

perhaps an entirely different licensee, as is contemplated under the petitioner's proposed rule. For these reasons, the Commission does not find that any of these rulemakings constitute a valid legal model for the petitioner's proposed rulemaking.

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

While the Commission expects that practical efficiencies, as described above, would be realized from using previously filed information, the petitioner's proposal to treat such information as resolved does not represent a viable approach. 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 for a different facility at a different location on the site. 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 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 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 representative areas that could arise in reviewing an ESP application, 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 change or supplementation, in order to avoid duplicative NRC review and approval. These areas are geotechnical information and meteorology. In both of these areas, which would not be expected to have significant changes from earlier reviews, 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 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 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 that the data collected more than 20 years ago for example 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 1996, (61 FR 65176, December 11, 1996). Therefore, none of the currently licensed nuclear plants utilized current reactor siting criteria. The applicant would have to supplement the geotechnical information as necessary to meet the current requirements of the revised Part 100.

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 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 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, that may render inapplicable the original data and findings with respect to geotechnical characteristics (or at least require supplementing the original data and findings).

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