NEW MEXICO
PUBLIC REGULATION
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21 February 2024

TO PARTIES OF RECORD IN CASE NO. 22-00309-UT

Enclosed please find the ***Recommended Decision*** of Hearing Examiner Anthony F. Medeiros in the above-referenced case before the New Mexico Public Regulation Commission ("Commission"). Unless and until the Commission considers the matter and votes to approve it, the Recommended Decision has no legal effect. This matter will be considered at a future Open Meeting of the Commission. To confirm when the matter will be considered, please see the Commission's Open Meeting agenda, which is posted on the Commission's website at least 72 hours before each Open Meeting at: https://www.nm-prc.org/nmprc-open-meeting-agenda/.

Parties to the proceeding may file exceptions to the Recommended Decision as provided in Rule 1.2.2.37(C) NMAC of the Commission's Procedural Rules or any specific Order of the Commission on exceptions issued in this case. Other interested persons may submit written comments in the record of this proceeding before the Commission takes final action in the matter.

The Commission may hold a deliberative meeting to address this matter in closed session in advance of the Open Meeting at which the matter will be considered, in accord with Section 10-15-1(H)(3) of the Open Meetings Act. NMSA 1978, § 10-15-1(H)(3) (2013). In such event, notice of the deliberative meeting will be posted on the Commission's website 72 hours in advance of the deliberative meeting at the https address set forth above.

Anthony F. Medeiros

Anthony F. Medeiros
Chief Hearing Examiner

Attachment: ***Recommended Decision*** (02/21/2024)

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF NEW MEXICO GAS COMPANY INC.'S APPLICATION FOR THE ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A LIQUIFIED NATURAL GAS FACILITY.	)	
	)	**Case No. 22-00309-UT**
NEW MEXICO GAS COMPANY, INC.,	)	
APPLICANT.	)	

RECOMMENDED DECISION

Before
Anthony F. Medeiros
Chief Hearing Examiner

21 February 2024

TABLE OF CONTENTS

APPENDICES

Appendix A	Party witnesses and exhibits admitted into evidence
Appendix B	Simplified map of NMGC's system showing major transmission lines and the location of the Keystone Storage Facility and the proposed LNG Facility
Appendix C	Diagrams and descriptions of the three operating modes of the LNG Facility modes – liquefaction, storage (or holding), and vaporization
Appendix D	Figures and map showing placement of LNG storage tank and other equipment on the proposed 25-acre Facility site
Appendix E	Map showing proposed LNG Facility in relation to major roads and landmarks provided by NMGC on response to Bench Request No. 4 (01/12/2024)

TABLE OF AUTHORITIES

This Recommended Decision uses short-form citations to certain Commission cases, cases from other states and regulatory jurisdictions, and other authorities. The following table shows the full citation for the short-form citations.

Short-form Citation	**Full Citation**
	New Mexico Regulatory Cases
Case No. 1891/1892	Case No. 1891/1892, *Re Southern Union Company*, *Final Order* (NMPSC 12/12/1984).
OLE Case	*In the Matter of the Application of Public Service Company of New Mexico for Approval to Construct, Own, Operate and Maintain the Ojo Line Extension and for Related Approvals*, *Recommended Decision*, Case No. 2382, 166 P.U.R. 4th 318 (NMPUC 07/05/1995), *Final Order Approving Recommended Decision* (NMPUC 11/20/1995).
Case No. 2678	*Re Southwestern Public Service Co*., Case No. 2678, *Corrected Recommended Decision of the Hearing Examiner* (NMPUC 11/25/1996), adopted in *Final Order Approving Recommended Decision* (NMPUC 01/28/1997)).
Case No. 3571	Case No. 3571 (*In re Valle Vista Water Util. Co.*), *Recommended Decision of the Hearing Examiner* (NMPRC 5/18/2001), at 6-7, approved in *Final Order* (NMPRC 6/19/2001), 212 P.U.R. 4th 305, 309 (2001).
Case No. 07-00398-UT	Case No. 07-00398-UT, *Recommended Decision* (NMPRC 02/6/2008), approved in *Final Order* (NMPRC Feb. 14, 2008) (Alto Lakes Water Asset Sale).

Curtailments Investigation	Case No. 11-00039-UT, *Final Order* (NMPRC 12/13/2012).
First LNG Case	Case No. 12-00364-UT, *Final Order Granting Leave to Withdraw Application* (NMPRC 12/11/2013)
Case No. 15-00312-UT	Case No. 15-00312-UT, *Recommended Decision* (NMPRC 3/19/2018), approved in *Final Order* (NMPRC 4/11/2018) (heightened standard of review for discretionary utility projects).
Fresh Look Solutions Case	Case No. 16-00097-UT, *Final Order Adopting Recommended Decision* (NMPRC 12/21/2016).
Extraordinary Cost Recovery Case	Case No. 21-00095-UT, *Final Order* (NMPRC 6/15/2021).
PNM Rate Case	Case No. 22-00270-UT, *Recommended Decision* (NMPRC 12/08/2023, approved in *Final Order* (NMPRC 01/03/2016).

Cases from Other States and Regulatory Jurisdictions

Kentucky PSC Order	*In the Matter of: Electronic Investigation of Louisville Gas & Electric Co. & Kentucky Utilities Co. Service Related to Winter Storm Elliott*, Order, 2023 WL 9186673 (Ky. P.S.C 12/22/2023).
Minnesota PUC Order	Docket Nos. G-008/M-21-138, G-999/CI-21-135, *Order Disallowing Recovery of Certain Natural Gas Costs and Requiring Further Action*, 2022 WL 13983107 (Minn. P.U.C. 10/19/2022).
New York PSC Order	Case 20-G-0131, Proceeding on Motion of Commission in Regard to Gas Planning Procedures, Case 12-G-0297, Proceeding on Motion of the Commission to Examine Policies Regarding the Expansion of Natural Gas Service, *Order Adopting Gas System Planning Process* (NY PSC 5/12/2022).
PacifiCorp	*In re PacifiCorp*, UE 246, Order No. 12-493 at 26-27, 2012 WL 6644237 (Or. P.U.C. 12/20/2012).
Wisconsin PSC Decision	*Application of Wisconsin Elec. Power Co. and Wisconsin Gas LLC for a Certification Certificate of Authority under Wis. Stat. § 196.49 and Wis. Admin. Code § PSC 133.03 to Construct a System of New Liquefied Natural Gas Facilities and Associated Natural Gas Pipelines near Ixonia and Bluff Creek, Wisconsin*, WI Pub. Serv. Comm'n Docket 5-CG-106, *Final Decision* (WI PSC 12/22/2021).
WUTC Pacific Power Order	Washington Utilities and Trans. Comm'n v. Pacific Power & Light Company, Docket UE-152253, Order 12 (*Final Order*,

	Redacted Version) at 25, 38, 40, 332 P.U.R. 4th 1, 2016 WL 7245476 (WUTC 9/01/2016).

Other Authorities

EO 2019-003	*Executive Order on Addressing Climate Change and Energy Waster Prevention*, EO-2019-003 (01/29/2019) (New Mexico Governor Michelle Lujan Grisham).
Kahn	Alfred Kahn, *The Economics of Regulation: Principles and Institutions*, Vol. I (1970).

ABBREVIATIONS, ACRONMYS, and DEFINED TERMS

AFUCD	Allowance for funds used during construction
AMI	Advanced metering infrastructure
App.	Appendix
Application	NMGC's Application in this case for a CCN to build and operate the proposed LNG Facility (12/16/2022).
APS	Arizona Public Service Company
Attach.	Attachment
BCA	Benefit-cost analysis
Baseload gas	Minimum gas demand expected for sales customers acquired through long-term and short-term contracts
Bd.	Board
County	Bernalillo County
BOG	Boil-off gas
BR or B.R.	Bench Request
Br.	Brief-in-chief or initial post-hearing brief
Btu	British thermal units
CAPEX	Capital expenditure
CCAE	Coalition for Clean Affordable Energy
Ccf	The volume of 100 cubic feet
Cf	Cubic foot or cubic feet
CCN	Certificate of public convenience and necessity
CenterPoint	CenterPoint Energy, Inc.
CEPC	Campos EPC, *see at* https://camposepc.com
CO_2	Carbon dioxide

Col. or cols.	Column(s)
Comm'n	Commission
Comm'r	Commissioner
Commission or NMPRC	New Mexico Public Regulation Commission
Compliance Filing	NMGC's March 31, 2022 compliance filing and supporting testimony of Tom C. Bullard filed pursuant to June 15, 2021 *Final Order*
COS	Cost of service
County	Bernalillo County
CNG	Compressed natural gas
Cross-exam.	Cross-examination
CWIP	Construction Work in Process
Dth	Dekatherm (Ten therms or 1,000,000 Btu)
Emera	Emera, Inc., a publicly traded Canadian multinational energy holding company and NMGC's parent company
EO	Executive Order
EPA	Environmental Protection Agency
EPE	El Paso Electric Company
EPNG	El Paso Natural Gas
ESA	Energy storage agreement
ETA	Energy Transition Act
FEED	Front-end engineering design
FERC	Federal Energy Regulatory Commission
GHG or GHGs	Greenhouse gas(es)
HE or H.E.	Hearing Examiner
Horizontal storage	See line pack below
Intervenors	CCAE, NMDOJ/NMAG, NEE, and WRA
Jt.	Joint
Keystone	Keystone Storage Facility
Kinder Morgan	Kinder Morgan, Inc., owner of Keystone Storage Facility
l. or ll.	line or lines

Line pack	Natural gas held in a gas utility's pipes that is available to meet customer demand during peak consumption hours, i.e., gas stored in the utility's pipes for later use
Lisbon	The Lisbon Group LLC, provider of engineering services and technologies to upstream, LNG, and NGL markets
LNG	Liquified natural gas
Mcf	One thousand (1,000) cubic feet, equals 1.038 MMBtu or 10.38 therms
MM	Million
MMBtu	Million (1,000,000) British Thermal Units
MMscf	Million standard cubic feet
MMscf/d	Million standard cubic feet per day
NAESB	North American Energy Standards Board
NMAC	New Mexico Administrative Code
NMAG or Attorney General	New Mexico Attorney General
NGLs	Natural gas liquids
NMDOJ	New Mexico Department of Justice, f/k/a New Mexico Attorney General
NMGC or Company	New Mexico Gas Company, Inc.
NMPSC	New Mexico Public Service Commission, predecessor to NMPRC
NMPUC	New Mexico Public Utilities Commission, predecessor to NMPRC
NMSC	New Mexico Supreme Court
NNG	Northwest Natural Gas
NPV	Net present value
NY PSC	New York Public Service Commission
OE	Owner's Engineer
Obj.	objection
O&M	Operations and maintenance
P. or Pp.	page or pages
Peak shaving	Liquefying natural gas for storage when user demand for gas is low and regasifying the LNG through vaporization for distribution when demand is high (at its peak)

