

POLICY ISSUE NOTATION VOTE

November 8, 2002

SECY-02-0199

FOR: The Commissioners

FROM: William D. Travers
Executive Director for Operations

SUBJECT: DENIAL OF PETITION FOR RULEMAKING TO USE INFORMATION FROM
PRIOR LICENSING ACTIONS AS RESOLVED INFORMATION FOR EARLY
SITE PERMIT AND COMBINED LICENSE APPLICATIONS (PRM-52-1)

PURPOSE:

To obtain Commission approval for denial of a petition for rulemaking to use information from prior licensing actions as resolved information during the preparation and review of early site permit (ESP) and combined license (COL) applications.

BACKGROUND:

By letter dated July 18, 2001, the Nuclear Energy Institute (NEI) submitted a petition for rulemaking (PRM) seeking to amend Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52. The petitioner requested that the Nuclear Regulatory Commission (NRC) regulations governing ESP and COL applications at existing reactor sites be amended to improve the efficiency of the application and review process for applicants seeking ESPs or COLs at sites with existing licensed facilities. The ESP amendment would allow an applicant seeking an ESP at a site for which a construction permit or operating license had been previously issued to use siting information from the previous licensing action in which stakeholders had the opportunity to raise concerns on site-related matters in a public hearing and such siting information has been approved by the NRC as baseline information and treat it as resolved information. The COL amendment would allow an applicant to incorporate and treat as resolved "programmatic"

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information as well as site information. The petitioner believes that its proposed amendments would improve the focus and efficiency of the ESP and COL licensing processes.

A notice of receipt of the petition was published in the *Federal Register* on September 24, 2001 (66 FR 48832). The NRC received letters from 10 commenters. Nine of the 10 commenters were in favor of the petition. Seven of the favorable letters were from nuclear utilities, one was from a vendor, and one was from the petitioner. One of the commenters, a member of a public advocacy group, opposed the petition.

Separately, the NRC is conducting rulemaking to amend Part 52. This rulemaking activity addresses lessons learned during previous design certification reviews and addresses certain elements of the ESP, design certification, and COL review processes. NEI requested that its petition be incorporated into the ongoing rulemaking effort; however, the staff proposes to deny the petition.

DISCUSSION:

According to the petitioner's proposal, the regulatory requirements and siting and programmatic information to be used as a basis for evaluating the acceptability of an ESP or COL located on a site for which a construction permit or operating license has been previously issued by the NRC would be established, in part, by the regulatory requirements and information that the applicant proposes to "incorporate by reference" from the "current licensing basis" for that construction permit or operating license. The applicant would have to supplement the incorporated information to the extent that there is significant new information on, *inter alia*, the ability of the site to support the additional nuclear facility contemplated by the ESP, information on cumulative radiological impacts, and information addressing new regulations. The programmatic information would be supplemented to address new regulations. Regulatory requirements and information incorporated by reference that do not need to be supplemented per the petition would be treated as resolved, unless the NRC complies with the Backfit Rule, 10 CFR 50.109. Regulatory requirements and information incorporated by reference that must be supplemented would be subject to NRC review and approval, and the Backfit Rule would not apply.

The NRC staff recommends that the Commission deny the petitioner's proposal. An applicant that wants to expand the use of a site that currently has one or more nuclear power reactors or for which a reactor was previously considered by the NRC may incorporate by reference information already filed with the Commission. The burden for demonstrating the relevance of the information to the pending action and to current regulatory requirements rests with the applicant.

The fundamental objective of the petitioner's proposal—resolution of issues in an ESP or a COL proceeding—appears to be based upon a misapplication of the "current licensing basis" concept and the Backfit Rule. The "current licensing basis" of a facility represents the licensing basis of that facility as it has evolved over time. There is no "current licensing basis" of a site for which a construction permit or operating license may already have been issued that could be applied to an ESP or COL. More importantly, information for an existing facility may not be technically applicable to support the licensing of a new facility to be located on the same site. The Backfit Rule was intended to address a licensee's reasonable expectation of regulatory stability. An ESP or a COL applicant, even one that already possesses a construction permit or operating license for a facility at the site for which an ESP or a COL is being sought, should have

no regulatory expectation that the NRC's determination on whether the application complies with applicable regulatory standards would be constrained by the "current licensing basis" for the earlier-issued construction permit or operating license for a facility at the site. It is inappropriate to extend the concepts of the "current licensing basis" and backfitting from prior separate licensing actions to new licensing actions.

The petitioner claims the proposed regulations will enhance the efficiency of the regulatory process by eliminating duplicate reviews of matters resolved in previous proceedings. The NRC staff does not believe that the petitioner's proposal would produce efficiencies in the review of an ESP or COL for a site on which a nuclear power reactor is currently or was formerly located. First, the potential complexity of the issues and the level of analysis necessary to establish that there is no significant new information for each relevant ESP or COL subject matter is likely to require at least as many resources as would be consumed if the proposed amendments were not adopted. Second, regardless of whether the petitioner's rule is adopted, the NRC has to evaluate cumulative radiological and environmental impacts of the proposed new facility, the potential safety impacts of the existing facility on the proposed facility and the proposed facility on the existing facility. Third, quite apart from the question of whether the Commission could bind interested persons who were not parties to the earlier proceedings, the NRC staff does not believe that there would be any significant reduction in the matters that may be addressed in a hearing. The proposal would merely change the focus of the hearing to whether (1) the applicant considered and adequately characterized all new and significant information, (2) the referenced information meets current requirements, and (3) the accuracy and completeness of any new information to support the existing information is adequate to meet the new requirement. Lastly, the NRC does not believe that there would be any increase in regulatory efficiency in the agency's compliance with the National Environmental Policy Act (NEPA). Following the receipt of an ESP application, the NRC would conduct a scoping process involving interested stakeholders. Under existing provisions, the scoping process in Part 51 already permits the NRC to identify existing information and determine whether the environmental issues related to a proposed ESP may be narrowed.

The NRC believes that some stakeholders may perceive the petitioner's proposal as increasing public confidence in the NRC, inasmuch as it provides for a regulatory process and standard for assessing whether prior NRC findings on siting may have validity with respect to a new facility to be located at the same site. By contrast, the NRC believes that other stakeholders may view the petitioner's proposal as decreasing public confidence in the NRC. These stakeholders may perceive the proposal as narrowing, rather than refocusing, the scope of the ESP or COL application and review process, the scope of the NRC's compliance with NEPA, and the scope of hearings associated with the issuance of an ESP or a COL. Such stakeholders may (incorrectly) perceive that the NRC is accepting old, out-of-date information and compliance with old requirements solely because the ESP is located on a site with an existing facility. Overall, the impact on public confidence in the NRC is unclear.

The NRC staff recommends the denial of the petition as submitted.

The attached *Federal Register* notice provides the bases for denial.

COORDINATION:

The Office of the General Counsel has no legal objection to the denial of this petition.

RECOMMENDATIONS:

That the Commission:

- (1) Approve denial of the petition for rulemaking and publication of the *Federal Register* notice of denial (Attachment 1).
- (2) Note that:
 - a. a letter is attached for the Secretary's signature (Attachment 2) informing the petitioner of the Commission's decision to deny his petition; and
 - b. the appropriate congressional committees will be informed.

/RA/

William D. Travers
Executive Director
for Operations

Attachments:

1. *Federal Register* Notice of Denial
2. Letter to Bishop

NUCLEAR REGULATORY COMMISSION

10 CFR Part 52

[Docket No. PRM 52-1]

Nuclear Energy Institute;
Denial of Petition for Rulemaking

AGENCY: Nuclear Regulatory Commission.

ACTION: Denial of petition for rulemaking.

SUMMARY: The Nuclear Regulatory Commission (NRC) is denying a petition for rulemaking submitted by the Nuclear Energy Institute (NEI or the petitioner) (PRM 52-1). The petitioner requested that the NRC amend its regulations to allow applicants seeking an early site permit (ESP) and a combined license (COL) to use existing information from prior licensing actions as resolved information that has been approved by the NRC and has been subject to a public hearing. The NRC denies the petition for the following reasons. Incorporation by reference of information which is relevant and material to the ESP and COL applications is already permitted by current NRC regulations. The petitioner's proposal to extend NRC findings from an earlier licensing action to a new and different licensing action appears to be based on a misapplication of "current licensing basis" and backfitting concepts. Furthermore, the proposal would not significantly reduce the scope of issues that must be reviewed and addressed by the NRC or the scope of matters that may be raised in a hearing.

