

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SECRETARY

November 16, 2006

COMMISSION VOTING RECORD

DECISION ITEM: SECY-06-0187

TITLE:

SEMIANNUAL UPDATE OF THE STATUS OF NEW REACTOR LICENSING ACTIVITIES AND FUTURE PLANNING FOR NEW REACTORS

The Commission (with Chairman Klein, Commissioner McGaffigan, Commissioner Merrifield, and Commissioner Lyons agreeing and Commissioner Jaczko agreeing in part and disagreeing in part) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of November 16, 2006.

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

Andrew L. Bates Acting Secretary of the Commission

Attachments: 1. Voting Summary

2. Commissioner Vote Sheets

cc: Chairman Klein Commissioner McGaffigan Commissioner Merrifield Commissioner Jaczko Commissioner Lyons OGC EDO PDR

VOTING SUMMARY - SECY-06-0187

RECORDED VOTES

	APRVD D	ISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. KLEIN	Х				Х	10/11/06
COMR. McGAFFIGAN	X				X	10/19/06
COMR. MERRIFIELD	Х				X	10/26/06
COMR. JACZKO	Х	Х			. X	10/06/06
Comr. LYONS	X				X	10/11/06

COMMENT RESOLUTION

In their vote sheets, the Chairman and Commissioners McGaffigan, Merrifield, and Lyons approved and Commissioner Jaczko approved in part and disapproved in part the staff's recommendation, and all the Commissioners provided some additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on November 16, 2006.

RESPONSE SHEET

TO:	Annette Vietti-Cook, Secretary	
FROM:	CHAIRMAN KLEIN	
SUBJECT:	SECY-06-0187 - SEMIANNUAL UPDATE OF THE STATUS OF NEW REACTOR LICENSING ACTIVITIES AND FUTURE PLANNING FOR NEW REACTORS	
Approved <u>XX</u>	Disapproved Abstain	
Not Participating		
COMMENTS:	Below Attached_XX None	

SIGNATURE

10/11/06 DATE

Entered on "STARS" Yes 🗸 No ____

I appreciate Commissioner Jaczko's concern about the potential situation that could occur whereby the NRC would receive more new reactor licensing applications than is included in the budget. I agree that the agency needs to be ready for such a situation should it occur and I have every confidence in the staff's ability to address changing workload. I agree with most of the thoughts expressed in Commissioner Jaczko's vote and support sharing them with the staff for consideration when allocating resources during budget execution subject to the comments below.

First, it should be noted that these criteria apply when allocating resources during budget execution only and should not be applied in preparing budget requests. The staff should continue to plan and budget for all low and medium uncertainty new plant licensing applications.

Second, I do not support including an attribute giving preference to "applications that reference a completed ESP and reference a certified design." I believe the staff should have sufficient flexibility to consider the status of its review of design certification applications when making decisions about resource allocations for COL reviews. For example, the staff should not necessarily defer reviews of COL applications if the referenced designs are in advanced stages of review and the vendor is providing the necessary support for a timely completion of the review. The staff should base its decision in such cases on the status of the review of the design certification application.

Third, I would caution against guidance that is conclusive with regard to the potential outcome of meeting other permitting requirements. The staff and the applicants are not in a position to predict definitively whether or not an application will be found to be acceptable by other permitting authorities. I recommend using the following in place of the second and third bullets in Commissioner Jaczko's vote: "Applications that demonstrate adequate coordination with other permitting authorities."

RESPONSE SHEET

TO:	Annette Vietti-Cook, Secretary	
FROM:	COMMISSIONER MCGAFFIGAN	
SUBJECT:	SECY-06-0187 - SEMIANNUAL UPDATE OF THE STATUS OF NEW REACTOR LICENSING ACTIVITIES AND FUTURE PLANNING FOR NEW REACTORS	
Approved X	_ Disapproved Abstain	
Not Participating		
COMMENTS:	Below Attached 🔀 None	

SIGNATURE Office 2006 19

DATE

Entered on "STARS" Yes 🔀 No ____

Commissioner McGaffigan's Comments on SECY-06-0187

I agreed with Commissioner Jaczko last March that the Commission needed to develop a plan on how it intends to deal with the avalanche of advanced reactor Early Site Permit (ESP) and combined operating license (COL) applications which will confront the staff starting late next year. In particular, I agreed then -- and still do now -- that the staff will need criteria to prioritize its reviews of ESP, COL and design certification applications.

We have always had such criteria, but they have traditionally been informal ones. For design certifications we gave review priority to those applicants who demonstrated strong utility interest in deploying their design. In the case of ESP applicants, we prioritized based on the likelihood of a follow-on COL application.

