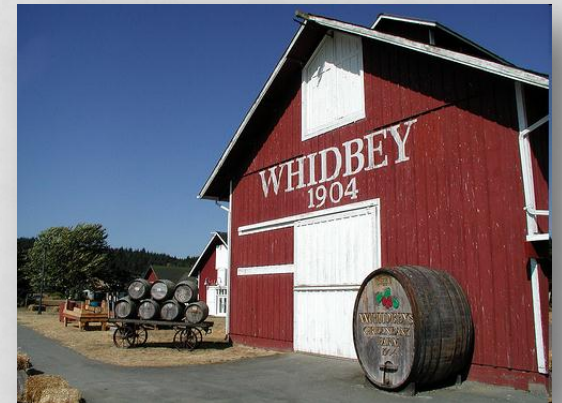


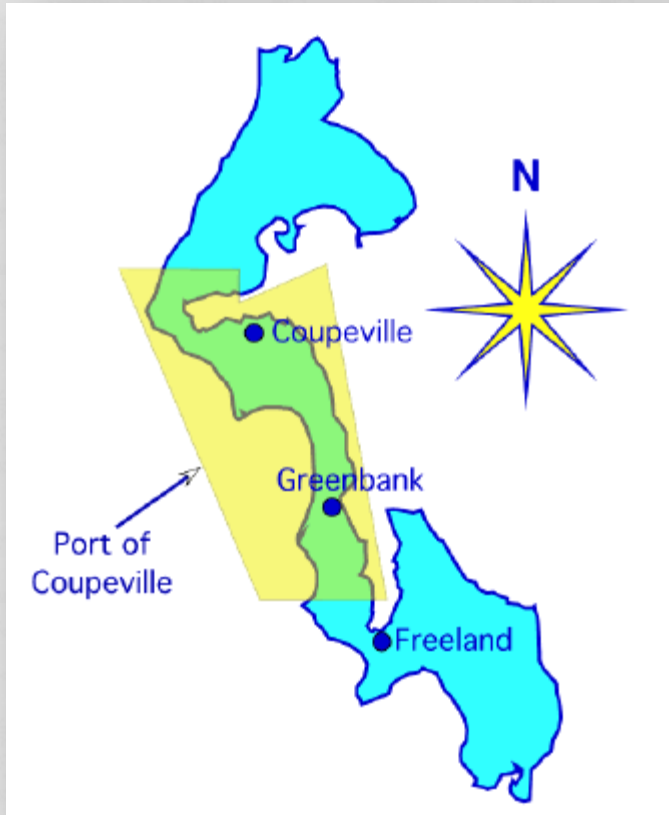
A COMMUNITY SOLAR PROJECT FOR GREENBANK FARM:

A Public/Private Partnership

- The Port of Coupeville
- Island Community Solar, L.L.C.



• The Port of Coupeville



Primary Mission:

- Economic Development

Major Sites of Activity:

- Greenbank Farm
- Coupeville Wharf & Marina

Three Commissioners:

- Mr. Marshall Bronson, Pres.
- Ms. Ann McDonald, VP
- Ms. Benye Weber, Sec.

Executive Director:

- Mr. Jim Patton

● Island Community Solar, L.L.C.



Founding Members:

- Paul Dickerson
- Ryan Goodman
- Paul Mathews
- John Hastings
- Linda Irvine
- Tim Economu

- **Recent history of Community Solar**

- **Net Metering of Electricity Law**

- **RCW 80.60 enacted in 1998**



Recent history of Community Solar

Initiative 937

- Approved by the voters in 2006



- **RCW 19.285** also known as the “**Energy Independence Act**”
“requires large utilities to obtain **15%** of their electricity from new renewable resources such as solar and wind by 2020 and undertake cost-effective **energy conservation**”
- “**Eligible renewable resources**” include:
 - Wind
 - Solar
 - Geothermal
 - Landfill & sewage gas
 - Wave & tidal power
 - Certain biomass & biodiesel fuels
- **Important terminology**
 - Renewable Portfolio Standard (RPS)
 - Renewable Energy Credit (REC)

- **Recent history of Community Solar**

- **Ellensburg Community Solar**

- **2006 – Initial 36 kW Installation**
- **2008 – “Harvesting the Sun” Conference**

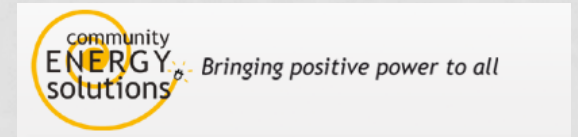


- **Recent history of Community Solar**

- **Community Energy Solutions** (Bainbridge Island)

