



# Developing an Implementation Plan for the Idaho MSRI Partnership Workshop Summary – Final Report

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# Developing an Implementation Plan for the Idaho MSRI Partnership

## Workshop Summary – Final Report

Prepared by the  
Florida Solar Energy Center and Sandia National Laboratories

October 17, 2000

### ***Workshop Information:***

Date: August 22, 2000  
Time: 8:30 a.m. - 4:30 p.m.  
Location: AmeriTel Inn  
7499 W Overland Road  
Boise, Idaho 83709  
Phone: (208) 323-2500

### Coordinating

Organization: Idaho Department of Water Resources–Energy Division  
1301 North Orchard St., Boise, Idaho 83706  
Phone: (208) 327-7900  
Fax: (208) 327-7866

### ***Attendees:***

Julie Austin, Avista Utilities  
John Crockett, IDWR Energy Division  
Russ Dane, Solar Solutions  
Al Fothergill, Idaho Citizens Coalition  
Gerry Galinato, IDWR  
Scott Gates, IdaCorp  
K.T. Hanna, IDWR  
Thomas Hickman, Energy Consultant  
(INEEL)  
Terry Hoebelheinrich, IDWR  
Mike Leonard, Aurora Power & Design

Dr. Al McGlinsky  
Glenn Messecar, Contractor  
Jonathon Messecar  
Joseph Messecar  
Heather Mulligan, U.S. Department of  
Energy  
Mike Purcell, Aurora Power & Design  
Lou Ann Westerfield, IPUC  
Dave Willford, Idaho Dept. of Parks &  
Recreation  
Charles Woodward, Natural Resource Co.

### ***US Department of Energy Representative:***

Heather Mulligan, Seattle Regional Office

### ***Instructors:***

Hal Post, Sandia National Laboratories  
Brian Farhi, Florida Solar Energy Center  
Jerry Ventre, Florida Solar Energy Center

### ***References/Workshop Materials:***

1. Workshop manual entitled *Implementing a State or Community Photovoltaic Buildings Program*, Florida Solar Energy Center, March 2000.

2. *Florida Photovoltaic Buildings Program: Status Report, Observations and Lessons Learned*, FSEC-CR-1150-00, prepared for Sandia National Laboratories, Florida Solar Energy Center, Cocoa, Florida, March 1, 2000.

**IDWR Introduction: Synopsis of Program**  
**Presented by Gerry Galinato, Idaho PV4You Solar Working Group Chairman**

Activities include:

- Performed Educational Activities on Radio Programs
- Released Newspaper Insert
- Hosted PV Workshops
- Began Database Development
- Collected and Published Interconnection Requirements
- Initiated Solar Electric Rebate Program
- Participated in National Barrier Activities

**Barriers Identified by the Partnership**

- Financing
- Federal government
- Lack of familiarity
- No plan of action for PV grid
- Confusion regarding net metering
- Covenants, planning, policy and codes
- Inspectors' lack of education and code compliance
- Certification of products and installers

**Partnership Expectations for the Workshop**

Attendees hoped to learn how to accomplish the following:

General:

- Review program progress.
- Learn what's being done to enforce mandates.

Government interaction:

- Break down government barriers to financing, eliminate local and state siting issues, increase technology acceptance, and remove GSA barriers.
- Sell PV systems to federal government (e.g. BLM).

Develop potential for grid-connected systems:

- Establish interconnection standards.
- Current net-metering only pays avoided costs in most of state (Avista offers full net-metering).
- Develop a strategy for planning and zoning prohibiting restrictive codes and covenants.

#### Education:

- Develop action plan to get message to public.
- Educate practitioners and inspectors/code officials. Two code classes were offered for electricians, electrical engineers, solar system designers/installers and state inspectors. No state inspectors attended either class, but about 100 electricians, electrical engineers and system designers/installers did.
- Develop product and installation certification for quality assurance.
- Educate legislature on specifics and benefits (e.g. energy diversity, environment, etc.).

#### Financial support:

- Identify untapped market and finance opportunities.
- Learn how to get state legislature to increase funding.
- Learn how to get more funding for the state energy office for program implementation.
- Create a systems benefit charge (e.g., Montana's) to generate money.

#### Comments from instructors during session:

- Federal funding cannot be used for hardware or marketing.
- Attempt to find funding sources other than DOE, the state, and FEMP – funding from BLM, Fire Center, DOD, and DOI may be possible.
- Utilities must usually be the champions of PV, along with state legislature and the state energy office. Must prove that PV is in the best interest of the state for effective program.

