

# Near Term Milestones – WBS 1

January 17, 2001

NCSX Engineering telecon

# Big picture

- January 30-31
  - Complete *initial* cost estimate assembled by Simmons
  - All outstanding design choices made
- February 7
  - Interface requirements finalized
- February 14
  - Complete and final cost data submitted to Simmons
- February 21
  - Design description submitted to Reiersen
- February 28
  - Complete first drafts of write-ups due

# PFCs

- Final decision on design approach not yet made
  - Options include stand-alone 350C liner (issues include \$ and space) and tiles mounted on 350C VV
  - Feedback from BFG Aerospace expected this week on the cost of contoured panels
  - ORNL to determine space requirements
- Decide on design approach by 1/24
- Complete design, finalize heating/cooling requirements by 2/7
- Provide final cost to Simmons by 2/14
- Provide design description to Reiersen by 2/21

# Trim Coils

- No engineering concept even on the table
- Decide today where Art should consider locating the trim coils (inside/outside VV, on what surface, what stay-out zones, etc.)
- Brooks to provide feedback on toroidal and poloidal areas to be blocked out for trim coils by 1/24
- Brooks to provide final coil topology and locations by 1/31
- Design concept for trim coils to be worked out by 2/7
- Current and voltage requirements to be provided to WBS4 by 2/7
- Final cost to Simmons by 2/14, design description to Reiersen by 2/21

# VV

- Bakeout temperature contingent on PFC design approach slated for 1/24
- Finalize decisions on other issues by 1/31
  - Inconel or SS
  - VV shape
  - Assembly features
- Complete definition of provisions for 350C bakeout (if required) by 2/7
- Provide final heating and cooling requirements for interfacing systems by 2/7
- Final cost to Simmons by 2/14, design description to Reiersen by 2/21

# Modular/TF/PF coils and structure

- Shrink machine size to 82% *this week*
- Provide spreadsheet level costs *today*
- Review design with ORNL personnel and outside vendors for cost and fabricability
  - Send out by 1/24
  - Solicit responses by 2/7
- Work out remaining details (joke!) by 2/7
  - Includes machine supports and interface, final winding pack geometry
  - Provide cooling requirements
- Final cost to Simmons by 2/14, design description to Reiersen by 2/21

# Access

- Shrink machine to 82% size
- Determine provisions required for NBI today
- Modify NB and VV designs as required by 2/7
- Work out diagnostic interfaces (port assignments) as much as possible by 2/7, finalize list of diagnostics that can be accommodated with Johnson
- Provide design description to Reiersen by 2/21