ADDRESSES: Copies of the petition for rulemaking, the public comments received, and the NRC's letter of denial to the petitioner are available for public inspection, or copying for a fee, at

the NRC's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. These documents are also available on the NRC's rulemaking Web site at <http://ruleforum.llnl.gov>.

FOR FURTHER INFORMATION CONTACT: Stephen S. Koenick, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 415-1239, e-mail ssk2@nrc.gov.

SUPPLEMENTARY INFORMATION:

Background

By letter dated July 18, 2001, NEI submitted a petition for rulemaking (PRM) to amend 10 CFR Part 52. The petitioner requested that the NRC regulations governing ESP and COL applications at existing reactor sites be amended to make the development and regulatory review of the application more efficient. The petitioner proposes to incorporate by reference and treat as resolved existing information and, by so doing, eliminate the need for what it believes is duplicate applicant preparation and NRC review of existing information relating to a licensed facility that has been previously approved by the NRC and has been subject to a public hearing. The petitioner believes that its proposed amendments would enhance the focus and efficiency of the ESP and COL licensing processes.

A notice of receipt of the petition was published in the *Federal Register* on September 24, 2001 (66 FR 48832). The comment period closed on November 8, 2001. The NRC received

letters from 10 commenters. Nine of the 10 commenters were in favor of the petition. Seven of the favorable letters were from nuclear utilities, one was from a vendor, and one was from the petitioner. One commenter, a member of a public advocacy group, opposed the petition. The comments are discussed in this document.

Separately, the NRC is currently conducting rulemaking to amend 10 CFR Part 52. This rulemaking activity addresses lessons learned during previous design certification reviews and addresses certain elements of the ESP, design certification, and COL review processes. NEI requested that its petition be incorporated into the ongoing rulemaking effort. Since the NRC is denying the petition, further consideration of the petition during the Part 52 rulemaking is not necessary.

The Petition

The petitioner expects that existing licensees will order new nuclear power reactors in the future and that many of the new reactors will be located on sites of currently operating plants. Additionally, the petitioner anticipates that the new reactors will rely on a number of the operational programs currently being used by the existing licensees. The petitioner believes that its proposed §§52.16 and 52.80 should be added to Part 52 to allow the use of existing information as a baseline and to limit the review and opportunity for a hearing to the consideration of changed circumstances, such as new regulations and significant new information, to improve the efficiency of the ESP and COL licensing processes. In its July 18, 2001, letter forwarding the petition, the petitioner requested that the proposed amendments be included in the Part 52 rulemaking now in progress.

The petitioner notes that Subpart A of Part 52 contains provisions governing issuance of ESPs. The petitioner proposes that a new §52.16 be added to Subpart A to allow an ESP applicant to incorporate, by reference, all or portions of the “current licensing basis” for an existing reactor site to the extent that it is valid and applicable to one or more additional nuclear power plants that “fit within the ESP envelope.” Proposed §52.16 also would require that any information incorporated by reference be augmented to include:

1. significant new safety or environmental information that materially affects the ability of the site to support the proposed additional nuclear facility;
2. information regarding the cumulative radiological and environmental impacts of the existing facility and the facility as described in the ESP application;
3. an analysis of the potential safety impacts of the existing facility on the suitability of the site for the facility as described in the ESP application;
4. an analysis of the potential safety impacts on the existing facility from the facility as described in the ESP application; and
5. information that addresses regulations applicable to siting issues that became effective after licensing of the current facility to the extent that these regulations are not addressed in the current licensing basis.

The petitioner states that under proposed §52.16, the NRC would treat those matters incorporated by reference as resolved, except to the extent that those matters are subject to augmentation with the new information described above. The petitioner also states that this section would allow the NRC to impose a change in the application with respect to the information incorporated by reference to the extent that the change satisfies the principles underlying the Backfit Rule in 10 CFR 50.109. The petitioner believes that in preparing the environmental impact statement (EIS) for the ESP, the NRC should adopt the applicable portions of the existing EIS for the site, modified or supplemented as necessary to reflect the NRC's review of the new environmental information described above.

The petitioner notes that Subpart C of 10 CFR Part 52 contains provisions governing issuance of COLs. The petitioner states that proposed §52.80, with provisions similar to those proposed in §52.16, would be added to Subpart C. The petitioner also states that proposed §52.80 would allow a COL applicant to incorporate by reference programmatic information identified in the "current licensing basis" of an existing licensed facility located at the same site or at a site owned or operated by the same licensee. Programmatic information, as identified by the petitioner, includes, but is not limited to, radiological emergency response plans, organizational structure, administrative controls to assure safe operation, plans for conducting normal operations, physical security plans, and quality assurance programs. Proposed §52.80 would require this programmatic information to be augmented to include information on regulations that became effective after the existing facility was licensed to the extent that these regulations are not addressed by the current licensing basis for the existing facility. The petitioner states that under this proposed section, the NRC would treat those matters incorporated by reference from the existing facility as resolved, except to the extent that there is

new information. The petitioner believes that the NRC could direct that a change be made in the COL application with respect to the information incorporated by reference to the extent that the change satisfies the principles underlying 10 CFR 50.109.

The petitioner states that the proposed amendments would not only be consistent with NRC's mission to ensure adequate protection of the public health and safety, the common defense and security, and the environment, but would also focus NRC reviews on new information and "the incremental impact of an additional unit at an existing site." The petitioner also states that the proposed amendments would enhance the efficiency of the regulatory process and reduce regulatory burden by eliminating duplicate reviews of matters resolved in previous proceedings and by focusing agency resources on new and material information and the impact of a potential new plant on the site.

Public Comments on the Petition

The NRC received 10 comments in response to the petition. Nine of the 10 comments were in favor of the petition. Seven of the favorable comments were from nuclear utilities, one was from a vendor, and one was from the petitioner. These commenters summarized the arguments in the petition but provided no additional bases in support of the petition. They were also in favor of including the petition in the current Part 52 rulemaking activity.

One commenter, a member of a public advocacy group, opposed the petition. The comment was general in nature and provided no basis to deny the petition.

Response: The comments received provided no additional bases to support or deny the the petition. Therefore, the reasons for denial of the petition sufficiently respond to the comments.

Reasons for Denial

The petition requests that the ESP and COL processes set forth in 10 CFR Part 52 be amended to allow an applicant to use existing information supplied to support the license for a different facility in an ESP or a COL application and to treat the information as resolved. The petition also discusses prior NRC activities that the petitioner claims are precedents for the petitioner's proposal. The denial addresses the ESP and COL proposals and the petitioner's examples.

ESPs

According to the petitioner's proposal, the regulatory requirements and siting information to be used as a basis for evaluating the acceptability of an ESP application for a site that is near a site for which a construction permit or license has been previously issued by the NRC¹ would be established, in part, by the regulatory requirements and siting information which the applicant proposes to "incorporate by reference" from the "current licensing basis" for that construction permit or license. See proposed §52.16(a). The applicant would have to supplement the

¹In pre-application interactions, two of the prospective ESP applicants have identified the physical locations of the proposed facilities to be at different locations on the proposed sites than were considered during the previous licensing actions.

incorporated information to the extent that there is significant new information on, inter alia, the ability of the site to support the additional nuclear facility contemplated by the applicant, information on cumulative radiological impacts, and information addressing new regulations. See proposed §52.16(b). Regulatory requirements and information incorporated by reference that need not be supplemented under paragraph (b), would be treated as resolved, unless the NRC met the Backfit Rule, (10 CFR 50.109). See proposed §52.16(d). Regulatory requirements and information incorporated by reference which must be supplemented under paragraph (b) would be subject to NRC review and approval, and the Backfit Rule would not apply. A similar approach would be used for environmental information. See proposed §52.16(c) and (f) [*sic*].

