February 24, 2000

COMMISSION VOTING RECORD

DECISION ITEM: SECY-99-244

TITLE: LOCATION OF THE NRC'S TECHNICAL TRAINING CENTER AND APPROPRIATE NUMBER OF SIMULATORS

The Commission (with all Commissioners agreeing) approved in part and disapproved in part the subject paper as recorded in the Staff Requirements Memorandum (SRM) of February 24, 2000.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission, and the SRM of February 24, 2000.

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Annette Vietti-Cook
Secretary of the Commission

Attachments: 1. Voting Summary
2. Commissioner Vote Sheets
3. Final SRM

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

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VOTING SUMMARY - SECY-99-244

RECORDED VOTES

| | APRVD | DISAPRVD | ABSTAIN | NOT PARTICIP | COMMENTS | DATE |
|---|---|---|---|---|---|---|
| CHRM. MESERVE | X | X | | | X | 2/23/00 |
| COMR. DICUS | X | X | | | X | 2/23/00 |
| COMR. DIAZ | X | X | | | X | 2/23/00 |
| COMR. McGAFFIGAN | X | X | | | X | 2/22/00 |
| COMR. MERRIFIELD | X | X | | | X | 2/22/00 |

COMMENT RESOLUTION

In their vote sheets, all Commissioners approved in part and disapproved in part the staff's recommendation as reflected in the SRM issued on February 24, 2000.

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## Commissioner Comments on SECY-99-244

### Chairman Meserve

Because I believe that the Commission's decision has important implications for the agency both from an organizational standpoint and from the

perspective of maintaining a high-quality training program, I have spent considerable time evaluating the options proposed by the staff in SECY-99-244. My evaluation included not only the meetings here in headquarters with the staff of the Technical Training Center (TTC) and the National Treasury Employees Union, but also a visit to the Center in December 1999 to form a first-hand impression of the facility and its staff. I was impressed by what I saw there and by the uniformly high marks accorded the TTC program by those who have taken training courses at the Chattanooga facility. I also recognize that for the TTC staff, the proposals in SECY-99-244, particularly the proposal to move the facility to Maryland, raise personal issues that merit careful consideration.

In my view, the questions of the appropriate number of simulators that should be retained as part of the NRC technical training program and the location of the TTC are linked, but can be separated. For the purpose of analysis, I have considered these two issues separately.

I find that the issue concerning the appropriate number of simulators is the easier matter to address. The advantage of eliminating the CE and B&W simulators is some long-term cost savings to the agency. I note, however, that the NRC employees who have been trained on these simulators uniformly support the quality of the training and the value of vendor-specific training in the performance of their official duties. Moreover, a decision to eliminate these simulators might diminish our capacities at facilities with CE or B&W units. I thus conclude that the NRC should retain all four simulators, although this question could and should be periodically reevaluated.

The more difficult issue is whether to keep the TTC in Chattanooga or move it to Maryland. On this question, I perceive several advantages to moving the TTC to Maryland: (1) the TTC training programs would be more accessible to the NRC headquarter's staff; (2) the TTC staff would have better access to the headquarter's program offices, which would facilitate better integration of training with new programmatic initiatives; (3) the agency would benefit from cross-utilization of the technical staff and the training staff; (4) the agency would be able to use the simulators for both incident analysis and other purposes unrelated to training, and (5) locating the training facility at headquarters could facilitate interaction among the headquarter's staff and trainees from the Regions. These are powerful considerations, in my view, particularly at a time in which our regulatory program is subject to significant modification and in which, as a result, training will be an essential ingredient to the achievement of regulatory success. I recognize that there are disadvantages in moving the TTC to Maryland-chief among them, that the TTC is functioning effectively and that the move will disrupt our valuable TTC staff. Nonetheless, after balancing the considerations, I support the staff's recommendation to move the TTC to Maryland.

It is imperative, however, that the Commission assure that the implementation of the move does not impose any needless personal burdens on the TTC staff. Moreover, the Commission should provide clear guidance to the headquarters program offices regarding Commission expectations for greater utilization of the TTC; the movement of the TTC to headquarters should be conceived as a means for strengthening our already excellent training program. Furthermore, locating the simulators at or very near the White Flint site should have very high priority in the negotiations with GSA; the benefits of the simulators will be reduced if they are not readily accessible.

### Commissioner Dicus

After careful consideration, I approve the staff's recommendation in part and disapprove the recommendation in part. While I approve the staff's recommendation to move the Technical Training Center to Headquarters, I do not approve the recommendation to decommission the CE and B&W simulators. All four of the current simulators located at the TTC in Chattanooga, TN should be relocated to Headquarters

### Commissioner Diaz

Based on the extensive interactions I have had on this topic with my fellow Commissioners, the NRC's staff, and NRC management, as well as considering the additional information provided by the Chairman on February 18, 2000, I support moving the Technical Training Center (TTC), including all four simulators, to NRC headquarters. In preparing for this move, the Office of Human Resources should be fully engaged to ensure that the transitional needs of TTC employees and their families are met. I am available to meet with HR to discuss options and proposals as needed.