The Congress has been generous. Perhaps in a perfect world, one blessed with ample staffing, low turnover, and budgetary constancy, the staff could manage even the expected avalanche of applicants for COLs, ESPs, and design certificates, armed only with traditional informal prioritization. However, there is no assurance at all that this will remain the case and we should not plan according to best case scenario assumptions. Long range planning is difficult at best, since NRC budgets and other agencies' priorities are always subject to the political processes inherent in our democracy. Even as I draft this vote, the Agency (and all others in the Federal family except DoD and DHS) are operating under a Continuing Resolution that effectively reduces NRC funding to a level \$100M below the FY 2007 level approved by the House and the Senate Appropriations Committee. Since the first budgetary priority of the NRC is -- and must always remain -- the safety and security of operating nuclear power reactors and irradiated fuel, new reactor review activities will inevitably be impacted once our carryover funds are exhausted. If we ever needed a demonstration of the need for formal prioritization, we have one now.

Nor are budgetary issues the only ones that could affect schedules. Other governmental entities have their own priorities and roles to play in the complex regulatory process applicants face. For example, DHS has a required statutory role on both emergency preparedness and security. Yet a hurricane like Katrina would likely result in DHS stripping personnel assets from all other areas to deal with such a crisis. Appropriate as such a focusing might be on the larger scale, it would completely halt DHS actions in nuclear license activities for an unpredictable period likely to span many months.

Nor would it take a catastrophe to precipitate an impasse or otherwise cause significant delay with respect to an applicant and another government entity. As the Commission heard from State officials in a public briefing Tuesday, 10/17/06, applicants have a plethora of State and local government entities to deal with on a myriad of matters such as water permits, rate cases, tax treatments, fuel clauses, cost recovery, etc.

The staff deserves formal prioritization guidance from the Commission. We should not force the staff to attempt to manage with only the traditional informal criteria. We may not agree unanimously on which prioritization scheme is best but, in my opinion, the worst plan of all is not to establish one.

One final thought before turning to the prioritization factors. NRC's goal over the next several years should be to deal honorably with applicants investing billions of dollars. We should learn as we go and make sure that there is a rapid lessons learned feedback loop so we need only learn lessons once. If we do so, as we have done in license renewal and power uprate applications from the existing fleet over the past eight years, there will be a follow-on wave of applicants on perhaps an even greater scale. If we do not, our processes will have denied the Nation an essential element of a diversified energy policy for the twenty-first century.

Commissioners Jaczko and Lyons both set out in their votes clear series of attributes for the staff to consider should the staff not have sufficient resources to support all the new plant licensing activities before them. In such a situation, there will be an urgent need both to maximize the efficiency of NRC review and also to minimize the possibility that NRC resources might be applied to applications that have little or no likelihood of being utilized. I support the items set out in my colleagues' votes, as modified below, because the attributes emphasize that when possible the staff should:

- 1) Utilize reviews, certifications, and analyses that the staff has previously completed; and
- 2) Devote NRC resources to applicants who demonstrate a high likelihood of completing the projects under review.

I join with Commissioners Jaczko and Lyons in stating that applicants should be committed to the design-centered review approach described in Regulatory Issue Summary 2006-06 (and any subsequent related guidance documents). Additionally, staff should consider the specific factors set out below in making resource allocation decisions should the licensing task load for new reactor licensing exceed the available resources.

For COLs:

- the extent to which an application references a completed ESP and a certified design;
- the degree of quality and the completeness of the application itself;

- the extent to which an application references an ESP application submitted well in advance of the COL and which demonstrates the likelihood that environmental and EP issues will be resolved prior to the COL hearing;

- the extent to which an applicant has coordinated with applicable state permitting authorities;

- the extent to which an applicant has coordinated toward meeting other applicable federal requirements;

- the schedule of the Department of Homeland Security (DHS) review of an applicant's EP plan, and the schedule for the DHS security consultation consistent with Section 657 of the Energy Policy Act of 2005;

- the evidence of the applicant's financial commitment to build a reactor in the near term, including the extent of procurement and orders for long lead time components and other related financial information;

- the degree of an applicant's adherence to schedules and meeting of milestones that could impact the staff's review; and

- the extent to which prioritization of the application could enhance efficiencies in the conduct of the adjudicatory process.

For ESPs:

- the degree of quality and the completeness of the application itself;

- the extent to which an application is likely to be followed up in the near term by a COL at the designated site; and

- the degree of an applicant's adherence to schedules and meeting of milestones that could impact the staff's review.

