

September 5, 2000

COMMISSION VOTING RECORD

DECISION ITEM: SECY-00-0092
TITLE: COMBINED LICENSE REVIEW PROCESS

The Commission (with Chairman Meserve and Commissioners Dicus, McGaffigan, and Merrifield agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum ([SRM](#)) of September 5, 2000. Commissioner Diaz approved in part and disapproved in part.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

Annette Vietti-Cook
Secretary of the Commission

Attachments: 1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Meserve
Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan
Commissioner Merrifield
OGC
EDO
PDR

VOTING SUMMARY - SECY-00-0092

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. MESERVE	X				X	6/20/00
COMR. DICUS	X				X	6/30/00
COMR. DIAZ	X	X			X	7/24/00
COMR. McGAFFIGAN	X				X	8/9/00
COMR. MERRIFIELD	X				X	8/11/00

COMMENT RESOLUTION

In their vote sheets, Chairman Meserve and Commissioners Dicus, McGaffigan, and Merrifield approved the staff's recommendation and provided some additional comments. Commissioner Diaz approved in part and disapproved in part. Commissioner Diaz disapproved the use of programmatic ITAACs and also disapproved the proposed ITAAC verification program. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on September 5, 2000.

Commissioner Comments on SECY-00-0092

Chairman Meserve

I approve the Combined Operating License (COL) review process as recommended by the staff, subject to the following comments.

I note that the staff plans to develop a rule for certifying that ITAAC have been met. The staff should specifically seek comment on the scope of the ITAAC for programmatic areas (e.g., QA programs, fitness for duty) in connection with the rulemaking. To the extent that changes to the reactor oversight program may have a bearing on aspects of the ITAAC verification program, the staff should ensure consistency between the agency's inspection program and any site-specific inspection guidance for ITAAC verification. Moreover, the staff should take note of changes in QA requirements that may result from agency initiatives in risk-informed regulation to ensure consistency between the requirements imposed on ITAAC for future plants and requirements for currently operating plants.

I approve the form and content of the generic COL as proposed by staff in Attachment 2 to the SECY paper. The generic COL appears to contain the necessary generic limitations and conditions to assure safe construction and operation. Any plant-specific limitations or conditions should be added to plant-specific COLs, as appropriate, as is the case of current Part 50 licenses.

Although it is not now apparent when the NRC will receive an application for a COL, the time to put in place an efficient process for assuring that any future plants provide adequate protection of the public health and safety and the environment is now. Continued effort to refine the regulatory process for licensing future plants is an important initiative for the agency.

Commissioner Dicus

I approve the staff's recommendations concerning 1) the ITAAC verification program, 2) the treatment of QA uncertainties related to ITAAC verification, and 3) the form and content of a generic combined license.

I agree with the Chairman that the efforts to refine the regulatory process for licensing future plants remains an important initiative. Recognizing that some substantial work remains in this area, the staff should continue to work with stakeholders to receive feedback on key issues, such as programmatic ITAAC. I support the concept of resolving these type issues in the context of Part 52 rulemaking. However, the timeline for Part 52-related rulemaking activities should not unnecessarily delay bringing significant issues to the Commission's attention for resolution. Efforts to identify, understand and resolve issues early will only provide greater certainty and confidence in the rulemaking process.

Commissioner Diaz

The U.S. Congress intended, and our stakeholders deserve a clear and predictable combined license (COL) process. I believe that having licensing information reviewed by the NRC at the earliest possible time fulfills this goal and is of benefit to the agency, the potential licensee, and the public. Therefore, I agree with the staff that a COL applicant should submit up front all the relevant information that is necessary for reviewing a construction permit as well as an operating license, including detailed construction plans. In this regard, I am mindful that, although it is the Department of Energy's responsibility to keep nuclear power as an option for meeting our nation's energy needs, the NRC should discharge its responsibility in a manner in which, after ensuring the public's health and safety, does not diminish the viability of the option.

