

Re-thinking the
Planetary Major Equipment and Facilities
program
to meet PSD R&A Needs

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November 16, 2021

Issues with current PMEF program

- Appended PME requests:
 - Currently capped at \$200K
 - Require additional work for PI, panel, and POs
- Standalone Investigator Instruments:
 - Effectively augmentations to parent awards, not new proposals
 - Restricted to PMEF fixed due date, regardless of parent award POP dates
 - impact ability to propose for and effectively use the new instrument
- Facility Investigator Instruments:
 - Provide funding for equipment and instrument set-up/installation only; no support or oversight for operation as a facility
 - No requirement for PIs to make the instrument / facility time available to community

Proposed changes to PMEF program

- Appended PME requests >\$50K will follow specific instructions outlined in C.1
 - Expanded program eligibility relative to current program
 - Programs excluded: Technology Development (e.g., PICASSO, MATISSE); Programs under mission lines (PSP; Co-I; DAPs other than LDAP)
 - Proposals with PME requests will:
 - Check Yes/No in NSPIRES program-specific question to indicate request for equipment/instruments over \$50K
 - Include rationale for equipment/instruments and a descope plan in S/T/M section
 - Include quotes and specifications as part of budget justification
- Standalone Investigator Instrument requests will be handled like other augmentation requests to existing awards
 - PIs need to contact PO for requirements of request
 - POs will solicit external reviews as appropriate
 - Text will be added to C.1 to clarify this change
 - Intended for replacement of lost capabilities from parent proposal (e.g., from instrument failure)
- Facility Instruments will be requested through Planetary Science Enabling Facilities call
 - Targeting February 2022 Step 1 due date, March 2022 Step 2 due date
 - Allows instrument acquisition to be directly tied to plans for community access
 - Will include language on partnering with MSIs (a la SSERVI, ICAR)

PSD-relevant programs eligible and ineligible for PME program C.17 money in ROSES21

PMEF Eligible	PMEF Ineligible
C.2 Emerging Worlds	C.7 NFDAP (not 811073)
C.3 SSW	C.8 LDAP (consistency across DAPs)
C.4 PDART	C.9 MDAP (not 811073)
C.5 Exobiology	C.10 CDAP (not 811073)
C.6 SSO	C.11 DDAP (not 811073)
C.14 PSTAR	C.12 PICASSO (Tech Dev)
C.15 PPR	C.13 MatISSE (Tech Dev)
C.16 LARS ¹	C.21 HOTTech (Tech Dev)
C.20 PS Early Career Award	C.24 MMX PSP (mission)
C.22 ICAR	C.25 Juno PSP (mission)
F.3 Exoplanets Research Program (cross-divisional) ²	C.27 VIPER co-I (mission)
F.4 Hab Worlds (cross-divisional) ²	C.28 MSL PSP (mission)
ISFM (standalone only)	

¹See C.16 for LARS-specific PME information

²Relevance to PSD will be an additional factor in the evaluation of PME requests in these programs

New proposal with equipment over \$50K



Proposal submitted through NSPIRES to program of interest.