PGAC	Purchased Gas Adjustment Clause
PHMSA	Pipeline and Hazardous Materials Safety Administration
PIPES Act	Protecting Our Infrastructure of Pipelines and Enhancing Safety Act of 2020
PNM	Public Service Company of New Mexico
PPA	Purchased power agreement
PUA	New Mexico Public Utility Act
PSC	Public Service Commission
PUC	Public Utilities Commission
Pre-FEED	Preliminary front-end engineering design
RD	Recommended Decision
Reb.	Rebuttal testimony
Resp.	Response
Resp. Br.	Response brief
Rev. Rqmt.	Revenue requirement
ROE	Return on equity
SPS	Southwestern Public Service Company
Staff	Staff of the Utility Division of the NMPRC
STV	Shell & tube vaporizer
Supp.	Supplemental
Swing gas	Gas acquired through withdrawal from storage, purchases of gas in day-ahead markets, or purchases of gas in same-day markets
TECO	TECO Energy, Inc., a utility company based in Tampa, Florida and NMGC's former parent company pursuant to the Commission's approval of TECO's acquisition of NMGC in Case No. 13-00231-UT; acquired by Emera, Inc. in July 2016
Therm	One therm equals 100,000 Btu, or 0.10 MMBtu
Tr.	Transcript
TW	Transwestern Pipeline
WI PSC	Wisconsin Public Service Commission
WRA	Western Resource Advocates
WUTC	Washington Utilities and Transportation Commission

1. EXECUTIVE SUMMARY

In this case, NMGC is seeking the Commission's approval of a certificate of public convenience and necessity (CCN) to build and operate a liquified natural gas (LNG) production and storage facility ("LNG Facility," "LNG Storage Facility," or "Facility") on a 160-acre parcel just within the southern boundary of the City of Rio Rancho, but on the northwest side of Bernalillo County. The map included in Appendix E to this decision and an additional map included in Section 4.4.7 below show the proximate location of the proposed facility in relation to major roads and notable landmarks in the vicinity of the LNG project. The LNG Facility itself, which would take up 25 acres of the 160-acre undeveloped parcel in an area zoned for future industrial development, is described in detail in other sections of this decision, principally in Section 4.1.2 below.

NMGC intends the LNG Facility to ultimately replace its present storage arrangement with the Keystone Storage Facility (the "Keystone Facility" "Keystone Storage") located in the Permian Basin in West Texas. Currently, NMGC obtains gas storage services from Keystone Storage and pays to lease storage space at the Keystone Facility.

As represented in the Application and in witness testimony, NMGC identifies three primary reasons for the LNG Facility proposal before the Commission. First, over the last several years, NMGC says it developed concerns over the reliability and performance of the Keystone Facility and thus, in 2020, begin to investigate alternatives to Keystone, including LNG storage. Second, following the occurrence of Winter Storm Uri ("Storm Uri") in February 2021, the Commission ordered NMGC in Case No. 21-00095-UT to evaluate and assess potential measures, and specifically, increased access to stored gas, including possible NMGC-owned or controlled storage facilities, that may be adopted to prevent a reoccurrence of NMGC incurring extraordinary gas

costs totaling $107 million as the result of the effects of Storm Uri and the potential for future extraordinary gas expenses and curtailments to customers. And third, NMGC believes that an on-system storage facility owned and operated by NMGC offers significant advantages over Keystone Storage and will result in improved reliability and a greater ability to moderate price volatility to NMGC customers.

In addition to NMGC, the parties in this case include Staff of the Commission's Utility Division and four intervenors: the New Mexico Department of Justice (NMDOJ or NMAG or "Attorney General," formerly the New Mexico Attorney General), Coalition for Clean Affordable Energy (CCAE), New Energy Economy (NEE), and Western Resource Advocates (WRA) (collectively, "Intervenors"). In addition, outside the parameters of this adjudication, while some individuals and business groups like the New Mexico Chamber of Commerce that have provided public comment support approval of a CCN for the proposed LNG Facility, intense public opposition to siting the Facility at NMGC's predetermined location has been expressed by many more individuals, neighborhood associations, interested State legislators, and the Bernalillo County Commission.

While Staff recommends approval of the Application, Intervenors uniformly and staunchly oppose granting NMGC a CCN for the LNG Facility. Intervenors oppose the Application on grounds too numerous to recount in this introductory summary. In the broadest terms, Intervenors assert that NMGC has failed to show the LNG Facility would improve reliability, that the concerns NMGC avers it has with Keystone are exaggerated and controllable, and that the LNG Facility will not provide the price volatility protection that NMGC claims the Facility will afford.

In considering whether to grant a CCN under the Public Utility Act, the new public utility plant or system must be found to consistent with the public convenience and necessity. The "public

convenience and necessity" standard requires the showing of a "net benefit to the public." The utility applicant must also show that it has considered alternatives before going forward with a project. The utility applicant, thus, must show that the resource alternative it proposes is the most cost-effective among feasible alternatives.

The Hearing Examiner conducted a four-day hearing in this matter between January 8-11, 2024 and developed an extensive evidentiary record at hearing and through the issuance of six bench requests to NMGC. Upon his close consideration of the record, the Hearing Examiner finds in this decision that the preponderance of the evidence weighs decisively against approving a CCN for the LNG Facility. The Hearing Examiner finds NMGC created confusion in the record over whether the primary rationale for the LNG Facility is to enhance NMGC's reliability, and thereby decrease the risk of supply disruptions like the 2011 severe winter event, or to promote price spike mitigation like the extreme price volatility experienced during Storm Uri in 2021.

Irrespective of the lack of clarity in the record, however, the evidence indicates that the proposed LNG Facility is not required for NMGC to provide reliable service or that the Keystone Storage problems the Company cites are increasing or unmanageable. The Hearing Examiner further finds that NMGC has not persuasively shown that the LNG Facility can provide meaningful price volatility protection or that the Facility is the most cost-effective among feasible alternatives. As to NMGC's investigation of alternatives, the Hearing Examiner finds that NMGC failed to perform the rigorous investigation that a prudent utility should perform prior to making a significant resource decision and committing to substantial, long-term capital investment expenditures. Moreover, NMGC failed to update time-sensitive elements of its analyses of alternatives. Accordingly, the Hearing Examiner finds that the LNG Facility would not provide a

net public benefit and therefore recommends that the Commission disapprove NMGC's Application.

In addition, given the intense public interest in this case and the fact that the proposed LNG Facility is a discretionary project – i.e., that the Facility is not necessary for the provision of adequate service, and not required by any Commission rule or regulatory mandate – the Hearing Examiner reviews the discretionary LNG project against the heightened standard of scrutiny applied in Case No. 15-00032-UT to Public Service Company of New Mexico's (PNM) advanced metering infrastructure proposal. Under the heightened standard applicable to discretionary resource proposals, the Commission should carefully evaluate the public interest and ensure a fair balancing of the interests of investors and ratepayers. The Commission also should consider the extent of any public opposition, the extent to which the applicant's justifications are not clearly demonstrated, and the extent to which any uncertainties will impact the public interest and create unreasonable risks for ratepayers.

Applying the heightened standard of scrutiny, first the Hearing Examiner finds, as already alluded to above in addressing the confusion NMGC created in the record, NMGC's primary justifications for the LNG Facility are not clearly demonstrated. In addition, the Hearing Examiner finds that NMGC's failure to provide an objective quantification of benefits versus costs of the proposed LNG project was contrary to the public interest, particularly where, while the record shows a substantial benefit to Emera shareholders in terms of after-tax return on equity (ROE) and enhanced earnings with the LNG Facility in rate base, NMGC neglected to provide a corresponding quantification of benefits to ratepayers and, crucially, failed to show that the Facility would be cost-effective for ratepayers. Moreover, the strong public opposition expressed against the proposed siting of the LNG Facility coupled with the significant unaddressed issues and

concerns over the potential safety effects and environmental impacts associated with locating the Facility at NMGC's predetermined location advise against approving a CCN for the LNG Facility.

Accordingly, considering that the LNG Facility would not provide a net public benefit, the additional public interest considerations corroborate the Hearing Examiner's findings that the LNG Facility would not promote the public interest.

2. PROCEDURAL HISTORY

Only the broadest sketch of the most significant procedural background information for is offered here. Interested readers may refer to the Commission's electronic record of this proceeding at https://edocket.prc.nm.gov for the full chronological procedural roadmap of the case from its inception on December 16, 2022.[1]

This case was initiated with NMGC's filing of its Application requesting, pursuant to NMSA 1978, §§ 62-9-1 and -6 of the Public Utility Act (PUA)[2] and 17.1.2.9 NMAC, that the Commission issue a CCN to construct and operate a new LNG production and storage facility within the City of Rio Rancho, but within the northwest edge of Bernalillo County.

On January 19, 2023, the Commission issued an order appointing the undersigned Hearing Examiner to preside over this matter. Among other things determined in the order, the Commission

[1] The chronological record of filings for Case No. 22-00309-UT is under the eDocket folder "100 PLEADINGS/ORDERS, which contains at this writing 74 documents, including but not limited to the Application and all the pleadings and orders of the Commission and the Hearing Examiner.

[2] NMSA 1978, §§ 62-1-1 to -7 (1909, as amended through 1993), 62-2-1 to -22 (1887, as amended through 2013), 62-3-1 to -5 (1967, as amended through 2019), 62-4-1 (1998), 62-6-4 to -28 (1941, as amended through 2018), 62-8-1 to -13-16 (1941, as amended through 2021). *See Tri-State Generation and Transmission Ass'n v. N.M. Pub. Reg. Comm'n*, 2015-NMSC-013, ¶ 8 n. 1, 347 P.3d 274 (listing the foregoing statutory provisions of the "entire PUA" and noting that § 62-13-1 specifies "the range of articles in Chapter 62 that comprised the PUA in 1993.").

provided that the "Hearing Examiner may for good cause shown under § 62-9-1(C) [of the Public Utility Act] extend the time for granting approval."[3]

On January 24, 2023, the Hearing Examiner scheduled a prehearing conference for February 1, 2023. That conference occurred as scheduled and was attended by counsel from NMGC, the Attorney General, CCAE, WRA, and Staff.

In his Procedural Order issued February 2, 2023, the Hearing Examiner found good cause to extend the time for granting approval of the Application for the full fifteen-month suspension period under NMSA 1978, § 62-9-1(C) to March 16, 2024.[4] The Procedural Order set the public hearing in this matter for October 24, 2023, and continuing on succeeding days as necessary, until November 2, 2023. The order dealt with the many other subjects that procedural orders generally address such as deadlines for intervention, testimony, publication and mailing of the Notice to Customers attached to the order, discovery issues, and deadlines for prehearing motions.

Timely motions to intervene were filed by the Attorney General (Feb. 3, 2023), WRA (Feb. 14, 2023), New Energy Economy (NEE) (Apr. 3, 2023), and CCAE (Apr. 5, 2023). The motions were unopposed. Thus, the "Intervenors" in case are the aforementioned parties.