### **Partnership Goals and Progress**

Primary Goal: 5000 rooftop systems by 2010; Interim Goal: 1,000 systems by 2005

Note: The present cost of electricity in Idaho is approximately 5 cents per kWh.

#### **Program Objectives:**

1. Develop one-stop consumer info package.
2. Target & deliver info to high-potential users.
3. Conduct consumer education events/activities.
4. Educate solar dealers, electricians, inspectors, and utility personnel.
5. Work with utilities and Idaho Public Utilities Commission to compile interconnection requirements.
6. Assure state access to federal programs.
7. Develop an awards program and counting system to track initiative's progress.
8. Reduce barriers to PV and solar thermal loans.
9. Develop and carry out the program implementation plan

#### **1. Develop one-stop consumer information package.**

##### Progress:

- Developed Idaho Consumer Information Booklet that successfully relates necessary information. Approximately 700 information booklets were distributed.
- Have a brochure in addition to comprehensive booklet.
- Have all information from Sandia.

- Information is posted on website.
- Utilities are distributing information booklet when requested by consumer.

Future Goals:

- Material is good, but needs better penetration (e.g., it didn't reach Eastern Idaho).
- Use media, "show what they're missing by not having PV".
- Be more proactive in education efforts.
- Use rural fairs to educate areas outside Boise.
- Make road trips to each utility and cooperative office.
- Put partners' names in back of information booklet.
- Idaho Power Co. has put together a demo solar electric energy trailer.
- Trace Engineering has offered to reproduce the Idaho Customer Information Booklet at no charge.

Summary Statement: Package developed – goal accomplished.

**2. Target and deliver information to high-potential users.**

Progress:

- Boise State University's marketing department completed a study for Idaho Power Co. that helped to focus effort on areas of largest potential.

Potential Users:

- Remote homeowners
- Land management agencies
- Architects & engineers
- Builders
- Utilities

Summary Statement: Groups appropriately targeted, information dissemination in progress – needs increased consumer penetration.

**3. Conduct consumer education events/activities.**

Progress:

- Idaho Power Co. has a program to educate science teachers that has been well received.
- Idaho Solar Awareness Week, Northwest Solar Awareness Month.

Other resources that could be utilized:

- There is a lack of university instructor training programs.
- College student volunteers have not been tapped.
- Nature Conservancy may be a good participant.
- Portable classrooms with PV demos for students would be good use of system placement.
- Public, consumer and conservation groups are interested in deregulation.

Summary Statement: Work being done is good – increased participation from public organizations should be utilized.

#### **4. Educate solar dealers, electricians, inspectors, and utility personnel.**

Progress:

- Two NEC Article 690 workshops were completed, with approximately 100 attendees.
- John Wiles' program was good, but too expensive.
- Inspectors were invited to both of these workshops, but none of them attended.
  - Two possible contributing factors: it was offered during hunting season, and electricians in Idaho are on a three-year cycle for continuing education.
  - Inspectors are busy during summer months.
  - Maybe this training can be worked into annual inspector meetings.
  - Distance learning and on-line coursework may not be feasible.
  - Inspector continuing education requirements need to be checked.

Future Goals:

- Another workshop for code officials.

Summary Statement: Efforts should be increased to find ways to educate state inspectors, and the highly successful courses for installers, dealers and electricians should continue to be offered.

#### **5. Work with utilities and the Idaho Public Utilities Commission to compile interconnection requirements.**

Progress:

- No statewide interconnection requirements are in place.
- Checked with Public Utility Commission on requirements and schedule for planned activities.
- Idaho Power Co. has one consumer grid-tied PV system that was installed about 10 years ago, and in the past the utility has been resistant to PURPA.
- There are not enough interested customers for Idaho Power Co. to establish a process for interconnection.
- \$1 million is required for liability insurance.
- Professional engineer's certification is required.

Future Goals:

- A champion is required for interconnection standards to be established – the Idaho realtors association has a strong lobbying group that could potentially get a legislator to assist in doing so.

Summary Statement: A uniform interconnection requirement is instrumental in establishing a strong PV program, and should be pursued as a primary goal.

#### **6. Assure state access to federal programs.**

Progress:

- US DOE has granted the Idaho partnership \$23,000.

Future Goals:

- DOE Team-Up Round 4 funding is worth pursuing.
- The newly formed Northwest Solar Alliance (between the four NW states) will help unify efforts and deal with funding issues.
- Indian reservations, State Energy Program funds, FEMP funds, BLM, state parks, and Greening of the Parks funds from DOE & DOI should be pursued.

