Fresh Approach to Transmission Planning and Community Involvement

Bill Moye and Chris Kenny

No one doubts that the electric transmission infrastructure in the United States is antiquated and needs substantial improvements. Nevertheless, getting new poles and wires in the ground continues to frustrate utility executives, largely due to organized public and regulatory opposition. The "backstop" authority and streamlined procedures for new transmission provided by the Energy Policy Act of 2005 (EPAct 2005) have yet to be tested. State regulators have grown tired of serving as the referees in disputes between utilities and various interest groups. However, EPAct 2005 likely will make regulators even more anxious to exercise control over their own territories, rather than seeing their jurisdiction usurped by the Federal Energy Regulatory Commission (FERC).

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Getting new infrastructure built does not have to be a win-lose or lose-lose proposition. Several utilities have employed a new approach to community participation that has helped them forge new, positive relationships with affected communities. The result: controversial-but-necessary transmission projects have been embraced by regulators and the public.

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NEED FOR NEW INVESTMENT

Transmission assets are critical to the overall reliability and economic efficiency of the electric system. However, in the 1990s investment in this sector of the power business lagged even as electric demand grew. The Edison Electric Institute (EEI) estimates that while load grew at an average rate of more than 2 percent a year, transmission infrastructure improvements had a meager growth rate of only 0.5 percent a year.

Calls for new transmission investment are not new and were only made stronger in the wake of the August 2003 New England Blackout. Indeed, a recent research report says that grid spending is on the upswing around the world, with plans for billions of pounds, euros, and local-denomination dollars in new transmission construction spanning the globe.

According to the EEI, actual spending on new transmission was more than $4 billion in 2003, with total expenditures on grid improvements forecasted to reach $28.5 billion in 2004–08. The majority of this new spending "will support the integration of new generation additions through network upgrades, improve transfer capability between regions, improve grid reliability, and enhance local, regional and inter-regional markets."

EPACT 2005

The EEI's analysis certainly is in keeping with the intent of federal policymakers, who

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purposely wrote into EPAct 2005 several provisions to encourage more transmission infrastructure via incentive rate-making, federal siting "backstop" authority, and a Department of Energy effort to identify "National Interest Energy Corridors."

Another element of the federal push for steel in the ground was released in the form of the Department of Energy's National Electric Transmission Congestion Study. That report identified areas of critical congestion in Southern California and along the New York-to-Virginia megalopolis corridor. Lesser but still problematic areas of concern were noted in the San Francisco Bay area, in Phoenix-Tucson, in Seattle-Portland, and through New England to Boston. For all these reasons, state policymakers are beginning to accept the need for new transmission, though they remain very suspicious of FERC's new authority.

The reaction from media and environmental groups has been to treat these developments with suspicion and hostility. For example, DOE's congestion study was immediately blasted as a forerunner to the energy corridor process, which in turn was viewed as a not-so-veiled opportunity for the federal government to exercise eminent domain over private property and to invoke the Supremacy Clause to override state-level decisions.

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THE TYPICAL APPROACH

Traditionally, utilities employ a public engagement process for major projects that looks something like this: The utility performs the necessary studies to determine what facility upgrades are necessary and where the new facilities should be sited. Once an internal decision is made, the utility engages the public through a series of town hall meetings to solicit reactions from affected communities.

In most cases, the utility receives a strong negative reaction, leaving the utility to battle the public in the regulatory arena or in court. In many cases, the utility also is forced to litigate the project in the court of public opinion, which condemns the utility for its "overreaching" and "high-handed" tactics. Worse yet, the utility might choose to cancel the project altogether.

OLD WAY CLEARLY DOES NOT WORK

Why does the community often react so negatively to the projects? Certainly, there is a visceral, NIMBY ("not in my backyard") reaction. However, there are fundamental flaws in the process itself. The utility often engages the public after having made the major decisions that will affect the community, such as having the path for the transmission line already secured. Another problem is the town hall meeting format: it often draws those who are most in opposition to the utility, rather than those (such as hospitals, police, business leaders, and economic development professionals) who have a strong interest in reliable energy.

Finally, the public has a limited knowledge of how a utility system works. Some people literally think their house meter generates the electricity powering their home. A two-hour town hall or open house (or even a series of these) is just not enough time to educate the public on the realities of utility operations and to build the case for the project.

As one senior utility executive succinctly put it, "The old way clearly doesn't work."

AN EFFECTIVE NEW APPROACH

To overcome these and other problems with the traditional public outreach approach, STAR Group, a consulting firm that specializes in the design and application of effective stakeholder involvement methods for the utility industry, has developed a new, collaborative approach to community involvement on utility infrastructure projects that has achieved exceptional results in several regions across the United States.

