Wade L. Robison's Commentary on "Dissent About Nuclear Safety"

Commentary On
Dissent About Nuclear Safety

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Alison should express her reservations. If Single Failure Criteria require that one assume the loss of one heat exchanger, and if the Criteria themselves are required-that is, if one is required to make sure that they are satisfied--then the failure to determine what would happen if there were only one heat exchanger means that the plant has failed to do what it is required to do. It makes a difference, or course, who is requiring that the Single Failure Criteria be satisfied. If it is the NRC, and it is reasonable to assume that it is, then the Plant Nuclear Safety Review Committee is failing to fulfill one of its obligations in submitting its Justification for Continued Operation to NRC.

Perhaps NRC will see the failure and send the JCO back for the additional information that NRC requires. But there is no guarantee of that. In a complex document, it is easy enough to miss something, even if required. So Alison cannot assume that NRC will catch the Committee's not determining what will happen if one heat exchanger fails.

Even if she could assume that, she has an obligation as a member of the Committee to make sure that the Committee's reports reflect whatever is required. By not expressing her reservations when, by the nature of Rich's comments, it looks as though a vote will be called, she is effectively agreeing to sign off on what she takes to be a flawed document. She has a professional obligation not to do that.

That, as it appears, others may not agree with her is not relevant. An analogy may make this point clearer. The Supreme Court consists of nine justices. It hears cases, and the justices meet together to determine what the Court ought to decide. It is rare that the justices all agree. Unanimity is the exception, not the norm. The justice chosen to write the opinion for the majority is required to circulate his or her draft opinion to all members of the Court, and justices send back comments, suggesting changes, including additional arguments, problems with existing arguments or positions, and so on. The vote, in short, initiates a dialogue among the justices. Sometimes that dialogue changes the votes of some of the justices. As they see a decision argued out, they may become convinced that their original judgment was mistaken. It is the job of each person to give their views as strongly and clearly as possible. Only in that way, it is assumed, can the best decision be reached--the one most likely to withstand further criticism.

The Plant Nuclear Safety Review Committee and, indeed, any official committee of professionals ought to work in the same way. Such a procedure presumes, as a working hypothesis, the respect of each member of the committee for the others, but that respect is both created and maintained by the quality of judgment of the person being respected--a quality of judgment measured by how good the reasons are a person gives, how nuanced to the evidence, how carefully considered in light of objections, and so on.

So if Alison now expresses her reservations, she is immediately calling upon the presumptions about how such a committee ought to operate that make such expressions reasonable and accepted. She is calling upon the other members of the committee to explain why they think such a contingency as the loss of one heat exchanger need not be examined, and she is herself required to explain why it is that she thinks it ought to be examined.

Lying behind such presumptions about how such a committee ought to operate is the further, and deeper, presumption that it is only in such a committee, operating with such respect of the members, one for another, that one can be more sure of coming to a conclusion that will withstand objections than not. There is no guarantee that the conclusion reached will not be mistaken: it is possible that all the members be wrong in one respect or another. But if each member feels entitled and, better, obligated to raise what objections seems appropriate, and if the committee as a whole is obligated to come to grips with the objections, treat them with respect, and respond to them in a reasonable way, then the end result will be better decisions--one more likely to withstand objection.

Alison thus has an obligation to express her reservations, and it is a complex obligation--to the nature of the decision-making process and to her fellow committee members. She is, after all, obligated by a commitment to the decision-making process not to allow her fellow committee members to embarrass themselves by making a bad decision.

Alison should vote not to approve the JCO without the Nuclear Safety and Licensing Department making the further calculation, and she should make it clear the reasons she is voting not to approve the JCO--that the Criteria require such a calculation, that it is inappropriate to send the JCO onto the NRC without satisfying the Criteria it requires, and that it will take little work, and waste virtually no time, to do what is required.

She may get a bit of flack for voting that way, but not much, and that is not to the point in any case. If her case is reasonable, then the other members of the committee can hardly complain at her unwillingness to do what she thinks is a mistake.

Of course, one of the problems with what she has done is that she has failed to give arguments for her position given what has been said. On the one hand, she needs to second the observation Mark Reynolds makes. Joe objects, "What's the point?," and the proper response is that the point is that the Criteria require that the contingency be considered and that, to push Mark's point home, the necessary information can be gained quickly and without a great deal of trouble. So, Alison can and should say, she is not asking for much and is asking only for what is required.

But, on the other hand, she needs to respond to the points Louks and Carpello bring up. If having heat exchangers is not itself required, then why is it necessary to test to see what happens if one is lost? It is not to the point to argue, as they do, that so far the plant has been accident-free. One may cross the street all one's life without being run over and without looking both ways, but one's luck does not mean that it is right or all right not to look both ways. Requirements are there to make sure that one do what needs to be done to prevent accidents. It does not follow that if one has not had any accidents, that one need not do what is required. One may not have had any accidents because one has done what is required. But the thrust of the objection

Louks and Carpello make is that since the heat exchangers are an extra safety device in any event, not required, it makes no sense to follow the Criteria and see what happens if one of them fails. Many plants have neither, and they have had no problems.

To make her point, Alison needs to argue something like this: heat exchangers are not required, but when they do exist, then the Criteria require that one determine what happens when one fails. It is not unusual to have a situation where one has something extra and then is required, because one has something extra, to make sure it works properly. If car seats for babies were not required by law, but one had one, it would not be inappropriate for a legislature to require that one check to be sure that it works properly. The baby might be no worse off in a car seat that did not stay in place in an accident than if he or she were in an accident without a car seat at all, but since the parent has provided one, the legislature may require that it work properly. Reduced insurance premiums might depend upon the seat working properly, or the legislature might want to be sure that the person who bought it has peace of mind appropriately, and not because of the mistaken assumption that the car seat will protect the child. Just so, NRC may not require heat exchangers, but may require, if a plant has them, that they do the job even if one is down. Nothing in the case tells us anything about that one way or the other, but that is a failure on the part of Alison. She has failed to pursue the dialogue, failed to provide the reasons she needs to provide, to make her position sustainable--and help her colleagues keep from making a mistake.



If subsequent calculations show that a single heat exchanger would be adequate, that would not make it wrong for Alison to have cast a negative vote. She is not doing that to prevent the report from going on to NRC, but to make sure that the committee do what is required--assuming that the Criteria are themselves required by NRC--and that the committee work in the appropriate way in coming to its decisions. That is, she has an obligation to present her views, however different they may be from the views of other members of the committee, and an obligation to make sure that the views of others are appropriately reasoned. She is casting a negative vote in part, presumably, because she does not think the position of the committee that the contingency in question need not be examined is a viable

position. That she turns out to be wrong does not mean that the committee's position is right. After all, they could not have known when they voted that one heat exchanger would be enough. And, more important, that she turns out to be wrong does not mean that the committee's deliberations were appropriate: the committee failed to come to grips with her objection that the Criteria require determining what happens in such a contingency (assuming that is the thrust of her argument or, what is the same, that she has an acceptable response to the objection of Louks and Carpello).

She may well set a precedent for proceeding without unanimity, but the hope must be that she will begin to initiate the sort of dialogue that ought to mark such deliberative bodies.