I approve, for Commission review, the staff's proposal to develop a requirement for a plant-specific probabilistic risk assessment (PRA) in the upcoming Part 52 rulemaking. 10 CFR 52.47(v) already requires that a design-specific PRA be part of the application for a standard design certification. In contrast, 10 CFR 52.79(c) requires that a COL application include inspections, tests, analyses, and acceptance criteria (ITAAC). In this paper, the Commission is being asked to approve having the ITAAC include "programmatic" activities. I believe this expansion is contrary to the understanding of ITAAC to which the Commission agreed in the late 1980's, i.e., that ITAAC would apply only to "hardware." Given the experience the NRC and the industry has gained in the intervening years and the recent regulatory reforms undertaken by the NRC, particularly in the area of risk insights, I believe there is no need for such an expansion of ITAAC. According to Part 52, a COL applicant will have to comply with most of the requirements in Part 50, including inspections and enforcement. ⁽¹⁾ Moreover, the Commission granted design certifications to the Westinghouse AP600, the ABB/CE System 80+, and the GE ABWR without "programmatic" ITAAC. Therefore, I question the advisability of now interjecting the subjectivity of "programmatic" ITAAC into the COL process and disapprove the staff's proposal to treat QA deficiencies related to ITAAC.

I also do not approve, at this time, the proposed ITAAC verification program as it seems premature. I do believe that as we gain experience from implementing the revised reactor oversight process, as well as other Commission risk-informed initiatives, risk insights will be gained that will be useful for this purpose. To minimize uncertainty and ensure regulatory stability, the staff should make any necessary adjustments as part of the revision to Part 52 and not wait until future nuclear plant applications are announced.

I approve the form and content of the generic COL in Attachment 2 to SECY-00-0092 and the staff's proposal to require applicants to certify that ITAAC have been met, provided that "programmatic" ITAAC are not included.

Commissioner McGaffigan

Having reviewed this paper, letters from NEI, EPRI and Westinghouse concerning the paper, the Commission's 1989 Part 52 rulemaking and the statutory changes pertaining to licensing of advanced reactors in the Energy Policy Act of 1992, I approve

the staff's recommendations subject to the following comments.

The Commission obviously spent a great deal of time and effort in developing Part 52 more than a decade ago. The Commission was trying to design as predictable a process as possible with as many issues resolved as possible at the combined license (COL) application stage and with as few issues remaining as possible when construction is complete and operation is to begin. In the 1989 rule they did this in part by requiring in section 52.79(c) that the COL applicant submit "the proposed inspections, tests and analyses which the licensee shall perform and the acceptance criteria therefor which are necessary and sufficient (emphasis added) to provide reasonable assurance that, if the inspections, tests and analyses are performed and the acceptance criteria met, the facility has been constructed and will operate in conformity with the combined license, the provisions of the Atomic Energy Act, and NRC's regulations." In section 52.103, the Commission in 1989 then limited the grounds for a possible second hearing prior to fuel loading to whether "one or more of the acceptance criteria in the combined license have not been met and, as a result, there is good cause to modify or prohibit operation." In the Energy Policy Act of 1992, Congress essentially adopted the Commission's framework, but went further (in section 189.a.(1)(B)(iii) of the Atomic Energy Act) and granted the Commission authority to permit interim operation while a hearing proceeded if, after considering the petitioners' prima facie showing and answers thereto, the Commission determines there will be reasonable assurance of adequate protection during interim operation.

The industry now argues that the 1989 Commission and the 1992 Congress envisioned inspections, tests, analyses, and acceptance criteria (ITAAC) as wholly objective measures limited to facility hardware issues. I am afraid that this is not consistent with the 1989 Statements of Consideration. That Commission did not believe that "every finding the Commission must make before operation begins under a combined license will necessarily always be based on wholly self-implementing acceptance criteria." Indeed they postulated that "trying to assure that the tests, inspections and related acceptance criteria in the combined license are wholly self-implementing may well only succeed in introducing inordinate delays into the hearing on the application for a combined license."

ITAAC are described both in statute and in our rule as "necessary and sufficient (emphasis added) to provide reasonable assurance....." The word "sufficient" denotes that ITAAC must comprehensively cover matters which are of concern to a decision on operation and inevitably brings in programmatic, non-hardware matters. By allowing the Commission to authorize interim operation while any hearing proceeds, the Congress tried to limit the financial uncertainty of a licensee to the maximum extent possible while allowing for very focused public involvement at this late stage of the process.