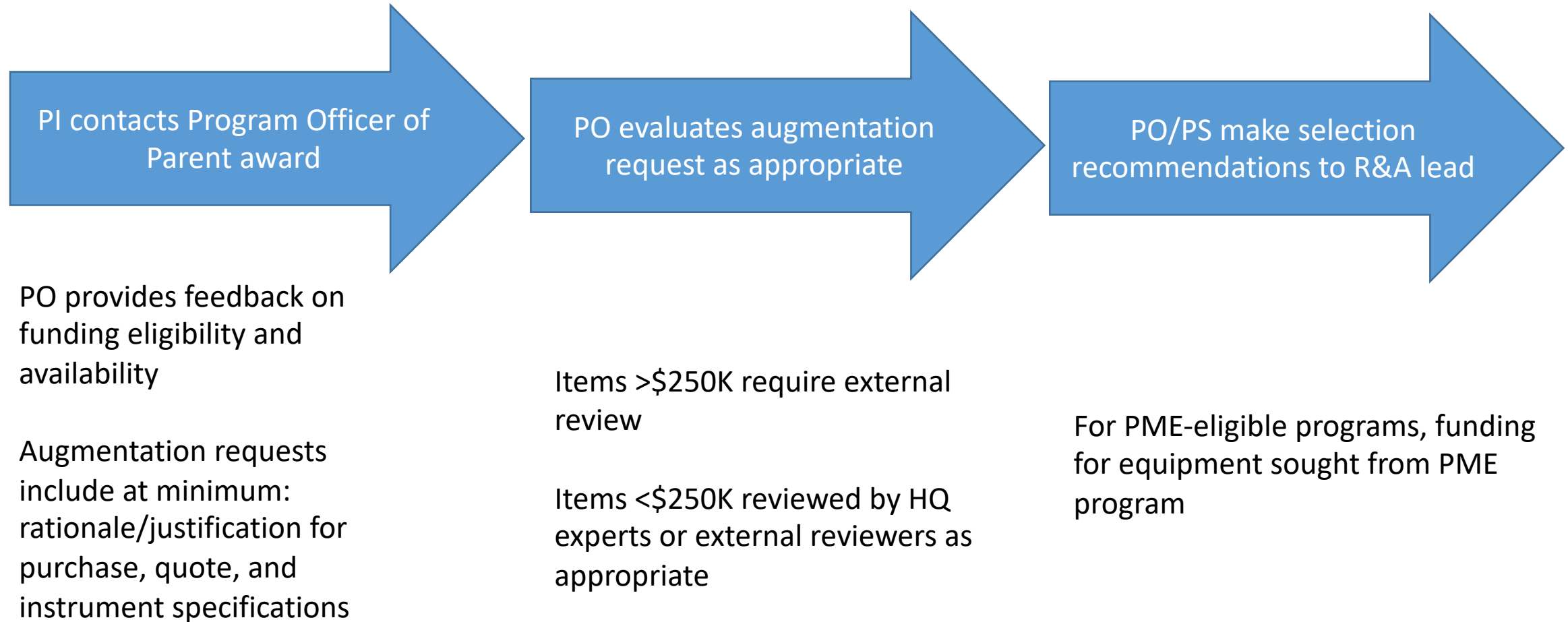
Check “Yes” in NSPIRES Program Specific Questions

Include in proposal: rationale/justification for purchase, descope option (or state no descope possible), quote, specifications

Panel evaluates proposal and any descope options

For PME-eligible programs, funding for equipment sought from PME program

Request for Investigator Instrument to augment existing award



Planetary Science Enabling Facilities (PSEF)

Proposed Facilities Program Element – ROSES 2021

Common themes from recent Facilities Senior Review

- Shared Planetary Science facilities can provide significant value to both the PSD R&A community and NASA
- Existing facilities are uncommon/unique and re-creating them elsewhere would be costly
- External interfaces for existing facilities generally could be improved
 - capabilities, availability and mechanisms for access not always well-explained
 - Presents a barrier for external users
 - Facility use tends to be dominated by internal users
- Many existing facilities require users to have funded R&A proposals
 - Further limits user-base of facilities

Guiding principles for new PSEF call

- The PSEF program should provide funding stability coupled with regular review to ensure community needs are being addressed
- Different types of facilities have different staffing and funding needs, and proposers should have flexibility to propose what they need
- Facilities should be encouraged to maintain or grow user base
- A significant fraction of funded time for analyses/experiments should be made available to the community

