What needs to happen to design, construct, and operated WTP successfully and safely?

The long-term operability perspective has been under represented in past BNI design decisions (no long-term operator has been assigned approval responsibility for design, leaving BNI with both design authority and design agency responsibility). As a consequence, many potential and likely crippling flaws are now imbedded in the design. Two actions are required address this:

- 1. Currently imbedded design flaws must be identified, quantified, and resolved. The attached issue resolution team structures outline how to accomplish this. First, potential issues must be prioritized by a *Topic Selection Team*. Then individual *Issue Teams* must quantify the problem and propose solutions as and if needed. Then a management oriented *Issue Resolution Decision Team* must concur with the resolution path. As much as practical, all teams must be open to all interested parties and seek unanimity. Technical, accomplishable resolution must be the goal.
- 2. An *Operator in Waiting* with long-term operability focus must approve all future designs.

WTP safety / quality culture

DOE's *Implementation Plan for Defense Nuclear Facilities Safety Board Recommendation* 2011-1 takes good steps towards addressing the WTP safety culture issue, but there is a missing component. In the past, those that have successfully defended the nominally completed designs, whether adequate or not and sometimes at the expense of those who have fought for long-term safe operability needs, have been rewarded. Those that have successfully caused changes in nominally completed designs to address long-term safe operability have been punished. There is a reward / punishment system in play. In addition to procedures and training, correction of the culture requires reversal of this – reward those who identify and fix long-term safe operability problems and do not reward those who conceal problems and squelch fixes. To quote a famous adage - actions speak loader than words.

Outline of Recommended WTP Issue Resolution Team Structures

Issue Resolution Decision Team

- WTP management (1 vote)
- Issue Resolution Czar (1 vote)
 - o Administration to publish all meeting minutes
 - o Project controls to track costs
- Operator-in-Waiting (1 vote)
- DOE (1 vote)
- Team lead + issue champion (1 vote)

Rules

- 1. All meetings open to all (unless 1st three exclude)
- 2. Decisions must be unanimous except 3 out of 5 can decide if unanimity cannot be achieved but only if Czar approves
- 3. Minutes published for all meetings
- 4. Team decides on recommendations from all issue teams

Topic Selection Team

- Czar
- Topic selection/coordination lead
- Operator-in-Waiting
- WRPS
- DOE
- DNFSB (optional invited)

Potential Issue Sources

- 1. WRPS ORE reviews
- 2. DNFSB issues
- 3. Walt list
- 4. EFRT Closure issues
- 5. Various WTP risk lists
- 6. Etc.

Rules

- 1. All formal meetings open to all (unless issue resolution team or Czar limits)
- 2. Selected issue list to be published
- 3. Rank topics but use broad selection criteria
- 4. Designate team lead

Issue Teams (many)

- Team lead (post progress and coordinate with topic selection/coordination lead and/or Czar, report recommendations to Issue Resolution Decision Team)
- Issue champion (team lead to designate, may be team lead)
- Topic selection/coordination lead (will sit in on most, but not all of the issue team meetings)
- Design and control representatives
- Modeling, process representatives (as needed)
- Operator-in-Waiting (optional –invited)
- WRPS (optional –invited)
- DOE (optional invited)
- DNFSB (optional invited)

Rules

- 1. All formal meetings open to all (unless issue resolution team, or Czar limits)
- 2. Attempt to achieve unanimity, but allow minority position(s) to be published and represented to issued decision team
 - a. Team lead can decide primary recommendations (majority not needed)

- 3. Primary findings/recommendations of meetings to be published
- 4. Team lead has authority to call meetings and request data / presentations. Issue resolution team to assure WTP project expedites requested data / presentations
 - a. Most issues are expected to take more than one and possibly several meetings to resolve. Some issues with require many meetings.
 - b. Team lead attempts to achieve group consensus on:
 - i. Does issue require any action?
 - ii. What is the recommended action?

<u>Description of Issue Resolution Team Structures</u>

(Needed to help sift through and resolve the key WTP issues that may preclude long-term safe operations)

At the top of the decision process is the Issue Resolution Decision Team – which receives the reports back from the Issue Teams (once they are done evaluating their assigned area / issue and identifying fixes, if needed) and decides what, if any, action will be assigned. This is the management team. All teams are designed to be open to all, but only a few persons have voting power in the Issue Resolution Decision Team. All teams strive for unanimous decisions.

The Topic Selection Team selects what issues will be worked. Note the Issue Resolution Czar (Czar) is on both the Topic Selection Team and the Issue Resolution Decision Team. This person needs to carry the perspective on the long-term owner-operator, not the short term goals. As organized now, this person probably should be from DOE with a "bullet proof reputation", though it would help to know the WTP process. The "Topic selection/coordination lead" is key to the flow of the process. This person has to know the WTP process well, understand how the issues are to be resolved, be very technically competent, and carry the perspective of long-term operations. Preferably both the Czar and the "Topic selection/coordination lead" should have done similar tasks before. Also note the DNFSB and WRPS (as the operator in waiting) are invited to all the Topic Select Team meetings. Topics can / will be selected even if they are not unanimously agreed as important. The Czar and "Topic selection/coordination lead" will be key players in this. The topic selection team will select the issues to review and the "Team leads". Neither the Czar nor the "Topic selection/coordination lead" should come from WTP design. They probably should not come from WTP. They must be zealous to have long-term mission success. They must not have significant conflicts of interest to long-term WTP success. (Incentives for short-term goals can become a conflict of interest for long-term goals.)

The Issue Teams (there will be many) are each headed by a "Team lead" selected by the Topic Selection Team. Also the "Topic selection/coordination lead" will frequent most of the Issue Team meetings to help with coordination. The issue teams will meet as many times as necessary to quantify if their issue requires resolution (change) and, if so, what the resolution is. The "Team lead" runs these meetings but strives for unanimity. However, the "Team lead" decides the results, not the majority. If unanimity cannot be reached a "minority" representative is allowed to present the "minority" opinion to the Issue Resolution Decision Team. The "Topic

selection/coordination lead" may have important input when there is a "minority" report. WRPS, DOE and DNFSB are all invited to the Issue Team meetings.

Project controls and DOE authorization will be very important in the overall flow of money for this. WTP (BNI/URS) will likely claim much of this is not in their scope. DOE with counsel needs to decide what is and is not in scope and how to fund anything that is not in scope.