Incorporation by Reference of Existing Information

Paragraph (a) of petitioner's proposed §52.16 would allow an ESP applicant to incorporate by reference all or part of the "current licensing basis" for a site to the extent that it "pertains to" the siting issues specified in the current §52.17. However, under §50.32, "Elimination of Repetition," an applicant may incorporate by reference information already filed with the Commission. This regulatory provision may be used by an ESP applicant to reference information from existing sources, including the safety analysis report and the environmental report on the facility which is near the location that the applicant proposes to obtain an ESP. Although the current Part 52 does not contain a provision that explicitly allows ESP applicants to take advantage of §50.32, the proposed new §52.5 would make the existing general provisions in

Part 50 applicable to the licensing processes in Part 52.² See p.10 of the *Federal Register* Notice attached to SECY-02-0077, dated May 8, 2002. Therefore, the NRC concludes that the petitioner's proposed §52.16(a) need not be adopted.

Misapplication of "Current Licensing Basis" Concept and the Backfit Rule

Paragraphs (b) through (f) of proposed §52.16 constitute the heart of petitioner's proposal, viz., resolution of issues in an ESP proceeding. However, the NRC regards the proposal as a misapplication of the "current licensing basis" concept and the Backfit Rule. The petitioner's proposal uses the term "current licensing basis" in the context of a site for which a construction permit or license has been issued. The NRC developed this concept for renewing nuclear power plant operating licenses under 10 CFR Part 54. The NRC uses the concept to determine the scope of the NRC safety review necessary to support the NRC's decision to renew a nuclear power plant's operating license. The NRC limited the scope of the NRC safety review for license renewal partly because the NRC has already made a licensing finding for the facility. Furthermore, as part of the Part 54 rulemaking, the NRC completed a comprehensive examination of NRC's post-licensing regulatory activities and determined that for all facilities the current licensing bases have been subject to continuing NRC oversight and have been appropriately updated. Thus, a broad-scope safety review against current requirements is therefore unnecessary at license renewal. The renewed license is issued to the same facility for which the NRC previously granted operating authority, and except for aging management

²In the draft of the new proposed §52.5, the NRC staff inadvertently omitted §§50.31 and 50.32. The NRC staff plans to include these provisions in the final Federal Register Notice for the proposed Part 52 update rulemaking.

programs, the operating authority for the facility under the renewed license is identical to the authority under the previous operating license. By contrast, there is no “current licensing basis” for a facility not yet granted a license, even if it is located at a site for which a construction permit or operating license has been issued to another facility.

More importantly, information for an existing facility, even if updated in accordance with the NRC’s regulatory requirements and oversight activities, may not be applicable from a technical basis to a new facility to be located on the same site as an existing licensed facility. The NRC considered two areas which constitute a representative sampling of siting and environmental matters which must be addressed in an ESP, to determine if the NRC’s findings on these subjects could be used for a new facility to be constructed at the same site without substantial change or supplementation, in order to avoid duplicative NRC review and approval. These areas are geotechnical information and meteorology. In both areas, the NRC believes that the scenario where existing information and findings with respect to an existing facility are most likely applicable without need for significant change and updating is where the ESP is to be located on the footprint of a proposed facility which was previously granted a construction permit but was never built. However, in both of these areas, the NRC concluded that simple application of the updated information would be insufficient to demonstrate compliance with regulatory requirements in effect at the time of the ESP application (which petitioner’s proposal would require, see §52.16(d)), and accordingly there would be little basis for avoiding necessary NRC review and approval.

In the geotechnical area, the NRC accepted the suitability of the site for construction and operation of a specific facility design. The NRC’s findings were based upon the applicant’s

subsurface investigations to obtain the necessary geologic and seismic data, and the applicant's evaluations of the data to determine the suitability of the site for that facility's reactor design. Even if the proposed ESP is to be located precisely on the footprint of a previously-approved facility that has not been constructed, the NRC believes that substantial additional information must be submitted by the applicant and evaluated by the NRC to demonstrate that the site is suitable.

The applicant would need to demonstrate and the NRC must find that the data originally collected to determine the suitability of a specific reactor type to be constructed and operated at a specific location supports the suitability of the site for some as-yet-unspecified design. The certified designs and contemplated designs provide a range of depths of embedment and implications for hydrological radionuclide transport. In addition, the applicant needs to demonstrate and the NRC must find that the data collected more than 20 years ago is still relevant, given the current knowledge of regional seismic activity, current data collection and analytical methods, and that the acceptance criteria of the previous licensing action are still relevant. There have been advances in the knowledge of seismic activity in the United States and how ground motion propagates from the seismic source to the site, particularly in seismic source zones such as the New Madrid and the Wabash Valley regions in the Midwest. There have been changes in the state-of-the-art techniques for performing subsurface investigations, (e.g., cone penetrometer testing and suspension logging inside one of the deep boreholes rather than across two boreholes). Furthermore, the reactor site criteria in 10 CFR Part 100 were significantly revised in December 1996. The applicant would have to supplement the geotechnic information as necessary to meet the current requirements of the revised Part 100.

Regardless of whether the applicant determined that the information needed to be supplemented, the NRC would need to evaluate the geotechnical and seismic information against the current knowledge of regional seismic activity, the current data collection and analytical methods, and the current acceptance criteria to make its safety determination against the revised Part 100. Thus, even in the most favorable case, the NRC believes that substantial additional information, analyses and evaluation is necessary to determine whether existing findings on geotechnical data are applicable to a proposed facility which may be constructed on the same footprint as a previously-approved but unconstructed facility.

These concerns about technical applicability of the data for the existing facility and review effort would only increase if the ESP was for an alternate location on the site. The distance between the existing licensed facility (or footprint for a facility that was authorized but not constructed) and the proposed facility may result in differences in site suitability. Localized subsurface faults which were not adequately characterized during the previous licensing action could bring representativeness of the incorporated geotechnical information into question. There may be other differences in the characteristics of local subsurface materials (e.g., depth of bedrock and soil types) between the existing licensed facility (or footprint for a facility that was authorized but not constructed) and the proposed facility, which may render inapplicable the original data and findings with respect to geotechnical characteristics (or at least require substantial supplementation of the original data and findings).

In the area of meteorology, the applicant has collected data that the NRC previously determined was sufficiently representative of the meteorological environment for the (then proposed) facility. While this data has been supplemented to a certain extent by data collected

throughout the period of operation of the facility, the type of data that has been collected in many cases has been reduced to a limited set necessary to support emergency action determinations. Also, as a technical matter, data collected to support the original findings may not be representative of meteorological conditions of the proposed site. Localized changes such as changes in land use, the erection of new structures and the removal of existing structures, have the capability to significantly alter the previous characterization of the site's meteorology. These changes in local conditions may not be reflected in the licensing basis for the plant, inasmuch as they are unnecessary to support emergency action determinations. Furthermore, the meteorological data previously collected to support the existing facility's design may be insufficient to characterize the release characteristics unique to the specific design (or the envelope of designs) that may be built under the ESP. For example, the NRC guidance contains different consequence analyses, viz., elevated release versus ground-level release (and therefore the meteorological data necessary to support such analyses), depending upon whether the facility is a boiling water reactor or a pressurized water reactor. The application and review effort would only increase if the ESP was for an alternate location on the site. The distance between the existing licensed facility (or footprint for a facility that was authorized but not constructed) and the proposed facility may result in sufficient terrain differences or orientation differences that call into question the applicability of the meteorological data collected at the existing facility to a facility that may be constructed under the proposed ESP.

In summary, prior NRC findings with respect to the characteristics of a site and compliance with then-current regulatory requirements with respect to an existing facility, updated in accordance with exiting requirements and practices, does not ensure that the data is sufficiently accurate and comprehensive to support a current ESP siting determination. Thus,

the petitioner's proposal to extend the concept of a "current licensing basis" in the manner contemplated by its proposed §52.16 is technically inappropriate.

This is not to say that the NRC is foreclosed from adopting a rule which limits the scope of an NRC review of an ESP application (and, consequently, limit the scope of a hearing on the ESP application) based upon prior NRC regulatory determinations and oversight activities. On the contrary, the NRC has authority under Section 161.i. and 182.a. of the Atomic Energy Act of 1954, as amended (AEA), to promulgate such regulations, as witnessed by the NRC's adoption of the original ESP requirements in 10 CFR Part 52 (54 FR 15372, April 16, 1989), and the requirements for nuclear power plant license renewal in 10 CFR Part 54. These two rulemakings represent different regulatory approaches for achieving "issue resolution," i.e., limiting the scope of matters which: (i) an applicant must address in an application; (ii) the NRC must evaluate and make findings in order to provide the regulatory approval; and (iii) an interested member of the public may seek to litigate in a hearing associated with the NRC's regulatory approval. However, the NRC does not believe that the petitioner's proposal provides a sufficient basis for instituting rulemaking under either of these regulatory approaches for achieving issue resolution.