- **2008 – Initial 2 kW Installation**

- **2009 – Enlarged to 5.1 kW**



Recent history of Community Solar

State Production Incentive Program



May 2005 – Senate Bill 5101 **Single-owner systems**

Out-of-State Equipment	15 ¢ / kWh
In-State Modules	36 ¢ / kWh
In-State Modules & Inverter	54 ¢ / kWh

May 2009 – Senate Bill 6170 **Community systems**

Out-of-State Equipment	30 ¢ / kWh
In-State Modules	72 ¢ / kWh
In-State Modules & Inverter	\$1.08 / kWh

• Recent history of Community Solar

• State Production Incentive Program

- A solar energy system of up to 75 kW of capacity.
- Installed on property owned by a cooperating local governmental entity.
(not Federal or State property)
- Owned by:
 1. A group (Local individuals, households, non-profit organizations or non-utility businesses)
 2. A utility company (and funded voluntarily by rate payers)
 - ➔ 3. A company (Limited Liability Company, Cooperative, or Mutual Corporation or Association)
- Incentivizes private capitalization for local government renewable energy projects and supports a local industry.
- **Terminates June 30, 2020**

RCW 82.16.110 et seq. / WAC 458-20-273

Gary Shaver, CEO
Silicon Energy
Marysville, WA



• Recent history of Community Solar

• Advantages of a Community System:

- **Optimal solar access**
- **Economies of scale**
- **Owners can buy-in for less money**
- **Better tax incentives (accelerated depreciation)**
- **Better production incentives**

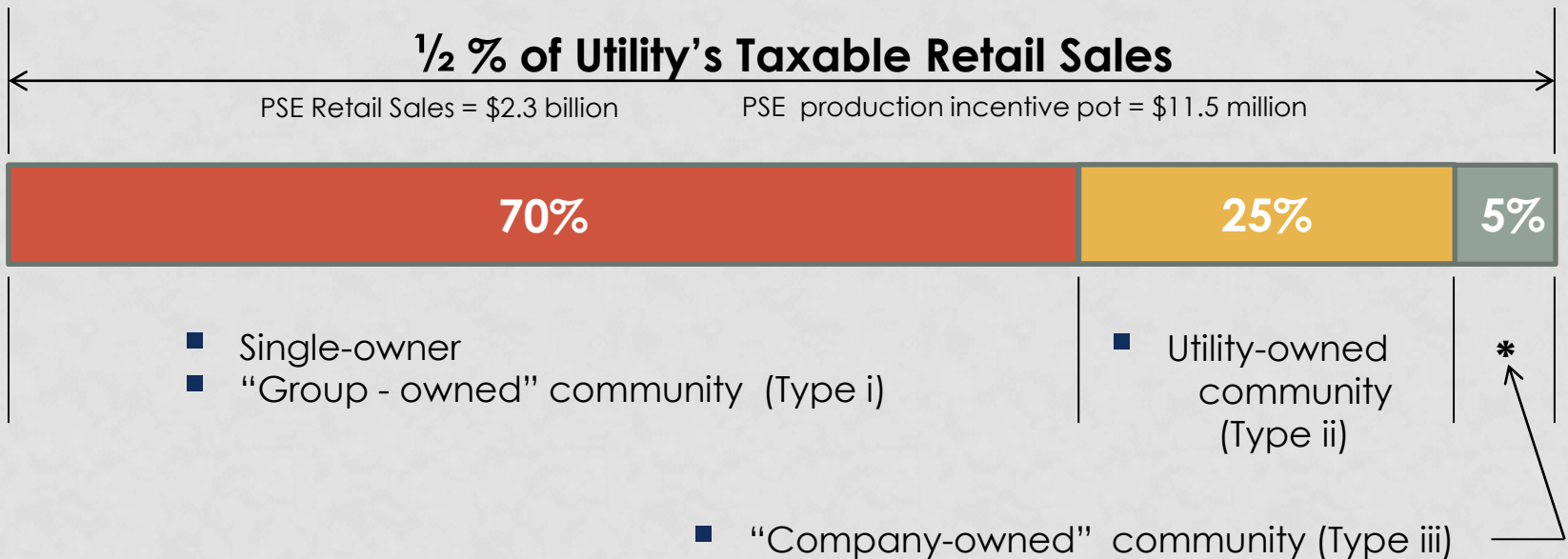
Silicon Energy Modules
Marysville, WA



Recent history of Community Solar

Disadvantages of a Community System:

Risk:



- **Our plan for Greenbank Farm**

- **Green Power Challenge**

GUEST VIEWPOINT | Take the Green Power Challenge

Aug 25 2009

As the mayors of Langley, Coupeville and Oak Harbor, we are enthusiastic about the success of the Whidbey Green Power Challenge. We need just 170 more participants to enroll in the Puget Sound Energy Green Power Program by Sept. 7 to win \$25,000 for a solar demonstration project here on Whidbey Island.

