Resource Modeling Working Group Notes from Dec. 4, 2012

Introductions

Jonathan Koehn
Yael Gichon
Kelly Crandall
Kathy Haddock

Sam Weaver
Tom Asprey
Nils Tellier
Ken Regelson
Puneet Pasrich
Josh Kuhn
Steve Drouilhet
Debbie Sandor
John Glassmire
Peter Lillienthal
Dave Corbus
Gregg Eisenberg
Ted Weaver
Alison Burchell

Issues/Items since last meeting

JK – Facilitator will not be with us again, but went over some of the points and ground rules and process as a reminder. All of these items are available on Basecamp website.

JK – Discussions start within the group and are continued within before anything is agreed upon and made public

JG – Homework primer and Doodle poll ending this week. All info is on basecamp. Please fill out poll today.

Discussion of working group parameters and scope.

Ted Weaver – Ton of work we could do, but not much time. The more we do, the harder it will be to send back to council. Four or five difference on communicating value. Differences between Xcel and Muni operated – Finances are cheaper – power supply is different – costs: lose subsidies on DSM and have to pay stranded costs. Obligation to show we can do same services for less, better resource plan, trade-offs (could be a distraction) – the more we understand the message and stick to it, the better the final product

Sam – Only one piece of the puzzle – We need to talk about prioritizing – We need to show we can meet Charter requirements

Kelly C – Consultant (Stratalytics) will help us prioritize key factors.

JK – We need to focus on what's essential. We need to provide council with the information they need to make a decision on how to move forward. We can't provide it all, but we need to provide enough.

JK – Will provide charter requirements and associate metrics to group so they know what requirements are to move forward with study

Josh – Do we have a range of stranded costs to insert into model? That's a huge factor.

JK – We have a range we used from last year. FERC attorneys are working to reduce that range to a smaller set.

Report from Resource Scenarios Sub-Committee – Handout provided

Sam W – Did not have resource deployment plan – Complete with multiple scenarios (x5) and timelines (See handout page 2) – Legal strategy will affect scenarios –

Sam W – went though handout developed by Scenario Planning Working Group

Sam W – Goal is to come up with wholesale costs so you can try to see what will work in financial model. HOMER will work it out themselves.

FEEDBACK –

Peter L – Clarification – It appears you are using parity in two separate ways. This is true. Emissions parity and rates parity. #5 – Maximizing emission reductions is unbounded. Should impose a cap. (A cap will be imposed at some time.

JK – We must be clear about all scenarios in order to inform council.

SAM – How much fugitive methane will we allow in the system if we rely on gas.

Dave Corbus – New report on fugitive emission coming out – It is out. Will send to Basecamp – Emissions parity and emissions comparison – We need to look at changes to emissions from Xcel and not just Boulder. HOMER Model will capture the change in emissions.

Peter L – "Bubble" – simple and complex – When we turn on light, energy is being generated to do that outside of Boulder – IF we put more renewables on system, someone's generators are ramping up more quickly.

Steve D – Take a broader view of the system and include conversions of electric vehicles in Boulder county transit network and possibly passenger cars to create different scenarios.

Sam – Bottom of third page shows will talk about EVs. Talk about bringing batteries on and how to cost that.

Sam – Decision Analysis group will help guide our work.

Peter L – Phasing – Between now and March we will see if we can meet Charter requirements. After that, we can get into deeper discussions about opportunities.

SAM – We should continue this conversation on scenarios (x5) separately and bring it back to the group. Generation options handout should be reviewed, but not sure who can do or is willing to do this. Just review it for now and provide feedback to consultants.

Peter L – Process to vet numbers? We don't want to make up numbers.

Sam – The spreadsheet is from the citizen group. Best available numbers or estimates from various sources.

Ken – It's what we thought we could conservatively justify

JK – We need to understand what needs to be refined and how/who should refine it.

Peter – We can take care of the model, but we need you to provide data

Sam – If you have NREL reports, you can drop that info in. We should use Xcel numbers as a start. NREL is a good source. Citizen's group also provided quality data. Their data sources are reliable. Maybe Tom A can do it since he's documenting it. Consultants do some, Tom does some, and others help.

David C – We need a champion to do this. Someone has to take up the lead.

JK – We also need PPAs and transmission costs.

Sam – City should supply PPA because they did indicative pricing

Ted – Can the city pay someone to do this? We want to get it right.

Sam – This spreadsheet took a lot of work. Tom should spearhead this. With help from NREL (Peter) and Consultants.

Sam – Subcommittee will review the work and then bring it back to group for full vetting. Sub group will need to assign people. Biomass needs to be modeled, but we need to find a subject matter expert.

TED – TO the extent that we deviate from XCEL will cause trouble.

