# NCSX June 2007 ETC
# TABLE I - Design Labor

**WBS Number: 824**
**WBS Title: System Analysis and Technical Assurance**
**Job Number: 8204**
**Job Title: Systems Analysis and Technical Assurance**
**Job Manager: Art Brooks**

| Job | WBS | Function | Resource Requirements | Basis of Estimate |
|---|---|---|---|---|
| **8204 - System Analysis and Technical Assurance (Brooks)** | | | | |
| | **824 - System Analysis and Technical Assurance** | | | |
| | | Field error analysis and management | 680 hours for Brooks<br>340 hours EA/EM engineer through 1st Plasma | This LOE is consistent with project experience. |
| | | Analysis and troubleshooting support for metrology and dimensional control | 1700 hours for Brooks<br>680 hours EA/EM engineer through 1st Plasma | This LOE is consistent with recent experience. Substantial uncertainties exist for future demands as dimensional control plans have not yet been completed and metrology procedures developed and exercised. |
| | | Modular coil alignment studies | 680 hours for Brooks<br>340 hours for EA/EM engineer through final assembly | Initial studies have been completed. Optimal alignment studies not yet performed. |
| | | Global modeling and analysis | 320 hours for Fan through completion of coil structures and base support structure design (May-Sep 2007) | This LOE is consistent with recent experience and is expected to continue until the design of stellarator core components. Most of this work has already been completed but global structural models need to be updated as the design of the coil structures (WBS 15) and base support support structure (WBS 17) are completed. |
| | | Technical assurance | 1340 hours for Fan from the start of FY08 through 1st Plasma. | Tasks are authorized by the Engineering Manager to resolve critical issues when they arise. LOE is consistent with project experience. |