STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Petitions for Recovery of Certain Gas Costs

In the Matter of the Petition of CenterPoint Energy for Approval of a Recovery Process for Cost Impacts Due to February Extreme Gas Market Conditions

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In the Matter of the Petitions for Recovery of Certain Gas Costs

In the Matter of the Petition of CenterPoint Energy for Approval of a Recovery Process for Cost Impacts Due to February Extreme Gas Market Conditions

This matter was assigned to Administrative Law Judges (ALJs) Jessica A. Palmer-Denig and Barbara J. Case to conduct a consolidated contested case hearing regarding whether CenterPoint Energy Minnesota Gas (CenterPoint Energy or Company) and other Gas Utilities\(^1\) prudently incurred extraordinary costs for natural gas to serve their customers during the period of February 13-17, 2021 (the February Event). The Minnesota Public Utilities Commission (Commission) referred this matter pursuant to its Order Granting Variances and Authorizing Modified Cost Recovery Subject to Prudence Review, and Notice of and Order for Hearing (Order for Hearing) issued on August 30, 2021,\(^2\) in which it requested the preparation of a full report, based upon the consolidated case record.


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\(^{1}\) In addition to CenterPoint Energy, the “Gas Utilities” include Minnesota Energy Resources Corporation (MERC), Northern States Power Company d/b/a Xcel Energy (Xcel Energy), and Great Plains Natural Gas Co., a Division of Montana-Dakota Utilities Co. (Great Plains).


Katherine Hinderlie and Richard E.B. Dornfeld, Assistant Attorneys General, appeared on behalf of the Department of Commerce, Division of Energy Resources (Department).

Brian Edstrom, Citizens Utility Board of Minnesota (CUB), appeared on behalf of CUB.

Jocelyn Bremer, Assistant City Attorney, appeared on behalf of the City of Minneapolis.

Ryan Barlow, General Counsel, Jorge Alonso, James Worlobah, and Andrew Larson of the Commission appeared on behalf of Commission Staff.

STATEMENT OF ISSUES

The Commission identified the following issues in its Order for Hearing:3

A. Did the individual Gas Utilities act prudently before, during, and after the February Event, and are costs related to the February Event reasonable to recover from ratepayers?

B. Should the Commission disallow recovery of any costs for each utility?

C. If there are any disallowances for imprudent or unreasonable action, how should these costs be calculated?

D. The specific prudence questions raised so far, including but not limited to:

   i. When and to what extent did Gas Utilities become aware of the potential for extreme weather during the February Event, and did they respond prudently and reasonably?

   ii. Did the Gas Utilities have enough geographic diversity of gas supply and, if not, what was the potential financial impact?

   iii. Should the Gas Utilities have had additional fixed-price contracts and, if so, what was the potential financial impact?

   iv. Did the Gas Utilities maximize use of storage capacity and, if not, what was the potential financial impact?

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3 Id. at 7-8.
v. Did the Gas Utilities maximize use of peaking capacity and, if not, what was the potential financial impact? Has Xcel’s maintenance and operation of its Wescott, Sibley, and Maplewood facilities resulted in financial impact?

vi. Should the Gas Utilities have made more robust conservation efforts and, if so, what was the potential financial impact?

vii. Did the Gas Utilities timely and appropriately pursue recovery through insurance, federal regulatory actions, market rules, contract enforcement, and other available legal actions such that they have not missed deadlines or become barred from possible recovery on behalf of ratepayers and, if not, what is the potential financial impact?

viii. Are there any other issues or actions related to prudence and, if so, what is the potential financial impact?

E. Is it possible to assign extraordinary costs to customers or customer classes based on their consumption during the February Event and, if so, would it be reasonable to do so?

SUMMARY OF RECOMMENDATION

The ALJs conclude that CenterPoint Energy acted prudently in connection with the February Event, that the extraordinary gas costs CenterPoint Energy incurred in order to serve its customers are recoverable, and that no disallowance related to the February Event is warranted.

Based on the testimony and other evidence in the record, the ALJs make the following:

FINDINGS OF FACT

I. Introduction

1. In February 2021, a winter weather event brought extremely cold weather to the southern United States, including the natural gas producing areas of Texas and Oklahoma. The cold temperatures caused significant disruption in the production and distribution of natural gas.

2. Natural gas is not price-regulated; rather it is a commodity, and its price is determined by the marketplace. As a result of the cold weather event in February 2021, natural gas prices in some areas of the United States soared to levels never before previously seen.

3. In Minnesota, the four companies identified here as the Gas Utilities, provide rate-regulated natural gas service to nearly all Minnesota natural gas customers. These Gas Utilities are responsible for purchasing sufficient gas to meet customer demand and ensuring that their distribution systems remain functioning.
4. During February 13-17, 2021, which the Commission calls the “February Event,” the Gas Utilities maintained service to their customers, but incurred unprecedented levels of under-recovered costs for the purchase of natural gas in order to do so.

5. The Gas Utilities, including CenterPoint Energy, now seek to recover those costs. The Commission determined that a proceeding to assess the prudence of the Gas Utilities’ decisions in connection with the February Event was necessary as a part of that process.

II. Procedural Background

6. On August 30, 2021, the Commission issued its Order for Hearing, which, among other things, referred these matters to the Office of Administrative Hearings (OAH) for consolidated contested case proceedings.4

7. The Commission identified the parties to the contested case proceeding as CenterPoint Energy, Xcel Energy, MERC, Great Plains, the Department, and OAG.5

8. The ALJs held a prehearing conference on September 13, 2021, and Judges issued the First Prehearing Order on September 20, 2021.6 The First Prehearing Order established a procedural schedule, procedures for discovery, deadlines for prehearing filings, and procedures for the evidentiary hearing and briefing.7

9. The First Prehearing Order established the following schedule:

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility Direct Testimony</td>
<td>October 22, 2021</td>
</tr>
<tr>
<td>Intervenor Direct Testimony</td>
<td>December 22, 2021</td>
</tr>
<tr>
<td>Rebuttal Testimony by all Parties</td>
<td>January 21, 2022</td>
</tr>
<tr>
<td>Surrebuttal Testimony by all Parties</td>
<td>February 11, 2022</td>
</tr>
<tr>
<td>All Parties File and Exchange Prehearing Filings</td>
<td>February 14, 2022</td>
</tr>
<tr>
<td>Evidentiary Hearing</td>
<td>February 17-18 and 22-23, 2022</td>
</tr>
</tbody>
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4 Id. at 7.
5 First Prehearing Order at 3 (Sept. 20, 2021) (eDocket No. 20219-178082-04).
6 Id.
7 Id.
10. On October 1, 2021, CUB petitioned to intervene as a party.\(^9\) The ALJs granted CUB’s petition on October 12, 2021.\(^{10}\)

11. On October 8, 2021, SLGI petitioned to intervene in MERC’s Docket No. G011/CI-21-611.\(^{11}\) On October 20, 2021, SLGI’s Petition to Intervene was granted as to the prudence review in MPUC Docket No. G-011/CI-21-611.\(^{12}\)

12. On October 11, 2021, Minneapolis submitted a Petition to Intervene in MPUC Docket No. G-008/M-21-138, stating that CenterPoint Energy is the exclusive gas provider for Minneapolis and its residents.\(^{13}\) On October 20, 2021, Minneapolis’s Petition to Intervene was granted as to the prudence review in MPUC Docket No. G-008/M-21-138.\(^{14}\)

13. The ALJs issued a Protective Order on October 8, 2021, to address the handling of trade secret and nonpublic data.\(^{15}\) A Protective Order for Highly-Confidential Trade Secret Data was subsequently issued on October 11, 2021, and amended on October 26, 2021.\(^{16}\)

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\(^8\) Id.
\(^11\) Petition to Intervene of Super Large Gas Intervenors (Oct. 8, 2021) (eDocket No. 202110-178613-03).
\(^12\) Order Granting in Part and Denying in Part the Petition to Intervene of the Super Large Gas Intervenors (Oct. 20, 2021) (eDocket No. 202110-178980-01) (SLGI’s Petition to Intervene in MPUC Docket No. G-999/CI-21-135 was denied as that docket was not referred to the OAH for inclusion in the contested case proceeding).
\(^13\) Petition to Intervene (Oct. 11, 2021) (eDocket No. 202110-178639-01).
\(^14\) Order Granting in Part and Denying in Part the Petition to Intervene of the City of Minneapolis (Oct. 20, 2021) (eDocket No. 202110-178978-04) (To the extent that Minneapolis’s filings could be construed as a request to intervene in the remaining three dockets, Minneapolis’s Petition to Intervene was denied).

15. On December 22, 2021, CUB, the Department, and the OAG filed Direct Testimony.


17. On January 27, 2022, the Commission requested that the OAH hold two virtual public hearings in early March of 2022 and provide a summary report.¹⁷

18. The ALJs held a second prehearing conference via Microsoft Teams on February 3, 2022.¹⁸ They then issued the Second Prehearing Order on February 7, 2022, scheduling the evidentiary hearing to be held via Microsoft Teams on February 17, 18, 22, and 23, 2022, beginning at 9:30 a.m. each day, and requiring prehearing filings.¹⁹

19. On February 4, 2022, the Commission issued a Notice of Virtual Public Hearings, scheduling public hearings for March 3, 2022, at 1:00 p.m. and 6:00 p.m.²⁰ On February 14, 2022, the Commission issued an addition to the February 4, 2022, Notice to inform the public that the Commission will also accept video comments as another method to participate in the virtual hearings.²¹

20. On February 11, 2022, CUB, the Department, and the OAG filed Surrebuttal Testimony.

21. On February 14, 2022, the Gas Utilities, CenterPoint Energy, Great Plains, Xcel Energy, MERC, the Department, CUB, and the OAG filed Written Summaries of Pre-Filed Testimony.

22. The ALJs held the evidentiary hearing on February 17, 18, and 22, 2022, via Microsoft Teams.


¹⁷ Request for the OAH to Hold Public Hearings (Jan. 27, 2022) (eDocket No. 20221-182049-04).
²⁰ Notice of Virtual Public Hearings (Feb. 4, 2022) (eDocket No. 20222-182412-04).
25. On March 25, 2022, the parties filed Reply Briefs, redlines of the Proposed Findings of Fact, and CenterPoint Energy, Great Plains, Xcel Energy, and MERC filed responses to public comments.

III. **Standard of Review**

26. Every rate made, demanded, or received by any public utility must be just and reasonable.23

27. This proceeding addresses the reasonableness of the costs incurred by the Gas Utilities, and specific to this Report, whether MERC acted prudently before, during, and after the February Event, and whether the costs related to the February Event are reasonable to recover from ratepayers.24

28. The term “prudence” means “skill and good judgment in the use of resources,” “caution or circumspection as to danger or risk,”25 and “behavior that is careful and avoids risk.”26

29. The parties to this proceeding generally agree on the contours for determining prudence. Prudence is defined as reasonable action taken in good faith based on knowledge available at the time of the action or decision.27 Actions taken in good faith are those taken without malicious intent,28 exercising the care that a reasonable person would exercise under the same circumstances at the time the decision was made.29

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22 The Administrative Law Judges requested that the parties use their best efforts to provide redlined findings of fact in order to clearly highlight specific areas of dispute. The parties did so, but given the short timelines required in this matter and the volume of material to be reviewed, the Department, OAG, and CUB noted that the failure to strike or revise certain facts did not constitute a stipulation or waiver as to that issue. The Administrative Law Judges appreciate the efforts of all of the parties to build the record for the Commission’s decision, and have reviewed the parties’ final submissions and the entire record in light of the reservations asserted by the Department, OAG, and CUB.


24 Order for Hearing at 7.


27 Ex. 506 at 28 (King Direct) (“I define prudence as reasonable action taken in good faith based on the knowledge available at the time.”); Ex. 103 at 13 (Honorable Direct) (noting that the prudence standard evaluates “whether the utility acted in good faith and reasonably, based upon the facts that it knew or should have known at the time, without the benefit of hindsight”); Ex. 819 at 13 (Nelson Surrebuttal) (noting the evaluation of prudence must “focus on whether [t]he utilities exercised due care given what was known and knowable of their actions”).

28 Evidentiary Hearing Tr. Vol. 2C at 25 (King) (“I had thought of it . . . as just meaning without malicious intent.”)

29 Ex. 810 at 21 (Nelson Direct) (“The fact that a better outcome could have been reached in hindsight is not in itself permissible evidence in a prudence review; what matters is whether the utility acted reasonably based on the facts it ‘knew or should have known’ at the time. This is related to the concept of a ‘reasonable utility,’ which is expected to exercise ‘the care that a reasonable person would exercise under the same circumstances at the time the decision was made.’”).
30. Prudence is not evaluated using the benefit of hindsight. Instead, the Gas Utilities’ actions and decisions must be judged on the basis of whether each action and decision was reasonable at the time, under all the circumstances, and based on the information that was or should have been known.\(^{30}\)

31. A determination of prudence must recognize that a utility may take a range of actions or decisions that are prudent.\(^{31}\) In most instances, there will not be one singular prudent action or decision but rather, a range of actions that are reasonable and prudent.\(^{32}\)

32. A prudence review is focused on an examination of a utility’s specific decisions and whether the decisions were prudent or imprudent.\(^{33}\) The burden to prove that its actions were prudent, and that recovery of extraordinary costs is reasonable, rests on CenterPoint Energy.\(^{34}\)

33. Utilities do not enjoy a presumption of prudence.\(^{35}\) Doubts as to reasonableness are resolved in favor of the consumer.\(^{36}\)

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\(^{30}\) Ex. 506 at 28 (King Direct) (Prudence must be assessed “based on the information the Gas Utilities had, or could reasonably have obtained, at the time of their actions and not the benefit of hindsight now available.”); Ex. 105 at 1 (Honorable Summary of Pre-Filed Testimony) (“It is my opinion that the Joint Gas Utilities have an obligation to act in good faith, based on the circumstances and facts known at the time, to obtain the necessary gas supplies to serve their retail customers at reasonable cost given the prevailing market at the time of the purchases. If they did so during the Winter Storm, the Joint Gas Utilities have acted in a prudent fashion and have incurred costs reasonably necessary to provide service to their customers.”); Ex. 600 at 17 (Lebens Direct) (The Commission “should focus as much as possible on evaluating the decisions that would have been prudent based on the information available at the time when those decisions were made.”); Ex. 104 at 4-5 (Honorable Rebuttal) (“This proceeding involves gas supply costs incurred by the Joint Gas Utilities to serve their customers during a recognized extreme weather event. Cold weather events create challenging and dynamic environments that require quick responses. Such circumstances should be considered as part of the overall prudence evaluation.”).

\(^{31}\) Ex. 506 at 28 (King Direct) (“[I]n order for the actions of the Gas Utilities to be deemed prudent, they must fall within a range of reasonable action.”); Ex. 105 at 1 (Honorable Summary of Pre-Filed Testimony) (“Prudence is not evaluated on the basis of hindsight, and prudence determinations recognize that a utility may take a range of actions or decisions that are prudent.”); Ex. 819 at 19 (Nelson Surrebuttal) (agreeing that a range of utility decisions taken in response to a specific circumstance may be prudent).

\(^{32}\) See Evidentiary Hearing Tr. Vol. 2C at 23 (King) (“Q. In order to be deemed prudent, the gas utilities’ actions must fall within a range of reasonable action. Correct? A. Yes. Q. Would you agree that a range of reasonable action includes more than one possible action? A. Yes”); Ex. 104 at 3 (Honorable Rebuttal) (“[T]he standard is clear that a range of reasonable utility management decisions made in response to specific circumstances may qualify as prudent – there is no single ‘right answer.’”).

\(^{33}\) Ex. 819 at 17 (Nelson Surrebuttal) (“[T]he focus of a prudence review is on specific decisions – not a vague ‘totality of the decisions’ in which no specific decision can be identified as unreasonable.”).

\(^{34}\) Minn. Stat. § 216B.16, subd. 4 (2020).


\(^{36}\) Minn. Stat. § 216B.03; see also Order for Hearing at 3 (“In incurring costs necessary to provide service, utilities are expected to act prudently to protect ratepayers from unreasonable risks.”).
IV. Overview of U.S. Natural Gas Markets

34. The natural gas market differs in important and fundamental ways from the electric power market, reflecting the different structures of the two industries and the different products moving through those markets.\textsuperscript{37} The electric power industry operates as a single, fully-integrated system, and the market operates in real-time, since electricity travels near the speed of light.\textsuperscript{38} In contrast, the natural gas industry consists of multiple entities operating independently.\textsuperscript{39} And while dynamic, the natural gas market is far more static than the electric market, particularly during strained operating conditions such as occurred during Winter Storm Uri.\textsuperscript{40}

35. The natural gas industry consists of: (1) producers that drill wells that bring raw natural gas to the surface; (2) midstream gathering and processing entities that carry the raw gas to treatment and processing facilities; (3) transmission pipelines which move dry (processed) gas and gas from storage to distant consuming markets; (4) storage providers which supply underground natural gas storage for system balancing and/or for later consumption; (5) local distribution companies (LDCs) that supply and deliver the natural gas actually consumed by utility customers to those customers; and (6) direct-connect end-users, such as power plants or large industrial users, which take natural gas service directly from the transmission pipelines rather than from an LDC.\textsuperscript{41}

36. In 1993, the Federal Energy Regulatory Commission (FERC) implemented Order No. 636.\textsuperscript{42} Order No. 636 “unbundled” different aspects natural gas industry.\textsuperscript{43} Previously transmission pipelines bought and sold the bulk interstate gas, and thus delivered to their customers a “bundled” product consisting of gas, transmission, and storage; through unbundling, FERC instituted the current structure in which transmission pipelines strictly transport and store gas as contract carriers, while buyers and sellers purchase and sell gas separately, moving it through the transportation and storage services provided by the pipelines.\textsuperscript{44}

37. To serve the needs of firm customers, a natural gas LDC must contract with two different types of entities. First, the LDC contracts with transportation pipelines, who transport natural gas to the LDC’s service territory from the locations where it is produced, purchased and stored, under agreements and pursuant to tariffs regulated by FERC.\textsuperscript{45} Natural gas is not produced within Minnesota, so the Gas Utilities rely on interstate

\begin{itemize}
\item\textsuperscript{37} Ex. 100 at 3, 15-16 (Smead Direct).
\item\textsuperscript{38} Id. at 3, 15-16.
\item\textsuperscript{39} Id. at 3-4.
\item\textsuperscript{40} Id. at 16.
\item\textsuperscript{41} Id. at 3-4; see also Ex. 506 at 3-4 (King Direct).
\item\textsuperscript{42} Ex. 100 at 4 (Smead Direct).
\item\textsuperscript{43} Id.
\item\textsuperscript{44} Id.; see also Ex. 506 at 5 (King Direct).
\item\textsuperscript{45} Ex. 506 at 6 (King Direct).
\end{itemize}
pipelines to transport gas produced in other states to Minnesota.\textsuperscript{46} Second, the LDC also contracts with suppliers of physical natural gas.\textsuperscript{47}

38. The trading of natural gas as a commodity is unregulated, but the United States natural gas market is subject to extensive reporting, observation, and analysis.\textsuperscript{48} Natural gas prices “are driven by the competitive market forces of supply and demand.”\textsuperscript{49}

39. Many factors affect the competitive market pricing of natural gas, including: weather forecasts, storage levels and activity, current and projected production levels, demand for liquefied natural gas (LNG) exports, pipeline constraints, pipeline tariff provisions and operational actions, and uncertainty of supply reliability.\textsuperscript{50}

40. The sale and purchase of natural gas takes place both through one-on-one bilateral negotiated transactions directly between counterparties and through open and transparent trading on organized and regulated exchanges, including the Intercontinental Exchange (ICE).\textsuperscript{51}

41. Physical gas is commonly traded at “market hubs” or “market centers”, collectively referred to as “trading hubs.” There are four trading hubs directly relevant to the Minnesota market: (1) Northern Natural Gas Company (NNG) Field/Market Demarcation (Demarc), which is the Kansas boundary between NNG’s supply-area system and the market system that serves Minnesota; (2) Ventura, Iowa (Ventura), where Northern Border Pipeline Company (Northern Border) and NNG intersect; (3) Emerson, Manitoba (Emerson), where TransCanada Pipeline feeds both Great Lakes Gas Transmission LP and Viking Gas Transmission Company (VGT); and (4) NiGas in the Chicago area (Chicago), where extensive storage connects with the pipelines serving Minnesota.\textsuperscript{52}

42. The physical delivery of gas from a seller to a buyer is based on three primary structures: (1) the daily physical spot market, where natural gas is bought and sold for delivery the next day (or in the case of a Friday, trades include nominations for flow on Saturday, Sunday, and Monday (and if Monday is a holiday, then Tuesday as well));\textsuperscript{53} (2) the monthly spot market, where gas is sold on monthly contracts for the upcoming month during a period called “bidweek” historically being completed sometime during the last week prior to the first day of the month the gas is intended to flow; and (3) long-term contracts, where gas supply is contracted under seasonal, annual or multi-

\textsuperscript{46} Id. at 7.
\textsuperscript{47} Id. at 6. Suppliers can either be producers of natural gas or marketers, who aggregate supply for commercial disposition. Ex. 100 at 5 (Smead Direct).
\textsuperscript{48} Id. at 7; Ex. 506 at 5-6 (King Direct).
\textsuperscript{49} Ex. 506 at 5 (King Direct).
\textsuperscript{50} Ex. 100 at 20-23 (Smead Direct).
\textsuperscript{51} Id. at 7; see also Ex. 506 at 24 (King Direct).
\textsuperscript{52} Ex. 100 at 5-6 (Smead Direct); see also Ex. 506 at 6-7 (King Direct).
\textsuperscript{53} Ex. 100 at 11, 14 (Smead Direct).
year deals. All of these different types of deals can be based on a fixed price or indexed based on a price reporting agency (PRA) index.

43. Monthly transactions are for delivery of specified volumes, effective on the first of the month (and thus called FOM) and remain in effect each day of the upcoming month. The bidweek FOM index is then published on or about the first business day of the month in which the trades will flow. For February 2021 FOM deals, trading closed on January 28, 2021.

44. Because the major trading platforms are not open on the weekends or holidays, it is difficult for an LDC to find uncommitted supply during the weekend. The intra-weekend market represents a less liquid bilateral market without the benefits of regular business day trading.

45. A subset of physical fixed price transactions (both monthly and daily) are reported on a voluntary basis to PRAs such as S&P Global Platts and Natural Gas Intelligence. PRAs use this information to produce price indices, which are used for index deals (i.e., deals that are settled based on a published index price). Fixed price deals that companies choose to report must be reported to PRAs by 3:00 p.m. central time. The PRAs pull the information into a database to create a weighted average (or some other mathematical midpoint).

46. Index deals are common in the natural gas industry—about 84 percent of the physical daily and monthly transactions in 2020 were done based on an index price. Index deals are the dominant pricing structure, since neither counterparty is making a wager on the difference between the contract price and a changing market during the duration of the agreement.

47. Once physical natural gas is purchased, it needs to be scheduled (or nominated) to flow on the transportation pipelines. FERC requires transportation pipelines

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54 Id. at 11.
55 In the wake of the Enron collapse, natural gas sales, futures transactions, the way these transactions are reported to PRAs, and the PRAs themselves became subject to a high degree of government oversight, through initiatives at FERC (such as FERC’s 2003 Policy Statement on Natural Gas and Electric Price Indices and FERC Order No. 704), the Commodity Futures Trading Commission (CFTC) and through major federal legislation (such as the Energy Policy Act of 2005, which provides broad enforcement power to both FERC and the CFTC), in order to ensure the integrity and reliability of price indices, so that they will be representative of the market. Id. at 8-9.
56 Id. at 12.
57 Id. at 14.
58 Evidentiary Hearing Tr. Vol. 2C at 26-27 (King).
59 Ex. 100 at 18 (Smead Direct).
60 Ex. 506 at 24-25 (King Direct).
61 Ex. 100 at 7 (Smead Direct).
62 Id.; see also Ex. 506 at 75 (King Direct) (“Natural gas price indices are widely relied on to be representative of the price of gas at their respective locations.”)
63 Ex. 100 at 14 (Smead Direct).
64 Id. at 7-8.
65 Id. at 12.
to incorporate nomination standards developed by the North American Energy Standards Board (NAESB) into their tariffs. These standards set five different cycles upon which natural gas can be nominated—two prior to the Gas Day (i.e., the period of 24 consecutive hours beginning and ending at 9:00 a.m. Central Time) and three opportunities during the Gas Day. The figure below illustrates these five nomination cycles. This pipeline nomination structure leaves limited ability to respond to changes during the day by buying and selling flowing gas supply.

**NAESB Timeline**

![NAESB Timeline Diagram](image)

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Cycle Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>Timely: Nominations sent by 1 p.m. (Central Clock Time), to be confirmed by 4:30 p.m., and to be effective for gas flow starting at 9 a.m. next gas day.</td>
</tr>
<tr>
<td>E</td>
<td>Evening: Nominations sent by 6 p.m., to be confirmed by 8:30 p.m. for gas flow at 9 a.m.</td>
</tr>
<tr>
<td>ID1</td>
<td>Intraday 1: Nominations sent by 10 a.m., to be confirmed by 12:30 p.m. for gas flow at 2 p.m.</td>
</tr>
<tr>
<td>ID2</td>
<td>Intraday 2: Nominations sent by 2:30 p.m., to be confirmed by 5 p.m. for gas flow at 6 p.m.</td>
</tr>
<tr>
<td>ID3</td>
<td>Intraday 3: Nominations sent by 7 p.m., to be confirmed by 9:30 p.m. for gas flow at 10 p.m.</td>
</tr>
</tbody>
</table>

48. When a transportation pipeline declares constrained operating conditions, which can include a “critical day,” “system overrun limitation,” or a “system underrun limitation,” LDCs and others flowing gas through pipelines can be exposed to substantial penalties for taking too much natural gas, for being out of balance between receipts and deliveries. Those penalties can be up to three times the applicable daily spot price per unit on that day.

