State Renewable Energy News

A Compilation of Renewable Energy Activities in the States

Prepared by the NARUC Subcommittee on Renewable Energy

Volume l, No. l
Winter 1992

Notes From the Chair

This newsletter represents the inaugural issue of what we hope will become a regular feature of the NARUC Committee meetings: the sharing of information on state-level renewable energy activities. The Subcommittee on Renewable Energy was formed in 1989 in part because it was recognized that renewable energy sources can play an important role in our current and future energy mix and that the potential of renewables had been largely overlooked. The activities of the Subcommittee are directed toward "getting the word out" on renewables and I believe that this newsletter can represent an important vehicle to accomplish this.

The "news" in this edition represents only a small sample of the renewables-oriented activities occurring in many states. We would like to report on your state's activities as well. We also hope that you will read about activities in other states and ask why these same activities are not occurring in your own state. If, as a result of reading this newsletter, your state initiates similar activities, then we will be truly successful in this venture. The recent Tucson PV Commercialization Conference and the state-level activities that have followed are prime examples of the potential of this type of "information transfer." **- Renz Jennings**

State Activities

Arizona

ACC Directs Utilities to Consider Solar
In several Orders executed during 1991, the Arizona Corporation Commission has directed the state's regulated electric utilities to undertake a number of activities related to solar energy. Among these:

- Utilities must compare the costs of traditional peaking and intermediate power plants with the costs of solar thermal plants as future generating options.
- Utilities must provide information to customers in remote locations about the relative costs of line extensions and stand-alone photovoltaic (PV) systems.
- Arizona Public Service Company (APS) must study and report on the cost effectiveness of using PV in transmission and distribution systems.
- Funds were established for two utilities to undertake PV and solar demonstrations.
- PacifiCorp, in receiving approval for transactions involving APS, agreed to study the possibility of using renewable energy technologies to displace planned fossil fuel generation plants.

ACC Contacts:
Gary Yaquinto/David Berry, (602) 542-4251

California

State Readies New Standard Offer Contracting Process

For the first time in seven years, long-run, fixed-price standard offer contracts will soon be available to non-utility projects qualifying under PURPA (qualifying facilities or QFs). An estimated 3,900 MW of renewable energy projects, as well as 5,700 MW of fossil-fuel-based cogeneration, have been developed in the state under an earlier set of standard offer contracts that were suspended in 1985. With the state once again projecting a need for new supply-side power sources, power will again be sought from QFs.

Unlike the former standard offer system, QFs will have to bid in an auction against a utility's designated avoidable resource option and the total capacity contracted will be limited to the utility's pre-determined need. Price adders or subtractors will be implemented for air emissions impacts. The process will also attempt to consider fuel diversity benefits.

PUC Contact:
David Morse, (916) 322-1284

Colorado

PUC Order Requires Utility to Examine Photovoltaics

In January 1991, in a first of its kind action, the Colorado Public Utilities Commission amended its electric line extension rules (Rule 31) to include a requirement for the electric utilities under PUC jurisdiction (Public Service of Colorado [PSCo] and West Plains Energy) to inform customers of the comparative economics of photovoltaics (PV) as an alternative to utility line extension. Under certain threshold conditions, the utility must perform this analysis at no charge to the requestor. Otherwise, a utility-determined charge ($176) is assessed.

Preliminary data (for March-October 1991) shows that of 1,356 requests to PSCo for electric service, only 23 qualified for the free PV analysis. PV was found to be potentially cost effective in about half of these cases. However, no decisions on actual PV installations had been made by these customers. None of the remaining 1,333 requestors, faced with the fee assessment, asked for a PV cost comparison.

At first glance, the utility fee appears to discourage customers from requesting a PV analysis. In addition, line extension location may be important. It is widely believed that PV can play a greater role in rural settings. However, it is not clear from the PSCo data how many of the line extension requests were urban/suburban versus rural.

Although these results do not appear very positive for PV, the PUC recognized that a review of the Rule 31 amendment would be necessary to assess its impact. This review will take place in Spring 1992.

PUC Contact:
Morey Wolfson, (303) 894-2000 x306

Minnesota

State Pursues Incentives for Wind Energy

During 1991, the Minnesota State Legislature enacted into law a bill aimed at advancing wind energy development in the state. The legislation exempts wind turbines from state property taxes and requires that the environmental costs of electricity generation options be quantified.

The potential importance of the property tax exemption to capital intensive projects like wind was recently illustrated by the bankruptcy filing of Luz International Limited, developer of solar thermal electric projects in California (see story below). Environmental costs, once determined, will be used as adders to the utility's avoided costs in calculating utility payments to QFs.

To implement the externalities law, the Minnesota Public Utilities Commission has recently begun a proceeding for the purpose of establishing (in a new rule) the environmental costs for each electric power source.

PSC Contact:
Paul Helgeson, (612) 297-8067

Texas

PUC Asks for Utility PV Study

In approving a notice of intent from Houston Lighting and Power (HL&P) for construction of three generation projects (a 160 MW gas-fired cogeneration plant and two 110 MW refurbishments), the Texas Public Utilities Commission has requested that HL&P conduct ten studies addressing various issues related to system reliability, fuel alternatives and demand-side management. One of the studies to be included is an analysis of photovoltaics (PV).

