

Joint Financial/Resource Modeling Working Group – Jan. 4, 2012

City Staff:

Heather Bailey
Jonathan Koehn
Yael Gichon
Kelly Crandall
Kathy Haddock
Andrew Barth
Cheryl Pattelli

Non-City:

Sam Weaver
Tom Asprey
Ken Regelson
Steve Pomerance
Pete Bastion
Ted Weaver
Puneet Pasrich
Leslie Glustrom
John Glassmire
Steve Drouilhet
Debbie Sandor
Eric Gorsinger
Joshua Putterman (on phone)
Frank Selto
Greg Eisenberg
Brad Davids
Zane Selvins
Edie Zadona
Alison Buchell
Dan Powers

CALENDAR and KEY DATES – Heather Bailey

- Timeline
 - Feb. 26 – Preliminary recommendations to council
 - Preliminary engineering estimates are in and more are coming in
 - Preliminary on stranded costs by end of Jan. if possible
 - Draft memo to council ready by Feb. 8
 - Vetting draft between Feb 8 and 19
 - Feb. 21 – Memo will be issued to public
 - Whether we can meet metrics
 - Scenarios for moving forward – what is possible above and beyond metrics
 - Council will provide feedback on Feb. 26
 - April 16 – Staff returns to council
 - Allows for a larger/longer public input process

- Modeling will continue between Feb and April meetings
- We will move into Phase II work with modeling after April 16 Council meeting
- Charter requirement for independent review
 - After council makes decision, city will begin soliciting proposal from potential third party review candidates
 - 2nd quarter 2013

OVERVIEW OF MODELING PROCESS

- Flow chart of modeling (handout)
- Three spreadsheets (handout) – available on Basecamp
- Yael – background on models (load)
 - Using historical Xcel data to plug in inputs and find profile
 - HOMER will use this to do many things
 - Projections over a 20 year period
 - HOMER will feed financial model
 - Decision analysis model (DPL) will also be used
 - Working with IT to develop macros for interface between models
 - FRANK SALTO– Does load model also factor in alternative rate structures?
 - YG – No. It’s not a demand analysis. Financial model does rate structures.
 - SAM WEAVER – Sensitivities – When you make changes to pricing, you could go back to the HOMER point and say you might make a different decision. How do you incorporate that?
 - KC – We’ll do initial sensitivity analysis within HOMER to begin. DPL will allow for final run of sensitivities at the end.
 - PETE B. – Who’s doing data purification? IT?
 - YG – We’re determining that right now. Meeting early next week.
 - JK – Good point. Interface between models could be “pinch points.” We have people making sure the transition between models is seamless. We’re not making rates here, we’re refining our data to give a better picture.
 - JOHN G – Load models also provide wholesale pricing for HOMER model
 - JK – We’d like to run a similar analysis in a different model to see those results from different model software.
 - STEVE P – Is someone looking from the outside on how we can present that to the city?
 - HB – We’re looking at this every day. How do we distill this down? We have ideas and we’re looking for others.
 - SAM W – Reference pricing, how is that going?
 - PUNEET P – We’ve worked on that with John G and a few others for a while and have a general idea on what they buy, supply and produce power for (Cost). Feel fairly good about the numbers we’ve compiled. Close to what the market is showing.
 - PETE – Is anyone contacting western area power lines?
 - PUNEET – We probably wouldn’t be able to buy power from WAPA
 - SAM W – Did you talk to an IPP?
 - PUNEET – We haven’t but we could.
 - JK – We should revisit that aspect. We want to make sure we’re going out to local entities. Nils has been talking with many people to make sure the models are accurate.

- TED W – We’re starting with Xcel’s numbers.
- SAM W – Need to answer what Xcel’s costs are and what other people are paying.
- STEVE P – How will all of this work in a decision process? This is a comparative process, we’re not looking at absolute. I don’t know how you’ll integrate the Xcel vs. other scenarios?
- SAM W – First scenario is just Xcel (BASELINE). Second is all gas/renewable grid. Third is same emissions. Fourth is push as far as possible. Fifth is “tapering.”
- HB – Schneider is also looking for what we need to have in place to have the utility of the future. What that would cost to take us to the next level.
- KATHY H – Schneider – Reliability analysis will be conducted. Very broadly for future utility.
- SAM W – The point of having HOMER is that it can optimize. The baseline model is just a spreadsheet.
- JOSHUA P – Outwardly, where is Schneider in the resource plan allocation?
 - HB – They will be continuing to lay out recommendations for things we can do moving forward. They will work with city in Phase II once we have refinement. They’re doing the technical engineering piece in support of the process. Estimates of costs based on different engineering design scenarios. Most optimal separation plan.
- **TOM ASPREY provided update on his work**
- **YAEL on Financial Assumptions (handout)**
 - Financial group has worked on it for a week+
 - All of the inputs in model except for confidential (acquisition, stranded costs)
 - We’ve made our best guess on sensitivity of each (high, medium, low) assumption
 - FRANK SALTO – PILOT – What needs to be deducted from revenue to meet that obligation? Should we be above or below the line?
 - YAEL – What’s in there now may be changed based on outcomes of ongoing conversations. These are political/policy decisions.
 - SAM – Stranded costs. You have a figure of \$32, is that true, or are there other costs that need to be input?
 - YG – It is fairly accurate, but there are a few things we can examine a little finer. We will do more work to try to make it more accurate. This is just the physical plan. Not the systems. This is the plant, not the people. Plant includes items like physical inventory. There will still be start-up costs if you have an outside company manage the facilities.
 - PETE – Utility legal start up costs.
 - YG – Doesn’t include litigation. Just organizational.
 - STEVE P – If borders are uncertain, how does that affect fixed and variable costs?
 - YG – We’ve used data from other munis and our own to determine a good estimate and try to scale that to make it more accurate. This might not have that much impact. Some of these numbers might shift a little, but we have pretty good data.
 - KEN – Billing – Is a large expense. What’s the water utility billing look like? What are their expenses? Why would you need more than what you already have?
 - HB – Electric billing is much more complex. Not similar to a water utility. There are many factors/issues that go into this side of the billing process? Most cities combine for efficiency. There is a lot more outreach that goes into electric billing.