49. The restriction and penalty provisions of pipeline tariffs mean that during strained operating conditions the penalty rate for a pipeline imbalance is a multiple of the

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66 Id. at 16.
67 Id. at 16-17.
68 Id. at 16.
69 Ex. 506 at 24, Figure 10 (King Direct).
70 Ex. 100 at 18 (Smead Direct).
71 Id. at 24.
prevailing market price, making an imbalance penalty far more expensive than ensuring an adequate supply at the market price.\textsuperscript{72}

50. The physical gas supply options available to the Gas Utilities are: (1) baseload purchases; (2) storage assets; (3) swing supply; and (4) daily spot purchases.\textsuperscript{73}

51. Baseload purchases refer to a fixed volumes of gas that flow every day for the term of the contract.\textsuperscript{74} Baseload contracts are either monthly contracts or long-term contracts (more than one month).\textsuperscript{75} Typically, these baseload purchases are prices at FOM index price or a fixed price.\textsuperscript{76}

52. There are several different types of storage assets: (1) pipeline storage; (2) virtual marketer storage; and (3) utility-owned storage facilities. Pipeline storage contracts and virtual marketer storage contracts lay out the terms of how these storage assets can be used, including for example, maximum daily withdrawal limits.\textsuperscript{77} Storage supplies are filled during the lower demand summer season for use during the higher demand winter season.\textsuperscript{78} On a daily basis, storage provides an operational balancing tool to allow utilities to manage uncertainty and variability of load, including across weekends during which gas trading is limited.\textsuperscript{79} Because regional storage around Minnesota is fully subscribed, the Gas Utilities cannot readily acquire additional storage without considerable effort and investment.\textsuperscript{80}

53. Swing supply refers to a commitment in advance for a supplier to bring an agreed upon volume of supply at the option or request of the buyer.\textsuperscript{81} Swing supply provides assurance in advance that a quantity of physical gas supply will be available.\textsuperscript{82} Although swing supply provides quantity certainty, those deals are typically priced at a daily spot index.\textsuperscript{83}

54. Daily spot purchases refers to gas bought in the spot market for delivery the next day or the next few days (weekend or holiday period).\textsuperscript{84} Daily spot purchases can be purchased for a negotiated fixed price or pricing can be based on the published daily market price index.\textsuperscript{85}

\textsuperscript{72} Id. at 24-25.
\textsuperscript{73} Id. at 31.
\textsuperscript{74} Ex. 506 at 21 (King Direct).
\textsuperscript{75} Id.
\textsuperscript{76} Id.
\textsuperscript{77} Id.
\textsuperscript{78} Id.
\textsuperscript{79} Id.
\textsuperscript{80} Id. at 21-22.
\textsuperscript{81} Id. at 20.
\textsuperscript{82} Id.
\textsuperscript{83} Id.
\textsuperscript{84} Ex. 100 at 11, 14 (Smead Direct).
\textsuperscript{85} Id. at 12.
V. General Background Regarding the February Event

55. In February 2021, cold weather across much of the United States led to increased demand for natural gas and, in some areas, supply disruptions.\(^{86}\) On February 12, 2021, unprecedented and unforeseen rise in natural gas spot market prices ensued, including in Minnesota. \(^{87}\)

56. Weather during the February event turned out to be consistently colder than had been predicted in late January and more widespread than had been predicted until a handful of days before the February Event. Additionally, in a development not seen to the same degree in at least the last decade, there was a substantial weather-driven failure of supply from major Texas and Oklahoma supply areas upon which the Minnesota market places significant reliance.\(^{88}\) During the event, a majority of gas production in Texas came offline, mostly because of wellhead and equipment freeze-offs as the deep freeze extended to all counties of the state, or due to power outages affecting gas supply chain facilities. Interstate pipelines deliver Texas gas supply to markets across the country, including to Minnesota.\(^{89}\) During the event, a majority of gas production in Texas came offline, mostly because of wellhead and equipment freeze-offs as the deep freeze extended to all counties of the state, or due to power outages affecting gas supply chain facilities. Interstate pipelines deliver Texas gas supply to markets across the country, including to Minnesota.\(^{89}\) Demand was up and supply was down, resulting in a sellers’ market price runup of historic proportions and creating substantial uncertainty about the reliability of flowing supplies over a holiday weekend when business would be very difficult if not impossible to transact, to bring new supplies on line.\(^{90}\)

57. Despite the difficult conditions, CenterPoint Energy maintained continuous service to 893,000 customers during this period, but in doing so, it incurred unprecedented costs associated with purchasing gas on the daily spot market.\(^{91}\) Because providing natural gas is a matter of public health and safety, especially during cold weather, CenterPoint Energy’s key considerations are safety, reliability and cost, in that order.\(^{92}\)

58. At issue in this proceeding are the “extraordinary gas costs” incurred during the February Event, which the Commission defined as the difference between $20/Dth and the actual average daily price experienced by the Minnesota natural gas utilities during the February Event.\(^{93}\) Based on the Commission’s definition, CenterPoint Energy incurred $408,755,953 in extraordinary gas costs during the February Event.\(^{94}\)

\(^{86}\) Order for Hearing at 1.
\(^{87}\) Id.
\(^{88}\) Ex. 100 at 57 (Smead Direct).
\(^{89}\) Ex. 106 at 8 (Ryan Direct).
\(^{90}\) Ex. 100 at 57 (Smead Direct).
\(^{91}\) Id. at 13.
\(^{92}\) Id.; Ex. 106 at 29 (Ryan Direct).
\(^{93}\) Ex. 106 at 19 (Ryan Direct).
VI. Background Regarding CenterPoint Energy

A. CenterPoint Energy

59. CenterPoint Energy has provided gas service in Minnesota since 1870. CenterPoint currently provides natural gas to over 893,000 sales customers, of which approximately 92 percent are residential customers dependent upon natural gas service for space heating, cooking and water heating.

60. CenterPoint Energy’s Minnesota gas distribution system includes approximately 14,334 miles of distribution and transmission mains and 781,100 service lines providing natural gas service to 315 cities, towns, and communities.

61. Each year, CenterPoint Energy procures well over 150 billion cubic feet (Bcf) of natural gas. Supply requirements vary throughout the year based on seasonal temperature differences. On some days in the summer, only 200,000 dekatherms (Dth) may be needed to serve customers, but on a cold winter day, supply requirements can exceed 1,000,000 Dth.

62. To meet its firm customer needs, CenterPoint Energy uses a diversified gas supply portfolio consisting of a combination of: (1) baseload gas supplies; (2) storage; (3) swing supply; (4) daily spot market purchases; and (5) peak shaving resources.

(1) Baseload: Baseload gas supplies are fixed volumes of gas that flow every day for the term of a contract. The baseload gas requirements vary from month to month particularly during the winter months (November through March), but also in the non-winter months. To match seasonal and month-to-month variability, the Company enters into both long-term baseload (more than one month) and monthly baseload supply contracts. Typically, an adjusted Inside FERC FOM index price is used as the price term.

(2) Storage: CenterPoint Energy has the following storage supplies: (1) pipeline storage contracts with Natural Gas Pipeline (NGPL) and Northern Natural Gas (NNG or Northern); (2) virtual marketer storage with BP Canada; and (3) Company-owned and operated underground aquifer storage located south of

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95Ex. 106 at 8 (Ryan Direct).
96 Id. at 12.
97 Id. at 13.
98 Ex. 118 at 4 (Grizzle Direct).
99 Id.
100 Id.
101 Id. at 6.
102 Id.
103 Id.
104 Id.
105 Id. Platts Inside FERC is a weekly subscription newsletter which provides reporting on gas pipeline regulation and includes monthly index pricing.
Minneapolis, known as the Waterville underground storage facility. Storage volumes are purchased in the summer and stored for withdrawal during the winter months. Storage supply has more flexibility than baseload supply. However, the use of storage in the winter is contractually and operationally limited by daily maximum withdrawal quantities as well as monthly and/or seasonal total minimum and maximum withdrawals.

(3) **Daily Swing Supply:** CenterPoint Energy’s daily swing supply allows it to reserve the availability of certain volumes of gas one day at a time, or in short term contracts, as needed to serve its customers’ daily demand. If daily options are purchased, CenterPoint Energy can request gas on any day by providing 24-hour notice to the supplier, with ratable supplies for weekends and holidays. Ratable supply means that CenterPoint Energy must purchase the same volume over the term of the trading period (for example, the same volume of gas must be purchased each day of the three days over a weekend or each of the four days in the case of a Monday holiday). When gas flows, CenterPoint Energy pays the daily index price for the volume that is delivered. A daily demand fee is paid each day regardless of whether the Company utilizes the call option or not.

(4) **Daily Spot Market Purchases:** Daily spot market purchases refer to gas bought in the spot market on a daily or short-term basis. Daily spot market gas supplies allow CenterPoint Energy to obtain different volumes of gas on a daily basis to match the daily variability in forecasted gas demand. Spot purchases can be obtained for a negotiated fixed price or pricing may be based on the published daily market price index rate. The daily market price index rate is the average price of all the reported fixed price deals entered into on a particular day for each trading hub. Since gas is only traded on non-holiday business days, on weekends with a Monday holiday, daily volumes are purchased on Friday for use on Saturday through Tuesday. In addition, due to the structure of the market and most swing contracts, daily volumes for a holiday weekend must be purchased ratably.

(5) **Peak Shaving:** CenterPoint has one liquefied natural gas (LNG) and eight propane peak shaving facilities that can inject supplies directly into its

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106 Id. at 7.
107 Id. at 8.
108 Id.
109 Id.
110 Id. at 9.
111 Id.
112 Id.
113 Id. at 10.
114 Id.
115 Id.
116 Id.
117 Id.
118 Id.
119 Id. at 9-10.
distribution system.\textsuperscript{120} These facilities are part of the portfolio of supply and capacity tools used to meet design day load requirements and respond to intraday changes in customer demand.\textsuperscript{121} CenterPoint Energy has historically used its peak shaving on extremely cold winter days when customer demand exceeds the total amount of baseload, storage and daily swing supplies that can be delivered. The Company generally does not plan for use of peak shaving resources unless forecasted load exceeds available pipeline capacity as contemplated by CenterPoint’s Gas Procurement Plan (GPP).\textsuperscript{122}

63. While not a gas supply asset, CenterPoint Energy also has interruptible commercial and industrial customers on its distribution system whose consumption can be curtailed. CenterPoint’s tariffs allow it to curtail “if capacity constraints require or for other appropriate reasons.”\textsuperscript{123} CenterPoint has historically curtailed on extremely cold winter days when customer demand exceeds the total amount of baseload, storage, and daily gas supplies that can be delivered.\textsuperscript{124} CenterPoint Energy also can curtail interruptible customers when reducing customer load at certain locations will alleviate local issues on the distribution system.\textsuperscript{125}

64. Since Minnesota is not a natural gas producer, CenterPoint Energy contracts with multiple gas supply sources across the country to procure gas to be delivered to its customers.\textsuperscript{126}

65. CenterPoint Energy depends on pipeline transportation to carry its gas supply from its gas suppliers to its 185 town border stations (TBS) or city gates.\textsuperscript{127} The TBS is where the gas enters CenterPoint Energy’s distribution system to be delivered to customers’ homes and businesses.\textsuperscript{128}

66. CenterPoint Energy contracts for firm pipeline capacity on a number of pipelines.\textsuperscript{129} CenterPoint Energy holds long-term contract rights to firm pipeline transportation services on both interstate and intrastate pipelines – Northern, Viking, Trailblazer, NGPL, and Minnesota Intrastate Pipeline Company (MIPC) – that are used to transport gas commodity purchases to CenterPoint Energy’s TBS facilities.\textsuperscript{130} The table below summarizes CenterPoint Energy’s interstate pipeline capacity available in February 2021.

\textsuperscript{120} Ex. 115 at 20:11-16 (Heer Direct).
\textsuperscript{121} Id.
\textsuperscript{122} Ex. 116 at 11-12 (Heer Rebuttal).
\textsuperscript{124} Ex. 133 at 36 (Reed Direct); Ex. 113 at 5 (Olsen Rebuttal).
\textsuperscript{125} Ex. 133 at 36 (Reed Direct); Ex. 113 at 5 (Olsen Rebuttal).
\textsuperscript{126} Ex. 118 at 13 (Grizzle Direct).
\textsuperscript{127} Id. at 14-15.
\textsuperscript{128} Id. at 15.
\textsuperscript{129} Id.
\textsuperscript{130} Id.
CenterPoint Energy Transportation Capacity 2020-2021

<table>
<thead>
<tr>
<th>Pipeline</th>
<th>Transportation (Dth/Day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNG</td>
<td>1,230,290</td>
</tr>
<tr>
<td>NGPL</td>
<td>212,000</td>
</tr>
<tr>
<td>Viking Transmission Company of America</td>
<td>76,809</td>
</tr>
<tr>
<td>Minnesota Intrastate Pipeline Company</td>
<td>100,000</td>
</tr>
<tr>
<td>Trailblazer</td>
<td>100,000</td>
</tr>
</tbody>
</table>

B. CenterPoint Energy’s Gas Procurement Planning Before the February Event

67. CenterPoint Energy reviews and updates its gas supply plan each summer to reflect new information, including revised projections of supply, demand, and prices. The gas supply plan involves developing a strategy to serve demand under various weather scenarios such as normal (average) weather and design-day cold weather using various types of capacity assets, including interstate pipeline transportation, storage, and LNG and propane-air peaking facilities. The plan documents CenterPoint Energy’s decisions regarding how its gas supply and capacity portfolio is developed. The gas supply plan serves as guidance for CenterPoint Energy’s capacity contracting, supply purchasing, and price hedging activities. At the same time, it allows CenterPoint Energy flexibility to react to changing circumstances, including the ability “adjust for changing market, weather, operational and other conditions.”

68. CenterPoint Energy’s gas procurement strategy is designed to maintain a reliable supply of gas while providing price protection and reasonable prices for its customers. CenterPoint Energy’s gas purchases often are the greatest when supplies are most difficult to obtain, and inadequate supply would have the most substantial adverse effect on essential human needs. The Company must have a gas supply that is reliable under any operational, market, or weather conditions.

69. Planning for adequate natural gas supply to ensure reliability is critical given the potential dire impacts of unplanned outages on the gas system. CenterPoint Energy explained that restoring gas in the event of an outage is a lengthy process that takes

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131 Ex. 126 at 14, Table 1 (Toys Direct).
132 Ex. 118 at 5 (Grizzle Direct); Ex. 133 at 13 (Reed Direct).
133 Ex. 133 at 13 (Reed Direct).
134 Id.
135 Ex. 118 at 10-12 (Grizzle Direct); Ex. 119 at Sch. 2 at 4 (Grizzle Direct Schedules); Ex. 133 at 13 (Reed Direct).
136 Ex. 118 at 4 (Grizzle Direct).
137 Id.
138 Id.
significant time, during which customers would be without natural gas service during potentially life-threatening cold weather.\textsuperscript{139}

70. On June 19, 2020, CenterPoint Energy filed its Minnesota 2020-2021 GPP with the Commission in Docket No. G-008/M-19-699.\textsuperscript{140} After filing its annual Gas Procurement Plan, CenterPoint Energy offered to meet with Commission staff, the Department, and the OAG to discuss the plan and to answer questions.\textsuperscript{141}

71. In its 2020-2021 GPP, CenterPoint Energy planned for a balanced set of supply options for February 2021 as shown in the table below.\textsuperscript{142}

\begin{center}
\textbf{Gas Supply Plan for February 2021}\textsuperscript{143}
\textbf{Maximum Available Daily Capacity (Dth/day)}
\end{center}

\begin{center}
\begin{tabular}{|c|c|c|c|c|}
\hline
Baseload & Storage & Peaking & Swing & Total \\
\hline
360,000 & 361,792 & 221,000 & 508,492 & 1,451,284 \\
\hline
\end{tabular}
\end{center}

72. CenterPoint Energy’s 2020-2021 GPP also contained a summary of its hedging plan, which, similar to other utilities, was designed to minimize price volatility and risk to customers by taking measures to stabilize gas prices and ensure the reliability of gas supply.\textsuperscript{144} CenterPoint Energy’s goal is to have price protection in place for approximately half of expected winter load in advance of the start of the winter season.\textsuperscript{145}

73. CenterPoint’s GPP permits the Company flexibility, noting as follows:

Actual volumes, prices, and percentages stated in this Plan may vary as transactions occur and as actual weather and other operating factors vary from those used in the load study. This Plan will be adhered to as closely as practical, realizing that execution of any plan is subject to modifications to adjust for changing market, weather, operational and other conditions as it is implemented. Price forecasts in this Plan are forward looking and based upon

\textsuperscript{139} Ex. 115 at 5-6 (Heer Direct).
\textsuperscript{140} Ex. 119 at Sch. 2 (Grizzle Direct Schedules)
\textsuperscript{141} Ex. 118 at 5 (Grizzle Direct).
\textsuperscript{142} Ex. 119 at Sch. 2 at 63 (Grizzle Direct Schedules)
\textsuperscript{143} Ex. 133 at 22-23 (Reed Direct).
\textsuperscript{144} Ex. 133 at 44-45 (Reed Direct); Ex. 121 at 55-57 (Grizzle Rebuttal) (“As required by the 2020 Hedging Order, CenterPoint Energy files its hedging plan, which is part of its Gas Procurement Plan, with the Commission each year. CenterPoint Energy also files updates with the Commission on its hedging activities throughout the year as part of the Company’s annual Demand Entitlement Filing, Annual Automatic Adjustment (AAA) report, and monthly Purchased Gas Adjustment (PGA) filings. The AAA reports include detailed information about each physical hedging contract executed by the Company including the volume and the net gain or loss for each contract. These reports are reviewed by both the Department and the Commission to determine the prudence of the Company’s hedging activities.”).
\textsuperscript{145} Ex. 118 at 23, 41 (Grizzle Direct).
CenterPoint Energy’s analysis and interpretation of available data. Actual market conditions may vary from the assumptions used in CenterPoint Energy’s analysis, causing such price forecasts to become inaccurate.  

74. For 2020-2021, CenterPoint Energy used storage as a physical price hedge and bought forward physical contracts as a contractual price hedge to achieve the desired price protection. Both the types of hedging tools used, and the amount of volumes hedged in CenterPoint Energy’s hedging plan, were consistent with the Commission’s order on hedging.

75. The Company executed its GPP and obtained baseload, hedged baseload, storage, and swing gas supplies in advance of the 2020-2021 winter season. These purchases provided CenterPoint Energy’s customers with price protection for 55.6 percent of winter gas supplies.

76. No party challenged the prudency of CenterPoint Energy’s gas procurement planning in advance of the February Event. Aside from the OAG’s argument that the natural gas utilities should have utilized certain financial hedging instruments, addressed below, no party suggested CenterPoint Energy’s gas procurement planning was unreasonable or imprudent.

77. CenterPoint Energy has demonstrated that its gas procurement planning and implementation for the 2020-2021 Gas Procurement Plan was prudent and reasonable.

VII. CenterPoint Energy’s Actions Before and During the February Event

A. CenterPoint Energy’s Knowledge Before the February Event

1. Knowledge of Extreme Weather

78. In January 2021, the weather forecasts for February 2021 indicated that temperatures in Minnesota would be warmer than normal.

79. On January 31, 2021, the revised weather forecast indicated that Minnesota and the rest of the Upper Midwest would be colder than normal in the month of February, but that temperatures would be normal or above normal in the south and south-central United States. Thus, in late January, CenterPoint Energy expected that while demand
for gas in Minnesota may be higher in February 2021, there was no indication that weather conditions would impact Minnesota’s gas supplies from the southern United States.\textsuperscript{152}

80. CenterPoint Energy, along with the rest of the energy industry, became aware of the potential for extreme weather at some point in early February.\textsuperscript{153} The extent of the extreme weather was not known at that time.\textsuperscript{154} The weather situation continued to develop leading up to and through the February Event.\textsuperscript{155}

81. On Friday, February 5, the weekend before the February Event, Minnesota started to experience colder than normal temperatures.\textsuperscript{156} However, the first concrete indication that a cold weather event was likely over the Presidents’ Day weekend was the National Weather Service’s 8- to 10-day outlook issued on February 5, 2021.\textsuperscript{157}

82. Predictions that the southern United States, including natural gas producing states of Texas and Oklahoma, would be faced with extreme weather did not occur until February 8, 2021.\textsuperscript{158} The February 8 and February 10 forecasts for Texas, on which the Electric Reliability Council of Texas (ERCOT) relies, underestimated the extent of the cold weather that eventually occurred during the February Event.\textsuperscript{159} The February 12 forecast for Texas was the first weather forecast that captured the extent of the cold weather, and even that forecast had significant errors on certain days.\textsuperscript{160} Notably, the February 12 forecast for Texas projected a shorter duration of cold weather and warmer temperatures than those ultimately experienced during the February Event.\textsuperscript{161}

83. On Monday, February 15, ERCOT began instituting rolling blackouts, which resulted in power outages at the bulk of wellhead operations, processing facilities, and pipelines that move natural gas from Texas to markets, including Minnesota.\textsuperscript{162} Due to these rolling blackouts, “the Permian output dropped by 2.9 Bcf/d[ay], or 25 percent, from 1:30 a.m. to 9:00 a.m. Monday, the end of the Sunday Gas Day. Monday, output fell another 20 percent, and Tuesday, February 16, another 10 percent. At the end of that period, the Permian output had dropped by 8.7 Bcf/d[ay], or 74.5 percent.”\textsuperscript{163} These events were not reasonably expected on Friday, February 12, when the Gas Utilities were planning gas supplies for the holiday weekend.\textsuperscript{164}

\textsuperscript{152} Ex. 100 at 42 (Smead Direct); Ex. 109 at 15 (Stepanek Direct).
\textsuperscript{153} Id. at 51 (King Direct).
\textsuperscript{154} Id. at 53.
\textsuperscript{155} Id.
\textsuperscript{156} Ex. 801 at 14 (Cebulko Direct).
\textsuperscript{157} Ex. 126 at 25 (Toys Direct) (The February 5, 2021, weather forecast for near-term indicated that temperatures in Minnesota for February 6-8, 2021, would be colder than normal, but gas prices only rose to $3.780/MMBtu at Demarc and $3.845/MMBtu at Ventura.); see also Ex. 133 at 66-68 (Reed Direct).
\textsuperscript{158} Ex. 100 at 42 (Smead Direct).
\textsuperscript{159} Id. at 53 (King Direct).
\textsuperscript{160} Id.
\textsuperscript{161} Id.
\textsuperscript{162} Ex. 100 at 49 (Smead Direct).
\textsuperscript{163} Id.
\textsuperscript{164} Ex. 133 at 72-73 (Reed Direct).
2. Knowledge of Price Spike Before and During the February Event

84. At the time it purchased gas on February 12, prior to the publication of the final index prices, CenterPoint Energy could not have reasonably predicted that spot market gas prices would reach the levels that they did. The price spike was unprecedented and dwarfed the level of high prices seen during prior natural gas price spike events.\(^{165}\) Although previous cold weather events with similar temperatures have occurred in Minnesota, those events did not result in a similar unprecedented market price spike.\(^{166}\)

85. The figure below compares the February Event to other past gas market price spike events since 2011, illustrating the contrast between prior events and the February Event.

![Natural Gas Spot Price Events Since 2011\(^{167}\)](image)

86. Price spikes have occurred at Demarc and Ventura in the past. The second highest price spike occurred over the New Year holiday weekend in 2017-18 (2017-18 New Year Event), during which Ventura pricing spiked to the then record high level of about $65/Dth for the three-day delivery period of December 29-31.\(^{168}\)

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\(^{165}\) Ex. 506 at 14 (King Direct) (“Although spot gas prices had spiked previously, the gas prices during the February Event were unprecedented.”); Ex. 133 at 85 (Reed Direct) (“In short, nothing like the price levels associated with the February Event had ever been experienced before.”); Ex. 810 at 28 (Nelson Direct); Ex. 801 at 7 (Cebulko Direct); Ex. 600 at 12 (Lebens Surrebuttal).

\(^{166}\) For example, looking back historically from February 2003 to January 2021, it is clear that the historical average gas prices remained below $6/MMBtu in the context of past cold weather events. See Ex. 133 at 71 (Reed Direct).

\(^{167}\) Ex. 133 at 86, Figure 22 (Reed Direct).

\(^{168}\) Ex. 506 at 15-16 (King Direct).
87. The 2017-18 New Year Event had some similarities to the February Event. First, the event involved extreme cold weather. Second, prices spiked considerably for a short period of time before returning to pre-spike levels. Finally, the spike at the Ventura hub occurred over a holiday weekend. However, the 2017-18 New Year Event was not identical to the February Event, as it occurred earlier in the winter and did not involve natural gas production declines as significant as those seen in the February Event. Also, the actual price spike at Ventura, although record setting at the time, was significantly lower than the February Event ($65/MMBtu versus $155/MMBtu at Ventura). Further, that price spike was focused on the one hub, and so was not as wide-reaching as the February Event.

88. While natural gas producing regions have previously experienced cold weather, resulting in impacts to natural gas supply, those events did not result in a spike in natural gas prices. Notably, in February 2011 Texas experienced a massive freeze and rolling blackout event approaching the severity of this year’s February event, including loss of power to gas supply infrastructure. However, there was no price spike in February 2011. This indicates that the confluence of events [in 2021] created a situation never seen before and that could not have been anticipated.

89. An examination of the spot market prices at the trading hubs used by CenterPoint Energy - NNG-Demarc and NNG-Ventura over an 18-year period also demonstrates the unprecedented nature of the February Event’s price spike. Prior to February 2021, prices at these trading hubs had never exceeded $35/Dth at NNG-Demarc and had never exceeded $68/Dth at NNG-Ventura, with daily prices consistently below $8/Dth more than 95 percent of the time over the past nearly 20 years.

90. The February Event also produced a dramatic change in gas prices over a short period of time. Gas Daily reported that natural gas prices for delivery on February 10 were $3.855/MMBtu for Northern-Demarc and $4.055/MMBtu for Northern-Ventura, but within three calendar days, prices jumped to $231.67/MMBtu and $154.91/MMBtu for delivery for February 13 through 16. In the days leading up to the Presidents’ Day weekend, there was no indication that the forecasted cold weather would lead to a price spike.