We encourage Whidbey residents and businesses to

Langley joins the push to promote renewable energy

By **ROY JACOBSON**

South Whidbey Record Reporter

May 09 2009

The city of Langley is jumping into Puget Sound Energy's Green Power Challenge with an electric meter and both feet.

Puget Sound Energy to present \$25,000 check to the Island County Council of Governments

Funds to support community solar project on Whidbey Island

BELLEVUE, Wash. (Nov. 17, 2009) - Event Advisory:

Whidbey Island meets PSE's Green Power Challenge

Community will receive \$25,000 solar project grant from local utility

BELLEVUE, Wash. (Oct. 28, 2009) – Whidbey Island has met Puget Sound Energy's challenge to increase enrollment in the utility's Green Power Program to 1,000 total residential and business

- **Our plan for Greenbank Farm**

- **Solar P-patch Concept**

- **Site development & basic infrastructure provided by the Port of Coupeville for a 1-acre plot.**
- **Separate individuals or entities lease space in the P-Patch for solar installations.**

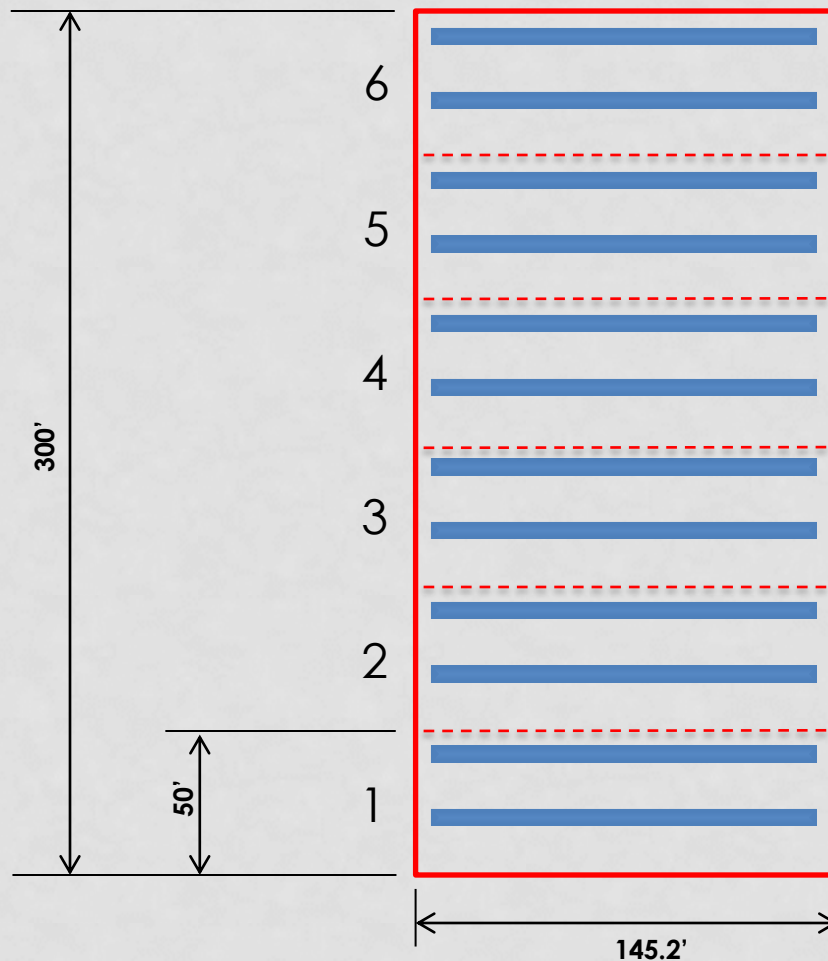


Site Plan

Site #7



North



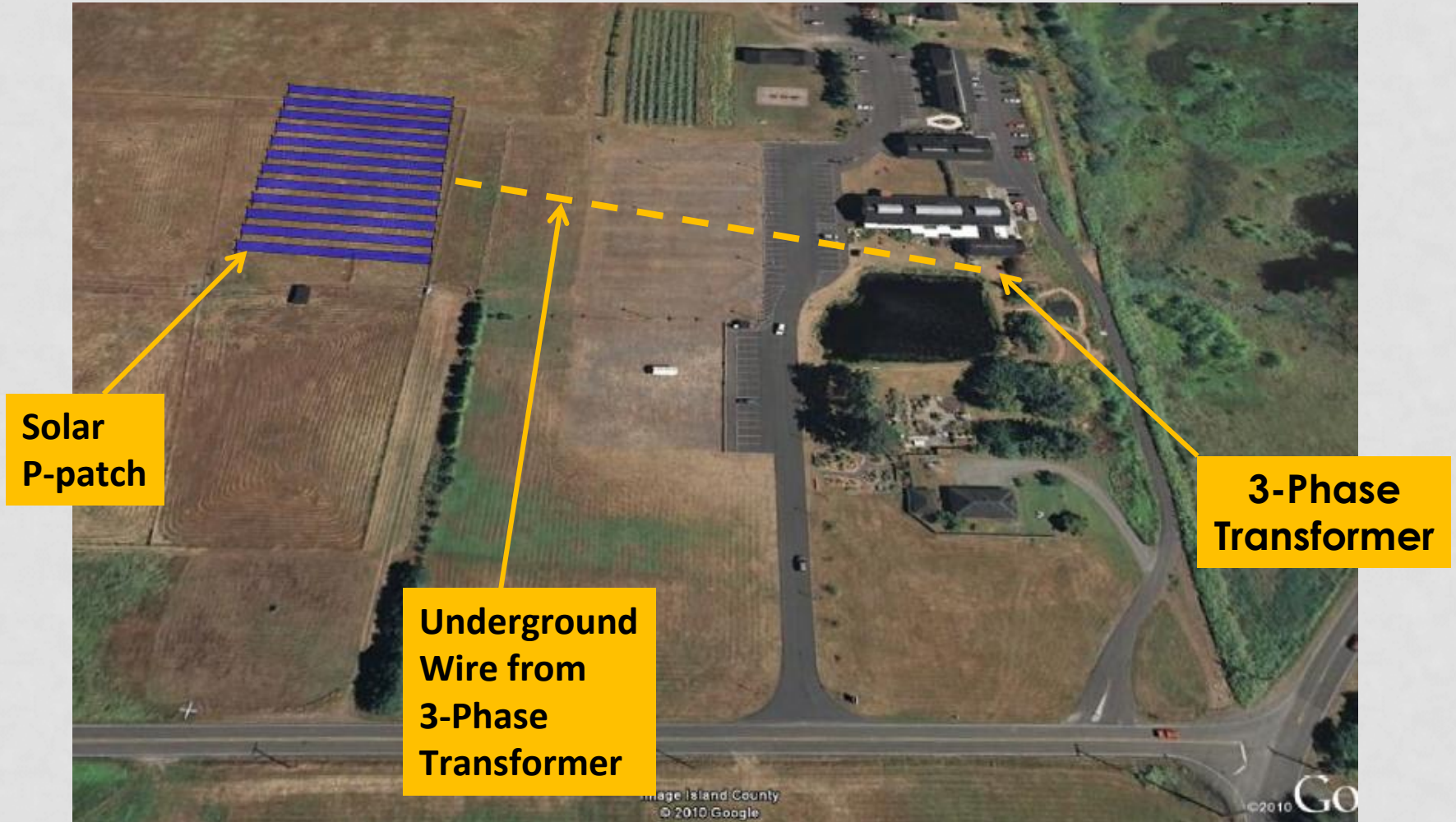
Underground
Wire from
3-Phase
Transformer