In deliberating on this matter, I considered a range of information, including the fine information presented by representatives of the Chattanooga Chamber of Commerce. However, I believe this is the right decision in view of the NRC's need to effectively carry out its regulatory mission, and that the benefits to the agency will substantially outweigh the costs associated with the move. Training is essential to the development and maintenance of staff expertise, which is fundamental to the agency's continued effectiveness. The TTC's relocation should be integral to enhancing NRC capabilities, and technical training as a whole should be restructured to focus on developing NRC staff to be regulators. As we progress into a more risk-informed era, our staff needs to gain a better understanding of reactor operations, both routine and non-routine. In this regard, my support for maintaining four simulators is given with the understanding that their utilization will be substantially increased.

In conjunction with the implementation of the new oversight process for nuclear power plants, the efforts to risk-inform 10 CFR Part 50, and relocating the TTC, the staff should develop an integrated training plan that links the abilities needed to implement the NRC mission to training course offerings, with particular emphasis on reactor operations training. This would improve the staff's cognizance of cross-cutting technologies among reactor vendor types, and thereby provide insights into regulatory issues. This comprehensive plan should include the use of multi-screen desktop computers to be used as a prerequisite to simulator training.

Restructuring training can help to close the gap between headquarters and regional staffs by providing a common understanding of operational safety issues. I believe there is substantial value to be gained by restructuring our training programs, and the agency needs to make the appropriate investments in time and resources to ensure a payoff. Finally, I further believe that restructuring reactor technical training should not be done in isolation, but should be one part of a larger effort to enhance capabilities and performance across the entire agency.

### Commissioner McGaffigan

I reviewed this paper carefully, together with various additional information provided by staff of the Technical Training Center (TTC) (for example, the material attached to Dr. Travers' October 28, 1999 memorandum). After completing that review, I favored a variant of Option 4, namely moving all four

simulators from their current location at the TTC to headquarters, using the staff transition plan outlined in Option 4. I commend the TTC staff and the Chattanooga Chamber of Commerce for their vigorous defense of both retaining four simulators and keeping the training function in Chattanooga. I came to agree with them on the former issue, but not on the latter. Today, the Commission conducted a closed meeting to discuss the TTC decision and to review the Option 4 variant ("Option 5") cost figures. The data confirmed my view that costs alone do not significantly favor one course of action over another. Today's meeting made it clear that the Commission's approval of "Option 5" would also direct that particular attention be given to easing the difficulties facing the TTC staff in preparing for and making the move to headquarters.

I believe the centralizing of the agency's training facilities at headquarters will offer significant advantages. Integration of the training function with the program offices should allow for enhanced participation by senior managers and experts in training the staff. For example, in a course on a rule and its recent changes, students could easily benefit from putting their questions directly to the project managers and other individuals with key current and historical knowledge. While it might not be practicable for such individuals to make the trip to Tennessee, they might well participate for an hour or an afternoon at a local site. I feel students would greatly benefit from the participation of someone like Gary Holahan in a PRA course, or Rich Correia on the maintenance rule, or Eileen McKenna on the history of the changes to 10 CFR 50.59, or Bill Borchardt on the development of the enforcement policy. Similarly, there will be benefits in making the simulators and instructors more available to the program offices. For a variety of reasons, I believe that training courses will be in higher demand if they are conducted at headquarters. This is true for both internal NRC students and Agreement State students. The potential for synergism in the move of the TTC to headquarters is a significant factor in my decision.

The simulators should be located as close to the headquarters offices as possible to maximize the training value gained from the move. The staff should explore the possible development of land adjacent to the headquarters offices.

There is the possibility, as the TTC staff has argued, that NRC headquarters students training at headquarters will more likely be diverted from their training by program office needs. It will require management oversight to ensure that this does not happen. But this is not a new issue for headquarters management, because it must be handled during the large number of non-technical training courses already held at headquarters.

## Commissioner Merrifield

Before presenting my views on the location of the NRC's Technical Training Center (TTC) and the appropriate number of simulators, I want to express my appreciation to the TTC staff for their record of outstanding performance. Having taken a training course at the TTC, I can attest to the outstanding professionalism, competency, and dedication of the TTC staff. As I considered the options presented in SECY-99-244, I carefully considered not only the training needs of the agency, but the personal and professional impacts on the TTC staff and the potential loss of highly capable training staff. I also carefully considered the information presented by representatives of the Chattanooga Chamber of Commerce and the Tennessee Congressional delegation. The intangible, personal, and economic aspects of this matter made my decision so very difficult.

I do not support any of the four options presented by the staff in SECY-99-244. Instead, I support moving all four simulators to headquarters and moving the TTC staff to headquarters using the staff transition plan outlined in Option 4. Specifically, I recommend that we:

1. Maintain a small staff in Chattanooga during FY 2001 - FY 2002 for implementation of simulator training.
2. Move the other TTC staff members to headquarters by mid-FY 2001.
3. Move all four simulators (CE, B&W, GE, and Westinghouse) simulators and remaining TTC staff members to headquarters by the end of FY 2002.