In his Second Procedural Order issued August 14, 2023, the Hearing Examiner granted the movants' (NMGC, Staff, and Attorney General's) proposed revised schedule that was set to culminate in the public hearing being held on December 4, 2023, and continuing through December 8, 2023 as necessary.

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[3] *See* Case No. 22-00309-UT, *Order Appointing Hearing Examiner* (NMPRC 01/19/2023), at 2, ¶ A.

[4] Case No. 22-00309-UT, *Procedural Order* (NMPRC 02/02/2023), at 2, ¶¶ 4 and A.

Subsequently, due to the press of other Commission business, the public hearing was moved in a November 16, 2023 order to January 8, 2024. The hearing was scheduled in that order to continue through January 12, 2024.

The public hearing was conducted over four days between January 8 and January 11, 2024. The expedited four volume transcript of the hearing was reported by David M. Lee of Cumbre Court Reporting Services, L.L.C. The transcripts and accompanying voluminous collection of exhibits admitted into evidence during the hearing were entered into the record on January 16 and 17, 2024.

As ordered at the end of the hearing, the parties' briefs-in-chief were due and submitted on January 29, 2024. Responses briefs were due and submitted on February 9, 2024.[5] Whereas the Intervenors individually filed briefs-in-chief, they jointly filed a single Response Brief.

3. STANDARDS APPLICABLE TO APPLICATIONS FOR CCNS

3.1 Legal Standards Governing this Matter

The Public Utility Act requires public utilities to obtain a CCN before constructing or operating any new utility plant or system.[6] In determining whether to issue a CCN, the Commission must consider whether the new public utility plant or system is consistent with the public convenience and necessity.[7] The "public convenience and necessity" standard has been interpreted

[5] Tr. (Vol. 4) 1070.

[6] NMSA 1978, § 62-9-1(A). In addition, under Section 62-9-1(B), a public utility may, but is not required to, request a determination of ratemaking principles and treatment for the proposed facilities. The utility must have its articles of incorporation on file with the Commission and make a showing that it has received the consent and franchise from the municipality where the construction and operation is proposed. NMSA 1978, § 62-9-1(B).

[7] NMSA 1978, §§ 62-9-1(A) and 62-9-6; *see* Case No. 15-00185-UT, *Recommended Decision* (NMPRC Sept. 30, 2015), at 6 ("The Commission has equated the 'public convenience and necessity' with the public interest.") (*citing Re Pub. Serv. Co.*, 119 P.U.R. 4th 48, 50 (1990), *aff'd, Pub. Serv. Co. v. N.M. Pub. Serv. Comm'n*, 1991-NMSC-083), approved in *Final Order Adopting Recommended Decision with Modification* (Oct.

as requiring the showing of a "net benefit to the public."[8] The utility applicant must also show that it has considered alternatives before going forward with a project.[9] Thus, the utility applicant must show that the resource alternative it proposes "is the most cost-effective among feasible alternatives."[10] Whether a utility has properly evaluated alternatives is an issue to be determined based upon the evidence in a hearing.[11] In the final analysis, the Commission's determination should be consistent with the overarching regulatory policy pronunciation set forth at the beginning in the Public Utility Act:

> It is the declared policy of the state that the public interest, the interest of consumers and the interest of investors require the regulation and supervision of public utilities to the end that reasonable and proper services shall be available at fair, just and reasonable rates and to the end that capital and investment may be encouraged and attracted so as to provide for the construction, development and extension, without unnecessary duplication and economic waste, of proper plants and facilities and

7, 2015); NMPRC Case No. 13-00297-UT, *Corrected Recommended Decision* (3/6/2014), at 8, approved in *Final Order* (6/11/2014).

[8] *See e.g.*, Case No. 07-00398-UT, *Recommended Decision* (NMPRC 02/6/2008), at 6, approved in *Final Order* (Feb. 14, 2008); Case No. 3571, *Recommended Decision of the Hearing Examiner* (NMPRC 5/18/2001), at 6-7, approved in *Final Order* (NMPRC 6/19/2001); Case No. 1891/1892, *Re Southern Union Company*, Final Order (NMPSC 12/12/1984), at 15 ("We believe that the proper review is an overall assessment of whether, upon a balancing of the benefits and costs to the public of the proposed transactions, there is a net benefit to the public likely to be realized if the abandonment of service and issuance of a new certificate are granted."). *See also New Energy Econ. v. N.M. Pub. Regulation Comm'n*, 2018-NMSC-024, ¶ 14, 416 P.3d 277 ("The PRC has interpreted 'public convenience and necessity' to entail a net public benefit.") (citing *In re Valle Vista Water Util. Co.*, 212 P.U.R. 4th 305, 309 (2001), *i.e.*, Case No. 3571, *Recommended Decision of the Hearing Examiner*, at 6-7.).

[9] *See* Case No. 22-00270-UT, *Recommended Decision* (NMPRC 12/08/2023), at 42 ("[U]tilities must conduct reasonable alternatives analyses before selecting resources. Deficiencies in analyses may warrant non-recovery of all or a portion of the costs of resources imprudently selected."), approved in *Final Order* (NMPRC 01/03/2024) at 20-24; Case No. 15-00261-UT, *Corrected Recommended Decision* (NMPRC 8/15/2016) at 96-99 (same), approved in *Final Order Partially Adopting Corrected Recommended Decision* (NMPRC 9/28/2016); NMPUC Case No. 2382, *Final Order Approving Recommended Decision* (NMPUC 11/20/1995), at 48-49.

[10] Case 19-00349-UT, *Recommended Decision* (NMPRC 11/16/2020), at 16-17 (*citing* NMPRC Case Nos. 15-00261-UT, 13-00390-UT, 15-00205-UT, and NMPUC Case No. 2382), adopted by order of the Commission (NMPRC 12/16/2020).

[11] Case 17-00129-UT, *Order Denying NEE's Motion to Dismiss* (NMPRC 8/11/2017), at 6.

> demand-side resources for the rendition of service to the general public and to industry.[12]

The question remains whether a standard higher than that required for a CCN applies in this case. Several Intervenors claim that since NMGC's proposal to build and operate an LNG storage facility is discretionary, the Commission should apply to NMGC's Application the heightened standard of scrutiny enunciated and applied in Case No. 15-00312-UT[13] to PNM's Application for approval of an Advanced Metering Infrastructure (AMI) project.[14] The heightened standard the Commission applied in disapproving PNM's AMI project is elucidated below.

NMGC argues that the belief that a heightened standard inheres in this case is based on a misunderstanding of NMGC's Application for a CCN. NMGC asserts that its Application is focused on cost-effectively achieving reliable gas storage. NMGC relates in its Response Brief that the Company and its predecessors-in-interest have utilized gas storage facilities, in one form or another, for decades in order to provide reliable cost-effective service to customers in New Mexico and that the Commission itself has recognized the necessity of natural gas storage.[15] No party in this case has claimed, NMGC maintains, that gas storage is unnecessary or somehow discretionary for NMGC to be able to provide reasonable gas utility service to customers. NMGC thus reasons that "there is no support in this case, or in Commission precedent over the last two decades, for the proposition that natural gas storage is somehow discretionary."[16]

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[12] NMSA 1978, § 62-3-1(B).

[13] Case No. 15-00312-UT, *Recommended Decision* (NMPRC 3/19/2018), approved in *Final Order* (NMPRC 4/11/2018).

[14] *See* NEE Br. at 4; NMAG Br. at 10, 19-20, 22; *see also* WRA Br. at 4 ("Ultimately, the Commission's determination is discretionary and should be guided by the policy enunciated in the PUA[,]" then quoting NMSA 1978, § 62-3-1(B) stated in the text above).

[15] NMGC Resp. Br. at 3, 5-6.

[16] NMGC Resp. Br. at 3.

NMGC submits that its Application requests that the Commission approve the more reliable gas storage option than the Keystone Storage Facility. NMGC says it is not proposing to both build the LNG Facility and continue to have a long-term lease with the Keystone Facility, since that would lead to unnecessary redundancy. NMGC says that it "makes clear in its filing and testimony in this case that if the Commission agrees that the LNG Storage Facility provides more customer benefit than Keystone currently provides, at a reasonable cost, then NMGC will terminate its relationship with Keystone and will rely on the LNG Facility for its gas storage needs."[17] NMGC then attempts to distinguish PNM's "starkly different" AMI project request in Case No. 15-00312-UT, which PNM admitted was discretionary,[18] from the CCN for a storage facility requested here.

In Case No. 15-00312-UT, the Commission held that a utility's proposed resource acquisition or facility is discretionary if it "is not necessary for the provision of adequate service, and not required by any Commission rule or regulatory mandate."[19] Tellingly, while NMGC submits that *storage is a necessary* component of a gas utility's portfolio – which, frankly, no one is seriously disputing – the Company does not claim that the proposed *LNG Storage Facility is essential* to its providing adequate service. Instead, NMGC pitches the LNG Facility as a more reliable and cost-effective resource option (e.g., the LNG Facility "offer[ing] greater reliability at a similar cost to its existing leased underground storage in Texas.").[20] NMGC likely knows it cannot claim forthrightly that the LNG Facility is necessary because the evidence reflects that the

[17] NMGC Resp. Br. at 3-4.

[18] Case No. 15-00312-UT, *Recommended Decision*, at 47, 80. Because the Hearing Examiner found that the standard to approve a discretionary request is higher than the standard that applies to CCNs, he reasoned that it was unnecessary to address whether a CCN would be required for PNM's AMI project. *Id*. 79 n. 26.

[19] Case No. 15-00312-UT, *Recommended Decision*, at 74.

[20] NMGC Resp. Br. at 3.

proposed facility is not required to provide adequate service. During the hearing, its leading witnesses framed the LNG Facility as a superior replacement resource in comparison to the Keystone Storage lease arrangement currently in place.[21] Staked to that position, it is impossible to logically claim that the LNG Facility is necessary unless the Keystone Storage Facility does not enable NMGC to provide reliable and adequate service, and that NMGC cannot possibly claim here because according to its own expert witness, John J. Reed, Chairman of the Board of Concentric Energy Advisors, Inc. and a specialist in financing and economic services to the energy industry,[22] NMGC "[can]not say but for the proposed LNG Facility the Company could not continue to provide reliable and affordable service."[23] It necessarily follows, then, that since the LNG Facility is not necessary for NMGC's provision of adequate service, and is not required by any Commission rule or regulatory mandate, it is a discretionary project.[24]

Hence, because the LNG Facility is a discretionary proposal, the heightened level of scrutiny articulated in Case No. 15-00312-UT applies to NMGC's request for approval of the LNG

[21] *See, e.g.*, Tr. (Vol. 1) 79-80 (Bullard) (claiming the LNG Facility "provides numerous benefits above Keystone, so we're real [*sic*] confident it will replace it."); Tr. (Vol. 1) 133 (Bullard) ("The proposal is *to replace* a storage facility that we don't control, that is not in our system, that we have reliability issues with, with a storage facility that we do control that is in our system."); Tr. (Vol. 1) 253 ("This facility replaces Keystone."); Tr. (Vol. 2) (Reed) ("We started by understanding that the Company's intention was to replace Keystone, and at least have the deliverability out of LNG that is currently there for Keystone. . . . We looked at *the proposal as it was structured, which was the replacement of Keystone*.") (emphasis added).

