Operational Energy Capability Improvement Fund and Operational Energy Prototyping Fund

Fiscal Year 2022 Call for Proposals

Summary

The Office of the Deputy Assistant Secretary of Defense for Environment and Energy Resilience (ODASD(E&ER)), Operational Energy – Innovation (OE-I) is now soliciting Fiscal Year 2022 (FY 22) proposals for the Operational Energy Capability Improvement Fund (OECIF) and the Operational Energy Prototyping Fund (OEPF).

OECIF is requesting Advanced Technology Demonstration (6.3) proposals in the following areas:

- ***Powering the Force***: Support the deployment of more mobile and distributed operations with decreased and more agile logistics; reduce the risk of carrying fuel to the fight, especially through contested environments
- ***Electrifying the Battlespace***: Enable the electrification of weapons, platforms, unmanned systems, and soldiers to field new weapons, sensing, active defense, and other technologies; advance power and thermal management technologies to meet the growing demands of high-power systems; pursue potential game-changing technology that drastically reduces energy resupply risks, costs, and signatures to enable persistent unmanned system and unattended sensors
- ***Commanding Energy***: Capturing and understanding adversarial energy profiles to transform the Joint Force from reactive to predictive with energy management and control

Funded OECIF projects may be new efforts or build upon existing OECIF efforts. They will be managed by the Military Services or other DoD Components, with oversight by OE-I and the OECIF Program Manager. Projects impacted by the NDAA FY 2021 rescission of OECIF FY 2020 funds will have a high priority and are encouraged to resubmit proposals. Proposals should come from DoD Components; this is not a call for proposals from non-government organizations – however, partnering with industry and academia is encouraged. Examples of high-priority technology needs in these areas are detailed in *OECIF and OEPF Technology Needs for FY2022* (Distro D document, available upon request).

OEPF is requesting Advanced Component Development and Prototype (6.4) proposals from successful OECIF investments in the above areas that have, or will have, service commitment to program of record transition in the FY23 or FY24 POM.

Funding Available

OECIF will accept three types of proposals:

1. Multi-Year Traditional Project: These proposals can request up to **three years** of funding (four-year period of performance) at a cost of **no more than $2 million per year**.
2. One-Year Surge Project: These proposals should focus on ready-to-go projects with clear transition pathways at completion. Surge proposals can request **one-year** funding (two-year period of performance) at a cost of **no more than $4 million**.
3. One-Year Study: Proposals for studies that advance an OECIF focus area can request **one-year** funding (***one-year*** period of performance) at a cost of **no more than $1 million**.

OEPF will accept One-Year Surge proposals as defined above.

Services and/or other Components are expected to provide matching funding. Matching funding includes the value of government labor/in-kind funding. The final funding awards will depend on the quality of the proposals received and the appropriations for the OECIF and OEPF Program Elements. Additional funding for these projects, as appropriate, could be provided by other industry, academic, or inter-agency partners.

Deadlines

This is a two-round selection process, with the following schedule:

Round One *(OECIF and OEPF)* – submit by 16 August 2021

- Submit a one-page whitepaper describing the proposed project candidate using the template format provided (see Appendix 1, *A1_OECIF and OEPF Proposal Whitepaper*)
- Submit an accompanying Quad Chart describing the proposed candidate project using the template format provided (see Appendix 2, *A2_OECIF and OEPF Quad Chart Template*)

Round Two *(OECIF)*

- Multi-Year Project
  - If selected to move forward, projects will give a proposal presentation within 30 days after notification
  - Projects are asked to submit a proposal technical paper (limit 6 pages) prior to the presentation
- One-Year Surge
  - If selected to move forward, projects will give a proposal presentation within 30 days after notification
  - Projects are asked to submit a proposal technical paper (limit 6 pages) prior to the presentation
- One-Year Study
  - If selected to move forward, projects will give a proposal presentation (no technical paper) within 30 days after notification

Round Two (*OEPF*)

- One-Year Surge:
  - If selected to move forward, projects will give a proposal presentation within 30 days after notification
  - Projects are also asked to submit a proposal technical paper (limit 6 pages) prior to the presentation

Project proposals for ***both OECIF and OEPF*** are to be delivered as follows:

- Proposals are to be uploaded electronically to the Operational Energy Management System (OEMS) web-site: https://www.oecif.org/ by **16 August 2021**. The OEMS web-site allows the Principle Investigator (PI) to register for an account and submit the whitepaper and quad chart within the "Proposal Management" section of the tool.

Awards will be announced one week after passage of the FY 2022 Department of Defense Appropriations Act.

