

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of

**CASCADE NATURAL GAS
CORPORATION, DBA CASCADE
NATURAL GAS,**

2023 Integrated Resource Plan.

DOCKET UG-220131

I. Introduction

Cascade Natural Gas Corporation (Cascade, Company) provides this Reply in response to Commission Staff Comments (Staff), April 28, 2023, in the above-cited proceeding.

At the outset, Cascade believes its 2023 Integrated Resource Plan (IRP) meets all standards of the Commission's IRP rules and past practices. The Company appreciates the perspectives of the wide range of commentors for this IRP cycle. However, Cascade's reply to Staff Comments will veer from its past history of focusing only on substance to now include perspectives on stakeholder involvement given Staff's recommendation for future processes without consideration of the broader issues negatively impacting the IRP process.

Staff, at page 3 of its Comments, states Cascade does not consider five aspects of the IRP rules (WAC 480-238) and does not comply with the rules and regulations associated with the development of an IRP (for example, see pages 6, 11, 12, and 14, among others). Such analyses and statements are incorrect and detrimental to the collaborative process given the considerable time, effort, and resources the Company and other stakeholders put into the development of the 2023 IRP. Despite holding six Technical Advisory Group (TAG, or TAGs) meetings, a submitted Draft IRP, multiple responses to stakeholders' questions of said Draft and, as Staff noted, Cascade's "ongoing voluntary" compliance efforts to address Staff's concerns, Staff's comments are not in keeping with the expected practices of the heretofore collaborative environment of recent IRP cycles. The Company is disappointed that Staff has chosen to cast aspersions about Cascade's commitment to fully comply with Commission rules. Cascade will demonstrate its compliance in these Reply Comments at Section III.

The deviation from Staff's normal processing of IRPs is troubling, as will be discussed in Section II. This includes 1) its last-minute identification of issues, many of which were addressed in the TAG meetings, the IRP, and its appendices and work papers; 2) lack of meaningful participation in the stakeholder engagement in the 2023 IRP process, unlike previous cycles; 3) mischaracterization of several issues and an overblown perception of what could simply be needed clarifications and Action Items. Had there been more active engagement by Staff, Cascade believes many of Staff's comments would be addressed simply by clarification and cites to the IRP and its appendices, supported by ample TAG meeting discussions.

In footnotes, Commission Staff Comments cite to WAC 480-90-238 on 47 occasions, usually implying a lack of compliance by Cascade. Cascade strongly disagrees with many of Staff's implications as will be shown in Section III of these comments. Cascade is fully aware of these rules and has been following these in previous cycles without disagreement by Staff and interested parties. Moreover, Cascade's analytical capabilities and execution have been greatly enhanced since its 2020 IRP was filed. Referring 47 times to the less-than-two page WAC 480-90-238 as Staff has done suggests the IRP process in Washington is broken. Cascade offers suggestions for future IRP processes in Section IV.

II. Process Issues, Current and Recommended

First, Cascade begins with a core issue of Staff's participation in the Company's Stakeholder Engagement process. In Cascade's opinion, Staff was not engaged in Cascade's efforts to run a best-practices Stakeholder Engagement process in the manner Staff has been engaged in during previous cycles. If it had, then Cascade believes the majority of Staff's concerns would have been shown to be adequately addressed or Cascade would have made substantive changes and/or appropriate clarifications to the IRP. Staff's review and process deviated from its previous practice, and Cascade believes this is why Staff's surprising 36 page document was filed at the conclusion of this docket, rather than in response to the Company's draft IRP, filed November 30, 2022. Cascade has and does take Stakeholder's input seriously. The following outlines the Company's concerted efforts to gain input on a real-time basis, preferably early in the process (as stated multiple times in Cascade's meetings and documents):

- Cascade held six TAG meetings averaging three hours each. These were substantive meetings with PowerPoint decks averaging 70 pages. These were not check-the-box, *pro forma*, "because we had to" type of meetings. Cascade was fully invested in this process. Generally, each TAG meeting concluded with unlimited time for questions and a request to have analyst-to-analyst discussion(s) afterwards as desired.
- Four years ago, Cascade provided, and sought collaborative input on, what it believes is a state-of-the-art public involvement five-page guide for participation intended to be considerate of Staff and all interested parties' time while optimizing desired input from stakeholders. This document, *Stakeholder Engagement Design Document (Design Document)*, was intended to alleviate the precise situation Staff has created in this docket. Cascade appends this document to these comments.¹
- This *Stakeholder Engagement Design Document* and some of its key points were mentioned at the beginning of each TAG meeting. For example, the *Design Document* states:
 - "...comments received earlier in the process can better influence the final draft document." (at page 3, emphasis added)
 - "Cascade prefers to receive feedback as early as possible in the process (e.g., in the course of its technical advisory group meetings or soon thereafter) so that the Company has a better opportunity to address questions or analyze/apply more stakeholder suggestions." (at page 4, emphasis added)

¹ See: [IRP-Stakeholder-Engagement.docx \(live.com\)](#)

- Cascade distributed slide decks for each TAG a week in advance.
- Practice in previous IRP cycles had Staff sometimes asking questions in advance of the TAG meetings and nearly always following up with substantive questions to which the Company responded. Cascade is surprised Staff did not continue this practice with the 2023 IRP, considering the numerous changes in the regulatory environment this cycle.
- Past practice saw Staff submitting comprehensive comments to the Draft IRP (in this case, filed November 30, 2022) rather than to the Final (filed February 24, 2023). In previous cycles, Cascade had the opportunity for clarification, addressing inaccuracies, agreeing with Staff, agreeing to disagree, or adding additional Action Items.
- Cascade's TAG meetings are recorded and transcribed. Thus, documentation of both this IRP's process and substance is in evidence.