Design Certifications:

- the degree of quality and the completeness of the application itself;

- the extent to which a certification is likely to be followed up in the near term by a COL application that would reference the designated design; and

- the degree of an applicant's adherence to schedules and meeting of milestones that could impact the staff's review.

One last comment on the paper. I notice that Table 1 does not have the Southern ESP completed until FY 2009. At Tuesday's briefing I heard 21 months as the timeline for this ESP review. That would mean completion by May 2008. As I said at the briefing, it is very important that, having learned from the first three ESP reviews, we carry out future reviews much more effectively and efficiently. It is possible that the staff's table is allowing a very long time for hearings after completion of staff work. The Commission clearly is determined to find a way to streamline the mandatory hearing under current law, or perhaps eliminate the requirement as I have argued separately. Given the guidance the Commission has already given the ASLB, no more than four months should be added to the staff's schedule for a mandatory hearing. By 2008, perhaps a shorter period will be able to be scheduled.

RESPONSE SHEET

TO:	Annette Vietti-Cook, Secretary	
FROM:	COMMISSIONER MERRIFIELD	
SUBJECT:	SECY-06-0187 - SEMIANNUAL UPDATE OF THE STATUS OF NEW REACTOR LICENSING ACTIVITIES AND FUTURE PLANNING FOR NEW REACTORS	
Approved	Disapproved Abstain	
Not Participating		
COMMENTS:	Below Attached // None	

SIGNATURE

10/26/0 DATE

Entered on "STARS" Yes 📈 No ____

Commissioner Merrifield's Comments on SECY-06-0187 "Semiannual Update of the Status of New Reactor Licensing Activities and Future Planning for New Reactors"

I approve the staff plan for new reactor licensing reviews, and I commend the staff for continuing to keep the Commission fully informed of current activities and future plans via semiannual update papers.

That said, I am fully aware of the potential bow wave of new reactor licensing applications, and the substantial amount of work associated with reviewing those applications, in 2007 and beyond. I fully support the design centered review approach outlined by the staff as a way to conduct effective and efficient reviews of these applications in a timely manner. The staff is well on the way in preparation for these reviews by hiring and training new staff, and creating the Office of New Reactors to focus on licensing the next generation of nuclear power plants.

I applaud my fellow Commissioners who have provided ideas on how best to cope with the potentially large number of applications, as noted in their respective votes. In the face of potentially 20 new reactor orders or more in the next 5 years, more than 3 times the number I could have imagined even a year ago, I agree the NRC cannot continue to keep adding staff and asking Congress for additional resources based solely on letters of intent from prospective applicants. Nor do I believe the Commission should continue to direct the staff to deal with the ever-growing list of potential applications through the PBPM process without further guidance. Given the increased level of interest in new reactors, the Commission can no longer afford to budget for work that is of a speculative nature. We need to know which prospective applicants are serious about building a new reactor in the next 5-10 years, and focus the bulk of the effort of the Office of New Reactors on those applications.

First, I propose to change the Commission's policy of reviewing design certification applications using a "first in, first out" priority scheme. While this policy made sense when the scope of work of the Agency was much smaller, given the huge number of staff we need to hire to review combined license applications, as well as the challenge we face to find offices where they can work, we cannot afford to spend time reviewing designs that may never be built. For this reason, I believe that, at least for the next several years while we will potentially be licensing a large number of new plants, any entity seeking a reactor design certification from the NRC should have a sponsor, such as a utility or a federal government agency, that is committed, in writing, to build such a reactor in the U.S. if the design is approved, and is willing to make a meaningful investment in the NRC's cost of reviewing the reactor design. In the event that a company cannot procure such a sponsor, review of the proffered design should be deferred until review of other designs with the requisite sponsorship have been completed.

Second, to ensure the seriousness of prospective COL applicants, I propose some form of cash payment up front to be submitted with the applicant's letter of intent. This "earnest money" would help defray the NRC's preparation costs of hiring and training new staff necessary to review incoming applications before the applications are actually docketed. Because this new infrastructure must be in place well in advance of receipt of the applications, we cannot rely on our current fee structure to meet this need. I believe that collecting such a fee is the fairest way to handle this situation, given that, currently, our existing licensees are being charged on a prorated basis for these activities, regardless of whether they intend to submit a new reactor license application. In my view, utilities who choose <u>not</u> to build a new reactor, should not be forced to subsidize those utilities that want to build a new reactor, or a non-licensee who wants

to become a nuclear utility. Consequently, the OGC and OCFO staff should develop a paper on the feasability of charging prospective applicants a fee, including various options for putting such a fee in place and the pros and cons associated with each option, within 90 days of the date of the SRM on this paper.

