

LSJ Solar Notes

Comments:

- LSJ Current system is a 480 volt industrial 3-phase system –AC which is equivalent to the amps that WAPA current brings to the Island
 - Current Usage
 - 2000 KWH/day.
 - 730,000 KWH year
 - Avg. Monthly bill \$26,000
- Solar is a 12 volt DC system. The following are not conducive to solar systems:
 - Major motor loads
 - Halogen lightening
 - AC systems
- Intent of a solar system is either a
 - Central system powering entire island, or
 - Point of use system where each structure has an individual point of distribution. Solar would be installed at the point of use as a kind of net metering system.
 - Start with outlying structures;
 - Kite house
 - Gym
 - Five Palms
 - Manager's Cottage
 - Office Pavillion
 - Small solar capacity; water heaters
- Location of the panels
 - Need large surface area (i.e., roof tops)
 - Wood shop
 - Mechanical
 - Generator building
 - Ground
- Space needed
 - 30 KW = 3,200 sq ft
 - 450KW = 21,000 sq ft
- Permitting
 - Not needed if installed on existing rooftops
 - Needed is installed at ground level

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Project : 3 source power

Location: Lovango Island

Contractor : Solar - Depot LLC: Robert Seton contact. 1-707-992-3100 CA company. Not sure if you can go direct as Dan Boyd of Lovango has the distributorship - he is green. Electrician Chris Meyers on St. John - smart but one man operation.

Wind - Talco Electronics. Tal Mamo 1-877-448-2525. Very pleased so far will be doing the final installation at the end of the month.

Cost : Approximate equipment only was Solar - \$175,000, Wind - \$125,000

Size: 3200 square ft.

Power Generation: 30 KW

Project Description: The Lovango Island Project installed a 3 source power system to sustain 10 residential family homes. There is no WAPA source to the Island. The solar component is approx 30 kilowatts of power. There are 130 solar panels . There is battery bank system with approx cost of 65K. The wind component is approx 11 kilowatts. The system works on a multi cluster box which auto switches between the 3 source, solar, wind, generator. They are working the glitches out but over all working well.

Project: Ground-mounted Photovoltaic Solar Panel System

Location: Cyril E. King Airport

Contractor: All Around System
Veteran's General Contracting, Inc

Cost: \$2,900,000

Size: 21,000 square feet (1,500ft X 14ft)

Power Generation: 450 KW

Cost Savings: \$52,500/month

Project Description: The Virgin Islands Port Authority in partnership with the VI Energy Office and WAPA wanted to find ways to reduce the government's oil-based energy. The lifespan of the panels is 20 years and it took three months to install. It has been reported that this is working well.