

AMENDMENT NUMBER 0004
BAA 11-002 ENTITLED
“RENEWABLE SUSTAINABLE EXPEDITONARY POWER”

The purpose of Amendment 0004 is to provide answers to following questions:

Question 1: Are you asking for the submitted White Paper to identify a specific solution (identifying technologies used), or instead are you asking for the White Paper to detail the strategy (criteria, weighting, etc) to identify and evaluate candidate technologies?

Answer 1: Section 4 of the BAA specifies White Paper Content.

Question 2: Who is the current supplier of the 2kW Military Tactical Generator (MTG)?

Answer 2: The MEP-831A (3kW TQG) is supplied by DRS Technologies

Question 3: It was stated that a judgment will be made regarding research of "particular value" when evaluating white papers. To what degree for example will expertise in engine efficiency be seen of value independent of expertise in generator technology? In essence will it be essential for a proposal to contain the complete system delivery and to what extent might the Navy play a role in establishing/ enabling collaboration between companies that have only one of the necessary technology elements? Perhaps this would be an activity that could be initiated to form teams based on white paper content. That is, companies with one or the other expertise would be given the opportunity to initiate discussion with the technology they don't possess to deliver a complete package.

Answer 3: Please refer to the BAA Section 4 for White Paper Content and Section 5 for evaluation criteria. The Key performance requirements are not prioritized. There are no plans for ONR to play a role in creating teaming efforts.

Question 4: Our current effort is focused on river-based hydrokinetic energy. The power density of river water is high and it has several advantages. However it will not be suitable for all sites. It will meet most of the requirements in section 6.3, but not all. Will a white paper that does not fulfill all requirements in section 6.3 be competitive? Or will you be mixing different efforts that lead to a suite of options for Marines?

Answer 4: White papers will be evaluated for the potential to meet all Key Performance Requirements stated in section 1, paragraph 6.3. Section 2 in the BAA provides the anticipated task order awards to be issued.

Question 5: I realize the latest BAA is regarding the 3kW application but depending on the electrical side of the unit's capability to produce or be altered to produce the 3kW requirements, our increased power density engine/ retrofit may be quickest/ cheapest option to get you fuel savings

Answer 5: All approaches and technologies meeting requirements of the BAA will be considered.

Question 6: Who are the current suppliers to the Navy of these generator sets?

Answer 6: The MEP-831A (3kW TQG) is supplied by DRS Technologies

Question 7: Where are answers to BAA questions posted?

Answer 7: Answers are posted on the FedBizOpps website:

https://www.fbo.gov/index?s=opportunity&mode=form&id=1c5327e0e4260069a1497edd052836f&tab=core&_cview=0

Question 8: For the baseline comparison, does a single generator operate continuously with the second brought on line to handle surge periods?

Answer 8: Power is provided by only one generator at a time in the currently-fielded power plant configuration (two MEP-831A generators mounted on a light tactical trailer). The generators are not configured to operate in parallel.

Question 9: Will detectability of a specific technology preclude it from consideration?

Answer 9: The detectability of all concepts will be assessed under the proposal evaluation criteria specified in V.1.1.iii: "Operational Naval Concept. Marine Corps relevance, the potential to meet demands of Marine Corps' operational and military transport environments, and the likelihood of future implementation on Marine Corps platforms will be assessed."

Question 10: To what extent is the 3KW continuous power mission cycle utilized to support a cooling, heating or thermal management load? The suite of complementary technologies that will yield the most affordable and capable RSEP could be quite different if the 3KW x 15 day mission duration given in Section 6.3 has a significant cooling/heating load proportion as opposed to being a purely electrical load.

Answer 10: Typical applications of the MEP-831A are for powering Weapon Systems, Missile Systems, Causeway Systems, and C4I Systems. These units are not typically used to provide cooling or heating.

Question 11: Please provide more specific guidance regarding 15 day mission success and availability requirements of the RESP. The baseline AN/MJQ-43

cited by ONR in the webinar is equipped with two MEP-831A 3KW diesel gensets and a switchover box. Presumably this is for improved availability in providing 3KW power during the 15 day mission cycle. Clearly this is an important requirement and will substantially impact the suite of complementary technologies most appropriate to optimize RSEP deployability, affordability, and mission success availability.

Answer 11: The Renewable Sustainable Expeditionary Power FNC is an applied research and technology development effort. Accordingly, detailed requirements have not been established in many areas. The 15-day mission is a key performance requirement as outlined in paragraph 6.3 of the BAA. The risk associated with meeting BAA requirements should be described as part of the white paper "Technical Concept". Offerors are also expected to state their assumptions and limitations as part of the white paper.

Question 12: Would a small scale marine hydrokinetic device fit within the scope of the RSEP program?

Answer 12: Such technology is responsive to the BAA. As with all proposals, the technology approach will be evaluated under the proposal evaluation criteria specified in V.1.1.iii: "Operational Naval Concept. Marine Corps relevance, the potential to meet demands of Marine Corps' operational and military transport environments, and the likelihood of future implementation on Marine Corps platforms will be assessed."

Question 13: What is the load profile for the 5kW power surge? How often does this load occur?

Answer 13: This requirement was established to insure the power output subsystem is sized for 5 kW electrical output, in the event excess stored energy is available to supply 3-5 kW for short durations (not to exceed 1 hour).
