

THE HOLY CROSS ENERGY EXPERIENCE



Managing community issues facilitates the approval process for an underground transmission line and substation project

BY DR. JAMES A. KENT

As you turn off Highway 82 onto Brush Creek for the seven-mile drive into Snowmass, Colorado, you cannot help but be struck by the expansiveness and beauty of the landscape. This is no accident. The citizens of this small resort town assessed themselves over \$8 million in the past decade to insure that this pristine entrance maintained a scenic corridor with no unnatural physical obstructions. As a result, it is easy to be impressed by the fact that there are no power poles and overhead power lines.

STEADY GROWTH LEADS TO ZERO RESERVE

Holy Cross Energy (HCE), a membership electrical cooperative, was involved in a 10-year long battle with Snowmass to put a substation and a new transmission line in town in order to ensure reliability. This transmission and substation project had generated enough stress over the decade to have one of the senior members of the HCE project team remark, "I had hoped to retire before we had to tackle this Snowmass project again!" No such luck.

The Public Utility Commission (PUC) of Colorado insisted that the existing facilities had enough energy and capacity to service the peak load times. For Snowmass, that peak load time happened to be Christmas day, when the town bustled with visitors and busy retailers, hotels, ski slopes and restaurants - all operating at peak capacity. By October 2002, it became apparent that avoiding the reliability issue was no longer an option. The Snowmass/Aspen and upper Roaring Fork Valley's electrical delivery system was in jeopardy of failing unless a substation and transmission line were approved and built as soon as possible. The time had come to make reliability the foremost priority. This entailed building the new substation in and transmission line to Snowmass.

EFFECTS ON LOCAL COMMUNITY

Complicating HCE's decision to proceed at this time was a disruption caused by a different project. A large-scale commercial/residential project called Base Village had caused a stalemate among the

residents and political forces in Snowmass. Base Village approvals were stuck in the system and had created enormous conflict throughout the community. Positions for and against the project were taken, with citizens demonizing each other over their differing opinions. HCE had to face the harsh reality that they had to seek approval for their energy project at the worst possible time.

The HCE Board knew that they could use the power of the PUC as the final authority. However, they also knew that such an approach would do irreparable damage to HCE and the relationships they had nurtured with their co-op members over the years. The search for a non-confrontational approach led to our company, James Kent Associates (JKA), as we have a reputation for facilitating projects by reducing complexities created by the formal approval processes. This is achieved by increasing citizen participation and ownership in a project. HCE's embedded management ethic of listening to their membership was an ideal match for our less conventional citizen-based approach.

The HCE team assigned to the project was responsible for insuring reliability of the present distribution lines that ran to Snowmass from the Aspen substation, as well as corridor and substation site selection and construction. Our team was assigned the task of taking the project through the formal approval process to reduce exposure to the HCE team. We were also responsible for the informal community organization work.

INCREMENTAL COST OF UNDERGROUND LINES

By the time our company came on board, the HCE team had already designed seven overhead corridor options, as well as six overhead/underground options and three fully underground options. They had also selected five substation sites, one of which was on Pitkin County Open Space land, a site that posed built-in conflict right from the start, thanks to the controversial Base Village project.

HCE made it clear that all 48,000 rate payers in their coop would share the cost for a new substation and standard above ground transmission lines, as it would increase reliability for their entire system. If the local valley governments asked for all or part of the line to be placed underground, then they would have to agree to a rate increase to fund the incremental \$7.8 million cost required to bury the line. Something neither elected bodies were willing to politically risk.

With this information, our team went into the local community to gauge and analyze the decision-making dynamics and communication structure they used in resolving community issues and keeping each other informed. In every community, there is an informal communication system that operates through word-of-mouth

networks and central gathering places. Our mission was to locate those informal networks, as they are the key to understanding local traditions, beliefs and values that underpin and direct decisions. This would enable us to engage the local citizens. We realized that, if the citizens gained social ownership of the project, they would hold the elected officials accountable for their desires, thereby reducing or eliminating ungrounded attacks on the applicant - in this case, HCE.

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THE PITFALLS OF ISSUE LOADING

One of our first steps included identifying which issues already existed in the community. This was undertaken so that HCE would not inadvertently stumble into issues created by another entity. It is critical for a project proponent to take ownership of their issues and develop protection, ensuring that unrelated issues do not delay their approval process. This is called “issue loading” and can prove deadly for many projects. It is often known as the silent killer, as it causes projects to fail—not because of project weaknesses—but because of issues that have been loaded onto the project, over which there is little or no control.

The first task in the prevention of issue loading was to keep HCE from being pulled into the three-year fight over Base Village. The electrical reliability issue had been building for several years, and was completely unrelated to the Base Village project. It was not in HCE's interest to have the new substation and transmission line tied to this project comprised of one million square feet of new development. The conflict over Base Village came from the developer using a top-down approach for their approvals. This meant that they relied on a formal planning process instead of an informal “bottoms up” process where the citizens discovered for themselves the merits of the project. Of course, the top down process typically leads to citizens reacting negatively to plans and attacking the project.

ENVIRONMENT BUILT ON TRUST

The second task that JKA undertook was to ensure that the project did not get trapped in the historic, as well as current conflicts between Pitkin County and the Town of Snowmass. The project required approvals from both governmental entities, as the transmission line was to be located in Pitkin County and the substation in Snowmass. HCE hoped to avoid being used as fodder in furthering the long-time conflicts between those two units of local government. By understanding the issues that created the conflict, we were able to distance our project from those disagreements. Recognizing the source of these issues allowed HCE to avoid unintentionally taking one side or the other. It was essential for us to create an environment built on trust, which would facilitate working independently with the entities and help us avoid the need for joint sessions. While joint sessions often look efficient and time saving, these types of structured sessions can also be a trap, and applicants can be compromised through no fault of their own.

