Utah State Energy Program, Utah Geological Survey
Comments on Blue Sky Report and program, January 2008
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The State Energy Program (SEP) generally concludes (with a few exceptions noted below) that the report provided to the Commission on the Blue Sky program in October, 2007 is an adequate summary of the program's costs and financial position. However, the report suggests to us problems with the program both in its fundamental design and with management of the program as it is currently conducted.

Suggestions for Improving the Report

1. Further details on the $900,000 purchase of REC's from "excess funds" (funds not needed to meet the 100kWh block purchase requirements) should be included. This information should include at a minimum the price and quantity of REC's purchased and retired.

2. Further detail should also be provided about the community projects funded with "excess" dollars. This includes at a minimum the total number of grant applications received, the number rejected, the criteria and evaluations underlying project selections, the locations of awarded projects (more than just the state), a description of the project, and information on the facility at which each project is located.

The Blue Sky Program Overall

Rocky Mountain Power has built the Blue Sky program into a robust customer participation program. Much good has been done by the program and SEP hopes the program continues to grow. However, the Blue Sky Report highlights for us what appear to be substantial areas for improvement of the program, both in fundamental design and management.

Fundamental Issues: REC Costs

The Blue Sky Report shows that the costs to the program of acquiring renewable energy credits (or RECs) ranges between $2.75 and $4.92 per MWh, averaging $4.35. However, the program collects from participants $19.50 per MWh ($1.95 for a 100 kWh block), more than four times more than is required to acquire RECs. While program administration costs must also be collected in this charge, the $1.95 charge per block is still significantly out of line with recent or historic REC prices. The company has suggested that a "buffer" is required in order to have funds available in the event of fluctuating regional REC prices. It also suggests that with renewable portfolio standards being enacted in the region, REC prices are likely to increase in the future. While these are valid concerns, SEP believes either that block prices should be significantly reduced and periodically changed to reflect actual market prices, or that the program be fundamentally redesigned such there is a connection between the current price of RECs and the actual number of kWh purchased for the program.

For comparison purposes, Sterling Planet, a private firm marketing RECs to individuals and businesses for carbon offsets, is currently offering certified RECs at 1.75 cents per

kWh to individuals; large purchasers receive a significant discount below this price. Some large Utah electricity consumers, most notably the University of Utah, have chosen to purchase RECs from Sterling Planet (at 0.3 cents / kWh) precisely because of the high cost per kWh reflected in Blue Sky's block price. Park City Mountain Resort purchases lower-priced RECs from Renewable Choice Energy (less than 1 cent / kWh) rather than Blue Sky.

Blue Sky is marketed as a program that is used primarily for wind power, yet less than 25% of participants funds are actually used for wind energy purchases. If Rocky Mountain Power wishes to continue to portray the program is they currently do (more on that topic below), then the program should be structured so as to purchase the maximum number of wind-based RECs at the least cost.

Fundamental Issues: Generation of "Excess" Funds

The current $1.95 per 100 kWh block price also creates a fundamental problem by generating very large amounts of "excess dollars" – money not needed for either the purchase of RECs or program management. The Blue Sky Report suggests that these excess dollars accumulated over several years to reach more than $2 million by August 2006. What to do with these funds has become a point of contention between some interested parties and the company. The company has used approximately half of these dollars for additional REC purchases and the other half for "community projects", most of which have been solar photovoltaic projects. As we will explain below, we consider the process of awarding and overseeing these projects to be poorly managed and have questions as to their cost effectiveness. Several parties have also pointed out that Blue Sky program literature makes no mention of such projects and suggests that funds are used solely for wind RECs. Regardless of this particular argument, the current fixed $1.95 price per 100 kWh block structure of the program generates funds far in excess of what is needed to purchase the promised RECs – money that somehow must be gotten rid of in a way that is not inconsistent with the goals of the program. We cannot help but wonder if 1) The administrative costs of the program, and 2) Much of the contention among interested parties, could be significantly reduced if the program simply used all collected funds for purchasing RECs at the lowest cost and for managing and marketing the program. We also believe that this would be more consistent with the program as-currently-marketed by Rocky Mountain Power and with the expectations of program participants.

Program Management: Marketing and Transparency

Marketing materials and the Bly Sky program website strongly imply, if they do not outright state, that all dollars collected from the program are used to purchase RECs. Quoting the website: "When you enroll, Rocky Mountain Power buys renewable energy on your behalf, equal to your Blue Sky purchase." And the website strongly suggests that all of this energy is wind power: "If you want to offset the emissions from your household energy use, here's your chance to purchase new wind power through our Blue Sky program." On the "Frequently Asked Questions" portion of the website, the section entitled "Where does Blue Sky renewable energy come from?" lists no sources of energy other than large-scale wind projects. It then states, "As the demand grows we will

purchase more wind energy from other facilities in the West." Nowhere on the Blue Sky website are community projects mentioned and nowhere is any renewable energy source other than wind referenced. In spite of this marketing, the Blue Sky Report shows to us that large amounts of money, in fact, do not purchase renewable energy of any type, and a significant fraction of the renewable energy that is funded is for photovoltaics and not for wind power.

While community projects in general, and photovoltaics in particular, may have merit, we believe that this is not what most Blue Sky participants currently think they are funding. If participants were informed of how funds are actually used, many might well agree and continue participation. Others might choose to participate in other programs, such as the Sterling Planet program referenced above. But as the program is currently marketed, and based upon the information provided to the public by Rocky Mountain Power, we believe that program participants are provided with incomplete or inaccurate information and are thus unable to able to make informed choices. Thus, we recommend that the company either be required to provide full information about the program, including a breakdown of how funds are used, on its website and appropriately revise other marketing materials, or that the program itself be changed to reflect how it is currently marketed.

