



THE NUCLEAR NEWS INTERVIEW

David Matthews: Why 10 CFR Part 52 isn't "one-step" licensing

Longtime nuclear industry participants often cite regulatory certainty or predictability as one of the key prerequisites that must

The NRC's director of Regulatory Improvement Programs offers a reality check for anyone planning to license new power reactors.

be in place before anyone would order and seek to build new power reactors in the United States. Two industry-initiated projects have been launched this year to test the predictability of the licensing process that was set up more than 10 years ago by the Nuclear Regulatory Commission, but has yet to be used: 10 CFR Part 52, which allows for early site approvals that would remain in effect for 10 to 20 years, certification of standard designs whereby basic safety issues would be resolved in advance, and a single adjudicatory proceeding for both construction and operation of a power reactor. These two industry groups have sought funding from the Department of Energy's Nuclear Power 2010 program to apply for licenses from the NRC under 10 CFR Part 52, without actually committing to the purchase of reactor hardware (*NN*, May 2004, p. 12).

David B. Matthews is the director of the Division of Regulatory Improvement Programs in the NRC's Office of Nuclear Reactor Regulation, and is responsible for the policy, development, planning, and direction of programs including license renewals, new reactor licensing, and all related environmental issues. He has pointed out in public statements that while 10CFR52 may provide more predictability in licensing than the old regime under 10CFR50 (through which all currently operating power reactors were licensed), the NRC's mission remains the protection of public health and safety, and not the convenience of the nuclear industry—and so, if the NRC encounters a situation in which ensuring the former means weakening the latter, the agency will use its authority under 10CFR52 to do so. As a result, he noted, an early site permit may not resolve all siting issues, and while a license might be granted by a single hearing process, the NRC must be satisfied that all required construction and preoperational tasks are completed before the agency would approve the loading of fuel.

Matthews enlarged on these points, and also assessed the license renewal process for operating power reactors, with *NN* Associate Editor E. Michael Blake.



Matthews: "... there's nothing in our regulations that would prevent" license renewal after 60 years of operation.

You have said that the licensing regime for new power reactors under 10CFR52 shouldn't be thought of as a one-step process, even though a single license would cover both construction and operation.

That's correct.

What could arise to make it more than a one-step approval?

Well, by design it really is a two-step process. The purpose in constructing Part 52 was to try to focus the principal portions of the review at the "front end." But there was always an expectation that there would be other actions that needed to occur before authorization to load fuel would be granted. The initial review of the application, at the beginning of the process of what we call the combined license, is an application that can be submitted under Part 52 and can be an application anew—namely, it represents a reactor design and a site that we would review according to the technical require-

ments in the remainder of the NRC's regulations, but we would use the process of Part 52 to do it. That application would then result in the staff's issuance of a combined license. However, there would be another step in the process, and it would be called inspections, tests, analyses, and acceptance criteria [ITAAC].

How extensive would the ITAAC be for a reactor nearing startup? Can the activities take place smoothly during the construction schedule, or is the owner going to have to plan on waiting days or weeks for the NRC to finish these reviews?

We're developing some of the details of that process right now. But the new—as we're phrasing it—construction inspection program has as its intent for there to be a very smooth transition throughout the whole construction period, such that evaluation by the NRC of conformance with the ITAAC, which the licensees would have performed, will not be an impediment to progress.

On the subject of the early site review process, once a permit is granted, does that mean the siting and environmental aspects of a new plant are settled, or are they going to have to be revisited again during the other stages later on?

Let me revisit my earlier comment. I described a combined license application that would have been both site and design information presented anew to the NRC. As an alternative, an applicant could come in with a combination of an early site permit and a design that has not been certified, and then apply with that joint submittal for a combined license. In that case, the information that the applicant would present with regard

The other alternative is for the applicant to bring a certified design to us, and a site of first representation, meaning the site would be one that we hadn't looked at before, but the certified design is one that we will have looked at. Then the substantive part of the review would be the site itself and the interface between the site and the design that had been certified. And then the last option would be for the applicant to bring an early site permit, together with a certified design, and represent that as an intact package for a combined license.

Now, back to your original question. There is the possibility that new issues could arise, and those new issues would relate to the compatibility between the early site permit that had been granted and what's called the plant parameter envelope that had been assumed at the time the early site permit was granted, and the degree to which it is compatible with the certified design that the applicant is representing to us. So there is the possibility that at the combined license stage new issues would arise that would have to be resolved as part of the application, irrespective of the applicant's having an early site permit and a certified design.

Does the NRC care if the licensee markets a site with an early site permit? We've seen that sometimes license renewals or power uprates must be completed in order for a plant to be sold.

We don't have a view with regard to either the advisability or the feasibility of those kinds of transfers except for the fact that there's a regulatory prohibition against a permit's being transferred to a party other than the one that it has been

granted to, without our approval. It's the same challenge that an owner of a plant has in transferring that ownership to another party. There are regulations of the NRC that have to be conformed to before we'll permit that transfer.

But clearly that has been done several times. The buyers and sellers have made sure the agency approves it.

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Right. The transactions you're referring to, though, are associated with the transfer of an operating reactor from one owner to another, or the operational responsibility being transferred from one operator to another, even though the ownership might not change. I don't recall, but I don't believe that such has ever happened with regard to a permit, or a permittee.

You've said that there are NRC staffers who used to be preparing for reactor decommissioning, and now they're working on license renewal. How do you assess the license renewal process so far? Do you expect that any power reactor owner will decide against license renewal, or accept closure either at or before the end of the current license?

I'd rather say that another way. Our planning expectation right now is that virtually every operating reactor in the United States will seek license renewal. But I can't say that with any absolute certainty, because we haven't heard from a lot of them. But that's our planning assumption. And we've had no indication to the contrary of that, by the way.

So nobody's actually come forward saying, "We are not going to look for license renewal"?

I believe that's correct, but I'd be hard-pressed to say it with absolute certainty.

Does the NRC see a possibility where once the first 20-year license renewal term runs out on some of these plants, the licensees will come back to renew them again?

Our process appreciates that that might happen, and it's permissible—provided they make the same quality of representations to us that they did in the first instance. In other words, there's no legal prohibition against it, and there's nothing in our regulations that would prevent them from requesting it. **■**

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to the design would have to be evaluated in conformance with the requirements primarily of Part 50, and then it would have to fit within the confines and limitations provided in the early site permit that had been granted at some previous time.