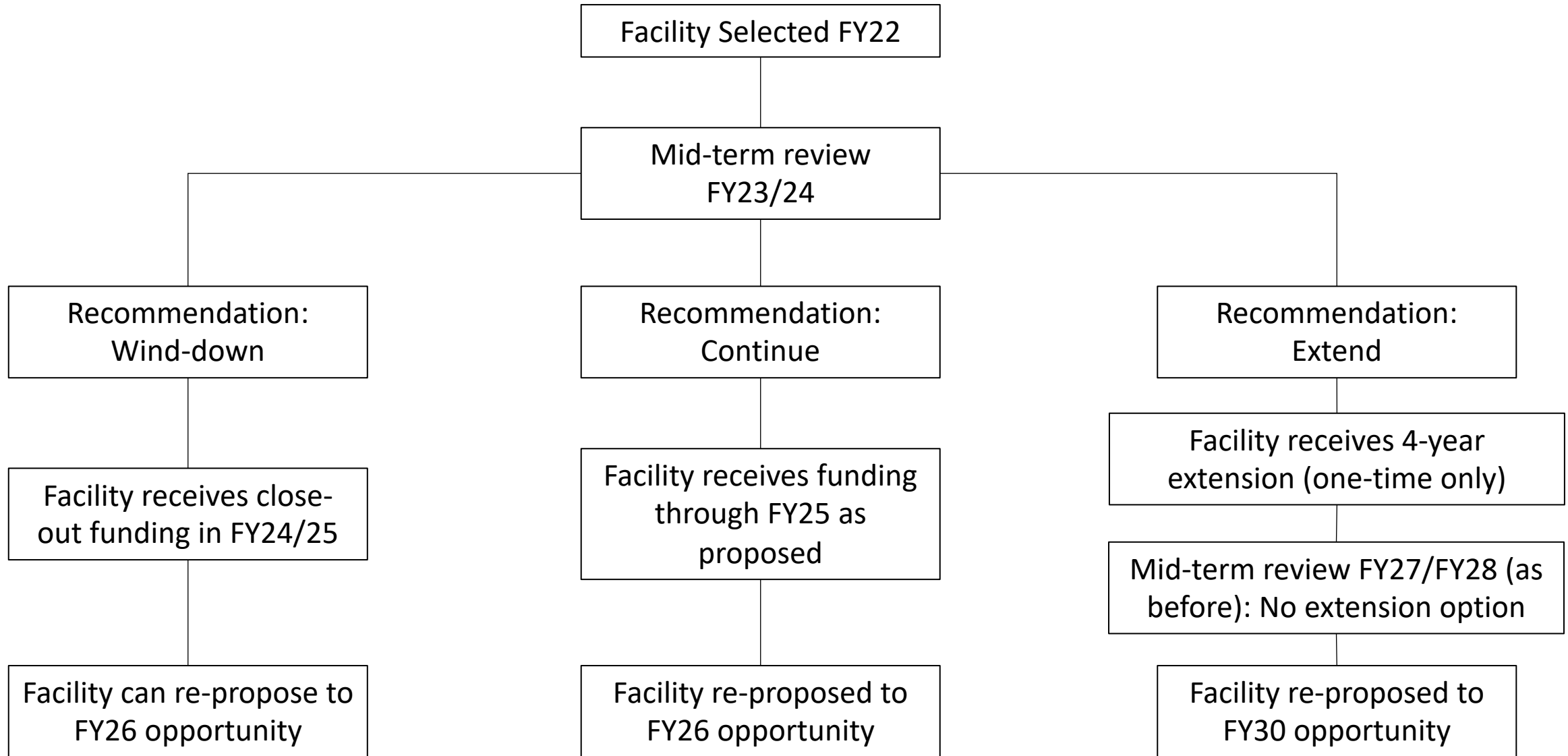
Baseline NASA Science-Enabling Facility

- Facilities program provides minimum level of support for:
 - Maintenance
 - Minor improvements
 - Technical expertise to keep instrument/facility operational
 - Evaluation and disposition of requests
- Users secure additional funding for the experiments/analyses through proposals to R&A programs
 - User fees directly if funds are available
 - Usage related to work in PSD R&A awards should be top priority
- 4-year expected length of awards, with review after 2 years
 - Pending outcome of mid-term review, award can be extended, continue as proposed, or be reduced in scope

Enhanced NASA Science Enabling Facility

- A pro-rated share of the full labor, supplies, and maintenance costs are paid for through PSEF program
- Users propose for time/sample analysis, get reviewed by some process, and time/analyses are awarded
 - Users can include analyses in R&A proposals; if proposal is selected, then those analyses are in highest priority category
 - Separate process for PSD-relevant analyses not proposed through ROSES. These are lower priority than those in R&A awards
- Share of time to be funded by HQ is identified by proposers at time of submission, and actual usage will be evaluated at mid-term review.

Facility review outcomes



Facility Instrument / Upgrade appendices

- At the time of submission, Facility proposers have option to submit separate facility upgrade appendix
 - Proposers can request enhanced instruments or capability upgrades
 - Facility proposals may be selected with or without the requested upgrades
 - This will replace current Standalone PMEF Facility Instrument solicitation