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Subject: UM 2178 Natural Gas Fact Finding Workshop #4b materials

Date: Friday, October 15, 2021 4:25:54 PM

Attachments: <u>UM 2178 10.12.2021 Workshop 4b Attendee List.docx.pdf</u>

<u>UM 2178 Workshop 4b Breakout 1 - Compiled Notes.pdf</u> <u>UM 2178 Workshop 4b Breakout 2 - Compiled Notes.pdf</u>

Dear UM 2178 / Natural Gas Fact Finding Stakeholders,

Thank you again for your contributions to Workshop 4b on Regulatory Tools. Please find attached the raw notes from the two breakout sessions in the October 12, 2021 Natural Gas Fact Finding Workshop 4b, and the attendee list.

Additionally, the recording of the meeting can be found here: http://oregonpuc.granicus.com/MediaPlayer.php?view_id=2&clip_id=843

Links to all of these materials, as well as the presentation, can be found on the PUC's EO 20-04 website: https://www.oregon.gov/puc/utilities/Pages/ExecutiveOrder20-04.aspx, and will be posted to UM 2178.

As a reminder, comments on Regulatory Tool should be submitted to PUC by October 26, 2021.

If you have any questions, please feel free to reach out to me directly.

Best, Kim

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How can existing planning processes be utilized or expanded to incorporate changing circumstances?