STAR Group's Utility Search Conference (USC) process is based on two fundamental realities: first, community leaders with widely divergent viewpoints can and will help identify feasible solutions to utility infrastructure challenges when given a meaningful opportunity. Second, engaging these leaders early on actually provides the utility far more control and likeli-

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hood of success than more traditional approaches to public involvement.

How It Works

The process begins by establishing the utility project team, which consists of utility personnel familiar with the technical, political, and regulatory issues involved in the infrastructure issue. The project team identifies and invites leaders to join a leadership team that will consist of two utility representatives as well as high-profile community leaders who represent key stakeholder groups.

The leadership team performs several tasks. First, the team reviews the utility's analysis of the problem to gain an understanding of the issues involved. Then the team creates a "Focus Statement" concerning the situation to be used with the general public. This statement is one that is not filled with engineering jargon, but rather is one that the public can understand clearly. A paraphrased example of a recent Focus Statement is: "The regional transmission system has become increasingly constrained and is beginning to jeopardize electric reliability."

The leadership team then identifies the stakeholder groups that could potentially be involved in a public meeting concerning the problem. Typically, these stakeholder groups include city, county, and state lawmakers and regulators; environmental interests; emergency response; commercial and industrial users; and neighborhood associations.

Utility Search Conference Event

About 50 to 64 individuals are ultimately selected to participate in a two-day Utility Search Conference. All participants are advised that the purpose of the event is to develop nonbinding recommendations for solving the Focus Statement and that it remains the utility's prerogative to accept or reject the recommendations developed at the conference.

Participants convene at a neutral site. In some cases, the conference may begin with an evening event hosted by the utility at which a guest speaker addresses the audience on an industry topic of general interest. From there, participants are asked to talk about more regional and local issues that may not—but often do—relate directly to the Focus Statement. The group also develops an historical timeline of key events that have given rise to the Focus Statement. These exercises enable participants to see the Focus Statement in the broader context of historical and regional trends, rather than simply within their own perspectives.

Participants are organized into a series of small and large "mixed" groups, meaning that each group contains no more than one individual from each stakeholder interest. Groups are challenged to develop two alternative statements concerning their community's future. The first, the "Probable Future Statement," describes what participants feel might happen if nothing were done to address the Focus Statement. A recent example is: "An increase in blackouts, along with mandated and natural limits on electrical use, have led to increased threats to public safety, the environment and the regional economy, with vulnerable populations most at risk."

Similarly, they develop a "Possible Future Statement," which the entire group feels would reflect the impact on their community if the Focus Statement were resolved satisfactorily. The Possible Future Statement developed as the corollary to the Probable Future Statement example above read as follows: "We have an affordable, efficient, and reliable power supply and transmission system that is environmentally and socially responsible and supports and provides for a vibrant local economy. This system is supported by a transparent and effective planning and permitting process that fosters innovation."

Both of these statements reflect community-wide values and recognize that solutions to the Focus Statement cannot be isolated to one stakeholder group's perspective. More important, the Possible Future Statement—which becomes the focus for the remainder of the conference—represents a shared vision that each participant is motivated to achieve. As a result, all stakeholders are fully engaged and willing to take part in developing recommendations that will move the community forward.

For the remainder of the conference, participants explore and develop feasible options for resolving their energy system situation. Because the utility is an active participant in each step along the way, the term *feasible* necessarily takes into consideration the regulatory, financial, and

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ratepayer impacts that each considered alternative requires for implementation. Alternative ideas are considered, debated, and moved forward or tabled. In the final step, participants consolidate their ideas into four or five recommendations for the utility's consideration.

At the conclusion of the conference, a senior utility executive as well as members of the leadership team gather to hear the recommendations and to ask questions. The utility executive then has the opportunity to state the degree to which the utility will support all, some, or none of the options presented. This exercise is extremely powerful because it reinforces the value each participant feels in giving up two days to attend the conference and also underscores the utility's commitment to the process.

Community Working Group

Once the participants are aware of which recommendations the utility is willing to pursue (or at least investigate further), a 20-person Community Working Group (CWG) is formed. The CWG meets monthly for approximately six months to pursue each of the recommendations developed. The group often requests additional information, including presentations by independent experts, so that they feel they have received unbiased information. This information is gathered and distributed to CWG participants prior to each meeting.

Finally, the CWG hosts a number of open house meetings in potentially affected communities in order to obtain additional input from the broader community. After gathering this additional input, the CWG meets to evaluate the information received and to make its final recommendations to the utility.

Exhibit 1 is a flow diagram of the overall process.