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169 Id. at 15.
170 Id. at 17.
171 Ex. 126 at 29 (Toys Direct) (“In February 2011, the Texas production areas saw extreme cold weather in the southwest production areas, but that weather had a proportionally minimal effect on natural gas prices downstream at Demarc and Ventura,” with prices staying below $6/Dth).
172 Ex. 100 at 54, Sch. 7 at 1 (Smead Direct);
173 Ex. 133 at 64-66, Figures 11-12 (Reed Direct).
174 Id. at 88-89 (“Both from a historical perspective, and from the probability of prices changing so dramatically in such a short period of time, I have concluded that the likelihood of being able to predict a price level or movement as dramatic as the one observed during the February Market Event is extraordinarily unlikely and it is not reasonable to expect that market participants would have been able to predict it, or to see a need to avoid it….”)
175 Id. at 88 (citing S&P Global Platts Gas Daily for February 8, 2021).
176 Ex. 126 at 28 (Toys Direct); see also Ex. 133 at 70-72 (Reed Direct).
91. Just prior to the February Event, gas prices were consistent with prior cold weather events.\textsuperscript{177} The table below provides the low, high, and average index price published by Gas Daily at Ventura and Demarc for February 5 through February 10.

\begin{center}
\begin{tabular}{|c|c|c|c|}
\hline
\textbf{Gas Day} & \textbf{Low Price} & \textbf{High Price} & \textbf{GDD Avg.} \\
\hline
Feb. 5 & 3.065 & 3.37 & 3.215 \\
Feb. 6 & 3.66 & 4.07 & 3.845 \\
Feb. 7 & 3.66 & 4.07 & 3.845 \\
Feb. 8 & 3.66 & 4.07 & 3.845 \\
Feb. 9 & 3.84 & 4.565 & 4.2 \\
Feb. 10 & 3.965 & 4.145 & 4.055 \\
\hline
\textbf{Gas Day} & \textbf{Low Price} & \textbf{High Price} & \textbf{GDD Avg.} \\
\hline
Feb. 5 & 2.925 & 3.105 & 3.015 \\
Feb. 6 & 3.7 & 3.86 & 3.78 \\
Feb. 7 & 3.7 & 3.86 & 3.78 \\
Feb. 8 & 3.7 & 3.86 & 3.78 \\
Feb. 9 & 3.6 & 3.835 & 3.715 \\
Feb. 10 & 3.83 & 3.88 & 3.855 \\
\hline
\end{tabular}
\end{center}

92. During the morning of February 11, supply began to tighten,\textsuperscript{179} as reflected in the Gas Daily low, high, and average prices for Ventura and Demarc, which is shown below:

\begin{center}
\begin{tabular}{|c|c|c|c|}
\hline
\textbf{Gas Day} & \textbf{Low Price} & \textbf{High Price} & \textbf{GDD Avg.} \\
\hline
Feb. 10 & 3.965 & 4.145 & 4.055 \\
\hline
\textbf{Gas Day} & \textbf{Low Price} & \textbf{High Price} & \textbf{GDD Avg.} \\
\hline
Feb. 10 & 3.83 & 3.88 & 3.855 \\
Feb. 11 & 6.055 & 7.155 & 6.605 \\
\hline
\end{tabular}
\end{center}

\textsuperscript{177} Ex. 126 at 26-27 (Toys Direct).
\textsuperscript{178} Id. at 26-27, Table 6.
\textsuperscript{179} Id. at 30.
\textsuperscript{180} Id. at 31.
93. On February 11, prices for gas delivered on February 12 settled at $15.415/Dth at Northern-Ventura and $15.68/Dth at Northern-Demarc, indicating tightening market conditions.\(^{181}\)

94. CUB argues that while it does not expect the company to predict $180/Dth gas, gas purchased on February 11 for gas on February 12 had already reached $15.42/Dth and $15.68/Dth at Ventura and Demarc respectively. Therefore, CUB contends, there is no logical scenario where the price over the weekend would decrease.\(^ {182}\)

95. CenterPoint Energy did not know prices would spike when it made its daily spot market purchases by 9:00 a.m. on the morning of February 12, for delivery on February 13-16. CenterPoint Energy did not become aware of the price for this daily gas until later in the day on February 12 when index prices were published.\(^ {183}\)

96. As of February 16, the Gas Utilities knew that natural gas production failures had continued to increase considerably.\(^ {184}\) The U.S. Department of Energy’s February 16 Situation Update (DOE Update) summarizes the circumstances over the previous weekend, including information the Gas Utilities would have known by that time.\(^ {185}\) Specifically, the DOE Update states that, “Extreme cold temperatures have led to sharp increases in gas demands to home heating and electricity generation across much of the Central U.S. At the same time, the cold has led to supply disruptions caused by well freeze-offs and natural gas processing plant outages in several producing areas in the U.S. South Central region (TX, OK, KS, LA, AR, MS, AL), which typically accounts for approximately 20-25% of total U.S. gas production.”\(^ {186}\) Production outages represented “approximately 7% of total U.S. gas production.”\(^ {187}\) The DOE Update also states that, “Although production losses due to freeze-offs are temporary, output takes time to return to normal levels and the cumulative reduction over several days could be substantial.”\(^ {188}\)

97. By the time they needed to purchase gas on February 16, the Gas Utilities knew or reasonably should have known that ERCOT, SPP, and MISO were instituting controlled power outages and millions of customers were without power, including wellhead operations, processing facilities, and pipelines moving gas out of the Permian Basin.\(^ {189}\)

\(^{181}\) Ex. 133 at Figure 19 (Reed Direct).
\(^{182}\) Ex. 801 at 65 (Cebulko Direct).
\(^{183}\) Ex. 506 at 60 (King Direct).
\(^{184}\) Id. at 62.
\(^{185}\) Id. Although the DOE Update was not released until noon on Tuesday, February 16, it summarizes information that had developed over the long weekend and that a reasonable utility in the gas industry would have been aware of. Ex. 507 at 4 n.3 (King Surrebuttal).
\(^{186}\) Ex. 506 at Sch. 11 at 7 (King Direct).
\(^{187}\) Id.
\(^{188}\) Id.
\(^{189}\) Id. at Sch. 11; Ex. 100 at 49 (Smead Direct).
B. CenterPoint Energy’s Actions Prior to and During the February Event

98. By the beginning of February 2021, CenterPoint Energy had already locked in its baseload gas supplies for the month of February.\textsuperscript{190} As a result, the Company’s gas supply decisions during February 2021 centered around day-to-day decisions regarding how to use the additional tools available to it (i.e., storage, swing and daily spot purchases, peak shaving, and curtailment of interruptible customers) to ensure it provided reliable service.\textsuperscript{191}

99. Daily gas supply decisions related to procuring supplies to serve customer loads during the February Event occurred on two important dates – first, on Friday morning, February 12 for gas to be used on Saturday through Tuesday, February 13-16, and second, on Tuesday morning, February 16 for gas to be used on Wednesday, February 17.\textsuperscript{192}

100. On February 4, a week before the February Event, NNG called a system overrun limitation (SOL) and continued to call SOLs daily through February 17.\textsuperscript{193} During SOL days, the pipeline has tiered penalty rates to push shippers to stay in balance with their nominations. If shippers like CenterPoint Energy take more gas than what they have scheduled, they face penalties as much as three times the gas daily average price.\textsuperscript{194}

101. On February 10, gas prices had reached $6.605/Dth at Northern-Demarc and $6.905/Dth at Northern Ventura for gas delivered February 11.\textsuperscript{195}

102. As of February 11, CenterPoint Energy’s forecast indicated that Sunday, February 14 to be the coldest day of the four-day weekend and, correspondingly, the highest demand day.\textsuperscript{196} On February 11, the Company was not forecasting February 14 to be a design day.\textsuperscript{197}

103. On the morning of February 11, CenterPoint Energy began seeing some tightening of supply in the market.\textsuperscript{198} That morning, CenterPoint Energy purchased 195,000 Dth of spot market gas for delivery over the holiday weekend to ensure sufficient gas supplies.\textsuperscript{199} CenterPoint Energy based this purchase on its forecasted demand for the four-day weekend and the fact that the Company saw some potential tightening of

\textsuperscript{190} Ex. 126 at 20 (Toys Direct).
\textsuperscript{191} Id. at 35-61.
\textsuperscript{192} Id. at 35-42 and 54-58.
\textsuperscript{193} Id. at 27.
\textsuperscript{194} Id.
\textsuperscript{195} Ex. 133 at Figure 19 (Reed Direct).
\textsuperscript{196} Ex. 126 at 30 (Toys Direct).
\textsuperscript{197} Id.
\textsuperscript{198} Id.
\textsuperscript{199} Id. at 31.
gas supplies in advance of the cold weather. This 195,000 Dth amounted to roughly two-thirds of CenterPoint Energy’s spot market gas for the weekend.

104. On February 11, prices for gas delivered on February 12 settled at $15.415/Dth at Northern-Ventura and $15.68/Dth at Northern-Demarc. This was within historical peak-day price ranges. The February 10 spot price for natural gas at Ventura was about half the high price in the three prior price spikes; and the February 11 spot price for natural gas at Demarc was within one percent of the high price in the three prior price spikes.

105. On the evening of February 11, CenterPoint Energy began to receive scheduling reductions as its suppliers were seeing cuts to their supplies from the producers. Around this same time, CenterPoint Energy started to see gas supply freeze offs and force majeure notices in supply locations. In particular, suppliers cut their daily gas schedules, but not their baseload/swing schedules.

106. In addition, NNG issued Critical Day notices going into the Presidents’ Day weekend. NNG began posting Critical Day notices on February 12, and they were in effect for every day from February 13 through February 19. A Critical Day is called when the operating condition of the pipeline system has severely deteriorated, and the integrity of the system is threatened. During Critical Days, the tolerance level for imbalances is reduced, allowing the pipeline to increase penalties for such imbalances. Under these circumstances, if CenterPoint Energy takes more gas than is permitted by the reduced tolerance level, it faces penalties as much as three times the Gas Daily average price.

107. On the morning of February 12, prices were elevated, but remained within historical ranges and the spread between the minimum, midpoint, and maximum prices remained relatively symmetrical, indicating that there was no extreme market response at that time.
Available Market Index Prices as of the Morning of February 12

<table>
<thead>
<tr>
<th>Trade Date</th>
<th>Flow Date</th>
<th>NNG - Demarc</th>
<th>NNG - Ventura</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/29/2021</td>
<td>02/01/21</td>
<td>$2.615</td>
<td>$2.600</td>
</tr>
<tr>
<td>2/1/2021</td>
<td>02/02/21</td>
<td>$2.735</td>
<td>$2.715</td>
</tr>
<tr>
<td>2/2/2021</td>
<td>02/03/21</td>
<td>$2.905</td>
<td>$2.900</td>
</tr>
<tr>
<td>2/3/2021</td>
<td>02/04/21</td>
<td>$2.860</td>
<td>$2.865</td>
</tr>
<tr>
<td>2/4/2021</td>
<td>02/05/21</td>
<td>$3.015</td>
<td>$3.215</td>
</tr>
<tr>
<td>2/5/2021</td>
<td>02/06/21</td>
<td>$3.780</td>
<td>$3.845</td>
</tr>
<tr>
<td>2/5/2021</td>
<td>02/07/21</td>
<td>$3.780</td>
<td>$3.845</td>
</tr>
<tr>
<td>2/5/2021</td>
<td>02/08/21</td>
<td>$3.780</td>
<td>$3.845</td>
</tr>
<tr>
<td>2/8/2021</td>
<td>02/09/21</td>
<td>$3.715</td>
<td>$4.200</td>
</tr>
<tr>
<td>2/9/2021</td>
<td>02/10/21</td>
<td>$3.855</td>
<td>$4.055</td>
</tr>
<tr>
<td>2/10/2021</td>
<td>02/11/21</td>
<td>$6.605</td>
<td>$6.905</td>
</tr>
<tr>
<td>2/11/2021</td>
<td>02/12/21</td>
<td>$15.680</td>
<td>$15.415</td>
</tr>
</tbody>
</table>

108. Prior to 7:00 a.m. on Friday, February 12, 2021, CenterPoint Energy developed an updated weather forecast for the five days from February 12 through February 16. This weather forecast indicated that Sunday, February 14 would still be the coldest day with the highest load of the four-day holiday weekend. CenterPoint Energy’s weather, load, and supply forecast for February 13-16 developed on February 12 is shown in the table below.

**February 12 Weather/Load/Supply Forecast for February 13-16**

<table>
<thead>
<tr>
<th></th>
<th>Feb. 13</th>
<th>Feb. 14</th>
<th>Feb. 15</th>
<th>Feb. 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal avg. high/low temps.</td>
<td>15°F</td>
<td>14.7°F</td>
<td>15.2°F</td>
<td>16°F</td>
</tr>
<tr>
<td>Forecasted avg. high/low temps.</td>
<td>-8.6°F</td>
<td>-13°F</td>
<td>-8.4°F</td>
<td>-0.6°F</td>
</tr>
<tr>
<td>Total Forecasted Load</td>
<td>1,098,099 Dth</td>
<td>1,223,099 Dth</td>
<td>1,074,099 Dth</td>
<td>1,063,099 Dth</td>
</tr>
<tr>
<td>Total Supply on System</td>
<td>1,161,436 Dth</td>
<td>1,245,536 Dth</td>
<td>1,121,436 Dth</td>
<td>1,106,436 Dth</td>
</tr>
</tbody>
</table>

109. Around 7:00 a.m. on February 12, CenterPoint Energy personnel met to review the daily load forecast and to discuss load requirements and gas procurement.

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213 Id. at 76, Figure 19.
214 Ex. 111 at 21 (Olson Direct).
215 Ex. 126 at 33 (Toys Direct).
216 Id. at 34, Table 9.
217 Ex. 111 at 22 (Olson Direct).
During this meeting, they also developed necessary plans in the event that daily temperatures, customer load, system pressures, or gas flows deviated from forecast, and it became necessary to take additional actions like deploying peak shaving, curtailing interruptible customers, and adjusting storage withdrawal nominations.

110. Also on that morning, CenterPoint Energy had to purchase its remaining daily spot gas supply, nominate its storage withdrawals, and confirm its baseload swing supplies for each day of the four days of the Presidents’ Day weekend. Due to the Presidents’ Day holiday weekend, CenterPoint Energy had to nominate or purchase ratable (consistent) baseload, daily swing, and daily spot supply for each day (Saturday through Tuesday).

111. With February 14 forecasted to be the coldest day of the four-day weekend, CenterPoint Energy planned its gas supplies to meet the forecasted load for that day. CenterPoint Energy decided to plan to maximize the use of its storage deliverability on February 14 and use daily spot purchases to fill the forecasted load remaining after accounting for planned baseload and storage withdrawals. The table below shows CenterPoint Energy’s storage nominations for the holiday weekend as of February 12.

### Nominated Storage Withdrawals on February 12, 2021 (Dth)

<table>
<thead>
<tr>
<th>Storage Supplies</th>
<th>Sat. (13th)</th>
<th>Sun. (14th)</th>
<th>Mon. (15th)</th>
<th>Tues. (16th)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGPL</td>
<td>115,000</td>
<td>145,000</td>
<td>95,000</td>
<td>85,000</td>
</tr>
<tr>
<td>NNG Storage</td>
<td>40,000</td>
<td>44,100</td>
<td>20,000</td>
<td>15,000</td>
</tr>
<tr>
<td>BP Canada Storage</td>
<td>108,000</td>
<td>108,000</td>
<td>108,000</td>
<td>108,000</td>
</tr>
<tr>
<td>Waterville</td>
<td>-</td>
<td>50,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>263,000</strong></td>
<td><strong>347,100</strong></td>
<td><strong>223,000</strong></td>
<td><strong>208,000</strong></td>
</tr>
</tbody>
</table>

112. On February 12, CenterPoint Energy nominated its total maximum baseload supply. CenterPoint Energy also nominated all 250,000 Dth/day of its swing supply on the NNG pipeline.

113. Having already purchased 195,000 Dth/day of index-priced daily spot gas on February 11, CenterPoint Energy purchased an additional 95,000 Dth/day of index-

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218 Id. at 23.
219 Ex. 126 at 35 (Toys Direct).
220 Id.
221 Id.
222 Id. at 34-35, 40-41.
223 Id. at 40, Table 13.
224 Id. at 40 n.7. By February 13, pursuant to CenterPoint Energy’s BP contract, the maximum daily withdrawal amount had ratcheted down from 120,000 Dth/day to 108,000 Dth/day.
225 Ex. 126 at 36 (Toys Direct).
226 Id. at 37.
priced daily spot gas on the morning of February 12 to cover the four-day holiday weekend.\textsuperscript{227}

114. For purchases of index-priced gas, the price is not available until published at 5:00 p.m. on the trade day.\textsuperscript{228} Therefore, when CenterPoint Energy made index-priced gas purchases on the morning of February 12, it did not know what the final index price would be.\textsuperscript{229} At approximately 5:00 p.m. on February 12, the index price for the four-day weekend was published and had settled at unprecedented levels, a weighted average of $231.67/Dth at Demarc and $154.91/Dth at Ventura.\textsuperscript{230}

115. On the morning of February 12, CenterPoint Energy did not plan any widespread curtailment of interruptible customers over the four-day weekend because its forecasted load was not expected to exceed available pipeline entitlement levels.\textsuperscript{231} However, the Company also reviewed system operating conditions and identified segments of the distribution system that were at risk of experiencing pressure issues based on the forecasted temperatures.\textsuperscript{232} Based on this information, CenterPoint Energy decided on February 12 to curtail certain of its interruptible customers to alleviate the forecasted system pressures.\textsuperscript{233}

116. On February 12, CenterPoint Energy did not plan to use its peak shaving resources during the four-day weekend.\textsuperscript{234} Historically, CenterPoint Energy only plans to use peak shaving resources if the Company has maxed out its available pipeline transportation capacity and is still short in meeting forecasted demand.\textsuperscript{235} This was not the case on February 12, as the Company’s total transport capacity is 1,230,284 Dth/day and the highest forecasted load for the weekend was 1,223,099 Dth for February 14.\textsuperscript{236}

117. Based on available weather forecasts, load forecasts, pricing data, SOLs, and Critical Day declarations, CenterPoint Energy reasonably: (1) accelerated the purchase of 195,000 Dth/day of spot gas supply on February 11;\textsuperscript{237} (2) made the spot gas purchases necessary to ensure an adequate supply of natural gas to protect customers

\textsuperscript{227} Id. at 37-38.
\textsuperscript{228} Ex. 133 at 82 (Reed Direct) ("[D]aily purchases are made the day prior to the day they are needed, and the daily index price is not known until the end of the trading day.").
\textsuperscript{229} Id.
\textsuperscript{230} Ex. 126 at 42 (Toys Direct).
\textsuperscript{231} Ex. 113 at 7 (Olson Rebuttal).
\textsuperscript{232} Id.
\textsuperscript{233} Id.
\textsuperscript{234} Ex. 126 at 41 (Toys Direct).
\textsuperscript{235} Id.
\textsuperscript{236} Id.
\textsuperscript{237} Id. at 31.
from both the cold weather and the significant variance charges in effect under the SOLs, and (3) held its gas peaking and customer interruption tools in reserve.

118. On the morning of February 13, the actual temperature was 1.4 degrees colder than forecast, resulting in a higher estimated daily demand. To meet the slightly higher forecasted customer demand, CenterPoint Energy decided to maximize its withdrawals from its third-party storage assets: pipeline storage with NGPL, NNG, and virtual marketer storage with BP Canada.

119. Late on Gas Day February 13 (in the early hours of February 14), in anticipation of higher morning loads for the morning of February 14, CenterPoint Energy began dispatching the Rum River propane air plant at 7:00 a.m. to supplement system pressures, resulting in 1,397 Dth drawn from propane air.

120. Beginning at 5:00 a.m. on February 14, CenterPoint Energy began curtailing 31 interruptible customers.

121. On February 14, the actual average temperature was slightly warmer (an increase of 1.9 degrees) than forecast, but the revised demand was slightly higher than forecast on February 12.

122. On February 14, CenterPoint Energy began to receive additional supply schedule cuts. The table below shows the February 12 nominated daily swing and spot gas volumes, as compared to the actual scheduled daily swing and spot volumes on February 14. As shown in this table, CenterPoint Energy experienced daily swing and daily spot gas cuts of 16,661 Dth on February 14.

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238 Id. at 40 (testifying that CenterPoint’s natural gas procurement strategy for Presidents’ Day weekend balanced, among other factors “[a]nticipated customer demand,” “potential supply issues,” and “pipeline penalties in place pursuant to the SOL and Critical Day notices.”).
239 Ex. 115 at 2,45-46 (Heer Direct) (“[P]eak shaving resources were dispatched to ensure reliable and continuous service to our customers during the February Market Event.”).
240 Ex. 111 at 32 (Olsen Direct) (CenterPoint Energy “did not call curtailments of system sales customers beyond those that were necessary to address potential distribution system constraints.”).
241 Ex. 126 at 42-43 (Toys Direct).
242 Id. at 44 (Toys Direct); Ex. 118 (Grizzle Direct)
243 Ex. 126 at 43 (Toys Direct).
244 Id.
245 See id. at 46.
246 Id. at 47-48.
247 Id. at 46.
Planned vs. Actual Daily Swing and Spot Gas Schedules for February 14\(^{248}\)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NNG Daily Call Options</td>
<td>250,000</td>
<td>243,832</td>
</tr>
<tr>
<td>NNG Daily Spot</td>
<td>290,000</td>
<td>279,507</td>
</tr>
<tr>
<td>Total</td>
<td>540,000</td>
<td>523,339</td>
</tr>
</tbody>
</table>

123. On February 14, CenterPoint Energy maximized withdrawals, subject to the respective contractual and operational limits, from all storage facilities, including the Company-owned Waterville storage facility.\(^{249}\) The table below shows CenterPoint Energy’s actual storage withdrawals for February 14 as compared to the Company’s nomination on February 12. CenterPoint Energy was able to exceed the maximum daily withdrawal limit at its Waterville storage facility, as it had done during three consecutive days over the previous gas weekend, due to favorable operating conditions at the facility and on the NNG pipeline that transports the stored gas.\(^{250}\)

Actual Storage Withdrawals on February 12\(^{251}\)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NGPL</td>
<td>147,170</td>
<td>145,000</td>
<td>147,170 (100%)</td>
</tr>
<tr>
<td>NNG</td>
<td>44,100</td>
<td>44,100</td>
<td>44,100 (100%)</td>
</tr>
<tr>
<td>BP</td>
<td>108,000</td>
<td>108,000</td>
<td>108,000 (100%)</td>
</tr>
<tr>
<td>Waterville</td>
<td>50,000</td>
<td>50,000</td>
<td>55,000 (110%)</td>
</tr>
</tbody>
</table>

124. On February 14, CenterPoint Energy increased dispatch from the Rum River propane air plant to approximately 7,000 Dth, to continue until approximately 11:00 p.m. on that day.\(^{252}\)

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\(^{248}\) Id. at 48, Table 17.
\(^{249}\) Id. at 48.
\(^{250}\) Id. at 49; Ex. 116 at 6 (Heer Rebuttal).
\(^{251}\) Ex. 126 at 48, Table 18 (Toys Direct).
\(^{252}\) Id. at 49, Table 19; Ex. 115 at 36 (Heer Direct).
125. At 10:00 a.m. on February 14, CenterPoint Energy brought the LNG peaking facility online at approximately 50 percent capacity and dispatched approximately 41,600 Dth over the rest of February 14.253

126. On February 14, CenterPoint Energy continued to curtail the 31 interruptible customers between the hours of 5:00 a.m. and noon.254

127. On Monday, February 15, the actual average temperature for the day was slightly warmer than the Company’s February 12 forecast, but the revised estimated gas demand was 109,747 Dth higher than was forecasted on February 12.255

128. On February 15, CenterPoint Energy received additional curtailments to its daily swing and spot gas schedules.256 The table below shows the February 12, nominated daily swing and spot gas volumes as compared to the actual scheduled daily swing and spot volumes on February 15. As shown in this table, CenterPoint Energy saw daily swing and daily spot gas cuts of 35,596 Dth on February 15.257

**Planned vs. Actual Daily Swing and Spot Gas Schedules for February 15**258

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NNG Daily Call Options</td>
<td>250,000</td>
<td>233,547</td>
</tr>
<tr>
<td>NNG Daily Spot</td>
<td>290,000</td>
<td>270,857</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>540,000</strong></td>
<td><strong>504,404</strong></td>
</tr>
</tbody>
</table>

129. On February 15, CenterPoint Energy again maximized withdrawals from all storage facilities, including Waterville.259

130. On February 15, CenterPoint Energy continued operating the LNG peaking facility until noon at approximately 50 percent capacity, and it dispatched an additional 6,358 Dth over the rest of February 15.260

131. On February 15, CenterPoint Energy continued its curtailment of the 31 interruptible customers.261

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253 Ex. 115 at 36 (Heer Direct); Ex. 126 at 47 (Toys Direct).
254 Id. at 51.
255 Id. at 51.
256 Id. at 52.
257 Id.
258 Id. at 52, Table 20.
259 Id. at 53.
260 Id.
261 Id. at 51.
132. On Tuesday, February 16, the actual average temperature for the day was 2.8 degrees Fahrenheit (3.4 degrees warmer than forecasted), and the revised estimated actual load was slightly lower than forecasted on February 12. That day, CenterPoint Energy reduced withdrawals from available storage facilities as actual temperatures were higher than forecasted and estimated actual load was lower.

133. On February 16, CenterPoint Energy continued to experience some modest cuts of approximately 3,580 Dth to its daily swing and daily spot gas schedules.

134. On February 16, CenterPoint Energy released all but two previously curtailed customers from curtailment. CenterPoint Energy continued to curtail two customers to address local distribution system pressure issues.

135. On the morning of February 16, CenterPoint Energy nominated its supply and storage withdrawals for February 17. That day, CenterPoint Energy forecast the temperature for February 17 to be 6.8 degrees and the forecasted load was 959,549 Dth. At 6.8 degrees, the average daily temperature for February 17 was anticipated to be substantially warmer than temperatures over the four-day weekend, as average daily forecasted temperatures ranged from negative 13 to negative 0.6 degrees during that time. CenterPoint Energy’s load requirements were also forecasted to be 21.5 percent lower than the peak over the four-day weekend.