Second, in light of the above, brings into question Staff's recommendation for the process going forward. Staff states:

“Staff recommends the Commission direct Cascade to file a comprehensive, detailed work plan within the next two months to begin working with Staff and parties earlier in the planning process to ensure that the recommendations contained in Staff comments are incorporated into the 2025 IRP. Staff notes that addressing all of Staff's recommendations is a considerable amount of work that might stress the limitations of a normal IRP technical advisory timeline. Therefore, Staff is requesting an earlier start and longer work time to collaborate with Cascade to bring the Company into full compliance.” (emphasis as shown at Page 6 of Staff's comments)

This is followed by 46 summary recommendations on substance (at page 33, Commission Staff Comments).

With Cascade's stakeholder engagement process, including early and substantive TAG meetings with strong requests for input early in the process having been stated several times, it is disconcerting to Cascade that Staff did not take full advantage of the opportunities to provide earlier feedback about their needs, or to suggest adjustments to the IRP schedule to address Staff's concerns. By stating their recommendations might “stress” the limitations of the normal IRP process, Staff appears to agree with Cascade that the timeline and process for developing IRPs has not kept up with the pace of new regulations, analytical requirements and deliverables. This would seem to indicate the current IRP process is broken. The Company believes the IRP regulations, in light of rapidly changing landscape, requires a comprehensive review. Cascade is not suggesting exhaustive and prescribed IRP rules and regulations but adding clarifying modifications to improve the analytics of the product and its expectations.

- As Cascade will show in the following section, its IRP from substantive perspectives address most, if not all, of Staff's requests. From a process perspective, the graphic to the right illustrates the IRP's attention to, for example, renewable natural gas (RNG) issues. This is an inset box from page 4-5 of the IRP, prepared intentionally to direct the reader to the precise issues that Staff now claims in its comments do not exist.
- If the Commission adopts Staff's proposed procedural recommendation as stated, the development of a signed Formal Charter should be discussed. Such Formal Charters have long historical roots at the Commission. With the advent of least cost planning (Cause No. U-85-53), stakeholder involvement began as informal collaboratives. Because of process problems or other concerns, these later evolved into Formal Charters for some integrated resource planning processes. The pendulum has more recently swung back to informal advisory groups. However, given Cascade's concerted efforts to provide for an effective informal advisory group, with the results being Staff's 36 page Comments, a Formal Charter could be in order or having the IRP rules/regulations more clearly outline the responsibilities of stakeholders.
- On Page 3, Staff states it has had multiple conversations with Cascade. Cascade's notes indicate that Staff placed one phone call and sent approximately 50-60 written questions to Cascade after it filed its Final IRP. Staff did not follow up on the responses to the written comments and filed Final Comments leaving Cascade to conclude that several of Cascade's responses were misunderstood by Staff.

QUICK REFERENCE TO RNG LOCATIONS IN IRP

Page - Topic

4-5 - Description of RNG

4-7 - Applicable Regulations

4-9 - Cost Effectiveness Evaluation Methodology

4-12 - RNG Projects

4-15 - Renewable Thermal Certificates

4-15 - Hydrogen

Chapter 6 - Environmental Compliance

Chapter 8 - System Planning (re Connection and Reliability)

Chapter 9 - Resource Integration (re Modeling Results)

Chapter 10 - Stakeholder Engagement (re Communications)

Chapter 11 - Action Items (re Future Steps)

III. Major Substantive Issues Identified by Staff

A. Overall Perspective of Staff Substantive Comments

Commission Staff Comments state an omnibus process recommendation plus 46 specific substantive recommendations (at pages 33-36 of Staff Comments). These recommendations focus on demand forecasting, emissions, renewable natural gas (RNG), hydrogen, GTN expansion, and others. Before Cascade addresses each of these issues, the purpose and characterization of Staff's comments should be considered.

- If all of Staff's recommendations are adopted for these issues, what would be the incremental benefit?
 - Cascade believes its analyses are robust and many suggested Staff modifications would be under the rubric of diminishing returns of benefits to customers.
 - Many of Staff's assertions:
 - Are differences without distinctions
 - Are mischaracterizations

- May be resolved by clarifications
- An IRP informs, an IRP does not decide. The Commission has always adopted this principle. Utilities are guided by their IRPs but have adaptive management in the operations of their companies--as has been Commission's long-stated policy.
- Cascade has built a strong Resource Planning Team over its last three IRP cycles. Cascade believes its demand analyses are second to none. This robust team has assimilated solid input throughout Cascade with strong executive officer and internal departmental support.

B. Specific Substantive Issues

Having stated most of Staff's recommendations are distinctions without a difference, mischaracterizations, or could have been resolved by further clarification, Cascade provides its responses with three additional perspectives: points Cascade generally agrees with Staff (e.g., hydrogen), areas where Cascade and Staff can agree to disagree, and issues to be included in the next IRP cycle.

The following section outlines Staff's 46 recommendations (numbered by Cascade for ease of reference) in italics from pages 33-36, along with the Company's responses.