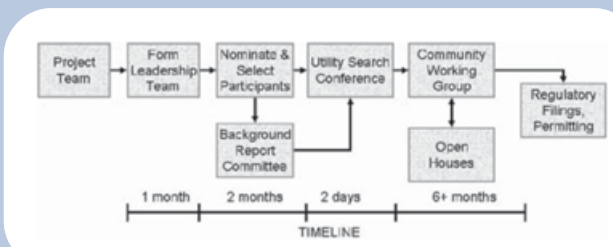
CASE STUDIES

The Utility Search Conference approach has been used where older approaches have failed.

PNM's "Project Power"

Public Service Company of New Mexico (PNM) faced a significant challenge: the load growth near the north-central New Mexico communities of Santa Fe and Las Vegas had reached a point that capacity would be necessary. Following its traditional approach to such issues, PNM conducted the necessary assessments, hired an engineering firm, and conducted a National Energy Policy Act–style approach to outreach. Feeling that it had done what was necessary, PNM even began constructing the line.

Exhibit 1. Diagram of the Utility Search Conference Process



Unfortunately, PNM's approach had actually galvanized opposition to the new line. One landowner sued PNM and, after years of litigation, stopped the project in its tracks. PNM had spent 12 years and $15 million, with no line to show for the company's efforts.

With power demand continuing to mount in northern New Mexico, PNM turned to STAR Group. Bill Moye, STAR Group's president, said, "While I assured PNM that the process could not guarantee a specific outcome, it was highly probable that, assuming PNM had correctly identified the capacity shortage and the related need to build a new transmission line, this would be reflected in at least one of the recommendations."

The recommendations included upgrading the existing transmission lines, conservation, and developing new distributed generation sources. Significantly, STAR Group's process was so effective that the recommended transmission line project received unanimous approval from each of seven regulatory bodies—a result that was unprecedented in PNM's experience. Project Power is now fully operational.

Roger Flynn, then-COO of PNM, credits STAR Group's approach with the project's success: "STAR Group provided a new medium for

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exchanging information and ideas. The end result was a better set of alternatives for transmission-line routing that both PNM and the public were willing to accept. Also, we got a better understanding of long-range possibilities for alternative energy sources and conservation."

Vermont's "Southern Loop"

In Vermont, a section of transmission line known as the "Southern Loop" spans 66 miles between the towns of Bennington and Brattleboro. Central Vermont Public Service (CVPS) engineering models indicate that if no additional investments are made to improve the Southern Loop, as little as 5 percent growth in electric demand may exceed the physical capability of the Southern Loop to deliver power to all customers during times of peak demand.

Following a nomination process that identified over 200 qualified stakeholder representatives from across the region, the Southern Loop Utility Search Conference was convened in January 2006 for the purpose of identifying recommendations to the following Focus Statement:

> Southern Vermont electrical transmission facilities have limited ability to support increased electrical demand and are unable to withstand failures of, or to have preventive maintenance conducted on, key components at present demand levels. The reliability of the regional bulk transmission system that connects southern Vermont, southwestern New Hampshire and northwest Massachusetts is at risk at existing demand levels, with increasing reliability risk as regional electrical demand levels increase.

The participating stakeholder representatives developed several nonbinding recommendations, including agreement that a synchronous condenser (CVPS's proposed interim solution) should be installed as soon as possible and that one of two possible transmission lines (Vermont Electric Power Company's [VELCO's] proposed solution) should be installed to help stabilize Vermont's electrical grid. Additionally, the group recommended that demand-side management and distributed generation opportunities be explored in much more detail and that steps be taken to improve the statewide electric transmission planning and policy process.

Twenty individuals signed up to serve on the Southern Loop Community Working Group. With STAR Group's assistance, the CWG met on seven separate occasions to examine in more detail the recommendations and alternatives developed at the conference. With additional input from several town hall meetings conducted throughout southern Vermont, the CWG recommended that a new transmission line should be built along VELCO's existing right of way to shore up the Southern Loop, that CVPS and VELCO should live up to their stated commitment to pursue all economically feasible distributed resources in southern Vermont, and that CVPS and VELCO should continue to pursue financial incentives for nontransmission solutions to energy issues.

CVPS has already filed a permit application for the recommended synchronous condenser, well ahead of the schedule that it anticipated before embarking on STAR Group's process. The other recommendations identified in the Southern Loop outreach process are in various stages of development. However, as one state regulator noted in private, any of the recommendations that ultimately are sent forward for approval already have so much momentum that regulators will be "hard-pressed" to reject them.

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CONCLUSION

If a utility approaches the public with respect and takes the time to educate and work with the public it can achieve a balanced outcome and stronger community ties. Additionally, while a Utility Search Conference may not be appropriate in all circumstances, it is an extremely effective approach. Indeed, in every case where the Utility Search Conference method has been used, at least one of the stakeholder-developed recommendations has included the utility's desired solution.

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