[22] NMGC Exh. 3 (Reed Dir.) at 1; Tr. (Vol. 2) 389, 497 (Reed).

[23] NMGC Exh. 4 (Reed Reb.) at 4 (In fuller context: ". . . the Company's evidence warrants issuance of the CCN, which is not to say that but for the proposed LNG Facility the Company could not continue to provide reliable and affordable service."). *See* Tr. (Vol. 2) 433-34 (Reed) ("By the way I define 'necessary' [to provide reliable and affordable service], no. . . . I think it is too much to say that if the LNG Application is denied, the Company won't continue to be able to provide reliable service.").

[24] Underscoring the Hearing Examiner's finding that the LNG Facility is discretionary is the opt out provision NMGC retains to terminate the LNG project if received contractor bids are too high to accept without exposing NMGC and ratepayers to unacceptable risk. *See* NMAG Br. at 22; *infra* Section 4.4.3.

Facility. In other words, "[t]he need for a strong[er] justification" for granting NMGC a certificate of authority for the LNG Facility applies in this case because the project is discretionary.[25]

Therefore, in addition to proof by a preponderance of the evidence that the LNG Facility will produce a net public benefit and that NMGC has conducted an evaluation of reasonable alternatives to its proposal, the Commission should also carefully evaluate the public interest and ensure a fair balancing of the interests of investors and ratepayers consistent with the regulatory compact that governs the utility's provisioning of a monopoly service in a specified territory.[26] Furthermore, the Commission should consider the extent of any public opposition, the extent to which NMGC's justifications are not clearly demonstrated, and the extent to which any uncertainties will impact the public interest and create unreasonable risks for ratepayers.[27]

Additionally, it should be noted that NMGC's concern that the heightened level of scrutiny *not be applied* to its Application will have been asserted in vain if the Commission finds that the LNG Facility does not meet the lesser included standard of providing a net public benefit. It is

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[25] Case No. 15-00312-UT, *Recommended Decision*, at 79.

[26] *See, e.g.*, Case No. 20-00212-UT, *Recommended Decision* (NMPRC 01/14/2022), at 16:

> 'The essence of regulation is the explicit replacement of competition with governmental orders as the principal institutional device for assuring good performance.' Alfred Kahn, *The Economics of Regulation: Principles and Institutions*, Vol. I, p. 20 (1970). ***The Regulatory Compact balances the public interest of customers with the business interests of the utility*** through, among other things, the following:
>
> - ensuring the utility's service and rates are just, reasonable and non-discriminatory; and
> - providing utilities an opportunity to recover prudently expended costs plus a reasonable return on their investments.
>
> ***The regulatory compact protects both customers and the utilities***.

(quoting Case No. 19-00018-UT, Rebuttal Testimony of Lauren Azar, PNM Exh. 8 at 9-10) (emphasis in the RD). Thus, consistent with Professor Kahn's apt observation over half a century ago, it is fair for the Commission to consider whether the public interest necessitates approval of the LNG Facility to assure NMGC's good performance going forward.

[27] Case No. 15-00312-UT, *Recommended Decision*, at 79.

also possible that an Application for approval of a discretionary resource or project fails both the net public benefit test and the heightened scrutiny standard. That is what the Commission ultimately found in Case No. 15-00312-UT with respect to PNM's AMI project proposal,[28] and this is what the Hearing Examiner ultimately finds and concludes below regarding the Company's LNG Facility proposal.

Finally, as to NMGC's urging the Commission to ignore NEE's misplaced attempt to bootstrap the specific requirements articulated in the PNM Ojo Line Extension case (the "*OLE Case*"), Case No. 2382, to claim NMGC has failed to account for various environmental impacts and failed to conduct a full analysis of options in this case,[29] the Hearing Examiner concurs with NMGC. The *OLE Case* involved not only a CCN case but also PNM's request for location approval and right-of-way width determination for the proposed transmission line. The location control statute, at NMSA 1978, § 62-9-3, which was central to that case, specifically required a finding that the new proposed utility facilities would not "unduly impair important environmental values."[30] The Hearing Examiner finds that that Section 62-9-3, which governs location approval of certain "new plants, facilities and transmission lines for the *generation and transmission of electricity* for sale to the public,"[31] is not germane to this gas utility-focused case.

3.2 Evidentiary Standards

The rule in administrative proceedings generally, and adjudications before this Commission in particular, is that unless a statute provides otherwise, the proponent of an order or moving

[28] *Id*. 120, ¶ 4.

[29] NMGC Resp. Br. at 5.

[30] Case No. 2382, *Recommended Decision* (NMPUC 7/05/1995) at 40, approved in Final Order (NMPUC 11/20/1995).

[31] NMSA 1978, § 62-9-3(A) (emphasis added).

party has the burden of proof.[32] The burden of proof is two-pronged: it includes both the *prima facie* burden of adducing sufficient evidence to go forward with a claim and the burden of ultimate persuasion.

The quantum of proof in administrative adjudications is, again unless expressly provided otherwise, a preponderance of record evidence.[33] Preponderance of the evidence means the greater weight of the evidence.[34] That is, evidence that – when weighed with that opposed to it – has more convincing force. It has superior evidentiary weight that, though not sufficient to free the mind wholly from all reasonable doubt, is still sufficient to incline a fair and impartial mind to one side of the issue rather than the other.[35] It is crucial to emphasize here how these standards apply and in this case.

It is well settled that "[a]dministrative judges have an affirmative duty to elicit the facts necessary to determine the interest of the public as well as the private parties. They must develop

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[32] DAVIS, KENNETH CULP, ADMINISTRATIVE LAW TREATISE § 16.9 at 255-57 (2d ed. 1980). *See Int'l Minerals and Chemical Corp. v. N.M. Pub. Serv. Comm'n*, 81 N.M. 280, 283, 466 P.2d 557, 560 (1970) ("Although the statute does not specifically place any burden of proof on [complainant] International, the courts have uniformly imposed on administrative agencies the customary common-law rule that the moving party has the burden of proof.").

[33] See DAVIS, *supra*, § 16.9 at 256 ("One can never prove a fact by something less than a preponderance of the evidence") (emphasis in original); See *El Paso Electric Co. et al. v. N.M. Pub. Serv. Comm'n*, 1985-NMSC-085, ¶ 12 ("This Court, however, does express its deep concern regarding the reasonableness of this heightened standard of proof ['clear and convincing evidence'], especially since a 'preponderance of evidence' standard is customary in administrative and other civil proceedings.") (emphasis added); *Re Southwestern Public Service Co*., Case No. 2678, *Corrected Recommended Decision of the Hearing Examiner* (NMPUC, 11/25/1996) at 22-23 ("No matter how the Commission describes its standard of review, SPS bears the burden of proof in this case. SPS must demonstrate that a preponderance of evidence exists in the record on which to base approval of the requested authorizations surrounding the merger.") (citing *Llano, Inc. v. Southern Union Gas Co.*, 75 N.M. 7, 11-12, 399 P.2d 646, 649; *cf. New Mexico Industrial Energy Consumers v. N.M. Pub. Serv. Comm'n*, 104 N.M. 565, 570, 725 P.2d 244, 249 (1986), adopted in *Final Order Approving Recommended Decision* (NMPUC 01/28/1997)).

[34] *Campbell v. Campbell*, 1957-NMSC-001, ¶ 24, 62 N.M. 330, 310 P.2d 266.

[35] BLACK'S LAW DICTIONARY 1431 (11th ed. 2019).

a record comprehensive and accessible record so that the agency and ultimately a court can review the whole case with minimal activity."[36] This simple statement takes on several degrees of difficulty when, as in this case, the administrative record is voluminous, the issues presented are complex, and the suspension period deadline for final Commission action in this case is drawing very near. Given those constraining factors, to the extent any of the numerous arguments for and against granting the Gas Company a CCN for the LNG set forth in the post-hearing briefing are not expressly discussed or identified in the text below, it behooves noting that the Hearing Examiner has considered them and, accordingly, such unaddressed issues should be deemed disposed of consistent the Hearing Examiner's analyses [37]in the ensuing discussion and his recommendation on the merits of the Application.[38]

4. DISCUSSION

This case presents the Commission a weighty and vigorously contested matter freighted with substantial public interest considerations: whether the Commission should grant NMGC a CCN to build and operate the proposed LNG Storage Facility within the Albuquerque metropolitan area near populated areas of the City of Rio Rancho in northwestern Bernalillo County. NMGC, joined by Staff, urge the Commission to grant the Company the requested CCN. The Intervenors unanimously contest the Application and urge the Commission to reject the Company's LNG Facility proposal. Moreover, significant public opposition to the LNG Facility, evinced among other things by a December 2023 Bernalillo County Resolution recommending that the

[36] CHARLES H. KOCH, JR. & RICHARD MURPHY, ADMINISTRATIVE LAW AND PRACTICE, 2 ADMINISTRATIVE LAW & PRACTICE, § 5.25, Responsibilities of the Administrative Judges at the Hearing (3d ed.).

[37] *See* Bernalillo County Board of County Comm'rs Admin. Resolution 2023-110 (10/24/2023).

[38] In most instances, the arguments and/or evidence supporting the party's position that has not been expressly addressed in this decision should be treated as having been considered and rejected.

Commission deny the CCN for the LNG Facility, cannot and should not be ignored, particularly given the conclusion that the heightened public interest standard of scrutiny applies in this case.

NMGC contends that it has demonstrated in this case, through fact and expert testimony, that gas supply shortages whether due to operational problems at the Keystone Storage Facility ("Keystone Facility" or "Keystone") in Texas or due to interstate pipeline issues, are problems that can and should be addressed with a solution that cost-effectively provides local storage to NMGC. NMGC submits that the Company has provided evidence that the proposed LNG Facility, located near NMGC's load centers, directly connected to NMGC's system, and under the control of NMGC, is more reliable and cost-effective than other options including the current arrangement for leased storage in West Texas. NMGC concludes that its proposed solution provides customers with greater reliability and the ability to mitigate price volatility, and results in a net benefit to customers.[39]

The Intervenors, on the other hand, steadfastly oppose a CCN for the LNG Facility. They make legitimate and compelling arguments contesting the relief NMGC requests in the subject Application. In short, Intervenors contend that even after hearing and briefing the NMGC has not provided the Commission with sufficient information to make a well-informed decision that this discretionary LNG proposal is cost-effective, needed, and in the public interest.[40] Regarding two critical issues, reliability and price spike mitigation, Intervenors maintain that NMGC's need to address potential curtailments or other supply disruptions have already been addressed by infrastructure improvements previously approved for that purpose in Case No. 16-00097-UT, the "*Fresh Look Solutions Case*" discussed in the next section below. Regarding options available to

[39] NMGC Resp. Br. at 1.