136. As of February 16, CenterPoint Energy knew that weekend gas prices at NNG-Demarc and NNG-Ventura reached unprecedented levels - $231.67 at NNG-Demarc and $154.95 at NNG-Ventura, but gas prices for February 17 were not yet known.

137. In addition, on the morning of February 16, SOL and Critical Day notices on NNG continued and CenterPoint Energy expected that the supply cuts experienced over the weekend would also continue.

138. With continuing uncertainty as and the pricing and deliverability of gas supplies, CenterPoint Energy planned how it would use its available supply options on February 17. On the morning of February 16, CenterPoint Energy nominated its full

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262 Id. at 54.
263 Id. at 55-56.
264 Id. at 56.
265 Id. at 55-56.
266 Id. at 55.
267 Id. at 58.
268 Id. at 57.
269 Ex. 113 at 8 (Olson Rebuttal).
270 Id.
271 Ex. 133 at 84, Figure 21 (Reed Direct).
272 Ex. 126 at 34, 54 (Toys Direct).
baseload supply of 358,436 Dth/day for February 17. That morning it also confirmed and nominated its full daily swing supply of 70,000 Dth/day for February 17.

139. Additionally, CenterPoint Energy nominated the remaining daily maximum withdrawals from storage for February 17 which reduced the Company’s need to purchase daily spot gas for February 17.

**Actual Storage Withdrawals on February 17**

<table>
<thead>
<tr>
<th>Storage Option</th>
<th>Max. Contractual or Operational Withdrawal (Dth/Day)</th>
<th>Feb. 16 Nominated Storage Withdrawals (Dth/Day)</th>
<th>Feb. 16 Actual Storage Withdrawals (Dth/Day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGPL</td>
<td>147,170</td>
<td>145,000</td>
<td>147,170 (100%)</td>
</tr>
<tr>
<td>NNG</td>
<td>44,100</td>
<td>44,100</td>
<td>44,100 (100%)</td>
</tr>
<tr>
<td>BP</td>
<td>50,000</td>
<td>50,000</td>
<td>50,000 (100%)</td>
</tr>
<tr>
<td>Waterville</td>
<td>50,000</td>
<td>50,000</td>
<td>50,000 (100%)</td>
</tr>
</tbody>
</table>

140. On February 16, due to a lower load forecast and its maximization of storage withdrawals, CenterPoint Energy purchased less daily spot gas for February 17 than it had for the four-day weekend.

141. On February 16, CenterPoint Energy also evaluated whether to call for additional curtailments of interruptible customers based on an evaluation of whether forecasted load on February 17 would exceed available pipeline capacity, or whether any distribution issues were anticipated under the forecasted temperatures and operating conditions. Because forecasted temperatures were warmer on February 17, CenterPoint Energy determined it did not need to plan any curtailments based on insufficient pipeline capacity. The Company did continue to curtail limited interruptible customers based on distribution constraints to ensure continuous service to firm service customers.

142. On February 16, CenterPoint Energy also evaluated whether to dispatch its peak shaving plants on February 17. As system loads were forecasted to be significantly below available pipeline entitlements, the Company did not plan to dispatch

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273 *Id.* at 55.
274 *Id.*
275 *Id.*
276 *Id.* at 60, Table 26.
277 *Id.* at 55.
278 Ex. 113 at 7-8 (Olson Rebuttal).
279 *Id.* at 8.
280 *Id.*
281 Ex. 116 at 16 (Heer Rebuttal).
its peak shaving plants. The peak shaving facilities remained available to be dispatched if needed to maintain system reliability, in the event unforeseen circumstances of operational needs arose on February 17.

143. On Wednesday, February 17, the actual average temperature for the day was slightly warmer than forecast the day before, and the revised estimated actual load was 20,374 Dth higher than forecasted.

144. On February 17, CenterPoint Energy received 225 Dth of cut swing gas schedules and 587 Dth of cut baseload gas schedules. CenterPoint Energy maintained its baseload and swing supply, except for the Ventura Swing Component of the BP Canada storage contract, which had been exhausted, and fully nominated and slightly increased its withdrawals from storage to the maximum quantities it could, subject to contractual and operational limits.

145. On February 17, CenterPoint Energy also withdrew the remaining maximum volume from the baseload and Carlton swing components of its BP Canada storage pursuant to the contractual limits established by its contract.

146. By February 18, gas prices for next day delivery returned to $6.050/MMBtu in Northern-Demarc and $5.980/MMBtu in Northern-Ventura.

VIII. Disputed Issues

147. The Department, CUB, and the OAG recommended disallowances to CenterPoint Energy’s recovery of its extraordinary gas costs with respect to the Company’s actions in four areas prior to and during the February Event: (1) planning and use of storage; (2) dispatch of peaking plants; (3) interruptible customer curtailment; and (4) financial hedging.

148. With respect to storage, the Department recommended disallowances related to the Company’s planned use of its Waterville storage facility and its BP Canada virtual storage contract during the February Event.

149. The Department recommended a disallowance related to CenterPoint Energy’s planned use of its Waterville storage. The Department contends that CenterPoint Energy should have factored into the Company’s February 12 gas supply plan an additional 5,000 Dth of storage withdrawal above the maximum withdrawal limit for the facility, and then should have reduced its spot market purchases by the same

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282 Id.
283 Id.
284 Ex. 126 at 58 (Toys Direct).
285 Id.
286 See id. at 59.
287 Id. at 60.
288 Ex. 133 at 104 (Reed Direct).
amount for the four days of the Presidents’ Day weekend.\textsuperscript{289} On this issue, the Department recommends that the Commission disallow recovery of $3,810,503.\textsuperscript{290}

150. The Department made two separate but related disallowance recommendations regarding CenterPoint Energy’s use of its BP Canada virtual storage contract during the February Event.

151. First, the Department contends that CenterPoint Energy should have shaped its nominated daily swing volumes when planning for the four-day weekend on February 12 to its forecasted load volumes rather than of prorating the remaining volumes equally over the four-day weekend as the Company did.\textsuperscript{291} The Department alleges CenterPoint Energy could have avoided additional spot gas purchases over the four-day weekend by increasing the volume of BP storage nominations on February 14 by 12,000 Dth.\textsuperscript{292} Based on this argument, the Department recommends that the Commission disallow recovery of $9,121,676.\textsuperscript{293}

152. Second, the Department asserts that, by shaping its nominated daily swing volumes to load forecast for the four-day period, the Company should have preserved a portion of its remaining 232,000 Dth Ventura swing volumes for use on February 17, rather than planning to use the remaining portion of this contract over the four-day holiday weekend.\textsuperscript{294} The Department alleges that preserving use of the Ventura swing supply for February 17 could have allowed CenterPoint Energy to reduce its spot market purchases for February 17.\textsuperscript{295} Based on this argument, the Department recommends that the Commission disallow recovery of $12,195,499.\textsuperscript{296}

153. With respect to peaking facilities, the Department and CUB both allege the Company should have planned to dispatch its peaking facilities to reduce spot market purchases during the February Event in response to market prices.\textsuperscript{297}

154. CUB alleges CenterPoint Energy should have planned to dispatch 50 percent of its LNG capacity and 25 percent of propane capacity in response to spot market prices throughout the entire five days of the event based on the knowledge that daily spot prices had reached $15/Dth on Friday, February 12.\textsuperscript{298} Based on this claim, CUB recommends a disallowance of $34,452,670.\textsuperscript{299}

\textsuperscript{289} Ex. 506 at 82-83, Sch. 4 at 2 (King Direct); Department’s Initial Br. at 24 (Mar. 15, 2022) (eDocket No.20223-183839-06).
\textsuperscript{290} Ex. 506 at Sch. 4 at 2.
\textsuperscript{291} Id. at 81-82.
\textsuperscript{292} Id. at 82, Sch. 4 at 2; Department’s Initial Br. at 22 (Mar. 15, 2022) (eDocket No.20223-183839-06).
\textsuperscript{293} Ex. 506 at Sch. 4 at 3.
\textsuperscript{294} Id. at 81.
\textsuperscript{295} Id. at 81-82, Sch. 4 at 4.
\textsuperscript{296} Id. at Sch. 4 at 4.
\textsuperscript{297} Id. at 90-94; Ex. 507 at 15-21 (King Surrebuttal); Ex. 801 at 8-9, 51-52, 56, 81-89 (Cebulko Direct); Ex. 811 at 41-46 (Cebulko Surrebuttal).
\textsuperscript{298} Ex. 801 at 84 (Cebulko Direct).
\textsuperscript{299} Ex. 811 at 6 (Cebulko Surrebuttal); Ex. 819 at 4 (Nelson Surrebuttal).
155. The Department recommends a disallowance based on the Company’s failure to incorporate its peaking plants into its supply decisions for February 17, in light of the high gas prices over the Presidents’ Day weekend. Based on this claim, the Department recommends a disallowance of $12,685,132.

156. With respect to curtailment, the Department and CUB both allege that the Company should have curtailed additional interruptible customers during the February Event.

157. CUB contends that CenterPoint Energy should have made the decision to curtail interruptible customers on February 12 before purchasing daily gas supplies to meet customer needs over the four-day weekend due to the higher daily spot prices experienced earlier in the week. Based on this claim, CUB recommends a disallowance of $48,020,615.

158. The Department, while agreeing with the Company’s curtailment decisions over the four-day weekend, contends that CenterPoint Energy should have curtailed half of its interruptible customers on February 17 based on the price of gas experienced over the weekend. The Department recommends a disallowance of $7,279,592, related to this claim.

159. With respect to hedging, the OAG argued that all of the Gas Utilities, including CenterPoint Energy, could have avoided incurring any extraordinary gas costs by using financial hedges prior the February Event. The OAG recommended a disallowance of up to all of CenterPoint Energy’s extraordinary gas costs of $408,755,953.

A. Maximization of Storage

160. The Commission’s Order for Hearing directed that this Report address whether the Gas Utilities maximized storage, and if not, to consider the impact.

161. Storage is critical to a gas utility’s ability to maintain system integrity and to respond to weather changes and customer consumption fluctuations. Storage is also a valuable price hedge throughout the winter heating season; because the storage fields

300 Ex. 506 at 93 (King Direct).
301 Id. at Sch. 4; Ex. 507 at 52 (King Surrebuttal).
302 Ex. 801 at 9 (Cebulko Direct).
303 Ex. 811 at 6 (Cebulko Surrebuttal); Ex. 819 at 4 (Nelson Surrebuttal).
304 Ex. 506 at 100 (King Direct).
305 Id. at Sch. 4; Ex. 507 at 52 (King Surrebuttal).
306 Ex. 600 at 23-25 (Lebens Direct); Ex. 603 (Lebens Surrebuttal).
307 Ex. 600 at 43 (Lebens Direct); Ex. 603 at 17 (Lebens Surrebuttal).
308 Order for Hearing at 22.
309 Ex. 115 at 17 (Heer Direct).
are filled in advance of the heating season, the cost or price of the gas later utilized in the winter season is fixed.\textsuperscript{310}

162. CenterPoint Energy utilizes storage to assist with natural gas deliverability during periods of high demand and for operational flexibility to balance gas supplies to customer demand year-round.\textsuperscript{311}

163. CenterPoint Energy has several different types of storage supply.\textsuperscript{312} CenterPoint Energy has contracted pipeline storage contracts with NGPL and NNG, contracted virtual storage with BP Canada, and owns and operates the Waterville storage facility, an underground aquifer natural gas storage facility.\textsuperscript{313}

164. While storage has more flexibility than baseload supply, storage withdrawals must comply with daily, monthly, and seasonal minimum and maximum withdrawals and storage inventory levels, as specified in applicable contracts and FERC tariffs.\textsuperscript{314} Operational considerations also impact withdrawals from the CenterPoint Energy’s Waterville storage facility.\textsuperscript{315}

165. The Department recommended disallowances related to CenterPoint Energy’s use of its Waterville storage facility, BP Canada storage, and NGPL storage during the February Event.\textsuperscript{316} In rebuttal, the Department withdrew its recommended disallowance related to the Company’s NGPL storage, but continued to recommend disallowances related to CenterPoint Energy’s use of its Waterville and BP Canada storage supplies.\textsuperscript{317}

166. In contrast, CUB opined that the Company appropriately maximized its use of all of its storage resources during the February Event.\textsuperscript{318} CUB determined CenterPoint Energy maximized its storage withdrawals, and CUB did not recommend any disallowances related to the Company’s use of its Waterville facility during the February Event.\textsuperscript{319} CUB concluded “CenterPoint Energy was able to slightly surpass these plans because operating conditions at the Company-owned [Waterville] facility enabled the utility to withdraw more gas than could reasonably be anticipated.”\textsuperscript{320}

\textsuperscript{310} Ex. 506 at 21 (King Direct).
\textsuperscript{311} Ex. 115 at 17 (Heer Direct).
\textsuperscript{312} See Ex. 118 at 7-8 (Grizzle Direct).
\textsuperscript{313} Id.
\textsuperscript{314} Id. at 8.
\textsuperscript{315} Id. at 8-9.
\textsuperscript{316} Ex. 506 at 83, Table 11 (King Direct).
\textsuperscript{317} Ex. 507 at 52, Table 3 (King Surrebuttal).
\textsuperscript{318} Ex. 801 at 52-54 (Cebulko Direct).
\textsuperscript{319} Ex. 801 at 52-54, 59 (Cebulko Direct) (“CenterPoint was able to slightly surpass these plans because operating conditions at the Company-owned Medford/Waterville facility enabled the utility to withdraw more gas than could reasonably be anticipated.”).
\textsuperscript{320} Id. at 52.
1. Company-Owned Waterville Storage

167. CenterPoint Energy’s Waterville storage facility is a natural aquifer storage field located hundreds of feet underground, where the gas is held in place by the pressure of the water within the aquifer.\(^{321}\)

168. The storage field is connected to the NNG interstate pipeline system and CenterPoint Energy holds 50,000 Dth/day of firm transportation capacity on NNG to deliver this stored gas in the winter.\(^{322}\)

169. Waterville uses compression to withdraw gas from the storage field and into the NNG pipeline.\(^{324}\) The compression capacity is determined by the difference in pressure between the storage field and the NNG pipeline.\(^{325}\) If the storage field pressure is low and the pipeline pressure is high, the withdrawal rate is slower than if the reverse is true.\(^{326}\) This withdrawal rate impacts the total amount of gas that can be withdrawn from this storage asset each day.\(^{327}\)

170. The maximum daily withdrawal limit for Waterville is 50,000 Dth/day, which reflects the operational withdrawal capability when the storage facility is near full.\(^{328}\) CenterPoint Energy has consistently planned for what it considers to be the maximum daily withdrawal limit of 50,000 Dth based on the Company’s knowledge of and experience with operating this facility.\(^{329}\)

171. Waterville’s maximum daily withdrawal limit can be exceeded under certain operating conditions.\(^{330}\) CenterPoint Energy has exceeded this maximum in some circumstances.\(^{331}\) The weekend before the February Event, CenterPoint withdrew 58,638 Dth on February 6, 56,848 on February 7, and 55,260 Dth on February 8.\(^{332}\) The ability to exceed the maximum planned daily withdrawal quantity depends on several factors, including pressures in the storage field, storage inventory, and pressures on NNG, the upstream pipeline.\(^{333}\)

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\(^{321}\) This facility is also referred to as “Medford” because that is the name of the delivery/receipt point on the NNG system where the storage gas is received or injected. Ex. 118 at 8 n.3 (Grizzle Direct).

\(^{322}\) Ex. 115 at 17 (Heer Direct); Evidentiary Hearing Tr. Vol. 2C at 12 (King).

\(^{323}\) Ex. 115 at 19 (Heer Direct).

\(^{324}\) Id. at 19.

\(^{325}\) Id.

\(^{326}\) Id.

\(^{327}\) Ex. 116 at 6 (Heer Rebuttal).

\(^{328}\) Ex. 115 at 19 (Heer Direct).

\(^{329}\) Ex. 117 at 2 (Heer Written Summary of Pre-Filed Testimony).

\(^{330}\) Id. at 19.

\(^{331}\) Ex. 507 at Sch. 1 at 1-2, 8, 15, 21, 26, 32, 38, 44, 54, 58 (King Surrebuttal) (listing storage withdrawals from Waterville and other storage assets in January and February since 2018).

\(^{332}\) Id. at Sch. 1 at 1-2.

\(^{333}\) Ex. 115 at 19 n. 8 (Heer Direct).
172. Pressures impact the maximum daily withdrawal quantity at Waterville, and these pressures are constantly changing based on real-time storage field conditions. CenterPoint Energy does not know exactly how the storage field and wells will respond until the Company is withdrawing gas from storage for a period of time and can assess the facility’s performance. While CenterPoint Energy understands the field performance and generally expected pressure response, the fact that Waterville is a natural aquifer means that the Company occasionally has an unexpected response when withdrawing gas. For instance, the Company has experienced excess water production when withdrawing gas from Waterville, which limits the Company’s rate of gas withdrawal at a well or several wells within the facility.

173. The maximum daily withdrawal limit is also impacted by the storage inventory level at Waterville. The withdrawal quantity reduces as Waterville is emptied during the heating season, to the point that the final daily withdrawal capacity is between 10,000 and 15,000 Dth/day. At the beginning of the February Event, February 12, CenterPoint listed Waterville as being 68 percent full, with a 55,000 Dth maximum withdrawal quantity.

174. The withdrawal rate for Waterville on a particular day is also dependent on the pressures on NNG’s pipeline. CenterPoint Energy does not own or operate the NNG pipeline, and Waterville is not the only facility connected to that segment of NNG’s system. NNG’s operating conditions and demand from other customers served by this pipeline impact CenterPoint Energy’s ability to withdraw gas in excess of the maximum daily limits from Waterville. Shippers on the NNG pipeline are not required to complete their nominations until 1:00 p.m. the day prior to gas flow. Shippers are also allowed to modify their nominations throughout the gas day, meaning those nominations are not final, and the pressures on the NNG pipeline can fluctuate throughout the day as result of these changing nominations.

175. CenterPoint Energy had to purchase ratable spot market gas for the four-day weekend on February 12, and it planned these spot market gas purchases assuming full utilization of all available storage, including Waterville, as well as baseload supplies on the forecasted coldest day, February 14. On the morning of February 12,
CenterPoint Energy planned to withdraw the maximum planned withdrawal limit of 50,000 Dth from its Waterville storage facility on February 14. 346

176. CenterPoint Energy’s actual withdrawals from the Waterville storage facility during the February Event are shown in the table below.

**Actual Waterville Storage Withdrawals During February Event** 347

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Waterville</td>
<td>0</td>
<td>55,000 Dth</td>
<td>54,000 Dth</td>
<td>0</td>
<td>50,000 Dth</td>
</tr>
<tr>
<td>Storage</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

177. On February 14, CenterPoint Energy withdrew 55,000 Dth from its Waterville facility. 350 Based on the need for additional gas supplies, gas control staff coordinated with NNG and CenterPoint Energy staff at Waterville on February 14, to determine whether conditions on the NNG pipeline and at Waterville would allow for an increase in the withdrawal rate. 351 After determining that an increase in the withdrawal rate was feasible, the Waterville staff increased the withdrawal rate on February 14 and continued to monitor for any issues. 352

178. The Department recommends a disallowance of $3,810,503 related to the Company’s planned withdrawals from Waterville for February 14. 353 The Department contends that on the morning of February 12, CenterPoint Energy should have planned to withdraw 5,000 Dth more than the Waterville’s planned 50,000 Dth maximum withdrawal limit for February 14. 354 The Department opined that “[b]ecause CNP owns the [Waterville] facility and the forecasted load was less than a Design Day, it is reasonable that CNP may have anticipated [Waterville]’s full capability in advance.” 355

179. In response, CenterPoint Energy maintains that it cannot rely on the availability of any volumes above the 50,000 Dth/day maximum level when planning on a

346 Ex. 126 at 39-40 (Toys Direct).
347 Ex. 115 at 38, Table 2 (Heer Direct).
348 CenterPoint Energy did not utilize its Waterville storage supplies on Gas Day February 13 and 16 as these days were warmer than the other days of the four-day weekend and the Company’s daily gas purchases were ratable over the four days. Ex. 115 at 38-39 (Heer Direct). This means that CenterPoint Energy could not adjust its daily gas purchases for these warmer days and using storage in addition to the daily gas purchases would result in significant over-deliveries of gas. Id.
349 While CenterPoint Energy did not originally plan to withdraw Waterville storage on February 15, the Company made the decision to utilize use Waterville for that day due to the continued cold temperatures. Id. at 38.
350 Id. at 38, Table 2.
351 Ex. 116 at 6 (Heer Rebuttal).
352 Id.
353 Ex. 506 at Sch. 4 at 2 (King Direct).
354 Id. at 80.
355 Id. at 80-81.
day-ahead or multiple day-ahead basis. CenterPoint Energy’s ability to withdraw more than 50,000 Dth/day from Waterville depends on several variable factors that cannot be known in advance and that are outside of the Company’s control, including the system pressures at the Waterville facility, the pipeline pressures on the NNG pipeline, and other factors.

180. CenterPoint Energy did not know until February 14 that the Company would be able to withdraw more than the planned maximum withdrawal limit of 50,000 Dth. The operating conditions of the aquifer storage facility and the NNG pipeline conditions would not have been known until February 14.

181. Given the nomination schedule for NNG, CenterPoint Energy also did not have information regarding pressures and operating conditions on the NNG pipeline until February 14. As a result, on February 12, CenterPoint Energy did not know whether the conditions on the NNG pipeline would allow the Company to exceed the maximum withdrawal limit.

182. CenterPoint Energy also maintains that planning for withdrawals in excess of the maximum planned withdrawal quantity would have risked system reliability issues and the imposition of pipeline imbalance penalties. If CenterPoint Energy had reduced its spot purchases and was unable to exceed its maximum planned withdrawal capability, it could have jeopardized the reliability of the system resulting in the potential for loss of service to customers. In addition, CenterPoint Energy could have incurred substantial pipeline imbalance penalties.

183. The Department counters that CenterPoint still held in reserve its peak shaving facilities and almost all of its interruptible load, so it could have responded to load changes or supply cuts. Going into the weekend, CenterPoint had 149,000 Dth/day in capacity from its propane peak shaving plants and 72,000 Dth in its LNG peak shaving plant. While CenterPoint did not deploy these facilities to displace spot gas purchases, they remained available to address load imbalances or pipeline delivery issues.

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356 Ex. 116 at 6-8 (Heer Rebuttal).
357 Id.; Ex. 134 at 50 (Reed Rebuttal) (“[T]here are several operating conditions specific to the Medford storage facility that were unknown until Sunday (e.g., excess water production, which can limit the rate of gas withdrawals.”)).
358 Ex. 116 at 9 (Heer Rebuttal).
359 Id. at 8; Ex. 134 at 50 (Reed Rebuttal).
360 Evidentiary Hearing Tr. Vol. 2C at 12 (King) (“Q. So, for example, on February 12, CenterPoint Energy would not necessarily have information regarding the pressures or operating conditions on Northern Natural Gas that would occur two days later on February 14; is that correct? A. I acknowledge that CenterPoint would not have perfect information in advance of that.”).
361 Ex. 116 at 8 (Heer Rebuttal).
362 Id. at 9.
363 Ex. 121 at 9 (Grizzle Rebuttal).
364 Ex. 134 at 50 (Reed Rebuttal).
CenterPoint also had approximately 160,000 Dth of interruptible customer load, minus the 31 customers it frequently curtails, that could be curtailed if necessary.\[365\]

184. According to the Department, CenterPoint Energy should have used storage, curtailment, and peak shaving facilities in unprecedented ways during a potentially life-threatening weather event. The Company would have had to rely on withdrawals from Waterville in excess of planned withdrawals without knowing if, until the actual gas day, the additional withdrawal was feasible, and reduced its gas purchases in advance of a four-day weekend in response. The Department proposes that the Company could have utilized its peak shaving resources and interruptible customers to address supply issues in the event Waterville could not provide more than planned. Those resources are addressed in greater detail in the sections below, but, in short, the Company relies on those resources for system operational needs and reliability. Factoring in more than the planned available amount from Waterville, and potentially diverting the other resources in unprecedented ways, would have jeopardized reliability and would not have been prudent.

185. The Department’s recommended disallowance ignores that the operating conditions at the storage facility and on the NNG pipeline were not and could not have been known on February 12. CenterPoint Energy prudently planned on February 12 to withdraw 50,000 Dth of storage gas on February 14 from its Waterville facility, as that amount is the planned and reliable maximum daily withdrawal limit.