Renewable Natural Gas

1. *Update their analysis to consider RNG as a valid CCA compliance resource and as part of a lowest reasonable cost portfolio.*

REPLY: Cascade rejects Staff's contentions on Cascade's RNG situation as inaccurate and a mischaracterization. The Company references Chapter 4 of the IRP and the inset box as shown on the fourth page of these comments which are fully responsive to Staff's concerns. Two Cascade subject matter experts led the RNG presentation at TAG 3, describing the Company's plans and ongoing negotiation for multiple RNG projects, including as a system resource. Chapter 4 includes a list of RNG projects that Cascade is modeling for inclusion to add to Cascade's portfolio in the near future. In Chapter 6, Cascade states "Ecology placed some geographic limitations for qualifying RNG outside of Washington for this exclusion within the WAC 173-441 GHG reporting rule and Cascade has placed limits on RNG accordingly as a compliance option in IRP modeling." At the time of modeling the IRP, it was Cascade's understanding that there were geographic limitations on RNG for use in CCA compliance, therefore, Cascade only modeled RNG that is procured within Washington State for CCA compliance. Cascade must also consider the Climate Protection Plan in Oregon while modeling RNG as a compliance resource.

Demand Forecast

2. *Use a first order approximation of current building code impacts on customer counts and use per customer, until Cascade can collect enough data for a more exacting estimate of customer count impacts.*

REPLY: This Staff recommendation is an academic way of stating “guessing,” which Cascade avoids such analysis in the Company’s IRPs. Cascade does agree that the building code impacts regarding gas bans need to be incorporated into Cascade’s demand forecast, however, given the timing and limited data on what the impacts may be, Cascade stated that this would be an Action Plan item. If Staff had issues with that approach, that should have been communicated earlier on in the IRP process. Furthermore, Cascade’s scenarios and sensitivities analyses model adjustments to customer counts with its “Customer Growth: No new customers after 2030” sensitivity. It is the Company’s position that this sensitivity provides a preliminary review of the impacts that building codes may have on customer counts.

Staff’s comments on demand forecasting are troubling. Cascade has assembled a team of three analysts who are expert in multiple analyses of demand forecasting (including stochastic analyses, ARIMA, and other statistical methodologies). Cascade was clear during the IRP process that certain data needed to be locked in early in the process. Cascade had stated during and after TAG 2 that “Due to recent changes to the State Building Code, Cascade will be making changes to the load forecast models. However, given the timing of the changes, Cascade will not be able to make this change for this IRP. Revamping the load forecast model to account for end use changes will be a 6 month to yearlong project, which falls outside of the IRP Planning timeline. Cascade will include this in the two- to four-year action plan.”²

3. *Where the specifics of future codes are unknown, the utility should project a demand forecast trend that accords with statutory goals and mandates. This specifically refers to RCW 19.27A.020(2)(a) and RCW 19.27A.160.*
4. *Develop a building stock attrition rate to represent the loss of customers due to buildings being demolished, abandoned, condemned, remodeled without gas service, or otherwise leaving gas service.*
5. *Adopt the assumptions about building code goals and mandates, as well as building stock attrition as the “current expectations” found in Figure 9-3, where sufficient data about current building and future codes is not available.*

REPLY: Cascade believes there is a misunderstanding by Staff. Cascade's Energy Efficiency group has continued to update the LoadMAP model to incorporate changes to distinctly account for changes to building and energy codes, which then impacts which appliances have cost effective energy savings potential. Once potential savings are determined, the Company applies those to decrement the demand forecast. If Cascade were to incorporate the same building code impacts that are being done by the Energy Efficiency group, the Company would be double counting those impacts.

² Item 11 IRP Feedback Report, Appendix A of 2023 IRP and at [Washington Integrated Resource Plan - Cascade Natural Gas Corporation \(cngc.com\)](https://www.cngc.com)

6. *Communicate the impacts of climate change in narrative as well as in Figure 3-14: System Baseload vs DSM.*
7. *Analyze the risks associated with rapidly increasing bill impacts upon customers and the distributional effects through the lens of equity, energy justice, and access to energy efficiency resources. 173 Final Order 09, UG-210755 (Aug. 23, 2022).*
8. *Dynamically model the anticipated comparative costs between Cascade's natural gas services and electric utility services into the future as well as the interplay of customers, by class, responding to that changing comparative cost.*
9. *Incorporate the distributional analysis recommended above within the comparative cost analysis.*

REPLY: Cascade provided climate change impacts at TAG 2; however, Cascade agrees the Company could have shared those results better in the IRP narrative and will do so in future IRPs. Staff recommendations 7 and 8 brings several issues into play. One issue is the sheer amount of work to implement these recommendations and whether this is part of integrated resource planning or should be separate studies. Another aspect is primary work was performed on similar issues related to Staff recommendation 7 in the 1980s as an outcome of the Public Utility Regulatory Policies Act (PURPA, 1978), including at least one Commission rulemaking and efforts to increase low-income funding for energy efficiency and rate assistance, among other items. The relevance herein is that these were concerted statewide efforts and would require industry focus for revisiting issues that could be updated. Likewise, Staff recommendation 8 may be best addressed by a Commission-sponsored study among all of its jurisdictional energy utilities, electric and natural gas. Cascade concurs that more work needs to be done around equity, energy justice, and access to energy efficiency resources and will participate in related venues. Staff recommendation 9 requires clarification on several levels, which the Company looks forward to discussing with Staff and other stakeholders.

