SB 2339

PACIFIC WEST ENERGY LLC
1088 BISHOP STREET SUITE 1220
HONOLULU, HI 96813

February 1, 2012

Senator Mike Gabbard, Chair
Senator J. Kalani English, Vice-Chair
And Members of the Committee on Energy and Environment

Senator Rosalyn H. Baker, Chair
Senator Brian Taniguchi, Vice Chair
And Members of the Committee on Commerce and Consumer Protection

Hawaii State Capitol
415 S. Beretania
Honolulu, HI 96813

Re: SB 2339 – Relating to Ethanol

Dear Chairs Gabbard and Baker, Vice-Chairs English and Taniguchi and Members of the Committees,

My name is William Maloney and I am the President and Chief Executive Officer of Pacific West Energy LLC and its affiliate, Pacific West Energy Kauai LLC ("PacWest"), the developers of an integrated agriculture to green power and biofuel project on Kauai. I am also an internationally recognized expert on biofuels, and provide consulting services to petroleum companies and biofuel producers and traders. I testify today in opposition to SB 2339 which repeals the ten per cent ethanol by volume requirement for gasoline sold in Hawaii for use in motor vehicles.

PacWest continues to intend to construct a biofuel production facility on Kauai, integrated with a renewable energy electricity cogeneration facility. We have expended over $10 million to date. The total project cost is approximately $140 million. Nobody and no organization is more frustrated with the time delays and hurdles that have had to be overcome to develop ethanol production, and no other entity has taken the financial risks we have in pursuit of ethanol production. Fortunately, technology has caught up with our delayed project, and we now intend to develop the project by deploying exciting new next-generation technology. To this end, we are in negotiation with technology providers and major equity investors for an all-equity financed project – a project that will be a model for advanced ethanol production worldwide. We are working with State agencies for lands, and negotiating contract farming agreements. We will produce biofuels for the local Hawaiian motor fuel market and produce renewable electricity.

Our project has been delayed to many circumstances beyond our control, but we still intend to proceed, provided there is a local market for the ethanol we would produce. This local market can only be assured if the ethanol mandate remains in place. An export oriented project is simply not financeable.

The ethanol blending mandate was enacted for several reasons, including: 1) to ensure a local market for fuel ethanol, and thereby to spur investment in local ethanol production; 2) to introduce price competition into Hawaii's petroleum sector, as previous to the mandate the local refineries refused to produce a base gasoline suitable for ethanol blending, blocking independent oil companies from blending the less-expensive ethanol, and stifling competition in the petroleum sector; 3) to provide Hawaii's consumers with cleaner burning gasoline, reducing toxic emissions; 4) to reduce the use of fossil fuels, and convert to renewable fuels; 5) to reduce imports of petroleum from non-US sources, and; 6) to reduce greenhouse gas emissions.

While there has yet to be local ethanol production, despite our continuing efforts and many millions of dollars of investment to date, the ethanol mandate has been very successful in accomplishing <u>all of the</u> other very desirable objectives – and perhaps most importantly, has and will continue to benefit Hawaii's consumers with price competition by reducing wholesale gasoline prices with E-10 blends.

So, in evaluating whether to repeal the ethanol mandate we request that the Committees evaluate the facts regarding ethanol blending, and weigh the positives to be gained by repealing the mandate, with the negatives, the costs associated with repeal. We believe an objective review will show unequivocally that Hawaii stands to lose far more by repealing the mandate then it would gain.

We believe it is clear that repeal will eliminate any further investment in local ethanol production, will reduce competition in the petroleum sector, will generate upward pressure on petroleum prices, and lead to increased pollution and dependence on foreign fossil fuels. I outline below in greater detail some specific points regarding ethanol blending in Hawaii:

- **The ethanol mandate does not require ethanol be blended if its cost is greater than the wholesale rack price of gasoline – so the mandate cannot exert upward pressure on Hawaii gasoline prices.** Repealing the mandate may exert upward pressure on gasoline prices as refiners could block voluntary blending, as they did prior to the mandate.