2. BP Canada Virtual Storage Contract

186. CenterPoint Energy has a marketer virtual storage contract with BP Canada that provides a total of 10 Bcf of gas through the winter months.\[366\] The BP Canada contract has three components: (1) a baseload component; (2) a Ventura swing component; and (3) a Carlton swing component.\[367\]

187. The baseload portion has a pre-determined daily volume while the swing portions each have required totals for the winter heating season. Each day CenterPoint Energy may nominate from zero to a set maximum daily withdrawal amount, which changes monthly until the total winter volumes are fully used. For each of the swing components, once the total seasonal volumes have been used, no additional volumes may be called on.\[368\] The total maximum daily withdrawal amount in February was 120,000 Dth/day for all three components.\[369\] For the Ventura Swing component, CenterPoint Energy could nominate up to 70,000 Dth/day in February until the total 3.7 Bcf of that portion of the contract was exhausted for the season.\[370\]

\[365\] Department’s Redlined CenterPoint’s Proposed Findings of Fact, Conclusions of Law, and Recommendation at 40 (Mar. 25, 2022) (eDocket No. 20223-184159-21).
\[366\] Ex. 121 at 36 (Grizzle Rebuttal).
\[367\] Id. at 36-37.
\[368\] Ex. 134 at 52-53 (Reed Rebuttal); see also Ex. 121 at 36-37 (Grizzle Rebuttal).
\[369\] Ex. 121 at 37 (Grizzle Rebuttal); Ex. 134 at 53 (Reed Rebuttal).
\[370\] Id.
188. Under the terms of the BP Canada contract, CenterPoint Energy must notify BP Canada by 8:00 a.m. the business day before gas flow of the volume of gas it intends to nominate.\textsuperscript{371} Unlike the Company’s Waterville storage facility and its NGPL and NNG pipeline storage, CenterPoint Energy cannot adjust its BP Canada storage nominations after 8:00 a.m., or during weekends or holidays.\textsuperscript{372} As a result, the BP Canada Storage contract provides less flexibility than CenterPoint Energy’s other storage assets.\textsuperscript{373} Unlike spot gas, however, these nominations do not need to be made on a ratable basis throughout weekend periods.\textsuperscript{374}

189. During the February Event, CenterPoint could nominate different amounts of Ventura Swing under its BP Canada contract on Saturday, Sunday, Monday, and Tuesday (February 13-16), up to a maximum daily amount of 70,000 Dth in February.\textsuperscript{375} But CenterPoint needed to decide how much gas to nominate for each day before 8:00 a.m. on Friday, February 12, and could not withdraw more than the total amount remaining for that resource under the contract.\textsuperscript{376}

190. As of the morning of February 12, CenterPoint Energy had multiple weeks of supply remaining in the Carlton swing portion of the BP Canada contract, but only had 232,000 Dth remaining in the Ventura swing portion.\textsuperscript{377}

191. As shown in the table below, after maximizing the baseload and Carlton swing portions of the BP Canada contract, CenterPoint Energy decided to split the remaining 232,000 Dth of the Ventura swing portion evenly over the four days of the holiday weekend (i.e., 58,000 Dth/day for Ventura swing and 108,000 Dth/day total for the BP Canada contract).\textsuperscript{378}

\textbf{Nominated Storage Withdrawals (Dth) on February 12}\textsuperscript{379}

<table>
<thead>
<tr>
<th>Storage Assets</th>
<th>Sat., Feb. 13\textsuperscript{th}</th>
<th>Sun., Feb. 14\textsuperscript{th}</th>
<th>Mon., Feb. 15\textsuperscript{th}</th>
<th>Tues., Feb. 16\textsuperscript{th}</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGPL</td>
<td>115,000</td>
<td>145,000</td>
<td>95,000</td>
<td>85,000</td>
</tr>
<tr>
<td>NNG</td>
<td>40,000</td>
<td>44,100</td>
<td>20,000</td>
<td>15,000</td>
</tr>
<tr>
<td>BP Canada</td>
<td>108,000</td>
<td>108,000</td>
<td>108,000</td>
<td>108,000</td>
</tr>
<tr>
<td>Waterville</td>
<td>-</td>
<td>50,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>263,000</td>
<td>347,100</td>
<td>223,000</td>
<td>208,000</td>
</tr>
</tbody>
</table>

\textsuperscript{371} Ex. 121 at 37 (Grizzle Rebuttal).
\textsuperscript{372} Id. at 38.
\textsuperscript{373} Id. at 38.
\textsuperscript{374} Id. at 37-38; Evidentiary Hearing Tr. Vol. 1 at 72-73 (Grizzle).
\textsuperscript{375} Ex. 121 at 37 (Grizzle Rebuttal).
\textsuperscript{376} Id. at 4, 36-37.
\textsuperscript{377} Id. at 38.
\textsuperscript{378} Id.
\textsuperscript{379} Ex. 126 at 40 (Toys Direct).
192. As the February Event unfolded, CenterPoint Energy adjusted its planned
storage withdrawals to respond to changing weather conditions and customer loads.\textsuperscript{380}

193. Actual customer loads over the four-day weekend exceeded the Company’s
forecast on every day except February 14.\textsuperscript{381}

194. To respond to these increased customer loads, on February 13,
CenterPoint Energy increased its storage withdrawals on NGPL and NNG to their
maximum withdrawal limits. CenterPoint Energy was able to increase these withdrawals
because these storage contracts, unlike the BP Canada contract, allow for intra-day and
intra-weekend adjustments to storage nominations.\textsuperscript{382}

195. On February 15, CenterPoint Energy increased its storage withdrawals on
NGPL and NNG to their maximum withdrawal limit and also withdrew 54,000 Dth from
Waterville. The table below summarizes CenterPoint Energy’s actual storage withdrawals
during the February Event.

**Actual Storage Withdrawals for February Event (Dth)**\textsuperscript{383}

<table>
<thead>
<tr>
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<tr>
<td><strong>NGPL Pipeline Storage</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(Max. withdrawal of 147,170 Dth/day)</td>
<td>147,170</td>
<td>147,170</td>
<td>147,170</td>
<td>96,507</td>
<td>147,170</td>
</tr>
<tr>
<td><strong>NNG Pipeline Storage</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Max. withdrawal of 44,100 Dth/day)</td>
<td>44,100</td>
<td>44,100</td>
<td>44,100</td>
<td>-</td>
<td>44,100</td>
</tr>
<tr>
<td><strong>BP Canada</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Max. withdrawal of 120,000 Dth/day until Feb. 17, then 50,000 Dth/day)</td>
<td>108,000</td>
<td>108,000</td>
<td>108,000</td>
<td>108,000</td>
<td>50,000</td>
</tr>
<tr>
<td><strong>Waterville Company-Owned Storage</strong></td>
<td>-</td>
<td>55,000</td>
<td>54,000</td>
<td>-</td>
<td>50,000</td>
</tr>
<tr>
<td><strong>Total Estimated Actual Storage Withdrawals</strong></td>
<td>299,270</td>
<td>354,270</td>
<td>353,270</td>
<td>204,507</td>
<td>291,270</td>
</tr>
</tbody>
</table>

196. On February 17, due to the total volume contract limitations, the maximum
daily withdrawal volume from BP Canada was reduced to 50,000 Dth/day.\textsuperscript{384} On February 17, the Company planned to and did withdraw that maximum daily withdrawal volume.\textsuperscript{385}

\textsuperscript{380} Ex. 111 at 24-25(Olsen Direct).
\textsuperscript{381} Ex. 129 at Sch. 7 (Toys Direct Schedules).
\textsuperscript{382} Ex. 121 at 38 (Grizzle Rebuttal).
\textsuperscript{383} Ex. 129 at Sch. 7 (Toys Direct Schedules).
\textsuperscript{384} Ex. 121 at 38 (Grizzle Rebuttal).
\textsuperscript{385} Id.
197. The Department recommends a total disallowance related to BP Canada storage in the amount of $21,317,175 based on its arguments that CenterPoint Energy should not have split the volumes of its withdrawals equally over the four-day weekend (for a disallowance of $9,121,676),\textsuperscript{386} and that the Company should have preserved a portion of the Ventura swing supply for February 17 (resulting in a disallowance of $12,195,499).\textsuperscript{387} More specifically, the Department contends that CenterPoint Energy should have shaped its nominated daily swing volumes when planning for the four-day weekend on February 12, rather than splitting the remaining volumes equally over the four-day weekend.\textsuperscript{388} The Department alleges CenterPoint Energy could have avoided additional spot gas purchases over the four-day weekend by increasing the volume of BP storage nominations on February 14 by 12,000 Dth.\textsuperscript{389}

198. The Department also asserts that the Company should have preserved a portion of its remaining 232,000 Ventura swing volumes for use on February 17 or later in the winter rather than planning to use the remaining portion of this contract over the four-day holiday weekend.\textsuperscript{390} The Department alleges that preserving use of the Ventura swing supply could have allowed CenterPoint Energy to reduce its spot market purchases for February 17.\textsuperscript{391}

199. CenterPoint Energy maintains its decision to equally divide the remaining Ventura swing portion of the BP Canada contract over the four-day holiday weekend was based on the knowledge that it had at 8:00 a.m. on February 12.\textsuperscript{392} CenterPoint Energy contends that the key difference between its BP Canada contract and its other storage assets is the lack of flexibility with its BP Canada storage withdrawals. Unlike its other storage resources, CenterPoint Energy’s storage amounts for BP Canada are locked in for the weekend at 8:00 a.m. on February 12. In contrast, the Company is able to adjust its storage withdrawal amounts for its other storage assets (NNG, NGPL, and Waterville) to address higher than forecasted load or supply issues.\textsuperscript{393}

200. CenterPoint Energy decided to equally divide its Ventura swing portion across the Presidents’ Day weekend to allow the Company to preserve its more flexible storage resources in order to address unforeseen weather changes and supply shortfalls.\textsuperscript{394} As of the morning of February 12, NNG had issued an SOL and the Company was also aware of supply production issues, although there was uncertainty as to the extent of those supply issues at that time.\textsuperscript{395}

\textsuperscript{386} Ex. 506 at 82-83, Sch. 4 (King Direct).
\textsuperscript{387} Id. at 81-82, Sch. 4 at 4.
\textsuperscript{388} Id. at 81-82.
\textsuperscript{389} Id. at 82-83.
\textsuperscript{390} Id. at 81.
\textsuperscript{391} Id. at 81-82, Sch. 4 at 4.
\textsuperscript{392} Ex. 121 at 40-42 (Grizzle Rebuttal); Ex. 134 at 55 (Reed Rebuttal).
\textsuperscript{393} Ex. 134 at 57 (Reed Rebuttal).
\textsuperscript{394} Id. at 55.
\textsuperscript{395} Ex. 121 at 41 (Grizzle Rebuttal); see also Ex. 134 at 57 (Reed Rebuttal).
201. If CenterPoint Energy had reduced its BP Canada storage withdrawals on February 13, 15, or 16, and replaced this resource with other storage assets (NGPL or NNG), it would have limited the Company’s ability to use these more flexible resources on those days.\textsuperscript{396} In the event that demand was higher than forecasted or there were supply disruptions on those days, the Company’s ability to use these more flexible storage assets would be critical to meeting customer demands and preserving system reliability.\textsuperscript{397}

202. CenterPoint Energy did in fact need to call on these more flexible storage resources on both February 13 and 15, when the Company increased its withdrawal nominations for NGPL and NNG to their maximum daily withdrawal quantity.\textsuperscript{398} Had the Company already planned on February 12 for greater NNG and NGPL storage withdrawals for those days and reduced its BP Canada volumes by the same amount, the Company would have risked having inadequate gas to meet customer demand.\textsuperscript{399} The Department challenges this analysis, contending that it inappropriately relies on hindsight. The Department’s criticism is misplaced. CenterPoint Energy is not claiming that these particular circumstances somehow informed its decisions before the February Event, but instead simply offers an illustrative example of what actually occurred during that time, highlighting what might have occurred if it had followed the Department’s recommended course of action.

203. Based on the information known as of February 12, and the fact that it was contractually required to nominate its BP Canada storage volumes for the four-day weekend by 8:00 a.m., CenterPoint Energy prudently decided to evenly split its BP Canada storage nominations across the weekend and preserve its other more flexible storage options to respond to colder than forecasted temperatures or supply disruptions.

204. Using the remaining Ventura swing portion of the BP Canada contract, means that CenterPoint Energy did not preserve 70,000 Dth for use on February 17, and it made this decision based on what it knew at 8:00 a.m. on February 12, when it was required to make the storage nomination.\textsuperscript{400}

205. On February 12, weather forecasts predicted substantially warmer temperatures for February 17, as compared to the long holiday weekend.\textsuperscript{401} As of 8:00 a.m. on February 12, there was no indication that spot gas prices would be extraordinarily high over the holiday weekend or that such prices would continue through February 17.\textsuperscript{402} Given these facts, CenterPoint Energy had no reason, as of the morning of February 12, to preserve Ventura swing volumes for Wednesday, February 17.\textsuperscript{403}

\textsuperscript{396} Ex. 121 at 41 (Grizzle Rebuttal).
\textsuperscript{397} Id.
\textsuperscript{398} Ex. 129 at Sch. 7 at 1-2 (Toys Direct Schedules).
\textsuperscript{399} Ex. 121 at 42 (Grizzle Rebuttal).
\textsuperscript{400} Id. at 41-41; Ex. 134 at 55 (Reed Rebuttal).
\textsuperscript{401} Ex. 121 at 41 (Grizzle Rebuttal); Ex. 134 at 55 (Reed Rebuttal).
\textsuperscript{402} Ex. 121 at 41 (Grizzle Rebuttal); Ex. 134 at 55-56 (Reed Rebuttal).
\textsuperscript{403} Ex. 121 at 41-42 (Grizzle Rebuttal); Ex. 134 at 56 (Reed Rebuttal).
Further, given the significantly warmer temperatures forecasted for February 17, it made sense for CenterPoint Energy to utilize the Ventura swing volumes during the holiday weekend, when forecasts were colder.\footnote{Ex. 134 at 56 (Reed Rebuttal) (testifying that, “given the weather forecast of Wednesday being noticeably warmer than the weekend, I can envision a scenario where CenterPoint Energy could have faced prudence questions if prices dropped back to normal after the holiday weekend and CenterPoint Energy had preserved Ventura swing volumes instead of using all the Ventura swing volumes over the holiday weekend”)}

Given the inflexibility of the BP Canada contract, as well as the information known at 8:00 a.m. on February 12, CenterPoint Energy prudently used its Ventura swing over the colder weekend days, rather than preserving it for use on February 17.

### 3. NGPL Pipeline Storage

CenterPoint Energy has a pipeline storage contract with NGPL.\footnote{Ex. 118 at 7 (Grizzle Direct).} Consistent with its planned use for its other storage assets during the event, CenterPoint Energy planned to maximize its storage withdrawals from NGPL on February 14 and on February 17.\footnote{Ex. 129 at Sch. 7 (Toys Direct Schedules).}

The Department originally recommended a disallowance of $2,046,668 related to CenterPoint Energy’s use of its NGPL pipeline storage during the February Event.\footnote{Ex. 506 at 83 (King Direct).} The Department considered that CenterPoint Energy planned to withdraw from NGPL slightly less than what it ultimately withdrew (145,000 Dth vs. 147,170 Dth) which the Department claimed increased the Company’s spot market purchases for February 13-17.\footnote{Ex. 121 at 30, 32 (Grizzle Rebuttal); Ex. 134 at 47 (Reed Rebuttal).}

CenterPoint Energy clarified that the 2,170 Dth difference between the 145,000 Dth the Company planned to withdraw from NGPL, and the 147,170 Dth it did withdraw, is the fuel required to transport the stored gas.\footnote{Id. at 80.} In accordance with NGPL’s FERC tariffs, a percentage of the natural gas transported from storage is charged as fuel for transportation on the interstate pipeline.\footnote{Ex. 121 at 30, 32 (Grizzle Rebuttal); Ex. 134 at 31 (Reed Rebuttal).} CenterPoint Energy planned its supply requirements using the lower 145,000 Dth amount, as the portion attributable to fuel (2,170 Dth) cannot be used to serve customers.\footnote{Id. at 30.} Had CenterPoint planned its daily supply based on the full 147,170 Dth, it would have risked having inadequate gas supplies to serve customer load requirements.\footnote{Id.; Ex. 134 at 48 (Reed Rebuttal).}
211. Based on CenterPoint Energy’s more detailed explanation of its NGPL storage withdrawals, the Department withdrew its recommended disallowance related to the NGPL pipeline storage component of CenterPoint’s gas supply.\textsuperscript{413}

212. CenterPoint Energy appropriately maximized its NGPL pipeline storage supplies during the February Event.

B. Maximization of Peaking Capacity

1. Peak Shaving Generally

213. The Commission directed that this Report address whether the Gas Utilities appropriately used peaking capacity, and if not, to calculate the impact.\textsuperscript{414}

214. CenterPoint Energy owns and operates one LNG plant and eight propane air plants.\textsuperscript{415}

215. CenterPoint Energy’s peak shaving resources are an important part of the Company’s gas supply plan and are used to maintain reliable service to firm customers during design day conditions. CenterPoint Energy uses peak shaving resources to meet capacity needs above available pipeline capacity, thereby avoiding incremental pipeline capacity purchases and costs. Peak shaving resources also play a critical role in addressing intraday load fluctuations to respond to changes in demand or available supply.\textsuperscript{416}

216. Peak shaving resources help maintain reasonable costs because they allow the Company to avoid procuring incremental pipeline capacity and the associated demand charges that must be paid year-round when that capacity may be used for just a few hours a year on average. In this way, peaking facilities help balance reliability and capacity cost objectives, but they are not designed or situated to be used as a trade-off for spot purchases. Instead, CenterPoint Energy’s peak shaving plants are an integral part of the distribution system design and gas supply plan to meet customer needs as the temperature approaches design day conditions. These assets enhance system reliability and provide the flexibility to address daily or hourly load variations on the distribution system.\textsuperscript{417} Though not historically dispatched for economic purposes, there is nothing technologically or structurally about the facilities that would prevent it.\textsuperscript{418} However, certain considerations may limit whether the plants can operate effectively and provide the

\textsuperscript{413} Ex. 507 at 9 (King Surrebuttal) ("Based on CNP’s more detailed explanation in rebuttal testimony, I no longer recommend a disallowance related to NGPL.").
\textsuperscript{414} Order for Hearing at 22.
\textsuperscript{415} Ex. 115 at 20 (Heer Direct).
\textsuperscript{416} Id. at 20-21.
\textsuperscript{417} Ex. 116 at 18 (Heer Rebuttal).
\textsuperscript{418} Evidentiary Hearing Tr. Vol. 1 at 58 (Heer).
supplies needed. In some cases, conditions on the distribution system may not be appropriate to operate the plants as needed.\textsuperscript{419}

217. In accordance with CenterPoint Energy’s GPP, peak shaving supply has historically been used on a limited basis to meet peak demand on the coldest winter days and to support pressure in specific areas of the system.\textsuperscript{420}

218. The Company’s Winter Dispatch Plan, included as Appendix D to the 2020-2021 GPP, calls for peak shaving when forecasted daily load exceeds contracted pipeline capacity.\textsuperscript{421} As described in the GPP, “CenterPoint Energy’s dispatch plan calls for interruption of … customers prior to using peaking supplies, with minor exceptions when system integrity can only be maintained through peaking.”\textsuperscript{422} The plan also states “[t]his Plan will be adhered to as closely as practical, realizing that execution of any plan is subject to modifications to adjust for changing market, weather, operational and other conditions as it is implemented.”\textsuperscript{423}

219. Dispatch of peak shaving resources is not based solely on consideration of overall system demand and available peaking inventory on a particular day; operational considerations also factor into peak shaving dispatch decisions.\textsuperscript{424}

2. LNG Plant Operations

220. CenterPoint Energy’s LNG plant has total storage capacity of 1,000,000 Dth and a daily design capacity limit of 72,000 Dth/day.\textsuperscript{425}

221. The LNG plant has three separate processes – liquefaction, storage, and vaporization. Liquefaction (filling storage) occurs during the non-heating season and vaporization occurs when supply is needed during the heating season.\textsuperscript{426}

222. For the LNG plant, dispatch decisions must consider that the LNG facility has a finite amount of gas that can be used during a heating season, and usage is also dependent on and limited by the size and design of the pumps, vaporizers, and pipeline systems.\textsuperscript{427}

223. It would not be practical to add LNG to storage during the heating season because the liquefaction process itself takes considerably longer than the vaporization process. The plant can liquefy up to 5,000 Dth/day but could vaporize up to 72,000 Dth if

\textsuperscript{419} Id. at 57-58.
\textsuperscript{420} Ex. 116 at 11-12 (Heer Rebuttal).
\textsuperscript{421} Ex. 121 at 44 (Grizzle Rebuttal).
\textsuperscript{422} Ex. 115 at 25 (Heer Direct); Ex. 119 at Sch. 2 at 26 (Grizzle Direct Schedules).
\textsuperscript{423} Ex. 119 at Sch. 2 at 4 (Grizzle Direct Schedules).
\textsuperscript{424} Ex. 115 at 28-29 (Grizzle Direct).
\textsuperscript{425} Id. at 22.
\textsuperscript{426} Id. at 29.
\textsuperscript{427} Id. at 28.
run for a full day. Thus, it would take approximately two weeks to replace the volume used in one full day of operation.\textsuperscript{428}

3. Propane Air Plant Operations

224. CenterPoint Energy’s eight propane air facilities have a total storage capacity of approximately 980,000 Dth and can produce approximately 149,000 Dth/day assuming 100 percent availability. Considering potential issues with equipment and cold temperatures, availability under design day conditions is assumed to be approximately 80 to 85 percent.\textsuperscript{429}

225. The propane air facilities are located across the gas distribution system.\textsuperscript{430} Liquid propane is delivered to the plants by truck during the non-heating months and is stored in its liquid state. When needed to supplement system capacity or support system pressure, the liquid propane is vaporized and mixed with air before being injected into the gas distribution system.\textsuperscript{431}

226. For the propane air plants, dispatch decisions must consider that the propane air plants typically have a finite amount of energy in storage that can be drawn from to service customers during a heating season.\textsuperscript{432} In addition to fuel availability, dispatch decisions must also consider equipment design, the location of the specific plant, customer demand in that area, and whether demand in the area will allow the Company to achieve the necessary propane-to-natural gas mix.\textsuperscript{433}

227. In general, it would not be possible to refill the propane storage to any significant degree during the winter. Even in ideal circumstances it can take weeks to refill storage at a single propane facility. Further, significant depletion of propane storage would likely mean there had been a long stretch of cold weather, which by itself would put significant demand on the propane delivery infrastructure, and it would be unlikely timely propane deliveries could be scheduled.\textsuperscript{434}

228. Propane air plants are sited where there are typically large gas distribution flows during peak or near peak demand events (i.e., when temperatures are extremely low, natural gas load near those plants is extremely high). In order to dispatch one of the propane air plants, the expected flow of energy must be at least 2.2 or 2.3 times the planned output of the propane air facility. This is because an adequate supply of natural gas (at least 55 to 60 percent of the total mixture) must be added to the propane-air

\textsuperscript{428} Id. at 29.
\textsuperscript{429} Id. at 24.
\textsuperscript{430} Id. at 22.
\textsuperscript{431} Id. at 24.
\textsuperscript{432} Id. at 27.
\textsuperscript{433} Id. at 28.
\textsuperscript{434} Id. at 32.
mixture to ensure acceptable safety and gas quality parameters are met for customer end-uses.\footnote{Id. at 30.}

229. While the Company’s distribution system is interconnected, that does not mean that gas can, as a practical matter, be moved from one area of the system to another to meet the specific customer demand.\footnote{Id. at 30; Evidentiary Hearing Tr., Vol. 1 at 58-59 (Heer) (“[I]n the city of Minneapolis, we have four propane-air peak shaving facilities. And depending on how we are bringing gas and flowing gas into the city, it may or may not impact the flow of gas that is going by one of these propane-air facilities. And it’s important that we have sufficient gas flow at that facility as we introduce propane-air into our system for gas quality and safety issues. So because our system is integrated in the city and because on different circumstance, depending on what’s going on with the weather and customer usage and which customers, the flow may or may not be appropriate at all of the facilities at all times to operate that system.”).}

4. Peaking Usage During the February Event

230. During the February Event, CenterPoint Energy used its peak shaving resources consistent with its GPP dispatch plan. The Company did not plan to dispatch its peak shaving plants when it procured daily spot gas for the four-day weekend, or on February 16 for February 17, 2021, because, as shown in the table below, the forecasted load requirements on the coldest day of the weekend were not projected to exceed available pipeline capacity.\footnote{Ex. 506 at 91 (King Direct); Ex. 121 at 44-45 (Grizzle Rebuttal).}

\begin{center}
\textbf{Planned Peak Shaving}\footnote{Ex. 121 at 45, Table 3 (Grizzle Rebuttal).}
\end{center}

\begin{tabular}{|c|c|c|c|}
\hline
\textbf{Gas Day} & \textbf{Forecasted Load} & \textbf{Available Transportation Capacity} & \textbf{Planned Peak Shaving} \\
\hline
February 13 & 1,098,099 Dth & 1,230,284 Dth & 0 Dth \\
\hline
February 14 & 1,223,099 Dth & 1,230,284 Dth & 0 Dth \\
\hline
February 15 & 1,074,099 Dth & 1,230,284 Dth & 0 Dth \\
\hline
February 16 & 1,063,099 Dth & 1,230,284 Dth & 0 Dth \\
\hline
February 17 & 959,549 Dth & 1,230,284 Dth & 0 Dth \\
\hline
\end{tabular}

231. During the February Event, CenterPoint Energy planned to keep its peak shaving plants in reserve to address intraday load variations and distribution system constraints.\footnote{Ex. 115 at 33 (Heer Direct).}
232. The Department agrees that it was not imprudent for the Company to plan to reserve its peak shaving plants when it procured daily spot gas for the four-day weekend. The Department argues, however, that CenterPoint Energy understood by February 16 that natural gas spot market prices had spiked to $154.9/Dth at Ventura and $231.7/Dth at Demarc, and that it had already incurred $400 million in costs. Therefore, the Department contends, based on the additional knowledge, prudent action required acting differently on February 16 and incorporating the peaking plants into its supply decisions for February 17.

233. The Department posits that if CenterPoint fully deployed its LNG plant on February 17, it still would have had all its propane peak-shaving plant assets (149,000 Dth/day) to respond to any supply cuts or intra-day swings on February 17. The Department notes that on the coldest day of the February Event, February 14, CenterPoint used less than five percent (7,001 Dth) of its propane peaking capacity and less than 60 percent (41,611 Dth) of its LNG peaking capacity. The amount of propane held in reserve on February 17 greatly exceeds the 56,000 Dth in supply failures that CenterPoint experienced over the entire February Event. In addition, CenterPoint’s LNG plant would have still had enough LNG stored to run at maximum capacity for 13 days, plus the full capacity of the propane plants, in the unlikely event of prolonged, unseasonably severe cold weather in late February and March.

234. CenterPoint Energy has limited tools available to respond to changing circumstances, such as fluctuations in customer loads during the course of the gas day, or in this specific case over four gas days.

235. As shown in the table below, CenterPoint Energy dispatched a portion of its peak shaving plants on February 13, 14, and 15, to provide supplemental pressure support, respond to intra-day variations in customer load based on weather, and preempt potential supply issues as the Company became aware of potential supply cuts early on February 14.

