Transmission Planning: Lessons Learned

California is embarking on a bold process to plan the electric transmission system of the future. The state has set an ambitious goal—to expand the transmission system in order to accommodate large amounts of electricity from renewable energy resources by the year 2020. To accomplish this goal, it’s important that we learn from past experience.

The renewable transmission planning exercise has been given the awkward name of Statewide CREZ Transmission Initiative—SCTI. (CREZ stands for “competitive renewable energy zones,” a moniker borrowed from Texas.) It builds on lessons learned from the recent planning for Tehachapi, Palo Verde-Devers 2, and the Sunrise PowerLink.

Perhaps most importantly, the transmission initiative will be coordinated by high-level regulatory representatives, and hopefully also from publicly-owned utilities. The primary role of this coordinating committee is to ensure that the plans which emerge satisfy the needs of the respective entities. No less valuable is the ability of the coordinating committee to identify peripheral issues that threaten to sidetrack the planning process and address them in the appropriate venue.

My colleague Dave Olsen and I are facilitating the transmission initiative process on behalf of the Center for Energy Efficiency and Renewable Technologies under contract with the California Energy Commission. We are encouraged by the enthusiastic participation of the commissions, the California Independent System Operator, and the munis—a change from some previous planning efforts. An important lesson evidently has been learned.

The second lesson is that all the important stakeholders must be meaningfully involved from the beginning of the process. The Palo Verde-Devers 2 transmission line experience vividly demonstrated what can happen if a crucial player—especially one like the Arizona Corporation Commission with veto power over the project—is left out of the process.

Unfortunately, stakeholder “involvement” often means little more than holding a meeting to review a draft of the final report after the process is 99 percent complete. To be meaningful, stakeholders must be able to have a say in the planning assumptions, how data is to be collected and used, schedules, deliverables, and a host of other concerns.
The goal of any planning exercise is to produce a plan that has the widest possible acceptance. Consensus is the ultimate goal. Consensus is very difficult to achieve, of course, and it is impossible if all the important players are not at the table.

Lesson number three is that good planning cannot be rushed. It takes time for participants to consider positions, consult with constituents, and develop compromises. The transmission initiative has been fast-tracked since lead times for transmission projects are long. But, like bread dough rising, haste makes the final product tough and indigestible. My counsel to all the participants is to hurry patiently.

The transmission initiative process will proceed in two phases. The first task is to prepare an assessment of the major competitive renewable energy zones in California and neighboring states and to rank them according to benefits and costs, including the estimated cost of providing transmission access. Armed with this information, some official entity—it's not clear which entity this is—must make a decision about which zones are to be developed. Tehachapi was the consensus low-hanging fruit, and that project is now underway. What resource areas should be developed next?

When that decision is made, detailed transmission plans must be developed for the chosen CREZ and moved into the approval process. All in all, it's a daunting task, but an essential one if the state is to meet its greenhouse gas and renewable energy goals.

Initial transmission initiative organizational meetings started this month. Utilities and regulatory agencies have been represented, but this group quickly must expand to include renewable developers, environmentalists, state and federal land management agencies, and others. My apologies if you have heard of this process and are interested in participating but have not yet been contacted. We intend to make the process as open and transparent as possible, so please be patient.

I must confess some reluctance to take on the task of facilitating the transmission initiative process. It's not what I had in mind for my sunset years up here in Boonville. But working to produce a consensus plan is a good use of my Quaker heritage, even if I cuss about it more than they would. I'm sure there are more lessons to be learned.

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