Kiosk at Wire Termination

12 arrays / 13.2 kW each / 158.4 kW per acre

- **Site Plan**



- **Aesthetic Considerations**

- **Established Patterns of Development**

- **Forms: Row Crops**
- **Scale: Human**

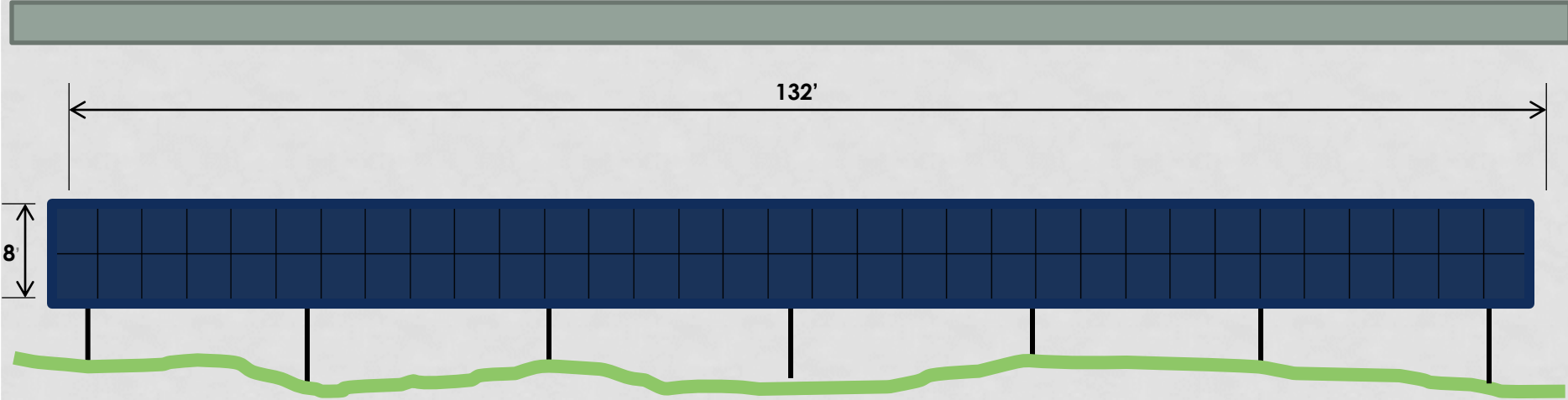


Greenbank Farm, circa 1950

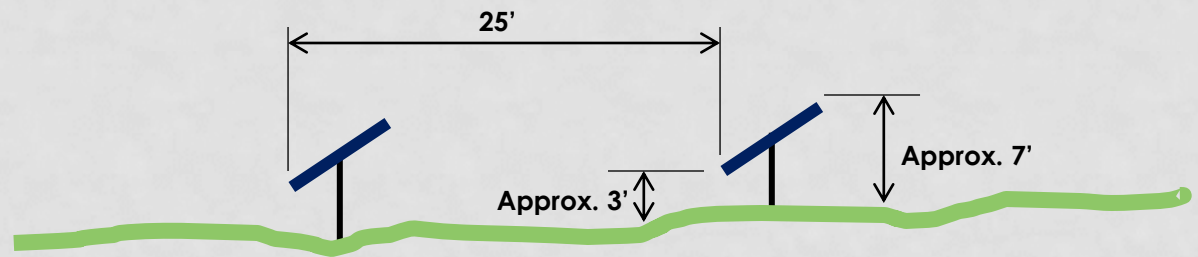
- **Aesthetic Considerations**



- Elegance of the Numbers



Front (South) Elevation

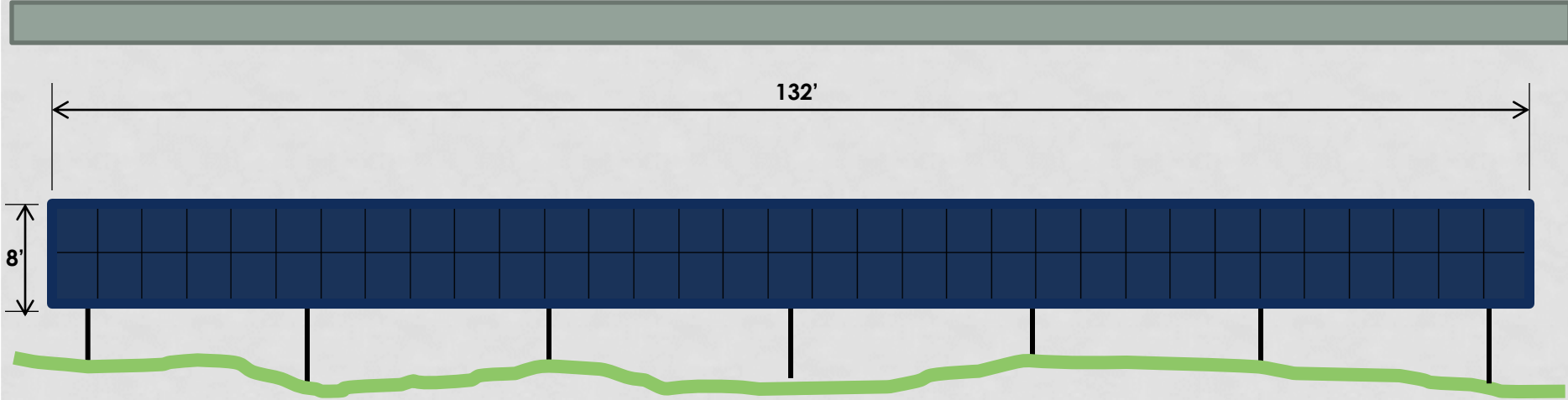


Side (East) Elevation

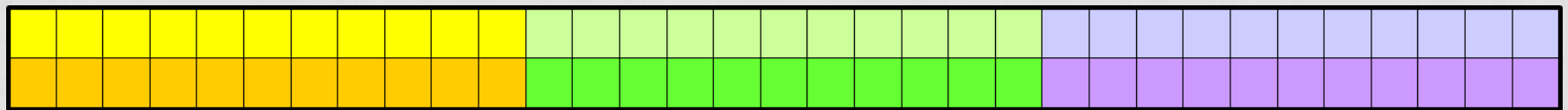
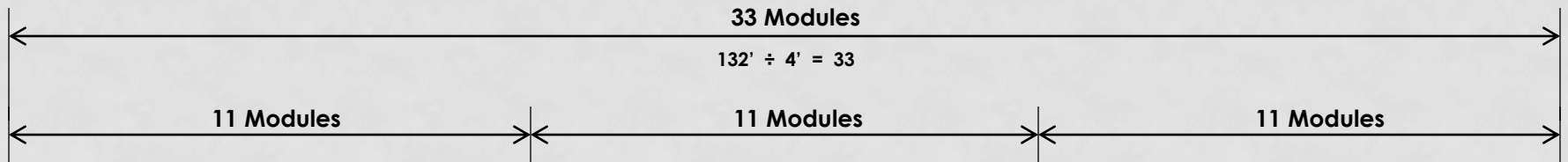


Ellensburg
Community
Solar

- Elegance of the Numbers



Front (South) Elevation
12 arrays / 13.2 kW each / 158.4 kW per acre



Inverter

22 modules per inverter X 200 W per module = 4,400 Watts



Inverter

4,600 Watts maximum per inverter X 96% = 4,416 Watts



Inverter

• Elegance of the Numbers



View looking southwest



View looking northwest

Site
Topography

Sun
Angle

Lot
Dimensions

Array
Dimensions

Inverter
Specifications

Washington
State Law

Greenbank Farm
Electric Load



3. What is our plan for Greenbank Farm?

● The Business Plan



- **Organized May 2010 as a Limited Liability Company (LLC).** (RCW 25.15)
- **All profits, losses and tax benefits pass through to the partners in the LLC through annual distributions.**
- **Maximize revenue from the Production Incentive Program by using Washington State-manufactured equipment.**
- **Sell the electricity wholesale to Puget Sound Energy** (per Schedule 91 Power Purchase Agreement).
- **Units of ownership sold in \$5,000 increments with a minimum purchase of \$10,000 and maximum of \$25,000.**