In Part 52, the Commission indicated that issue resolution would be justifiable for a period of 10 to 20 years—the term of an ESP (54 FR at 35378, second column). However, as part of this discussion the Commission indicated:

The Commission is confident that there will be information adequate to support site approvals lasting up to 20 years. After all,

the Commission licenses plants and their sites for operation for periods of up to twice twenty years. *Where adequate information is not available, early site permits will not be issued.*

Id. (emphasis added). Thus, the Commission expressed its expectation that information submitted for an ESP would be evaluated to determine if it is “adequate” to support findings over the duration of an ESP. By contrast, petitioner’s proposal would rely upon siting determinations that were intended to support a contemporaneous licensing action. Therefore, the NRC gave no consideration to whether its determinations with respect to the adequacy of the information and compliance with applicable regulations would remain viable to support other siting determinations for as long as the site had a licensed facility. Moreover, the petitioner’s proposal appears to provide for issuance of the ESP without NRC consideration on whether the previously-determined siting information is adequate to support siting findings over the duration of the ESP.

The NRC took a different approach for achieving issue resolution in license renewal. Each nuclear power plant had already been subject to comprehensive safety evaluations as part of the issuance of the construction permit and the operating license, and is subject to continuing oversight and consequent changes to the licensing basis to keep it up-to-date. Accordingly, the Statements of Consideration for both the original Part 54 rulemaking (56 FR 64943, December 13, 1991) and the revised rule (60 FR 22461, May 8, 1995) included extensive discussion of the bases for limiting the scope of the license renewal review, including the principles and technical findings with respect to the regulatory processes for ensuring that the licensing bases of nuclear power plants are maintained, such that a NRC re-review of safety matters is not necessary at

the time of license renewal. Furthermore, the 1991 rulemaking was supported by a comprehensive review of NRC regulatory practices and activities for the purpose of demonstrating that the “current licensing basis” of operating plants evolves over time such that an acceptable level of safety will continue to be provided during any renewal term. See NUREG-1412, “Foundation for the Adequacy of the Licensing Bases.” The 1991 rulemaking was also supported by a separate study evaluating unresolved generic safety issues and unresolved safety issues. See NUREG/CR-5382, “Screening of Generic Safety Issues for License Renewal Consideration.” In the 1995 rulemaking, the NRC expanded its findings with respect to the regulatory process to take into account the recently-adopted Maintenance Rule, 10 CFR 50.65, to further limit the scope of the NRC’s review of the renewal application. See 60 FR at 22469-73. Thus, the Part 54 rulemaking involved a comprehensive, subject matter-specific consideration and finding with respect to the adequacy of the regulatory process for maintaining the adequacy of the current licensing bases of plants for purposes of license renewal. By contrast, petitioner’s ESP proposal did not identify discrete siting matters (e.g., ground motion amplitude and frequency) for which review could be foreclosed by rule, together with a statement of bases showing why it would be technically acceptable to rely upon such findings.

The NRC also believes that the petitioner’s proposal would essentially extend the Backfit Rule to situations for which the policies underlying the Backfit Rule are not applicable. The Backfit Rule was intended to address a licensee’s expectation of regulatory stability. That is, a licensee expects that the terms and conditions of the licensee’s authority under a license will not be changed after the NRC has issued the license, except as permitted in the Backfit Rule. The Backfit Rule established regulatory criteria to be used by the NRC in evaluating proposed new

and changed regulatory requirements and changes in NRC interpretations and findings with respect to compliance with those requirements.

An ESP applicant, albeit one that already possesses a construction permit or operating license at the site for which an ESP is being sought, under the existing regulatory regime has no regulatory expectation that the NRC's determination of whether the application complies with applicable regulatory standards would be constrained by the "current licensing basis" for the earlier-issued construction permit or operating license at the site. The ESP applicant's regulatory expectations would extend, at most, to licensing associated with the facility for which the NRC previously granted a construction permit or operating license. An ESP application, submitted years after the issuance of the construction permit or license for an existing facility on the site, cannot reasonably be viewed as implicating the "regulatory stability" concept underlying the current Backfit Rule. The NRC further notes that the petitioner's proposal would also permit an ESP applicant that does not have a construction permit or license at the site to reference the "current licensing basis" of another licensee's facility located at the proposed ESP site. Again, under current regulatory practice the ESP applicant does not have any reasonable expectation of regulatory stability with respect to *its* new application, inasmuch as the NRC has not taken any licensing action *for the ESP applicant* with respect to a facility located at that site. The NRC has the authority to modify its regulatory system to effectively extend the licensee's regulatory stability expectations to encompass subsequent ESP applications to be located at the same site as an existing licensed facility. However, the implications of such an approach are significant and wide-ranging, and NRC does not believe that the petitioner's proposal is the appropriate opportunity for considering such a substantial expansion of backfit concepts.

Regulatory Efficiency and Effectiveness, and Reducing Unnecessary Regulatory Burden

Even if the NRC were to adopt the petitioner's proposal, the NRC does not believe there would be a significant increase in regulatory efficiency and effectiveness, or a significant reduction in unnecessary regulatory burden, two of the NRC's performance goals. The petitioner claims the proposed regulations will enhance the efficiency of the regulatory process by eliminating duplicate reviews of matters resolved in previous proceedings. However, §52.16(b) and (c) apparently concede that backfitting protection and "issue resolution" are not appropriate in circumstances where—after issuance of a construction permit or license for a facility at a specific site—either significant new information relevant to siting becomes known or new regulatory requirements relevant to the siting decision are adopted by the NRC. Thus, paragraphs (b) and (c) would require that the application be supplemented to address significant new information, as well as include information on how the new regulations would be satisfied to the extent that the existing incorporated information does not address compliance with the new regulations. Paragraphs (b) and (c) would also require that the application address cumulative impacts of the proposed new facility contemplated by the ESP, and the impacts of the new facility on the existing facility (and vice versa). Section 52.16 (d) and (f) would require the NRC to make the necessary findings with respect to the new information and compliance with the new regulations. The NRC does not believe that the petitioner's proposal would result in any real savings in resources expended by the ESP applicant in preparing the application or by the NRC in reviewing and acting on the application. Nor does the NRC believe that there would be any significant reduction in the time needed for the applicant to prepare the application or for the NRC to review and act on the application.

First, the detailed analysis necessary to establish that there is no significant new information for each relevant ESP subject matter and that the application meets current requirements is likely to consume at least as many resources as would be consumed if the proposed amendments were not adopted. As discussed above, the NRC considered two areas—geotechnical information and meteorology—to assess the applicability of the data and findings made in connection with the original licensing. In both areas, the NRC does not believe that there would be any significant increase in regulatory efficiency and effectiveness, or a reduction in unnecessary regulatory burden.

As discussed earlier with respect to “current licensing basis” and geotechnical information, the applicant must demonstrate and the NRC must find that the data collected some years earlier is still relevant, given the current knowledge of regional seismic activity, current data collection and analytical methods, and the acceptance criteria of the previous licensing action. Regardless of whether the applicant determined that the information needed to be supplemented, the NRC would need to evaluate the geotechnical and seismic information against the current knowledge of regional seismic activity, the current data collection and analytical methods, and the current acceptance criteria to make its safety determination against the revised Part 100. Even in the most favorable case, the NRC believes that there would be no real gain in NRC regulatory efficiency or reduction in the applicant’s burden. The application and review effort would only increase if the ESP was for an alternate location on the site, inasmuch as the applicant would have to demonstrate that specific characteristics of the local subsurface material for the existing facility apply to a facility located at a different location on the site. Thus, NRC does not believe that substantial regulatory efficiency and effectiveness, or reductions in unnecessary regulatory burdens will result if proposed §52.16 is adopted.