First, let me address the issue of moving the TTC from Chattanooga to the headquarters area. Few would argue that our simulators are tremendous assets to the agency. Yet, it is clear to me that, due to their remote location, these assets are not being utilized to their fullest potential. Thus, for me, the most compelling reason to move the TTC staff and simulators to the Rockville area is to increase the use of the simulators by headquarters offices for such things as reactor technology training, research, and event analysis.

The NRC and the nuclear industry will experience tremendous change in the coming years with the adoption of a new reactor oversight process, the transition to more risk-informed regulation, the increasing use of emerging technologies, the deregulation of the electric industry, and the challenges associated with an aging workforce. In addition, the Government Performance and Results Act (GPRA) and increasing budgetary pressures will drive the agency to meet these challenges in a more efficient and effective manner, and with fewer resources. To be successful, the NRC must have a highly trained workforce and a vibrant and accessible technical training program. In my view, the current level of headquarters staff participation in TTC training courses is inadequate to meet the future needs of the agency. It is essential that our headquarters staff, a staff which not only represents a majority of our workforce but one which faces the greatest technical challenges, has greater access to reactor technology training and make better use of agency simulators for training purposes. With an aging technical workforce in headquarters, it is imperative that the agency establish a more robust technical training program in Rockville; one that is more accessible to new, less experienced Project Managers and technical reviewers. Failure to do so could jeopardize our ability to maintain a highly qualified technical workforce. The new reactor oversight process and the agency's pursuit of risk-informed regulation will also demand better integration of our technical training and regulatory training. Furthermore, the rapidly changing regulatory environment and the emergence of new technologies will require our TTC staff to work more closely with technical subject experts, and to be more aware of current agency activities and perspectives which could then be more easily incorporated within training courses. It is my view that the best way to achieve these goals is by moving the TTC staff and simulators to headquarters.

The agency should also place greater emphasis on using our simulators to assist staff in non-training matters. For example, our technical and inspection staff should more effectively utilize our simulators in the agency's assessment of plant events and in its incident response preparation. Our research staff should have greater access to our simulator facilities and utilize them to support research initiatives associated with such issues as human performance, digital instrumentation and controls, and accident and risk analysis. Again, it is my view that the best way to accomplish these goals is by moving the TTC staff and simulators to headquarters.

On November 9, 1999, the Commission was briefed by representatives of the TTC staff and union representatives on their views regarding relocation of the TTC to Rockville and the appropriate number of simulators to be retained. During that briefing, the representatives raised concerns regarding managerial challenges associated with having the TTC in Rockville. These challenges included potential class interruptions, competing work interests, and competing family interests. In a memorandum to the Commission dated November 24, 1999, the EDO described ways in which these challenges can be managed. The EDO reiterated that it is well within management's ability to adequately control situations which could interfere with effective training. I am confident that NRC management can implement strong administrative and managerial controls to overcome the challenges outlined by the TTC and union representatives. The Commission and EDO should settle for nothing less.

Now I will discuss my rationale for maintaining all four simulators. Historically, the CE and B&W designs, including their systems design, transient response, and emergency procedures were deemed to be sufficiently different from the GE and Westinghouse designs that separate vendor-specific simulator training programs were warranted. The staff has stated that it believes that vendor-specific knowledge and skills are necessary for successful job performance including the risk-informed baseline inspection program, characterization of the risk significance of inspection findings in the assessment process, and use of risk information matrices for inspection planning. However, the staff goes on to state that the added value of CE and B&W simulator training is not sufficient in comparison with the relatively high cost per student.

Given the industry's increasing interest in license renewal, it is likely that the NRC will have to maintain its proficiency in CE and B&W technology for many years to come. I agree with the staff that an adequate level of knowledge and skills related to CE and B&W designs can be obtained through enhanced classroom training and on-the-job training. I also agree that staff observation of licensee site-specific simulator training can be used to supplement CE and B&W classroom training. However, I believe the staff, in narrowly focusing on the high cost per student of the CE and B&W simulators, missed an important opportunity to identify ways in which simulator utilization could be improved and failed to adequately account for the increased usage that would certainly be realized if those simulators were located in Rockville. For example, in addressing the programmatic considerations for TTC location, the staff states that the use of reactor technology training by headquarters offices would most likely increase if the TTC were located in Rockville. Yet, in discussing the programmatic considerations for the number of simulators, the staff uses historical utilization data and does not account for greater simulator use in its cost per student figures. I believe realistic projections with respect to increased use of the simulators by headquarters staff would result in favorable cost per student estimates for both the CE and B&W simulators. My support for maintaining four simulators is reinforced by the relatively small incremental cost differential associated with moving four versus two simulators to the Rockville area. Thus, I am not compelled by the basis the staff used to recommend that the CE and B&W simulators be decommissioned. These simulators are valuable agency resources that should not be casually discarded. Instead, I recommend that the staff place greater emphasis on increasing their use, especially by headquarters staff. Once the simulators are moved to headquarters and the staff gains experience with respect to simulator utilization, the agency can revisit the issue of whether to retain the CE and B&W simulators.

Although this was a difficult decision, I believe moving all four simulators to headquarters will ultimately enhance our ability to carry out our mission of protecting public health and safety.