

DAVID Y. IGE
Governor

SHAN S. TSUTSUI
Lt. Governor



State of Hawaii
DEPARTMENT OF AGRICULTURE
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SCOTT E. ENRIGHT
Chairperson, Board of Agriculture

PHYLLIS SHIMABUKURO-GEISER
Deputy to the Chairperson

**TESTIMONY OF SCOTT E. ENRIGHT
CHAIRPERSON, BOARD OF AGRICULTURE**

**BEFORE THE HOUSE COMMITTEE ON CONSUMER PROTECTION AND
COMMERCE**

February 24, 2016
2:05 P.M.
CONFERENCE ROOM 325

**HOUSE BILL NO. 2077 HD1
RELATING TO HYDROELECTRIC POWER**

Chairperson McKelvey and Members of the Committee:

Thank you for the opportunity to testify on House Bill No. 2077 HD1 that allows a “small hydropower facility” as defined by the U. S. Department of Energy as a hydroelectric facility on all Agricultural District lands. The Department of Agriculture has concerns and offers an amendment.

This bill deletes from Section 205-4.5(a)(23) the requirement that small hydroelectric facilities of up to 500 kilowatts on all Agricultural District lands are accessory to agricultural activities on agricultural lands and for agricultural use only (Bill, page 18, lines 12-13 and page 19, lines 7-8) In its place is an amendment that allows without restrictions on “A” and “B” rated agricultural land, a “small hydropower facility” up to 30 megawatts capacity and may include dams, diversions, and channels (page 18, lines 16-20).

The proposed amendment in Section 205-2 (page 4, lines 3-6) reinforces the amendment to Section 205-4.5 by stating that “...hydroelectric facilities permitted under section 205-4.5(a)(23), shall not be required to be an accessory to agricultural land for agricultural use only;”



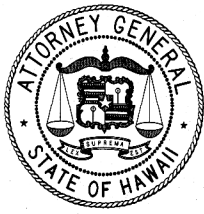
As currently written, this measure now seeks to allow “small hydropower facilities.” This may be “small” by U. S. Department of Energy standards but we are uncertain as to the impact these facilities may have on Hawaii streams, rivers, and groundwater sources and their use for agricultural irrigation and other purposes.

The Department of Agriculture sees no direct benefit to “irrigation for agricultural lands” as stated in the purpose of this measure (page 1, line 17). This bill, as written, focuses on energy production. To ensure a balance between the use of surface and ground water for energy production within the Agricultural District, the Department of Agriculture recommends the following amendment:

(Page 19, lines 15-20)

"(D) Do not ~~adversely~~ impact or impede whatsoever the use of agricultural land or the availability of surface or ground water for all uses on all parcels that are served by the ground water sources or streams for which hydroelectric facilities are considered."

Thank you for the opportunity to submit our testimony.



**TESTIMONY OF
THE DEPARTMENT OF THE ATTORNEY GENERAL
TWENTY-EIGHTH LEGISLATURE, 2016**

ON THE FOLLOWING MEASURE:

H.B. NO. 2077, H.D. 1, RELATING TO HYDROELECTRIC POWER.

BEFORE THE:

HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

DATE: Wednesday, February 24, 2016 **TIME:** 2:05 p.m.

LOCATION: State Capitol, Room 325

TESTIFIER(S): Douglas S. Chin, Attorney General, or
Bryan C. Yee, Deputy Attorney General

Chair McKelvey and Members of the Committee:

The Department of the Attorney General provides the following technical comments.

This bill proposes to remove the requirement that hydroelectric facilities on agricultural lands be accessory to agricultural activities.

Currently, section 205-2(d)(7), Hawaii Revised Statutes (HRS), allows accessory agricultural uses, including hydroelectric facilities that are accessory to agricultural activities. Section 205-4.5(a)(23), HRS, sets forth additional limitations on hydroelectric facilities on A and B-rated agricultural lands, beyond the requirement that the hydroelectric facility be accessory to an agricultural activity.