Third, to further assist the staff in prioritizing COL application reviews and determine which applications are most likely to mature into an actual plant order, applicants should be encouraged to include as much of the following information as possible in the COL application submittal:

- 1. The reactor design the applicant has chosen and the date the applicant signed a contract to purchase the design;
- 2. The date of procurement of long lead time reactor components (reactor vessel, steam generators, etc);
- 3. The architect-engineer the applicant has chosen and an outline for the provision of detailed design information.
- 4. The schedule for responding to staff requests for additional information (RAIs) concerning the application, assuming the staff follows the normal projected time line for a COL review (Note this may involve interaction with the staff prior to submitting the application);
- 5. The schedule for site preparation work, under a limited work authorization, if appropriate;
- 6. The construction schedule for the new unit, assuming the staff approves the application in the normal projected time frame;
- 7. Coordination and schedule of applicable reviews by other federal and state permitting authorities; and

8. Information about the form and source of financing for the proposed unit(s).

I look forward to working with my colleagues on the Commission to provide common sense guidance to the staff as we prepare for an unprecedented resurgence in building new nuclear power plants. The President, the Congress, and the American people expect us to fully review these license applications to ensure the continued safe use of nuclear power. To maintain our strategic goals of effectiveness, efficiency, and timeliness, and to provide equity to <u>all</u> of our reactor licensees, we must provide an appropriate prioritization methodology that will ensure we focus on reviewing those applications that are most likely to be built, and at the same time we must not financially penalize those licensees who choose not to build a new plant at this time.

10/20/00

RESPONSE SHEET

- TO: Annette Vietti-Cook, Secretary
- FROM: COMMISSIONER JACZKO

SUBJECT: SECY-06-0187 - SEMIANNUAL UPDATE OF THE STATUS OF NEW REACTOR LICENSING ACTIVITIES AND FUTURE PLANNING FOR NEW REACTORS

Approved X Disapproved X Abstain _____

Not Participating

COMMENTS: Below____Attached_X_None____

SIGNATURE

10/6/00

DATE

Entered on "STARS" Yes X No ____

Commissioner Jaczko's Comments on SECY-06-0187 Semiannual Update of the Status of New Reactor Licensing Activities and Future Planning for New Reactors

I am supportive of the design centered approach to licensing reactors and more importantly of the standardization this approach will bring to nuclear power plants if the Commission approves any licenses. I also believe, however, that it is only a partial solution to meeting the potential demands of reviewing the anticipated license applications for possible new nuclear power reactors.

The workload this agency may potentially receive in the coming years is unprecedented to most of this generation of regulators. Safety is the core of the agency's mission. The Commission must consider additional action now to ensure that the staff will be ready to complete a large workload and consider actions necessary to ensure safety, security and emergency preparedness of new reactors.

According to the staff, approximately 70% of an application can be standardized. This portion largely involves the technical aspects of the reactor designs in large part certified through a rulemaking process. The agency, however, needs to manage the challenges that may potentially be presented in the remaining 30% of the review that is site specific and does not lend itself to standardization.

These areas may present unique challenges and they are likely to include: the environmental review; the emergency preparedness review; the ultimate heat sink and other cooling sources; offsite power; and seismic considerations. These are also the areas most likely to have contentions raised in the hearing process as they may not be part of the design certification rulemaking. While these areas constitute only 30% of the review, in terms of overall agency effort in the licensing process, most notably the hearing process, they are significant. This is why it is important to plan ahead for allocation of staff resources over the next several years should the technical staff, the legal staff, or the hearing boards become overwhelmed by the number of applications or the challenges presented by them.

Thus, I propose that, first and foremost, applicants should be committed to the design centered review approach as communicated to the industry in Regulatory Issue Summary (RIS) 2006-06. In order to demonstrate this, applicants should be active participants in a design centered working group certification well in advance of the submittal of the reference COL. These working groups should focus on designs that either have been or will be presented for design certification. In addition, and consistent with the design-centered review approach, applicants should submit high quality, standardized applications; and the NRC staff should continue to be firm in their acceptance reviews of applications.

Beyond these criteria, and within the design centered approach, should the staff not be able to support all plant licensing applications that the staff has budgeted resources for, the staff should consider, among other things, COL applications commensurate with their having the following attributes:

- Applications that reference a completed ESP and reference a certified design;
- Applications that demonstrate adequate coordination with state permitting authorities to facilitate success of permitting by those authorities.

