



Community Advisory Committee Meeting #4

Idaho Dept. of Fish and Game Regional Office
318 South 417 East in Jerome (U.S. 93 Business Park)

Thursday, March 13, 2008

Results

Meeting Purpose:

- *To continue education regarding Magic Valley's electrical system function, condition and needs*
- *To confirm goals for the Magic Valley Electrical System*
- *To develop the initial range of alternatives to meet the Magic Valley's electrical needs*

I. Attendance

Committee

- Daniel Stapleman
- Valori Armstrong
- Rick Naerebout
- Brad Wills
- Bill Chisholm
- Charlie Howell
- Jay Loesche
- Dave Burgess
- Debbie Dane
- Debra Rose
- George Urie
- Jane Kollmeyer
- Ken Miller
- Rich Yankey
- David Mead
- Marlin Eldred
- Brian Olmstead
- Louis Zamora
- Richard Dunn
- Sara Cohn
- Jackie Zapf
- Tom Faulkner
- John Miller
- Richard VanZante

Planning Team

- Kent McCarthy, Idaho Power, Project Leader
- Dan Olmstead, Idaho Power
- Dave Angell, Idaho Power
- Bryan Hobson, Idaho Power
- Marc Patterson, Idaho Power
- Mike Pepper, KMP Planning – Facilitator
- Amber Buckley, Civil Science – Clerical

Other Idaho Power Employees

- Chris Punt
- Mark Lupo
- Mike Barrie

Review CAC Meeting #3 – February 14, 2008 – Mike Pepper

- Comments / Changes to the meeting results - None at this time
 - David Mead brought up the two Times News articles that had been recently published about Idaho Power and the relationship to plans by other entities to construct new transmission lines through the Magic Valley. Dan Olmstead provided an overview of these projects and described their relationship to the Magic Valley system and this process.
 - There may be lines coming in through Carey but this will not be part of the Idaho Power project. While Idaho power may be able to access power from these new transmission lines, these lines are not anything that the committee should be concerned about as this is not part of their planning process.
 - ***Additional Information Request: Can the committee get more information on Bonneville Environmental and Green Power Programs?***

II. Confirm Goals – Mike Pepper

- Discuss, revise and confirm goals and siting criteria developed from February meeting
 - See revised goals (attached) for review of goals changes from Committee discussion

Reliability:

Q: What is being done to make sure the areas that lack redundant systems don't go down in the first place? How dependable are those systems?

A: Some customers are on a radial line/single transmission line. For those systems, we do extra maintenance, but that doesn't eliminate the risk of losing power. The question that IPCo asks is "Do we (IPCo) want to spend the money to bring another line in to provide redundancy, or do we want to continue with the system as is, with its inherent risks, etc.?" It is an ongoing assessment of cost/benefit/risk.

Q: When Idaho Power has a long outage do you review that outage and put a plan in place to prevent that in the future?

A: We review the outage, and its cause, etc., but we realize we're not going to be able prevent all outages.

Efficiency:

Q: (In regards to the first efficiency goal) Does that include consideration for distributed generation to reduce the need for as many or length of transmission lines?

A: It could. We'll include text edits in the revised goals about distribution generation.

Energy Conservation

One of the goals of efficiency should be providing a public education process; people don't understand what their impact is on these systems and what programs are available to them.

Environment:

Goal #1 should state: Avoid "negative" impacts

Q: Recognizing that some negative impacts are unavoidable, is there some mitigation planned and implemented for these conditions?

A: There are some direct and indirect impacts which bring about mitigation issues. Part of the committee's purpose is to help determine options that may minimize undesired impact and minimize the need for mitigation.

III. How Idaho Power Plans for the Magic Valley – Marc Patterson

Q: Are you (Idaho Power) looking at water resources or other aspects that are limiting factors affecting potential build out?

A: Idaho Power has considered those but still base our projections largely on what population growth has been. We've seen areas that we thought would be limited by water but they're not. A lot of those issues (water, etc...) are beyond what we can plan for. Those things are considered but aren't used as defining factors.

Q: Do you (Idaho Power) ever work with cities on comprehensive plans for population numbers?

A: We gather data from jurisdictions and use that information as part of the planning process. It's interesting to note that some cities, including Twin Falls, use Idaho Power numbers in their comprehensive plan.

It is fair to say that the build out plan is flexible. If significant changes occur, such as the availability of new technology that affects the need for electrical service, Idaho Power will revisit these plans and build out projections.

Q: Can you (Idaho Power) explain how you would integrate major changes into the build out plan?

A: Idaho Power would consider bringing a group (this committee or another similar group) together to reassess the needs of the Magic Valley.