1	Please ground the planning process by stipulating facts that are not changing. Such as the generally accepted properties of methane. This includes its climate properties and health impacts in
	society. Let's not open a discussion on opinions about chemistry.
1	Must take into account realistic future climate, economic, and regulatory projections (e.g., not be based on historical weather data or short-term projections for gas prices, should consider
1	likelihood of additional climate regulations and liabilities); Mutathko into account likely to regulations and liabilities);
1	Must take into account likely stranded fossil fuel assets and cost of decommissioning these assets; Must include accurate life cycle accounting of emissions (including upstream methane) for gas resources
1	wiss include accurate mere type according or emissions (including spacear) mere accurate mere expensive the realistic practical and cost and safety limitations associated with RNG/hydrogen and align with other West Coast states to explore true electrification
1	Ensure that IRP requires modeling of electrification. Assumptions should be based on currently available data
1	Planning processes may be enhanced by accounting for emerging technologies (not just currently available).
2	Expand IRP processes to be more accessible to all customers so they can engage - more 101 documents and OPUC 101
2	How to expand access/transparency to IRP planning
2	Just reiterating my basic point from earlier: access to the PUC's approach, basic information about how the agency operates, the implementation of public engagement seems very important.
	Public engagement should focus first, foremost on communities that will be most impacted by gas transition. The process may want to acknowledge the growing body of evidence that indoor use poses significant health concerns, particularly for those in smaller spaces. Finally, making a transition away from gas (without a distraction in RNG, which often comes from CAFOs).
2	Procedurally: IRPs must be more accessible and include efforts to crate baseline understanding of the process and a more robust opportunity for stakeholder engagement.
2	there is an information asymmetry between utilities and other stakeholders (including staff, but also others) - how can we make the information more available?
3	The current siloed planning process cannot be corrected. It must be replaced by an integrated energy system planning process that looks at both the gas and electric systems and identifies the most cost-effective solutions to meeting near-term decarbonization targets.
3	Planning must take place at a more global arena. If electrification is an answer then it can't be done alone with gas utilities. Where in the electric IRP process is electrification and more than
	doubling of loads reflected.
4	Joint Planning for winter peak
4	An integrated planning process is needed to support an orderly transition of our building stock to low-carbon appliances in a least-cost manner.
4	The integrated planning modeling should also address the needs of industrial customers that do not have cost-effective electrification options, and the grid reliability issues that will emerge a
	transition to greater reliance on electricity for space and water heating and to 100% clean electricity generation. Fortunately, these are mid-term issues, and what is needed now was focuse
	planning efforts in cooperation with impacted industrial customers to plan their path to path to long-term decarbonization.
4	Need to account for cost effectiveness of trade offs for CPP compliance and general GHG reduction activities if it's much less expensive to achieve GHG reductions with electrification than
	RNG/potentially stranded hydrogen, that should be an option. This is about customer protection and benefit, not gas company business model protection and benefits.
4	a. When planning gas, use assumption that electric system fully will meet the energy requirements.b. Plan the gas and electric together.
4	how to link electric and gas utility planning
4	Resource adequacy processes should consider the interaction of the electric and direct use gas system
4	Cost effectiveness needs to be updated to not be tied to cost of gas and beyond just energy savings to be about carbon savings, avoidance of stranded assets, etc. Fuel and technology neutral approach to decarbonization that centers GHG emission reductions over prescribed solutions
4	Existing planning processes artificially address different fuels (gas/electricity) separately. Needs to include an analysis that can involve tradeoffs, particularly as it involves economic (strande-
4	existing pranting processes artificially adures summerful (GHG's/indoor emissions; emissions in exposed communities) consciousness artificially as it involves economic (strande assets/stranded customers) and environmental (GHG's/indoor emissions; emissions in exposed communities) consequences.
4	assets/stranued customers), and environmental (upon symbour emissions; emissions in exposed communities) consequences. IRP guidelines for long-term planning can be a useful tool for evaluating future costs and risks, but the IRP analyses need to take a more comprehensive and holistic approach to accurately
7	evaluate the need and prudence of different investments and compliance pathways and take a harder look at whether they're in the public interest and reduce or increase ratepayer exposure.
	risk and uncertainty. To ensure that IRPS are consistent with the long-term public interest, the IRP planning process must accurately evaluate and compare costs and risks from gas system
	as and uncertainty. The data constitute is ungesting public interest, the first promising process must accurately evaluate and compare costs and itself on gas system expansion and electrification as an alternative.
4	Prioritizing actions that clearly reduce carbon emissions now and benefit customers now rather than waiting to have all the information. The transition to a clean energy system will take decident
•	and any delay now reduces our chances of achieving an inhabitable Oregon.
4	Step One is to address the objectives from the prospective of both natural gas and electric consumers, ensuring that peak needs are met reliably without simply running gas generators to me
	loads brought on by forced eletriccfications.
4	IRPs should include separate analyses to evaluate fuel shifting costs and risks for the utility vs. costs and risks to customers
4	Making sure that the process for PUC managing risks is modified to include managing the changing circumstances of extreme climate impacts.
5	Planning redesigned with a whole different metric: Set aside traditional cost effectiveness. Aim simply at meeting climate goals (HB2020, CPP, and ultimately IPCC) in a least cost and least ris
	manner, and leveraging new regulatory tools to minimize impact on disproportionately impacted communities.
5	I would welcome hearing how everyone is defining "changing circumstances." Getting a list of everyone's ideas about what that means would be helpful.
5	Bear in mind what's changing circumstances about worsening climate change, for instance) are already telling us about what's to come. I.e.: lay the foundation now for bigger ghg emissions
	reduction goals later.
5	Continued consideration/prioritization of energy affordability and reliability
5	prioritize carbon reduction vs a specific pathway such as electrification in all utility IRP's. all pathways should be considered in order to get to a least cost for the system as a whole
5	CPP planning as part of IRPs
6	Can the differential energy rate bill that just passed be used for different rates for low-income gas customers?
7	Should not be run by gas utility based on existing gas utility business model because that will be inherently biased and counter to the public interest;
8	Must include frontlines communities' input, those who are hit first and worst by the climate crisis and gas industry pollution;
8	Process should be used to empower electrification and energy efficiency - especially in frontline and low-income communities.
	The voices from frontline and low income communities must be prioritized. Information in this process should also be accessible and less technical.
8	December 14 and 4 the second of the form of the first of
8	Processes should center the needs of low-income, communities of color (around affordability, energy efficiency, adverse health impacts of burning gas in homes, and resilience, etc.)
8 8 9	Process should be used to empower gas utilities to pursue robust pathways to decarbonization including RNG and hydrogen.
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What can be done within the existing framework to integrate with electric utility planning (e.g., timing of planning efforts, information exchange, requirements to cross-reference information, requirement for input from gas/electric utilities)?