On page 3, line 21, to page 4, line 1, the bill proposes to amend section 205-2(d)(7), HRS, and delete the provision allowing “hydroelectric facilities in accordance with section 205-4.5(a)(23).” On page 4, lines 3-6, the bill proposes to further amend section 205-2(d)(7), HRS, by adding the following: “provided that hydroelectric facilities permitted under section 205-4.5(a)(23), shall not be required to be an accessory to agricultural land for agricultural use only.” It is not clear that these amendments, however, will accomplish the bill’s purpose. Although the additional wording on page 4, lines 3-6, describes what hydroelectric facilities are not required to do, it does not provide that hydroelectric facilities are permitted uses on agricultural land.

We recommend that the amendments on page 4, lines 3-6 be deleted, and a new paragraph (16) be added to section 205-2(d), HRS, to provide as follows:

“Hydroelectric facilities as described in section 205-4.5(a)(23).”

This will allow any hydroelectric facility allowed on A and B-rated lands pursuant to section 205-4.5.(a)(23), HRS, to be a permitted use on all other agricultural lands. Furthermore, hydroelectric facilities which are not accessory to agricultural activities are better described in a separate paragraph rather than within section 205-2(d)(7), HRS, which focuses on accessory agricultural uses.

Thank you for this opportunity to provide testimony.

DAVID Y. IGE
GOVERNOR OF HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

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HONOLULU, HAWAII 96809

**Testimony of
SUZANNE D. CASE
Chairperson**

**Before the House Committee on
CONSUMER PROTECTION & COMMERCE**

**February 24, 2016
2:05 PM
State Capitol, Conference Room 325**

**In consideration of
HOUSE BILL 2077, HOUSE DRAFT 1
RELATING TO HYDROELECTRIC POWER**

House Bill 2077, House Draft 1 proposes to authorize construction of small hydroelectric facilities as defined by the United States Department of Energy in a manner that combines clean energy infrastructure and irrigation for agricultural lands. **The Department of Land and Natural Resources (Department) supports hydroelectric facilities, including pumped storage, and offers an additional amendment to the bill in order to streamline the approvals process while still ensuring protection of public trust resources and uses.**

In its current form, House Bill 2077, House Draft 1 may place undue burdens on current agricultural operations which are already legally allowed to divert water for agricultural purposes. As drafted, the addition of a hydroelectric facility to an existing irrigation system, without increasing the amount of surface water diverted, would require an amendment to existing instream flow standards. In this case, the addition of a hydroelectric facility is adding value to an existing agricultural operation without increasing the impact to instream uses, making the requirement for a new instream flow standard burdensome and unnecessary.

To address this issue, the Department proposes an additional amendment (double underscored below) at Line 14 of SECTION 3(a)(23)(C):

- (C) Shall, if over five hundred kilowatts in hydroelectric generating capacity, have the approval of the commission on water resource management, including a new instream flow standard established for the hydroelectric facility in question where the project involves new or expanded diversions; and

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON, P.E.
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

The construction of any new stream diversion works structures would already require an amendment to the interim instream flow standards established under these rules. Conversely, if a hydroelectric facility were added onto an existing surface water system (i.e., irrigation ditch), without modification to the existing stream diversion works structure or diversion of additional amounts of water, no amendment to the interim instream flow standard would be required.

The Department recognizes the importance and benefit of hydroelectric energy-generating facilities towards energy independence and security and respectfully requests your consideration of our proposed amendment.



Email: communications@ulupono.com

HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
Wednesday, February 24, 2016 — 2:05 p.m. — Room 325

Ulupono Initiative Strongly Supports HB 2077 HD 1, Relating to Hydroelectric Power

Dear Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

My name is Kyle Datta and I am General Partner of the Ulupono Initiative, a Hawai'i-based impact investment firm that strives to improve the quality of life for the people of Hawai'i by working toward solutions that create more locally produced food; increase affordable, clean, renewable energy; and reduce waste. We believe that self-sufficiency is essential to our future prosperity and will help shape a future where economic progress and mission-focused impact can work hand in hand.

