

SB 1214

TESTIMONY BY KALBERT K. YOUNG
INTERIM DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE SENATE COMMITTEES ON ENERGY AND ENVIRONMENT AND
COMMERCE AND CONSUMER PROTECTION
SENATE BILL NO. 1214

February 3, 2011

RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST
PACIFIC POWER AND WATER COMPANY, INC.

Senate Bill No. 1214 authorizes the issuance of up to \$25,000,000 in special purpose revenue bonds to assist Pacific Power and Water Company, Inc., with the planning, permitting, designing, constructing, equipping and operating hydropower plants at locations throughout Hawaii pursuant to Part V, Chapter 39A, Hawaii Revised Statutes.

The Department has a technical comment on this bill. Under Section 144 of the Internal Revenue Code of 1986, as amended, tax exempt financing for industrial projects are limited to \$10 million. In order to better examine the viability of tax-exempt financing as an alternative, we recommend that the project party consult with a bond counsel firm to determine if the project may qualify, under certain exemptions, for the full amount of tax-exempt financing.

Dr. Patrick Sullivan
Chairman, Pacific Power & Water Company, Inc.
828 Fort Street Mall, Suite 600
Honolulu, HI 96813
February 2, 2011

Energy and Environment
Senator Mike Gabbard, Chair
Senator Kalani English, Vice Chair

Commerce and Consumer Protection
Senator Rosalyn Baker, Chair
Senator Brian Taniguchi, Vice Chair

Hearing on Feb 3, 2011 at 2:45pm in room 225

TESTIMONY in SUPPORT of SB 1214, Relating to the Issuance of Special Purpose Revenue Bonds to Assist Pacific Power and Water Company, Inc.

Dear Committee Members,

Thank you for hearing SB 1214 today. As you well know, Hawai'i has a few hundred dams throughout the islands, many of them plantation-era earthen dams that are over a hundred years old. Dams hold back large volumes of water, and are by their very nature hazardous. Maintaining our existing dams is very expensive but essential to ensure public safety.

Pacific Power and Water Company, Inc. is an Oceanit spin-off that was formed for the purpose of converting Hawai'i's existing non-powered dams into small-scale hydropower dams. Oceanit is a twenty-five year old Hawai'i science and engineering firm with a track record that includes alternative energy projects as well as dam inventorying, monitoring and decommissioning.

Small-scale hydropower at Hawai'i's existing dams will:

- a) Generate revenue to pay for dam maintenance and repairs, thereby improving public safety
- b) Reduce Hawai'i's dependence on fossil fuels and help meet our renewable energy goals
- c) Create jobs in the renewable energy sector
- d) Keep the door open to future traditional agriculture and green energy needs

Special purpose revenue bonds will allow Pacific Power and Water Company, Inc., to initially finance the development of hydropower facilities. I think the benefits to the state as a whole are clear, and ask for your support in passing this measure. Please see the attached white paper for additional information. Please contact me if you have any questions.

Sincerely,

Patrick Sullivan
Pacific Power and Water Company, Inc.
808-531-3017

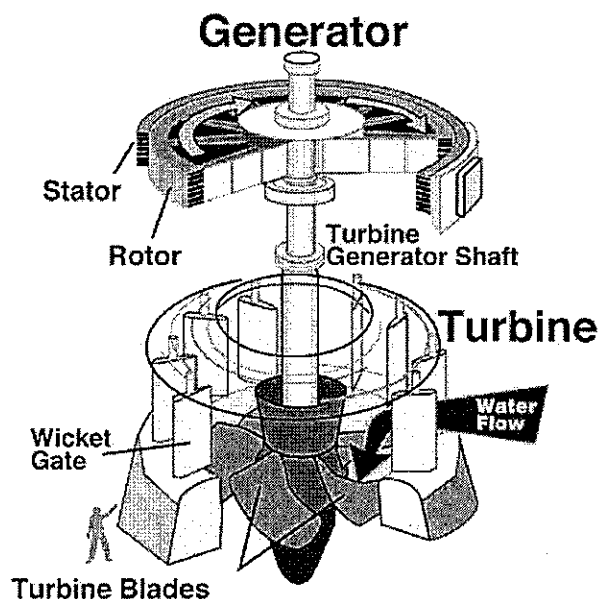
Converting Existing non-Powered Hawai'i Dams into Small-Scale Hydropower Dams

Hawai'i has a few hundred dams throughout the islands, most of them dating back to the plantation-era. Many of our existing dams in Hawai'i are in need of significant repair, are not in active use, or are being considered for closure due to the inherent dangers and liabilities associated with dams. Small-scale hydropower installations will **a) generate revenue to pay for dam repairs and maintenance**, thereby reducing liability and improving public safety, **b) reduce Hawai'i's dependence on fossil fuels** and help meet our renewable energy targets, **c) create jobs** in the renewable energy sector and **d) ensure that existing dams are well-maintained for traditional agriculture and future green energy needs**.

