Insights from US ITER: Strategies for Accelerating Fusion Energy as a Project

Ned Sauthoff US ITER Project Manager SOFE Town Hall Meeting | June 27, 2011

1. Treat fusion energy as a project, rather than a program.

Mission:

• Rapid materials and fusion systems development, leading to a demonstration system

Sequenced Deliverables:

- Near-term tasks, logic and decision-trees to meet prerequisites
- Flexible, upgradeable core facilities
- Anticipated facility upgrades, building to full fusion system demonstration



3. Plan the path to fusion energy.

Design the Project: Tasks and Logic

Resource-Load Business Plan (teaming, government/ private)

4. Design, build and upgrade basic facilities.

Flexible Machine

Re-Usable Basic Machine (shield the structure and containment) Design for change-out of many systems

Flexible Technical Infrastructure Develop materials and systems iteratively

5. Organize for success.

Avoid creation (new machines and institutions)

Fund for rapid success Plan to survive the Valley of Death

Summary

Treat fusion energy as a project, with linked tasks, needed resources, decision points, and deliverables

- Manage risks (don't avoid them)
- Plan the path to fusion energy, emphasizing effective decision-making

Design, build and upgrade basic facilities: avoid new facilities and new institutions

Plan the teaming:

- Multiple parties, as desired
- Government and private sector