Q: How would you (Idaho Power) go about incorporating new technologies into the build out plan?

A: It depends on the technology. We (Idaho Power) would look at the ability of the new technology to affect the build out needs, do a cost benefit analysis, and engage the PUC in the determination of potential changes to the plan. The build out plan is on a ten year review cycle. The CAC may be brought back together to discuss potential changes in the plan. This is not a static plan.

Transportation changes and growth will definitely affect this plan. For example, as the cost of fuel goes up, people may not want to commute as much. Or the use of electric cars could cause an increase in the need for power. Essentially if electric cars come into play we (Idaho Power) will be exchanging the need for one resource (gas) to the need for another resource (power).

Q: Do you (Idaho Power) think land is a limiting factor for growth in the Magic Valley?

A: Yes. The Magic Valley has a large percentage of public lands, including forest service and BLM lands. Not all land in the Magic Valley area is available for development

Q: Do ethanol plants, like the one in Burley, use much electrical energy?

A: Energy use at those facilities generally isn't huge. They may use 1-2 MW.

Q: Did you (Idaho Power) have to build a new substation to accommodate the Burley ethanol plant?

A: Idaho Power doesn't serve that plant.

Q: How does the energy usage in the Mini Cassia area compare to the Treasure Valley?

A: The per-person kW demand for energy is higher in the Mini Cassia area than the Treasure Valley because of irrigation. This is true for the entire Magic Valley. The usage is high compared to the rest of Idaho Power's system.

Q: Do you (Idaho Power) ever get close to black out conditions in the Magic Valley?

A: Things are tight with the current situation on the entire Idaho Power system. When Idaho Power hit its peak last summer we had a number of days where, if we had lost a major transmission line or generator, we would need to shed some of the load and turn lights off, to reduce load by nearly 300

MW. At 4KW per home that's more than a few homes with no power. Idaho Power's system will be in this situation until about 2012 when the new transmission lines come in.

Q: Why don't we (Idaho Power) use brown outs?

A: First, Idaho Power uses the term "rotational outages". With all the irrigation pumps in the area that require a consistent high-level of voltage, "brown outs" would not provide a lot of benefit. Also reducing the voltage to irrigation pumps will kick off pumps and cascade to make the problem worse.

Q: How many hours do we actually get close to the point of black out?

A: There were approximately 100 hours in the month of July spread over 19 days where we were close to the point of black out.

Q: What about brown outs "rotational outages"? Are they an option in an area that is mostly agriculture?

A: When other power companies do "brown outs" they lower their load by 5%. Idaho Power may someday lower the voltage down to that level. Our plan is to operate at a constant voltage rather than at a couple volts below nominal value.

Q: Some utilities have arrangements with large customers (i.e. hospitals, manufacturing plants) where they can access their generators to help feed extra power into the system to help in emergency outages. Does Idaho Power do that?

A: Idaho Power is looking at that possibility and has reviewed the associated process. We have not yet incorporated those sources, and would also need to assess costs before incorporating those sources into the system during emergency situations.

Q: If you (Idaho Power) have to turn lights out somewhere how do you make the decision about who gets turned off, etc.?

A: There is an established program that takes into account hospital and school loads. The program within the energy control system knows exactly what our load is and distributes the outages at substations where there is the ability for remote control and adjustment. The outages are not selected specifically but rather distributed evenly to alleviate load.

Q: From a dairy standpoint we (dairies) have a perishable product. Does that come into consideration for shut downs on the system?

A: Local planners will petition for these areas. If power is shut down the rotational outages will be short and will roll throughout different customers.

Q: Would you (Idaho Power) notify power users before shut downs?

A: Yes, as much as possible. Idaho Power has run tests of the notification system and will call the affected customers (as much as feasible) or use media to inform customers of upcoming outages.

Q: Are the growth numbers on the build out plan based on population numbers or number of homes?

A: Growth for the build out plan is based on population, not homes. We take the population figures, come up with an average power use per person, and create our figures from that.

IV. Magic Valley Future Electrical Buildout Needs – Bryan Hobson

- Continuation / expansion of February presentation on MV future electrical buildout needs

Q: How do you (Idaho Power) figure load for new large facilities like the hospital, Wal-mart, or the new high school?

A: When we get into figuring commercial or industrial load, we look at existing fully filled commercial areas and use existing loads in built out areas as a basis for estimating load figures for new similar

development. We may add a little load for the new facilities but those numbers are based on current built out commercial or industrial areas.

Q: Where is Cassia County's electrical need/use addressed?

A: IPCo has included the number of IP customers only. As Cassia County grows, the number will get bigger but most growth is projected in TF County, Jerome, & Lincoln counties.

