

# 21st Century Polling

*Public opinion polls about energy resource planning have limited value unless survey respondents understand the issues.*

**T**he Nebraska Public Power District has a long-term energy supply strategy to meet customers' future energy needs and a strategic goal to add additional renewable energy sources to its power generation portfolio. Before proceeding with its plans, NPPD wanted to obtain input from the people who ultimately use electricity generated by the power district. NPPD recognized that end-use customer responses to NPPD's green marketing efforts were quite different than what was indicated by traditional methods of assessing customer interest in renewable energy.

To be useful, the method of public input had to meet two criteria. First, it had to gather the opinions of consumers who were informed on the issues. Secondly, the input had to come from a representative sample of NPPD consumers so the utility could be confident customers who were informed on the issues would support the energy plan.

A public hearing is one traditional method of obtaining feedback but these often produce biased results because special interest groups are far more likely to participate than the general public. Participants might be knowledgeable about the issues but their opinions might not represent those of the general population. Traditional surveys gather public opinion from a representative sample of the population but often ask questions of people who know little or nothing about the topic examined. Focus groups, which bring together small groups of people for interactive discussion, offer some opportunity to educate participants before asking for input, but the number of participants is very small and not representative of the population.

NPPD decided to conduct a Deliberative Poll®, a proprietary research technique used to determine informed opinions of a representative sample of a population, in this case, NPPD's customer

owners. It would allow them to find out what their customer-owners would think if they were given an opportunity to read about, discuss, and ask questions of experts and advocates concerning the issues under consideration. To conduct the process and analyze the results, NPPD engaged Public Decision Partnership, whose partners collectively have decades of experience working with electric utilities and conducting Deliberative Polls®.

Deliberative Polling® has another critical distinction from other research methods. It provides credibility and trust in the process for participants, observers, and utility management. Advocates for all resource options are invited to participate in the creation of educational materials provided to participants and to sit on panels to which participants can address questions. This approach assures that participants get a balanced view of the options to be considered.

Dr. Will Guild, Dr. Dennis Thomas, and Ron Lehr, partners in Public Decision Partnership, have conducted Deliberative Polls® for all of the major investor-owned utilities in Texas. The NPPD project was the first for a public power utility. As in the NPPD event, Texas utility customers evaluated alternative power production methods to meet future energy needs. In the Texas polls, the process was lauded and the results were well received by customers (including special interest groups), regulators, and management of the utility companies. These utilities used the results of their polls in planning for new power generation capacity.

NPPD obtained a major portion of the funding for this project from Western Area Power Administration through the Department of Energy's Wind Powering

America program. WAPA has set aside some funding for others who may wish to conduct a similar project.

The role of the advisory committee was to ensure that the survey questions were unbiased and that the written materials and expert panels provided participants with complete, fair, and balanced information for their deliberations. Many advisory committee members also participated in the program as expert panelists, along with outside experts. The PDP team

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met three times with the advisory panel, developing the survey questionnaire, the written information materials, and the agenda for the customer meeting.

Planning for the NPPD event began in March 2003 and in May an advisory group was assembled. Members included representatives from NPPD, groups with particular energy concerns, and advocates of different energy alternatives that customers were to consider. Among the advisory committee members were a representative from the coal industry, a wind expert, a low-income advocate, an environmental advocate and a large customer representative. Also represented were the Natural Resources Committee of the Nebraska Legislature and the Nebraska Energy Office.

In late June, Dr. Guild conducted a telephone survey from a random sample

by Will Guild, Robert Guild and Frank Thompson

of households in the NPPD service area. The pre-event survey included questions that would be asked of participants at the end of the day-long customer meeting. This baseline survey met several needs. It told us about the opinions of NPPD customers who had not been educated on the issues. It served as an introduction to inviting respondents to participate in the customer meeting. It also allowed us to compare responses of those who agreed to participate with responses of all respondents to assure that participants were representative of NPPD's customers. Finally, a comparison of pre-event and post-event participant responses allowed us to measure the impact of education and public deliberations about the topics on the participants' opinions and perceptions. The demographics and attitudes of the respondents who agreed to participate in the customer meeting were very similar to those presented by all respondents, allowing us to conclude that participants were a valid representative sample.

