

*Status Report from Non-electric
Applications Panel*



Kathy McCarthy

FESAC Meeting

September 11-12, 2002

Gaithersburg, Maryland

Panel Members



Charlie Baker

Ed Cheng

Jerry Kulcinski

Grant Logan

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George Miley

John Perkins

Dave Petti

John Sheffield

Bill Stacey

Don Steiner

Les Waganer

Process for Fulfilling Charge

- Exhaustive list of potential applications was compiled
- A set of criteria for evaluating each application is under development
- A variation on the FESAC “Opportunities” document is being distributed both inside and outside the fusion community to get feedback on the potential applications
- A speaker for each application or group of applications has been identified and invited to a meeting to be held in September

Evaluation Criteria

- Will the application be viewed as necessary to solve a “national problem”?
- What are the technical requirements on fusion imposed by this application vis-à-vis present state of fusion and vis-à-vis technical requirements imposed by electricity production?
 - What R&D is required to meet these requirements?
 - Is it on the path to electricity production?
- What is the competition for this application, and what is the likelihood that fusion can beat it?

Applications to be Discussed at September Panel Meeting

- Near Term Applications (for example, detection of clandestine materials, production of PET-Positron Emission Tomography- isotopes)
- Isotope Production
- Hydrogen Production
- Space Propulsion
- Transmutation

Opportunities Document

- An outline will be prepared for each application with a description of the application as well as the status
- This document will be sent out to experts both inside and outside of the fusion community
- Questions in this document are aimed at soliciting feedback on how fusion could do a particular mission better (or not), and how this application is less demanding than production of electricity

Schedule

- September 24-25, panel meeting in San Francisco
- Skeleton draft of the panel report completed at that meeting
- Complete draft ready for review by the end of October
- Final version of report complete by the end of November