depleting assets from the licensee to such an extent that the ability to fund safe operations and decommissioning could be affected, the reviewer should recommend that transfer approvals be conditioned to require the licensee to inform the NRC before significant assets are transferred from the licensee to its parent or related company. When co-owners have requested NRC consent to transfer their interests in power reactors, the reviewer should determine the financial qualifications of each buyer to own or operate its proposed percentage share of the facility by following the same procedure as described in other sections of III.1. of this SRP. Generally, the reviewer should not deem as license transfers under section 50.80 those internal corporate reorganizations (i.e., that do not entail mergers, holding company formations, acquisitions, or divestitures) that do not alter the licensee's status as an “electric utility,” do not substantially affect corporate ownership or identity of the licensee, or do not otherwise materially affect the licensee's financial qualifications. However, the reviewer should determine whether such reorganizations are subject to NRC review and determine whether the licensee's technical qualifications are affected by the reorganization.

The reviewer should also evaluate financial qualifications of non-“electric-utility” applicants on the basis of financial data based on current information from the financial ratings services such as *Moody's* and *Value Line*. To date, the NRC has not found any proposed restructuring actions in which the surviving licensee would not remain an “electric utility” or that would render the proposed transferee not financially qualified.<sup>6</sup> The reviewer will publish the results of such an evaluation in a Safety Evaluation Report (SER), which is used by the Associate Director of Projects staff to issue an order, with a license amendment when appropriate. These actions are noticed in the *Federal Register*.

NRC regulations in 10 CFR 50.81 govern the relationships that licensees may have with their creditors, including trustees under any mortgage, pledge, or lien and court-appointed trustees under bankruptcy proceedings. This section permits the creation of such creditor relationships, provided that creditors do not take possession of the facility and are subject to the same restrictions under NRC regulations and the AEA as the licensee. The NRC does not typically review creditor relationships other than sale-leaseback<sup>7</sup> transactions. See *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Unit 1), CLI-85-17, 22 NRC 875 (1985).

## **2. Decommissioning Funding Assurance**

### **a. Verifying the Initial Certification Amount**

As part of the reporting requirements in section 50.75(f), a licensee's calculations of both the basic certification formula amount and the annual escalation amount are subject to NRC verification. As described in section III.2.b. of this SRP, NRC regulations require licensees to report information on decommissioning funds at least once every two years following the initial report filed by March 31, 1999.

(1) Power reactor licensees were required to certify by July 27, 1990, that they would have adequate funds to decommission each unit by the time they plan to shut the unit down.

Pursuant to section 50.33(k), a new applicant for an OL is required to submit information in the form of a report indicating how reasonable assurance of decommissioning will be provided. The reviewer should confirm that this certification is based on the applicable formulas contained in sections 50.75(c)(1) and (2), or upon a site-specific estimate, provided that the estimate is not less than the value derived from section 50.75(c), using the following criteria:

(a) Section 50.75(c)(1) contains two formulas to determine the certification amounts in 1986 dollars for pressurized water reactors (PWRs) and boiling water reactors (BWRs). The formulas include scaling factors to account for size differences in reactors. The decommissioning cost ranges *in 1986 dollars* are from \$85.6 million to \$105 million for PWRs and from \$114.8 million to \$135 million for BWRs.

(b) Section 50.75(c)(2) contains a formula to determine the annual change (inflation or escalation, although deflation is also possible) in the three primary decommissioning cost components—labor, energy, and low-level waste (LLW) burial charges.

- The 1990 certifications should have included escalation calculations from 1986 dollars to 1989 or 1990 dollars.
- Licensees are required to recalculate the formula amounts annually to account for changes in the three decommissioning cost factors during the previous year. Calculations are to be based on data from the U.S. Bureau of Labor Statistics and current versions of NUREG-1307 as specified in section 50.75(c)(2). (Power reactor licensees are required to change their collection amounts periodically. For licensees that remain under rate regulation, this period may coincide with licensees' usual rate cycles. Licensees that are not rate regulated or do not have access to non-bypassable charges for decommissioning should adjust their funding levels over reasonable periods. In all cases, however, pursuant to section 50.75(e)(2), the NRC reserves the right, either in cooperation with a licensee's rate regulators or independently, to take action on a case-by-case basis to modify a licensee's schedule for the accumulation of decommissioning funds.)

(2) A licensee's calculations of both the basic certification formula amount and the escalation amount from 1986 to the current year are subject to NRC verification. Such verification will be determined primarily by the reviewer's evaluation of the biennial reports required in 10 CFR 50.75(f), as described in III.2.b. of this SRP, but may also be accomplished through the NRC inspection process. Although data may be over a year out-of-date, the licensee is required to have performed an escalation calculation within the previous 12 months.

