Computational Group Progress

The computational group has been working on the development of the alpha version of the xLPR code. This work includes the development of a detailed program plan for the code structure as well as the selection of appropriate, yet temporary, modules to be used for the framework development. As a reminder the code is being developed both with the commercial software GoldSim (SNL) and with open source software - SIAMPFM (ORNL). These versions will be use to determine which structure is appropriate for the development of xLPR in the required time period.

1. Key actions from June mtg (what were your TG's action items?)
    - **a.** SNL, ORNL, Battelle develop one page description of in-house software QA procedures. Include with this write-up how and why their procedures meet the minimum NRC requirements. **In progress**
    - b. Rudland to update xLPR flow, pass it by the PIB, and then pass it to SNL and ORNL – Time → Rudland to send to PIB on Friday 6/12/09 – responses from PIB by 6/17/09 – Send to SNL/ORNL by 6/19/09 **- Done**
    - c. Rudland (with the help of Kurth) to develop, from the NRC computational group perspective, a list of inputs, outputs and uncertainties for each model type. This list will be passed to Bishop for comment and additions/subtractions. The list will then be sent to SNL and ORNL. Time→ Rudland to send to Bishop in one week, Bishop to respond in one week, Rudland to send to SNL/ORNL within one month **- Done**
    - d. Rudland, Kurth, Harris to talk next week on which modules from PRO-LOCA and PRAISE may be appropriate for this first phase of the code. Once these routines are chosen, Rudland, Kurth and Harris to work with SNL to make sure they are in the correct format to be used with Goldsim. Time→one-two months **- Done**
2. Activities underway (what is your TG currently working on?)
    - a. Finalizing alpha version program plan
    - b. Finalizing alpha version modules
    - c. Developing alpha version framework – Goldsim and Siam
    - d. Configuration management structure (including QA) for beta version
3. TG Interface action items (what interface issues has your TG identified where coordination or communication with another TG is needed?)
    - a. No real problems. We have had several computational group meetings and have participated in models group conference calls
4. Participation & support (are you receiving the participation and support needed from your TG members?)
    - a. Yes, both NRC and Industry contractors have been supporting the effort.
    - b. From NRC side, SNL has been providing leadership in the development execution of the alpha code effort, while ORNL is participating by not adding to the development
    - c. From Industry side, SIA has been an active participant in both the development and execution of the alpha code development.