Q: Have you (Idaho Power) done anything in terms of determining the load reduction due to energy efficiency that is available now? What is the energy efficiency potential?

A: I (Bryan Hobson) haven't done that.

*Q: **Additional Information Request:** Can we get more information on the current energy efficiency that is available?*

A: IPCo will research this question and provide follow up information as available at the next CAC meeting.

Q: When you (Idaho Power) say that the planning for build out is flexible, what do you mean?

A: Flexible in this case means the size and number of lines, the size and number of stations, and how lines are routed, which is entirely up to the committee. All of these factors are completely flexible and can be changed anyway the committee would like, as long as the plan will work technically and operationally.

Q: Would the Filer distribution station potentially be like the Midpoint station?

A: Not exactly. The Mid-point station has and will have 500 kV lines running through it, there won't be 500 kV lines running through the Filer station. It would likely be much smaller than Midpoint

Q: Why are there more MW shown at the transmission stations (on the maps presented) than what is needed at build-out?

A: There is a lot more available power shown on these maps than 2000 MW (predicted buildout need). We (Idaho Power) don't want to be on the edge of meeting demand, where it might be necessary to shed load. As a result, a higher amount of available power is planned in the system to address times of peak use and also to allow for redundancy should a transmission line or substation be out-of-commission.

Q: Since most of the growth is around TF, why isn't the higher number closer to the higher load area?

A: The load will be growing throughout these areas. However, due to the density of development in and around TF, siting and developing any new substations outside and away from high population centers makes it easier to build the new infrastructure.

Q: Does the new substation on Pole Line count as a transmission station?

A: That is counted as a distribution type substation, rather than a source substation.

Q: Do the Eastern Idaho Rail Road corridors fit into the plan?

A: We do have existing lines in those corridors and that is an option for consideration in siting new infrastructure.

Q: When you (Idaho Power) increase the voltage, do you have to modify the existing easement?

A: Yes, the higher voltage lines require more right-of-way.

Q: Is there a difference in the height of the tower for higher voltage lines?

A: Yes, the higher voltage lines sag lower and require a higher tower to accommodate these lines. They also require greater height for safety considerations because the public must be kept farther from the lines.

Q: What size lines are used in the build out study?

A: 138,000 volt and 230,000 volt

Q: Is there a cost difference between installing larger lines big as compared to a greater number of small lines to deliver the same amount of power?

A: It varies. We (Idaho Power) can get numbers on that. It is not always a “half or twice as much” result. If one of the criteria that is important to the Committee is to keep costs down, that will be something to consider.

12:00 p.m. Lunch – catered on-site by Aramark Catering

V. Transmission and Related Components to meet Buildout Needs – Marc Patterson

- Parameters for transmission facilities
- Substations

Q: Does Idaho Power modify its line / infrastructure design to accommodate crop dusters?

A: Typically we wouldn't change the lines for crop dusters.

Q: The Pole Line power line is a 138 kV line. If you (Idaho Power) add another side to that would it take more right of way?

A: It may not take more right of way if the poles are initially built with the option for multiple lines.

VI. Initial Alternatives Discussion – *Understanding the combination of required components*

- Group work to understand the required combination of components and discussion of the initial range of alternatives

Q: Will these maps show road right-of-way widths?

A: No, we don't have that information available. Once the plan is in place, right-of-way can be acquired anyway. The committee doesn't have to plan around these existing right-of-ways.

Things to include on maps for planning:

- Designate areas to stay away from for some specific reason; environmental, zoning, residential, etc.
- Designate land that Idaho Power already owns
- Identify any highway corridors that are planned for future expansion that we want to coordinate with in planning project improvements
- Illustrate the lines coming through Wood River to the Magic Valley.
- Public/private land ownership

Additional visuals request: Photos or schematics of what substations will look like and how much land the different substations use.

VII. Next Steps and Wrap up / Adjourn by 2 p.m. – Mike Pepper

- Final discussion
- Next CAC meeting #5 – Thursday, April 10th / **10 a.m. to 3 p.m.** / IDFG Regional Office
 - Planning process review, orientation and additional education as needed
 - Confirm updated goals
 - Review buildout needs
 - Distribute and review background / mapping packets
 - Review steps in identifying / developing alternatives
 - Presentations on planned Regional Power Infrastructure
 - SWIP and MSTI: planned major transmission infrastructure systems
 - Mapping work to develop the initial range of alternatives

- Note: the following individuals need copies of the ppt handouts for CAC Mtg #4\
- Amber Buckley, Marlin Eldred, Mark Lupo, Chris Punt, Mike Pepper,