The Path Forward for Fission Power Systems

Government and Industry Working Together

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Why Do We Need Both Industry and Government?

- Assumed Objective: Design, develop, build, qualify, and successfully operate one or more Fission Power Systems on flight missions - with acceptable cost, schedule, and risk – that are of significant net value to NASA
- Government can mature technologies before there is an established mission and is responsible for developing missions
- Government has mandatory management and SNM roles
- Government can bring unique technologies into architecture studies
- Industry is experienced in detailed design, qualification, and production of complex systems with rigorous QA/QC
- Industry is driven by financial and contract considerations
- Each has unique capabilities, personnel resources, and facilities

A government/industry team can be the most efficient option for fission power systems
Challenges of Government and Industry Working Together

• Competition/ turf battles
• Different agendas
• Duplication of work, facilities, staff
• Gaps in work/ things that fall through the cracks

To minimize these risks/costs we need:
• Clear, common understanding of roles
• Honest buy-in to common goals
• Proactive, effective top level management and appropriate lower level management
• Effective systems engineering / interface control
What Needs to be Done at the Current Status Point

- Industry contributions, investments, participation
  - Concepts, missions studies
  - Technology support
  - Interaction with NASA and DOE at different levels

- Government inclusion of industry inputs
  - Starting at earliest stages of potential programs
  - Continuing interactions with industry
  - Incorporation of beneficial industry information