440 Id. at 17; Ex. 506 at 11 (King Direct).
441 Ex. 506 at 93 (King Direct).
442 Ex. 507 at 16 (King Surrebuttal); Ex. 129 at Sch. 4 at 1 (Toys Direct Schedules) (showing 149,000 Dth in peaking capacity).
443 Ex. 129 at Sch. 4 at 1 (Toys Direct Schedules).
444 Ex. 507 at 17 (King Surrebuttal).
445 Id. at 17-18.
446 Id. at 17-18.
447 Id. at 17-18.
448 Id. at 17-18.
449 Id. at 17-18.
450 Ex. 115 at 9 (Heer Direct) (“Typically, customer demand varies over the course of 24-hours, most directly with ambient temperature but also depending on the time of day and day of the week as businesses open (or close); residential customers’ setback thermostats turn on their furnaces, hot water heating is used for morning showers, and customers leave and return home; schools open (or close); and industrial production is operational (or not).”).
451 Id. at 17-18.
452 Ex. 116 at 14-15 (Heer Rebuttal).
Use of Peak Shaving During the February Event

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<tr>
<td>LNG</td>
<td>229 Dth</td>
<td>41,611 Dth</td>
<td>6,358 Dth</td>
<td>433 Dth</td>
<td>348 Dth</td>
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<tr>
<td>Propane Air</td>
<td>1,397 Dth</td>
<td>7,001 Dth</td>
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<td>80 Dth</td>
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236. CenterPoint Energy dispatched peak shaving supply on February 14 “based on anticipated morning temperatures and forecasted load and expected system needs and pressures.” The Company made this decision early on the morning of calendar day February 14 (which was at the end of the Gas Day February 13). On February 14, CenterPoint Energy dispatched its LNG plant to preempt any supply issues as the Company became aware of potential gas supply cuts on the pipeline system early on February 14.

237. The Department and CUB assert that CenterPoint Energy should have planned to dispatch its peak shaving resources in response to spot market prices.

238. The Department acknowledges that the Company’s decisions with respect to peak shaving dispatch over the four-day weekend February 13-16 were not inconsistent with the prudence standard. Operating based on economics due to spot gas prices is outside of the typical framework for how peaking plants are designed and planned, and are outside of the ways in which CenterPoint Energy itself plans to or has used its peak shaving plants in the past. Further, the extent of the price spike was not fully understood on February 12, which is when CenterPoint Energy had to procure daily spot gas for the four-day weekend.

239. However, the Department opines that CenterPoint Energy should have engaged in economic dispatch of peak shaving on February 17, after the magnitude of the price spike was known. On February 16, CenterPoint Energy understood the extent of the price spike that occurred in the market on February 12. At that time, the Department argues, prudent action required incorporating peak shaving into the Company’s supply plan.

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448 Ex. 115 at 35-36, Table 1 (Heer Direct).
449 Id. at 36; Ex. 116 at 14 (Heer Rebuttal).
450 Ex. 115 at 36 (Heer Direct); Ex. 116 at 14-15 (Heer Rebuttal).
451 Ex. 506 87-94 (King Direct); Ex. 507 at 15-21 (King Surrebuttal); Ex. 801 (Cebulko Direct); Ex. 811 at 41-46 (Cebulko Surrebuttal).
452 Ex. 506 at 92 (King Direct).
453 Id.
454 Id. at 93; Ex. 507 at 15-16 (King Surrebuttal).
455 Ex. 506 at 93 (King Direct); Ex. 507 at 19-20 (King Surrebuttal) (“CNP could have pursued a strategy of acquiring additional spot gas on an intra-day basis (as Xcel did) to replace anticipated supply cuts.
240. The Department contends that CenterPoint Energy demonstrated over the four-day weekend that it could and would incorporate peaking plants into its supply portfolio based on economics. The Department concludes running peaking plants to preempt potential supply cuts is an example of running for economic reasons because the Company could have pursued a strategy of acquiring additional spot gas on an intra-day basis (as Xcel did) to replace anticipated supply cuts.\(^\text{456}\)

241. The Department recommends a disallowance that assumes CenterPoint Energy should have planned to use 100 percent (72,000 Dth/day) of its LNG facility maximum daily output to offset spot market purchases on Wednesday, February 17, for a total disallowance of $12,685,132.\(^\text{457}\)

242. The Department acknowledges that its disallowance recommendation does not account for the incremental cost to dispatch the Company’s peak shaving plant. However, the Department does not incorporate this fact into its recommendation because “the magnitude of including replacement costs is very small, on the order of 1 to 2% of the disallowance amount.”\(^\text{458}\)

243. CUB argues more broadly that CenterPoint Energy should have planned to dispatch peak shaving in response to increasing spot market prices on February 12 and throughout the entire February Event.\(^\text{459}\)

244. CUB concludes that on February 12, CenterPoint Energy knew that prices had reached $15/Dth and it should have determined that some of its peak shaving resources would be dispatched to mitigate the cost impacts of spot prices.\(^\text{460}\) CUB notes that when the Company planned its gas supply on February 16 to for Gas Day February 17, it absolutely knew it was amidst an unprecedented price spike.\(^\text{461}\)

245. CUB recommends a disallowance of $34,452,670, based on its conclusion that CenterPoint Energy should have dispatched 50 percent of available LNG and 25 percent of propane peak shaving resources for economic purposes from February 13-17.\(^\text{462}\)

246. In light of the circumstances it faced, including significant production declines and the risk of supply cuts, the Company’s decision not to plan for economic dispatch of its peak shaving resources was appropriate and allowed it to address potential reliability issues during the February Event. In fact, such issues did arise and the

\(^{456}\) Ex. 507 at 20 (King Surrebuttal).

\(^{457}\) Ex. 506 at Sch. 4 at 5 (King Direct).

\(^{458}\) Ex. 507 at 13 (King Surrebuttal).

\(^{459}\) Ex. 801 at 84 (Cebulko Direct).

\(^{460}\) Ex. 811 at 42-43 (Cebulko Surrebuttal).

\(^{461}\) Id.

\(^{462}\) Id. at 5-6; Ex. 819 at 4 (Nelson Surrebuttal). CUB revised its disallowance recommendation in surrebuttal in response to the Company’s Rebuttal Testimony.
Company did dispatch its peak shaving facilities as planned to meet system reliability needs.\(^{463}\)

247. When planning for gas supply on February 12 and February 16, CenterPoint Energy knew the forecasted customer load and the weather conditions forecasted, but it could not know whether actual weather conditions and temperatures would be colder or how customer usage would vary over each 24-hour gas day.\(^ {464}\)

248. Particularly related to gas purchasing decisions on February 12, CenterPoint Energy also knew that NNG had called an SOL and that there were impacts to production as a result of freeze offs, resulting in the risk of possible supply cuts. However, the scale of potential production declines, how those supply shortages would impact the market (and for how long), and whether there would be cuts to supply were all unknown.\(^ {465}\)

249. In light of these circumstances, CenterPoint Energy needed as much flexibility and control over its supply resources as possible to be ready to respond to potential supply issues. As a result, it was reasonable for the Company to lock in supply for the four-day weekend that cannot be adjusted day-by-day, and to retain the supply over which it does have control and flexibility – its pipeline storage and Company-owned Waterville storage resources.\(^ {466}\)

250. Further, CenterPoint Energy’s peak shaving resources have daily withdrawal limits.\(^ {467}\) Over the four-day weekend, CenterPoint Energy had already planned to maximize its storage withdrawals, baseload, and swing purchases for the coldest day, February 14. Actual load on Gas Day February 14 was 5,743 Dth higher than forecasted and CenterPoint Energy experienced 16,661 Dth of supply cuts. In response to these circumstances, CenterPoint Energy dispatched its LNG and propane air plants. If CenterPoint Energy had instead reduced its spot market purchases over the weekend and planned to rely on peak shaving supplies, the Company would not have had this resource available to address these unforeseen supply needs.\(^ {468}\)

251. Additionally, if weather conditions had been more extreme, if load had been higher, if additional distribution pressure issues were experienced, or if supply disruptions had been more significant, CenterPoint Energy could have needed to call on additional peak shaving dispatch to meet customer load requirements. If weather had been more extreme or supply cuts more significant, it is also likely that many utilities would have been

\(^{463}\) Ex. 134 at 33 (Reed Rebuttal).
\(^{464}\) Ex. 117 at 1 (Heer Written Summary of Pre-Filed Testimony).
\(^{465}\) Id.
\(^{466}\) Ex. 121 at 41-42 (Grizzle Rebuttal)
\(^{467}\) Ex. 115 at 21, 24 (Heer Direct) (noting CenterPoint Energy’s LNG plant has a vaporization design rate of 72,000 Dth/day and that “CenterPoint Energy’s eight propane facilities ... can produce approximately 149,000 Dth/day assuming 100 percent availability. However, considering potential issues with equipment at negative 25 degrees Fahrenheit, availability factors under design day conditions are assumed to be approximately 80 to 85 percent.”).
\(^{468}\) Ex. 134 at 38 (Reed Rebuttal).
in the market looking for emergency gas. Under those circumstances the availability of any significant amount of additional supplies in the weekend gas market would have been close to zero, or such gas would have been even more expensive than the prices CenterPoint Energy already experienced. These factors demonstrate the importance of reserving resources to address changing conditions, like those that occurred during the February Event.\textsuperscript{469}

252. By the morning of Tuesday, February 16, the most extreme weather in Minnesota had subsided but: (1) it was still expected to be extremely cold with a forecasted average temperature of 6.8 degrees; (2) there was still uncertainty associated with load due to the possibility that actual temperatures could turn colder than forecasted or that actual customer usage could vary from forecasted load; (3) there was significant uncertainty as to whether supply cuts would continue or grow;\textsuperscript{470} and (4) CenterPoint had already planned to maximize storage withdrawals to minimize spot purchases.\textsuperscript{471} As a result, CenterPoint Energy’s peak shaving facilities provided the only remaining flexible source of supply for Wednesday, February 17.

253. CenterPoint Energy’s planning and use of peak shaving during the February Event was consistent with design, location, and operational considerations relevant to the Company’s peak shaving resources. CenterPoint Energy’s peak shaving plants have been designed and located to ensure reliability and provide flexibility that allows the Company to address daily or hourly load variations for local areas of the distribution system and to meet customer needs above our contracted pipeline transportation capacity.\textsuperscript{472}

254. Operationally, dispatch of the Company’s peak shaving facilities is based on a number of factors, including the location of the specific plant, customer demand in that area, available fuel, and whether demand will allow the Company to achieve the necessary propane-to-natural gas mix.\textsuperscript{473}

255. If it had followed the Department’s proposal to dispatch the LNG peak shaving plant, CenterPoint Energy would have had to place even greater reliance on its propane air facilities to respond to colder than forecasted weather, higher than forecasted load, or supply cuts due to production failures. In Minnesota, cold weather occurs in the latter part of February, through March, and can occur even into April.\textsuperscript{474} Although such events may be infrequent, CenterPoint Energy must be prepared to serve firm customers under design day conditions, which are planned based on a 24-hour average temperature of negative 25 degrees Fahrenheit.\textsuperscript{475} This planning is based on a weather event that

\textsuperscript{469} Id. at 40.
\textsuperscript{470} Ex. 100 at 48-49 (Smead Direct) (detailing that between Monday February 15 and Tuesday February 16, Permian output had dropped by 8.7 Bcf/day or 74.5 percent, representing a 10 percent decline in total U.S. natural gas production from all sources).
\textsuperscript{471} Ex. 134 at 42 (Reed Rebuttal).
\textsuperscript{472} Ex. 115 at 33 (Heer Direct).
\textsuperscript{473} Id. at 28.
\textsuperscript{474} Ex. 109 at 8-11 (Stepanek Direct).
\textsuperscript{475} Ex. 115 at 8 (Heer Direct).
occurred in 1996, when Minneapolis experienced five consecutive days of extreme cold, with hourly temperatures dropping below minus 25 degrees on three of the five coldest days.\footnote{Ex. 119 at Sch. 2 at 24 (Grizzle Direct Schedules).}

256. In its recent experience, CenterPoint Energy needed to call upon its peak shaving facilities late in the heating season. In the winter of 2014, the TransCanada pipeline ruptured on a cold weekend in January and CenterPoint Energy called on peak shaving supplies to manage the loss of gas supply into Minnesota. Later that same winter, forecasts of far below zero on a March weekend necessitated the use of peak shaving supplies to meet customer needs.\footnote{Ex. 115 at 38-39 (Heer Direct); Ex. 116 at 20-21 (Heer Rebuttal).}

257. As a natural gas utility, CenterPoint Energy must make decisions and take actions ensuring it can provide continuous, safe, and reliable service to customers in the context of significant gas production declines, without knowing the extent of gas supply impacts or the scale of potential cuts to gas supplies.

258. In light of the circumstances of the February Event and the information known or knowable to CenterPoint Energy, including supply failures and the risk of possible significant force majeure supply cuts, and the extremely cold weather experienced across the communities served by CenterPoint Energy in Minnesota, the Company’s decision to preserve its peak shaving resources to address reliability issues was reasonable and prudent.

259. CenterPoint decisions regarding the use of its peak shaving resources were prudent and reasonable under the circumstances. The Administrative Law Judges do not recommend a disallowance on this basis.

C. Curtailment of Interruptible Customers

260. The Commission’s Order for Hearing directed development of the record as to any other issues that could bear on the prudency of the Gas Utilities’ actions during the February Event.\footnote{Order for Hearing at 23.} One such issue raised by the parties relates to CenterPoint Energy’s decisions related to curtailment of interruptible customers.

261. CenterPoint Energy’s interruptible service historically has provided system relief during peak conditions to allow the Company to ensure continuous, reliable service is provided to firm service customers.\footnote{Ex. 113 at 5 (Olsen Rebuttal).}

262. The Company’s tariff related to interruptible customers contains the following language:

CenterPoint Energy can interrupt End User if capacity constraints require or for other appropriate reasons. End User will provide to CenterPoint Energy
(and update as necessary) the names and telephone numbers of persons CenterPoint Energy should notify to curtail in Appendix A. End User will cease using gas on one hour’s notice when CenterPoint Energy requests or pay the penalty for Unauthorized Use of Gas contained in the Tariff.480

263. According to the Company, interruptible customers are subject to curtailment when: (1) the Company experiences distribution system operational issues; or (2) for system sales (non-transitip) customers, when an interstate pipeline constraint or insufficient pipeline capacity limits the delivery of natural gas to CenterPoint Energy’s system.481

264. Interruptible service provides significant benefits and cost savings to CenterPoint Energy’s firm service customers through reducing pipeline capacity and distribution system costs. First, CenterPoint Energy does not purchase pipeline entitlement to serve interruptible customers, allowing for increased overall capacity utilization rate throughout the year when CenterPoint Energy is not experiencing design day conditions, and reducing capacity costs for non-interruptible customers. Additionally, interruptible customers allow the Company to design and construct a more efficient distribution system, which reduces costs for firm customers. Interruptible customers increase the utilization of distribution assets during non-peak conditions and historically have been curtailed in the event of distribution constraints, allowing for greater utilization of those investments without additional costs.482 Curtailments also provide a limited amount of intra-day load flexibility.483

265. In accordance with the Company’s GPP filed each year with the Commission, when CenterPoint Energy forecasts system loads above its pipeline entitlement levels, the Company plans to curtail interruptible system sales customers until enough forecasted load has been removed to balance capacity with expected load.484

266. When the Company identifies potential distribution system constraints, it curtails its interruptible customers until enough load has been removed from the distribution system to maintain sufficient system pressure on the distribution pipeline.485

267. During the February Event, CenterPoint Energy curtailed interruptible customers to address anticipated distribution constraints.486 CenterPoint Energy’s use of interruptible customer curtailments to address operational issues on the distribution system during the February Event helped ensure uninterrupted service to all of the Company’s firm customers.487

480 Center Point Energy Gas Rate Book at Section VII, Original Page 2.a., 3.a., and 10.b. (Mar. 12, 2021).
481 Ex. 111 at 18 (Olsen Direct); Ex. 113 at 5 (Olsen Rebuttal).
482 Ex. 113 at 9 (Olsen Rebuttal).
483 Ex. 111 at 18 (Olsen Direct).
484 Ex. 113 at 5 (Olsen Rebuttal); Ex. 119 at Sch. 2 at 33 (Grizzle Direct Schedules).
485 Ex. 111 at 19-20 (Olsen Direct).
486 Ex. 113 at 2, 6-7 (Olsen Rebuttal).
487 Id. at 2.
268. On February 12, CenterPoint Energy identified eight sections of the distribution system for which it expected deliverability constraints over the coming Presidents’ Day weekend. In response, the Company curtailed 31 interruptible customers beginning on Sunday February 14 and continued these curtailments through February 16. CenterPoint Energy curtailed 123,666 Dth of interruptible customer load in the aggregate between February 12 through February 16.

269. On February 16, CenterPoint Energy’s daily load forecast indicated warmer temperatures and decreased load requirements for February 17, so the Company lifted curtailments for the 31 interruptible customers who had been curtailed beginning February 14. However, the Company continued to curtail a limited number of interruptible customers that are frequently curtailed during the heating season, in order to address distribution system conditions.

270. The Department and CUB contend that CenterPoint Energy should have curtailed more of its interruptible customers during the February Event in response to spot market natural gas prices. Both Department and CUB recommended disallowances based on CenterPoint Energy’s decision not to plan to curtail additional interruptible load in response to high prices.

271. The Department acknowledges that it was not unreasonable for CenterPoint Energy to forego calling curtailments from February 13 through February 16. The Department recognized that the Company would have been required to make curtailment decisions early on the morning of February 12, before the unprecedented magnitude of the spot gas price spike could be known or understood.

272. The Department maintains, however, that CenterPoint Energy should have planned on February 16 to curtail interruptible customer load, thereby reducing daily gas purchases made on February 16 for February 17. While agreeing that curtailment on the basis of gas prices was outside planned and historical usage, Department asserts that the CenterPoint Energy should have planned to curtail on February 17 in light of the extraordinary price spike. The Department alleges that the Gas Utilities “could have

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488 Id. at 6.
489 Id. CenterPoint Energy also directed curtailment of certain interruptible customers frequently called on to address distribution system conditions throughout the heating season. Id. at 6-7.
490 Id. at 6.
491 Ex 111 at 28 (Olsen Direct); see also Ex. 113 at 8 (Olsen Rebuttal).
492 Ex. 113 at 8, 15-22 (Olsen Rebuttal).
493 Ex. 506 at 100-01, 109-12 (King Direct); Ex. 507 at 52 (King Surrebuttal); Ex. 811 at 6 (Cebulko Surrebuttal); Ex. 819 at 4-6 (Nelson Surrebuttal).
494 Ex. 506 at 98-99 (King Direct).
495 Id. at 98.
496 Id. at 99 (“Again, the magnitude of the price spike was unprecedented and not fully understood by the Gas Utilities on February 12 when they made their purchasing decisions for the Four-Day Period.”).
497 Id. at 100.
made curtailments on February 17 on a one-time, ad hoc basis given the extreme circumstances and did not need to develop a permanent program to do so.\footnote{Id. at 99. Mr. King acknowledged that “the traditional use of curtailment is for capacity-related needs when pipeline availability is fully utilized,” and that “calling curtailment based on economics due to spot gas price is outside of how the Gas Utilities plan on and have historically used curtailments.” Finally, Mr. King acknowledged that the magnitude of the price spike was unprecedented and not fully understood on February 12 when CenterPoint Energy had to make its purchasing decisions for the four-day weekend.\textsuperscript{499} Id. at 100-101.}

273. The Department calculated a disallowance “based on an assumed volume of planned curtailments equal to 50% of the usage of curtailment customers on February 17.” Therefore, the Department recommended a disallowance of $7,279,592 for CenterPoint Energy.\footnote{Ex. 801 at 9 (Cebulko Direct); Ex. 811 at 5 (Cebulko Surrebuttal) (agreeing with the Company that it is necessary to use a curtailment compliance percentage that could be counted on during such an uncertain situation and increasing the calculated compliance from 95 percent to 90 percent).\textsuperscript{500} Ex. 801 at 71-72 (Cebulko Direct).\textsuperscript{501} Ex. 811 at 5 (Cebulko Surrebuttal).\textsuperscript{502} Id. at 6; Ex. 819 at 4 (Nelson Surrebuttal).\textsuperscript{503} Id. at 7.\textsuperscript{504} Ex. 113 at 2 (Olsen Rebuttal).\textsuperscript{505} Id. at 2; Ex. 134 at 28 (Reed Rebuttal).}

274. CUB contends that CenterPoint Energy should have curtailed all of its interruptible customers for the entirety of the February Event for economic reasons.\footnote{Ex. 801 at 9 (Cebulko Direct); Ex. 811 at 5 (Cebulko Surrebuttal) (agreeing with the Company that it is necessary to use a curtailment compliance percentage that could be counted on during such an uncertain situation and increasing the calculated compliance from 95 percent to 90 percent).\textsuperscript{500} Ex. 801 at 71-72 (Cebulko Direct).\textsuperscript{501} Ex. 811 at 5 (Cebulko Surrebuttal).\textsuperscript{502} Id. at 6; Ex. 819 at 4 (Nelson Surrebuttal).\textsuperscript{503} Id. at 7.\textsuperscript{504} Ex. 113 at 2 (Olsen Rebuttal).\textsuperscript{505} Id. at 2; Ex. 134 at 28 (Reed Rebuttal).} CUB concluded that based on prices for gas on February 11, pipeline warnings, and uncertainty going into the four-day weekend, CenterPoint Energy should have “locked in the benefit to the system and customers by curtailing interruptible customers.” CUB also concluded that CenterPoint Energy’s decision not to curtail customers on February 17 was unreasonable given the price of natural gas.\footnote{Ex. 801 at 9 (Cebulko Direct); Ex. 811 at 5 (Cebulko Surrebuttal) (agreeing with the Company that it is necessary to use a curtailment compliance percentage that could be counted on during such an uncertain situation and increasing the calculated compliance from 95 percent to 90 percent).\textsuperscript{500} Ex. 801 at 71-72 (Cebulko Direct).\textsuperscript{501} Ex. 811 at 5 (Cebulko Surrebuttal).\textsuperscript{502} Id. at 6; Ex. 819 at 4 (Nelson Surrebuttal).\textsuperscript{503} Id. at 7.\textsuperscript{504} Ex. 113 at 2 (Olsen Rebuttal).\textsuperscript{505} Id. at 2; Ex. 134 at 28 (Reed Rebuttal).}

275. CUB estimated a 90 percent compliance percentage to calculate its recommended disallowance instead of the 50 percent curtailment compliance the Company believed was appropriate in an uncertain situation.\footnote{Ex. 801 at 71-72 (Cebulko Direct).\textsuperscript{501} Ex. 811 at 5 (Cebulko Surrebuttal).\textsuperscript{502} Id. at 6; Ex. 819 at 4 (Nelson Surrebuttal).\textsuperscript{503} Id. at 7.\textsuperscript{504} Ex. 113 at 2 (Olsen Rebuttal).\textsuperscript{505} Id. at 2; Ex. 134 at 28 (Reed Rebuttal).} As a result, CUB recommended a disallowance of $48,020,615 based on CenterPoint Energy’s actions with respect to curtailment during the February Event.\footnote{Id. at 6; Ex. 819 at 4 (Nelson Surrebuttal).\textsuperscript{500} Ex. 801 at 9 (Cebulko Direct); Ex. 811 at 5 (Cebulko Surrebuttal) (agreeing with the Company that it is necessary to use a curtailment compliance percentage that could be counted on during such an uncertain situation and increasing the calculated compliance from 95 percent to 90 percent).\textsuperscript{501} Ex. 801 at 71-72 (Cebulko Direct).\textsuperscript{502} Ex. 811 at 5 (Cebulko Surrebuttal).\textsuperscript{503} Id. at 6; Ex. 819 at 4 (Nelson Surrebuttal).\textsuperscript{504} Ex. 113 at 2 (Olsen Rebuttal).\textsuperscript{505} Id. at 7.\textsuperscript{506} Id. at 2; Ex. 134 at 28 (Reed Rebuttal).}

276. The prices and terms governing CenterPoint Energy’s interruptible services reflect the fact that curtailment will only be called for system reliability reasons or, in the case of system sales customers, when an interstate pipeline constraint or insufficient pipeline capacity limits the delivery of natural gas to CenterPoint Energy’s distribution system.\footnote{Ex. 113 at 2 (Olsen Rebuttal).\textsuperscript{504} Id. at 2; Ex. 134 at 28 (Reed Rebuttal).}

277. The Company’s decision to curtail some interruptible customers to address anticipated distribution constraints was consistent with the Company’s historical practice and GPP.\footnote{Id. at 2; Ex. 134 at 28 (Reed Rebuttal).} CenterPoint Energy has not and does not curtail interruptible customers for economic reasons.\footnote{Id. at 2; Ex. 134 at 28 (Reed Rebuttal).}
278. The Company's curtailment decisions were also consistent with how other natural gas utilities use interruptible customer curtailments.508 “There is no record in Minnesota of curtailing interruptible customers in response to a pricing situation.”508 Further, “there is no industry standard that interruptible sales customers should be curtailed if … higher cost purchases could be avoided by curtailing interruptible sales customers.”509 Past reviews of interruptible tariffs and curtailment of interruptible customers in Minnesota during pricing or weather events have focused on reliability issues, not economics.510

279. CenterPoint Energy’s tariffs do not provide for price-based curtailment and such an action is contrary to the Company’s interruptible rate structure. CenterPoint Energy’s tariffs do not contain established criteria for economic curtailments, such as the price or trigger for issuing such curtailments.511

280. Under Minnesota law, CenterPoint Energy must provide “safe, adequate, efficient, and reasonable”512 gas service to all if its customers and is only permitted to curtail its interruptible customers in accordance with the Commission-approved terms and conditions as established in the Company’s approved tariffs and customer service agreements.

281. The absence of an express tariff provision relating to price-based curtailments means there are no parameters governing when CenterPoint Energy could curtail customers for economic reasons, which in turn means that under the proposals advanced by the Department and CUB, interruptible customers would have been curtailed on grounds they could not have reasonably expected, at any time, and for any length of time.513

282. Curtailing for economics would change the frequency of curtailments.514 If the frequency of curtailments is inconsistent with interruptible customers’ understanding of the character (and value) of the service they receive, it could cause interruptible customers to convert to firm services.515 This could result in increased costs among all customer classes, while depleting the utility of interruptible service to address pipeline capacity and distribution system reliability issues.516

283. CenterPoint Energy utilized interruptible customer curtailments throughout the February Event to address distribution system reliability concerns, consistent with its past practice. By doing so, the Company addressed forecasted constraints on the
distribution system, ensuring reliable, uninterrupted service to the Company’s firm customers. Departing from this past practice during the February Event would have risked the reliability of service to customers and could have resulted in significant additional costs incurred as a result of applicable pipeline penalties in place.