- Current ethanol prices are $0.60 - $0.70 per gallon less than gasoline prices (and forward markets currently maintain this relationship for the next two years). This is consistent with the historical price relationship and exhibits clearly that **ethanol costs significantly less than gasoline**, and thereby its use exerts <u>downward pressure on gasoline prices and increases competition in the petroleum sector</u>. Interestingly, ethanol in Hawaii trades at a premium of approximately $0.20 per gallon above Los Angeles ethanol prices, while over the past four years gasoline in Hawaii has traded at a premium of $0.2975 above Los Angeles gasoline prices.[1] Ethanol again exhibiting more price competitiveness, benefitting Hawaiian consumers. **Assuming 40 million gallons of annual ethanol blending in Hawaii, the savings from ethanol blending is approximately $24 million annually.**

[1] Source: US Department of Energy, Energy Information Administration, LA Spot / Hawaii DTW.

- **Repealing the mandate will likely result in increased gasoline prices to Hawaii's consumers, and may decrease State and County fuel tax revenues.**[2] Prior to the mandate Hawaii's refiners blocked independent petroleum distributors from blending lower-cost ethanol by refusing to produce a base gasoline suitable for ethanol blending.

- The US Renewable Fuel Standard ("RFS") requires ethanol use equivalent to 10% blends nationally, so **repealing the ethanol mandate doesn't necessarily eliminate ethanol blending in Hawaii (if that is the goal) – but it creates the opportunity for refiners to reduce competition, creates market confusion, may result in greater pollution from toxic emissions, destroys any opportunity for local ethanol production and the resultant job creation, and may increase costs to Hawaii's consumers,** as without ethanol blending the refiners must purchase RIN credits under the RFS and pass these costs on to consumers.

- PacWest has continued to pursue ethanol production in Hawaii, investing over $10 million to date in project development. New technologies are finally coming into commercial application, creating a fresh opportunity for local ethanol production. PacWest's project will directly employ over 175 persons and will develop approximately 10,000 acres in crop cultivation. A repeal will mean the PacWest project will not be able to secure further equity and debt financing and all investments to date will be likely be lost, and along with the future job creation and economic activity.

- Ethanol has a positive energy balance. Whether produced from corn or other biomass feedstocks, ethanol generates more energy than used during production. A life cycle analysis of ethanol production - from the field to the vehicle - found that ethanol has a large and growing positive fossil energy balance, a 2008 USDA Study concluded that each gallon of corn ethanol today delivers as much as 2.3 times more energy than was used to produce it. This figure would be more like 7 – 9 times more energy from a Hawaii production facility.

- Ethanol contains 35% oxygen. Adding oxygen to fuel results in more complete fuel combustion, reducing harmful tailpipe emissions. Ethanol also displaces the use of toxic gasoline components such as benzene, a carcinogen. Ethanol is non-toxic, water soluble and quickly biodegradable. Ethanol is a renewable fuel, unlike petroleum-based fossil fuels that are the major contributor of carbon dioxide (CO_2) emissions, a greenhouse gas (GHG).

[2] Theoretically, ethanol's lower Btu content results in approximately 2.5% more liquid gallons of gasoline being sold, equating to additional State and County tax revenues of approximately $3.2 million per annum. Actual mileage yields are not available, and recent studies indicate there may be lesser or no mileage reduction (rendering the argument that consumers are negatively impacted due to lower mileage possible false, and meaning that one must either accept that the lower ethanol price offsets reduced mileage yields, and thus the $3.2 million in annual tax revenues are net to the State and economy, or there is no mileage reduction, and the lower prices are a net positive to consumers, and tax revenues are neutral).

- Independent analyses comparing ethanol and gasoline show ethanol reduces GHG emissions from 30-50%. A study published by Yale University's Journal of Industrial Ecology found that GHG emissions from ethanol produced at modern US ethanol facilities are "... equivalent to a 48 percent to 59 percent reduction compared to gasoline".

- Ethanol reduces tailpipe carbon monoxide emissions by as much as 30%, toxics content by 13% (mass) and 21% (potency), and tailpipe fine particulate matter (PM) emissions by 50%. Ethanol also reduces secondary PM formation by diluting aromatic content in gasoline.