[40] Intervenors' Resp. Br. at 1-2.

NMGC to address extraordinary price volatility, NMGC's presentation of evidence demonstrates that its analysis was not sufficiently thorough or transparent for the Commission to conclude that the LNG facility is the most feasible, cost-effective alternative to Keystone or that it will result in price spike mitigation as required in Case No. 21-00095-UT, the "*Extraordinary Gas Recovery Case*," also discussed in the next section.[41] The Intervenors' arguments are addressed as they pertain under the issue headings in Sections 4.2 through 4.6 below.

4.1. The Keystone Storage Facility and the Proposed LNG Storage Facility

4.1.1. Background: Events and Factors NMGC Asserts as Grounds for Proposing the LNG Facility as an Alternative to the Keystone Storage Facility

The following background narrative is cobbled together primarily from the testimonies in this case provided by NMGC witness Tom C. Bullard. The narrative in this section sets forth NMGC's rendition of the events and factors that prompted the Company to propose the LNG Storage Facility. Some of the facts and representations set forth in this narrative are disputed by the Intervenors. The disputed facts and the Hearing Examiner's findings made on them as they pertain to contested issues are addressed in Sections 4.2 to 4.4 below.

Tom Bullard, NMGC's Vice President of Engineering Gas Management, and Technical Services,[42] introduces the Company's narrative by noting that gas storage has been an integral part of utility gas supply strategy for New Mexico customers for at least five decades.[43] NMGC has relied on natural gas storage since the Company's inception, when the NMGC took over the

[41] *Id*. 9.

[42] NMGC Exh. 1 (Bullard Dir.) at 1.

[43] Bullard Dir. at 11.

Keystone Gas Storage LLC lease from PNM as part of the Company's purchase of PNM's assets in 2009.[44]

Keystone Gas Storage LLC ("Keystone Storage" or "Keystone") is a Kinder Morgan, Inc. ("Kinder Morgan") company.[45] Keystone Storage is a high-deliverability salt cavern natural gas storage facility located in the Permian Basin in West Texas near the Waha natural gas trading hub in Pecos County, Texas.[46] Keystone has pipeline connections to El Paso Natural Gas (EPNG), Transwestern Pipeline (TW), and Northwest Natural Gas (NNG). The simplified map of NMGC's system in Appendix B shows, among other things, the major transmission lines, the location of the Keystone Facility, and the location of the proposed LNG Facility.[47] The total gas storage is 8.6 Bcf, a working capacity of approximately 6.565 Bcf. a maximum injection capacity of 200,000 Mcf/day, and a maximum withdrawal capability of 400,000 Mcf/day.[48] The facility has injection and withdrawal capabilities.[49] It began service in 2002 and has been owned by Kinder Morgan since 2014.[50] The Keystone facility operates under market-based rate authority from the Federal

[44] *Id*. According to Mr. Bullard there are limited commercial gas storage facilities in the Southwest. Keystone Storage is one of the only commercial gas storage facilities in the Permian Basin, and there are no commercial gas storage facilities operating in the San Juan Basin. In addition, the Keystone Facility is connected to multiple interstate pipelines, including the Transwestern and El Paso Natural Gas Company pipelines that interconnect with NMGC's system and on which NMGC has transportation rights. *Id*.

[45] *See* https://pipeportal.kindermorgan.com/portalui/DefaultKMBasic.aspx?TSP=KGS. According to Kinder Morgan, the Keystone Gas Storage LLC is wholly owned by Kinder Morgan Energy Partners LLC. *See* n. 46 *infra*.

[46] *See* https://pipeline2.kindermorgan.com/Documents/KGS/KGS_CI_Cpny_Overview.pdf. *See* NMGC Exh. 3 (Reed Dir.) 8.

[47] *See* Bullard Dir. at Exhibit TCB-2.

[48] Reed Dir. at 8.

[49] Bullard Dir. at 12.

[50] Reed Dir. at 8.

Energy Regulatory Commission (FERC) and has firm storage contracts with the six customers listed in the following table.[51]

	2021-Q3	2021-Q4	2022-Q1	2022-Q2
NEW MEXICO GAS COMPANY, INC.	2,700,000	2,700,000	2,700,000	2,700,000
SALT RIVER PROJECT	1,000,000	600,000	600,000	866,666
EL PASO ELECTRIC COMPANY	400,000	400,000	400,000	400,000
ARIZONA PUBLIC SERVICE COMPANY	400,000	333,333	300,000	366,666
HARTREE PARTNERS, LP	250,000	250,000	250,000	250,000
TUCSON ELECTRIC POWER COMPANY	200,000	200,000	200,000	200,000
TOTAL	**4,950,000**	**4,483,333**	**4,450,000**	**4,783,332**

Since the February 2011 severe winter event, discussed further below, when NMGC was forced to curtail 28,707 customers according to the Commission's *Curtailments Investigation* subsequently conducted in 2011-2012,[52] NMGC has leased at least 2.7 Bcf1 of storage space at the Keystone Facility. At this level of storage space, NMGC has the right to withdraw up to 190,000 Mcf/d from the Keystone Facility.[53] Per the lease, the Company's withdrawal rights vary with storage inventory levels, meaning as NMGC's inventory levels drop, its withdrawal rights decline. Mr. Bullard explained that since withdrawal rights from Keystone Storge are more important to NMGC's business operations than its inventory level at the Keystone Facility, NMGC retains its storage level at the Keystone Facility primarily to maintain its withdrawal rights. In short, NMGC maintains 2.7 Bcf of storage rights to safeguard its withdrawal rights at 190,000 Mcf/d. Because NMGC does not typically need the entire 2.7 Bcf of gas storage to service its

[51] *Id*. at 8-9. The table above is derived from Reed Dir. at 9.

[52] Case No. 11-00039-UT, *Final Order* (NMPRC 12/13/2012), at 21 ("*Curtailments Investigation*").

[53] Bullard Dir. at 12.

sales customers, NMGC has been able to sublease 1.0 Bcf of its capacity at the Keystone Facility to third parties while preserving its withdrawal rights. So, while NMGC subleases 1.0 Bcf of its capacity, it retains all of its withdrawal rights. This means on days when NMGC needs its full withdrawal rights, the sublessee is not allowed to withdraw gas from Keystone Storage.[54]

Under its lease for the Keystone Facility, NMGC currently pays Kinder Morgan $6,804,000 for storage at the Keystone Facility each year. This price is fixed through the middle 2023. The cost will increase in mid-2023 to $7,452,000 and again in mid-2024 to $8,748,000 for the final two years of NMGC's current storage lease.[55] Historically, Mr. Bullard recounted, NMGC has experienced increases in lease cost and has never experienced a price decrease for gas storage services. He said the Company has estimated that that its next storage lease at the Keystone Facility will cost at least $8,748,000 per year and escalate through the term of that lease.[56] Leases of the type NMGC has with Kinder Morgan have typically been for at least three and up to five

[54] *Id.* The subleased capacity has enabled NMGC to offset some of the $6.8 million in lease costs through annual subleases of some of its space at Keystone Storage. Mr. Bullard said that for August 1, 2022, through September 30, 2023, NMGC will receive $3,240,000 from the sublease. He noted that this subleased income can change significantly based on gas markets. NMGC provides a credit of 70% of this amount to customers through its purchased gas adjustment clause (PGAC), as the Commission approved in NMGC's most recent PGAC continuation filing in Case No. 20-00130-UT. Bullard explained that the revenues derived from these subleases arose only in the last five years because of economic conditions relating to the price differential of natural gas in the Permian Basin compared to other basins, and the continuation of these revenues into the future is uncertain. These economic conditions, Bullard observed, are related to supply and demand forces which can arise when the Permian Basin produces more gas than can be moved on the interstate pipelines to other markets. These conditions can cause gas produced in the Permian Basin to be less expensive than gas produced in other basins in the Western United States. This results in pricing differentials that marketers attempt to arbitrage by purchasing gas in the Permian Basin, storing it, and then selling it in markets in the West Coast where gas can attract a higher price. Bullard Dir. at 13-14.

[55] Bullard Dir. at 13.

[56] *Id*.

years.[57] NMGC recovers the annual leasehold cost for the Keystone Facility through the Company's PGAC.[58]

Mr. Bullard explained that because NMGC is primarily a heating-load utility, and the majority of the Company's customers use gas to heat their homes and businesses throughout the state, colder winter temperatures result in greater demand for gas. NMGC therefore uses the Keystone Facility primarily as a seasonal peaking facility, mainly utilizing its withdrawal rights at Keystone Storage in the winter months during abnormally cold weather and winter storms.[59] To facilitate winter withdrawals from the Keystone Facility, NMGC typically injects gas into the Keystone Facility during the summer months. NMGC, however, does have the ability to inject excess gas into Keystone Storage during the winter in the event that weather forecasts are incorrect and NMGC has more gas than it needs to serve customers. Additionally, NMGC uses the gas stored at the Keystone Facility as swing gas to supplement NMGC's baseload purchases.[60]

As a result of the February 2011 severe winter storm event,[61] described by the Commission as "a once-in-50-year weather event,"[62] NMGC was compelled to curtail gas service to more than

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[57] *Id*.

[58] *Id*. 15.

[59] *Id*.

[60] *Id*.

[61] Tr. (Vol. 1) 47-48 (Bullard); NMGC Exh. 2 (Bullard Reb.) at 4. Mr. Bullard testified that had the proposed LNG Facility been in place instead of the Keystone Facility gas service would not have been curtailed to the 25,000 customers on the Northwest System that suffered through the disruption of service. Tr. (Vol. 1) 48 (Bullard).

[62] Case No. 11-00039-UT, *Final Order*, at 19 ("Statistically, the storm was a once-in-50-year weather event, and it affected the entire Southwest Region.").