- Applications that demonstrate other federal permitting requirements will be met;
- Applications that reference an Early Site Permit application submitted well in advance of a COL and demonstrate the likelihood that environmental issues will be resolved prior to COL hearing;
- Applications that contain, or have a schedule for completion of, a review of their emergency preparedness plan by the Department of Homeland Security;
- Applications that demonstrate, in a proprietary nature if necessary, a strong financial commitment to build a reactor in the near term.
- Applications that demonstrate, in a proprietary nature if necessary, the procurement of long lead time reactor components that can facilitate the NRC scheduling of vendor and construction inspections.

For other types of applications, COLs should take precedence over ESPs that do not have an associated near-term COL. Additionally, design certification applications with domestic interest in development of that design should receive priority over those that do not.

Therefore, should the staff not be able to support all plant licensing applications that the staff has budgeted resources for, the staff should consider, among other things, the above general guidance for appropriately allocating resources. I encourage my fellow Commissioners to join with me in adopting these principles or suggesting other options that they believe will achieve the same objective. Commissioner McGaffigan and Commissioner Merrifield have offered thoughtful views on this matter and I look forward to working with them, and my other colleagues, to address the potentially large workload in a manner to allow the agency to fulfill its important role to the American public - of ensuring the commercial use of nuclear materials in a manner that adequately protects public health and safety and the environment and the common defense and security of the nation.

e**ɗ**ory B. Jaczko

RESPONSE SHEET

TO:	Annette Vietti-Cook, Secretary		
FROM:	COMMISSIONER LYONS		
SUBJECT:	SECY-06-0187 - SEMIANNUAL UPDATE OF THE STATUS OF NEW REACTOR LICENSING ACTIVITIES AND FUTURE PLANNING FOR NEW REACTORS		
Approved X	Disapproved Abstain		
Not Participating			
COMMENTS:	Below Attached_X_ None		

Peter B. Lyons	CaBlyn
SIGNATURE	

10/ // /06 DATE

Entered on "STARS" Yes <u>x</u> No _____

Commissioner Lyons' Comments on SECY-06-0187

I appreciate the points raised by Commissioner Jaczko and similarly support the staff's designcentered approach to licensing new reactors and the standardization of applications that this approach will require. I believe that the Commission could provide beneficial high-level guidance for allocating resources for staff reviews of new reactor applications, for use in the event that other measures the Commission has already taken, such as the aggressive staffing and supporting infrastructure increases, are not sufficient to reasonably accommodate the workload.

When establishing such guidance, I believe it is important to ensure that staff is able to react appropriately to a potentially very dynamic licensing environment. Therefore, I would not support Commission-directed criteria that must be followed rigorously. Rather, I believe it better to establish a set of factors that staff should consider when making resource allocations and schedule decisions if and when actual licensing work exceeds that which can be addressed through the add/shed process staff normally uses to meet licensing performance goals. Guidance to consider such factors must continue to permit staff flexibility to appropriately adjust schedules and budget as conditions change, in order to best accomplish the NRC's mission. I assume a continuation of the usual thresholds for staff to engage the Chairman and the Commission.

I generally support most of the factors noted by Commissioner Jaczko, with some modification noted as follows.

Staff should consider the following specific list of factors for resource allocation and schedule decisions if and when new reactor licensing work exceeds that which can be addressed through the normal PBPM process.

for any one of multiple COL applications referencing the same design certification, the extent of the applicant's commitment to the design-centered review approach described in Regulatory Issue Summary 2006-06 and any subsequent related guidance documents (this factor should not, however, disadvantage a COL applicant referencing a design that is not referenced in other COL applications)

- the degree of quality and completeness of any application
- the extent to which a COL application references a completed ESP and a completed design certification
- the extent to which a COL applicant has coordinated with applicable state permitting authorities
- the extent to which a COL applicant has coordinated toward meeting other applicable federal requirements
- the schedule for the Department of Homeland Security review of an application's emergency preparedness plan
- the degree of an ESP or COL applicant's financial commitment to build a reactor in the near term, including the extent of procurement and orders for long lead time components and other related financial information

- the degree of an applicant's historical adherence to schedules and meeting of milestones that could impact the staff's review
- the extent to which prioritization of any application could enhance efficiencies in the conduct of the adjudicatory process
- the extent of domestic interest in a design certification application.

In general, I would not support any factor that requires prejudging the likelihood that issues outside of NRC's purview (e.g. being reviewed by other federal, state, or local agencies) will be resolved.

Peter B. Lyons Date