

Public Utilities Commission

Docket No. 05-0145

O`ahu Power Plant

Testimony of

Henry Curtis

Vice President, Life of the Land

re Economics

LOL T-13

1

2 Life of the Land has submitted several economic studies as exhibits in recent Commission
3 dockets. These studies have not been challenged, nor have competing studies been proffered by
4 any other party. The studies submitted by Life of the Land have covered a wide gamut of
5 approaches.

6

7 Enterprise Honolulu (formerly known as the Oahu Economic Development Board) stated that:

8 “A Key characteristic of a healthy economy is that it exports more than it imports. This is
9 especially important for an island economy with no land-based contiguous markets. These goods
10 arrive each day in containers at Sand Island and at the airport via cargo planes from global
11 suppliers in other parts of the world. We pay for all of these overseas shipments ... with the
12 money available to us. Imagine if we had to pay for all these products with hard cash, and that no
13 cash was coming into the state. How long would it take before we had no money left in the
14 islands? In order to pay for the things we import, we need a flow of exports to keep refilling our
15 coffers. And the flow of payments for the goods and services we import should be at least
16 balanced by the flow of goods and services we export. If payments for imports exceed payments
17 for exports, we have a ‘trade deficit’. Just like a negative balance in your checking account
18 impacts your household, if a trade deficit continues too long, a region’s quality of life begins a
19 downward slide. So how are we doing? According to the State’s Department of Business,
20 Economic Development and Tourism, not do well" (LOL-EXH-ECO-4 EDS 10)

21

22 Enterprise Honolulu found that our deficit in goods and services is almost \$13 billion/year. We
23 prop up our local economy through exogenous factors: tourism and the federal government

1 (primarily the military). Running a continual state balance of payments deficit, we lose control of
2 our own economic control, and must rely on outsiders to stabilize our economy.

3

4 Dozens of studies have been conducted on the economic impact of investing in local energy
5 sources. These range from the Center for Business and Economic Research at the University of
6 Nevada, Las Vegas (LOL-EXH-ECO-3 UNLV); HECO consultant Black & Veatch's study of
7 Pennsylvania (LOL-EXH-ECO-2 B&V), and the Hawaii Department of Business, Economic
8 Development, and Tourism (DBEDT) (LOL-EXH-ECO-7 GDS). All came to the same
9 conclusion: local energy investments result in increased jobs and business opportunities, higher
10 state taxes, greater quality of life for the residents. These impacts came from direct investment
11 and secondary impacts. An analogy is dropping a rock in a pond -- the ripples spread out and
12 affect all sectors. The concept is called the economic multiplier.

13

14 The economic multiplier effect means that one dollar invested in Hawai`i generates additional
15 dollars to the state economy, and one dollar exported decreases the state GNP by more than one
16 dollar. Institutions, such as DBEDT, use economic multipliers in their economic analysis. Each
17 dollar that a tourist brings into Hawai`i ripples through the economy, each dollar exported for oil
18 is a potential ripple that never materialized. The economic multiplier is calculated by analyzing
19 money flows via an Input-Output Model. The analysis looks at both direct spending and indirect
20 spending. Two related issues are foreign investment and leakage. Foreign investment refers to
21 out-of-state money that is invested within the local economy. Leakage refers to all the ways
22 money in the economy leaks out of the economy.

23

1 For Hawai`i, we could bring money into the economy by providing markets for foreign (outside
2 Hawai`i) investors, such as wind and wave companies; keep money in Hawai`i by using
3 renewables such as solar water heaters, photovoltaic panels, and OTEC; building components
4 within the state to support local jobs and businesses; or continuing to export money for oil and
5 coal.

6
7 Ultimately, local energy projects help on numerous levels: Hawai`i becomes self-reliant, controls
8 its own economic future, decreases risk from foreign fuel price fluctuations, offers increased
9 security, decreases payments to unstable foreign governments, and provides fuel diversification.

10

11 Fuel Diversification provides a cushion against market tremors because each fuel class has
12 different risks, rewards, and tolerance to economic events. Fuels whose price movements are
13 opposite each other are negatively correlated. When negatively correlated fuels are combined
14 within a portfolio, the portfolio volatility is reduced. For Hawai`i, the overwhelming
15 concentration in one type of fuel -- oil -- means that world oil price fluctuations have enormous
16 impact on our commercial, governmental, tourist and residential sectors.

17

18 HECO is running full page ads which state in part that we should support renewables even if
19 they cost a little more. They don't. The fossil fuel industry, like many industries, has been able to
20 shift costs from ratepayers to taxpayers, hiding the real cost of their product. Dr. Shimon
21 Awerbuch's (LOL-EXH-ECO-10) shows that the price distortions increase when very divergent
22 technologies are considered. Fossil fuel appears to be the cost winner when the \$50 billion/year
23 (pre Iraq war) spent by the military to insure adequate supplies, and the global disaster known as

1 man-made climate change are shifted from ratepayers to taxpayers.

2

3 Before the recent oil price hikes, wind was competitive with oil. With today's oil prices, all forms
4 of renewables are competitive. A portfolio makes the most sense.

5

6 **Exhibit Sponsorship**

7 Life of the Land, through various witnesses, has offered a number of exhibits into the record. All
8 are publicly available on the web. All of them are being provided into electronic format. Some of
9 them we have submitted to the Commission in previous dockets. Some we are providing in hard
10 copy in this docket. The exhibits we are submitting for the record in this docket are LOL-EXH-
11 BF-1 through LOL-EXH-BF-19; LOL-EXH-ECO-1 through LOL-EXH-ECO-11; LOL-EXH-
12 ENV-1 through LOL-EXH-ENV-27; and LOL-EXH-GW-1 through LOL-EXH-GW-17.

13

14