Climate Commitment Act

10. *Plan to comply with all applicable laws, including the CCA and the statutory emissions cap.*
11. *Evaluate and analyze the prudence of its planned reliance on PCUs.*
12. *Dynamically model Industrial customers in all scenario modeling as well as industrial customers' responses to changing market conditions and changing utility service price competitiveness.*
13. *Develop a decarbonization plan akin to the Avista general rate case settlement with the added objectives of avoiding instability, reducing impacts on customers, and fully assessing the lowest cost mix of fuels and conservation (including electrification where appropriate).*

REPLY: Cascade's Chapter 6 (Environmental Policy) is exhaustive. It covers the state of emissions policy from the local level to the state level to the Federal level. Cascade's Chapter 9 (Resource Integration) integrates this into emissions targets based on known policy. Scenarios cover other potentialities.

Chapters 6 and 9 address Staff recommendation 10 based on what is known at this time. Cascade is highly confused by Staff's assertion that Cascade is relying on Price Ceiling Units (PCUs) for compliance. In Cascade's IRP, Cascade includes a chart that shows PCUs are not utilized in the Company's CCA Compliance.³ Cascade looks forward to further discussions with Staff in regard to Staff Recommendation 12. As stated in Chapter 6 and Chapter 11 (Two-Year Action Plan), Cascade is in the process of developing what is requested in Staff recommendation 13.

The Company does agree that CCA requirements and implications may need a broader response beyond what is currently contained in the IRP. On a parallel track, we are also working with an outside consultant to create a decarbonization plan that will allow Cascade to meet or exceed the decarbonization targets outlined in the CCA while providing support to Washington's clean energy transition. Reliable energy will be an important piece of that transition and the Company believes there is a role for our energy delivery system to play. Cascade anticipates the consulting work to be complete by late summer. At that point Cascade could begin working with Staff, other IRP stakeholders and our new equity advisory group to review and fine-tune the decarbonization plan. Hopefully that timing might better align with Cascade's ongoing commitment and attempt to bring parties into the discussion earlier in the planning process. This consulting process that we have underway would kick off the parties' involvement this fall on this topic.

Conservation

14. *Work with Community Action Agencies in their service territory to improve Community Action Agencies' internal capacity. In collaboration with its Conservation Advisory Group, Low-Income Advisory Group, and Equity Advisory Group, identify other means of improving capacity of Demand Side Management programs, as well as researching other delivery mechanisms to increase low-income program goals.*
15. *Assess the distributional equity implications of its Demand Side Management programs, and, where inequitable gaps are identified, to research, design, and implement improvements that adhere to clear benchmarks toward program equity.*

REPLY: Cascade has been addressing Staff recommendation 14 through its Conservation Advisory Group (CAG). Staff recommendation 15 has been an issue historically effecting all Commission jurisdictional energy utilities. The issue is and always has predominantly revolved around available funding at the federal, state, and utility level. Within this universe have been sub-issues of significant funding to relatively few customers for deep retrofits or a much broader array of lesser rebates to a larger population as well as rate assistance programs (be they grants or discounted rates) and rate design. Cascade respectfully states that it has been pursuing the underlying intent of Staff recommendation 15 but recognizes this is an issue facing most North American utilities.

³ 2023 Cascade IRP Figure 9-14, Page 9-20

Staff recommendation 16, 17, and 18 will be addressed in Cascade's next cycle; these would have been included as Action Plan items if brought to the Company's attention sooner.

Price Forecasting

16. *Add figures similar to Figure 4-9 to communicate the price methods used later in the scenario modeling.*
17. *Include these methods and figures in Chapter 4 under the subheading of Natural Gas Price Forecast as Staff believes they are part of the price forecast.*
18. *Model the uncertainty in the trend line itself.*

REPLY: Cascade appreciates and agrees with Staff's recommendation to add language and figures to Chapter 4 to present all elements and applications of the price forecast that will be utilized as part of the resource optimization process. This will be included in future IRPs. Cascade disagrees with Staff's comment that "The analysis does not consider long-term movements in the trend line itself. Staff recommends that Cascade model the uncertainty in the trend line itself." Cascade disagrees with this assessment and holds the position that its modeling does satisfy WAC 480- 90-238(2)(b) "At a minimum this analysis must consider resource costs, market-volatility risks..." As shown in Figure 9-12, the Company's final portfolio rankings are derived by calculating risk adjusted results, which are defined as 75/25 split of deterministic and stochastic analyses, respectively. Deterministic results, by definition, are intended to evaluate the portfolios under an expected future state, but the stochastic element of the analysis specifically models uncertainty in the price forecast and how the portfolios perform around this uncertainty. The Company begins its explanation of its stochastic process on page 9-9, with the following relevant paragraph on page 9-10:

"Cascade models these price movements with a Geometric Brownian motion stochastic process. For each of its 200 draws, the month over month price change is determined by two elements: a drift term and a shock term. The drift term is the expected movement of the basin pricing, derived from the Company's price forecast. The shock term is the main stochastic element, which takes the month over month return variance and multiplies it by a random normal variable to create a normal distribution of price movements for a given month, and a lognormal distribution of prices as illustrated above."