Program Management: Management costs

SEP is concerned about the costs of managing the program that are reflected in the Report. According to the Report, 35.6% of revenues went to marketing and management. This figure jumps to 39.3% if one also factors in the $50,000 paid in late 2006 to Utah Clean Energy for marketing and developing community projects. When a program is new and has not yet established a firm public "brand", high administrative and marketing costs are to be expected. However, we wonder whether high administrative costs for a program as well-established and well-known as Blue Sky are appropriate. Spending $486,520 per year just for the Utah portion of the program seems inordinately high.

A useful perspective on Blue Sky's administrative cost can be found in a recent National Renewable Energy Laboratory Technical Report entitled "Trends in Utility Green Pricing Programs (2006)" (NREL/TP-670-42287). NREL surveyed a large number of utilities offering green pricing programs and collected data on marketing and administrative costs. Table 20 from the report (below) shows that among 51 utilities submitting the appropriate data, the average cost for marketing and administration costs was 23% of the price premium collected. Among top performers, this rose slightly to 24%, compared with Blue Sky costs of 39.3%.

Table 20. Marketing and Administrative Expenditures as Percentage of Premium (2006)

	2003	2004	2005	2006	Top Perfomers 2006
Average	17%	20%	15%	23%	24%
Median	5%	9%	2%	10%	28%
# of Responses	36	60	59	51	16

Program Management: Community projects

One of SEP's major charges is to administer grant and loan programs on behalf of both the State of Utah and the U.S. Department of Energy. As a result, we have long experience with the administration of grant programs. To the extent that Blue Sky has become a grant program, we feel a particular ability to comment on the community projects aspect of the program.

Project Evaluation. SEP has significant concerns about how proposed projects are evaluated for grant awards. The Blue Sky Report does not include the evaluation criteria for 2006 and 2007 grants so it is not possible to determine exactly how awards were made. However, SEP has first-hand experience with several of the 2006 projects that were awarded funds. In one case, a recipient was awarded $70,000, part of a $100,000 award, for a feasibility study. In another case, a recipient called SEP to ask for assistance in determining how to use a grant (i.e. what kind of systems or technologies might work) after it had been awarded. We also know of a solar systems installer who was awarded a grant to install a system on a school to be determined in the future. It thus appears that at least several projects have been awarded grant funds without a clear definition of the project to be carried out. It is unclear to us how valid evaluations of projects can be made before a location is known and a technology type chosen. We also note that the Blue Sky Report lists several projects as "Design phase." We also wonder how well a project can be compared competitively against others before design has been completed. An accurate knowledge of cost and cost-effectiveness cannot be known until after a design is completed. We also strongly disagree with funding feasibility studies: If a project is deemed infeasible and thus not built, how can Blue Sky participants' contributions be said to be purchasing renewable energy? We are also concerned that grant funds have gone directly to an installer rather than to the project's host. Such a grant allows a project host to avoid any semblance of competitive bidding.

Project Cost Sharing. The Blue Sky community projects do not require that a share of project costs be borne by grant recipients. SEP feels strongly that grant recipients in any program must provide cost sharing or in some way make a significant contribution to a project. Grantee buy-in is important to ensure the success of projects. When a grantee has no tangible stake in a project, there is no commitment to help ensure the project's viability. For example, if a grantee has received a free photovoltaic system that later experiences problems, the grantee has little incentive to protect the investment of Blue Sky participants by making repairs or modifications. The recipient of a free system also has little incentive to invest in appropriate maintenance or to ensure that a system is installed so as to ensure maximum cost-effectiveness and efficiency. Project cost sharing is simply good policy and should be required in this program.

Up-Front Grant Awards. All grant awards under this program are made shortly after an award and not after project completion or on a reimbursement basis. SEP feels that this is a very risky practice and should be discontinued. While recipients are required to sign a short letter of agreement in order to receive funds, the agreement provides no mechanisms for failure to complete a project, for project modifications, for projects that

are completed for less than the grant amount, for projects that only install a portion of the originally-proposed project, and for documentation of actual expenses incurred. Up-front funding is an easy mechanism for abuse of this program and wasting of participants' dollars. Standard grant practice is to provide payment only after project completion or upon reaching key milestones and to pay only on a reimbursement basis and upon documentation of actual expenses incurred. This is an effective mechanism to ensure that grant funds have been used for the agreed-upon purposes and for appropriate expenses.

Cost-Effectiveness and Cost Disparities. Based upon reviewing the Blue Sky report, SEP wonders whether cost effectiveness criteria are applied in grant evaluations. For example, while several projects are funded at roughly $5/watt of capacity (e.g. Town of Alta, $15,000 for 3 kW) others are significantly more expensive per installed watt (e.g. Park City, $100,000 for 5.4 kW or $18.51 per watt; Entheos Academy, $37,500 for 2.4 kW or $15.62 per watt; West Jordan School, $25,000 for 2.4 kW or $10.42 per watt.)

Summary

SEP believes that Blue Sky is a valuable program that should be continued, but that it is also a program that is failing to meet its full potential and exhibits significant management issues. We believe that a redesign or abandonment of the per-block funding mechanism is needed in order to meet public expectations of the program and to align program revenues with the actual cost of REC purchases. This would also reduce or eliminate the generation of "excess funds" that have been used to finance the community projects grant program that exhibits major policy and management problems. If the Company wishes to continue with community projects, SEP has offered to assist with project design and project evaluation. Finally, the program should, at a minimum, be made more transparent such that participants have a true and accurate knowledge of the ends for which their contributions are used.