Rough	Participant Response
Grouping 1	Model load growth of smart, connected electric heating & cooling load at slow, medium and fast rates.
1	would load grown or smart, commercial electric nearing a cooling load at slow, meaning and last rates. An energy resilience value for the gas system needs to be incorporated into this process.
1	Arriene gy reside. The Oregon Custainability Board can tend a dashboard showing the condition of the Oregon carbon lifecycle model hosted by Argonne GREET.
2	nere a sinua. The Origin Sustainaum goard can creat a dashood a showing the conductor of the Origin Caudion indice of the Origin Caudion in Caudion (and the Origin Caudion Ca
2	As combined systems are discussed, create new kinds of information / intuitive summary views to enable participation by folks who are not steeped in durity planning.
3	Require electric and gas utility IRP work to be done in parallel and coordinated by PUC, if not even combined.
4	As was mentioned earlier, use the combined utilities in WA as an example of combined impacts of scenarios.
4	Prioritize policies which decarbonize the gas system immediately - including tools which will limit gas system infrastructure growth, reduce throughput and reduce customer base, then use those same inputs to the electricity IRP process so the electric utilities can plan to pick up the additional heating load required. This will be a gradual shift, but must be started immediately
4	Any forecasted demand shift for the building sector has to be met with new resources that can meet that specific load. That could be modlled in electric utility IRPs.
4	Take at least one pass using assumption that electric system can fully meet the energy requirements, and then plan electric side accordingly.
4	Hypothesize and project a probable near-term, policy-driven electrification case for heating, cooling, transportation and some industrial application loads, and draw the likely conclusions that will accomplish this transition with the greatest co-benefits and fewest negative effects, especially to low-income/vulnerable households and businesses.
4	actual emissions trajectories from both gas and electric IRPs can be used to analyze the actual emissions impact of building electrification relative to low carbon supply and energy efficiency from gas customer usage
4	Gas utility IRPs should model various rates of electrification/fuel shifting, and electric utility IRPs should model increased load and fuel shifting scenarios. Both gas and electric utilities should share
	underlying information and data with each other, the PUC, and stakeholders, and cost and risk projections of different modeling results should be evaluated through a combined gas/electric stakeholder process.
4	Look to existing combined utility IRPs (ie Avista) for best practices
4	We should jointly plan for winter peak to fully understand impacts of different pathways to decarbonization.
4	Explore joint Resiliency planning.
4	Electric utilities should be planning more explicitly to meet various electrification futures beyond the more traditional focus on electric vehicles (may be happening already in the 2021 IRP cycle but I
	have not been as plugged to the electric IRPs this cycle).
4	Gas utilities should model various levels of electrification as well for their load impacts. Ideally consistently with what the electrics would model. This should inform risk assessment of future capital expenditures.
4	Fully implement and apply HB 2021 to electric utility planning to ensure GHG reduction and equity are embedded into the energy system approach and regulation by the PUC
4	rate design for both types of utilities should be a key consideration
5	I must remind everyone that this process as mandated by the Governor is to fact find what the gas utilities can do the meet the GHG obligations and what the impact is. the electric utilities are not part of the process for a reason.
6	In the near-term, is there a role for the OPUC in synthesizing the IRP results and actions statewide?
6	Commission Staff can provide inputs to the electric and gas utilities for consistency in modeling and in areas where gas utilities don't have insight into the electric utilities planning and operations and vice versa.
6	OPUC should ensure complementary IRPs between gas and electric utilities modeling likely shifts off of gas and onto electric so that no additional capital costs are unnecessarily spent on fossil fuel
Ü	infrastructure that will ultimately be stranded and pawned off on ratepayers. Both IRPs (and future rate cases) must be reviewed through a lens of maximizing public interest benefits rather than
	maintaining investor profits or the existing utility business model
7	High line strength points or the existing quality dusiness model. Align line extension allowances between gas and electric utilities toward policy goals.
7	Angir interacterision anowances and natural gas customers are the same customers and align policy goals accordingly.
7	Apply consistent policies aross utilities (ie gas line extension allowance formula) via rate case or other mechanism
7	Assuming the framework@neans Oregon legislation and agency rule base. Every bill must be characterized by its quantified carbon reduction effect if enacted. Agencies must commit to quantified
	carbon in eductions. Result is that utilities including NG can compute their role in the remaining carbon
8	Initiate an OR-wide joint electric gas utility planning process for the future of gas
9	Examine how piped gaseous fuels can serve to support resource adequacy and how both electric and increasingly decarbonized gas can serve their highest and best purpose to achieve GHG
	emissions reductions.

What needs to be changed or added to develop a more integrated planning approach?