The real issue, it seems to me, is how tightly the acceptance criteria for programmatic ITAAC can be drafted to make them as objective as possible. That issue should continue to be discussed by the staff with stakeholders in the context of the proposed rulemaking for certifying ITAAC. I agree with the Chairman that changes in QA requirements that may result from agency initiatives in risk-informed regulation need to be taken into account by the staff and industry in developing QA ITAAC for future plants.

I also agree with the Chairman that the continued effort to refine the regulatory process for licensing future plants is an important initiative for the agency. The fact that a new COL application may be a long way off should not deter the staff from addressing these issues now, in order to be prepared with an effective and efficient process.

Commissioner Merrifield

I approve the staff's recommendations outlined in SECY-00-0092. Specifically, I approve:

1. the proposed ITAAC verification program
2. the proposed treatment of QA deficiencies related to ITAAC verification
3. the proposed form and content of the generic COL

I agree with the Chairman and Commissioner McGaffigan that changes in QA requirements that may result from agency initiatives in risk-informed regulation need to be taken into account by the staff and the industry in developing QA ITAAC for future plants.

I believe that Commission approval of the staff's three recommendations simply serves as a starting point on these important matters. I do not believe the Commission intends for its approval to shut the door on further discussions with our stakeholders. It is clear from the Background section of SECY-00-0092 that interaction with stakeholders on the combined license review process has been somewhat limited over the last few years. This is not a criticism, as I appreciate that most of the staff's more recent efforts associated with Part 52 have been appropriately focused on design certifications. While the staff's recommendations appear reasonable based on the limited amount of information provided in the paper, I believe the staff must take further steps to ensure that our stakeholders understand with greater detail and specificity, how these recommendations will be implemented. I believe we can benefit from further dialogue with stakeholders on these and other important matters related to our combined license review process and I encourage the staff to remain open to improvements or alternative approaches that our stakeholders may suggest.

I am concerned about how the programmatic ITAAC issue is evolving. Subsequent to receiving SECY-00-0092, the Commission received letters from NEI, Westinghouse, and EPRI expressing concern over the manner in which the staff is proceeding on programmatic ITAAC. I was somewhat surprised that these stakeholders, who have been so active in Part 52 activities, could have an understanding of the ITAAC process, and more specifically programmatic ITAAC, that is so fundamentally different from that of the staff. This disconnect reinforced my belief that we cannot continue to address combined operating license issues in as sporadic and infrequent a manner as we have in recent years. Resources must be

applied to the combined license review process in a more consistent manner so that this and the other very important issues that form the regulatory infrastructure for Part 52 are promptly resolved and codified. We simply must ensure that the regulatory infrastructure is sound prior to receiving a new application. To do otherwise would be irresponsible.

In reviewing SECY-00-0092, I carefully reviewed the record associated with Part 52. I was surprised to find that while the staff has previously informed the Commission regarding its intentions associated with programmatic ITAAC, the basis for the staff's approach on programmatic ITAAC in the combined license review process has not, in my opinion, been thoroughly articulated. Furthermore, the Commission has not explicitly voted on the merits of the staff's approach. Thus, in order to get a better understanding of the staff's and the industry's positions on this important matter, I was briefed by NRR and OGC staff.

During the briefings, the staff presented a strong case for their approach on programmatic ITAAC. In the staff's view, Section 185.b. of the Atomic Energy Act provides the basis for their approach on programmatic ITAAC. The staff points to conforming language in 10 CFR 52.79 (c). Specifically, Section 185.b. states:

The Commission shall identify within the combined license the inspections, tests, and analyses, including those applicable to emergency planning, that the licensee shall perform, and the acceptance criteria that, if met, are necessary and sufficient to provide reasonable assurance that the facility has been constructed and will be operated in conformity with the license, the provisions of this Act, and the Commission's rules and regulations.

The staff broadly interprets this language, placing emphasis on the terms sufficient, operated, and rules and regulations to support their all-encompassing ITAAC approach on programmatic issues. Based on my review, I believe the staff's position on programmatic ITAAC is logical and defensible. From my perspective, the term "sufficient" denotes that ITAAC were intended to comprehensively cover both the hardware and programmatic matters necessary to provide the reasonable assurance described above.

