Clarification Questions for BWXT ISA Summary Review **P. 1**

CLR-1 License Application, Section 3.2.1, sixth paragraph, p. 3.4

Clarify why, if other widely accepted process hazard analysis methodologies are used, they will not be described in Section 3.2.2?

10 CFR 70.62 requires in the License Application a safety program, which includes the safety program for the integrated safety analysis (ISA) and the ISA Summary.

The License Application needs to contain all the programmatic commitments and descriptions of how to meet the commitments.

CLR-2 License Application, Section 3.2.3, description of [redacted] bottom p. 3-5

Clarify whether [redacted] controls described here would be Items Relied on For Safety. Clarify the purpose of putting the example in the description of [redacted] especially, when there are no examples in the other two [redacted] descriptions.

10 CFR 70.62 requires in the License Application a safety program, which includes the safety program for the integrated safety analysis (ISA) and the ISA Summary.

The License Application needs to contain all the programmatic commitments and descriptions of how to meet the commitments.

CLR-3 License Application, Section 3.2.4, fourth paragraph, pp. 3-6 and 3-7

Clarify the purpose of the paragraph concerning nuclear criticality safety and License Application Chapter 5, especially when there are no other references to other License Application safety disciplines.

10 CFR 70.62 requires in the License Application a safety program, which includes the safety program for the integrated safety analysis (ISA) and the ISA Summary.

The License Application needs to contain all the programmatic commitments and descriptions of how to meet the commitments.

Clarification Questions for BWXT ISA Summary Review **P. 2**

CLR-4 License Application, Section 3.2.4, Table 3.2.4-1, p. 3-7

Clarify whether the prevention methods described here would be Items Relied on For Safety. Clarify the purpose of putting the parenthetical to License Application Chapter 5 in the description of Frequency of Initiating Event Score [redacted] especially when there are no parentheticals to other License Application safety disciplines in the other six score descriptions.

10 CFR 70.62 requires in the License Application a safety program, which includes the safety program for the integrated safety analysis (ISA) and the ISA Summary.

The License Application needs to contain all the programmatic commitments and descriptions of how to meet the commitments.

CLR-5 License Application, Section 3.2.4, Table 3.2.4-2, p. 3-8

Clarify the purpose of putting the parenthetical to License Application Chapter 5 in the description of Effectiveness of Protection Score of [redacted] especially when there are no parentheticals in the other four score descriptions.

10 CFR 70.62 requires in the License Application a safety program, which includes the safety program for the integrated safety analysis (ISA) and the ISA Summary.

The License Application needs to contain all the programmatic commitments and descriptions of how to meet the commitments.

CLR-6 License Application, Section 3.2.4, Table 3.2.4-4, p. 3-11

Clarify the distinction in the table itself between what is in Risk Zone 2 vs. Risk Zone 3.

10 CFR 70.62 requires in the License Application a safety program, which includes the safety program for the integrated safety analysis (ISA) and the ISA Summary.

The License Application needs to contain all the programmatic commitments and descriptions of how to meet the commitments.

Clarification Questions for BWXT ISA Summary Review **P. 3**

CLR-7 License Application Section 3.2.4, Tables 3.2.4-1 thru and 3.2.4-4, pp. 3.7 thru 3.11

Clarify the intent of using the tables for criticality accident sequences.

10 CFR 70.61(b) requires that high consequence events need to be made highly unlikely or their consequence needs to be reduced to no higher than intermediate consequence.
10 CFR 70.61(d) requires, amongst other things, that in addition to meeting 10 CFR 70.61(b), the risk of nuclear criticality accidents must be limited by assuring that under normal and credible abnormal conditions, all nuclear processes are subcritical.

However,

- if Table 3.2.4-3, Severity of Consequences, is used as stated, then the consequence of a Criticality would be [redacted]

- if Table 3.2.4-4, Risk Assessment, is used as stated and the [redacted] then the Overall Likelihood of the Accident Scenario that would be acceptable is either [redacted] and

-if Table 3.2.4-1, Frequency of Initiating Event, and Table 3.2.4-2, Effectiveness of Protection, are used as stated, then if either the Frequency of Initiating Event Score is [redacted] r the Effectiveness of Protection Score is [redacted] then the Overall Likelihood of the Accident Scenario is [redacted] which means that, by Table 3.2.4-4, the accident sequence is [redacted]

Thus, it appears that one definition of "Highly Unlikely" at BWXT is to be 'consistent with double contingency and control acceptability described in Chapter 5.' But, this is not in accordance with 10 CFR 70.61(b) and 10 CFR 70.61(d). As stated above, both 10 CFR 70.61(b) and 10 CFR 70.61(d) need to be met. To meet 10 CFR 70.61(b), a high consequence event needs to be made highly unlikely or the consequence needs to be reduced to no higher than intermediate. Meeting the double contingency principle is one way of meeting one part of 10 CFR 70.61(d) (i.e., subcritical under normal and credible abnormal conditions). Therefore, meeting the double contingency principle in the standard way (i.e., control acceptability described in Chapter 5) does not mean meeting highly unlikely.