The Path Forward for Fission Power Systems

Government and Industry Working Together

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H. Sterling Bailey

Bailey Engineering and Management

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