The drift term discussed above is the expected movement of the trend line, while the shock term is the element that introduces uncertainty by using historical market data to generate 200 unique potential future market states. In each of these simulations, the historical volatility is multiplied by the random normal variable to model 200 different ways that the long-term price forecast could diverge from the trend line that makes up the deterministic price forecast. The Company is then able to identify the Value at Risk (VaR) of each portfolio, which is represented by the "99th Percentile Total System Cost"

column in Figure 9-12. Qualitatively, these results can be interpreted to say that the Company has identified that with 99% certainty, costs for a given portfolio will not exceed X over the planning horizon, with X representing the value listed in Figure 9-12. Identifying this upper risk boundary, and its utilization in the Risk-Adjusted Portfolio Ranking, is how Cascade demonstrates compliance with WAC 480- 90-238(2)(b)

Climate Change Modeling

19. *Do not cite Wikipedia.*
20. *Align the RCP pathway with expected global emissions rather than the expected emissions of Western North America.*
21. *Adopt RCP 8.5 as it is relied upon by the NWPCC and would bring Cascade's modeling in line with other gas utility IRP climate modeling already submitted to the UTC.*
22. *Include HDD data related to peak days in its appendices.*
23. *Model all climate change impacts in a non-linear fashion.*
24. *Incorporate climate change into its peak day methodology.*

REPLY: Regarding Staff recommendation 19, Cascade has a general policy to not cite to Wikipedia and concurs with Staff on this recommendation. For Staff recommendations 20 through 23, Cascade looks forward to working with Staff on climate change models. Similarly, although Cascade disagrees with incorporating climate change impacts into peak days, Cascade looks forward to further discussions with Staff on this topic. Cascade's hesitancy towards utilizing climate change models to reduce peak day stems from research that indicates global warming may in fact have the opposite effect.⁴ Cascade agrees to include HDD data related peak day in the IRP appendices. Regarding Staff recommendation 24, Cascade is concerned about this recommendation given the volatility of weather from climate change. Cascade asks Staff to name sources to state peak day will decline over time.

Upstream and Distribution Emissions

25. *Quantify all of its emissions occurring in the gathering, transmission, and distribution of natural gas.*
26. *Comply with RCW 80.28.380 and include these emissions estimates in its costeffectiveness analysis where appropriate.*
27. *Corroborate measurement of distribution system emissions with reference to accounting the difference between natural gas volumes purchased by Cascade and the volumes sold.*

REPLY: Cascade disagrees with Staff's Staff recommendations 25 and 26, asserting that Cascade has not quantified all of its emissions and that the Company does not comply

⁴ Judah Cohen et al, "Linking Arctic variability and change with extreme winter weather in the United States" Sept. 1 2021 Available at: <https://www.science.org/doi/10.1126/science.abi9167>

with RCW 80.28.380. Cascade includes the loss of distribution in the Company's LoadMAP model. Cascade will agree that this could be clarified better within the IRP narrative. Cascade presented the quantification of upstream emissions during TAG 4, included narrative in the IRP, and provided the calculation in Appendix H.⁵ If this calculation was not clear, Staff should have stated that fact earlier on in the IRP process. Cascade looks forward to further discussions with Staff on Staff recommendation 27.

PLEXOS

28. *Consult with their Low-Income Advisory Group, and Equity Advisory Group to design a better methodology for considering the lowest reasonable cost, which includes examination of its decision-making framework related to integrated resource plan modeling.*
29. *Highlight and offer appropriate cautions in its analysis wherever PLEXOS yields results or behaviors that would be unlikely to be anticipated or enacted by a human planner.*
30. *Highlight and offer appropriate caution in its analysis wherever PLEXOS uses resources in its portfolio in a manner that does not accord with current best practices or current technological means.*
31. *Rapidly resolve the technical and economic questions related to the integration of Hydrogen and other synthetic fuels to ensure the fuels are accurately incorporated into optimized portfolios.*

REPLY: If Staff recommendation 28 relates to Plexos consulting with its two advisory groups, then Cascade concurs. Cascade has repeatedly stated the equivalent of Staff recommendations 29 and 30 during the TAG meetings and in the IRP and appreciates Staff's concurrence of this.^{6,7} Regarding Staff recommendation 31, Cascade notes that the understanding of hydrogen (including but not limited to application, safety, reliability, operational issues, and integration) are emerging with a wealth of information supporting its advantages and disadvantages. Hydrogen with all of its applications and associated issues has a lot of unknowns. Cascade has recognized that. This is described in Chapter 4 and 9. Cascade believes it has a prudent approach to monitoring developments of hydrogen and acting upon these if and when appropriate. Cascade strongly believes that Staff has mischaracterized the Company's position on hydrogen despite Cascade's explanations during TAG meetings. Cascade generally concurs with Staff's perspectives beginning at page 19 of its comments about safety, reliability, etc. and believes that this supports the Company's approach to monitoring all aspects including real-world experience with end-uses. Cascade rejects Staff's assertion regarding the latter that "Cascade provides no citation for this claim. A review of relevant literature suggests that there are substantial safety and reliability concerns that have not been resolved." (page 19 of Staff Comments) A Cascade representative was part of a Pacific Northwest delegation (including Washington state government officials) which toured Denmark's hydrogen

⁵ 2023 Cascade IRP, Page 6-31

⁶ Slides 22 and 23, TAG 3 presentation, [Cascade Natural Gas Corporation 2018 Integrated Resource Plan Technical Advisory Group Meeting #3 \(cngc.com\)](https://www.cngc.com)

⁷ 2023 Cascade IRP, Page 1-11

facilities and successful end-use (including residential) applications. With this said, Cascade questions the veracity of Staff recommendation 31 recommendation to “Rapidly resolve...” and related narrative in the body of Staff’s Comments.