284. If the Commission wishes to consider reevaluating the utilities’ use of curtailments in order to mitigate price risk, it may wish to explore this issue in connection with its forward-looking docket. In connection with the February Event, however, CenterPoint Energy did not act imprudently by not curtailing interruptible customers for economic reasons. Therefore, the Commission should not disallow extraordinary gas cost recovery to CenterPoint Energy on that basis of curtailments.

D. CenterPoint Energy’s Hedging Activities

285. In response to the Commission’s direction regarding record development as to any other issues not enumerated, the OAG addressed the Gas Utilities’ use of hedging.

286. CenterPoint Energy uses hedging as a tool to minimize price risk volatility and deliverability risk by taking steps to stabilize gas prices and ensure the reliability of gas supply.\(^{518}\)

287. CenterPoint Energy’s use of hedging is regulated by the Commission.\(^{519}\) To ensure that utilities do not engage in speculative hedging activities, the Commission imposes limits on the volumes of gas that are hedged, the total cost premiums and reservation fees, and the types of hedging products utilities can purchase.\(^{520}\) CenterPoint Energy’s use of hedging is approved and overseen by the Commission through multiple filings made by the Company throughout the year.\(^{521}\)

288. CenterPoint Energy files its hedging plan, which is part of its GPP, with the Commission each year. CenterPoint Energy also files updates with the Commission on its hedging activities throughout the year as part of the Company’s annual Demand Entitlement Filing, AAA report, and monthly PGA filings. The AAA reports include detailed information about each physical hedging contract executed by the Company including the volume and the net gain or loss for each contract. The Department and the Commission review these reports to determine the prudence of the Company’s hedging activities.\(^{522}\)

289. CenterPoint Energy seeks to have price protection in place for approximately half of expected winter load in advance of the start of the winter season.\(^{523}\)

\(^{517}\) Order for Hearing at 23.
\(^{518}\) Ex. 134 at 72 (Reed Rebuttal).
\(^{519}\) Ex. 118 at 29-30 (Grizzle Direct).
\(^{520}\) Ex. 134 at 72-73 (Reed Rebuttal).
\(^{521}\) Ex. 118 at 29-30 (Grizzle Direct).
\(^{522}\) Ex. 133 at 44-45 (Reed Direct); Ex. 121 at 55-57 (Grizzle Rebuttal); Evidentiary Hearing Tr. Vol. 3 at 13-14 (Lebens).
\(^{523}\) Ex. 118 at 23, 41 (Grizzle Direct).
CenterPoint Energy relies on a combination of storage as a natural price hedge and physical hedge products such as costless collars, call options with a ceiling price, and fixed price hedges to meet this goal. Both the types of hedging tools used, and the volumes hedged in CenterPoint Energy’s hedging plan, are consistent with the Commission’s order on hedging and the hedging programs at other gas utilities.

290. Additionally, CenterPoint Energy’s hedging strategy is shaped by limits on volume, the instruments used, and the available budget to create price and volumetric certainty. In particular, to ensure the hedging activity is done in the context of the requirements associated with customer volumes and not as a speculative activity, the Commission has imposed the following parameters on CenterPoint Energy’s hedging plans:

1. Established an annual limit on hedging volumes of 26 Bcf;

2. Established an annual limit on net option premiums of $6.5 million, excluding premiums or reservation fees paid for daily call gas;

3. Authorized CenterPoint Energy to engage in put options in combination with call options to form a collar but disallowed the Company to use put options for any other reason, without specific Commission approval.

291. CenterPoint Energy’s goal in utilizing its gas hedges is to obtain some price stability, not to “beat the market.” Therefore Company endeavors to balance the costs of hedging with the goal of achieving price stability.

292. Available hedging tools are monthly-oriented, similar to baseload purchases. As a result, these tools are ineffective with respect to gas purchased using daily price indices and are not useful to mitigate daily price spikes. Department witness Mr. King testified that hedging tools generally do not provide daily price spike mitigation. Rather, Mr. King testified that hedging tools, if in place, could be valuable to mitigate against

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524 Id. at 31-32.
525 Ex. 133 at 43-44, 46-47, 49-51 (Reed Direct).
527 Ex. 118 at 29 (Grizzle Direct) (“CenterPoint Energy’s goal in setting price hedges is for price stability, not to ‘beat the market.’ There is a cost to hedging and our focus is on maximizing protection while minimizing the costs of that protection.”); see also Ex. 506 at 76 (King Direct) (“I do not believe the Gas Utilities should be expected to systematically beat the index or engage in behavior that risks increased cost without having the parameters for doing so established and agreed in advance.”).
528 Ex. 121 at 54 (Grizzle Rebuttal).
529 Ex. 506 at 23 (King Direct).
consistent upward market moves, “rather than a transient spike.”530 “Financial hedges typically point to monthly FOM prices as opposed to daily prices.”531

293. In its 2020-2021 GPP, CenterPoint Energy documented its intent to procure 23 Bcf in forward physical price baseload hedges for the 2020-2021 winter.532 CenterPoint Energy executed on its hedging plan in the summer of 2020, procuring the following price-protected supplies for the 2020-2021 heating season:533

<table>
<thead>
<tr>
<th>(November 2020 - March 2021)</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BCF</td>
</tr>
<tr>
<td>Baseload - Hedged</td>
<td>23.1</td>
</tr>
<tr>
<td>Baseload - Index Price</td>
<td>21.3</td>
</tr>
<tr>
<td>Daily/Swing Supply</td>
<td>19.5</td>
</tr>
<tr>
<td>Storage Supply</td>
<td>28.1</td>
</tr>
<tr>
<td>Peaking Supply [LNG/Propane]</td>
<td>0.1</td>
</tr>
<tr>
<td>Total System Purchases</td>
<td>92.1</td>
</tr>
<tr>
<td>Total Price Stabilization</td>
<td>51.2</td>
</tr>
</tbody>
</table>

294. The OAG contends that the Gas Utilities should have implemented price ceilings and price floors in their swing contracts to ensure that prices remained inside the expected range of prices. The OAG further argued that over-the-counter (OTC) type contracts, if planned sufficiently in advance, could have completely avoided extraordinary gas costs during the February Event.534 According to the OAG, the utilities hedging decisions, spanning several years, contributed to the extraordinary gas costs incurred during the February Event and were not prudent.535

295. The OAG’s witness, Mr. Lebens, testified that the utilities could have utilized “daily options, weekly options, and short-term options” as traded on the CME Group platform to mitigate extraordinary costs. Mr. Lebens suggested the utilities could have pursued “customizable [OTC] contracts that cap the maximum price that they would have paid.” Finally, Mr. Lebens suggests that the utilities could have used Weather Futures and Options to hedge price risk during the February Event.536

296. During the evidentiary hearing, Mr. Lebens testified that he was not aware of any Commission proceeding that directed the utilities to engage in the kind of financial hedging that he advocates the utilities had to do to be found prudent.537 Mr. Lebens further testified that he is not aware of any proceeding before the Commission in which the

530 Id.
531 Id.
532 Ex. 121 at 56 (Grizzle Rebuttal).
533 Ex. 118 at 58-59 (Grizzle Direct); Ex. 119 at Sch. 3 (Grizzle Direct Schedules) (actual hedge contract for 2020-2021).
534 Ex. 603 at 13 (Lebens Surrebuttal).
535 Ex. 604 (Lebens Written Summary of PreFiled Testimony).
536 Ex. 600 at 6 (Lebens Direct).
537 Evidentiary Hearing Tr. Vol. 3 at 50-51 (Lebens).
Commission has discussed the financial hedging strategies he opines on or indicated that such hedging strategies would bear on prudency.\textsuperscript{538}

297. Mr. Lebens acknowledged that he does not have any experience developing hedging strategy, trading physical natural gas, trading financial hedges for a natural gas utility, or negotiating hedging contracts.\textsuperscript{539}

298. Mr. Lebens acknowledged that he is not aware of any such daily, weekly, or short-term hedges or exchange-traded hedges at Ventura or Demarc that were traded in the market during 2021.\textsuperscript{540} In his testimony, Mr. Lebens did not identify any OTC products that could have been utilized to hedge against gas price spikes at either Northern-Demarc or Northern-Ventura. Rather, he requested that the Gas Utilities identify such products that he cannot price or quantify.\textsuperscript{541}

299. The record shows that the OAG’s hedging proposals would not have been feasible or reasonable as a real-world strategy for CenterPoint Energy. The strategies suggested are based on instruments that either do not exist, would not have addressed the risk in Minnesota, or do not address the utility’s obligation to deliver actual gas to customers.\textsuperscript{542}

300. The various suggestions made by the OAG are either a highly risky commodity-speculation strategy, involve a search for price-protection tools that simply do not exist, or consider commitment to price-protection tools that would be prohibitively expensive.\textsuperscript{543}

301. The OAG also suggested that the gas utilities could have used weather derivatives. Without offering any detailed information on Minneapolis weather derivatives, the OAG noted that Dallas weather derivatives performed well.\textsuperscript{544}

302. A weather derivative is a financial instrument used to address weather-related risks. It is typically structured around the number of heating degree days (HDD) or cooling degree days (CDD).\textsuperscript{545} These products provide a hedge against variations of heating degree-days from normal, an approach often employed by utilities to normalize

\begin{itemize}
  \item \textsuperscript{538} Id. at 51.
  \item \textsuperscript{539} Id. at 39-39; see also Ex. 137 (OAG Response to CenterPoint Energy Information Request No. 11) ("Mr. Lebens does not have experience implementing a hedging strategy for a regulated utility nor has he previously evaluated the implementation of a hedging strategy for a regulated utility in testimony outside of this proceeding and its related dockets.").
  \item \textsuperscript{540} Ex. 600 at 8, 10-11 (Lebens Direct).
  \item \textsuperscript{541} Id.
  \item \textsuperscript{542} Ex. 134 at 82-85, Sch. 2 at 4 (Reed Rebuttal) ("[N]o contract for daily, weekly, or short-term natural gas options for Minnesota exist."); Ex. 101 at 3 (Smead Rebuttal).
  \item \textsuperscript{543} Ex. 101 at 3 (Smead Rebuttal)
  \item \textsuperscript{544} Ex. 603 at 14 (Lebens Direct).
  \item \textsuperscript{545} Ex. 134 at Sch. 2 at 9 (Reed Rebuttal).
\end{itemize}
their revenues against weather changes, primarily oriented toward consumption volumes, not prices.\(^\text{546}\)

303. However, the massive spike in prices that occurred during the February Event was not driven primarily by changes in the weather in Minnesota. As a result, a weather derivative product would not have mitigated the cost impacts, even if such derivative were available.\(^\text{547}\)

304. Unlike physical hedges that combine the supply of natural gas with some price protection, financial hedges do not include the physical supply of gas.\(^\text{548}\) Without the underlying physical transaction, the market for financial hedges in CenterPoint Energy’s Minnesota market are very limited.\(^\text{549}\)

305. The OAG argues that review of the “price action that occurred for actual hedges during February 2021” is useful “because it mimics how other hedges would have performed, and because it mimics how hedged swing contracts would have performed if they were in place.”\(^\text{550}\)

306. However, the “current monthly call options” the OAG suggests the Gas Utilities, including CenterPoint Energy, could have purchased to hedge against February gas costs were actually for deliveries in March 2021. February call options were not available at the time the OAG suggests these options should have been purchased.\(^\text{551}\)

307. Any futures options contracts or OTC-type contracts executed during the week of February 8 would have been for the delivery of natural gas in March.\(^\text{552}\) In order to hedge against the risk of a price spike (at Henry Hub) in February 2021, CenterPoint Energy would have had to execute such a futures options contract in January.\(^\text{553}\)

308. The OAG also suggested the gas utilities should have used costless collars, which it asserts “do not cost anything.”\(^\text{554}\)

309. The OAG’s proposal regarding collars was only partly accurate and missed certain key points. First, Mr. Lebens considers collars that are CME options based on

\(^{546}\) Ex. 101 at 18 (Smead Rebuttal).
\(^{547}\) Id. at 18-19; Ex. 134 at Sch. 2 at 10-11 (Reed Rebuttal).
\(^{548}\) Ex. 121 at 53 (Grizzle Rebuttal).
\(^{549}\) Id. at 53-54.
\(^{550}\) Ex. 603 at 3 (Lebens Surrebuttal).
\(^{551}\) Evidentiary Hearing Tr. Vol. 3 at 19-20 (Lebens); Ex. 134 at 86 (Reed Rebuttal) (“The prices referenced by Mr. Lebens are for delivery in March 2021, not during February 2021. . . . Prices for the futures for delivery in March 2021 did not react to the price spike observed in the spot prices during the February Market Event, which makes March 2021 option prices irrelevant in explaining what he claims could have been done.”).”
\(^{552}\) Ex. 101 at 20 (Smead Rebuttal) (“Most importantly, the example relates to March gas, not February, so the prices plotted could not possible have any bearing on the price of February purchases.”); Ex. 134 at Sch. 2 at 24-25 (Reed Rebuttal); Evidentiary Hearing Tr. Vol. 3 at 19 (Lebens).
\(^{553}\) Ex. 101 at 20 (Smead Rebuttal); Ex. 134 at Sch. 2 at 24 (Reed Rebuttal); Evidentiary Hearing Tr. Vol. 3 at 20 (Lebens).
\(^{554}\) Ex. 603 at 20 (Lebens Direct).
futures contracts for purchase at Henry Hub, not Demarc or Ventura. Second, the put or floor price obliges the buyer to purchase a futures contract even if the floor price is higher than the current market price.\footnote{Ex. 101 at 12-14 (Smead Rebuttal); see also Ex. 134 at Sch. 2 at 16 (explaining that costless collars are not at all costless).}

310. The OAG’s recommendations regarding collars were not actionable in a way that could have avoided the price spike during the February Event.\footnote{Ex. 101 at 15-17 (Smead Rebuttal).}

311. Collars could not be arranged on swing contracts in advance of the February Event at the quantities that Mr. Lebens recommended. The only approach that fits the OAG’s recommendations on placing hedges on swing supplies would be very expensive, if available.\footnote{Id. at 29-31.}

312. The Henry Hub daily, weekly, and short-term futures products traded on the Chicago Mercantile Exchange (CME) are all priced based on the price of natural gas at Henry Hub located in Erath, Louisiana, and not at any of CenterPoint Energy’s delivery points: Ventura, Demarc, or Emerson.\footnote{Ex. 101 at 5 (Smead Rebuttal) (“All CME products require trades at Henry [Hub] in Erath, Louisiana. The Joint Utilities’ market is in Minnesota, over 1,000 miles away.”); Ex. 134 at 83, Sch. 2 at 3 (Reed Rebuttal); Evidentiary Hearing Tr. Vol. 3 at 17-18 (Lebens).}

313. As a result, these products would not have addressed the price spike experienced during the February Event with respect to natural gas deliveries to CenterPoint Energy’s Minnesota customers.\footnote{Ex. 134 at Sch. 2 at 3 (Reed Rebuttal).} Prices reported for Henry Hub peaked at only $6.00/MMBtu, compared to the $231/MMBtu spike at NNG-Demarc.\footnote{Id.}

314. Executing a financial futures option contract at Henry Hub in Louisiana in advance of the Presidents’ Day weekend in 2021 would not have been a hedge against the delivered price of natural gas at Ventura, Demarc, or Emerson.\footnote{Id.} Further, executing a short-term futures option contract priced at Henry Hub during the week of February 8, 2021, would not have hedged against the price spike that occurred during the February Event.\footnote{Ex. 101 at 5 (“These actual locations where the Joint Utilities receive the majority of their gas receive only passing mention in the OAG testimony. However, any meaningful hedging strategy for any of the Joint Utilities depends on achieving price protection at Demarc and Ventura, not Henry.”).}

315. OAG witness Mr. Lebens testified that he did not review the historical pricing of the InterContinental Exchange (ICE) swing futures contracts priced at Demarc and Ventura to determine whether the contracts are liquid or how they are priced.\footnote{Id. at 25.} Mr. Lebens was also unaware of the fact that these contracts include a premium to cover
the risk associated with the fact these contracts provide the buyer with volumetric flexibility.\textsuperscript{564}

316. There is no evidence that there were (or are) suppliers willing to transact with the utilities for ICE swing futures contracts or OTC-type contracts priced at Ventura or Demarc.\textsuperscript{565}

317. The underlying basis of a swing supply contract from the utility’s perspective is to execute a contract that it will call on, or use, when it needs additional supply.\textsuperscript{566} For any swing contract that could be exercised at the buyer’s option, the parties would necessarily negotiate a ceiling price (that provides value to the utility buyer) and floor price (that provides value to the supplier).\textsuperscript{567} But any supplier would understand that, because the underlying product is swing supply, the utility buyer would only be likely to exercise the option if there was higher demand.\textsuperscript{568} In other words, the utility would be very unlikely to exercise the swing option when prices are low — the time when the contract would provide value to the supplier. A supplier would almost certainly price the fact that a swing option contract provides it with only upside risk, making the contract far too expensive to be an appropriate hedging tool for a utility.\textsuperscript{569}

318. Suppliers operate with the same knowledge of market fundamentals—historical supply and demand, historical pricing, weather forecasting, etc.—as buyers.\textsuperscript{570} To the extent that a buyer like CenterPoint Energy attempted to secure swing supply with protection against high prices — based upon all known and knowable information — the supplier with whom it negotiated would have knowledge of the risk of such high prices, and would price such risk into cost of the swing contract collar.\textsuperscript{571}

\textsuperscript{564} Id. at 26.
\textsuperscript{565} Ex. 134 at 83, Sch. 2 at 8-9 (Reed Rebuttal); Ex. 101 at 28, 30 (Smead Rebuttal); Evidentiary Hearing Tr. Vol. 3 at 26-27 (Lebens).
\textsuperscript{566} Ex. 101 at 9 n. 3; Evidentiary Hearing Tr. Vol. 3 at 36 (Lebens).
\textsuperscript{567} Evidentiary Hearing Tr. Vol. 3 at 35 (Lebens).
\textsuperscript{568} Ex. 101 at 30-31 (Smead Rebuttal); Evidentiary Hearing Tr. Vol. 3 at 36 (Lebens).
\textsuperscript{569} Ex. 101 at 30-31 (Smead Rebuttal) (“It is important to never lose sight of the fact that this approach would require sellers to commit their gas supply at a below-market ceiling price, with no assurance of the gas being called upon and the likelihood that when and if it were called upon, demand and thus market prices would be high, meaning the sellers were foregoing substantial margins with no offsetting protection. Any rational seller would undoubtedly charge a \textit{significant} premium for such a premium for such a product, or the product simply would not be offered.”).
\textsuperscript{570} Ex. 506 at 54 (King Direct) (”...if the Gas Utilities were anticipating extreme cold weather, then the gas market would be as well. Once information about upcoming cold weather is available, it would be rationally priced into the market.”); Ex. 134 at Sch. 2 at 8 (Reed Rebuttal) (“The same information on market outlooks, risks of price spikes and volatility of pipeline basis differentials from Henry Hub to Minnesota is available to all market participants.”).
\textsuperscript{571} Ex. 101 at 30-31 (Smead Rebuttal).
319. The OAG’s prudence arguments rely on hindsight. The OAG starts with a known event – the February Event – and works backward from there to identify a transactional strategy that could have offset the financial impact.

320. Based on the information that was known and knowable to CenterPoint Energy during the summer of 2020, when it was developing its GPP, and throughout the 2020-21 winter season leading up to the February Event, CenterPoint Energy acted prudently in maintaining its hedges and adhering to its gas supply plans.

321. The record does not support finding that CenterPoint Energy should have used hedging as recommended by the OAG, that such hedging strategies could actually be implemented, or that there is any portion of the extraordinary gas costs CenterPoint Energy incurred that could have been avoided through these strategies. CenterPoint Energy did not act imprudently in not procuring such hedging instruments. Therefore, no disallowance is recommended regarding the Company’s actions related to hedging.

IX. Undisputed Issues

A. Load Forecasting and Supply Reserve Margin

322. An additional issue developed pursuant to the directions in the Order for Hearing addresses load forecasting and the use of a supply reserve margin.

323. The daily load forecast reflects the anticipated natural gas demand of CenterPoint Energy’s customers based on forecasted temperature and weather conditions and anticipated customer usage. The daily load forecast represents the Company’s principal resource for determining how much natural gas is needed to meet customer requirements.

324. Ensuring an accurate forecast is important as inaccurately forecasting load could risk possible service outages or expose the Company to potentially substantial imbalance penalties. The further out the Company forecasts weather and customer load, the less accurate the forecast is likely to be. However, it is impossible to forecast perfectly. For example, a key factor in forecasting a gas utility’s load is the weather and how cold it will be. It is impossible to perfectly forecast the weather and the further out a forecast is, the greater likelihood there will be variances between the forecast and actual outcome. Going into the February Event, there was greater uncertainty as to forecasts for days later during the four-day weekend.

572 Id. at 30, 33; Ex. 134 at 71, 74, 81, Sch. 2 at 2 (Reed Rebuttal).
573 Ex. 134 at 70, Sch. 2 at 2 (Reed Rebuttal); Ex. 101 at 4 (Smead Rebuttal).
574 Order for Hearing at 23.
575 Ex. 111 at 8 (Olsen Direct).
576 Id. at 8, 14.
577 Id. at 15.
578 Id. at 11-13.
579 Ex. 506 at 66 (King Direct).
580 Id. at 66-67
325. To forecast, CenterPoint Energy receives hourly weather forecasts from multiple sources to develop a gas day weather forecast, which accounts for both temperatures and wind speeds. That adjusted gas day average weather forecast is applied as an input to the Company’s customer load forecast model to forecast customer demand. The load forecast model computes daily forecasted load based on forecasted weather, cloud cover, temperature lag, historical average daily temperatures, and observed fluctuations in customer demand that occur over the course of a week, recognizing that customer usage will be different on a Thursday than it is on a Sunday, even under the same weather conditions.

326. CenterPoint Energy updates its load forecast each day prior to 7:00 a.m. so it can be reviewed and discussed at the daily gas supply meeting. Relying on the most current weather forecast data at the time gas procurement decisions must be made ensures that CenterPoint uses the most accurate data to forecast customer load and make decisions about gas procurement, dispatch of storage and peak shaving resources, and interruptible customer curtailments. Even using the most current weather data in day ahead planning, the forecast is still subject to potentially significant change.

327. On Friday, February 12, the Company prepared its daily load forecast for the five days from February 12 to February 16. CenterPoint Energy used this forecast, as explained in the table below, as the basis for the development of the Company’s gas supply plan to meet customer load requirements over the four-day Presidents’ Day weekend.

### Forecasted Average WET10 Temperature and Daily Load (February 13-16)

<table>
<thead>
<tr>
<th></th>
<th>Gas Day February 13</th>
<th>Gas Day February 14</th>
<th>Gas Day February 15</th>
<th>Gas Day February 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecasted Average Daily WET10 Temperature</td>
<td>-8.6°F</td>
<td>-13.0°F</td>
<td>-8.4°F</td>
<td>-0.6°F</td>
</tr>
<tr>
<td>Forecasted Daily Load</td>
<td>1,098,099 Dth</td>
<td>1,223,099 Dth</td>
<td>1,074,099 Dth</td>
<td>1,063,099 Dth</td>
</tr>
</tbody>
</table>

328. Further, as shown in the table below, CenterPoint Energy’s actual load over the four-day weekend was very close to forecasted load.

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581 Ex. 111 at 9 (Olsen Direct).
582 Id. at 8-11 (describing the process of developing and revising the daily load forecast).
583 Id. at 10 (Olsen Direct).
584 Id. at 11.
585 Id. at 13.
586 Id. at 22.
587 Id. at 22-23.
588 Id. at 22, Table 2.
589 Id. at 24.
Actual Average WET10 Temperature and Daily Load (February 13-16)

<table>
<thead>
<tr>
<th>Actual Average Daily WET10 Temperature</th>
<th>Gas Day February 13</th>
<th>Gas Day February 14</th>
<th>Gas Day February 15</th>
<th>Gas Day February 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Average Daily Load</td>
<td>1,187,038 Dth</td>
<td>1,228,842 Dth</td>
<td>1,183,846 Dth</td>
<td>1,059,449 Dth</td>
</tr>
<tr>
<td>(88,939 Dth greater than forecast)</td>
<td>(5,743 Dth less than forecast)</td>
<td>(109,747 Dth greater than forecast)</td>
<td>(3,650 Dth less than forecast)</td>
<td></td>
</tr>
</tbody>
</table>

329. On Tuesday, February 16, the Company prepared its daily load forecast for February 17, consistent with its regular practices. The Company used this forecast to develop its gas supply plan to meet customer load requirements on February 17.