General Scope & Proposal Evaluation

OECIF programs are Advanced Technology Development, Budget Activity (BA) 6.3 and Technology Readiness Level (TRL) 4-6, intended to address operational energy challenges of DoD modernization priorities. Project candidates should target operational energy capabilities to modernize for a more lethal and resilient joint force structure. Project candidates are to demonstrate and show direct operational value and maturation with transition to BA 6.4, TRL-7, and beyond.

OEPF programs are Advanced Component Development and Prototype BA 6.4 that enter around TRL 6 and complete at TRL 8/9. Project candidates should advance technology into a Service program of record that is ready for transition and already has funding in the POM.

Strong proposals include, but are not limited to, the following:

- Clear identification of improved military capabilities and/or performance goals
- Analysis of the proposed capability underpinned by data and scenario - preferably completed prior to the submission, but at a minimum have go/no-go criteria at each annual assessment. ***The project's projected impact on climate change mitigation is required.***
- Involvement of two or more of the Services and/or a Combatant Command (CCMD). A greater number of transition partners is valued more highly. Annual demonstrations with warfighter feedback are strongly encouraged.
- The project plan – technical and management approach – is logical and broken into steps to assess progress and learn/correct as needed along the way.
- Strong and experienced project team. This team must have active involvement and participation from at least one transition partner. Project proposals include specific PE numbers with follow-on funding requirements identified.

- Strong, active ties to the appropriate acquisition and user communities. These ties will help improve the prospects of a successful transition. Specification of documented artifacts generation and their input into the transition partners' schedules is required.
- Inclusion of interns/students on project work.

Proposals will be evaluated and selected for funding based on the factors below. The first factor is the most important, while the remaining factors are of equal rank. Poor performance against any single factor is sufficient for a proposal to be eliminated.

1. **Improved Operational Energy Effectiveness** – The military benefit of the proposed project. The extent to which the proposed project would improve the operational energy related military capabilities and/or reduce the burdens and risks from DoD's energy supply lines. Well supported, quantified analysis will score better. Efforts shall take into consideration DoD's climate change and sustainability strategic approach in their technology development.
2. **Project Plan/Jointness** – The quality of the proposed technical and managerial approach. The goals, approaches, schedules and processes of the proposed project should be clearly identified, logical and demonstrate a clear understanding of the path forward. There should be a clear connection between the improved performance/capabilities sought and the technical goals and approach. Joint projects will score better. Test data to support acquisition, requirements, and war-gaming shall be collected.
3. **Personnel/Team** – The quality of the project team, including qualifications, expertise and demonstrated accomplishments in work relevant to the proposed project. Each team shall include a data analytical / modeling and simulation expert. Teams with student/intern contributions will score better.
4. **Commitment to Demonstration and Transition** – Teams must demonstrate progress not less than once annually. At least one transition partner is active throughout the life of the proposal. Memorandum of Understanding (MOUs) or other formal partnerships between research and acquisition/in-service/fielding organizations also are beneficial. Proposed projects that are aimed at an actual or developing military requirement and/or have clearly identified, firm pathways and commitments to both sustaining research in this area and transitioning the technology will score better.
5. **Cost** – The reasonableness of the proposed cost for the proposed project.

Proposals will first be reviewed by the energy offices of each Military Department and the CCMDs. This pathway is intended to allow the Military Departments and CCMDs to vet, coordinate, and recommend the proposals that are of interest to them. Services and CCMDs are encouraged to jointly perform. Services provide acquisition and transition while CCMDs provide operationally relevant demonstration opportunities and requirements signals. Notification of proposal submission should be sent to the points of contact listed below.

Points of Contact

Below are points of contact for the Services and OE-I. Proposers should reach out to the appropriate point of contact to coordinate the submission of proposals. General questions can be directed to OE-I.

- **OE-I**: RuthAnne Darling, Director, ruthanne.s.darling.civ@mail.mil
- **Army**: Office of the Assistant Secretary of the Army (Installations, Energy, and Environment), Nathan Cornell, nathan.t.cornell.civ@mail.mil
- **Navy and Marines**: Office of the Deputy Assistant Secretary of the Navy (Research, Development, Test and Evaluation), Jim Caley, james.c.caley@navy.mil
- **Air Force and Space Force**: Office of the Deputy Assistant Secretary of the Air Force (Operational Energy), Troy Warshel, robert.warshel@us.af.mil
- **Combatant Commands:**

CCMD	POC	Email
USAFRICOM	Garth Anderson	harold.g.anderson6.civ@mail.mil
USCENTCOM	Martin Drake	martin.a.drake.civ@mail.mil
USEUCOM	Mike McGuinness	michael.t.mcguinness.civ@mail.mil
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Appendices (Attached)

1. A1_OECIF and OEPF Proposal Whitepaper
2. A2_OECIF and OEPF Quad Chart Template