- E-10 blends are approved by all automobile manufacturers and recommended for use by most, outdoor power equipment maker Husqvarna has approved ethanol blends for all its power equipment produced since 2005. Clear gasoline is currently available in Hawaii to meet the market demand by boaters and small outdoor equipment operators, if they require it.

In conclusion, it is clear and irrefutable that repealing the ethanol blending mandate could only have a negative impact on gasoline prices in Hawaii, decrease competition in the petroleum sector, likely increase greenhouse gas and toxic emissions, while likely decreasing State and County tax revenues and, importantly, result in the permanent loss of significant investments in Hawaii's agriculture and manufacturing sectors. With this knowledge, we respectfully request the Committees oppose SB 2339, and thereby allow Hawaii to continue to enjoy the benefits, and keep our project, and its potential for hundreds of jobs, on track.

Thank you for your consideration.

Sincerely,

By */s/ William M. Maloney*
William Maloney
President & Chief Executive Office
Pacific West Energy LLC
Pacific West Energy Kauai LLC

PACIFIC WEST ENERGY LLC
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Re: SB 2339 – Relating to Ethanol – **ADDENDUM TESTIMONY TO SUPPORT PREVIOUSLY SUBMITTED TESTIMONY**

Dear Chairs Gabbard and Baker, Vice-Chairs English and Taniguchi and Members of the Committees,

This addendum is provided to support my previously submitted testimony regarding the benefits accruing to Hawaii and Hawaiian consumers by the mandated blending of 10% ethanol in gasoline. Specifically, exhibited on the attached chart is the price differential for the past two years between RBOB gasoline (base gasoline suitable for ethanol blending) and ethanol – LA OPIS and Chicago CBOT postings. Most ethanol sold to an in Hawaii is based on LA OPIS prices, as is local gasoline. You will see that with very few unique and short-lived exceptions, gasoline prices have greatly exceeded ethanol prices. Currently, ethanol is priced approximately $0.65 less per gallon than gasoline. As the attached chart exhibits, such discounts, and even greater ones, are the norm and not the exception.