As a component of the notice of intent filing, HL&P included an evaluation of PV as an alternative to the proposed projects but concluded that no attractive sites existed for a PV plant. However, in view of the success of the City of Austin in utilizing PV in a central station application, the PUC felt that HL&P had not thoroughly investigated PV as an alternative and has required the utility to include a more in-depth analysis of PV before seeking a certificate of convenience and necessity, the next stage in the project approval process.

When considering such alternatives, utilities are required to assess: availability; cost and benefits, including environmental; reliability; risks; and financing requirements.

PUC Contact:
Parviz Adib, (512) 458-0107

Wisconsin

PSC Holds Hearings on Renewables

In December 1991, the Wisconsin Public Service Commission held four days of hearings on renewable energy as a component of its tri-annual "Advance Plan" utility resource planning process. An examination of the potential of renewable resources to displace future fossil fuel generation is one of many issues being addressed in Advance Plan 6.

Among renewables interests, the hearings included testimony from U.S. Windpower, Bergey Windpower, the Solar Energy Industries Association, the Union of Concerned Scientists, and numerous representatives from the solar, hydropower and biomass combustion industries.

PSC Contact:
Nancy Korda, (608) 267-3599

Other Activities

Ground Breaking PV Conference Held

During December 1991, representatives of the electric utility industry, utility regulatory community, the photovoltaic manufacturing industry, state energy and consumer advocates offices, and the U.S. Department of Energy (DOE) gathered in Tucson to discuss potential collaborative efforts to accelerate the adoption of photovoltaics in the U.S. electric utility industry. The conference, entitled PV for Utilities: Developing a National Photovoltaic Strategy for Utilities, involved a series of presentations on issues and barriers affecting the commercial development of photovoltaics in the utility industry as well as workshops on technical, regulatory, economic, and commercialization issues.

As a result of the interest generated from this workshop, a number of new PV-oriented activities have developed. In Arizona, Colorado and New York, state-level collaboratives have been initiated to explore PV. And at the national level, a cooperative effort has been initiated involving NARUC, NASEO, the Edison Electric Institute (EEI), the Electric Power Research Institute (EPRI), the Solar Energy Industries Association (SEIA), and the U.S. DOE to promote the near term application of solar energy.

Contacts:
Rick Sellers (SEIA), (202) 408-0660
Mike Foley (NARUC), (202) 898-2200

UCS Initiates Midwest Renewable Energy Study

The Union of Concerned Scientists (UCS) has begun a major project to assess the feasibility and cost of meeting a significant fraction of the Midwest's electricity needs with renewable energy sources. UCS is conducting the study in close cooperation with Midwestern state officials, utility managers and regulators, community leaders, and interest groups with the stated goal of fostering "an improved political, economic, and regulatory climate for (renewable) energy sources."

The study will be confined to the twelve states of the Midwest (or North Central) census region (North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, Missouri, Wisconsin, Illinois,

Michigan, Indiana, and Ohio) with focus on Minnesota, Wisconsin, and Ohio. The initial resource emphasis will be on biomass crops, wind energy, and photovoltaics.

UCS Contacts:
Michael Brower, (617) 547-5552
Alden Meyer, (202) 332-0900

NEP Issues "Green" RFP

The New England Power Company (NEP) has issued a solicitation to purchase electric energy from renewable and waste energy sources. The expressed intent of the solicitation is "to place a limited number of renewable and waste electric power production facilities into commercial operation to assess the current-day feasibility, value, resource potential, and environmental attributes of renewable resource technologies." NEP plans to purchase up to 200,000 megawatt-hours annually from these projects, the equivalent of from 45 to 90 MW of capacity, assuming capacity factors ranging from 25 to 50%.

Although projects are encouraged from all renewable energy sources (wind, solar, biomass, waste, geothermal and hydro), NEP prefers "projects with minimal environmental impacts and projects using fuels and technologies not fully explored in New England.

Similar renewable energy "set-asides" have been proposed in California and New York. The California State Legislature has enacted a 50% set-aside for renewables, pending the development of a workable competitive procurement process, while the New York State Energy Plan calls for a 300 MW renewables-only procurement "assuming that such capacity can be obtained at an acceptable price premium."

NEP Contact:
Michael Hachey, (508) 366-9011

Demise of Luz Documented

Luz International Limited, the sole commercial developer of solar thermal electric projects in the U.S., filed for bankruptcy during 1991 following the failure to obtain project financing for its tenth solar electric plant. Since 1984, Luz had constructed nine solar plants, totaling 355 MW of capacity, in California's Mojave desert. Despite the bankruptcy filing, the operation of the nine existing plants will continue.

The Luz experience is documented in a report published by Sandia National Laboratories entitled: Barriers to Commercialization of Large-Scale Solar Electricity: Lessons Learned from the LUZ Experience. The report was authored by Michael Lotker, formerly Vice President of Business Development for Luz. The report identifies a number of factors that contributed to the company's downfall, among them: the vagaries of federal and state energy and tax policy, lower utility avoided costs, the declining effectiveness of PURPA, the absence of incentives for utilities to own solar plants, and the lack of recognition of the environmental benefits of solar energy technology.

Sandia Contact:
Daniel Alpert, (505) 844-6982

State Renewable Energy News is prepared under the auspices of the NARUC Subcommittee on Renewable Energy to promote the sharing of information on state-level renewable energy activities. It is issued three times annually to coincide with the NARUC Committee meetings.

Comments or questions regarding NARUC or this newsletter can be directed to:

Blair Swezey
NREL
1617 Cole Blvd.
Golden, CO 80401
(303) 384-7455.

Return to State Renewable Energy News homepage