

(Original)

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPROPRIATE	}	IEEP Response to
DISPOSITION OF PROCEEDS FOR THE	}	ORDER NO. 30529
SALE OF IDAHO POWER COMPANY'S SO2	}	
EMISSION ALLOWANCES IN CY 2007	}	CASE NO. IPC-E 07-18

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 IDAHO PUBLIC UTILITIES COMMISSION

On behalf of the Idaho Energy Education Project, I would like to thank the Idaho Public Utilities Commission for this opportunity to provide this proposal that seeks to designate \$500,000 of the SO2 sales money into energy education.

The idea of investing money in energy education is very consistent with the following goals of the 2007 Idaho Energy Plan:

***4. In order to protect and enhance Idaho's quality of life, it is incumbent on all citizens to use Idaho's precious natural resources, including energy, in a wise and responsible manner.***

***5. When acquiring resources, Idaho and Idaho utilities should give priority to: (1) Conservation, energy efficiency and demand response; and (2) Renewable resources; recognizing that these alone may not fulfill Idaho's growing energy requirements.***

***7. It is Idaho policy to encourage the development of customer-owned and community owned renewable energy and combined heat and power facilities.***

How else but through education can the citizens of Idaho be expected to use our precious energy resources in a wise and responsible manner, to know the options available to them on both the consumption and production side of the equation. There is no better place to begin this education than with the young in our schools.

The Idaho Energy Education Project is not new to this concept; it has on a small scale been involved in the schools for a number of years. (See attached information about IEEP). The opportunity presented with this proposal has the potential to advance these goals to a new and more inclusive level. To that end, the IEEP invited other entities to partner in this process so that the benefits of energy education could be spread over a larger area.

IEEP invited the Idaho Office of Energy Resources, the Idaho State Department of Education and Idaho Power to participate in this effort. The e-mail inviting the partnering and the responses are included in this proposal. The roles of the partners are outlined in the body of this response.

After discussion with those involved in education, it made no sense to try and add energy education on to the existing system, but to include energy education in the state

standards. Energy education standards are coming and this project would help to put Idaho education ahead of the curve. Some excellent curriculum is already available and with perhaps some tweaking to Idaho's particulars could be readily adopted after training the teachers in that curriculum. So the first step of this project is to train and excite the teachers on the importance of energy conservation, efficiency and the possibility of renewables, and to get them to look at the possibility of multi-discipline education so that math, science, economic and even English teachers could partner in teaching this curriculum. Some wind and solar for schools projects already exist, or are in the works and could be dovetailed with this project.

The second step and the primary goal of this project is to teach the students and excite them about using energy wisely and responsibly. Part of the funds from this project would purchase educational aids such as electric meters or other measuring devices so that the students can learn about the energy use of different types of light bulbs, or other appliances, light meters and thermometers so they can measure candlepower and heat loss. The second part of this project would fund student driven energy conservation, efficiency and possibly some renewable projects, again where possible dovetailing with existing efforts. This portion of the project would involve the expertise of other partners in energy audits and solutions strategies, but the students would be the drivers. Assessing a problem, coming up with a solution and then implementing that solution and assessing its effectiveness will be a powerful experience that can benefit the students, the school and from the students into their homes and community. This experience can further economic development in energy efficiency and renewables and prepare the students for the increased demand for jobs in these areas as well as be part of our state's energy solution.

### **The Framework for this Project**

**Structure:** A partnership of IEEP, Idaho Power, Idaho Office of Energy Resources, Idaho State Department of Education, National Energy Foundation, school districts, individual schools and teachers.

#### **Partners roles:**

**Idaho Energy Education Project** will function as project coordinator during the start-up phase, provide broad outline, facilitating meetings as necessary, working with other partners to develop their roles, coordinating the functions of the partners, participate in the evaluation of education component and grants and provide some classroom instruction as well help in the development process of student directed projects.

**Idaho State Department of Education:** will help evaluate curriculum in terms of educational standards, assess requiring conservation and efficiency components be added to various disciplines such as math, English, economics, act as point of recruitment of schools and teachers to participate, will also participate in grant application evaluation. After start-up Department of Education will become the primary manager of this program..

**Idaho Office of Energy Resources** will provide additional expertise on renewables, energy conservation and efficiency opportunities, help with curriculum development and grant evaluation.

**National Energy Foundation:** Provide of award winning energy educational curricula and materials and teacher training.

