
**Lunar
Exploration
Analysis
Group**

8 February 2018

Dr. Michael New
Discovery Program Lead Scientist
Science Mission Directorate, NASA
Washington, DC 20546



Dear Michael:

We are writing in regard to the announcement at the NASA Town Hall at the American Geophysical Union meeting in December 2017 that radioisotope power supplies (RPSs) would not be available for the next Discovery Program call. On behalf of the lunar community that the Lunar Exploration Analysis Group represents, we urge you to reconsider this decision.

The inclusion of RPSs in the next Discovery call would enable a number of important lunar science missions that would fit within the cost cap. Consistent power over the long term (months and years) enables lunar missions of the following varieties:

- Extensive (long-term) rover exploration across the lunar surface. RPSs will allow science and roving to be conducted during the lunar night or allow the rover to survive many day-night cycles to prolong surface operations.
- Exploration of the permanently shadowed regions around the poles where ice deposits are known to be present both at the surface and within the regolith. Such a polar exploration mission holds important implications for volatile delivery in the inner Solar System as well as for human exploration (life support consumables, rocket fuel) and future private sector economic development.
- Monitoring networks on the lunar surface, which need to be long-lived to examine geophysical and environmental (e.g., lunar volatile cycle) phenomena over at least one year.

Clive R. Neal, Ph.D.
Professor,
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With the exclusion of radioisotope power supplies, such missions cannot be proposed with any credibility. Inclusion of RPS systems as an enabling technology also opens a lot of other planetary science possibilities beyond the Moon. Therefore, we urge you to reconsider this decision and include RPSs in the next Discovery call.

Sincerely yours,



Clive R. Neal
LEAG Chair and Professor



Samuel J. Lawrence
LEAG Vice-Chair

cc: James Green, PSD Director
LEAG Executive Committee