25,000 customers on its Northwest System and another 3,000 customers on its Southeast System.[63] That massive winter storm that affected much of the United States and Canada in the winter of 2011[64] "caused freeze-offs on natural gas wells, gathering lines and processing plants and interfered with the delivery of natural gas to numerous customers across the State of New Mexico[,]" according to the Commission in its Final Order in Case No. 16-00097-UT.[65] In the aftermath of the 2011 winter event, Mr. Bullard testified that "NMGC worked to improve its gas supply, and made numerous enhancements to its gas supply contracts, transportation contracts,

[63] *See* Staci Matlock, *Lessons Learned in the Aftermath of Natural-Gas Crisis*, SANTA FE NEW MEXICAN, Feb. 13, 2011, retrieved 02/01/2024 from https://www.santafenewmexican.com/news/local_news/lessons-learned-in-aftermath-of-natural-gas-crisis/article_e249f9a6-7c58-597c-b16d-0568f8f9381c.html (The snow-storm that blew through New Mexico with an arctic blast in the first week of February, leaving an estimated 32,000 homes and businesses without natural gas for several days, tested the ability of an interstate utility system – and found it wanting. . . . Frozen gas well heads, ruptured waterlines and freezing homes stretched 2,000 miles across at least 16 states from New Mexico and Texas northeast to Connecticut and Illinois. The storm took down power utility companies in Texas and disrupted production, ultimately affecting the ability of natural-gas processing plants to pack enough of the hydrocarbon into interstate pipelines for the thousands of people who needed it."); Michael Haederle, *30,000 Homes in New Mexico Lose Gas Service*, LOS ANGELES TIMES, Feb. 5, 2011, retrieved 02/01/2024 from https://www.latimes.com/world/la-xpm-2011-feb-05-la-na-gas-shortage-20110205-story.html ("As New Mexico endured record cold — two mountain towns hit 36 degrees below zero — natural gas service to about 30,000 homes across a large swath of the state was cut off after suppliers in West Texas curtailed production because of rolling electrical blackouts caused by the harsh weather. . . . New Mexico Gov. Susana Martinez declared a state of emergency and ordered most state offices closed Friday to conserve gas supplies. Public schools throughout much of the state closed for the same reason, as did Albuquerque city offices and large employers such as Sandia National Laboratories, Los Alamos National Laboratory and the University of New Mexico. . . . Martinez urged people to dial back their thermostats to reduce gas consumption, and emergency shelters were set up to take in people without alternative heating sources.").

[64] Technically, the winter storm, dubbed the "2011 Groundhog Day blizzard" on Wikipedia, started affecting large swaths of the United States and Canada on January 31 through February 3, 2011. *See* https://en.wikipedia.org/wiki/2011_Groundhog_Day_blizzard. *See also* Case No. 11-00039-UT, *Final Order*, Attachment, Staff Report: "Severe Weather Event of February, [*sic*] 2011 and its Cascading Impacts on Utility Service (12/11/2011), at 9.

[65] Case No. 16-00097-UT, *Final Order Adopting Recommended Decision* (NMPRC 12/21/2016), at 1, ¶ 2. Earlier, in the *Curtailments Investigation*, the Commission found that the 2011 extreme weather event "caused a high percentage of freeze-offs in both the San Juan and Permian Basins, affecting wellheads, gas gathering lines, and gas processing plants." Case No. 11-00039-UT, *Final Order*, at 19.

transmission systems, distribution systems, and planning processes."[66] The infrastructure improvements were detailed in Case No. 16-00097-UT, the "*Fresh Look Solutions Case*"[67] referred to above.[68] The *Fresh Look Solutions Case* was initiated in reaction to the Commission's *Final Order* in Case No. 13-00231-UT, wherein the Commission approved the acquisition of NMGC by TECO Energy, Inc. (TECO). There, the Commission ordered NMGC and TECO to take a "fresh look to determine the appropriate response to the February 2011 supply interruption" and to file a case for approval of a proposed solution within 12 months of the day of closing of TECO's acquisition of NMGC.[69] As already noted, the Company's evaluations and infrastructure improvements at issue in the *Fresh Look Solutions Case* are described in various parts of the testimony of NMGC witnesses in this case[70] as well as the *Final Order* and *Recommended Decision* in Case No. 16-00097-UT and, thus, will not be belabored in this narrative except as set forth in this next footnote.[71]

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[66] Bullard Reb. at 20.

[67] *Id*.

[68] It should also be noted that in more or less this same time frame (2012), NMGC filed an application for a CCN to authorize the construction and operation of an LNG storage facility. As presented in Case No. 12-00364-UT ("*First LNG Case*"), the LNG facility NMGC proposed "would have been," as Mr. Bullard describes, "smaller and would have been more of an insurance policy for a single winter weather event once a year and would have continued reliance on the Keystone storage facility. The earlier design is detailed in the First LNG Case, and primarily was focused on providing a safeguard against another severe weather event." Bullard Reb. at 20. However, in 2013, Bullard said NMGC "withdrew its application in the First LNG Case, when some of the intervening parties expressed concern that a storage facility designed to operate mainly as a safeguard against another severe weather event did not justify the projected cost of approximately $40 million. NMGC agreed to withdraw its application in order to reevaluate the scope and cost of the project." *Id*. 20-21.

[69] *See* Case No. 13-00231-UT, *Certification of Stipulation* (NMPRC 6/30/2014), at 35-36 (Section N, entitled "LNG Facility") and Attach. B (Stipulation), p. 7, ¶ 16, adopted in *Final Order* (NMPRC 08/13/2014).

[70] *See e.g.*, Bullard Reb. at 20, 21-22, 26; NMGC Exh. 3 (Reed Dir.) at 58.

[71] *See, e.g.,* Case No. 16-00097-UT, *Final Order Adopting Recommended Decision*, at 2-3, ¶ 5 ("NMGC has taken various system improvements since 2011 to improve supply including looping its Rio Puerco mainline with 15 miles of 24 inch pipe, diversifying its gas supply with new sources in Colorado and Wyoming, obtaining

Nevertheless, despite the infrastructure improvements documented in the *Fresh Look Solutions Case*, ever since the 2011 severe winter event NMGC says that it and its customers have experienced supply disruptions and extraordinary price volatility that, among other concerns,[72] has resulted in increased customer bills[73] and caused NMGC to lose confidence in its storage supply arrangement with Keystone.[74]

Focusing specifically on the Company's ongoing storage issue, Mr. Bullard stressed that, in addition to being able to purchase baseload gas or swing gas, "storage is a critical component of ensuring reliable gas supply and NMGC has experienced several issues with Keystone Storage, which prompted it to consider alternatives prior to Storm Uri."[75] Prior to addressing why the Company was considering alternatives to Keystone Storage even before Storm Uri, it is important to address the significance of the February 2021 extreme weather event in the Company's thinking in relation to potentially replacing the Keystone Facility with another storage resource.

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additional capacity on Williams Gas Pipeline Company's Northwest Pipeline, contracting with Kinder Morgan for an additional 500MMcf of storage capacity at the Keystone Storage Facility, increasing its daily withdrawal and injection rights at Keystone and extended the term of its Keystone storage contracts through 2018. NMGC further installed a new compressor - the Alcalde Compressor to increase pressure and gas flow on the Taos Mainline, switched its Chapparal Compressor with its Arrey Compressor to increase gas flow along its Alamogordo Mainline; increased the diameter of the Alamogordo Mainline and Silver City Very High Pressure Line, installed isolation valves in the Albuquerque/Santa Fe Metropolitan Area and is constructing new interconnections on several interstate pipelines. NMGC further changed its contracting strategy for gas procurement and entered into new contracts for transportation of San Juan and Permian Basin gas. NMGC has also taken steps to map all meters with GPS coordinates, revise its Emergency Communication Plan, update its Emergency Operating Procedures, update its curtailment plans, and enhance its communications procedures.").

[72] Mr. Bullard also identifies NMGC's concerns over declining production of pipeline-quality gas from the San Juan Basin and the inability of interstate pipelines to deliver gas to NMGC's receipt points for various reasons in February 2011 and at other times. Bullard Dir. at 18-19.

[73] NMGC Br. at 4.

[74] Bullard Reb. at 22, 32-33, 42.

[75] Bullard Dir. at 16.

Winter Storm Uri was a "crippling, large and major winter and ice storm that had widespread impacts across the United States, Northern Mexico, and parts of Canada from February 13 to 17, 2021."[76] Storm Uri resulted in gas supply failures throughout the Southwest region and beyond,[77] which, when combined with significant increases in demand for natural gas throughout the region, "caused natural gas prices to spike to levels never before experienced."[78] Although the Keystone Facility declared a *force majeure* event on February 14-15, 2021 that reduced the amount of storage gas NMGC was able to obtain to amounts substantially less than it had contracted for,[79] NMGC was not required to curtail service to its customers during Storm Uri.[80] However, Keystone's *force majeure* declaration forced NMGC to purchase additional gas in the day-ahead and same-day markets, "and this significantly contributed to the extraordinary gas costs incurred by the Company in February 2021."[81] Due to the "exceptionally volatile natural gas market[]"

[76] https://en.wikipedia.org/wiki/February_13–17,_2021_North_American_winter_storm. *See also* Rick Rojas and Marie Fazio, *Winter Storm Brings Icy Temperatures and Cuts Power Across the U.S.*, N.Y. TIMES, Feb. 14, 2021, retrieved 02/01/2024 at https://www.nytimes.com/2021/02/14/us/winter-storm-snow-ice.html ("A coast-to-coast winter storm swept from Oregon and Washington to the Southeast on Sunday, part of a frigid weather pattern that created record low temperatures in Minnesota and a 100-vehicle traffic pileup in Texas and that is now producing dangerous conditions across much of the country because of heavy snowfall, perilous ice and dangerously low temperatures. . . . Power failures plagued a number of states by early Monday. In Texas, at least two million customers had lost power, according to PowerOutage.us, which aggregates data from utilities across the country. Some of the outages were intentionally imposed and could last throughout the morning, according to the operator of the state's electricity grid, which faced record demand as wind chills were expected to reach minus 10 degrees. . . . Elsewhere, about 300,000 customers in Oregon and 150,000 in Virginia were also without electricity.").

[77] Tr. (Vol. 1) 45-55, 86, 176-77.

[78] Bullard Dir. at 19-20.

[79] Id. 21; NMGC Resp. to BR Request No. 1-2.

[80] Bullard Dir. at 20.

[81] Bullard Dir. at 20. Mr. Bullard explains in detail not reiterated here the role that the Keystone Facility played in NMGC incurring the extraordinary costs that customers were eventually required to absorb Bullard concludes that "[b]ecause of the Keystone Facility's failure to provide NMGC with the full amount NMGC

dynamics, NMGC "ultimately incurred approximately $107 million in extraordinary gas costs over a period of six days."[82]

Turning back to the issues NMGC had with Keystone Storage predating the extraordinary price volatility accompanying Storm Uri and the Commission subsequently authorizing NMGC to recover the extraordinary gas costs in Case No. 21-00095-UT ("*Extraordinary Cost Recovery Case*") and ordering the Company to study and consider gas storage alternatives and report back to the Commission in a subsequent compliance filing, Mr. Bullard identified three problems or issues with the Keystone Storage Facility.

First, according to Mr. Bullard, NMGC cannot always withdraw its maximum 190,000 Mcf/d from the Keystone Facility. Bullard stated that pursuant to its Keystone contract, NMGC's withdrawal capability ratchets down as inventory in the Keystone Facility decreases, and during various months of the year. For example, NMGC's withdrawal capability in the shoulder months of October, November, and March when NMGC's inventory is less than or equal to 1,525,000 Mcf, is limited to 110,000 Mcf/d. In addition to the *force majeure* events detailed in the Company's response to Bench Request No. 1-2, the Keystone Facility has periodically reduced NMGC's ability to withdraw gas through declarations of pro rata reduced withdrawals, or cuts to gas nominated for withdrawal from Keystone. (The cuts identified by NMGC in response to the Hearing Examiner's first bench request are listed in chronological order between April 2013 and February 2022 in NMGC Bench Request Table 1-1 Supplemental.) Bullard asserted that "the

should have been able to withdraw from storage, NMGC was forced to purchase more swing gas than it had anticipated purchasing in order to meet demand and this swing gas was at extraordinarily inflated prices." *Id*.