**Idaho Power** will provide information about their system, how much energy is used, where it comes from, what conservation and efficiency programs they have in effect and what the impacts are. IP will also participate in energy audits, curriculum development and grant application assessment.

**School districts, individual schools and or individual teachers:** will apply to participate in the energy education project beyond the standards, be provided curriculum and training. Will provide leadership in multi-discipline participation where feasible and provide guidance in the development of student driven projects. The schools will benefit from a more energy aware staff and student body. Schools will be furnished with devices such as electric meters, light meters and temperature sensors as aids in assessing energy use.

**Students:** will be inspired by the potential of renewables, energy conservation and efficiency and will develop and propose projects where they can see their ideas reach fruition.

**Monies:** There are two components of this project. The educational portion and the project portion, \$500,000 total. \$250,000 for education and \$250,000 for projects.

**Education Monies:** One possibility would be that a third of the educational money go into curriculum development and administration. One third of the money would go into actually teaching the teachers via in service and other educational opportunities for extended credits and the remaining third would go into various classroom aids such as light meters, electric meters which could be hooked to various devices that would show energy usage, etc. Project partners will be reimbursed for their time based on an agreed to hourly rate plus mileage and per diem where applicable..

**Project Monies:** \$250,000 will be available for grants to facilitate student developed conservation and energy efficiency projects in either the participating schools or in some project in the local community in need of such a project. Caps on those grants would be \$12,500, which would facilitate 20 such projects at full grant levels or more at lesser levels of funding. Project partners will be reimbursed for their time on an hourly rate plus mileage and per diem where applicable.

All monies not spent would remain in an interest bearing account, with the interest going toward project expenses or further grants.

**Curriculum:** The National Energy Foundation has award winning curriculum that meets National Science Education Standards. The Idaho State Department of Education would review that curriculum and adopt them as standards. Those curriculum would need to be supplemented with Idaho specific curriculum. While the bulk of this project will focus on the energy used in the homes, businesses and industry of Idaho, some focus should also be made on other uses of energy such as transportation.

**Teacher Recruitment:** The Idaho State Department of Education will use its contacts with the school districts to recruit teachers to participate in this important project. Offering both economic incentives, advanced curriculum, training and the classroom support of IEEP or other partners.

**Teachers:** For the efficiency projects to be a success, a teacher needs to believe in and be a champion of energy education. It will then be up to the lead teacher in each school to define in coordination with the project partners how the project will be handled. As there are many opportunities at all levels of education from elementary school through high school, and via a number of disciplines, recruitment should be broad. The goal being knowledge of the electrical system and the important role of conservation and energy efficiency in reducing demand and thus the need for new production and transmission economic and environmental costs. Participating schools and teachers will agree as part of their participation to evaluate both the curriculum and the effectiveness of their projects.

**Students:** They are the key, they are the purpose of this project and it is essential that they be full and respected partners. It is essential that they buy into the project, understand the economic and environmental benefits to themselves, their families, their schools, their communities and their future. They will be given knowledge of (energy systems) the electrical system, where the energy comes from, what the options are, how it is being used, how it could be conserved or used more efficiently, how to assess that and what kinds of tools are available to accomplish the economic and environmental benefits of doing so. The students then will be offered the opportunity to develop projects of their own, either for their school or for their community, and then apply for grants to implement their project, assess its effectiveness.

**The Effectiveness of the Project:** The impact of this project can be measured in KWs saved or perhaps generated. The projects will be funded by grants which will have to address the amount of energy in use before and the savings the project would facilitate. There could be spin-off challenges for savings in the school and in the students homes which could be measured through the comparison of the energy usage the current month this year versus the same month last year. Of course the longer measure will be in the students, the teachers and the rest of the citizens using energy wisely and responsibly and lowering the load, particularly at peak demand.

**Fiscal Management:** It is proposed that the Idaho State Department of Education be the fiscal manager of this project and that quarterly reports of what the money is being spent

on be submitted to the IPUC for its oversight. As the projects start to come on line and their impacts measured that information will also be pulled together and forwarded to the IPUC.

**In Conclusion:** Given the short time line the Idaho Energy Education Project had in forming the structure for this project, there is still work to be done. The project is worthy, it is a matter now of bringing together the will to get it done. In an era of upward spiraling energy costs and a downward trending economy, investing \$500,000 of the SO2 credit sales money makes sense, it is in the "public interest".