- Because escalation in the three decommissioning cost factors, labor, energy, and LLW disposal, are given regionally in the reference documents, the reviewer should check a licensee's methodology and sources in making the calculations.
- Licensees may use information from several tables of regional data in the U.S. Department of Labor, Bureau of Labor Statistics cited in section 50.75(c). Such information is subject to reviewer or inspector confirmation that the choice of data is reasonable. That is, site-specific data should not vary substantially from generic cost data without demonstrable reason.

(3) The NRC formulas in section 50.75(c) include only those decommissioning costs incurred by licensees to remove a facility or site safely from service and reduce residual radioactivity to a level that permits: (1) release of the property for unrestricted use and termination of the license; or (2) release of the property under restricted conditions and termination of the license. Thus, for example, the costs of dismantling or demolishing non-radiological systems and structures are not included in the NRC cost formulas. In addition, the costs of managing and storing spent fuel on site until transfer to the Department of Energy for permanent disposal are not included in NRC cost formulas. Therefore, the reviewer will ensure that either—

- Such costs are not included in licensee formula calculations; or
- If such costs are included, they are separately identified and are not used for NRC-required decommissioning funding assurance.

#### **b. Evaluating the Biennial Decommissioning Fund Status Reports**

The reviewer should confirm that the following information is contained in the biennial decommissioning fund status reports:

(1) As provided in 10 CFR 50.75(f)(1), each power reactor licensee is required to report to the NRC on a calendar year basis, beginning on March 31, 1999, and every 2 years thereafter, on the status of its decommissioning funding for each reactor or share of a reactor that it owns. The information in this report must include, at a minimum: the amount of decommissioning funds estimated to be required, pursuant to 10 CFR 50.75(b) and (c), or a site-specific estimate, as appropriate; the amount accumulated to the end of the calendar year preceding the date of the report; a schedule of the annual amounts remaining to be collected; the assumptions used regarding rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections; any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(1)(ii)(C); and any modifications to a licensee's current method of providing financial assurance occurring since the last submitted report. Any licensee for a plant that is within 5 years of the projected end of operation, or where conditions have changed such that it will close within 5 years, or has already closed, is required to submit the report annually.

(2) As long as the information described above is included in the report, no specific reporting format is required. However, each licensee should indicate the assurance mechanism being used as a source of revenues for the external sinking fund (e.g., traditional “cost-of-service” ratemaking, a non-bypassable charge, long-term contracts that the NRC has found to be acceptable pursuant to 10 CFR 50.75(e)(1)(v)).<sup>8</sup> If the assumed real earnings rate on an external sinking fund exceeds 2 percent, each licensee should indicate the specific rate ruling or decision by its rate regulator that documents the earnings rate being used, as provided in 10 CFR 50.75(e)(1)(I) or (ii). If a licensee is using an assurance mechanism other than an external sinking fund, it should include as part of the report adjustments to the assurance mechanisms (e.g., a surety bond or letter of credit) to account for any escalation since the previous report.

#### **c. Verifying Annual Amortization Amounts for External Sinking Funds**

The reviewer should verify the accuracy of the annual amortization amounts for external sinking funds using the following procedures:

(1) Once a licensee has established the decommissioning cost for each of its reactors in current-year dollars, the reviewer should confirm that the licensee will have this amount (less future estimated earnings as provided in 10 CFR 50.75(e)(1)(I) or (ii)) by the time it plans to shut down by using one of the financial assurance mechanisms allowed in section 50.75(e). Virtually all power reactor licensees so far have chosen to use an external sinking fund. This assurance method requires a licensee, or a designated representative of a licensee, to make payments, at least annually, into an external trust fund held by a third party, usually a bank licensed by a State, acting as trustee. The trustee will invest a licensee's deposits in order to earn interest and dividends to increase the value of the fund. If a licensee permanently shuts

down its reactor at the expected end of the reactor's operating life, it should have sufficient funds (less future estimated earnings) to complete decommissioning, either by immediate dismantlement or by storage over some period followed by deferred dismantlement. If, on the other hand, a licensee permanently shuts down its reactor prematurely, it will need to accumulate any shortfall in decommissioning funds (less future estimated earnings). As provided in section 50.82(c), the collection period for making up any shortfall will be determined on a case-by-case basis.

