NCSX June 2007 ETC TABLE IV - Uncertainty of Estimate and Residual Risk Assessment

WBS Number: 81

WBS Title: Project Management and Control

Job Numbers: 8101, 8102, and 8998

Job Title: Project Management and Control - ORNL (8201) Job Title: Project Management and Control - PPPL (8101)

Job Title: Project Allocations (8998)

Job Managers: Hutch Neilson (8101), Jim Lyon (8102), & Ron Strykowsky (8998)

Uncertainty of the Estimate fgor Jobs 8101, 8202, and 8998

| | <u>High</u> | <u>Medium</u> | Low | Uncertainty Range (%) | | Comments/Other Considerations |
|-------------------|-------------|---------------|-----|--------------------------|--|-------------------------------|
| Design Maturity | Х | · | | | LOE effort dependent on length of schedule | |
| Design Complexity | | | х | -5%/+10% | LOE effort dependent on length of schedule | |

Note: High/Medium/Low uncertainty assessment from Job Manager. Uncertainty range based on AACEI recommended practice 18R-97 as amended for NCSX.

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Residual Impacts

| | | | | | Cost Impact | | Schedule Impact | |
|------|---|----------------------------|--|---|-------------|---------|-----------------|--------|
| Job | Risk Description | Likelihood of Occurring | Mitigation Plan | Basis of estimate | Low | High | Low | High |
| 8101 | 8101 Funding profile may not match assumptions which in turn could impact cost and schedule | | | Cost impact derived from stretchout | + \$0 | + \$0 | (2.00) | + 2.00 |
| | Overhead rates may change signficiantly which in turn could impact cost and schedule | U | | Calculated on basis of \$45M ETC | (\$900) | + \$900 | (1.00) | + 1.00 |
| | Escalation of Copper higher than base escalation rates | VL | Funding limits preclude early procurements to avoid escalation impacts | See separate sheet (Table VI) assume 5% to 20% higher per year escalation rate | + \$11 | + \$81 | + 0.00 | + 0.00 |
| | Escalation of Stainless Sheet and Inconel higher than base escalation rates | VL | Funding limits preclude early procurements to avoid escalation impacts | See separate sheet (Table VI) assume 5% to 20% higher per year escalation rate | + \$0 | + \$0 | + 0.00 | + 0.00 |
| | GPP projects not completed in time to support project needs | NC | Crane/HVAC Lab/DOE overisght Ample float | | | | | |
| | Labor rates may be significantly lower/higher than projected | L | | Escalation rate may be anywhere in the range of 2-5% instead of the nominal rate of 3.4% for labor. Schedule impact is due to annual fundign constraints. | (\$500) | + \$500 | (0.50) | + 0.50 |

8102 - NONE

8998 - NONE

Notes

- [1] Low cost and schedule impacts are considered the minimum (0-percentile) impacts should the event occur.

 High cost and schedule impacts are considered the maximum (100-percentile) impacts should the event occur
- [2] Cost impacts should be entered as man-hours (by demographic) and M&S direct cost under basis of estimate.

 Cost impacts should NOT include standing army costs which are separately calculated from the schedule impact

 Project control is reponsible for quantifying the low and high cost impacts based on the labor hours and M&S identified
- [3] The schedule impacts should be entered as the min and max impacts on the critical path. If there is no critical path impact then the schedule entries should be zero.
- [4] Likelihood of occurrence should be entered consistent with our risk classification methodology, i.e. VL= Very Likely (P>80%), L=Likely (80%>P>40%), U=Unlikley (40%>P>10%), VU=Very Unlikely (P<10%), NC=Non-credible (P<1%)