SAM – Say outloud that the scenarios need to be analyzed before March and the options should be vetted line-by-line

Peter – 1 through 3 are legitimate – 4 and 5 are more than we need to know before we decide to move forward

Ken – Nothing says that we need to do 4 and 5, but we should to make it an inclusive process and to provide all answers to open questions

Kelly C – Everything we've brought up is important and will be discussed and answered, but we need to focus on those things council will need to know in February and March

SAM – We expected Xcel to hammer us on everything, but they didn't look at resources, only stranded assets and condemnation costs. We were conservative enough.

ACTION – Adopt proposed model scenarios – No one in opposition.

FINANCIAL INFO FROM YAEL –

- Met with financial advisors last week, some of this group was there
- Not going into details but you can contact me later
- Won't be able to release the financial model due to litigation issues
    - Kathy Haddock explained reasoning
        - This equates to a hostile takeover
        - We're concerned that city documents in the public hands, it will be presented as the city's product and we'll have to do forensic research to determine why you came up with something different than the city
        - This will take a ton of time and is a litigation nightmare
        - Could confuse judge and jury, and that's how you lose cases
        - We want to give you all info you need
        - We can figure out what you need and how we can provide that information
        - We're not worried about info or assumption
        - Worried about litigation strategy and Xcel taking a long time to delay the process, which hurts us

SAM – Finacial group would like to use a different non-city model –

Kathy – That is fine

Yael – Could cause problems because we'll have a model that the city didn't vet

Sam – We need to give Nils something to model to. It's independent. It's not a lightweight model. Frank Salto's model is solid. It allows for feedback to groups.

Yael – We'll go through key assumptions in financial group.

Nils – TO what extent would it cause a conflict if I provide input into non-city model?

Kathy – That's ok. We just have to be clear what is the city's and what isn't. We don't want our own documents used against us.

Sam – I think that's fine. We run an outer process and you run an inner. Our process can help yours.

Ken – Non-city work on Basecamp. Is that a city-document?

Kathy – Should be ok. And not a city-document. It's available for all.

Ted – Do we need to lock HOMER down?

SAM – Just the city's version. We can have our own. We can shadow.

Kathy – HOMER's model doesn't include city strategy. HOMER's model is their work. They're not doing anything differently for Boulder.

Peter – Would like clarification on this from Kathy. HOMER can separate files. Probably should have a conversation about this.

Kathy – Will follow up with Peter and Yael.

TOM – Would a session where we don't have the model or touch it, but could we give the city inputs we'd like you to run in your model and get feedback?

Kathy – We're analyzing that and will get back to you. Could be possible.

KELLY and DECISION ANALYSIS INDICES

Greg Hamm with Stratelytics on speakerphone

Kelly outlined role – formalizing decision making and identifying risks and ensure we're working with good information

KELLY – We want to identify all risks and opportunities. Using Energy Future goals adopted in 2011.

KELLY - 2 tasks to work on

- Reducing carbon emissions
- Providing greater say about energy supply

GREG – Described process and what Resource group is doing that has already laid out starting point and framework for identifying decisions

- Elements of decision analysis model

QUESTIONS –

How will this process be used?

- When we make recommendations, we have to have appropriate framework for analyzing what will come to the top. Has to be a way to evaluate all options against each other. Sensitivity analysis. DA tries to add are two things
    - More rigorous trade off of the metrics measuring the outcome. What you mean by the goals and how you would trade one goal off against another. What the goals are and what we can accomplish in each
    - Clear statement about what the risks and opportunities are of all strategies. Put a probability around the occurrence of an extreme event.

We must deal with minor adjustments to Charter amendments, how do you plan on bringing that up with staff and council? There will be give and takes? And certain aspects of the charter will have to be adjust if you do one thing or another.

Kathy- Bond issue? Charter puts limitations on competitive bond issuances. Difficult way to go get funding. Must tell entire story.

Kelly – Talking about extreme weather events and their effect. Those will have to be addressed by working groups, should they choose to.

Greg – We hope to identify instances in which none of the alternatives or a small set would meet a certain criteria that has been established. This is a complex process with a short time frame. We're limited. We'll have to pick and choose.

Kelly – Tasks

- Uncertainties identified and if we missed anything – could defer to subcommittee meeting
    - Nils – Cost or uncertainty of having water is missing.

- Uncertainty list
    - Cost of fossil fuels
    - Cost of renewable
    - Cost and potential for disaster
    - Scheduling cost
    - Capacity reserve requirements
    - Renewable reserve requirement
    - Over supply and curtailments
    - Incentives for RE-PTC, ITC, RECS
    - Carbon tax
    - Cost of capital
    - Load growth
    - Cost and timing – WAPA

- Group will look at list and analyze.
- Look at DA handout and edit
- We're trying to achieve – if everyone was handed a list of outcomes, would everyone put it into the same areas? Success/Failure
- Would 90% of the people in the room agree that this is the result.
- Kelly will email group with what we're trying to do and how to do it. When it's due.
- Greg will be here next week and we'll set up a time where you can all meet with him.

JK – Will summarize next steps and send out. Will schedule a subcommittee meeting. Will have to be soon. Next meeting will be determined, but probably early January.