BRIEFING OF LUIS REYES

EXECUTIVE DIRECTOR FOR OPERATIONS

APPEAL OF DPO-2006-005,
"MANAGEMENT POLICY ON
LICENSING NEW FUEL CYCLE FACILITIES"

November 30, 2007

SUMMARY OF DPO ISSUES

Two main issues: completeness of integrated safety assessment (ISA)
completeness of design

- Completeness of ISA

  Part 70 requires identification of each credible high- and intermediate-consequence accident sequence and each item relied on for safety (IROFS) needed to meet the performance requirements. (Breadth of the ISA) [10 CFR 70.61(b), (c), (d), (e); 70.62(c); 70.65(b)]

  Part 70 also requires there be sufficient information for NRC to determine the adequacy of IROFS to meet the performance requirements. (Depth of ISA, or level of detail) [10 CFR 70.62(c)(vi); 70.65(b)(4) and (b)(6)]

- Completeness of Design

  Reasonable assurance that each accident sequence and IROFS have been identified requires a sufficiently complete facility and process design upon which an analysis is based.

  Determination of the adequacy of the IROFS also requires sufficiently complete facility process and design.

  [10 CFR 70.22(a)(7); 70.23(a)(3)]

SUMMARY OF DPO ISSUES (CONT.)

- The August 4, 2006, policy memo is lacking in that it:

  -- does not provide clarity regarding the completeness of the ISA and design for licensing of new facilities
  -- incorrectly over-emphasizes programmatic aspects of licensing reviews
  -- introduces new terms without defining (e.g., “functional-level”)
  -- shifts licensing responsibility to inspection

- The DPO panel report and DPO decision did little to clarify these areas.

- Our goal in appealing is to ensure that our issues are clearly understood, as it does not apear that the panel fully understood them, and that there is a process in place and clear, rational guidance to reviewers and licensees to support subsequent new fuel cycle facility reviews.

SIGNIFICANT AND SPECIFIC ISSUES OF THE APPEAL

We raised these and other issues in our April 16, 2007, comments on the draft DPO panel report but the panel was not responsive to them.

- The DPO report and the subsequent DPO decision focused on a different issue (the amount of information the licensee needs to provide to the NRC) than those in our DPO (completeness of the design and the ISA), despite our detailed comments that the panel misunderstood these issues. The panel focused exclusively on its argument that functional-level description is sufficient to support licensing (depth) rather than the additional major concern of the DPO of whether any information existed on given scenarios and IROFS (another aspect of completeness--breadth).

- While the DPO panel report and DPO decision did not endorse the submitters' views on what constituted a complete ISA, they did not

    -- clearly articulate a rational and defensible alternative; or
    -- define what constitutes a complete ISA before the working group named in the recommendation initiated work

- To be responsive to the DPO, completeness of design needs to be addressed as a technical, not just as a regulatory, issue (i.e., is it even possible to develop a complete ISA without a sufficiently complete design upon which to base it?).

- Regulatory requirements noted in the DPO were not addressed in the DPO panel report.

SIGNIFICANT AND SPECIFIC ISSUES OF THE APPEAL (cont.)

- There needs to be a clearly articulated definition of “programmatic” within the context of implementing Part 70. Including “functional-level description” (i.e., technical information) within the definition of “programmatic” is unique and not consistent with the commonly-accepted understanding of “programmatic” (which involves programs and commitments).

- It is not clear to what a “functional-level description” applies but it appears that it would only apply to IROFS and not scenarios. It is further not clear how a “functional-level description” alone allows a reliability to be assigned to an IROFS to demonstrate compliance with performance requirements as required by Part 70; it appears one would also need to know whether the IROFS is active, passive or a human action to assign a defensible reliability.

- If “functional-level description” is going to be a term retained in implementing Part 70, it needs to be clearly stated that the needed description in terms of level of IROFS detail may vary depending upon the scenario, the type of IROFS, and type of hazard.

- It is not clear that the transfer of responsibilities from licensing review to inspection is appropriate and consistent with the rule, that is, certain regulatory conclusions must be drawn to support licensing and cannot be deferred. While inspectors can verify that chosen components meet a functional description, they are not in a position, nor have they historically been called upon to make such licensing determinations, to determine (1) adequacy and completeness of scenarios, (2) adequacy of IROFS selected, including appropriateness of likelihoods assigned for reliability, or (3) translation of commitments to standards to specific design applications.

SIGNIFICANT AND SPECIFIC ISSUES OF THE APPEAL (cont.)

- There needs to be clear communication of the shift from licensing responsibilities to inspection responsibilities for the USEC facility, consistent with the Agency value of Openness and the previous strategic goal of Openness. If deemed appropriate and consistent with the rule for such a responsibility shift to occur for other new facilities, similar clear communication needs to occur.

- We disagree with the panel conclusion that existing facilities should be allowed to provide only functional-level information. This is not consistent with ISA reviews and amendments for existing facilities and an ongoing facility review.

- In light of Agency resource tightening, resources need to be available to provide the needed clarity to Part 70 guidance and its implementation and the transfer of responsibilities to inspection for USEC and other new facilities to which a similar approach may be used.