As discussed earlier with respect to “current licensing basis” and meteorology, the applicant must demonstrate and the NRC must find that the data and original findings are representative of current meteorological conditions. The applicant must demonstrate that local changes have not changed the previous characterization of the site’s meteorology. The applicant must also demonstrate that the meteorological data previously collected is sufficient to characterize the release characteristics unique to the specific design (or the envelope of designs) that may be built under the ESP. Even in the most favorable case, the NRC believes that there would be no real gain in NRC regulatory efficiency or reduction in the applicant’s burden. The application and review effort would only increase if the ESP was for an alternate location on the site. Thus, NRC does not believe that substantial regulatory efficiency or reductions in unnecessary regulatory burdens will result if proposed §52.16 is adopted.³

In short, the petitioner’s proposal would merely change the focus of the application preparation and NRC review to whether (1) the applicant considered and adequately characterized all new and significant information, (2) the referenced information meets current requirements, and (3) the accuracy and completeness of any new information to support the claim that existing information is adequate to meet the new requirements.

³The NRC also believes that current data being collected by licensees under their operational program requirements will be insufficient, in and of itself, to support NRC siting determinations. Current onsite meteorological monitoring programs are intended to ensure that licensees provide representative and reliable data for emergency planning and response purposes. The set of parameters needed to meet operational objectives was narrowly restricted to those necessary to follow the course of an accident (i.e., wind direction and speed, and an indicator of atmospheric stability; see Regulatory Guide 1.97). These parameters are a small subset of the meteorological parameters (delineated in Regulatory Guide 1.23) which are needed to evaluate design basis accidents for a particular design/site combination and for environmental impact evaluation.

Second, regardless of whether the petitioner's rule is adopted, the NRC has to evaluate: (1) the cumulative radiological and environmental impacts of the proposed new facility (the information required by paragraphs (b)(2) and (c)(2)); (2) the potential safety impacts of the existing facility on the proposed facility (information required by paragraph (b)(3)); and (3) the potential safety impacts of the proposed new facility on the existing facility (information required by paragraph (b)(4)). Even if there is no new information and new regulatory requirements (which, as discussed above, the NRC does not believe is a reasonable expectation), the applicant has to address these issues in its application and the NRC has to evaluate these issues and come to a conclusion in acting on the ESP application. The NRC concludes that paragraphs (b)(2)-(4), and (c)(2) simply make explicit what already must be done under existing regulations, and therefore these paragraphs would not increase regulatory efficiency and effectiveness or reduce unnecessary regulatory burden.

Third, the NRC does not believe that there would be any significant reduction in the matters that may be addressed in a hearing associated with the issuance of an ESP under the proposal. The petitioner proposes to limit the scope of the mandatory hearing by adopting, by reference, the existing information from a construction permit or license for a facility located at the same site. The petitioner states that the proposal provisions are consistent with Section 189 of the AEA and are in accordance with a number of NRC and court precedents authorizing the NRC to limit the scope of the licensing proceedings to avoid re-review and relitigation of previously adjudicated matters. The NRC does not disagree with the petitioner's contention that Section 189 of the AEA allows the Commission to limit the scope of licensing proceedings in order to avoid review and relitigation of previously adjudicated matters. However, the NRC believes the proposal would merely change the focus of the hearing to whether: (1) the applicant

considered and adequately characterized all new and significant information; (2) the referenced information meets current requirements; and (3) the accuracy and completeness of any new information to support the existing information is adequate to meet the current requirements. The NRC does not believe that proposed §52.16 will result in any practical reduction in potential scope of issues that may be raised in a hearing or any significant reduction in the resources expended or the time needed to complete a hearing.

Lastly, the NRC does not believe that there would be any increase in regulatory efficiency and effectiveness in the agency's compliance with the National Environmental Policy Act (NEPA). Following the receipt of an ESP application, the NRC would conduct a scoping process involving interested stakeholders. Under the provisions of §51.29(a), the NRC would use the scoping process to "identify and eliminate from detailed study those issues which are peripheral or are not significant or which have been covered by prior environmental review" and to identify other environmental assessments and impact statements which are "related to but are not part of the scope of the statement under consideration." Thus, the scoping process in Part 51 already permits the NRC to identify existing information and determine whether the environmental issues related to a proposed ESP may be narrowed. The petitioner's proposal also contains elements of "tiering." Tiering allows Federal agencies to rely on previous environmental assessments (EAs) and EISs to aid in the presentation of issues, eliminate repetition, or reduce the size of an EIS. Tiering is encouraged by the Council on Environmental Quality, see 40 CFR 1520.20, and the NRC's regulations permit the use of tiering and incorporation by reference (see 10 CFR Part 51, Appendix A.1.(b)). Thus, to the extent that the petitioner's proposal addresses the NRC's reliance on relevant information, including EAs and EISs, the proposal duplicates the NRC's existing authority.

Public Confidence

The NRC believes that some stakeholders may perceive the petitioner's proposal as increasing public confidence in the NRC, inasmuch as it provides for a regulatory process and standard for assessing whether prior NRC findings on siting may have validity with respect to a new facility to be located at the same site. By contrast, the NRC believes that other stakeholders may view the petitioner's proposal as decreasing public confidence in the NRC. These stakeholders may perceive the proposal as narrowing, rather than refocusing, the scope of the ESP application and review process, the scope of the NRC's compliance with NEPA, and the scope of hearings associated with issuance of an ESP. Such stakeholders may (incorrectly) perceive that the NRC is accepting old, out-of-date information and compliance with old requirements solely because the ESP is located on a site with an existing facility. Overall, the potential impact of the petitioner's proposal on public confidence is unclear.

Summary of Denial of Petitioner's ESP Proposal

In summary, incorporation by reference of information which is relevant and material to the ESP application is already permitted by current NRC regulations. The proposal also appears to be based on a misapplication of the "current licensing basis" concept and the Backfit Rule. The petitioner's proposal would not significantly narrow the scope or reduce the content of the ESP application (and, consequently, the time and resources necessary for the applicant to

prepare the application). Nor would the proposal significantly reduce the scope of issues that must be reviewed and addressed by the NRC in its safety evaluation and its environmental review under NEPA (or reduce resources and time NRC needs to accomplish its safety and environmental review). Finally, the petitioner's proposal would not significantly narrow the scope of potential matters that may be raised in a hearing associated with issuance of the ESP. For these reasons, the NRC declines to adopt the petitioner's proposal.

COLs

According to the petitioner's proposal, a COL applicant for a facility to be located at a site with a currently licensed facility⁴ and a COL applicant who holds a facility license at another site, may incorporate by reference the siting information described in proposed §52.16 from the "current licensing basis" of the currently licensed facility. The incorporation would be subject to the requirements in proposed §52.16. See proposed §52.80(a). In addition, a COL applicant for a facility to be located at a site where the COL applicant currently holds a facility license, and a COL applicant who holds a facility license at another site, may incorporate by reference the information required to address certain NRC requirements. These "programmatic requirements," which are delineated in proposed §52.80(b), include: (1) emergency preparedness plans under §50.33(g) and compliance with the emergency preparedness provisions of 10 CFR Part 50, Appendix E; (2) physical security plans under 10 CFR 50.34(c) and safeguard contingency plans under §50.34(d); (3) the quality assurance (QA) program under §50.34(f)(3)(iii); and (4) the managerial plan for design and construction activities under

⁴The petitioner's proposal would, by its terms, permit an applicant to seek a COL at a site with a facility whose license is *not* held by the applicant.

§50.34(f)(3)(vii). The COL applicant would have to supplement the incorporated information to the extent that there are new regulations. See proposed §52.80(b)(1).

The bases for evaluating the acceptability of the COL application would be established, in part, by the regulatory requirements and programmatic information for which the applicant proposes to incorporate by reference from the “current licensing basis” of an existing licensed facility located at the same site or another site owned or operated by the COL applicant. See proposed §52.80(b). Regulatory requirements and information incorporated by reference that need not be supplemented in accordance with §52.16(b) or (c), or §52.80(b)(1), would be treated as resolved, unless the NRC complies with the Backfit Rule, 10 CFR 50.109. See proposed §52.16(d). Regulatory requirements and information incorporated by reference that must be supplemented under §52.16(b) or (c), or §52.80(b)(1) would be subject to NRC review and approval, and the Backfit Rule would not apply.