(2) In the 1988 decommissioning rule, the NRC deferred to the ratemaking authority of the PUCs and FERC to set annual rates for decommissioning. As rate deregulation proceeds, some licensees may no longer have rate regulatory oversight with respect to decommissioning. (To the extent such oversight continues to be provided, it may include direct oversight as provided in traditional cost-of-service or similar ratemaking, or indirect oversight through government-mandated non-bypassable charges or other mechanisms.) The NRC expects that, for licensees that continue to have direct or indirect rate regulatory oversight, it will continue to be able to defer to rate regulators to determine the appropriate amortization schedule for decommissioning funds, provided that there is reasonable assurance that, at the time of permanent cessation of operations, decommissioning funds plus estimated earnings will be available in the amount estimated to be necessary to complete decommissioning. If the source of decommissioning trust funds is a State-mandated non-bypassable charge, the reviewer should, as appropriate, evaluate the assumptions used in calculating and collecting the charge to determine that it, plus estimated future earnings, will be adequate over the stipulated collection period, to provide the funds estimated to be needed for decommissioning. Provisions should be made in the non-bypassable charge to cover increases in decommissioning cost estimates. If the non-bypassable charge does not have such provisions, the licensee will be required to use one of the other decommissioning funding assurance mechanisms allowed in 10 CFR 50.75(e) for the unfunded difference. The reviewer should exercise greater oversight of those licensees that no longer have such rate regulatory oversight. In either case, the NRC reserves the right to review, as needed, the rate of accumulation of decommissioning funds, and, either independently or in coordination with a licensee's rate regulators, take additional actions as appropriate on a case-by-case basis, including modification of a licensee's schedule for the accumulation of decommissioning funds. When the reviewer evaluates licensees' amortization schedules, he or she should use the following benchmarks:

(a) Some licensees will base their amortization schedules on the certification amount adjusted to current-year dollars. At its simplest, licensees should have an annual amortization amount that equals the adjusted certification amount divided by the remaining years of projected plant operation. This amount will change as the certification amount is continually readjusted to account for inflation and trust fund earnings and as the remaining operating life decreases.

(b) Other licensees will project decommissioning costs out to the planned time of permanent shutdown by inflating costs at some predetermined inflation rate. They will most likely also discount the fund by the expected earnings rate on the fund. On the basis of these calculations, licensees will be able to calculate an annual amortization amount that, coupled with projected earnings, will equal the inflated certification amount.

- Although projected inflation rates may be expected to vary, they should be in the 2 percent to 5 percent range based on recent economic experience. Some licensees may use higher rates for LLW disposal costs.
- Projected earnings rates on funds may also vary. A licensee, of course, may take credit for any earnings already accumulated. However, projected future earnings are limited to a real rate (i.e., the nominal earnings rate less inflation) of up to two percent, unless a licensee's rate regulator authorizes the use of a higher rate.



(c) The decommissioning rule is structured to allow for changes in amortization rates over time. Thus, it is not essential that a licensee achieve prorated annual amortizations as long as the licensee periodically adjusts the amortization rate to compensate for changes in the certification amount and the fund earnings rate.

- Licensees' adjustments to the amortization rate do not need to be made annually, but should be coordinated with licensees' rate case schedules with their PUCs, if applicable. Rate cases are typically on a three-year cycle, but the licensee should document decommissioning rate filings and their underlying assumptions.
- Licensees that no longer have rate regulatory oversight or access to non-bypassable charges for decommissioning should adjust their assurance mechanisms annually to reflect any changes in decommissioning cost estimates derived from the formulas or site-specific estimates in 10 CFR 50.75(c).

(d) Some licensees are part owners of power reactors. In such cases, the reviewer should evaluate separately each licensee's amortization schedule for its share of the facility, unless the lead licensee has agreed to coordinate funding documentation and reporting for all co-owners.

#### **d. Evaluating Investments in External Sinking Funds**

The reviewer should use the following criteria to evaluate investments in external sinking funds:

(1) For power reactor licensees that are either subject to cost-of-service rate regulation or have access to a non-bypassable charge(s) to recover the estimated costs of decommissioning, the NRC will typically defer to State PUCs and FERC to set standards for the types of investments allowed for external sinking funds. For other power reactor licensees, the NRC has specified in Regulatory Guide 1.159 that external decommissioning trust fund investments should be "investment- grade."<sup>9</sup>

(a) For example, this means that corporate or municipal bonds or preferred stocks should be rated at least "BBB" by Moody's or an equivalent rating by another bond rating agency.

(Standard and Poors, Duff and Phelps, and Fitch are examples of other major rating agencies.)

(b) Common stocks are not rated. Although the NRC does not explicitly prohibit external trusts from being invested in common stocks, NRC guidance indicates that speculative issues (e.g., stocks of companies with limited operating history, or that have low "safety" rankings from rating agencies) should be avoided. There is no simple way to determine whether a stock issue is speculative. A licensee's own stock, as well as those of other power reactor licensees are inappropriate.