As the proposed partners have not all agreed as to how this should happen, they have all expressed interest and spoken to the possibilities. I would therefore ask the Idaho Public Utilities Commission to continue its tentative approval of this project contingent on the proposed partners coming to some agreement by June 1, 2008. This will give the partners time to better define there roles and also give the project time to pull together the curriculum and begin teacher training so that the energy education portion of the project could begin in the Fall of 2008.

Submitted this 25<sup>th</sup> day of April, 2008

  
by Bill Chisholm coordinator  
Idaho Energy Education Project

**About the Idaho Energy Education Project**  
by Bill Chisholm, project coordinator

The Idaho Energy Education Project (IEEP) was born out of Sempra Coal Plant issue. As a long time energy activist I thought it important to move beyond the focus on this one plant and to expand the debate to energy in broader terms from both the production and consumption side of the equation.

The IEEP is a small project, it has been funded through small grants via the Fund for Idaho, with the Idaho Rural Council acting as its fiscal agent. Though the project is small, its impacts have been fairly large including the energy education proposal before the PUC in the matter of the Idaho Power SO2 credits sale.

The IEEP put an Idaho Energy Plan on the table and on the Legislative Energy Interim Committee's web site even before the committee met for the first time. The IEEP has also facilitated numerous public discussions on energy around the state from Pocatello, to the Magic Valley, Boise and Couer d'Alene. In addition IEEP taught a class at Castleford High School in which students were taught how to assess the energy needs of the school's greenhouse and then facilitated the students making a plan to help address those needs. In an unrelated water right settlement with a CAFO, myself and another activist garnered an \$18,000 donation to the school to mitigate the CAFO's impact on the school. The CAFO owner and myself signed a letter to the school board requiring that the second half of those monies be invested in energy solutions, not merely spent on general expenses. This money was then available to implement the students recommendations.

Acting on behalf of the Idaho Rural Council, as its energy coordinator, I helped to facilitate the first Solar for Schools project in Idaho at Castleford. That project was funded via Idaho Power's Green Power Program through a grant from the Bonneville Environmental Foundation. The Idaho Rural Council, Idaho Power, the Castleford schools, Balanced Rock Electric and Windpower Unlimited LLC worked together to bring that project about. The project included 1KW of net metered solar, 3.5KW of energy efficiency upgrades and includes use of inverter generated information in school curriculum.

In the fall of 2007, IEEP held two 3 part seminars of energy and climate change for the Magic Valley Alternative High School in Twin Falls. The first class dealt with problem assessment, the second class focused on decisions and the third class had students come up with plans for solutions in their homes and in their community with discussion of those plans.

IEEP is an active participant in Idaho Power's Magic Valley Electrical Planning Committee, bringing forth ideas and emphasizing the importance of energy conservation and efficiency as part of that planning process.

**IEEP recently acted as the Idaho coordinator for garnering support from a broad coalition urging Senators Craig and Crapo to support federal tax incentives for energy efficiency and renewable energy. Both Senators supported that legislation.**

## Invitation to Superintendent Luna and Response from his Office

Mr. Luna,

Pasted below is a portion of a recent Idaho Public Utilities Commission order stemming from an Idaho Power case that involves the disbursement of monies the company received from the sale of SO2 credits. The order references a proposal from the Idaho Energy Education Project of which I am the coordinator. I have been doing this work on a small scale, but as you can tell from my proposal and the PUC order things will step up several notches. What I am proposing is a partnership between my project, Idaho Power, the Idaho Office of Energy Resources and the Department of Education. I have been doing this work and will coordinate the effort, but would like the partnership of your department to help evaluate the curriculum and be a source of contact with the schools. I don't see this as taking a lot of time, but certainly some and would be proposing some modest funding for any staff time. I am also looking at some funding incentives for the teachers involvement. I see great opportunities for multi-discipline education as energy issues involve science, math, economics and communication. Please let me know your thoughts on this. As you can see from the order I have a short time frame in which to put this together. I have been doing the work, so it is not like going from 0 to 60, more like 45 to 60, but the devil is in the details.

Thanks,

Bill Chisholm

Idaho Energy Education Project, coordinator

BILL CHISHOLM

[chisholm3@mindspring.com](mailto:chisholm3@mindspring.com)

EarthLink Revolves Around You.