On Aug. 9, 2003, 109 NPPD residential customers met to discuss energy alternatives. Participants arrived at the event and were assigned randomly to eight small groups of 13-15 people. A trained, neutral moderator (not an NPPD employee) led each small group through a discussion of the issues. The issues were explained in a set of written materials delivered to participants approximately two weeks prior to the event. Participants alternated between small group sessions and large group sessions, where they asked questions of panels composed of subject-matter experts and advocates for different resource solutions. An outside moderator led the large group sessions.

The customer meeting was videotaped by Nebraska Educational Television of Lincoln for a documentary on the event. The entire process was open to the press and observers. The primary topic of discussion focused on customer values and preferences concerning NPPD's future choices for expansion of energy production facilities. In addition to looking at

## Feedback About The Process

### Comments from participants

- "I learned a lot. It opened my eyes to concerns that I will share with my family and friends."
- "Having sat through numerous boring teachers' workshops and boring in-service speakers, I was concerned with the use of my time today. I was rewarded with good information, which was well presented."
- "This was an extremely well organized meeting. This was a most worthwhile experience. I feel fortunate to have the opportunity to participate."

### Comments from advisory group members

*The advisory group brings a unique perspective to the process. They fill the role of participant observers. Some came to the process as advocates for one perspective or constituency while others were there to ensure that the process was fair to all sides. Here is what a sample of advisory group members had to say about the NPPD event.*

"I feel this is a tremendous public process. It is a great way to educate and garner an educated opinion from the public. As mayor of Hebron I have tried to integrate some of the lessons about public education into our own town meetings."

**Pat Kenner**, mayor of Hebron, an NPPD power customer community

"It is clear without the results of this process that it is highly unlikely there would be substantial wind development in Nebraska. The DP results unequivocally showed there is public support for renewable energy, particularly wind energy resources in Nebraska."

**Larry Pearce**, Nebraska Governors Policy Research and Energy Office

"This is a worthwhile process to build a better bond between the community served and the entity providing the service."

**Jody Gittins**, aide to State Senator Schrock

### Comments from NPPD management

"Our customers took the time to share their opinions with us, and that's an important part of the public power process in Nebraska. We appreciate their input and will consider it as we move forward in our resource planning efforts."

**Bill Fehrman**, President and CEO

"I believe Deliberative Polling® is a fair and credible process that allows a representative sample of our customers to provide informed responses to relevant questions. This in turn allows NPPD to make better-informed decisions."

**Frank Thompson**, Renewable Energy Development Manager

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participant's attitudes toward energy options and their values related to energy choices, two specific projects were discussed. The first was the addition of 200 MW of capacity from wind power by 2010, which would provide 5 percent of NPPD's total energy for its customers. The second was the addition of five MW of capacity fueled by methane derived from animal manure. These renewable genera-

The survey presented participants with a description of the wind project, including its effect on electric bills, and asked if they believed NPPD should go forward with it. After responding, participants were told of a possible federal renewable energy incentive that would allow NPPD to build a wind farm with no increase in consumer bills. The specific wording is as follows:

It is possible that there will be a federal incentive for renewable energy. If this were available, there would be no increase in rates or bills over what they would be without a wind farm.

Participants were asked if NPPD should go forward with the project if this renewable energy incentive was available. As shown in Chart A, results indicate overwhelming support for the

project, even without a renewable energy incentive.

The survey explained that if the size of the wind farm was increased, the cost to consumers would increase proportionately and if it was reduced, the cost would decrease proportionately. Following this explanation, the survey asked how large a wind farm participants would like to see NPPD build, with and without the tax credit. Chart B shows the response to this question. The chart again demonstrates very strong support for a 200-MW wind

farm and substantial support for even more wind power if there is a renewable energy incentive.

Participants were asked whether they believe NPPD should go forward with the methane project. As in the case of the wind project, after responding to the initial description of the program, participants were told of a possible federal renewable energy incentive that would mean no increase in rates for the methane project. They were then asked if NPPD should go forward with the project if this renewable energy incentive was available.

As shown in Chart C, the strong level of support for the methane project was not affected by the possible renewable energy incentive.

Participants were asked how many megawatts of methane fueled power capacity they would like to see NPPD build, with and without the tax credit. Chart D shows the response to this question.

Again, only those who supported methane fueled power generation appear in the chart so the percentage on the left side of the chart does not equal 100 percent. Respondents were told on the survey that 50 megawatts was the maximum feasible amount of methane projects that could be built.