Forecasted Average WET10 Temperature and Daily Load (February 17)

<table>
<thead>
<tr>
<th>Forecasted Average Daily WET10 Temperature</th>
<th>6.8°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecasted Daily Load</td>
<td>959,549 Dth</td>
</tr>
</tbody>
</table>

330. Actual temperatures and load on February 17 were as follows:

Actual Average WET10 Temperature and Daily Load (February 17)

<table>
<thead>
<tr>
<th>Actual Average Daily WET10 Temperature</th>
<th>7.9°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Daily Load</td>
<td>979,923 Dth</td>
</tr>
<tr>
<td>(20,374 Dth greater than forecast)</td>
<td></td>
</tr>
</tbody>
</table>

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590 Id. at 24, Table 3.
591 Id. at 27-29.
592 Id. at 27.
593 Id. at 27, Table 4.
594 Id. at 28, Table 5.
331. The Department and CUB both acknowledged the Company’s forecasting methodology produced accurate daily load forecasts during the February Event.\(^{595}\)

332. CenterPoint Energy’s forecast for February 14 was very accurate. For February 17, CNP under-forecasted and bought less gas than what perfect hindsight would have entailed. However, this was a small enough error that CenterPoint Energy did not need to make supply adjustments to its plan for February 17.\(^{596}\)

333. In general, the Gas Utilities planned for gas supplies that were slightly long of forecasted requirements due to high potential imbalance penalties from pipeline, forecast uncertainty, and potential supply cuts. The Department agreed that the risk of punitive imbalance penalties, potential supply cuts, and forecast uncertainty are all valid drivers for holding supply reserve margins.\(^{597}\)

334. On a typical day, CenterPoint Energy tries to match its gas supplies as closely as possible to forecasted load so that the Company does not procure excess gas that is not needed to serve load. On most days, the Company can closely match its gas supplies to customer load. On high demand days, CenterPoint Energy aims to be slightly “long” in its gas supplies, meaning that the Company aims to procure slightly more gas than it expects is needed to meet forecasted load to ensure reliable service.\(^{598}\)

335. CenterPoint Energy determines its planned gas supply margin based on the interplay of a multitude of factors and application of experience, expertise, and judgment. CenterPoint Energy considers monthly pipeline imbalance levels, storage inventory levels, pipeline constraints and the availability of system management service (SMS) balancing, potential supply cuts, and weather forecast uncertainty. For instance, if there is risk for potential for supply cuts, CenterPoint Energy will purposefully try to be slightly long when procuring gas supplies to ensure adequate supply in case supply cuts do occur. Each of these factors change constantly, so while CenterPoint Energy is intentional in determining its planned gas supply relative to its load forecast, the dynamic nature of these different factors does not lend itself to setting an exact supply reserve target for each day of the year.\(^{599}\)

336. No party takes issue with CenterPoint Energy’s approach to planning for supply reserves in general or that the Company’s approach was reasonable during the February Event.

337. CenterPoint Energy accurately forecast customer demand before and during the February Event.\(^{600}\)

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\(^{595}\) Ex. 506 at 67-68 (King Direct); Ex. 801 at 59 (Cebulko Direct).

\(^{596}\) Ex. 506 at 67-68 (King Direct).

\(^{597}\) Id. at 56.

\(^{598}\) Ex. 121 at 25-26 (Grizzle Rebuttal).

\(^{599}\) Id. at 26.

\(^{600}\) Ex. 506 at 67-68 (King Direct); Ex. 801 at 59 (Cebulko Direct) (“I am not proposing a disallowance for CenterPoint on this issue as the Company appears to have accurately forecasted load for the Event”).
338. The Administrative Law Judges find that CenterPoint Energy’s approach to planning for supply reserve during the February Event was reasonable in light of the circumstances of the event including punitive pipeline penalties, the risk of possible supply cuts, and forecast uncertainty.

B. Geographic Diversity of Gas Supply

339. The Commission’s Order for Hearing directed that this Report address whether the Gas Utilities had enough geographic diversity of gas supply.\footnote{Order for Hearing at 22.}

340. Geographic diversity of supply refers to a gas utility’s ability to acquire gas supply from a variety of locations. The Gas Utilities’ geographic diversity of supply is ultimately tied to the transportation arrangements they hold with pipelines. In any particular area, the pipelines that exist are the result of years of history based on the demand at major market centers and the production of natural gas from supply basins.\footnote{Ex. 506 at 42 (King Direct).} Reliance on a few pipeline hubs does not necessarily indicate a lack of geographic diversity.\footnote{Id. at 44.}

341. As NNG is the key interstate pipeline serving the Minnesota Gas Utilities, a large quantity of gas supply purchases are tied to the NNG pricing hubs of Ventura and Demarc. Another major pipeline, VGT, is tied to the Emerson hub.\footnote{Id. at 43.}

342. There is no natural gas production connected to CenterPoint Energy’s system in Minnesota, so CenterPoint Energy contracts with multiple gas supply sources across the country to procure natural gas to be delivered to its customers.\footnote{Ex. 126 at 12 (Toys Direct).}

343. CenterPoint Energy contracts for gas supply from Canada, the Gulf Coast, the Mid-Continent, and the Rocky Mountain region.\footnote{Id.}

344. The Department questioned CenterPoint Energy’s decision to baseload all of its available Viking transportation capacity at Emerson. The Department initially noted that if CenterPoint Energy had not made the decision to baseload its full Viking transportation capacity at Emerson, the Company could have then baseloaded elsewhere (Ventura or Demarc) and could have then procured daily spot gas at Emerson, which had lower daily spot prices as compared to Ventura or Demarc, during the February Event.\footnote{Ex. 506 at 49 (King Direct).} In addressing this issue, the Department requested that the Company provide additional information to support its decision to baseload at Emerson in its rebuttal testimony.\footnote{Id. at 49-51.}
345. The Company provided information regarding the operational considerations supporting the decision to baseload at Emerson.\textsuperscript{609} The Company noted that Viking provides upstream supply transportation to NNG and the intrastate pipeline MIPC, which then feeds the northern portion of CenterPoint Energy’s distribution system.\textsuperscript{610} The Company stated that there are several cities, such as Milaca and Dalbo, which rely exclusively on the gas supplies provided by Viking, as they are not connected to other pipelines.\textsuperscript{611} Given that Viking is the sole source of gas supplies for these customers, baseloading gas supplies on Viking is appropriate to ensure that CenterPoint Energy has adequate gas supplies to serve customers living in these areas.\textsuperscript{612}

346. The Company also supported its decision to baseload on Viking by explaining that its Viking supply delivers into the north side of the Company’s distribution system serving communities in the northern metropolitan area. If the Company replaced its baseload Viking deliveries to serve customers in these north metropolitan communities with baseload NNG deliveries (at Ventura or Demarc), the Company would need a significant expansion on NNG’s system that connects to this part of CenterPoint Energy’s distribution system.\textsuperscript{613}

347. CenterPoint Energy explained that by contracting for baseload deliveries using its available Viking transportation capacity, the Company maximized its access to Canadian gas supplies throughout the year, ensuring geographically diverse supply sources.\textsuperscript{614}

348. Ultimately, the Department did not take issue with or recommend any disallowances related to CenterPoint Energy’s decision to baseload at Emerson or its geographic diversity of supply in general.\textsuperscript{615} No other party took issue with CenterPoint Energy’s geographic diversity of supply.

349. The geographic diversity of CenterPoint Energy’s natural gas supply was reasonable and prudent.

C. Fixed-Price Contracts

350. The Commission’s Order for Hearing directed that this Report consider whether the Gas Utilities should have had additional fixed-price contracts.\textsuperscript{616}

351. Fixed price daily spot market transactions are priced based on a price agreed to by a single buyer and a single seller.\textsuperscript{617} Buying at a fixed-price represents a risk that

\textsuperscript{609} Ex. 118 at 55-57 (Grizzle Direct); Ex. at 32-33 (Reed Direct); Ex. 121 at 18-24 (Grizzle Rebuttal).
\textsuperscript{610} Ex. 121 at 21 (Grizzle Rebuttal).
\textsuperscript{611} Id.
\textsuperscript{612} Id.
\textsuperscript{613} Id. at 22.
\textsuperscript{614} Id.
\textsuperscript{615} Id. at 22.
\textsuperscript{616} Order for Hearing at 22.
\textsuperscript{617} Ex. 126 at 9 (Toys Direct).
the price could ultimately be higher or lower than index. In contrast, the daily index price is calculated based on all of the fixed price transactions that occur during a day and the final value of the index is the volume-weighted average of all of the fixed price transactions for that day.

352. Index-priced transactions are generally offered earlier in the gas trading day. As a result of these dynamics, to make a fixed price purchase during the February Event, the Gas Utilities would have had to decide not to purchase their full gas quantities at index and instead to reserve a portion of their supply to purchase at fixed price later in the day. It is not reasonable to expect the Gas Utilities to “systematically beat the index.”

353. On February 12, when buying gas for the Presidents’ Day weekend, CenterPoint Energy reasonably chose to purchase its needed gas supplies at the daily index price rather than try to out-guess the market by purchasing at a fixed price.

354. On February 16, CenterPoint Energy again reasonably chose to procure its needed daily spot gas supplies at daily index prices instead of trying to out-guess the market by purchasing at fixed prices.

355. Purchasers that elected fixed-price options on February 16 paid as high as $250/MMBtu at Demarc and as high as $495/MMBtu at Ventura; but the daily index price at those locations were only $133/MMBtu and $188/MMBtu, respectively, demonstrating the risk of waiting to purchase gas in an attempt to beat the market.

356. No party disputes the reasonableness of CenterPoint Energy’s decision to purchase its spot market gas at the daily index prices established by the market rather than at a fixed-price.

357. CenterPoint Energy’s decision to purchase daily gas at daily index prices during the February Event was reasonable and prudent.

D. Conservation Efforts

358. The Commission’s Order for Hearing directed that this Report address whether the Gas Utilities should have made more robust conservation efforts during the February Event. This issue relates to the question whether the utilities should have made voluntary conservation pleas to customers to reduce usage during the February Event.

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618 Ex. 506 at 76 (King Direct).
619 Ex. 133 at 94 (Reed Direct).
620 Ex. 506 at 75 (King Direct).
621 Id. at 76.
622 Id. at 103 (Reed Direct).
623 Id.
624 Id. at 103-04.
625 Ex. 506 at 75-76 (King Direct) (“Q. Should the gas utilities have made more fixed-price purchases? A. No. Buying at index ensures that the price paid will reflect the market midpoint for that day.”).
626 Order for Hearing at 22.
359. CenterPoint Energy regularly engages with customers leading up to and during cold weather to provide information on how customers can reduce the impact of cold weather on their gas bills.627

360. The Company did not issue a general conservation request during the February Event.628 A conservation plea is generally a request from the utility to customers to voluntarily reduce usage for a defined amount of time. These types of pleas are driven by a short-term event and distinguishable from general long-term efficiency and conservation measures, such as home weatherization and the installation of more efficient gas appliances.629

361. Because conservation requests are voluntary and not enforceable, it is impossible to quantify accurately the impact of such a request for load forecasting purposes.630 Reducing gas purchases in reliance on a conservation request could result in having insufficient gas to serve customers during extremely cold weather and the imposition of enormous pipeline penalties if customer demand exceeded procured supplies.631

362. By the time unprecedented prices were known late on February 12, CenterPoint Energy had already contracted for adequate daily volumes for the four-day weekend and could not, at that time, adjust the purchase volume in reliance on customer conservation.632

363. It was reasonable for the Gas Utilities not to reduce spot purchases by relying on a conservation plea. Estimating the volume of load reduction from a conservation plea had the potential for wide deviations. Also, conservation pleas are traditionally a last resort reliability tool. Unlike interruptible customer curtailment and peak shaving, which are intended to be used somewhat regularly, making a plea to firm customers has been used seldomly in the past by the Gas Utilities and only as an emergency measure.633

364. No party has recommended a disallowance because CenterPoint Energy’s did not issue a conservation request during the February Event.634

365. CenterPoint Energy acted prudently related to conversation efforts during the February Event.

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627 Ex. 115 at 41 (Heer Direct).
628 Id. at 34.
629 Ex. 506 at 101 (King Direct).
630 Ex. 115 at 42 (Heer Direct).
631 Id. at 43.
632 Id.
633 Ex. 506 at 103 (King Direct).
634 Id. at 102-03 (“Q. Should the gas utilities have reduced their spot market purchases during the February Event for planned conservation pleas? A. No....”)
E. Baseload Gas Supplies

366. Baseload gas supplies are fixed volumes of gas that flow every day for the term of the baseload contract. Baseload gas volumes vary from month to month particularly during the winter months, but also in the non-winter months.

367. To match seasonal and month-to-month variability, the Company enters into both long-term baseload (more than one month) and monthly baseload supply contracts. The Company generally acquires its baseload supply through a request for proposal (RFP) process. Typically, an adjusted Inside FERC FOM index price is used as the price term.

368. As documented in its 2020-2021 GPP, CenterPoint Energy sets its baseload supply volume to meet the forecasted customer load requirements for the warmest day of a particular month. The Company then plans to supplement that baseload supply with storage, swing supply, and daily gas purchases.

369. The Department opined that a strategy to procure baseload supplies equal to a utility’s forecasted minimum daily load was reasonable. The Department stated that, “[p]rocuring [baseload gas] in excess of the minimum day’s load would logically cause a utility to be in a position of excess physical supply on some days...this excess position can be problematic because it needs to be balanced somehow, and [the utilities] do not have unlimited options for doing so.”

370. CenterPoint Energy’s baseload supply during February 2021 was consistent with the Company’s strategy of aligning its baseload purchases with its forecasted minimum daily load. CenterPoint Energy’s minimum daily load forecast for February 2021 was 384,904 Dth. CenterPoint Energy’s total planned baseload supply for February 2021 was 385,000 Dth.

371. The Department requested that the Company provide clarification as to whether a portion of the CenterPoint Energy’s BP Canada contract is correctly classified as baseload to ensure that the Company procured baseload quantities consistent with its 2020-2021 Gas Procurement Plan. CenterPoint Energy validated that the relevant portion of the BP Canada contract is treated as baseload. Ultimately, the Department

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635 Ex. 118 at 6 (Grizzle Direct).
636 Id.
637 Id.
638 Id.
639 Id.
640 Id. at 7.
641 Id.
642 Ex. 506 at 36 (King Direct).
643 Ex. 121 at 18 (Grizzle Rebuttal).
644 Id.
645 Id.
646 Ex. 506 at 39 (King Direct).
647 Ex. 121 at 17 (Grizzle Rebuttal).
did not recommend any disallowances related to CenterPoint Energy’s baseload purchases.\textsuperscript{648}

372. CenterPoint Energy’s planned baseload supply for February 2021 was reasonable and prudent as it was consistent with the Company’s minimum daily load forecast for the month.

F. Recovery from Other Sources

373. The Commission’s Order for Hearing directed that this Report address whether the Gas Utilities timely and appropriately pursued recovery through insurance, federal regulatory actions, market rules, contract enforcement, and other available legal actions such that they have not missed deadlines or become barred from possible recovery on behalf of ratepayers.\textsuperscript{649}

374. CenterPoint Energy took action to evaluate and pursue recovery or offset the extraordinary gas costs through contract enforcement, negotiations, federal and state investigations, and legislative efforts.\textsuperscript{650} The Company also has also engaged in efforts to identify and evaluate possible forward-looking changes that could be implemented to mitigate future price spike events.\textsuperscript{651}

375. Following the February Event, the Company reviewed its gas cost invoices to ensure that its suppliers complied with their contractual obligations.\textsuperscript{652} The Company followed an established invoice review and reconciliation process to verify that the quantities of natural gas contracted and billed matched what was delivered and that prices charged were consistent with the applicable contracts and transaction confirmations.\textsuperscript{653} The Company also retained outside counsel to determine whether there were any viable claims against its suppliers.\textsuperscript{654}

376. In general, CenterPoint Energy did not experience any issues regarding delivery of contracted supplies. Three of the Company’s suppliers failed to deliver small volumes of gas totaling less than one percent of gas supply for February 13-17.\textsuperscript{655} Because the gas was not delivered, CenterPoint Energy did not pay for those volumes and because the volumes were small, the Company did not need to procure replacement gas.\textsuperscript{656}

377. CenterPoint Energy secured a total of $620,711 from two of its suppliers for their failure to deliver 26,448 Dth of gas during the February Event.\textsuperscript{657} Through

\textsuperscript{648} Ex. 507 at 14 (King Surrebuttal).
\textsuperscript{649} Order for Hearing at 22-23.
\textsuperscript{650} Ex. 106 at 44-64 (Ryan Direct).
\textsuperscript{651} Id. at 56-64.
\textsuperscript{652} Id. at 47.
\textsuperscript{653} Id.
\textsuperscript{654} Id.
\textsuperscript{655} Id. at 48.
\textsuperscript{656} Id.
\textsuperscript{657} Id.
negotiations with a third supplier, the Company was also able to subtract undelivered volumes from the amounts priced at gas daily—resulting in a benefit of $7,459,424 for 33,116 Dth of undelivered gas.\footnote{Id. at 49.}

378. The Department observed that under the contract terms, a supplier may claim force majeure to excuse itself of its obligations if circumstances were beyond its control. The Department concluded it was not surprising that suppliers were making such claims given the contract language, widespread natural gas production failures, and extreme weather.\footnote{Ex. 506 at 106-07 (King Direct).}

379. With respect to insurance, the Company reviewed its insurance policies in effect during the February Event to verify whether any insurance claims could be made with respect to the February Event and costs. Based on this review, CenterPoint Energy determined that none of its insurance policies in place provide coverage with respect to the February Event.\footnote{Ex. 106 at 50-51 (Ryan Direct).} The Department has noted that “[b]ecause of the unprecedented nature of the February Event and the risk profile of such an event, the lack of insurance is not unexpected.”\footnote{Ex. 506 at 103 (King Direct).}

380. In reviewing additional mitigation methods for potential future price increases, the Company, in consultation with domestic and foreign insurance brokers as well as traditional domestic and foreign insurance markets, has also confirmed that no traditional insurance products are available at a reasonable cost to provide coverage for increased gas prices due to a weather event.\footnote{Ex. 106 at 51 (Ryan Direct).}

381. CenterPoint Energy is continuing to actively monitor for any developments with respect to federal or state investigations into potential market manipulation related to the February Event.\footnote{Id. at 54-55; Ex. 107 at 23 (Ryan Rebuttal).}

382. CenterPoint Energy continues to monitor FERC’s Office of Enforcement and joint FERC/North American Electric Reliability Council (NERC) reliability reporting and investigation on the February Event, as well as FERC proceedings related to its Policy on Price Index Formation and Transparency, to address natural gas index liquidity and transparency. CenterPoint Energy is also following litigation and investigations related to the February Event. As detailed in FERC’s Annual Report on Enforcement issued November 18, 2021, FERC has been conducting an examination of wholesale natural gas and electricity market activity during the February Event to determine if any market participants engaged in market manipulation or other violations and has referred two matters for investigation by the Office of Enforcement Division of Investigations.\footnote{Ex. 107 at 22-23 (Ryan Rebuttal).}
383. The Company submitted a letter to FERC in support of its investigation following FERC’s initial report regarding the February Event. In particular, the Company voiced its support of a potential stakeholder forum to identify and implement solutions to the problems that occurred during the February Event. Further, the Company stressed that it fully expects that any bad actors who took advantage of the February Event conditions will be held accountable for their actions in an effort to deter such conduct in the future.665

384. At the federal legislative level, the Company has advocated for federal funding to assist its customers who cannot afford their gas utility bills. As a result of these efforts, Congress appropriated an additional $4.5 billion for the Low Income Home Energy Assistance Program (LIHEAP) in March of 2021.666

385. At the state level, the Company participated alongside other Minnesota utilities in weekly calls with the Minnesota Department of Commerce Office of Energy Assistance to coordinate and maximize the effectiveness of LIHEAP outreach efforts. The Office of Energy Assistance surpassed its goal of 12,000 LIHEAP applications from regulated utility customers.667

386. The Company also continues to advocate for an appropriation from the state legislature to help customers with the gas costs associated with the February Event.668

387. Additionally, the Commission approved the Company’s proposal to extend the recovery timeline for February Event extraordinary costs from 27 to 63 months without carrying costs.669 This extension became effective January 1, 2022, and results in lower customer bills for the recovery of the Company’s extraordinary gas costs.670

388. No party has disputed the prudence and reasonableness of CenterPoint Energy’s actions after the February Event to investigate and pursue recovery through any available contract enforcement, insurance, federal regulatory action, market rules, or other legal action.

389. The Department acknowledges that investigations by FERC and other entities are ongoing and that these results will likely not be known for some time.671 The Department urges the Commission to withhold a determination of the prudency of CenterPoint Energy’s actions on this issue. The Department contends that the Commission should continue to review reporting from the Gas Utilities and make a

665 Ex. 106 at 55 (Ryan Direct).
666 Id. at 51.
667 Id. at 52.
668 Id.; see also Ex. 107 at 21 (Ryan Rebuttal).
670 Ex. 107 at 13 (Ryan Rebuttal).
671 Ex. 506 at 104 (King Direct).
determination of prudence regarding regulatory investigations, and the Gas Utilities’ efforts to pursue legal or contractual remedies, as more facts come to light.672

390. The record in this proceeding establishes that CenterPoint Energy has complied with the Commission’s direction to investigate and pursue any available recoveries. CenterPoint Energy has reasonably evaluated, and continues to review, avenues to pursue recovery of extraordinary gas costs through insurance, federal regulatory actions, market rules, contract enforcement, and other available legal actions. There is no basis on this record to reject the prudence of CenterPoint Energy’s efforts on this issue. Therefore, the ALJs recommend that the Commission make an initial determination that CenterPoint Energy has appropriately sought recovery from other sources, but require ongoing compliance filings from all of the Gas Utilities on this issue. The Commission can take additional action at a later date based on further developments, if warranted.

G. Assigning Extraordinary Costs to Customers or Customer Classes Based on Consumption During the February Event

391. The Commission’s Order for Hearing directed that this Report address whether it is possible to assign extraordinary gas costs to customers or customer classes based on their consumption during the February Event, and if so, whether it would be reasonable to do so.673

392. CenterPoint Energy cannot obtain daily meter read therm data for all of its customers and therefore, would not be able to identify and assign daily customer usage by customer or customer class.674 Additionally, attempting to allocate usage to customers or customer classes based on estimated February Event usage would be imprecise and administratively difficult to implement and, therefore, would not be reasonable.675

393. The Department has acknowledged that the Gas Utilities lack the metering and billing infrastructure necessary to conduct cost assignment and billing based on February Event consumption.676

394. The Department maintains that allocation of the extraordinary February Event costs based on customer usage over the going-forward cost recovery period can be a reasonable approximation of usage during the February Event.677 The Department further concluded that the Commission’s approved allocation methodology achieves the goals of having rate that are simple, understandable, and affordable by lengthening cost

672 Department Initial Br. at 81-82 (Mar. 15, 2022) (eDocket No. 20223-183839-07).
673 Order for Hearing at 23.
674 Ex. 131 at 12-13 (DeMerritt Direct).
675 Id. at 14-18.
676 Ex. 506 at 107 (King Direct).
677 Id. at 108.
recovery, phasing in the rate, seasonally adjusting the rate, and exempting certain customers.678

395. The Department supported tracking customers who received sales service during the February Event who switch to transportation service to avoid paying the extraordinary cost surcharge.679 CenterPoint Energy’s approved rates are applied to customers who received sales service during the February Event, even if those customers move to transportation service.680

396. The record supports continuation of the approved recovery approach based on current customer natural gas usage and continuation of tracking for customers who received system sales service during the February Event who switch to transportation service.

Based on the foregoing Findings of Fact and the record in this proceeding, the Administrative Law Judges make the following:

CONCLUSIONS OF LAW

1. The Commission and the Administrative Law Judges have jurisdiction to consider this matter pursuant to Minn. Stat. §§ 14.50, 216B.03 (2020).

2. The Commission has complied with all procedural requirements of law and rule, and the parties have had notice and an opportunity to fully participate in this proceeding. Therefore, this matter is properly before the Commission and the Administrative Law Judges.

3. Every rate made, demanded, or received by any public utility must be just and reasonable.681

4. The burden to prove that its actions were prudent and that recovery of extraordinary costs is reasonable rests on CenterPoint Energy.682

5. Utilities do not enjoy a presumption of prudence.683 Doubts as to reasonableness are resolved in favor of the consumer.684

678 Id.
679 Id. at 108-09.
680 Ex. 107 at 19 (Ryan Rebuttal).
681 Minn. Stat. § 216B.03.
682 Minn. Stat. § 216B.16, subd. 4.
684 Minn. Stat. § 216B.03; see also Order for Hearing at 3 (“In incurring costs necessary to provide service, utilities are expected to act prudently to protect ratepayers from unreasonable risks.”).
6. CenterPoint Energy has established that its actions during the February Event were prudent and that recovery of its extraordinary costs is warranted.

7. The record does not support disallowing extraordinary costs incurred by CenterPoint Energy in connection with the February Event.

Based upon the Findings of Fact and Conclusions of Law, the Administrative Law Judges make the following:

RECOMMENDATION

1. The extraordinary gas costs incurred by CenterPoint Energy to serve its customers during the February Event were prudently incurred.

2. No disallowance is warranted and it is reasonable for CenterPoint Energy to recover the gas costs incurred during the February Event from its customers according to the recovery period established by the Commission.

3. CenterPoint Energy shall make further compliance filings as ordered by the Commission.

Dated: May 24, 2022

_______________________________
JESSICA A. PALMER-DENIG
Administrative Law Judge

_______________________________
BARBARA J. CASE
Administrative Law Judge

NOTICE

Notice is hereby given that exceptions to this Report, if any, by any party adversely affected must be filed under the time frames established in the Commission’s rules of practice and procedure, Minn. R. 7829.1275, .2700 (2021), unless otherwise directed by the Commission. Exceptions should be specific and stated and numbered separately. Oral argument before a majority of the Commission will be permitted pursuant to Minn. R. 7829.2700, subp. 3. The Commission will make the final determination of the matter after the expiration of the period for filing exceptions, or after oral argument, if an oral argument is held.

The Commission may, at its own discretion, accept, modify, or reject the Administrative Law Judge’s recommendations. The recommendations of the Administrative Law Judge have no legal effect unless expressly adopted by the Commission as its final order.
May 24, 2022

See Attached Service List

Re:  In the Matter of the Petitions for Recovery of Certain Gas Costs

In the Matter of the Petition of CenterPoint Energy for Approval of a Recovery Process for Cost Impacts Due to February Extreme Gas Market Conditions

OAH 71-2500-37763
MPUC G-008/M-21-138

To All Persons on the Attached Service List:

Enclosed and served upon you is the Administrative Law Judge’s FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATION in the above-entitled matter.

If you have any questions, please contact me at (651) 361-7874, michelle.severson@state.mn.us, or via facsimile at (651) 539-0310.

Sincerely,

Michelle Severson
MICHELLE SEVERSON
Legal Assistant

Enclosure
cc: Docket Coordinator
CERTIFICATE OF SERVICE

In the Matter of the Petitions for Recovery of Certain Gas Costs
In the Matter of the Petition of CenterPoint Energy for Approval of a Recovery Process for Cost Impacts Due to February Extreme Gas Market Conditions

OAH Docket No.:
71-2500-37763
MPUC G-008/M-21-138

Michelle Severson certifies that on May 24, 2022, she served the true and correct

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATION by
eService, and U.S. Mail, (in the manner indicated below) to the following individuals:

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