(c) As long as an external trust is invested in a diversified portfolio of bonds, stocks, and other investments, losses on any one issue should not significantly affect the overall value of the trust fund. Further, because external trust funds are required to be adjusted periodically, losses in one year may be recouped by increased amortizations in following years. When the reviewer evaluates the amortization amounts, he or she should ensure that licensees are revising their amortization rates based on the current net market value of their trust investment portfolios.

(2) The reviewer should confirm that power reactor licensees that are either subject to cost-of-service rate regulation or have access to a non-bypassable charge(s) to recover the estimated costs of decommissioning have documented any rate regulators' decisions with respect to investments in external sinking funds and have them available at a licensee location for possible NRC inspection. Other licensees should document their investments and have them available for NRC inspection.

#### **e. Evaluating External Sinking Fund Trust Documents**

The reviewer should use the following criteria to evaluate external sinking fund trust documents:

(1) Power reactor licensees were required to submit executed or conformed copies of their external sinking fund trusts (or other assurance mechanisms, if used) by July 27, 1990.

Essentially, all power reactor licensees are currently using external sinking fund trusts. These trusts were reviewed by the NRC shortly after submission in 1990. The NRC notified those few licensees whose trust provisions were found to be deficient. In accordance with 10 CFR 50.75(f),<sup>10</sup> licensees are required to submit any material revisions to trust agreements to ensure that NRC records are current. Material revisions to trust agreements include: (1) changes in trustees; (2) provisions for payment into and out of the trust; (3) changes in trust investment management; and (4) any other changes that would have a direct bearing on the amount, availability, and assurance of funds for decommissioning. The reviewer should follow review procedures for these changes similar to those it used for the 1990 submissions.

(2) The NRC does not require licensees to use specific trust wording. However, sample wording is provided in Appendix B.3.1. of Regulatory Guide 1.159. Trusts are acceptable in this respect if they contain the following provisions:

(a) The trust should be segregated from the licensee's assets and outside the licensee's administrative control. The licensee should avoid day-to-day investment decisions.

(b) The trustee should be licensed to act as trustee by State or Federal authority.

(c) Disbursements from the trust should be restricted to decommissioning expenses or for transfer to another assurance mechanism acceptable under section 50.75(e). Licensees may make withdrawals from decommissioning trust funds as long as the purpose of such withdrawals meets the criteria specified in section 50.82(a)(8)(I). In addition, licensees are restricted at various stages of the decommissioning process by section 50.82(a)(8)(ii) to (iv) in the amounts of funds they may withdraw for decommissioning expenses until the NRC has terminated the license. Finally, licensees may not use decommissioning trust funds for "operational" expenses (e.g., waste disposal costs while a plant remains in operating status).

#### **f. Evaluating Other Financial Assurance Mechanisms**

The reviewer should evaluate other acceptable financial assurance mechanisms using the following criteria:

(1) If a power reactor licensee decides to switch from an external trust to some other assurance mechanism, the licensee should submit information on this new mechanism to the NRC in accordance with section 50.9 and Regulatory Guide 1.159, Section 2.6.1. Sample wording of other mechanisms is provided in Regulatory Guide 1.159.

(2) Third-party guarantee mechanisms, such as surety bonds or letters of credit, should guarantee the total amount of currently estimated decommissioning costs. If these mechanisms are used in combination with other assurance mechanisms, the combined amount should at least equal current estimated decommissioning costs.

(3) Licensees or license applicants who use long-term contracts as a method of demonstrating decommissioning funding assurance must demonstrate that the provisions of the contracts meet the criteria specified in 10 CFR 50.75(e)(1)(v),

(4) As indicated in 10 CFR 50.75(e)(1)(vi), the reviewer should evaluate other decommissioning funding assurance mechanisms or combinations of mechanisms proposed by licensees or license applicants on a case-by-case basis to determine that the mechanism or combination of mechanisms provide assurance of decommissioning funding equivalent to that provided by the mechanisms specified in 10 CFR 50.75(e) (1)(I)-(iv).

