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

WBS Number: 131

**WBS Title: Toroidal Field coils** 

Job Number: 1361

Job Title: TF Coil Fabrication Job Manager: Mike Kalish

## **Uncertainty of the Estimate**

|                   | <u>High</u> | Medium | Low | Range (%) | Comments/Other Cionsiderations  |
|-------------------|-------------|--------|-----|-----------|---|
| Design Maturity   | Х           |        |     |           | Coils in fabrication - design is complete   |
|                   |             |        |     | -10%/+15% |   |
| Design Complexity |             | X      |     |           | While conventional cross-section with solid Cu, some potential difficulty in maintain precise geometry and tolerances |

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

Uncertainty

| Residual Impacts   |                  |                            |   | Cost Impact Schedule Impact             |        |        |        |        |  |
|--|------------------|----------------------------|---|---|--------|--------|--------|--------|--|
| Job  | Risk Description | Likelihood of<br>Occurring | Mitigation Plan   | Basis of estimate                       | Low    | High   | Low    | High   |  |
| 1361 TF vendor produces a non-compliant coil requiring fabrication of an additional coil |                  | VU                         | Conductor for extra coil already procured. Ample float in schedule to avoid critical path impact. | Increase PPPL Title III by ~1 man-month | + \$15 | + \$35 | + 0.00 | + 0.00 |  |

## 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

  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%)