Incorporation by Reference of Existing Information

As discussed earlier in relation to ESPs, §50.32 allows an applicant to incorporate by reference information already filed with the Commission. The staff’s proposed new §52.5 will make the existing general provisions in Part 50 (including §50.32) applicable to the licensing processes in Part 52. Therefore, the NRC concludes that proposed § 52.80(a) and (b) need not be adopted to the extent that they address incorporation by reference of other information.

Misapplication of “Current Licensing Basis” Concept and the Backfit Rule

The fundamental objective of the petitioner’s proposal, viz., resolution of issues and regulatory standards in a COL proceeding referencing an earlier licensing decision, appears to be based on a misapplication of the “current licensing basis” concept and backfitting. As discussed earlier, the “current licensing basis” concept was intended only to apply to renewal of a license for a nuclear power plant. It was not intended, and has no regulatory meaning, in the context of licensing of another separate and unrelated facility that may be located at the same site—much less a separate facility located at a different site. Moreover, with respect to information on compliance with programmatic requirements which may be incorporated by reference, proposed §52.80(b) does not require the COL applicant to demonstrate that the programmatic information is relevant and technically applicable to the proposed COL site and facility.⁵ For example, under the petitioner’s proposal, an applicant referencing an emergency plan from a licensee-owned facility located at a different site need not demonstrate that the siren alerting system for the referenced plant would be effective at the COL site. Thus, the petitioner’s proposal to extend the “current licensing basis” concept in the manner contemplated by its proposed §52.80 is not technically acceptable.

In addition, the NRC does not believe that programmatic information for an existing facility, even if that information was routinely updated in accordance with the NRC’s regulatory requirements (e.g., 10 CFR 50.71(e) and 10 CFR 50.59) and oversight activities, may simply be “imported” and used at a new facility either at the same site (or a different site). In general, it is

⁵This may have been a drafting error on the part of NEI, which could be corrected by including a provision in the proposed §52.80 requiring the COL applicant to demonstrate that the programmatic information from the referenced site and facility is relevant and technically applicable to the proposed COL site and facility. However, inclusion of such a provision would not address the other concerns with respect to “current licensing basis,” backfitting, and regulatory effectiveness.

unlikely that such wholesale “importation” of programmatic information without substantial change or supplementation to reflect the new facility and its location can be justified without NRC evaluation of the acceptability of the information with respect to the specific characteristics and location of the proposed facility. The NRC examined three programmatic areas to determine whether programmatic information for an existing facility may be used without substantial change or supplementation at a different facility, in order to avoid repetitive NRC review and approval: (1) physical protection, (2) emergency preparedness, and (3) quality assurance (QA).

Proposed §52.80(c) would provide issue resolution for all or part of the physical security and safeguards contingency plans (including compliance with the provisions of 10 CFR Part 73 under §50.34(c) and §50.34(d)), which would be incorporated by reference either from an already licensed facility at the site for the proposed COL or from a facility at another site whose license is held by the COL applicant. However, the adequacy of physical protection commitments for a nuclear power reactor depends on the design of the plant, the nature of the site, the location and configuration of the plant on the site (including its proximity to other structures), and the physical characteristics of the surrounding land. Adding a new facility to an existing site—even if located on the footprint of a previously approved but never built facility—would necessitate a reevaluation of the existing physical security plan and the safeguards contingency plan to determine if the proposed facility meets the eight elements of physical security in §73.55 and the five categories of information for the safeguards contingency plan in Appendix C to Part 73.⁶ For example, the existing physical barriers on the site would

⁶The NRC notes that a proposed facility located on a site with an existing facility could adversely affect the adequacy of the existing facility’s physical security and safeguards contingency plans. However, unlike the provisions in proposed §52.16(b)(1) and (4), §52.80 would not require the COL applicant to address the impacts of the proposed facility on the existing facility, including cumulative impacts.

need to be evaluated to assure that there are two physical barriers of the appropriate size in place for the vital area of the proposed facility. With respect to the physical security organization, the NRC would evaluate whether the guard force is sufficient to perform their assigned duties and responsibilities for both the existing and proposed facility.

Proposed §52.80(c) would provide issue resolution for all or part of an emergency plan (including compliance with 10 CFR Part 50, Appendix E, and the requirements for the size and configuration of emergency planning zones under §50.33(g) and §50.34(b)(6)(v)), which would be incorporated by reference either from an already licensed facility at the site for the proposed COL or from a facility at another site whose license is held by the COL applicant. If the COL applicant referenced an emergency plan for a facility at the site for which the COL would be issued, the NRC believes that the addition of a new facility could have a substantial bearing on whether the existing plans meet the 16 planning standards in 10 CFR 50.47. In addition, the NRC must evaluate the impacts of the proposed facility on the existing facility, as well as any impact the existing facility would have on the proposed facility. The design of the facility determines the type and severity of accidents which need to be addressed by the emergency plan. If the new facility used a different design than the existing facility, the existing emergency plan would need to be evaluated to determine whether it can accommodate the type and severity of accidents associated with the new facility, or whether new provisions (e.g., emergency action levels tailored to the particular accident sequences of the proposed COL facility) are necessary. If the plan cannot accommodate the accidents, the plan would have to be supplemented. For example, with respect to emergency planning zones (EPZs), the NRC would have to determine whether the specific location and configuration of the proposed facility would lead to some adjustment to the existing EPZ. Furthermore, the protective actions associated with the EPZs

may not be appropriate for a different design and radioactive inventory associated with the proposed facility. For a COL applicant who references an emergency plan from another site, a new EPZ would have to be developed inasmuch as the existing facility's EPZ could not be used at the COL site. The NRC would also have to identify and consider any differences between the existing site and the proposed COL site, in order to determine whether the existing emergency plan meets the §50.47(b) planning standards.

Proposed §52.80(c) would provide issue resolution for all or part of a QA program (including compliance with the provisions of Appendix B to Part 50, under §50.34(b)(6)(ii), §50.34(f)(3)(i), §50.34(f)(3)(ii) and §50.34(f)(3)(vii)), which would be incorporated by reference either from an already licensed facility at the site for the proposed COL or a facility at another site whose license is held by the COL applicant. The petitioner's proposal does not distinguish between construction and operation. Operational QA programs cannot be used for design and construction of a new facility because the scope and nature of activities performed during construction are different than during operation. A construction QA program focuses on design, procurement, fabrication and construction, whereas an operational QA program focuses on maintenance, modification, and operation. Furthermore, the QA organization is different for construction than for operation because a construction QA program relies heavily on an architect-engineer and an operational QA program relies on licensee personnel. If the COL applicant intended to rely on a construction QA program which it used in construction of an existing facility (either on site or at another site), an extended period of time might have elapsed since the major provisions of that construction QA program had been utilized. Thus, the construction QA program might not address the design, procurement, fabrication and construction activities that the COL applicant proposes to use in the construction of the

proposed facility. Moreover, applicable industry standards and practices for construction QA have evolved, so that the NRC may not consider the original construction QA programs to be acceptable for constructing a new facility. For example, American Society of Mechanical Engineers (ASME) NQA-1, "Quality Assurance Program Requirements for Nuclear Facilities," which was referenced in the construction QA programs for many existing plants, has undergone numerous revisions since the 1970s editions. Since the original endorsement of these industry standards, the NRC has withdrawn its endorsement of several quality standards as more effective standards developed by industry groups became available.

With respect to operational QA, the NRC would need to review the existing operational QA program to assure the licensee's commitments in the QA program area are applicable to the proposed facility. The adequacy of QA program elements depends upon facility design, fabrication and construction technologies, and how SSCs and services are procured. For example, modular construction, in which portions of the plant are prefabricated off site, transported to the site, and integrated into the portions of the plant constructed on site, will likely involve different QA programs, procedures, and considerations than those for (current generation) plants constructed entirely on site. Another example is the use of SSCs which are procured from sources outside the United States. These components may be manufactured, tested, and qualified to different standards than the standards of the COL applicant's construction QA program.