[82] Bullard Dir. at 20.

contractual limitations and the operational limitations both diminish the ability of NMGC to use the Keystone Facility for which it has contracted to positively impact NMGC's system."[83]

Second, Mr. Bullard explained that NMGC must plan in advance for its storage withdrawals because there is a lag between the time it decides to withdraw gas from the Keystone Facility and when gas starts flowing into NMGC's system.[84] Gas withdrawn from Keystone Storge is delivered to the Company via the interstate pipelines, and as a result, delivery is tied to North American Energy Standards Board (NAESB) scheduling cycles. NAESB has created set schedules for nomination and delivery for day-ahead and same-day gas. These schedules affect and control all gas deliveries on interstate pipelines, including those used to deliver gas to NMGC from the Keystone Facility. As explained in more detail in Mr. Bullard's testimony, given lags that can be as long as 20 hours between nominating day-ahead gas and when gas begins to flow, the delays in gas deliveries can contribute to inefficiencies in the Company's operations.[85]

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[83] *Id*. 16.

[84] *Id*. 17.

[85] *Id*. 17-18. Later in his testimony, Mr. Bullard explains the inefficiencies associated with delivery of gas from the Keystone Facility to NMGC via the interstate pipelines and tied to the NAESB scheduling cycles as follows:

> Orders for LNG storage gas from the Keystone Facility are sometimes subject to approval and control of the facility operator, capacity of the interstate pipelines, and other parties' withdrawal rights. The Keystone Facility can take as short as three hours or as long as 15-20 hours to deliver gas to NMGC following nomination. As a result, when ordering gas from Keystone Storage, NMGC must anticipate well ahead of time what conditions will be like when the nominated gas starts to flow. This lag time between nomination and delivery often affects the efficiency of decisions the Company makes regarding purchases of gas in the day-ahead or same-day markets. This in turn affects decisions regarding levels of line-pack to maintain in the Company's pipes, injections into and out of storage, and often leads to the Company making decisions to over-purchase gas or take gas from storage based on stale information. For the gas supply team, even a few hours can significantly affect information and alter decisions. The speed with which the LNG Facility can put vaporized gas into NMGC's system – as little as one hour – allows NMGC to make more accurate decisions based on more real-time data.

The third issue Mr. Bullard identified is that the costs for storing gas at the Keystone Facility are increasing. Since 2018, the cost of storage at the Keystone Facility has increased 6.2% annually, and this increase is set by contract to continue at least through mid-2027.[86] Bullard indicated that NMGC does not know what prices Kinder Morgan, Inc. will demand for storage at Keystone Facility at the next renewal of these storage contracts.[87]

As noted above, in addition to the three Keystone Storage-specific issues, NMGC had two additional concerns that caused it to evaluate new storage options even before Storm Uri in February 2021. First, according to Mr. Bullard's testimony, the San Juan Basin, from which NMGC procures approximately two-thirds of the Company's baseload gas,[88] has been experiencing declining production for years, and there are fewer sources to obtain pipeline-quality gas from that area. "Thirty years ago," Mr. Bullard noted, "there were three large gas processing plants in the San Juan Basin, and NMGC (and its predecessors) was directly connected to two of those plants. Both of these gas processing plants have closed, and no new plants have been built, leaving only one commercial processing facility in the San Juan Basin. If there were to be a

Bullard Dir. at 69-70. The Hearing Examiner notes here that NMAG witness John Rosenkranz credibly rebuts Mr. Bullard's suggestion that NMGC must wait for gas to physically flow from Keystone Storage to NMGC's gate station with the delivering pipeline before taking gas into its system. *See* NMAG Exh. 2 (Rosenkranz Dir.) at 23-25. As Mr. Rosenkranz concludes after describing the mechanics of day-ahead nomination and intra-day windows, "[t]here is no waiting for gas to flow through the pipe." *Id*. 24. Moreover, given that gas delivered to interstate pipelines becomes part of interchangeable pool, nor does "the contract path from West Texas to New Mexico define the distance or direction that the gas physically flows through the pipe." *Id*. 24-25.

[86] Bullard Dir. at 18.

[87] *Id*.

[88] *See id*. 7 Mr. Bullard said that NMGC purchases the vast majority of its gas from the San Juan Basin in the northwest and the Permian Basin in the southeast. In addition, NMGC is a part owner of the Blanco Hub in San Juan County, NM, which enables NMGC to purchase gas from the Piceance and Green River Basins in Colorado and Wyoming, where gas fields tend to be winterized. Bullard explained the Blanco Hub ownership interest provides NMGC "supply diversity and flexibility in sourcing gas from multiple basins, which allows NMGC to increase supplies from one basin should one of the other basins become constrained." *Id*.

problem at that plant, NMGC might not receive the gas it purchased, and the Company's storage arrangements are important in such an event."[89]

Second, Mr. Bullard said that NMGC is dependent on the interstate pipelines to transport the gas it purchases and gas it receives from the Keystone Facility. In February 2011 and at other times, the interstate pipelines were unable to deliver the gas to NMGC's receipt points for various reasons. As a consequence, NMGC says it has been looking for an on-system storage alternative to reduce NMGC's reliance on interstate pipeline deliveries.[90]

In sum, as Mr. Bullard concluded,

> [f]or all these reasons, even before Winter Storm Uri in February 2021, NMGC was considering a Company controlled on-system storage facility for which NMGC makes decisions as to equipment procurement, equipment maintenance, winterization, staffing and utilization. NMGC would have a different interest in a storage facility than a third-party who is selling storage space to many customers for different purposes. NMGC would prioritize customer reliability and redundancy in operating the LNG Facility.[91]

In addition to the foregoing issues and concerns, Mr. Bullard identified two majors sources of price volatility that the NMGC and its customers have faced during and since Storm Uri: (i) the extreme price volatility and extraordinary additional expense to ratepayers that storms like Storm Uri have caused; and (ii) global economic pressures affecting Permian and San Juan natural gas prices.[92]

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[89] *Id*.

[90] *Id.* 19.

[91] *Id*.

[92] *See id*. 24 ("the demand for natural gas is increasing world-wide and the world is experiencing price volatility in the natural gas markets related to world-wide economic conditions. These global economic pressures are affecting Permian and San Juan prices of natural gas and thereby directly affecting NMGC and its customers. Demand for Permian Basin gas is rising for LNG exports and NMGC is feeling the resulting price

Finally, and perhaps most significantly in terms of motivating NMGC to propose the LNG Facility in this case,[93] Mr. Bullard cites this Commission's reactive mandate in June 2021 that NMGC evaluate additional storage options in the *Extraordinary Cost Recovery Case*. Specifically, as noted in Mr. Bullard's testimony, in addition to authorizing the recovery of extraordinary gas costs, in its June 15, 2021 *Final Order* in Case No. 21-00095-UT, the Commission ordered NMGC to make the following filing:

> N. Within twelve months of the date of this Order, NMGC shall make a filing with the Commission, consistent with the format of its "fresh look" filing in Case 16-00097-UT, evaluating and assessing potential measures, and specifically, increased access to stored gas, including possible NMGC owned or controlled storage facilities, that may be adopted to prevent a reoccurrence of this event [the 2021 Winter Event] and the potential for extraordinary gas expenses and curtailments to customers.[94]

Thus, in short, as Mr. Bullard concluded, the Application in this case "follows from the Company's compliance filing [in the *Extraordinary Cost Recovery Case*] and from the Company's ongoing evaluation of its storage options."[95]

4.1.2. Description of the Proposed LNG Facility

Like the background discussion above, the following description of the LNG Facility is derived largely from the direct testimonies of NMGC witnesses Tom Bullard and Michael A. Barclay, Technical Director for the Lisbon Group LLC ("Lisbon").[96] The Lisbon Group was

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fluctuations. These conditions are exacerbated in a storm situation and therefore applicable to responding to the Commission's June 15 Order to address price volatility issues.").

[93] The provision in the *Final Order* in Case No. 21-00095-UT quoted below led intervenors to observe: "This [the absence of a benefit-cost analysis] begs the question of whether the Company would have proposed an LNG facility absent the Commission's Order in 21-00095-UT, and if it had, whether that hypothetical application would have attempted to quantify the benefits of its proposal." Intervenors' Resp. Br. at 5.

[94] Case No. 21-00095-UT, *Final Order* (NMPRC 5/15/2021), at 39, ¶ N.

[95] Bullard Dir. at 23.

[96] NMGC Exh. 5 (Barclay Dir.) at 2.

engaged by the Company to provide Owner's Engineer (OE) services in the development of a proposed LNG peak shaving plant.[97] Mr. Barclay addresses the work involved in developing the preliminary front-end engineering design ("pre-FEED") report prepared by the Lisbon Group.[98] The pre-FEED report is attached to Mr. Bullard's direct testimony as NMGC Exhibit TCB-3.

An LNG peak shaving plant such as the proposed LNG Facility stores natural gas as a liquid. LNG is natural gas that has been "liquefied," or cooled to a liquid state at -260 degrees Fahrenheit, to reduce the specific volume and allow it to be more easily transported or stored. Approximately 600 standard cubic feet of natural gas occupies 1 cubic foot in the liquid form, meaning the volume for natural gas is approximately 600 times smaller than its volume in a gaseous state. The LNG Facility will take gas off the NMGC system, pretreat the gas, and cool it to a liquid form in a process called liquefaction.[99] It will be stored as a liquid in the LNG tank until it is needed to meet customer demand. When needed, the liquid natural gas will be warmed to a gaseous state through the process of vaporization and reintroduced into the Company's system for delivery to customers.[100]

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[97] Bullard Dir. at 5.

[98] *Id*. 5-6.

[99] "**Liquefaction**," according to the pre-FEED report, "consists of the separators, heat exchangers, controls and instruments, valving, piping, and ancillary devices required to cool, condense, and otherwise process the treated natural gas stream into an LNG stream suitable for storage in the LNG Storage Tank. It is fully integrated with Refrigeration and typically supplied by the same vendor." Bullard Dir. at Exhibit TCB-3 (pre-FEED report), p. 9 of 22 (emphasis in original).

[100] *Id*. 44.

These three processes or modes – liquefaction, storage (or holding), and vaporization – comprise the main characteristics or operating modes of the LNG Facility.[101] Diagrams and descriptions of the three LNG operating modes are presented in Appendix C to this decision.