Mr. Chisholm, Supt. Luna is traveling this week and asked me to work on this with you.

I forwarded your email to our Director of Content Areas Peter Kavouras and our Science Coordinator Scott Smith. Both of them are very enthusiastic about finding out more about this proposal. Scott in particular was very excited; his background includes working with Idaho Power, BSU and the Idaho National Lab on Alternate Energy Education, so he understands the potential of your program.

I noted in your response to Paul Kjellander that you were hoping this meeting could take place as early as Monday, April 21. Supt. Luna's April calendar is nearly full, but he would be happy to have you include Scott in the initial meeting so as not to delay progress. Scott can brief Tom for future meetings. Otherwise, his first open dates are Monday, May 5 after 10:30am and Wednesday, May 7 after 1:00pm.

I'm taking the liberty of sending your emails on to Scott Smith so he can be kept in the loop. Please copy him on future emails as well.

Thanks!!

Brenda Mattson

Exec. Asst. to Supt. Luna

## Idaho Power Invite to Karl Bokenkamp and Response

Karl,

I reckon you've seen the PUC order on the SO2 monies. I have twelve days to put together my proposal. I'm not having to go from 0 to 60, more like from 45 to 60 to flesh this thing out. I have been doing this, but obviously this is a much bigger project. What I am proposing is a partnership between my project, the Idaho Energy Education Project, Idaho Power, Idaho Office of Energy Resources, Idaho State Department of Education and of course the schools and teachers. What I see in terms of need for this partnership is someone from Idaho Power that can provide information on their system and their programs, help evaluate the curriculum and when it comes to it, help evaluate the project proposals from the school. Since I only have twelve days to put something before the PUC, I would need to know if Idaho Power would be willing to partner. I would then propose some amount of the budget to help pay staff time. I don't see this as a major time consumer as I would coordinate the project. I serve on Idaho Power's Magic Valley electrical planning committee and a lot of system information, which I think would be useful in the classroom. I see this first as a classroom exercise, then involving the students in developing project proposals.

Thanks for your time,

Bill Chisholm

Idaho Energy Education Project, coordinator

Bill - Idaho Power is interested in exploring the opportunities to work with you, and other members of the proposed partnership - the Office of Energy Resources and Supt. Luna's office, to develop IEEP's energy education program proposal as outlined in your email yesterday. This effort may fit nicely with an ongoing internal effort to refresh some of our educational materials for use in classrooms.

Idaho Power's involvement will most likely involve folks from our Customer Relations and Energy Efficiency group. Patti Best is our Program Specialist in charge of the Green Power Program (including Solar 4R Schools) and she will be your contact for this project. Please go ahead and contact her directly - her number is (208) 388-5948.

Bill, thanks again for thinking of Idaho Power as a partner on the project - we look forward to working with you. Karl

Invite and First Response of Paul Kjellander, Idaho Office of Energy Resources

Mr. Kjellander,

Pasted at the end of this e-mail is a portion of a recent order from the Idaho Public Utilities Commission regarding the disbursement of monies from the sale of SO2 credits by Idaho Power. I am the coordinator of the Idaho Energy Education Project that is referenced in the order. I have been doing this work on a small scale, but this opportunity is much larger and could use the expertise of your staff. What I plan to propose to the PUC is a partnership between the Idaho Energy Education Project, Idaho Power, the Idaho Department of Education and your office, to assemble some of the curriculum material and develop and carry out some of the assessment. I will coordinate the effort and in my proposal will allocate some funding for all the partners to help pay for staff time. I don't see this as taking a lot of time, but it does need some quality attention and having worked with your staff over the years, I know that quality is there. Because I know Sue Seifert well, I have sent her the following and asked for her wise counsel. Please let me know your thoughts on this and how I might proceed.

Thanks,

Bill Chisholm

Idaho Energy Education Project, coordinator

BILL CHISHOLM

[chisholm3@mindspring.com](mailto:chisholm3@mindspring.com)

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Bill:

Thank you for contacting me in reference to the recent PUC order. Perhaps it would be wise to meet and discuss an overview of your project. Then it might be worthwhile to bring the potential partners in this effort together to identify opportunities and barriers. From this, a clear path forward is likely to present itself. From the material provided in your e-mail, I think we could play a direct role related to the grants component of your project.

Again, thank you for contacting me and I look forward to learning more about this opportunity.

Paul