Who is Pacific Power and Water Company?

Pacific Power and Water Company, Inc. is an Oceanit-formed company that is focused on converting Hawai'i's existing non-powered dams into small-scale hydropower dams. Oceanit is a twenty-five year old Hawai'i science and engineering firm with a track record that includes numerous alternative energy and water-related research and engineering projects, as well as dam inventorying, monitoring and decommissioning projects. We have a significant amount of expertise and depth of knowledge regarding Hawai'i's dams and their unique attributes as well as hydropower projects.

What is hydroelectric power?



Hydroelectric power is the creation of electricity by using the flow of water to turn turbines, which in turn operate generators. Hydroelectricity is the most widely used form of renewable energy, accounting for 67% of America's domestic renewable energy generation, and approximately 20% of the world's electricity.¹ Once completed, a hydroelectric facility produces no direct waste and emits significantly less carbon dioxide (CO₂) than a conventional fossil-fuel powered plant. Hydroelectric power is reliable and proven over time and incurs low operating and maintenance costs.

Figure 1: Hydroelectric power generation (U.S. Army Corps of Engineers)

¹ National Hydropower Association

Why does hydropower make sense for Hawai‘i’s existing dams?

Hydro for improved public safety

There are many existing dams in Hawai‘i that are in need of repair or are being considered for closure due to the inherent dangers and liabilities associated with dams. Necessary capital improvements can be costly and the day to day maintenance and operation of a dam can be expensive as well. Small-scale hydro power at Hawai‘i’s dams will generate revenue to help pay for much needed maintenance and repairs, thereby reducing liability and improving public safety.

Hydro for energy

Hawai‘i is the most fossil fuel dependent state in the nation – imported oil accounts for 90% of our energy needs. This represents up to \$7 billion a year in money leaving the state to help pay for energy.² Hydropower is America’s largest clean, renewable energy resource, accounting for 67% of the country’s renewable energy generation. Small-scale hydropower at Hawai‘i’s dams can help meet the state’s Clean Energy Initiative goal of generating 40% of our energy from local renewable sources.

Hydro for jobs

Hawai‘i is heavily reliant on only a few economic sectors – tourism and the military together account for roughly 50% of our economy.³ There is a clear need for economic diversification – growth of new economic sectors will translate into a more stable economy for the future. Converting Hawai‘i’s non-powered dams into small-scale hydropower dams will create jobs throughout the state. According to a 2009 study commissioned by the National Hydropower Association, installing 60,000 MW of hydropower across the US would result in 1.4 million cumulative jobs by 2025. That’s roughly 23 jobs per MW of hydropower.

Hydro to support agriculture

Our dams were built to provide irrigation for agriculture. While the agricultural sector of the economy has declined considerably, agriculture still plays an important role in the state and holds promise for the future. From fresh produce for local consumption to export products like macadamia nuts, coffee and flowers, to biofuel crops like jatropha and kukui, agriculture is likely to remain a part of Hawai‘i’s economy for generations to come. Using our dams to create hydropower will ensure that they are in good repair and ready to meet the future needs of agriculture.

² Department of Business, Economic Development and Tourism (DBEDT)

³ DBEDT

TESTIMONY

Committee on Energy and Environment

Senator Mike Gabbard, Chair

Senator Kalani English, Vice Chair

&

Committee on Commerce and Consumer Protection

Senator Rosalyn Baker, Chair

Thursday, Senator Brian Taniguchi, Vice Chair

Feb 3, 2011

2:45pm Hearing

State Capitol, Conference Room 325

Regarding

SB 1214, Relating to the Issuance of Special Purpose Revenue Bonds to Assist Pacific Power and Water Company, Inc.

Testimony in SUPPORT of SB 1214

Thank you for hearing this bill today. States across the country are moving towards hydropower at existing dams as a means of paying for much needed dam maintenance and repairs. I think it's time Hawai'i did so as well, in the interest of public safety as well as energy, job and food security.

While dam decommissioning is one option, it is very expensive and reduces many future possibilities, including agriculture (both traditional agriculture, as well as green crops used for biofuel). Small-scale hydropower at existing dams will generate revenue for their upkeep while reducing our dependence on foreign oil. It will also create green jobs in the state of Hawai'i and support future agricultural uses.

Please consider passing this bill which would provide a financing vehicle for Pacific Power and Water Company, Inc. to begin addressing the important issue of dam safety in a manner that is beneficial to the state of Hawai'i.

Sincerely,

John Kuriyama

Oceanit

808-531-3017