Having said that, the above language is not particularly clear and thus could be subject to reasonable, yet differing interpretations. For example, if Congress intended a broad interpretation (i.e., to include programmatic issues) of what must be addressed as part of the ITAAC process, why did it specifically call out the programmatic issue of emergency planning? Also, in its letter of June 16, 2000, NEI emphasizes the word "facility" in the language, arguably lending some credence to their position that COL ITAAC apply only to hardware issues. I believe the term "operated" also lends itself to interpretation, especially with respect to how narrowly or broadly it should be applied. Thus, while I believe that the staff's position on programmatic ITAAC is logical and defensible, I am not yet convinced that it is the only logical and defensible position. Thus I believe that constructive dialogue between the NRC, the industry, and our stakeholders is absolutely essential. The staff should be open to stakeholder feedback and alternative approaches to this important issue. Subsequent to these discussions, the staff should formally provide the Commission with a recommendation as to how to proceed on programmatic ITAAC, the basis for this recommendation, a discussion of alternatives proposed by stakeholders, a legal analysis supporting the recommendation, and a thorough description of how the staff would implement its recommendation. This should serve to alleviate the uncertainty and differences of opinion that clearly exist on this important matter.

As we engage in constructive dialogue with our stakeholders on this matter, we must keep in mind what the intent of Congress was when it approved the Energy Policy Act of 1992, and what the Commission's intent was when it approved Part 52. There is no question in my mind that Congress and the Commission envisioned a reactor licensing process which protected public health and safety as well as the environment. There is also no question in my mind that Congress and the Commission intended for the NRC to have a sensible and stable procedural framework in place for the consideration of future designs, and to make it possible to resolve safety and environmental issues before plants are built, rather than after. In other words, both Congress and the Commission clearly believed it was in the best interests of our stakeholders to have a stable combined license review process that provided for early resolution of safety and environmental issues in licensing proceedings, and which eliminated the unpredictability and instability that plagued our Part 50 licensing process.

An issue at the heart of discussions related to the predictability and stability of the combined license review process is that of objective ITAAC acceptance criteria; an issue recognized by the Commission in its 1989 Statements of Consideration. Programmatic issues do not necessarily lend themselves to reasonably objective, precise ITAAC acceptance criteria. Thus, I am concerned that the staff's approach on programmatic ITAAC could, if not implemented in a disciplined manner, inappropriately introduce the instability and unpredictability that Part 52 and ITAAC were designed to eliminate. More specifically, if the staff proceeds with its broad approach to programmatic ITAAC in the combined license review process, it is likely that there will be acceptance criteria that are imprecise and less objective. Such acceptance criteria inherently lend themselves to interpretation, and thus introduce instability and unpredictability not only with respect to the NRC's inspection program but also with respect to requests for hearings as discussed in Section 189 of the Atomic Energy Act and 10 CFR 52.103 (b)(1). The imprecision or subjectivity of the acceptance criteria clearly make them more susceptible to inappropriate interpretations and challenges, increasing the likelihood of a request for a hearing prior to fuel loading as discussed in section 52.103(b)(1). In essence, unless reasonably precise and objective acceptance criteria can be developed for programmatic ITAAC, an intolerable level of instability and unpredictability will be inherent in the combined license review process, and that process will simply not live up to Congress' expectations when it approved the Energy Policy Act of 1992, or the Commission's expectations when it approved Part 52.

Thus, I understand and appreciate the concerns raised by EPRI, Westinghouse, and NEI. As I stated above, it is imperative that we promptly commence constructive dialogue with the industry and our stakeholders on the programmatic ITAAC issue. Most importantly, the staff should work with our stakeholders on developing, to the extent practical, acceptance criteria for programmatic ITAAC that are reasonably objective and precise. In addition to providing the Commission with the information discussed above, I believe the staff should also formally report back to the Commission on the success of efforts to bring

reasonable precision and objectivity to the acceptance criteria associated with programmatic ITAAC.

1. For example, 10 CFR 52.83 states: "Unless otherwise specifically provided for in this subpart, all provisions of 10 CFR part 50 and its appendices applicable to holders of construction permits for nuclear power reactors also apply to holders of combined licenses issued under this subpart. ...Similarly,...applicable to holders of operating licenses also apply to holders of combined licenses issued under this subpart." 10 CFR 52.99, "Inspection during construction" states: "Holders of combined licenses shall comply with the provisions of 10 CFR 50.70 and 50.71."