GTN Xpress

32. *Reevaluate the demand shortfalls by: (1) Updating the demand forecast consistent with Staff’s other recommendations noted above in the section on demand growth, price forecasting, and climate change modeling, and (2) Running a control analysis without the GTN capacity increase.*
33. *Analyze the impacts on ratepayers for when the GTN capacity resource becomes a stranded asset.*
34. *Clarify the role of non-core/transportation customers in peak day events and provide quantitative and graphic analysis of the size of curtailable contracts.*
35. *Demonstrate the lowest reasonable cost analysis by demonstrating that other capacity resources were considered.*
36. *Demonstrate that a 20,000 dth/day annual contract is tailored to meet demand on a 70 HDD temperature day.*
37. *Demonstrate that an annual capacity contract is appropriate for a winter-peaking event*

REPLY: Staff recommendation 32, and 35-37, while interesting, would not change the information available to Cascade during the period of time (2018-2019) when the capacity was modeled to meet projected shortfalls or be used to move more of the less expensive AECO gas to the system. As Staff knows, capacity projects are “lumpy” and become available on a project-by-project basis. Cascade identified that based on the information available to the Company at the time, the GTXN project was indeed, justified. While Cascade can rerun the model based on changes in the last four years, the decision to acquire the capacity was made based on the best information about market conditions and Cascade’s forecasted load at the time. While the IRP does not determine prudence, the process Cascade followed to acquire the capacity is consistent with long-standing practice of the Commission to assess resource acquisitions from the standpoint of what did the utility know at the time it made the decision. The GTNX contract was executed prior to receiving or becoming aware of recent decarbonization requirements and need for corresponding analyses. As stated earlier, utilities are guided by their IRPs but have adaptive management in the operations of their companies. As Cascade continuously points out, IRPs inform, IRPs do not decide. The SENDOUT optimization runs for modeling GTNX considered alternative capacity resources. The full list of alternative capacity resources has been identified in each IRP for the last several cycles under Appendix E. Cascade secures upstream pipeline capacity for core customers—non-core transport customers are responsible for securing their own upstream resources. Citygate capacity is contracted to meet core load; non-core customer load is assumed to be zero by the model for peak day. GTN only offered annual capacity for the project; there was no opportunity to bid on winter only sizing. Finally, Cascade is unclear as to

what year Staff assumes that GTNX might become a stranded asset. The Company looks forward to future discussions on this subject.

Other Staff Comments

38. *Include an equity analysis of its pipeline siting.*
39. *If inequities are identified in the siting of pipelines and other infrastructure then research, design, and implement equity siting protocols that adhere to clear benchmarks toward distribution system siting equity and include that analysis within future IRP documents.*
40. *Include a graphic that synthesizes the data and communicates the scale of unmet demand and the scale and cost of Incremental Supply Side Resource Options.*

REPLY: Cascade agrees to continue communications with Staff to further clarify expectations for future IRPs in regard to Staff recommendations 38, 39, and 40.

Public Outreach and Engagement

41. *Improve the language accessibility of bill inserts.*
42. *Hire professional translators to translate Cascade's website.*
43. *Collaborate with its Conservation Advisory Group, Low-Income Advisory Group, and Equity Advisory Group to develop the capacity to target communications for customers who are renters, low income, non-English speaking, and other energy equity-related parameters.*
44. *Where possible, quantify collaboration with local non-profits and community-based organizations and outcomes of that collaboration.*
45. *Collaborate with its Conservation Advisory Group, Low-Income Advisory Group, Equity Advisory Group, and community-based organizations in its service territory to develop and expand these relationships as well as the capacity and outcomes of these partnerships.*
46. *Thoroughly review the GRC final order and prepare to implement its imperatives in its 2025 IRP*

REPLY: Cascade agrees to continue communications with Staff to further clarify expectations for future IRPs in regard to Staff recommendations 41-46.

IV. Future IRP Guidance

Cascade is concerned about Commission Staff expectations of integrated resource planning both generally and specifically. Staff acknowledges the rapidly changing regulatory landscape, however, Staff then recommends beginning the next IRP within two months to begin working with Staff and parties earlier in the planning process. Staff's suggestion opens up the Company to a longer IRP process, increasing the opportunities for a rapidly changing regulatory landscape to impact the work that has already been locked in. Cascade feels policy should not be formed by

last minute comments in an eighteen month process. Cascade respectfully requests the Commission initiate an inquiry into its IRP rules and/or process and/or expectations.

Cascade believes it has provided a textbook process for stakeholder involvement. Cascade believes its facilitation followed best practices. The Company was clear about its commitments (as listed in its *Stakeholder Engagement Design Document*), communicated this frequently, and encouraged analyst-to-analyst communications. If the next cycle repeats this past situation resulting in a 36 page set of Staff Comments after Cascade's filing of the Final IRP, but not the Draft months in advance, the Commission should consider providing independent facilitation. This, by itself, would add time to what Staff is requesting.

Coincidentally, discussions within Cascade began over a year ago regarding reshaping some aspects of its IRP process. One scenario discussed was to reduce the number of TAG meetings and provide a draft IRP earlier in the process. This would be informed by preliminary meeting(s) to solicit requested assumptions, scenarios, and sensitivities. (This was the intention of the Company's previous first two TAG meetings. If rolled into one TAG meeting to be followed by a Draft IRP, then this may bring proper focus among stakeholders to the early TAG meeting(s).) Under this scenario, advisory meetings would occur after filing a Draft so as to gain suggested improvements from stakeholders. This would also shorten time frames so as to address any emerging issues.

V. Recommendations

If Staff's aim is to "improve Cascade's 2025 IRP," then it should be a full participant early in Cascade's IRP process with clearly stated requests and positions. Cascade believes that its current stakeholder involvement process provides for this.