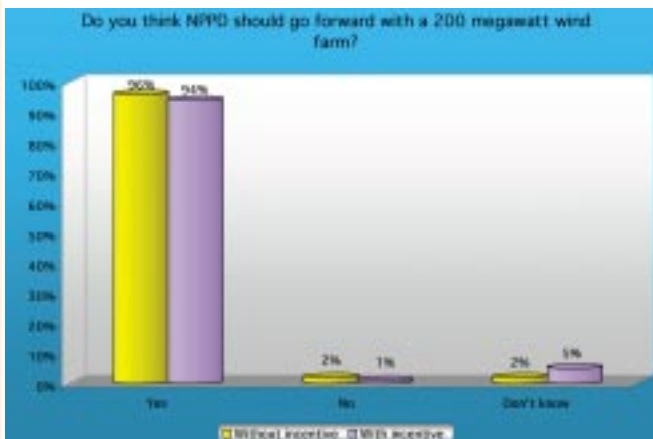
As was the case with the wind project, Chart D demonstrates very strong support for five megawatts of methane projects and substantial support for even more production from methane if there is a renewable energy incentive.

**During the one-day event, participants were educated on the issues and options, questioned experts and advocates, and discussed the issues with other participants.**

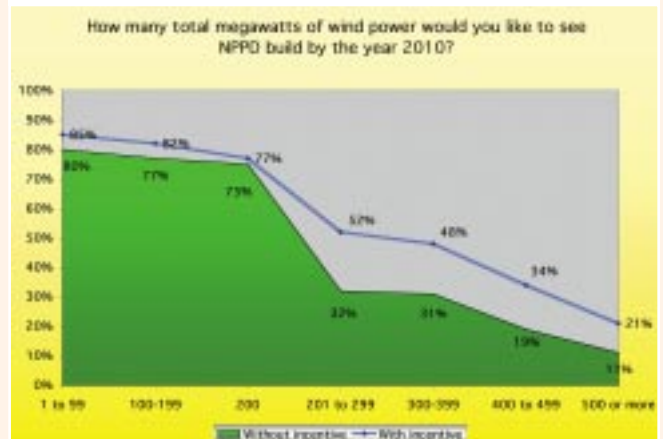
tion resources were compared against more traditional resources such as coal and natural gas. Respondents received descriptions of each project, including the expected dollar impacts on the customers' utility bills.

During the one-day event, participants were educated on the issues and options, questioned experts and advocates, and discussed the issues with other participants. At the end of the event, we asked them to give their opinions by completing a survey developed by the Advisory Committee.

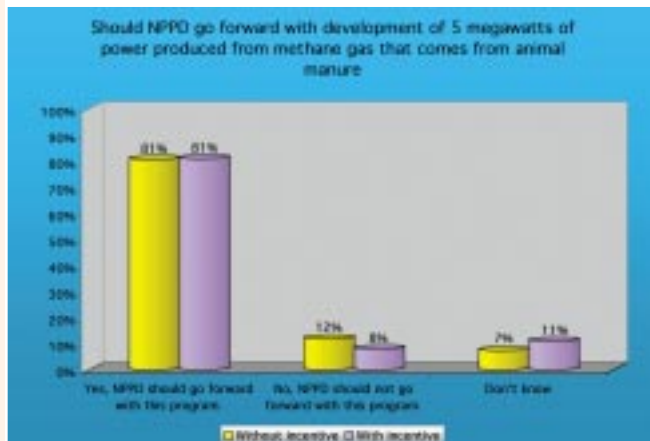
**Chart A**



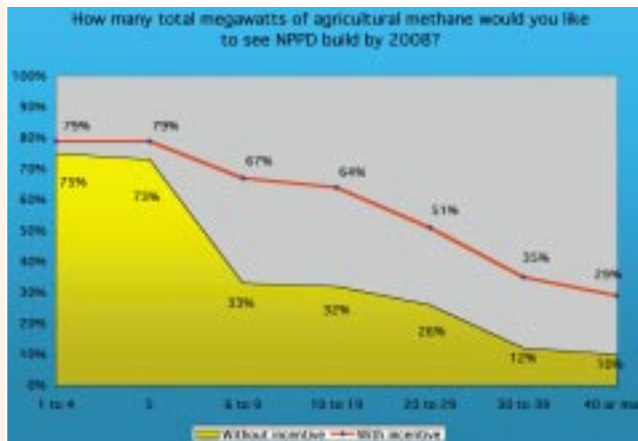
**Chart B**



**Chart C**



**Chart D**



A critical issue for utilities considering renewable projects, which may be more expensive than fossil alternatives, is how to pay for these projects. The participants were asked about how NPPD should fund renewable energy with the following question:

*One way would be to build a project, such as the wind farm described above, and divide the cost, as well as any benefits from the project (such as stable fuel costs), among all customers.*

*Another way would be to market renewable energy before building any facilities to produce it. Customers would be asked to commit to buy renewable electricity and NPPD would only build facilities to produce enough renewable energy to meet the demand of those customers who had committed to buy renewable energy. The cost and any benefits would only go to those customers who had committed to purchase the renewable en-*

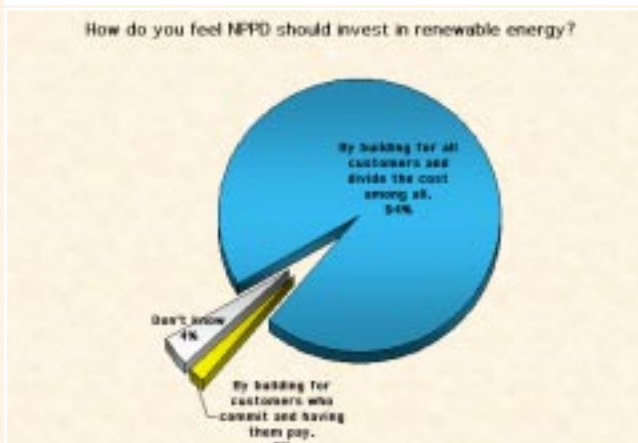
*ergy from these facilities. How do you feel NPPD should invest in renewable energy?*

Participants were almost unanimous in their support of building facilities and dividing the cost among all customers.

In addition to asking participants about specific projects, the survey also queried participants about a number of more general options to meet future energy needs. Questions about the wind power and methane projects were asked only in the post-event survey because by then participants were familiar with the specifics and tradeoffs involved in these projects. However, more general questions about energy options were asked in the pre-event survey as well.

This allowed NPPD to see how attitudes changed as people learned more about the options and were able to discuss tradeoffs with fellow customers and experts. One way the survey did this was by asking which options participants felt

**Chart E**



NPPD should pursue first. (See Charts F & G).

Wind power was selected most often as the option NPPD should pursue first, both before and at the conclusion of the customer meeting. The percentage of participants selecting solar power dropped very substantially, while the percentage choosing conservation increased substantially at the conclusion of the meeting. The percentage choosing coal as the first option also increased significantly compared to the initial results.

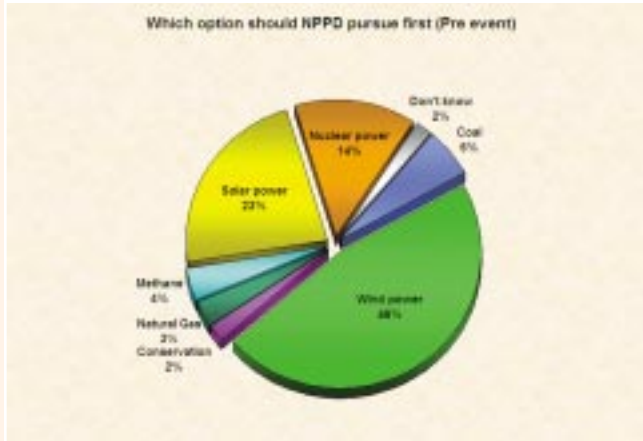
Chart H depicts the percentage of participants who selected each of seven energy source options to be pursued either first, second or third. It shows both pre- and post-event results.

Most of the participants favored the development of renewable energy resources.

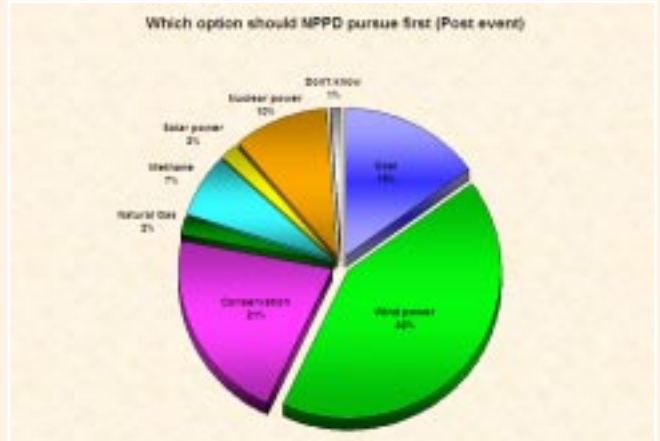
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**Chart F**