Summary Statement: Additional sources of funding other than DOE should be pursued – creativity and funding diversity will be key in establishing program success.

**7. Develop an awards program and counting system to track initiative’s progress.**

Progress:

- Registration list (similar to MSRI’s) has been developed, but most systems don’t qualify for the MSRI program.
- Registering systems has been a problem for reasons similar to the rest of the country – most installers and/or system owners are unwilling to share information.

Future Goals:

- Certificate signed by governor, and/or a sticker are being considered as rewards

Summary Statement: The Idaho program should not be constrained to only focusing on systems considered “acceptable” for the national MSRI program, although a recognition program may be appreciated among some groups.

**8. Reduce barriers to PV and solar thermal loans.**

Progress:

- IDWR loan program available with 4% interest, for 5-year payback, up to \$10,000 residential (\$100,000 for commercial) available provided PV is the least-cost alternative.
- IDWR’s PV rebate program.
- GMAC and other lending institutions. (Most mortgage companies not aware of program.)
- Grid-tied PV can’t compete with low-priced energy currently available.
- Tax breaks for homeowners for installing wind, solar, and geothermal systems, insulation, thermal or storm doors, windows, caulking and weather-stripping.

Future Goals:

- Offer free advertising in consumer information booklet for companies that offer loan program.
- Offer education program for mortgage companies.

**9. Develop and carry out the program implementation plans for 2000 and beyond.**

Progress:

- Plan has been developed.

Future Goals:

- See action items below.

### **Action Items/Responsible Partners**

**1. Inspector Education.**

Task Leader: Mike Leonard (Aurora Power), John Wennstrom (EnerTech Services) – Inspectors already call Mike for assistance, and he is currently developing an inspector education program.

**2. Seek Additional Resources for Consumer Education.**

Task Leader: John Crockett (Idaho Energy Division) – publishing and printing solar materials, conducting solar electric workshops, conducting renewable energy fairs

**3. Develop Utility Interconnection Policies.**

- Standards & Codes
- Liability Insurance
- Metering & Billing
- Expert Support
- Select Committee to Develop White Paper

Task Leaders: Scott Gates, Tom Starrs, Heather Mulligan, Mike Leonard, John Crockett, Thomas Hickman, Russ Dane.

PUC – Tariffs as desired, want legislation to level playing field

(The installation of 5,000 solar systems may not be attained in Idaho if grid-tied PV programs are not developed.)

**4. Secure Funding for Program Implementation.**

Task Leader: Gerry Galinato (Idaho Energy Division), with Heather Mulligan as a resource

Discussion led to the belief that corporate sponsorship was not reasonable, but the Northwest Solar Alliance may help here.

**5. Secure Legislative Support for Promoting Solar.**

Task Leader: Mike Leonard and others (Industry Coalition for Idaho)

Cultivation of advocates is necessary; Industry association may be necessary to bring in broad base of people to do lobbying IDWR is not able to do.

**6. Financing Options for Realtors/Mortgage Lenders.**

Task Leader: Russ Dane (Solar Solutions)

PV on model homes may be used to help bring these issues to the forefront. Russ will educate realtors and attempt to make solar mortgages part of realtors continuing education programs.

**7. State Leadership in Utilizing Solar on Buildings.**

Task Leader: TBD – local, state and federal governments

**8. Utility Leadership in Solar and Distributed Generation Use in Schools.**

Task Leader: TBD

Green pricing to fund systems for schools. Steve Fucile (Bonneville Power Administration) – avoid programs like the one proposed by PacifiCorp, which was turned down by the Idaho Public Utilities Commission.

**9. Exploring Corporate Sponsors for Schools.**

Task Leader: Tom Hickman (subgroup of PV4You)

Possible corporate sponsors to offer money: Albertson's, Home Depot, Wal-Mart, Micron, HP, McDonald's, Trus Joist MacMillan, Trace, BP Amoco/Arco.

**10. Develop Quality Measures.** Must agree (not an action item in Idaho).

- Approved Systems
- Module Ratings
- Technical Support within State

Task Leader: PV4You Group (especially IDWR)

**11. State Legislative Support for Codes, Covenants, and Restrictions (CCR) and Solar Access.**

Task Leader: Idaho Energy Division

State legislative support may be easier to secure as opposed to numerous town/county ordinances

**12. State Installer Licensing Policy, Training and Exam.**

Task Leader: TBD – subcommittee to develop white paper

There is no General Contractor license offered in Idaho, but there are electrical and plumbing licenses to build on. Training and exams will be key.