Comments on May 31, 2021 Discussion Paper, "The issues identified at nuclear security cornerstone assessment and the issues of J-ROP"

1. The questions posed on slide 5 (What's wrong with it?) are the best questions to ask and answer. They provide the best insights into J-ROP's strengths and weaknesses.

2. The way that the 14 issues on slide 6 are assigned to the various parties (e.g., Society, J-ROP, etc.) is a comprehensive way of monitoring J-ROP. J-ROP affects all these parties, and reviewing the pilot for consequences to these parties is valuable.

3. Slide 9 covers Information Disclosure and points out that the issuance of "white" and "red" inspection findings resulted in distrust of the company by the public. It may seem unlikely, but these findings can and should also increase trust by the public. What if NRA never issued "white" and "red" findings. That may indicate that security and safety are adequately protected. But it also might indicate that security and safety inadequacies are being missed, overlooked, or downplayed by NRA. It gives me comfort when the NRC reports that a US plant failed a force-on-force test. It tells me that the tests are robust. I would much prefer that a plant fails a robust test than pass a weak test. True, I'd prefer more that plants pass robust tests. But the occasional test failure is necessary for people on the outside, like me, to understand that the tests are robust.

4. The comparison of the four elements of Nuclear Safety to the four elements of Nuclear Security on slide 10 is a great way to explain both issues. Well done!

5. The discussion for Issue 4 on slide 11 addresses a key difference between safety and security problems. While safety problems can be publicly discussed in detail, security problems cannot be so freely discussed so as to prevent terrorists from using this information to plan their attacks. But there is another downside to this situation. The lack of open communication about security problems also impedes the awareness of workers in industry and NRA to them. Thus, if I am a worker at Plant X, I can better understand the nature of safety problems at Plant Y than I am to understand a security problem at Plant Y. Consequently, I am better able to take steps from that safety problem from affecting my Plant X than I am at avoiding a repeat of Plant Y's security problem. There needs to be a better way to keep vital security information form terrorists while still providing non-vital security information from the nuclear industry, NRA, and the public. Withholding almost all security information helps keep it from terrorists, but it might also keep too much information from those needing and deserving to get it.

6. The discussion of Issue 7 on slide 12 addresses the goal of J-ROP to prevent signs of "red" events before they occur. This is the proper goal, but challenging to meet. One thing that the NRC's ROP contains is a backward look when a reactor's declining performance moves it into Column 3, 4, or 5 of the Action Matrix. When that occurs, the NRC formally reviews the Baseline Inspection Program under the ROP to see if they should be allocating resources and oversight focus differently. In other words, could they have detected the declining performance sooner and prevented it from dropping so low as to move the reactor into Column 3, 4, or 5? Asking and answering this question either confirms that the ROP's Baseline Inspection Program is right or identifies revisions that make the effort more effective.

7. The discussions of Issue 8 on slide 13 and Issue 9 on slide 14 seem to be connected. Issue 8 mentioned that the pilot only discussed green and minor problems. Issue 9 mentioned that there is no formal dialog between NRA and industry regarding more serious problems. Combined, this means that NRA and industry lack opportunities to reach common understandings of the most serious safety and security problems. This seems opposite to proper allocation of time and attention. It is most important that NRA and industry share a common understanding on the most serious safety and security problems if future efforts at avoiding them are to be successful. This discussion paper makes this key point very well.

8. The discussion of Issue 10 on slide 15 makes a point that I raised repeatedly wit the NRC. Any time that an NRC inspector identifies a violation, he or she has actually identified two violations – the violation and also the failure of the operator to have found the violation before the NRC did. I argued that the operator must fix BOTH violation – the specific violation as well as the programmatic failures that prevented it from finding and fixing the problem first.

9. The discussion of Issue 14 on slide 16 touches upon the point made in Comment 5 above. Suppose someone has worked the past 5 years in the security department at a Japanese nuclear plant and then transfers to a safety role at that same plant. And consider another person at this same plant doing just the opposite – transferring into the security department after working 5 years in a safety position. The first person is less likely to be aware of security problems that happened during the five years before his or her transfer into security. And the second person is likely to be more aware of safety problems during the prior five years even though he or she was working in security. Opening all information on security problems to all persons cannot be done. As a compromise, formal knowledge transfer programs could be used. For example, in the case above of a worker transferring from a safety department to a security department at a plant, it could be required that the worker review and perhaps be tested about security events during the prior five years. There's an old saying that "Information is power." Workers must be given the power to perform their security duties at their fullest capabilities.

10. The reference material on the CASE on slide 18 circles back to information such as that about Issue 2 on slide 10. Management and workers at Kashiwazaki-Kariwa were aware of security problems but failed to take steps necessary to fix them. Would similar problems on the safety side also been tolerated and not fixed? If not, why were security problems not perceived to be as important as safety problems?

The WG's Discussion Paper does a fine job of communicating its review effort and makes very sound findings and observations.

Dave Lochbaum. June 2021