In summary, the NRC does not believe that it is technically possible to apply programs such as physical protection, emergency preparedness, and QA from another facility to a proposed COL without substantial evaluation and consideration of the acceptability of the

information with respect to the specific characteristics and location of the proposed facility. This is not to say that the NRC may not adopt a rule which limits the scope of an NRC review of a COL application (and, consequently, limits the scope of a hearing on the COL application) based upon prior NRC regulatory determinations and oversight activities. As discussed earlier with respect to petitioner's ESP proposal, the NRC has authority to promulgate such a regulation as witnessed by the Commission's adoption of both Part 52 and Part 54. However, for the reasons discussed earlier these rulemakings may be distinguished from petitioner's proposal.

The NRC also believes that the petitioner's proposal would essentially extend the Backfit Rule to situations for which the policies underlying the Backfit Rule are not applicable. A COL applicant simply can have no reasonable regulatory expectation that the NRC's determination of whether the application complies with applicable regulatory standards would be constrained by the "current licensing basis" for a previously licensed facility at that site. This is even more true for a COL applicant referencing a previously licensed facility *at a different site*.

The COL applicant's regulatory expectations extend, at most, to licensing associated with the facility for which the NRC previously granted a construction permit or license. An application for a COL, submitted years after the issuance of the construction permit or license for an existing facility on the same site, cannot reasonably be viewed as implicating the regulatory stability concept underlying the current Backfit Rule. This is even more true with respect to an application for a COL referencing a construction permit or license issued years earlier for an existing facility *at a different site*.

Regulatory Efficiency and Effectiveness, and Reducing Unnecessary Regulatory Burden

Even if the NRC were to adopt the petitioner's proposal, the NRC does not believe there would be a significant increase in regulatory efficiency and effectiveness, or a significant reduction in unnecessary regulatory burden. Turning first to §52.80(a), which would extend the provisions of proposed §52.16 to the COL application, the NRC believes that the proposal will not result in a significant increase in regulatory efficiency, or a significant reduction in unnecessary regulatory burden, for the reasons stated earlier with respect to §52.16. In addition, proposed §52.80(a) would allow the COL applicant to incorporate siting information from another site owned by the COL applicant. Assuming that the petitioner's proposal implicitly requires the COL applicant to demonstrate how the information on the referenced site is applicable to the proposed site, the NRC's review would be even more complex.

With respect to the petitioner's proposal in §52.80(b) to allow COL applicants to incorporate programmatic information by reference, the NRC agrees that the proposal would significantly reduce the COL applicant's regulatory burden. However, the NRC believes that the reduction would be inappropriate. Unlike proposed §52.16(b)(1) and (2), proposed §52.80(b) would not require the COL applicant to demonstrate that the programmatic information from the referenced site and facility is relevant and technically applicable to the proposed COL site and facility. Further, unlike §52.16(b)(3) and (4), §52.80(b) would not require the COL applicant to address the safety impacts of the proposed facility and the existing facility on each other.

The NRC does not believe that the petitioner's proposal would increase regulatory efficiency and effectiveness. The scenario most likely to increase regulatory efficiency is when the COL applicant proposes to incorporate programs from a facility or facilities owned or operated by the applicant on the same site, and the proposed facility is the same design as the

facility or facilities currently in operation at the site.⁷ The NRC considered three programmatic areas to determine if any resource or time savings would occur under the petitioner's proposal: (1) physical protection, (2) emergency preparedness, and (3) QA. As discussed earlier, the information in each of these three programmatic areas will likely require substantial supplementation by the COL applicant and NRC evaluation of the acceptability of the information with respect to the specific characteristics and location of the proposed facility. Hence, it is unlikely that there will be actual increases in regulatory efficiency and effectiveness or reductions in unnecessary regulatory burden.

The adequacy of physical protection commitments for a nuclear power reactor depends on the design of the plant, the nature of the site, the configuration of the plant on the site (including its proximity to other structures), and the physical characteristics of the surrounding land. Adding a new facility to an existing site—even if located on the footprint of a previously approved but never built facility—would necessitate a reevaluation of the existing physical security plan and the safeguards contingency plan to determine if the proposed facility meets the eight elements of physical security in §73.55 and the five categories of information for the safeguards contingency plan in Appendix C to Part 73. Regulatory efficiency and effectiveness would not be increased in the area of emergency preparedness. The NRC would have to review the entire emergency plan to determine the extent to which the information incorporated by reference meets each of the 16 emergency planning standards in §50.47(b). Nor would regulatory efficiency and effectiveness be increased in QA. The COL applicant will likely have to develop a new construction QA program. An operational QA program cannot be used for design

⁷The NRC believes that the next generation of reactors will use designs which are significantly different from those of the current generation of light water reactors.

and construction of a new facility because the scope and nature of activities performed during construction are different than during operation, and an extended period of time might have elapsed since the major provisions of that construction QA program had been utilized. With respect to operational QA, adequacy of referenced QA program elements depends upon facility design, fabrication and construction technologies, and the nature of procured SSCs.

For these reasons, the NRC concludes that the petitioner's proposal refocuses, but ultimately does not change the NRC time and resources necessary to evaluate a COL application referencing programmatic information. Nor will there likely be a significant reduction in unnecessary regulatory burden on the COL applicant, inasmuch as the demonstration that must be made in its application with respect to programmatic matters will not result in material reductions in the level of information to be provided.

Public Confidence

As with petitioner's ESP proposal, the NRC believes that some stakeholders may perceive the petitioner's proposal as increasing public confidence in the NRC, inasmuch as it provides for a regulatory process and standard for assessing whether: (i) prior NRC findings on siting matters may have validity with respect to a new facility to be located at the same site, and (ii) prior NRC findings on programmatic matters may have validity with respect to a new facility located at the same site, or at a different site—so long as the existing and new facilities are owned by the same licensee. By contrast, the NRC believes that other stakeholders may view the petitioner's proposal as decreasing public confidence in the NRC. These stakeholders may perceive the proposal as narrowing, rather than refocusing, the scope of the ESP application

and review process, the scope of the NRC's compliance with NEPA, and the scope of hearings associated with issuance of an ESP. Such stakeholders may (incorrectly) perceive that the NRC is accepting old, out-of-date information and compliance with old requirements solely because the ESP is located on a site with an existing facility. Overall, the potential impact of the petitioner's proposal on public confidence is unclear.

Summary of Denial of Petitioner's COL Proposal

In summary, incorporation by reference of information which is relevant and material to the COL application is already permitted by current NRC regulations. The petitioner's proposal also appears to be based on a misapplication of the "current licensing basis" concept and the Backfit Rule. The petitioner's proposal would not significantly narrow the scope or reduce the content of the siting and programmatic information presented in a COL application (and, consequently, would not reduce the time and resources necessary for the applicant to prepare the application). Nor would the proposal significantly reduce the scope of issues that must be reviewed and addressed by the NRC in its safety evaluation and its environmental review under NEPA (or reduce resources and time NRC needs to accomplish its safety and environmental review). Finally, the petitioner's proposal would not significantly narrow the scope of potential matters that may be raised in a hearing associated with issuance of the COL. For these reasons, the NRC declines to adopt the petitioner's proposal.

NRC Regulatory Activities As Precedents for Petitioner's Proposal

The petitioner cites several examples of NRC's practice to support the petition. The NRC does not believe that these examples are valid precedents for the petitioner's proposals. Each of these examples is addressed below.

License Renewal

The petitioner suggests that its proposal is consistent with the regulatory concepts underlying the Commission's adoption of Parts 51 and 54 for license renewal of power reactors. See petitioner's proposal at p.7.

The NRC disagrees. With respect to Part 54, as discussed earlier in the section on the current licensing basis and backfitting, there is no "current licensing basis" for a hypothetical facility that may be built under the authority granted by an ESP located at a site where a construction permit or license may already have been issued. The NRC's regulatory review and oversight of the construction and operation of the specific facility described in a construction permit and/or license were directed solely at ensuring the safety of the facility described in the construction permit and/or license, and took no account of hypothetical and speculative facilities that may be built at the site at some unknown time in the future. The petitioner's analogy to the Commission's use of the current licensing basis concept in 10 CFR Part 54 is not valid.

With respect to the petitioner's claims on Part 51, the petitioner's argument does not reflect the fact that the scope of environmental issues needing plant-specific consideration under Part 51 for license renewal was based upon a generic environmental impact statement (GEIS).