- KELLY C – Anywhere it says .5 FTE means it's sharing with water utility personnel.
 - KEN – I think our water billing is highly complex and they already do many of the things that an electric utility billing system needs.
 - Transmission cost assumptions – are they really kilowatt hours per month?
 - YG – Yes. Nils has broken this down and examined.
 - STEVE D – How do you intend to apply these cost assumptions and take them down to the modeling (HOMER)?
 - YG – Nils would be able to answer that. We can discuss further.
 - We need to make sure ancillary transmission cost are all covered and accounted for.
 - TED W – PILOT – Starting with 2011 data?
 - YG – Yes
 - TED – Because you're part of Xcel, that money is all subsidized. Make sure that flows correctly. That it's the money that coming in and not the money that's coming out.
 - SAM – We ran that last year with HOMER. We may split those apart this year using HOMER.
 - TED – Example - If Xcel's paying 50%, Boulder's paying 10% because the rest of their customers are funding it. We need to get this right. Looking at efficiency and renewable. We need to follow costs all the way back to the source.
 - LESLIE – We want to be able to answer this question of subsidies and provide a clear explanation. Provide a historical evolution on this. Then and now with performance based measures Xcel is using. Xcel is in a different spot now than it was when the programs started.
 - KEN – Costs for purchasing REC contracts factored in?
 - KATHY – We don't know exact, but it will be factored into the model.
 - KEN – Can we have the names of the categories for “confidential figures?”
 - KATHY – It's listed now as acquisition costs. Not in the list now, but will be added.
 - YAEL – We will make a box for those that say “confidential” so you know.
 - JOSHUA – Any preliminary pre- or post-environmental impact statement that will be used? Will one be developed?
 - HB – It makes sense, but it's not required in this situation. Not at this stage.
 - JK – During appraisal of system, later this year, is where we'd look into this with existing equipment.
 - PPA Heather – You enter into a contract to get your energy from a specific resource. You're depending on someone else to provide your power to you for a portion of time. This is the lowest risk option for a startup because you don't know what you want right away and gives you most flexibility. You may pay a premium, but this makes most sense in short-term. Once you're established, you can mix it up with power on the spot and PPAs.
 - SAM – Interest rate assumptions? –
 - Cheryl – Our advisor has provided this information.
- **RESOURCE MODEL**
 - JK – We need to get blank boxes filled in.
 - JK - We are going alter load modeling. Impact of DSM (DG) and what impact that would have low, medium and high. Second – Load model is going to change slightly based on service territory boundaries. We're looking at service area. It will affect load profile.

Need to make sure it's accurate when it goes into the model. That may tweak numbers in the future. We need to get a good cost of coal. Leslie has provided and Nils is working on.

- JK – Solar – Assigned to Debbie Sandor. She is working on this and will send ASAP. Will include utility scale as well as community scale.
- JK – Email sent yesterday has assignments. Will resend. Please get your information to us by early next week, Tuesday if best.
 - **ASSIGNMENTS**
 - LOAD – Ted and Brad on impact on DS efforts
 - CARBON TAX – Kelly
 - Natural Gas – Sam, Puneet
 - Wind – Sam, Leslie and Dave Corbus
 - Solar – we just talked about – Debbie
- Ken and Sam – we need to update model with new battery cost data ASAP. Ken – I don't have battery costs yet, so I can't enter.
- **UNCERTAINTIES – KELLY CRANDALL**
 - Handout provided
 - First table is big list
 - Second table is major uncertainties we're selecting to use
 - Not listed in order of significance – Top five we'll look at in financial model and then in HOMER
 - We're ok with a reasonable high and low, but we're working on a curve that will be more accurate in the future.
 - STEVE P. – These are external inputs we are uncertain about? There are some on here that we can control, so I don't think they're "uncertain."
 - We're working on all of these now and they may not be uncertain down the road. These are underlying uncertainties.
 - PETE – Need to categorize the uncertainty list.
 - LESLIE – Explaining to public. We're doing so much more with exactly the same of money or less as Xcel. The benefits of the new system will be exponentially better than what Xcel is providing and can provide. There isn't a risk free path moving forward. There are risks with both staying with Xcel and with Municipalizing. Xcel has uncertainties too. We're looking at them as well.
 - SAM – Colorado is responsible for 2/3 of Xcel's shareholder profits and we're not their biggest service area. Why are we paying a majority of their profits/shareholder money?
 - How we lay out the results is very important. It might be beneficial to have a frame or outline as to how it might look so we can understand how to fill it in.
 - JK – This group should be thinking about that because your input is valuable and we want to form this so we all can have an intelligent conversation about this.
 - KC – Next steps
 - Will check with people as we move forward. Will be working behind the scenes.
 - YG – Financial next steps will go out over Basecamp
 - JK – Resources – fill in the blanks

- PETE – Will be organizing tours of power plants. Will post availability on Basecamp. First one is Jan. 17.
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