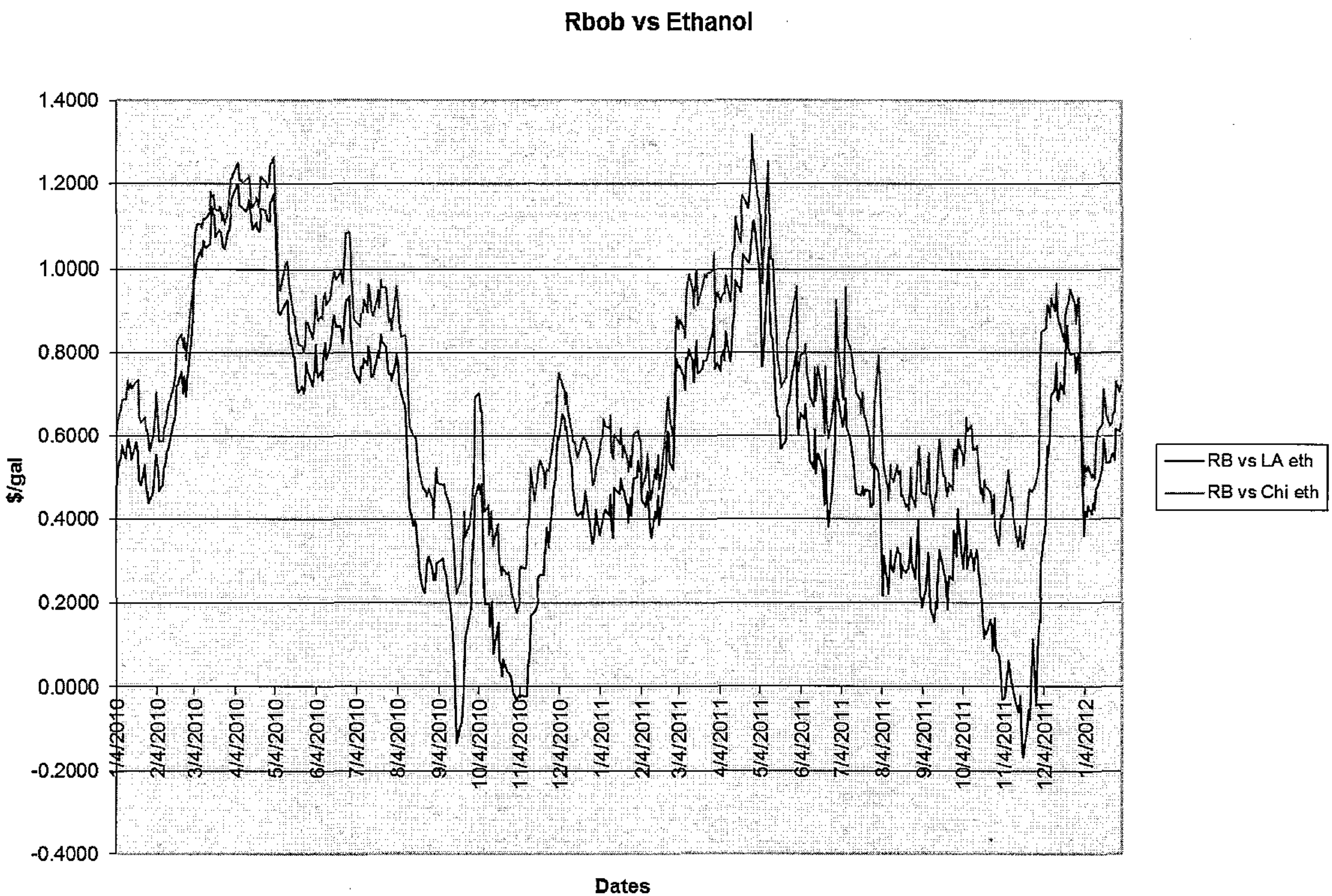
A key benefit to the ethanol mandate, aside from enabling ethanol and biofuel projects to continue to be pursued in Hawaii, is the very real competition ethanol blending creates in the Hawaii petroleum market. Prior to the mandate, the two refiners refused to make a base gasoline that would enable the independents, i.e., Aloha Petroleum and MidPac (previously ConocoPhillips), from blending ethanol, which has always been priced lower than Hawaiian gasoline. Even though the refiners themselves could increase margin, they obstinately refused to allow ethanol blending. I believe the primary reason was that their goal has always been to maximize the refinery's profits – and to control the market. Losing control of even 10% of the petroleum stream is an anathema to refiners, and, with the margins that ethanol blending could have created and actually have created, an independent, like Aloha, can use these margins to price their blended gasoline more aggressively on the street, forcing others to do likewise or losing market share. Similarly, this allows the big box retailers to also price more aggressively – resulting in greater competition and lower petroleum prices to Hawaiian consumers. We fear that absent the mandate, the local refiners may revert to their previous policy of not producing a base gasoline suitable for ethanol blending, thereby removing a competitive advantage for the independents (it should be noted that when a company like Aloha pursues its ethanol purchases it doesn't just have the option of two suppliers, as with gasoline, but solicits tenders from at least a dozen potential ethanol suppliers).

I hope that this information is helpful in further illuminating the importance of maintaining the ethanol blending mandate.

Thank you for your consideration.

Sincerely,

By */s/ William M. Maloney*
William Maloney
President & Chief Executive Office
Pacific West Energy LLC
Pacific West Energy Kauai LLC



Rbob vs Ethanol
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Dates
RB vs LA eth
RB vs Chi eth

Testimony for ENE/CPN 2/2/2012 2:55:00 PM SB2339

Conference room: 225
Testifier position: Support
Testifier will be present: No
Submitted by: Debra Bringman
Organization: Individual
E-mail: debrab@financefactors.com
Submitted on: 1/31/2012

Comments:

Testimony for ENE/CPN 2/2/2012 2:55:00 PM SB2339

Conference room: 225
Testifier position: Support
Testifier will be present: No
Submitted by: William Page
Organization: Individual
E-mail: pagew001@hawaii.rr.com
Submitted on: 2/1/2012

Comments:
I strongly believe that no government leverage should be used to encourage conversion of green matter into gasoline and jet fuel. There is too much consideration that food (that could be distributed to hungry people) should be converted into gasoline for our SUVs.