Cascade asks that the future processes begin with a discussion of having a Formal Charter and/or revisit Cascade's Stakeholder Engagement Design Document for reasons discussed in this Reply.

Further, there needs to be an understanding that the rapidly changing regulatory landscape could cause inflection points in the IRP where the Company and stakeholders will need to decide if models need to be updated, potentially delaying the IRP filing date. As suggested in the prior section this may require consideration of new IRP processes such as mini-TAGs with multiple drafts before finalizing an IRP, or a continuous IRP with inflection points determining the timing of the IRP.

Again, Cascade encourages the Commission to initiate an inquiry into expectations of its IRP rule and process.

VI. Concluding Remarks

Cascade's reply comments are unusually firm. Unfortunately, the Company's concerns with some of the mischaracterizations made by Staff, plus Cascade's belief that the IRP process model needs review, Cascade feels compelled to provide a strong response.

Cascade has prided itself on being a collaborative, transparent, and open-minded partner in the development of IRPs. The Company is troubled that its efforts with the 2023 IRP have been perceived as lacking. Cascade submits that a plain reading of its IRP fully complies with the Commission's IRP regulations. If Staff suggests otherwise, Cascade recommends the Commission open a docket to review its IRP rules.

As Staff has pointed out, the regulatory environment has changed rapidly since the last IRP cycle. With that change there are new expectations for narratives, modeling, analyses, and action plan development. Unfortunately, the IRP process itself has not evolved to address the needed changes in timeline, structure, expanded analyses, and deliverables associated with all these changes. Cascade believes the IRP process has become unclear and confusing which does not serve the best interests of stakeholders, Staff, the Commission, and most importantly, utility customers. It seems to Cascade that a docket clarifying the rules, expectations, deliverables, and timing of the IRP is desperately needed.

Cascade is amenable to beginning the 2025 IRP process earlier. The Company has already identified it has engaged with an outside consultant to develop a more comprehensive decarbonization plan. Additionally, Cascade suggests that a series of workshops be scheduled as soon as practical to follow up on Staffs' and other stakeholders concerns regarding data, modeling, and assumptions surrounding the development of the 2023 IRP. Cascade appreciates the recent discussion that have been held between the Company and Staff. We are excited that these conversations with Staff about the IRP will continue in the coming months. Cascade looks forward to collaborating with all interested parties to develop an IRP process that clearly describe the rules, expectations, and deliverables to ensure Cascade's 2025 IRP will meet and exceed the Commission's standards.

This concludes Cascade's comments.



In the Community to Serve®

CASCADE NATURAL GAS STAKEHOLDER ENGAGEMENT DESIGN DOCUMENT

Abstract

This document contains the rational, assumptions, and explanation behind the Stakeholder Engagement process of Cascade's IRP Process

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Introduction

Cascade welcomes input from technical experts and the interested public in developing its Integrated Resource Plan (IRP). Cascade seeks to employ best industry practices and recognizes external participation can add incremental improvements.

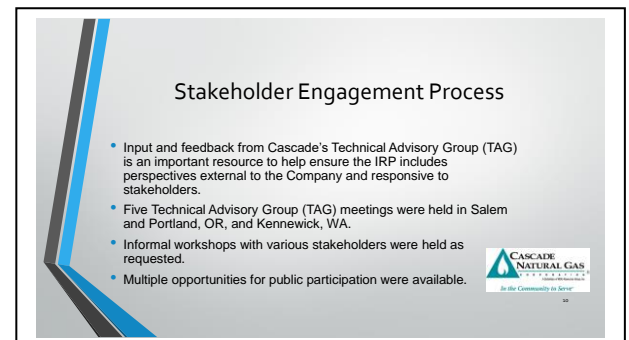
Cascade recognizes stakeholders have a multitude of projects before them. This Design Document is intended to assist in optimizing participation by interested parties to yield a solid IRP to the benefit of customers and the Company.

Purpose

The goal of the IRP process is to produce a plan that addresses meeting long-term load giving consideration to the best combination of expected costs and associated risks and uncertainties for the utility and its customers. Cascade strongly believes this process is best accomplished with input from all stakeholders.

The purpose of this document is to align perspectives for maximizing the effectiveness, influence, and amount of contributions from stakeholders in an environment of robust workloads by all parties. The stakeholder engagement process is summarized in Box #1.

Box #1: From OPUC 5/15/18 Workshop



Principles

Cascade applies the following four principles throughout this Design Document and the overall IRP process.

- A quality stakeholder engagement process is an iterative activity that requires collaboration and commitment

- Input from diverse perspectives improves the resulting IRP
- Removing barriers to participation and communicating in clear language with solid data is critical
- Transparency, and availability of Cascade staff for associated discussions, is central to the IRP process

Context

This Design Document is provided with the understanding that some organizations (e.g., Commission Staffs) may rotate its members through its various utility's IRP processes as well as onboard new Staff. Thus, beyond memorializing Cascade's commitments, this Document can be a primer for analyst-to-analyst mutual expectations.

Cascade's perspective is to capture the benefits of interested parties' knowledge by seeking to implement best-practices of stakeholder engagement, beyond this simply being a regulatory requirement.

Mutual Expectations

The Company will commit to the following series of actions for an efficient process to enhance stakeholders' participation. In turn, Cascade hopes that participating stakeholders will agree to general expectations on their part. The following Cascade and Stakeholder commitments are intended to coordinate communication throughout the IRP process and lay out mutual expectations.

