# NCSX June 2007 ETC
## TABLE I - DESIGN LABOR

**WBS Number: 133**

**WBS Title: External Trim Coils**

**Job Number: 1354**

**Job Title: Trim Coil Design and Procurement**

**Job Manager: Mike Kalish**

**Description:**

***Title I and II Engineering for PF Coils and Title III Support of Fabrication Effort.***

| Task ID | FY07$K | | | | | HOURS | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 41MS | 48MS | 37STK | 35TRVL | 31OT | ORNL EM | ORNL DSN | EMEM | EMSM | EMSB | EMTB | EAEM | EADM | EEEM | EESM | EESB | EETB | ECEM | ECSB | ECTB | RM2 | RM3 | Basis of Estimate |
| **Title I & II Design** | | | | | | | | | | | | | | | | | | | | | | | |
| Complete PF Coil SRD | | | | | | | | | | | | 8 | | | | | | | | | | | **Engineering Judgment - Past Experience (Jupiter 2)** |
| Analysis | | | | | | | | | | | | 40 | | | | | | | | | | | **Engineering Judgment - Past Experience (Jupiter 2)** |
| FDR Dwgs | | | | | | | | | | | | | 60 | | | | | | | | | | **Engineering Judgment - Past Experience (Jupiter 2)** |
| Prepare for FDR | | | | | | | | | | | | 16 | | | | | | | | | | | **Engineering Judgment - Past Experience (Jupiter 2)** |
| FDR | | | | | | | | | | | | 8 | | | | | | | | | | | **Engineering Judgment - Past Experience (Jupiter 2)** |
| Prepare Procurement Coil Spec | | | | | | | | | | | | 24 | | | | | | | | | | | **Engineering Judgment - Past Experience (Jupiter 2)** |
| Detail Drawings | | | | | | | | | | | | | 64 | | | | | | | | | | **4 drawings at 16 hours per drawing** |
| Disposition FDR Chits | | | | | | | | | | | | 8 | | | | | | | | | | | **Engineering Judgment - Past Experience (Jupiter 2)** |
| Trim Coil Structure, Design | | | | | | | | | | | | | | | | | | | | | | | Engineering Judgment |
| ***Subtotal Title I & II Design*** | | | | ***$0.0K*** | | | | | | | | ***128*** | ***164*** | | | | | | | | | | |
| **Title III Design** | | | | | | | | | | | | | | | | | | | | | | | |
| Coil Procurement Support | | | | | | | | | | | | 24 | | | | | | | | | | | **Past experience in procuring simple coils** |
| Fabrication Support | | | | | | | | | | | | 116 | | | | | | | | | | | 3months, 1day per week, +20hrs drafting -**Minimal oversight due to simple conventional coil design, based on experience** |
| Fabrication Support Travel | | | | $2.5K | | | | | | | | | | | | | | | | | | | One trip to west coast assuming vendor is in Ca (worst case assumption) |
| ***Subtotal Title III Design*** | | | | ***$2.5K*** | | | | | | | | ***140*** | ***0*** | | | | | | | | | | |