

NEI 12-10 Guideline for Developing a Licensee PAR Procedure using NUREG-0654
Supplement 3 (October 2012)

NRC Comments/Questions:

1. Page 3, note: "0-2 mile radius". Is this meant to be 0-10 mile radius?
2. Page 6, 2nd bullet: The intent is to provide a "protective action strategy development tool". Perhaps the "PAR logic diagram" is the product that results from using this tool and may be included in EIPs, but a PAR logic diagram is not provided in Supplement 3.
3. Page 6, last bullet: There is no intent to require licensees to review every technical matter related to protective strategy development with OROs. The criteria where ORO input should be sought are delineated in Supplement 3.
4. Page A-3, 2.4: It is thought that very few licensees have existing commitments for providing a PAR at SAE. However, the guidance appropriately addresses those that do.
5. Page A-4, 2.5: The guidance is permissive regarding wind persistence issues not directive. It may be that ORO protective action strategy would be to expand the 2-5 mile evacuation if necessary, rather than always expand it through licensee PAR logic. Perhaps the section should screen out if this is the preferred ORO strategy. The current ETE would be used and decision making should be based upon the 90% ETE not the 100% ETE for downwind sectors. ETEs are likely to be short at most sites. The comparison to wind persistence should be conclusive rather than suggestive that any change would be necessary. There was never the intent to force licensees to conduct a "wind persistence study". An analysis of existing information in annual meteorological data or the UFSAR would suffice.
6. Page A-4, 2.5: The intent in Supplement 3 App A note 4 may not be clear. ERPAs are typically bigger than the downwind sectors in a PAR and may negate the need to expand the number of sectors recommended. Although it is possible that some sites may have small ERPAs in which case, this issue could be relevant, however, the licensee should defer to the ORO strategy.
7. Page A-6, 2.7: SAMGs may not be in use in the first hour of a severe accident and is not a good criteria. The rapidly progressing scenario is very unlikely but within the EP planning basis. The staff determined that if the scenario was not self revealing, then it should be assumed to not be taking place. This was based in part on the need to keep the Control Room (CR) protective action strategy simple enough to be implemented within 15 minutes. It is thought best to reference "containment failure" as a criterion to the extent it can be determined from the control room as opposed to the "containment challenge" criterion in EAL schemes. For example GEs based upon coolant level at TAF or loss of AC exceeding the SBO coping time are not rapidly progressing scenarios if containment is intact. This area requires further discussion.

Enclosure

8. Page A-9, Blocks D, E, F: SIP should not be removed from the PAR procedure in any case. Rather, hostile action should not be considered an impediment and should be removed from consideration of impediments. SIP remains an important tool for protecting public health and safety and must not be removed from consideration. Rather, in a staged evacuation, it would be prudent to SIP those downwind sectors to 5 miles beyond the evacuation order.
9. Page A-9, Blocks D, E, F: OROs might consider it appropriate to SIP 0-2 miles during a HA and evacuate 2-5 miles downwind. Should a radiological situation develop, it may be appropriate to communicate that information to OROs and allow them to change PAD, rather than complicate the control room PAR strategy with that contingency. Although, this contingency may be appropriate for the augmenting ERO procedure.
10. Page A-10, Blocks D, E, F: OROs may determine whether the licensee need be involved in weather determinations. Alternately, licensees need only consider this contingency if they have been informed of impediments (e.g., highways closed by governor's order).
11. Page A-9-10, Blocks D, E, F: The above impediment considerations should collapse into simple guidance for the control room after conferring with OROs, e.g., GE within 1 hour of initial classification, HA, or roads closed by state. Even these examples are contingent upon the ORO decision and could be removed if so agreed.
12. Page A-11, Blocks D, E, F: It is difficult to imagine a scenario that would have the control room venting containment before a GE was declared and in place for some time. Although the potential for other short releases may exist. Perhaps this contingency is more appropriate for the augmenting ERO procedure?
13. Page A-12, Block G: Although it does complicate the control room PAR strategy, it is appropriate to have guidance for both day and night. Perhaps review of the ETE would show greater difference between two other evacuation scenarios, such as day and weekend night. If that is the case, perhaps those two scenarios should be simply defined and in the guidance. The augmenting ERO procedure could contain more complete guidance. The same comment would apply to the 2-5 mile guidance.
14. Page A-16, Blocks H, M: NRC has provided guidance to licensees on an acceptable manner to incorporate ETE information into PAR strategy. Other methods may be acceptable, but must be based on a technical analysis showing adequacy. There is no such technical basis, that we are aware of, showing the key hole to incorporate ETE information and provide more protection than staged evacuation. Licensees may perform an analysis of various accident scenarios with site specific information to show

15. how other methods are superior to staged evacuation. This analysis should be available for NRC inspection. OROs will make protective action decisions based upon many factors some not technical. The licensee recommendation need not cleave to the ORO's PAD strategy in all cases. However, the process of Supplement 3 attempts to bring ORO and licensee protective action strategies closer.
16. Page A-16, Blocks I, K: It should be noted that evacuation beyond the initial 2 miles would be recommended when the 90% 0-2 mile ETE time is reached, if the current plant conditions would warrant declaration of a GE. The current GE condition could be reached through an EAL that was not the cause of the initial GE declaration, e.g., coolant level at TAF was the basis for the initial GE and level have been restored, but now high range containment monitor is reading at the GE level. The GE conditions remain.
17. Page A-17, Blocks J: Perhaps what is meant is that no further actions WRT a rapidly progressing accident are necessary for the CR PAR procedure. Other boxes after "G" are applicable to the CR.
18. Page A-17, Blocks J: The licensee may use any combination of protective actions after determining it is safer to begin evacuation after a rapidly progressing severe accident. Staged evacuation need not begin 0-2 miles, it may be that 2-5 or 5-10 miles should begin. The NRC staff agrees that it is hard to imagine a scenario where the CR would have to make these decisions.
19. Page B-2, 2.1: The NRC staff agrees. Note that wording of last sentence is odd. Perhaps a period after first "SIP" communicates that either could be used in any case, depending on the situation. Probably evacuation, but could be SIP.
20. Page B-2, 2.2: Is criterion 2.2.1 based on an actual release? If so, the NRC staff agrees.
21. Page B-3, 2.2.2: The NRC staff does not agree. This requires more analysis and discussion. It is unlikely that the ERO could ever determine all these criteria to the satisfaction of all concerned until the plant condition is fully mitigated. There could be little source term in containment and yet evacuation would be expanded to where ever the wind was blowing. This also does not address the situation of a diurnal wind shift that merely blows through several sectors during onshore to offshore changes. It appears that all sectors would be evacuated, exactly the NRC concern.
22. Page B-3-5, 2.2.3, 2.3, 2.4, 2.5: The NRC staff agrees, pending a bit more examination and discussion of intent.