

Energy Independent Vashon A Public Utility District Proposal

Rita Schenck

Institute for Environmental
Research and Education



Energy Increase Rate Percent per Year

Gasoline 4.5

Residential NG 8.8

Wellhead NG 13.5

City NG 10.0

Wellhead LNG 12.0

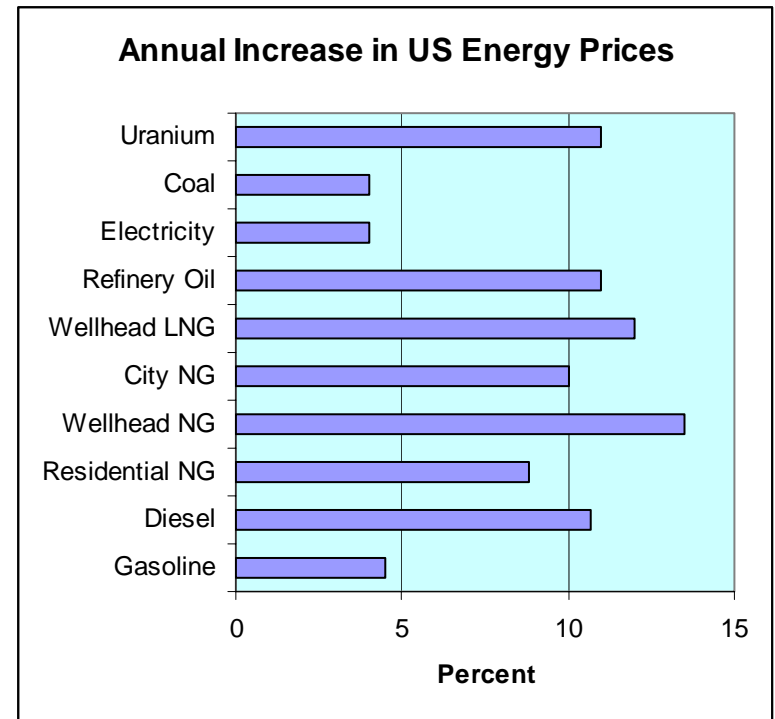
Refinery Oil 11.0

Electricity 4.0

Coal 4.0

Uranium 11.0

Renewable Energy Costs are Decreasing 2.5% per Year



Based on statistical projections of 1999-2005 data

How PUD is Formed

- Petition circulated in January/February 2006 for ballot November 2006
- Three commissioners on slate with petition
- Once passed, commissioners hire manager

Does PUD Raise Taxes?

- PUD have authority to raise taxes
- Almost all offer fee-for-service instead
- Across the state, only 2% of PUD income is from taxes

PUD Plan for Vashon Island

- Form PUD in 2006 (earliest legal moment)
- Conserve energy: Value = \$95 Million
 - Conservation cost: \$35 Million
- Use savings to install Renewables
 - 15 wind turbines, 12 biomass generators, solar
 - Total cost <\$40 Million
 - Total savings \$55 Million
- Timeline 10 years



How the PUD Works

- PUD approaches homeowner/business owner
- Writes performance contract that guarantees energy savings (annual checkup/review)
- PUD makes necessary upgrades in building
- Homeowner pays nothing up front
- Homeowner pays a portion of savings to monthly to PUD

Financing

- PUD eligible for low-interest loans and grants
- After first year of operation, fees finance ongoing operations & conservation
- Eventually, PUD installs renewable energy projects around island, using the energy conservation fees, not additional fees

What this Means to the Homeowner/Business Owner

- Energy bills reduced at least 35%. For the average home, this is about \$300/year
- Once PUD loans are paid off (about 10 years), energy bills go down even more
- Seasonal variation in energy bills is greatly reduced.

What this means in jobs on Vashon

- PUD Staff (4)
 - Manager, engineer, bookkeeper, technician
- PUD Contractors (26)
 - Technicians installing insulation
 - Electricians & HVAC specialists installing & maintaining heat pumps
 - Technicians maintaining wind turbines
 - Heating specialists operating biomass systems
 - Electricians installing solar
- One-time Building Contractors (~10/yr, 7 yrs)
 - Installing wind turbines
 - Installing biomass systems

Why Would a PUD Work Here?

- Vashon has a relatively high energy usage rate, so relatively high savings are available
- Locally controlled community action reduces costs and improves efficiency through economies of scale.
- Cost-effectiveness for a PUD is based on customer savings, not on utility savings