Ulupono strongly supports HB 2077 HD 1, which permits hydroelectric power facilities larger than 500kW on Agricultural District lands, because it aligns with our goal of increasing the production of clean, renewable energy in Hawai'i. Of particular interest to Ulupono is the ability to create run-of-river hydroelectric and pumped storage hydro projects. Energy storage projects are gaining more support as variable renewable energy is increasing. Yet, for all the battery technology developments, hydroelectric and pumped storage hydro are some of the most cost efficient and technologically proven energy storage systems in the world.

Through increasing the electric generating capacity cap, more projects can be built that benefits farmers and ranchers, the utility, and ratepayers. For farmers and ranchers, a hydroelectric power and pumped storage project can provide both a supplemental revenue source and more effective water capture and usage. For the utility, these projects can provide more firm, renewable generating capacity and greater grid effectiveness. For the ratepayer, these energy projects can lower the cost of energy use.

However, these hydroelectric projects can require larger economies of scale to make them economically viable. The current 500kW cap is too small to allow for hydroelectric infrastructure and pumped storage hydro to develop in a timely manner.

As Hawai'i's energy issues become more complex and challenging, we appreciate this committee's efforts to look at policies that support renewable energy production.

Investing in a Sustainable Hawai'i



Thank you for this opportunity to testify.

Respectfully,

Kyle Datta
General Partner



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February 24, 2016

HEARING BEFORE THE
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

TESTIMONY ON HB 2077, HD1
RELATING TO HYDROELECTRIC POWER

Room 325
2:05 PM

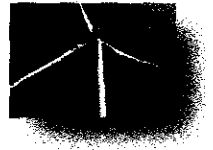
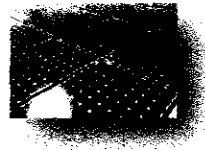
Aloha Chair McKelvey, Vice Chair Woodson, and Members of the Committee:

I am Randy Cabral, President of the Hawaii Farm Bureau Federation (HFB). Organized since 1948, the HFBF is comprised of 1,900 farm family members statewide, and serves as Hawaii's voice of agriculture to protect, advocate and advance the social, economic and educational interests of our diverse agricultural community.

HFB supports the intent of HB 2077, HD1, which permits hydroelectric facilities on Agricultural District lands that are considered small hydropower facilities under federal law.

Renewable energy is important to the State's energy goals. Hydroelectric facilities can serve as a feasible alternative energy source to meet such goals. That being said, viable farming and ranching activities on agricultural lands must be maintained in order to retain agricultural lands for future generations. Lands capable of supporting viable agricultural activities should be protected and kept in agriculture. Hydroelectric facilities can provide the State with alternative energy options, as long as it is secondary to agricultural activities on agricultural lands.

Thank you for this opportunity to provide testimony on this measure.



LATE

HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

February 24, 2016, 2:05 P.M.

Room 325

(Testimony is 1 page long)

LATE TESTIMONY

TESTIMONY IN SUPPORT OF HB 2077 HD1

Aloha Chair McKelvey, Vice Chair Woodson, and Committee members,

Blue Planet Foundation supports HB 2077 HD1. This bill can help to clear the path for clean hydroelectric power or pumped hydro energy storage facilities, where appropriate.

We note that bill amends H.R.S. § 205-2, which currently limits hydro power to "micro" facilities capped at 500 kilowatts. This specification is too limiting for many applications that could provide support for local energy, agriculture, and communities. It is particularly too limiting for pumped hydro energy storage facilities, a non-consumptive use of water.

We also note that all such projects will still need to conform with the State Water Code and thus applicable Water Commission rules and review. In addition, HD1 expressly:

- (i) requires Water Commission approval for facilities over 500 kilowatts,
- (ii) requires establishing a new instream flow standard, and
- (iii) requires that eligible facilities "must not adversely impact or impede the use of agricultural land or the availability of surface or ground water for all uses on all parcels that are served by the ground water sources or streams for which hydroelectric facilities are considered."

We are hopeful that these protections can ensure that eligible facilities, if sited appropriately, will promote and protect both local water resources and local energy.

Thank you for the opportunity to testify.