Rough Grouping	Participant Response
1	more coordination with other agencies as part of that planning (codes, standards, etc.)
1	Yes information sharing with ODOE is necessary too
1	Oregon forests and agriculture can't sequester all the anthropogenic carbon. We need to know what's left over. The remaining workspace to attain net zero emissions becomes the work
	space for state agencies to pare down, including OPUC and its helpful utilities.
1	in addition to ODOE, the other key agencies are DLCD, ODOT, the City of Portland, Metro and Tri-Met.
2	Electric and gas utilities are planning at different times with sometimes different assumptions or methodologies; coordinating these processes better and better sharing of information
2	Consider a joint electric/gas planning process or docket at the commission level, or, at minimum, information-sharing among utilities.
2	The most critical near-term action the PUC should undertake is to establish a process for a comprehensive energy system planning across gas and electric utilities. As an impartial
	regulator, the PUC's core mission is to protect the public interest, and the PUC must ensure that the most cost-effective solutions to the climate crisis are adopted. An integrated planning process is needed to support an orderly transition of our building stock to low-carbon appliances in a least-cost manner. The outcomes of this planning process should inform future IRP and other ratemaking processes.
2	Add an OPUC-driven planning process, in parallel to the utility IRP's (and informing them) that is end-use/end-user-driven and seeks an optimum cost/benefit combination of economic, environmental and societal outcomes (not unlike what the NW Power Council does when it does its job well, albeit limited to regional electricity). The PUC can reach further and across the range of fuels, suppliers, economic and environmental outcomes.
2	Open a utility commission docket on common issues hindering deep decarbonization among utilitiesi.e., winter peak solutions.
3	Criteria and metrics that prioritize the carbon reduction impacts of tools and incentives must be added to the current criteria of resource adequacy and cost effectiveness
3	shift from a silo'ed look at energy savings/reductions to incorporate GHG savings/reductions in planning of the overall energy system (gas and electric)
3	Develop a system map that accurately assesses existing infrastructure, areas of constraint on the system, as well as customer classes, current and anticipated demand, and sources of
	supply. The utility should then develop alternative scenarios about how that map may change in future years and where pruning can happen.
3	DSM planning that looks at avoided costs in a way that accounts for avoided cost of GHG emissions or other threshold that allows for broader inclusion of energy efficiency opportunities to
	tap into all available decarbonization and EE technologies and pathways to support successful decarbonization of gas utilities.
3	Particularly agree on need to plan for pruning in a coordinated way. Some more rural communities may struggle to engage.
4	Integrated planning will need clarity on what other values are being optimized seeing that some are advocating for including 'resilience' while others have noted need to include health, and then there's ec dev, and other considerations. If expanding to include concepts of resilience, need to also add others.
4	There was a comment above about the objective of this process being related to how gas utilities comply with the CPP. I disagree that this is what the EO requires exclusively.
4	EO 20-04 says that "it is in the interest of utility customers and the public generally for the utility sector to take actions that result in rapid reductions of GHG emissions, at reasonable costs, to levels consistent with the GHG emissions reduction goals set forth [in the EO]."
4	Potentially need to change the standards for acknowledging IRPs, or change the presumption that investments identified in IRP are in the public interest. IRP Guideline 8 should be revised to require evaluation of potential regulation of biogenic emissions in addition to anthropogenic emissions.
5	Planning should incorporate additional frameworks from other intersecting arenas such as health. This is especially true around indoor air quality and temperature and the general health and safety of housing. Planning already takes into account EE and DR but doesn't look at either from the perspective of building improvements and infrastructure that can promote community stability, health, and resilience.
5	Added: Potential cost impacts to different customer groups (e.g., LMI, rural, BIPOC) should be considered in planning; public health harms (e.g., indoor and outdoor pollution from gas distribution and use) should be included; IRP scenarios should include an optimized-GHG reduction scenario
5	We need to plan for the public interest in earnest in IRPs.
5	In addition to the language in the EO, it is in the public interest to mitigate the impacts of climate change. I think we lose that context in this conversation often, the impacts of not mitigating the expected warming will be devastating, and are hitting and will hit first and hardest communities that are already experiencing vulnerability.
5	Planning should include nuances around cost impacts, not just directly within the utility/ratepayer system but the cost of infrastructure to communities (at siting -health and economic impacts, especially to Indigenous, Black, and Brown communities, low-income, and rural/coastal communities), and the health and economic impacts at the home level. A resource is not cost effective if it creates substantial health harms that have social and other system costs.