

NCSX Project Closeout Update: May 28, 2008



- **Attention to Safety in Times of Uncertainty**
- **Conversations with DOE**
- **Closeout Planning**
- **Near-Term Actions**



Guidance from DOE



- Project to propose NCSX closeout activities
- Proposal must be sufficiently compelling to earn buy-in from Congress & OMB
- Activities should capture \$81M Project investments to date
 - Wrap-up work packages so there is value, documenting corporate memory and lessons learned
 - Retire risks, specifically cryostat and assembly, to a level that would pass a SC review, if DOE wants one
- FY08 allocation is fixed and available
- Finish MIE project in FY09
 - Funding dependent on Congressional appropriations
 - use ~ 1/3 of President's request for planning purposes

Closeout Plan Options



- Complete fabrication of major stellarator components very close to completion
 - Modular coils
 - Toroidal field coils
 - Vacuum vessel sectors with installed services
- Complete design integration of the stellarator core
 - Cryostat and cryogen supply and distribution system design through PDR
 - Complete electrical leads and neutral beam transition duct design through PDR
 - Complete FDRs of conventional coil support structures
 - Complete and document magnet analyses: coil protection limits and strategy; operating scenarios and fault modes; coil cooling
 - Update the assembly sequence plan and assembly estimates
- Prototype critical assembly operations
 - Assemble one complete field period through installation of two half-periods over a vacuum vessel sector (Station 3).
- Document and publish contributions to fusion engineering knowledge made by the NCSX project.
- Secure equipment with supporting documentation

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Draft Plan for Remainder of FY08

(Ron will soon provide you a detailed resource-loaded schedule)



- Design
 - Continue stellarator core on current schedule
 - Scale back on ancillary systems and start-up planning effective immediately
- Construction
 - Complete modular coil VPIs
- Assembly
 - Continue vacuum vessel services
 - Continue Station-2 through the 2nd half period assembly only
 - Continue Station-3 through the 1st field period assembly only
 - Scale back on Station-5 & 6 planning
- Procurements
 - Complete TF contract & orders that support Stations 2 & 3 first articles
 - Purchase card orders must be pre-approved by J. Chrzanowski, R. Strykowski, or M. Viola
- Prepare Estimates for New Scope
 - Documentation completion & archival
 - Equipment disposition

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