

IGRAC #2

Date & time: 6/8/2023, 9:00 AM to 12:00 PM MT

Location: Microsoft Teams Meeting

Presenters: Mark Sellers-Vaughn, Jenny De Boer, Kathleen Campbell, Zachary Sowards, Min Park, Kathy Wold, Eric Wood

In attendance: Mark Sellers-Vaughn, Jenny De Boer, Kathleen Campbell, Zachary Sowards, Min Park, Kathy Wold, Eric Wood, Bruce Folsom, Kevin Connell, Mathew Hunter, Michael Parvinen, Nicole Gyllenskog, Rick Keller, Kevin Keyt, Teresa McKnight, Jason Barnes, Jason Talford, Taylor Thomas, Jett Hawk, Kristen Sreda, Devin McGreal

Introduction

Mark Sellers-Vaughn opened the meeting by welcoming and thanking stakeholders for participating in Intermountain's IRP Process. Mark then proceeded with introductions, the agenda, and a reminder of the stakeholder engagement goals. Jenny De Boer presented a safety moment.

Presentation #1 – Distribution System Modeling (Kathleen Campbell, Zachary Sowards)

- System Dynamics
 - Pipeline diameter ½" to 16"
 - Operating pressure 60psi to 850psi
- Model System in Synergi
- Peak Heating Degree Day
 - Peak HDD = 65 – Average Daily Temp
- Fixed Network
 - Can read meters on ongoing basis rather than manual monthly reads
 - IGC has a goal of reading 90% of meters through Fixed Network by the end of 2023
 - Currently 61% of meters are read through Fixed Network
- System Deficits
 - Pipeline bottleneck
 - Minimum inlet pressure to compressor
 - Component limiting capacity

Question: "What is the compressor station for?"

Answer: "Compressors will boost pressure on a lateral. Instead of running another pipeline, a compressor can be used to solve pressure issues for long laterals such as the Sun Valley Lateral." -Kathleen Campbell

Question: "What level of granularity is used in the model?"

Answer: "They run at a higher level as to not inundate the model with too much data, I will get into this later on in the presentation" -Kathleen Campbell

Question: "Do you look at gas quality and BTU to make sure you are getting what you are paying for?"

Answer: "We check Williams and have our own BTU zones to ensure proper billing." – Kathleen Campbell

Question: "Are you able to increase pressure on 60psi pipes?"

Answer: "Every pipeline has an MAOP (max allowable operating pressure) and anything over that would be subject to an upgrade." – Kathleen Campbell

Question: "How do you determine which pipeline size you upgrade to on expansions?"

Answer: “We look at a 5-year snapshot to make sure we don’t over-project the need. There are certain areas with exceptions such as Boise and Nampa which have had incredibly high growth in the last couple years.” – Kathleen Campbell

Presentation #2 – Avoided Cost Methodology (Min Park)

- Nominal Avoided Cost per Therm = Commodity Cost + Transportation Cost + Variable Distribution Cost
 - Commodity Cost Calc
 - Calc starts with internal 30-year price forecasts for three primary basins (weighted on day gas purchase data)
 - Heating Degree Day used to shape monthly prices, based off 65 degrees
 - Transportation Cost Calc
 - Cost of reserving additional capacity on Northwest Pipeline
 - Distribution Cost Calc
 - Energy efficiency can lead to delaying or even avoiding costly pipeline expansions

Question: “Is the inflation rate commonly used in the calculation?” Was it used in years past?”

Answer: “In previous years, we also used inflation rate but it increased this year as it is based on a five-year average.” – Min Park

Question: “Previous years’ costs all seem relatively even but for updated costs there is a lot of variability, can you explain what is driving this change?”

Answer: “The numbers are based off gas prices by year, they are weighted based off HDD shaping. Inflation caused a change in gas prices.” – Min Park

Question: “Gas prices are always up and down and previous years don’t reflect this volatility, is there a change in HDD shaping methodology?”

Answer: “I don’t think there was a big difference in shaping I think it was due to the pricing we saw earlier this year and inflation.” – Min Park

Answer: “We can look into this and provide more explanation as to why we saw this in the current IRP, but the pricing volatility from this winter certainly has had an effect.” – Mark Sellers-Vaughn

Question: “What stakeholders are you working with?”

Answer: “I am not sure, I was just told stakeholders.” – Min Park

Answer: “I think it would be Intermountain walking through the methodology and soliciting feedback through the process.” – Mark Sellers-Vaughn

Question: “Specifically what committee would the distribution costs be discussed in of the four stakeholder meetings?”