#### **C. Foreign Ownership**

As indicated in Section II.3. of this SRP, foreign ownership, control, or domination of a power reactor licensee is prohibited by the Atomic Energy Act and the NRC's regulations. Because the Commission has determined that all co-owners of reactor facilities are co-licensees, each licensee of a power reactor must be evaluated to determine that it is not owned, controlled, or dominated by an alien, foreign corporation, or foreign government. In each case, the staff will evaluate the totality of the facts and circumstances against Com-

mission precedent (e.g., *General Electric Co. and Southwest Atomic Energy Assoc.*, 3 AEC 99 (1966)) in order to determine whether foreign ownership, control or domination exists. The NRC has not determined whether any percentage ownership would be sufficiently small as to be considered *de minimis*. (The staff notes that, normally, it does not evaluate power reactor licensees to determine the degree to which foreign entities or individuals own their voting stock.) A comprehensive discussion of NRC review criteria for evaluating these issues is contained in a draft SRP Regarding Foreign Ownership, Control, or Domination of Applicants for Reactor License that will be issued soon.

#### **IV. Evaluation Findings**

The reviewer verifies that sufficient information has been provided to satisfy the requirements of this Standard Review Plan section and the underlying regulations, and concludes that his or her evaluation is sufficiently complete and adequate to support the conclusion to be included in the staff's safety evaluation report that the applicant (1) is financially qualified to conduct the activities under the license, (2) has satisfied the NRC's decommissioning funding assurance requirements, and (3) is not owned, controlled, or dominated by a foreign individual or entity.

#### **V. Implementation**

The following is intended to provide guidance to applicants and licensees regarding the NRC staff's plans for using this SRP.

Except in those cases in which the applicant proposes an acceptable alternative method for complying with specified portions of the NRC's regulations, the method described herein will be used by the staff in its evaluation of conformance with Commission regulations.

#### **VI. References**

1. Part 50 "Domestic Licensing of Production and Utilization Facilities" of Title 10 of the *Code of Federal Regulations* (10 CFR Part 50)

—10 CFR 50.33(f)

—10 CFR 50.33(k)

—10 CFR 50.75

—10 CFR 50.82

—10 CFR Part 50, Appendix C

2. Part 30 "Rules of General Applicability to Domestic Licensing of Byproduct Material" of Title 10 of the *Code of Federal Regulations* (10 CFR Part 30)

—10 CFR Part 30, Appendices A and C

The NRC regulation that implements this prohibition in the Atomic Energy Act is 10 CFR 50.38, which states:

Any person who is a citizen, national, or agent of a foreign country, or any corporation, or other entity which the Commission knows or has reason to believe is owned, controlled or dominated by an alien, a foreign corporation, or a foreign government, shall be ineligible to apply for and obtain a license.

The NRC views the term, "newly-formed entity," in the context of CP, OL, or post-OL reviews, as being largely self-explanatory, but is providing the following working definitions to assist the reviewer in determining whether an applicant is a "newly-formed entity" or an "established entity:"

A *newly-formed entity* is a company that has been formed or organized for the primary purpose of constructing, operating, owning, or decommissioning a nuclear power plant, and does not have an established five-year financial record, or demonstrated a financial capability for raising and managing capital similar to the level required to fund a nuclear power plant's construction, capital additions, and operating and decommissioning expenses, as appropriate, or the licensee's stipulated share of those operating expenses. A nuclear operating company formed from an existing power reactor licensee or licensees is a newly-formed entity.

An *established entity* is a company that has an established and proven financial, construction, operational, or decommissioning record of five years or more for managing or owning a nuclear power plant, or has an established record of raising and managing capital similar to the level required to fund a nuclear power plant's construction, capital additions, and operating and decommissioning expenses, as appropriate, or the licensee's stipulated share of those operating expenses.

All power reactor licensees are required, pursuant to 10 CFR 50.71(b), to submit annual financial reports.

Section 50.80(a) reads, "No license for a production or utilization facility, or any right thereunder, shall be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the Commission shall give its consent in writing."

A separate SRP on technical qualifications of license transfer applicants is being developed.

In one case, the NRC received information as part of a request for approval of the formation of a holding company over a licensee that indicated that the licensee did not meet the NRC's definition of an "electric utility." However, the formation of the holding company in this case did not cause the licensee's status as an "electric utility" to change.

Sale-leaseback transactions typically involve the licensed owner of a nuclear power plant selling all or a portion of its share of the plant to an investor, who then leases back that portion of the facility to the licensee. The licensee continues to "possess" and/or operate the plant and is responsible for safe operation and decommissioning under the terms of the NRC license.

To the extent that power reactor licensees have received rate regulator approval to use market-based rates for a significant portion of their nuclear-related revenues (i.e., greater than 20 percent), the NRC will not consider them to be subject to traditional cost-of-service rate regulation for that portion of their rates.

Regulatory Guide 1.159, "Assuring the Availability of Funds for Decommissioning Nuclear Reactors," August 1990.

See also Section 2.1.6. of Regulatory Guide 1.159.