



SENATE COMMITTEE ON WAYS AND MEANS

February 22, 2013, 9:00 A.M.

Room 211

(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF SB 1280 SD1

Chair Ige and members of the Ways and Means Committee:

The Blue Planet Foundation supports SB 23 SD1, authorizing the issuance of special purpose revenue bonds to assist Kona SWAC, LLC, in constructing part of a seawater air conditioning district cooling system. We respectfully ask that the measure be amended with a proper date.

As we consider strategies for kicking Hawai'i's 5-million-gallon-per-day oil habit, our tendency is to focus on alternative sources of fuel and electricity. We look to clean, renewable energy sources to replace dirty fossil fuel power. We also look for ways to reduce the amount we use—and waste—through efficiency and conservation. What we often overlook is the reality that fuel and electricity are means to an end. Electricity is not what we really want. What we really want is light when it's dark, hot water for a shower, and a comfortable temperature indoors. What if we could cut out the middleman and put an abundant natural resource to work in place of electricity? Seawater air conditioning is a clean energy solution that does just that.

Air conditioning is a voracious consumer of electricity. On O'ahu, the cooling of commercial buildings year-round is responsible for a whopping 20 percent of the island's electricity demand. The percentage of electricity devoted to cooling is even higher in resort areas. Kona SWAC seeks to develop a seawater air conditioning solution for Kona that precludes the need to cool water with electricity, one that stands to save substantial amounts of electricity—displacing fossil fuel imports—annually. The project proposes to use existing piping infrastructure.

Electricity is versatile, but it is difficult and costly to make and store. The genius behind seawater air conditioning technology is that the cold seawater can chill buildings 24/7, much like solar water heaters provide hot showers even after the sun has set. Our ocean directly improves our lives in so many ways: food, therapy, recreation, scenery. Let's also recognize its enormous potential in helping to meet our energy needs. While researchers continue to work on ways to harness wave power and ocean thermal power, buildings in dense areas should readily convert to seawater air conditioning, a renewable energy solution that is practical and proven.

Thank you for the opportunity to testify.

Kona SWAC, LLC



Written Statement of
Cord Anderson, Partner
Kona SWAC

before the
SENATE COMMITTEE ON WAYS AND MEANS
Friday, February 22, 2013
9:00 AM
State Capitol, Conference Room 225

In consideration of
SB 1280
**RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO
ASSIST A SEAWATER AIR CONDITIONING PROJECT.**

Date: February 20, 2013

To: Chair Ige and Committee Members

Kona SWAC, LLC is in support of this measure that will allow the State of Hawaii to issue Special Purpose Revenue Bonds (SPRBs) for the development of a district cooling system on the Big Island of Hawaii.

The intent is for Kona SWAC to develop a seawater air conditioning system at the Keahole Airport. The proposed size of the system is 5,000 tons with the understanding of leveraging the existing NELHA pipeline.

The NELHA facility has been in operation since the early 1980's with existing deep water pipelines. The cold seawater is being used for agriculture and desalinization, but there is a large amount of unused capacity within the 55" pipeline. We believe that we can provide economic and environmental benefits to the State of Hawaii and others through leveraging the available cold seawater to chill freshwater that will be delivered to structures with centralized air conditioning systems.

Benefits of a SWAC system include:

- Conservation of approximately 23,000 barrels of oil/year
- Reduction of approximately 10,700,000 kWh/year
- Reduction of potable water usage by approximately 35,000,000 gallons/year
- Reduction of sewage discharge by approximately 15,400,000 gallons/year
- Reduction of harmful gas emissions of approximately 11,100 tons/year
- Alignment with HCEI's goals of End-Use Efficiency and next generation technologies

The Keahole Airport Terminal Modernization Program's Environmental Assessment already includes plans for a SWAC system connecting to the NELHA pipeline to service the airport

terminal and the Ellison S. Onizuka Space Center. With cooperation amongst the Department of Transportation, Airports Division and NELHA, the reality of implementing a SWAC system in Kona is possible.

The addition of a 5,000 ton SWAC system to the existing NELHA campus will be a major step forward. Not only will this project diversify the NELHA portfolio of next generation technologies, it would also provide an additional income stream through leasing and service contracts, which could potentially alleviate the current funding from the State of Hawaii Legislature allocations.

Future growth of the Keahole Airport SWAC system would potentially include the UH – West Hawaii campus, planned mixed-use developments along Queen Ka’ahumanu Highway, and existing industrial parks.

Kona SWAC is a subsidiary of Kaiuli Energy. Kaiuli’s management team is comprised of Hawaii business leaders with the necessary experience critical to the project’s success. My background includes a wide range of projects in Hawaii from residential subdivisions to hospitality industry development. As a member of a family with a multi-generational development background, I’ve worked on both small and large scale projects in Hawaii. In addition, Rob Iopa, president of WCIT Architecture, has extensive experience and expertise in entitling, designing and construction large complex projects in Waikiki and urban Honolulu. Ray Soon has over 40+ years consulting and delivering on construction projects in Hawaii. Darryl Nakamoto was the former CFO of Hoku Corporation with a diverse experience in alternative energy, finance, and raising funds for large scale ventures.

Thank you for the opportunity to share our thoughts with you.