

Discussion Comments on

NCSX PROGRAMMATIC ISSUES

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Meeting of the
Fusion Energy Sciences Advisory Committee
Gaithersburg, MD
15-16 May 2001

NCSX Programmatic Issues

- Decision to Proceed with NCSX is the “leading edge” of the 2004 Assessment which will shape the fusion program this decade.
 - Presuming PVR & CDR are OK: there are two big issues:
 - 1) Will proceeding with NCSX in 2003 preclude/damage ability to take a Burning Plasma step in 2004?
 - 2) Will proceeding with NCSX ‘damage’ the base program or program balance?
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Effect of NCSX on Program Balance

- We have several new program elements identified in the Knoxville Report, by the FuSAC Panel, and the community for support as part of the base program in fusion:
 - + Broaden Base of OFES Research 2-3 M\$/yr
 - + New Fusion Science Research Centers 1-3 M\$/yr
 - + Higher Utilization of Nat'l Facilities 5-10 M\$/yr
 - + Strengthen Tools for ICC Program 5 M\$/yr
 - + Reinvigorate Technology Program 3-5 M\$/yr
 - + Larger US Role on JET >2 M\$/yr
 - + ORNL QPS Facility 5-10 M\$/yr
- ⇒ **FESAC should provide programmatic advice to DOE on the relative priorities of these elements.**
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Effect of NCSX on Burning Plasma Step

- We have too often failed to take a ‘good’ step to help with possibility of a future Burning Plasma step:
 - ⇒ ultimately losing both
 - We should take the NCSX step now if CDR is OK and funding profile using TFTR D&D role-off keeps base program sound:
 - ⇒ NCSX will strengthened the Base Program Portfolio.
 - ⇒ NCSX fulfills the Leesburg plan for rebuilding experimental activity at PPPL and anchors its role in the program.
 - ⇒ Stronger Base program will make it easier to unite the community to take a Burning Plasma next step
- ⇒ **FESAC should endorse plan to proceeding with NCSX in 2003 and re-endorse need to proceed with a Burning Plasma experiment in 2004 as high priority.**
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