

Written Questions Received from Industry Conference Held at KMCB Officers' Club on 28 March 2012.

Question 1. What is the construction cost of SWAC systems? What are the largest cost drivers?

Answer: This is actually a question that the Govt. has for industry. Some Govt. cost estimates were provided for implementing SWAC systems in Guam; but these costs are thought to be on the high side, as the Govt. was being conservative when estimating SWAC construction efforts/costs.

Question 2. What is the discharge temp of SWAC? My company is positioned to use the effluent of SWAC (55 degrees – 60 degrees F) to produce freshwater condensation and agriculture crops to supply local communities. Our system is proven tech which can be installed with any SWAC. Company X would like to demonstrate this to the DOD, at existing SWAC sites like NELHA. Company X would like to link up with DON and other SWAC eng./designers and installers.

Answer: The discharge temperature will likely be in the mid to high 50's degrees F; depending on how the district cooling chill-water operating temperatures might be optimized for the site specific conditions.

Question 3. How many buildings will be served by the HSWAC?

Answer: Approx 40

Question 4. What will the electrical avoidance be (MW or KW) from the project?

Answer: Approx 16 mw

Question 5. Is there any advantage to using multiple smaller pipelines (sea intake) rather than a single large diameter pipe? It would seem that smaller pipes would be easier to handle/deploy, fusion equip more readily available, smaller on-shore anchor for deploying. Also wouldn't multiple pipes provide some back-up (albeit reduced capacity) capacity if there were a problem/failure with one of the pipes?

Answer: Some advantages, as stated; but at an increased cost.

Question 6. What is the limitation in diameter and horizontal dispatch with the HDPE pipe.

Answer: 2.5m, the largest pipe diameter commercially available. Regarding horizontal dispatch (length?), there's no particular limit; it's based on hydraulic friction and internal suction forces stemming from the flow.

Question 7. What is the mitigation to prevent a crack in the HDPE pipe at the earth to sea junction during an earthquake (as happen at NELHA in 2006).

Answer: The Government would rely upon the contractor to develop an engineering solution that could handle the theoretical stresses resulting from an earthquake.

Question 8. During deployment what is the upper limit for wind and wave height to not risk losing the pipe. –Currents a problem.

Answer: The Government would rely upon the contractor to propose a deployment method that is compatible with the piping being deployed. The cost of deployment would most likely be one factor considered in evaluating of proposals.

Question 9. Should we start NEPA process?

Answer: A SWAC project should be approved before the NEPA process is undertaken. A NEPA process must include the evaluation of the specific characteristics of the project design.

Question 10: Best estimate on the following;

1) RFP date for WETS deep water location at MCB Kaneohe, HI

Answer: There won't be an RFP for deep water WETS at K-Bay. All of the information can be found in the current RFI, describing how the Navy will select CRADA partners based on their submitted response to this RFI.

2) RFP date for OTEC Pilot Project at Pearl Harbor, HI

Answer: There are no current plans within NAVFAC for an OTEC pilot project at Pearl Harbor, so no RFP is anticipated.

3) RFP date for saltwater air condition project at Diego Garcia

Answer: Prior to releasing an RFP for SWAC at Diego Garcia, the Navy would evaluate the viability of proposed designs including the anticipated environmental consequences, estimated project costs and projected efficiencies.
