

**Tracking Number: 2010-01-01 (SC-01)**  
**Restart of Domestic Plutonium-238 (Pu-238) Production**

**NASA Advisory Council Recommendation:**

The Science Committee urges NASA to work with the Department of Energy (DoE) to seek an equitable solution for the restart of domestic production of Pu-238, and for the development and testing of advanced Radioisotope Power Systems (RPSs). The Science Committee requests to be kept informed of developments on this issue at the next meeting.

**Major Reasons for the Recommendation:**

The use of RPS power sources is vital to robotic exploration of the outer solar system and to many other situations where solar power is insufficient or not available. Without Pu-238 to fuel RPSs, exploration of the outer solar system will have to be abandoned and other exploration objectives curtailed. Pu-238 production in the US has been stopped and the amount available from Russia will not meet the need for robotic planetary exploration into the next decade. Russia has also stopped shipment of Pu-238 pending contract renegotiation. The 2011 budget contains funds for restarting Pu-238 production by DoE. The budget is sufficient for production of only a certain amount per year, the issue being resolution of the amount required by NASA between requirements in SMD and in ESMD. Additional funding will be necessary if the amount of Pu-238 required by NASA exceeds the value presumed by the 2011 budget.

**NASA Response**

NASA agrees with this recommendation and plans the following actions:

1. As SMD reported at the April meeting of the NAC Science Committee, NASA continues to work with DoE and the Office of Management and Budget on the finalization of a restart plan for Pu-238 as required by the Energy and Water Appropriations Subcommittee conference report. The restart plan has been cleared by NASA and is now in formal interagency concurrence. To date, NASA has made good progress, and we will continue to report to the NAC as events warrant.
2. SMD and ESMD have agreed in principle on an equitable distribution of funding in FY 2011 to support NASA's contribution in the President's budget request of \$15M.