Answer: “I believe it would be the Avoided Cost Sub-Committee.” – Kathy Wold

Comment: “Please cover how the inflation rate has been included in this calculation in the past during the sub-committee meeting. Also please address it in the next IGRAC.”

Presentation #3 – Energy Efficiency (Kathy Wold)

- Demand Side Management
 - Option A: purchase MMBtu from supplier
 - Option B: purchase energy efficiency programs through customers
- Incentives can stack on top of each other
- Conservation Potential Assessment
 - Assess achievable energy savings potential
 - Apply results
- What is CPA?
 - Technical Potential
 - Total energy savings available relevant to population

- Economic Potential
 - Cost effectiveness
- Achievable Potential
 - EE expected to be adopted by programs

Question: “What is a HERS rating?”

Answer: “Home Energy Rating System is a third party who rates new builds by energy efficiency. They perform tests and give an energy efficiency score. This measures items that are important to energy savings.” – Kathy Wold

Question: “The whole home incentives stacked with the smart thermostat incentives may have some overlap, do you have any insight on how these can be disentangled?”

Answer: “I am unsure about the specifics of that, but I will check and follow up.” – Kathy Wold

Question: “For the modeling in the Base case of the IRP which model are you looking to use?”

Answer: “The conservative scenario would be using business as usual, but we will be working with the IRP team to decide which scenario to use.” – Kathy Wold

Question: “What is considered a lot versus a little therm savings when looking at DSM commercial savings?”

Answer: “All savings are good savings; in terms of our commercial program it is new in development and small in comparison to the residential program.” – Kathy Wold

Question: “What avoided cost are we using, the one from the previous slides?”

Answer: “We are using the avoided cost calculation that comes from the Resource Planning Team which Min was referencing in the previous slides.” – Kathy Wold

Presentation #4 – Supply Resources and Transportation & Storage Resources (Eric Wood, Jenny De Boer)

- Gas Supply Planning
 - Reliability
 - Security
 - Competitive and stable prices
 - Efficiently meet future growth
 - Frequently evaluate portfolio
- Traditional Supply Resources
 - Natural Gas Supply
 - Pipeline Capacity
 - Storage Capacity
 - Energy Efficiency
- Non-Traditional Supply Resources
 - Renewable Natural Gas
 - Hydrogen
- Storage Resources
 - Use
 - Needle peaking
 - Winter baseload
 - Day-to-day load balancing
 - Gas price hedge
 - Emergency issues
 - Types
 - Liquefied Storage
 - Underground

Question: “What is “lease and plant other” on the graph?”

Answer: “I am unsure, this is from EIA so I will have to look into that.” – Eric Wood

Question: “What is the arrangement pertaining to ownership of JP and Clay Basin storage facilities?”

Answer: “We don’t own capacity, we lease it from them.” – Eric Wood

Question: “How does needle peaking work with capacity on the pipeline?”

Answer: “Usually we use LNG for needle peaking because we can draw greater amounts more quickly, it is a little different than normal capacity on the pipeline. We use a separate contract only for storage to get the gas to the distribution system. Nampa and Rexburg are located behind the citygate so don’t require excess upstream pipeline capacity.” – Eric Wood

Question: “In the past when market price was more predictable, after the end of the heating season gas was cheap and we used that to fill storage. Now that doesn’t seem to be the case. It seems as if storage doesn’t seem to work as a hedge anymore, is that accurate?”

Answer: “Last summer we had delayed summer injections due to higher prices, but we still found times to buy cheaper fill gas. This continues into the current year as hydropower kicks up in May and June and allows us to capitalize on cheaper gas than we tend to see in late summer.” – Eric Wood

Question: “Can you explain your hedging portfolio a bit?”

Answer: “The hedging portfolio is mostly handled by our marketer IGI. It is a three-year portfolio under constant evaluation. We provide them with a forecast for the year, the front of every month, and the daily forecast so IGI can plan to buy for storage or day gas for demand.” – Eric Wood

Question: “Was Intermountain exposed to volatile pricing this winter? How much was hedging able to help?”

Answer: “Intermountain was shielded a bit, as they buy less from sumas. Intermountain was positioned well this last winter, they were exposed to some day gas pricing but tried to rely more on long term contracts and gas from storage.” – Eric Wood

The Meeting was Adjourned

Action Items:

1. Look in the work papers to see how inflation has been included in Avoided Cost calculations in this past IRP cycle and previous cycles to determine how the methodology has changed.
2. Follow up on how the overlap of stacking entire-system and smart thermostat energy efficiency programs contributes to double counting or how it is disentangled.