Ellensburg
Community
Solar



3. What is our plan for Greenbank Farm?

● How does the community Benefit?

○ The Port:

- A lease that increases the value of the land from \$200 /acre /year to \$3,000 /acre/year
- Still maintains the pasturage at the site
- An option to purchase the array after 2020 at a reduced cost
- Potential for green tourism
- Creates an activity that is consistent with its mission & the comp plan for the Farm

○ The Community at large:

- A local, green investment opportunity
- Solar access for people who do not have solar potential at their sites.
- Stimulation of a local renewable energy economy



3. What is our plan for Greenbank Farm?

Major Areas of Effort:

○ Grant Writing:

- USDA
- Green Power Challenge

○ Site Plan & Permits:

- Site Selection
- Site Plan Design
- Zoning Review
- SEPA Review
- Site Plan Review

○ Business Pro forma, Tax & Accounting:

- Tax Research
- Spreadsheet Design
- Cost Estimating
- Insurance

○ Legal:

- Business Formation
- Operating Agreement
- Securities Act of 1933
- State Filings
- Lease Agreement – Port of Coupeville
- Power Purchase Agreement - PSE
- Community Solar Law
- Installer Contract Bidding & Negotiation

○ Electrical Design:

- Photovoltaic Array Design
- Inverter Design
- Racking system Design
- Connection to the Grid
- Monitoring System

● Island Community Solar, L.L.C.



Founding Members:

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- Ryan Goodman
- Paul Mathews
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- Linda Irvine
- Tim Economu

For more information call: 360-320-0187