SPECIFIC IMPLEMENTATION ISSUES RELATED TO RECOMMENDATIONS

- Clarify working group role: decision states the working group will incorporate August 4 policy in guidance vs. verbal information from Mike Weber that the rule and the SRP are starting points (i.e., that the working group has “free rein” to disagree with the policy)

  -- Clarify how submitters will be involved as stated in the statement of views by Mr. Weber. No involvement has occurred to date.

  -- Concern regarding management oversight for implementation and Agency decision level. Previously, the Commission was provided the SRP in conjunction with the rule.

OTHER ISSUES RAISED BY DPO

- Risk and Part 70

  -- View has been expressed that gas centrifuge facilities are low risk and that Part 70 allows consideration of risk. We generally agree with this, but...

    -- Submitters would say that the requirements of the regulation (in particular regarding completeness of the ISA and design) apply equally to all Part 70 licensees. All licensees must demonstrate an equivalent level of risk (e.g., high-consequence events are “highly unlikely”). The rule does not provide separate requirements for low-risk facilities.

    -- Risk considerations come into play only in how much the staff needs to review, not in what the licensee needs to demonstrate, for regulatory compliance. Licensees with lower-risk facilities should have an easier time demonstrating acceptable risk and compliance with provisions of the regulations.

- 10 CFR 70.72 Change Process

  -- For licensees to use the change process as outlined in the rule, IROFS need to be defined.

  -- Conceptual design without IROFS defined or commitments to standards do not allow the licensee to be able to perform the required change analysis.

OTHER ISSUES RAISED BY DPO (cont.)

- Policy Issues

  -- Subpart H of Part 70 and the associated SRP were provided to the Commission as part of the rule approval process. If the SRP is going to be revised in a substantive way, the Commission should have the same opportunity to endorse the new guidance.

DPO PROCESS ISSUES

- In effect, submitters select no panel members.

  -- Submitters provide 3 names and then management selects which of the 3 (in addition, management gets to choose 2 members outright).

- Soon after issuance of the draft DPO panel report for comment and before the submitters had provided comments (which were significant), Mr. Weber issued an e-mail to the DPO panel commending them by stating the report "accurately and completely characterizes the staff position at issue and is responsive to the charge to the panel from Jack Strosnider."

  -- Removed incentive for DPO panel to address any of our comments in its final report.

- The requirement that the DPO be submitted after an Agency decision has already been made makes it extremely difficult for submitters to be satisfied with an Agency response.

  -- Agency is in a difficult position to acknowledge an error, especially after the Agency decision

  -- When followup actions are assigned to the same decision makers, it is difficult for them to offer an unbiased re-assessment, especially after the Agency decision has been made.

  – The requirement to submit a DPO after the Agency decision means that the USEC issues could not be resolved before the Hearing Board's decision on licensing.

DPO PROCESS ISSUES (CONT.)

- Numerous statements made regarding career progression by being a DPO submitter. Other staff who are in agreement with the submitters are reluctant to provide comments.

- Panel was not responsive to our statements that indicated the panel had not understood the full range of issues raised.

- It is not clear to what extent our concerns will be addressed in the follow-up actions to this DPO. For example, Mr. Weber's verbal comments that the working group should have "free rein" to disagree with the policy, and that the submitters should be substantially included in the resolution, is encouraging, but not established in writing.

Some Questions Left Unanswered by August 4, 2006, Policy Memo, DPO Panel Report, and DPO Decision

- If all accident scenarios and IROFS do not need to be identified, how many of them need to be identified to be found acceptable? What is the minimum standard for licensing new facilities? [Note Tim Johnson's ASLB hearing testimony stated that all scenarios and IROFS need to be identified to support licensing.]

- If acceptability in electrical and instrumentation and controls areas may be based on commitments to standards, can the entire review be done this way? How does this approach even meet a "functional-level description"? What about safety disciplines in which detailed standards do not exist (criticality)?

- Is Douglas Collins' September 26, 2006, memo correct in stating that the facility design will be reviewed during inspection? Is this appropriate? If so, what training will be provided for the inspectors to equip them to do this review? What infrastructure will be put in place (e.g., inspection procedures, sufficient resources in terms of personnel and schedule)?

- The requirements of 10 CFR 70.72 presupposes a baseline design against which changes must be evaluated, most specifically changes to IROFS (e.g., "equivalent replacement" of IROFS). If not all IROFS have been identified (and the facility design upon which the ISA is based is incomplete), then how can changes be evaluated?

Some Questions Left Unanswered by August 4, 2006, Policy Memo, DPO Panel Report, and DPO Decision (cont.)

- Unanalyzed events are required to be reported within 24 hours under Part 70, Appendix A. If the existence of an unanalyzed sequence is of such regulatory concern, then how is it acceptable to license a facility with whole portions of the design unanalyzed?

- To date, current licensees and applicants, and staff reviewing the ISAs of these new and existing facilities have understood that each scenario and each IROFS needed to be part of the ISA and ISA Summary. If indeed the policy interpretation of Part 70 is correct, why were not the current licensees and staff interpreting it that way earlier? Why has the review of new facilities not been structured this way? How is it logically supportable that the Agency would require less, as appears to be the direction in the August 4, 2006, policy memo, of new technology facilities than of operating facilities with operational history?