Cascade Commitments

1. The Company will provide reasonable accommodations for people with disabilities. Additionally, the Company will reasonably accommodate items such as requests for meeting locations, audio and visual capabilities, and other items requested by external stakeholders
2. Publishing an annual schedule of meetings, for calendaring and coordination purposes, to be included in the workplan
3. Publish a brief section that lists the recommendations from the previous Commission IRP acknowledgement
4. Providing meeting materials (agenda and PowerPoint) approximately 7 days in advance of meetings
5. Responding to pre- or post-meeting communication going over information of interest to stakeholders
6. Offering separate workshops (e.g., forecasting, SENDOUT®, DSM) as requested
7. Keeping a running list of action items from Technical Advisory Group (TAG) meetings that need to be further addressed if not directly related to the then-meeting topic or if more time is required to respond
8. Provide TAG minutes that include the action items from bullet #7 as well as any upcoming deadlines for feedback on the IRP.
9. Allowing for open, inclusive, and balanced participation and information sharing

10. Recognizing that some parties may not have the industry knowledge or the resources to devote to analyzing all aspects of the IRP and that their interest may be one of breadth
11. Understanding TAG members can and should speak up if they need more information or if the time for discussion is too short and merits further discussion
12. Responding to questions in a reasonable time period
13. Noting when confidential information has been requested (or provided) and associated treatment
14. Seeking perspectives on inputs and results of the components of the IRP
15. Present information in a clear and transparent manner

Cascade Requests of Stakeholders

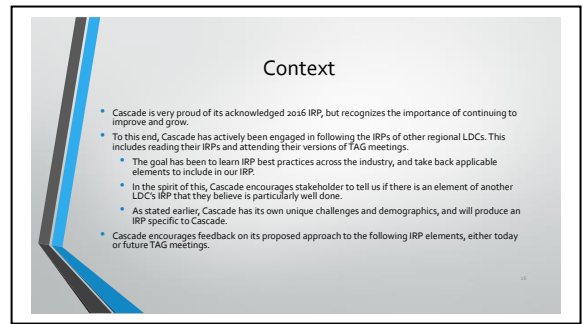
1. Ask questions of the Company on technical and methodological aspects
2. Be a point of contact within their organization to distribute information to peers or let Cascade know who should be on Cascade's direct distribution list.
3. Provide organizational positions, opinions, or perspectives to all stakeholders on various issues, while recognizing the following bullet point #4. (This is particularly relevant for organizations that have different lead analysts assigned to different companies or who have relatively new Staff members participating in any given IRP process.)
4. All should understand that some (e.g., Commission Staffs) organizational representatives cannot bind their organizations (i.e., Commissioners) but are making best efforts to provide relevant information
5. Recognize relative informality of the meetings and ability to interject for clarification and understanding
6. These requests of stakeholders are not to say, "speak now or forever hold your peace" or to put undue pressure on others' timelines and workload; rather these are ways to maximize the effectiveness of the stakeholders' comments, which optimizes the process. Again, comments received earlier in the process can better influence the final draft document.
7. When possible, provide feedback to meeting materials in advance of the meeting, to give Company representatives time to prepare information for an informed discussion.
8. Review bullet points #5 and #8 of Cascade's Commitments to ensure all action items are included and have been satisfactorily responded to by Cascade.

Desired End-Result

A well-planned and executed stakeholder engagement process would have all technical and methodological issues examined in meetings prior to parties later providing comments on the final draft document. This is the proverbial win-win-win situation. Commission Staffs and interested parties would have full understanding of the Company's data and analytical approaches. These studies can be refined through analyst-to-analyst discussions. Consideration of new approaches can be put to the forefront for current or future IRPs, based on budgets and benefit to customers. The Company benefits by gaining access to perspectives perhaps not otherwise known. Commission Staff and others may be aware of emerging policies and approaches given the breadth of their interactions with Commissioners and new issues. As Cascade strives to implement best planning practices, as depicted in Box #2, stakeholders can provide advice based on what they've seen in the industry.

The Company has and will continue to encourage stakeholder feedback, questions, and suggestions to assist Cascade in producing an IRP that meets the regulatory requirements and Cascade’s customers’ needs. Cascade prefers to receive feedback as early as possible in the process (e.g., in the course of its technical advisory group meetings or soon thereafter) so that the Company has a better opportunity to address questions or analyze/apply more stakeholder suggestions. Cascade recognizes that all parties are extremely busy, but strongly believes that stakeholder participation is crucial from the outset.

Box #2: From WUTC 6/18/18 Workshop



The above recognizes that key analytical components of the IRP—such as the demand forecast—need to be “locked down” at least midway through the process so that resource integration can be addressed. Interested parties can best influence these components earlier, rather than later, in the process.

Conclusion

While Cascade "owns" and is responsible for the IRP, the Company desires to have involvement from stakeholders to provide a diversity of perspectives. A best practices IRP is informed by perspectives, analyses and access to concerns and approaches that the Company may not have considered. Some stakeholders participate in multiple IRP processes and have a line-of-sight that may not be available to Cascade, despite the Company monitoring other utilities’ IRPs and associated processes.

Cascade recognizes parties will submit sometimes-detailed comments at the conclusion of the stakeholder involvement process in advance of Commission acknowledgement. The Company’s hope is that the guidelines contained in this Document will allow stakeholders to demonstrate to the Commission their work in the final IRP while concurring with its conclusions given the parties’ influence.