The GEIS specifically identified and characterized (to the extent possible, as delineated in the GEIS and Part 51) the environmental impacts and consequences of refurbishment and continued operation during the renewal period for 118 nuclear power reactors at known locations. The assessment of the nature and significance of the environmental impacts of renewal was based upon two considerations. First, considerable environmental impacts occurred as the result of the initial clearing of the site and the construction of the licensed facility, and would not recur as part of license renewal. Second, facility operations during the period of extended operation would be largely the same as operations under the current operating license. Hence, if the nature and scope of facility operations are not expected to change as the result of renewal, then the environmental impacts and their significance would not be expected to change and the impacts for some issues can be generically characterized and dispositioned. By contrast, an analogous environmental impact statement addressing the adequacy of specific site for a yet-to-be-built facility, as described in either an ESP or a COL application, does not exist. A new facility, even if built at a site which has an existing facility, will likely involve construction impacts not previously evaluated and the site environmental setting (e.g., the regional demography) has likely changed since it was originally evaluated. Furthermore, the cumulative effects of operation of an additional facility at the site would not have been considered by the NRC when it originally licensed the first facility at that site.

The NRC also notes that Part 51 contains provisions for considering new and significant information for an issue dispositioned in the GEIS. See 10 CFR 51.95(c)(4).

License Amendments

The petitioner compares the issuance of an ESP to the issuance of a license amendment for a facility, and argues that the NRC does not conduct a fresh assessment of issues that were thoroughly considered in initial licensing of that facility and that are not affected by the proposed amendment. (pp.7-8 of the petition).

The petitioner's analogy is inapt. After the NRC licenses a facility, the safety and environmental findings made when NRC initially authorized the facility's construction and operation remain effective throughout the term of the license, and need not be revisited in their entirety in a subsequent licensing amendment proceeding of limited scope. Only those matters which are within the scope of the proposed license amendment and, therefore, are affected by the amendment, fall within the scope of the NRC's consideration of the license amendment. Contrary to the petitioner's suggestion, an application for an ESP or COL is not analogous to a license amendment. The NRC's review of an ESP or COL application is the NRC's initial licensing action. As suggested in the earlier discussion on backfitting, the NRC's licensing decision for a facility located on a specific site is limited to that facility. The NRC never envisioned that its licensing decision for that facility would have any regulatory significance years later for either a new, separate facility (likely of different design) located at the same site, or a new, separate facility to be located at an entirely different site.

Table S-3 and Spent Fuel Storage Casks

The petitioner states that the Table S-3 generic environmental rulemaking and the rulemakings approving spent fuel storage casks are regulatory precedents for making generic findings by rulemaking, and thereby reducing the scope, or eliminating the need for consideration, of matters in a facility-specific hearing.

The NRC does not regard these rulemakings as analogous to the proposed §§52.16 and 52.80. In the Table S-3 rulemakings, the Commission made generic environmental findings which were applicable to all nuclear power plants. In every spent fuel storage cask rulemaking, the Commission made generic safety and environmental findings which were applicable to every spent fuel storage cask constructed in accordance with the specific cask design approved in that rulemaking. Moreover, each cask design was reviewed and approved by the Commission through the rulemaking for generic use across the United States. By contrast, the NRC licensing determinations, which petitioner's proposals would permit an ESP and COL applicant to reference, are not generic but are limited solely to a consideration of an applicant's proposals and relevant information available at the time of the proposal. Nor did the NRC approve the applicant's proposals with the understanding that they would be deemed by rule to be acceptable in a subsequent licensing proceeding for a different facility, without a requirement that their suitability for use in the subsequent licensing action be assessed.

Quality Assurance and Facility Procedure Change Process

The petitioner cites the quality assurance (QA) program change process under §50.54(a)(3)(ii), and the facility and procedure change process under §50.59(a)(2)(ii) as

examples of situations in which the NRC by rule permits a licensee to implement changes that have been previously approved by the NRC for use by other licensees (p.8 of the petition).

While the NRC acknowledges that these two regulatory provisions permit a licensee to implement changes that have been previously approved by the NRC for use by other licensees, these provisions both require that the licensee demonstrate that the proposed change previously approved by the NRC is applicable to the licensee's facility. For example, §50.54(a)(3)(ii) requires a licensee desiring to make a QA program change to demonstrate that "the bases of the NRC approval are applicable to the licensee's facility." Such a demonstration is not required by proposed §52.80(b). Therefore, the petitioner's analogy to the implementation of changes without prior NRC approval is not valid for original licensing proceedings.

Conclusion

In conclusion, the petitioner proposes to incorporate by reference existing information for the site and, by so doing, eliminate the need for what it believes is duplicate applicant preparation and NRC review of existing information relating to a licensed facility that has been previously approved by the NRC and has been subject to a public hearing. The NRC denies the petition for the following reasons. Current NRC regulations already permit incorporation by reference of information which is relevant and material to an ESP and a COL application. The proposal to extend NRC findings from an earlier licensing action to a new and different licensing action appears to be based on a misapplication of "current licensing basis" and backfitting concepts. The petitioner's proposal would not significantly narrow the scope or reduce the content of the information presented in an ESP or COL application (and, consequently, would not reduce the

time and resources necessary for the applicant to prepare the application). Nor would the proposal significantly reduce the scope of issues that must be reviewed and addressed by the NRC in its safety evaluation and its environmental review under NEPA (or reduce the resources and time NRC needs to accomplish its safety and environmental review). The petitioner's proposal would not significantly narrow the scope of potential matters that may be raised in a hearing associated with issuance of an ESP or a COL. For these reasons, the NRC declines to adopt the petitioner's proposal.

For these reasons, the NRC denies the petition.

Dated at Rockville, Maryland, this _____ day of _____, 2002.
FOR THE NUCLEAR REGULATORY COMMISSION

Annette Vietti-Cook,
Secretary of the Commission

Letter to Petitioner

Attachment 2

Mr. Robert W. Bishop
Vice President and
General Council
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

SUBJECT: PETITION FOR RULEMAKING TO USE INFORMATION FROM PRIOR
LICENSING ACTIONS AS RESOLVED INFORMATION FOR EARLY SITE
PERMIT AND COMBINED LICENSE APPLICATIONS (PRM-52-1)

Dear Mr. Bishop:

I am responding to your letter of July 18, 2001, which submitted a petition for rulemaking on behalf of the Nuclear Energy Institute (NEI). Your petitioner requested that the NRC amend its regulations to allow applicants seeking an early site permit (ESP) and a combined license (COL) to use existing information from prior licensing actions as resolved information that has been approved by the NRC and has been subject to a public hearing.

A notice of receipt of the petition was published in the *Federal Register* on September 24, 2001 (66 FR 48832). The NRC received letters from 10 commenters. Nine of the 10 commenters were in favor of the petition. Seven of the favorable letters were from nuclear utilities, one was from a vendor, and one was from the petitioner. One of the commenters, a member of a public advocacy group, opposed the petition.

As the NRC staff understands your petition, the regulatory requirements and siting and programmatic information to be used as a basis for evaluating the acceptability of an ESP or COL located on a site for which a construction permit or operating license has been previously issued by the NRC would be established, in part, by the regulatory requirements and information which the applicant proposes to "incorporate by reference" from the "current licensing basis" for that construction permit or operating license. The applicant would have to supplement the incorporated information per the provisions in your proposal. Regulatory requirements and information incorporated by reference that do not need to be supplemented per the petition, would be treated as resolved, unless the NRC complies with the Backfit Rule, 10 CFR 50.109. Regulatory requirements and information incorporated by reference which must be supplemented would be subject to NRC review and approval, and the Backfit Rule would not apply.

The NRC denies your petition for the following reasons. Incorporation by reference of information which is relevant and material to the ESP and COL applications is already permitted by current NRC regulations. The fundamental objective of your proposal—resolution of issues in an ESP or a COL proceeding—appears to be based upon the misapplication of "current licensing basis" and backfitting. Furthermore, your proposal would not significantly narrow the

R. W. Bishop

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scope of the ESP or COL application. Nor would the proposal significantly reduce the scope of issues that must be reviewed and addressed by the NRC or the scope of matters that may be raised in a hearing.

The denial is discussed in detail in the enclosed notice of Denial of Petition for Rulemaking, which will be published in the *Federal Register*.

Sincerely,

Annette Vietti-Cook
Secretary of the Commission

Enclosure: Notice of Denial of
Petition for Rulemaking