Working within the informal networks allows the project proponent to take the project directly to the people. To achieve a sufficient level of agreement and proceed on a major project, a community must first engage in widespread public discussion of the issues, specifically at a level where citizens' interests in their community is the core topic. Formal meetings that take place without informal networking only serve to attract those who already have a position on the issue. Working at the "interest" and not the "position" level is what actually generated the ideas that HCE ultimately incorporated into their successful approval process.



The GIS substation was placed on the site that the citizens chose. The 25 kv distribution lines feed from substation. The public hiking trail incorporated into the site plan is in the foreground.



The GIS substation was nestled into the hillside with site restoration in progress.

DISCOVERING COMMUNITY BELIEFS AND TRADITIONS

To help us align the transmission and substation project with the needs of the local community, the key beliefs and traditions of Snowmass residents had to be discovered. If we could associate the project with their culture wherever possible, instead of trying to force citizens to get on board with the HCE technical proposal, then we would be successful.

During this discovery process, four value systems were uncovered:

1) A Sense of Fairness

The overhead power line corridors were an issue from the beginning. Citizens did not want 40 to 60 foot power poles sweeping up Brush Creek - the same area where the community had already invested \$8 million for visual protection. Once the community saw the various overhead alternatives and discussed the routes, they concluded that the line should be underground. The main reason was cited as, "It would not be fair to subject a neighbor to a power line corridor that I would not want in my own environment." The citizens wanted to avoid any decision that would pit neighbor against neighbor, which had occurred with the Base Village project.

2) Taking Care of Their Own

As a companion to a sense of fairness, there were strong beliefs and practices that indicated residents mobilized to take care of their own issues. As related through stories, there was pride among the residents in their ability to rise to any occasion and identify ways to manage intrusions into their environment. Citizens of Snowmass proved to be independent, proud and not prone to asking for outside help.

3) A Passion for Facts

We held numerous chat sessions in private homes, and in every session, there were participants with calculators. Often times,

these were owners and company executives who had retired in Snowmass. Whenever we discussed numbers, we found ourselves being scrutinized, corrected and called to refine the numbers. This project actually had its own citizen-based mathematicians! They helped us calculate the surcharge formulas, and since they were part of the process, they took ownership and became project proponents.

4) Relationship to Geographic Place

We recognized early on that citizens know their community geography and terrain extremely well. Leveraging this “relationship to place” was critical for the project in these ways:

- a) The surcharge boundary was decided by the citizens to be the geographic areas represented by the current three distribution lines that bring energy to Snowmass from Aspen. In grounding the boundary area within these pre-existing geographic references, a rate payer fight was avoided. The surcharge would operate on a “Cost Causer Pays” basis.
- b) It was also clear that an air-cooled substation requiring two acres of land was not going to fit Snowmass. It is a resort community and two acres of land is a rare premium. Besides, no one wanted an “ugly” substation. Our team conveyed this to HCE and concurring with the citizens, proceeded to build a Gas Insulated System (GIS) where transformers could be housed in a building. This system came from Europe, along with engineers to build the station. The substation is now located in two small structures that look like barns with stone siding, tin roofs and wood trim. Only 8,500 square feet of space was used instead of 88,000 square feet.
- c) HCE had five alternative substation sites selected, all of them potentially controversial. The final site, not part of the original five sites, was identified by several citizens who knew the terrain and geography, and took into account that the Town of Snowmass owned land next to the town cemetery. The site turned out to be ideal, and there was no controversy since citizens were part of the selection process.

Both a “sense of fairness” and the “taking care of their own” attitude among the residents helped HCE work out the determination of the upper limits of a surcharge that would be assessed for the underground placement of the transmission line up Brush Creek.

The estimated cost was an additional \$7.8 million, which the residents would have to cover above and beyond their current monthly bills. This required an exciting discussion throughout the community, which later proposed a 15% increase over 33 years as a tolerable threshold and a 20% breaking point. HCE decided that, after much calculation, they would work to come in under the 15%



These towers bring the 115 kv line across the Roaring Fork River where it goes immediately under ground to begin its seven-mile journey under Highway 82 to the GIS substation.

mark. HCE announced in April of 2006, to everyone’s delight, that the actual surcharge was 11.447% - well below the 15% threshold and significantly under the 20% breaking point. To date, there have been no complaints of the added amount on the monthly bill, once again confirming that people have a sense of ownership over project decisions when they are allowed to participate in the process.

SUMMARY

With the citizens taking social ownership of the project, all disruptive issues were avoided and there was no opposition at any of the formal hearings. The project was completed in December of 2005, when the substation and transmission line were energized. A local company completed the underground corridor work, primarily because they were sensitive to the fact that they were working in a seven-mile stretch of land that accommodated high levels of traffic and environmental integrity. A local architect designed the substation, and a seven-mile bike path costing \$900,000 has been built on top of the right of way, thanks to funding from the Pitkin County Open Space fund. Citizens of Snowmass currently take visitors to see their small, intimate and attractive substation.

The success of the substation and underground power line project is the result of Holy Cross Energy taking a collaborative approach to project approval. As the HCE team said after the approvals from both governments were final, “In the end, we could have legally persisted and could have been the last one standing in a terrible fight. But this way, we all feel good about each other and the project, and we have built long term relationships and learned from each other — citizens, government and HCE. We at Holy Cross have enhanced our commitment as a co-op to ‘listen to our membership.’ ★