**Chart G**



As NPPD thinks about its long-term plans it may be helpful to understand what objectives its customers wish to meet through the development of such resources. In the post event survey, participants were presented with a list of reasons for their support of renewable energy. The survey asked the following question to explore these objectives:

*People might have different objectives they want fulfilled by having NPPD invest in renewable technology. One objective is to develop resources that will never be used up. Another is to create electricity in ways that produce little or no pollution. A*

*third is to provide customers with more stable costs for electricity by getting rid of variability in fuel costs. A fourth is to provide a source of income for farmers who can lease their land for wind turbines. A fifth is to help lower the future cost of renewable energy by increasing the production of renewable technology. Please indicate how you view the importance of these by taking 100 points and dividing them among the objectives in terms of how important they are to you. For example, if you think there is only one important objective you might assign it all 100 points. If you think all three objectives*

*are equally important you might divide the points evenly.*

There is no one objective that is seen as most important. (See Chart I ). Having sustainable resources, controlling pollution, stable costs, reducing dependence on foreign sources, using Nebraska sources, and lowering the future cost of renewables are all seen as important. Participants saw renewable energy not as a way of achieving one particular goal, but a number of distinct goals.

We mentioned that NPPD needed to have confidence that, if they considered the results in developing an energy plan,

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Chart H

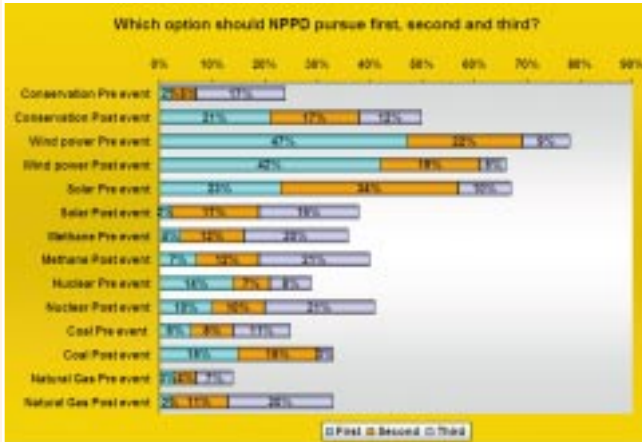


Chart I



customers who were informed on the issues would support it. Therefore, an important objective was that participants, advocates, management, and outside observers see the process as fair and that participants were given a balanced view of all options to be considered. Several questions in the post-event survey were asked


of participants in order to provide feedback on this objective.

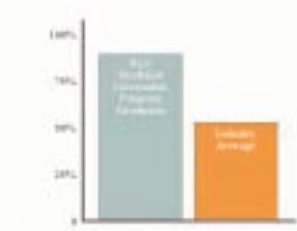
At the conclusion of the survey participants were asked to evaluate the customer meeting. The most impressive response concerned how valuable they considered the meeting to be. Almost two thirds (61 percent) gave the event the highest possible

rating, extremely valuable. An additional 32 percent rated it as valuable. Not one participant rated the event negatively.

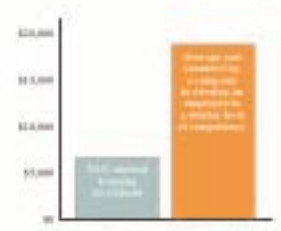
Participants were also asked whether they saw the meeting as fair or biased. The overwhelming majority saw it as fair. Finally, participants were asked whether the discussion materials were balanced or

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whether they favored some positions over others. Again, the vast majority saw the materials as balanced.

The NPPD board of directors approved continuing efforts to develop 30 MW of wind energy for NPPD and marketing of additional wind energy to interested entities up to a total of 75 MW at the site selected for development. One question left to be answered is, "If customers support 200 MW, when is NPPD going to build the rest?" NPPD does plan to continue to research sites for future development, but none is ap-

proved at this time.

The credibility this polling method brings to the decision-making process can make it a valuable tool when contentious issues must be addressed. This method can build public consensus, rather than resentment, by assuring fair and balanced information in an open forum and allowing a representative sample of informed consumers to voice

their opinions. Other contentious issues that might be well-served by this process could be development of rights of way for transmission facilities or development of energy conservation programs.

**About the authors: Will Guild is CEO of The Guild Group, a social science research firm in Austin, Texas. Robert Guild is chief operating officer of The Guild Group and Frank Thompson is renewable development manager for Nebraska Public Power District. ●**



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