Liquefaction. The liquefaction equipment at the LNG Facility will take natural gas from NMGC's system and run that gas through pre-treatment and cooling equipment until the gas cools to -260 degrees Fahrenheit and changes into a liquid. The liquefaction equipment will be able to liquefy 10,000 Mcf/d of gas and inject the resulting LNG directly into the storage tank. Additionally, the LNG Facility will contain a single bay with a scale for loading or unloading LNG trailers which can be used to deliver LNG to the facility to supplement the 10,000 Mcf/d liquefaction rate if necessary or used to take LNG from the facility for pipeline maintenance and inspection, or outage management.[102]

Storage. Once liquefied, the LNG will be stored at near atmospheric pressure in a 1 Bcf (~12 million net gallons) double-walled and insulated storage system designed to hold the LNG. The LNG tank is comprised of a self-supporting inner tank, comprised of 9% nickel steel, and surrounded by an outer tank made of either carbon steel or pre-stressed concrete (to be determined later by the EPC). The space between the inner and outer tank walls is filled with insulation to help maintain the internal temperature necessary to hold the LNG. NMGC anticipates the outside of the tank will be painted a light color, possibly white, to reflect solar heat gain. The tank will be no more than 100 feet high, with a diameter of between 186 and 204 feet. Figures showing the

[101] Barclay Dir. at 17.

[102] Bullard Dir. at 45.

placement of the tank and other equipment in the 20 to 25 acre developed LNG project site are included in Appendix D.[103]

Vaporization. When called for, the vaporization equipment at the LNG Facility will pump LNG out of the storage tank to be warmed to a gaseous state for reintroduction into the NMGC system. As proposed, there will be three Shell & Tube Vaporizer (STV) pumps,[104] with each pump being capable of sending up to a maximum of 65,000 Mcf/d to heat exchangers that vaporize LNG to a gaseous state.[105] The maximum vaporization rate if all three pumps are working at the same time will be 195,000 Mcf/d, although NMGC anticipates that for the vast majority of the time all three pumps will not run at maximum capacity but instead only two pumps will operate, with a third in reserve, allowing vaporization at a rate of 130,000 Mcf/d.[106]

At a maximum vaporization rate of 195,000 Mcf/d, the LNG Facility will have a slightly higher maximum delivery rate than what NMGC contracts for at the Keystone Facility. Given the

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[103] *Id*. 45-46.

[104] "Matching the arrangement of the LNG pumps, 3 x 65 MMscfd STV are included to support reliable vaporization capacity of 195 MMscfd with all three vaporization pumps operational." Bullard Dir. at Exhibit TCB-3 (pre-FEED report), p. 10 of 22.

[105] The vaporizer heating media supplying the warm-water glycol heating media to the STV vaporizers

> consists of a gas fired water-glycol heater (often referred to a boiler) as well as glycol-water circulation pumps. The Vaporizer Heating Media systems are located in a building remote away from the LNG and hydrocarbon processing areas and the glycol is circulated via insulated carbon steel lines to / from the Vaporizer area.
>
> The Vaporizer Heating Media pumps and fired heaters match the arrangement of the LNG pumps and STV vaporizers with a 3 x 65 MMscfd arrangement designed for vaporization capacity of 195 MMscfd with all sets of equipment running. Note that any LNG pump can operate with any STV and any water-glycol heater arrangement for operational flexibility and high reliability.

Bullard Dir. at Exhibit TCB-3 (pre-FEED report), p. 10 of 22.

[106] Bullard Dir. at 46.

size of the tank, this will allow for approximately five days of full capacity vaporization. "This is longer," NMGC witness Tom Bullard points out, "than any previous supply disruption that NMGC has experienced."[107] At 130,000 Mcf/d delivery, NMGC can provide more than seven continuous days of gas. NMGC can operate just one pump if needed or can run the pumps at less than full speed. Mr. Bullard noted this would allow for multiple variations of vaporization for various periods of time.[108]

How NMGC determined the operational characteristics of the LNG Facility is discussed under Section 4.3 below.

The LNG Facility will be engineered to switch from vaporization to liquefaction within an 8-hour shift, according to Mr. Bullard. Typically, Bullard added, NMGC should be able to liquefy 6,500 Mcf to 10,000 Mcf into the LNG Facility on any given day as necessary. NMGC anticipates that in an average winter month it will be in a position to liquefy during 12-18 days of that month, meaning NMGC might liquefy between 78,000 and 180,000 Mcf/month into the LNG Facility during each winter month. Assuming NMGC starts with 900,000 Mcf in the LNG Facility on November 1st and liquefies an average of 120,000 Mcf each month between November and March inclusive, Mr. Bullard estimates that NMGC could have access to approximately 1.5 Bcf of LNG throughout the winter.[109]

NMGC acknowledges that, like "[a]ll industrial developments," the LNG Facility will "have some impact on the environment."[110] NMGC witness Barclay focused his study of

[107] *Id*.

[108] *Id*.

[109] Bullard Dir. at 77.

[110] Barclay Dir. at 24.

environmental impacts on facility emissions. Mr. Barclay said that NMGC asked the Lisbon Group "to align with best industry practice to allow it to become a useful part of gas infrastructure increasing cost-effective, reliable gas supply to New Mexico while also being a steward to the environment where possible."[111] Barclay states that the LNG Facility will have the following environmental impacts:

- The LNG Facility is situated within a 160-acre plot of land in Rio Rancho, New Mexico. This development will be visible during the day and at night with site lighting and navigational lights similar to other energy infrastructure projects.

- The LNG Facility will have a direct fired regeneration gas heater that uses fuel gas and emits some exhaust gasses. This has been specified with low nitrous-oxide and carbon monoxide emission and will be addressed in the air permit.

- The LNG Facility will have three direct-fired Water-Glycol heaters associated with the vaporization that combust fuel gas and emit exhaust gasses. These will be specified with air emission limits and will be addressed in the air permit.

- The LNG Facility has an essential gas generator that is fueled by natural gas and a firewater pump that is fueled by diesel that will be periodically tested in accordance with NFPA 59a and 49 CFR Part 193 requirements. These have emissions to air associated with stationary engines used for emergency purposes.

- The LNG Facility will have heaters and vaporizer heaters which will use natural gas, and thus emit carbon dioxide.

[111] *Id*.

- The LNG Facility adds roads, concrete, and other improved surfaces and modifies stormwater collection and drainage on the site. This will be reflected in site civil design and permitted according to statutory requirements. Measures are taken throughout the LNG Facility initial design to prevent the inadvertent discharge of chemicals, such as glycol used as a heating media in the vaporizers from entering the stormwater management system. Industry standard measures to prevent soil contamination or release to the environment of oils (lubrication for compressors), glycols (heating media), fuels (diesel for firewater pump), and other chemicals present on-site will be taken. Impoundment and secondary impoundment areas affecting surface water drainage will include standard measures to prevent discharge of contaminated stormwater to the environment.

- The LNG Facility, similar to compressor stations or power plants, will emit some noise, particularly when operating in liquefaction mode with all coolers and compression operational and flow through the pipes. Noise studies will be conducted in subsequent engineering phases, compressors are located in buildings to help with noise attenuation, and noise intensity levels fall within acceptable levels.[112]

Further, Mr. Barclay emphasized that the LNG Facility will be a "closed" system with no normal venting of hydrocarbons into the atmosphere.[113] Barclay noted that the LNG Facility will not have a common vent system or a flare and will not normally emit any uncombusted hydrocarbons into the atmosphere.[114] In other words, consistent with the Facility's design, natural gas will enter the storage area and then will be returned to NMGC's system when needed without

[112] *Id*. 24-26.

[113] *Id*. 26.

[114] *Id*.

venting natural gas.[115] Nevertheless, Mr. Barclay acknowledges that there may be some fugitive emissions – small releases from connection points and fittings, valves and instruments, and items like compressor seals – but claims such emissions will be "small releases."[116] Barclay states that the LNG Facility design attempts to minimize such releases. Additionally, because the Facility will be subject to the Protecting Our Infrastructure of Pipelines and Enhancing Safety (PIPES) Act of 2020,[117] NMGC must have a leak detection and repair program in place to monitor for leaks and repair them as soon as possible to minimize any fugitive emissions.[118]

In his rebuttal testimony, responding to environmental concerns expressed by certain Intervenors, Mr. Barclay addresses the Company's anticipated amounts of CO_2 emissions, explains how the Facility's design addresses environmental issues, how the design considers environmental impacts, how and when excess gas may need to be flared or vented, and discusses why NMGC won't be able to estimate yearly emissions more precisely until the LNG Facility is built and in operation.[119]

Finally, addressing the significant decisions about the LNG Facility that remain to be determined, Mr. Barclay observed that

> [a]s the project moves into the FEED and construction stages, some engineering and design alterations are inevitable. Typical upcoming design decisions will include selection of equipment types and vendors, tuning capacity around specific commercially available hardware where appropriate, detailed line sizing and

[115] NMGC Br. at 47.

[116] Barclay Dir. at 26.

[117] PL 116-260, 134 Stat 1182 (12/27/2020).

[118] *Id*.; NMGC Exh. 6 (Barclay Reb.) at 3.

[119] *See* Barclay Reb. at 19-24.

> insulation thickness as design is refined, and layout refinement based on more detailed survey and additional geotechnical boreholes.[120]

Mr. Barclay emphasized that the foregoing presently unknown elements of the LNG project "are very normal in a project of this magnitude."[121] However, "the key decisions," including "site location, LNG liquefaction technology, storage technology and pre-treatment technology," Barclay concluded, "are not anticipated to change."[122] Missing from the Application, however, is a detailed plan detailing how the LNG Facility would be operated on a day-to-day basis and in differing situations and conditions.[123] The absence of such an operating plan is material and relevant to the Hearing Examiner's determination on the merits, as will be seen in succeeding sections of this decision.

NMGC's projected capital cost for the proposed LNG Facility is $181 million, with a "contingency" or CAPEX range of accuracy of -20% to +25%.[124] Estimated annual O&M costs are approximately in the ranges of $4.7 to $5.3 million per year.[125] All costs are based on 2022 dollars and then inflated over a 30-year period in NMGC's financial model.[126] Maintenance costs comprise approximately 36.2% of the projected annual O&M costs, while salaries and wages account for approximately 31.5% of the projected operating costs. The remaining O&M costs are electricity and fuel.[127]

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[120] Barclay Dir. at 27.

[121] *Id*.

[122] *Id*.

[123] *See* Intervenors' Resp. Br. at 3, 6,

[124] Bullard Dir. at 55, Exh. TCB-4, pp. 9, 22 of 28.

[125] *Id*. 55.

[126] NMAG Exh. 1 (Crane Dir.) at 14.

[127] *Id*.

If the Commission approves NMGC's Application, NMGC would build the LNG Facility with the aim of filling it in the summer and fall of 2026 and becoming operational prior to or during the 2026-2027 winter heating season. NMGC would continue to use the Keystone Facility as it transitions all storage operations to the LNG Facility, a transition that may take between one to three years to complete.[128]

4.2. Review of NMGC's Analysis of Alternatives

Guided by the governing legal standard for a CCN, the Commission must determine whether NMGC reasonably evaluated feasible alternatives to the LNG Storage Facility. In its introduction surveying the history of the analysis culminating in the filing of the Application in this case, NMGC begins by noting that the Company and its customers have experienced supply disruptions and extraordinary price volatility over the last thirteen years, which has resulted in the curtailment of customers, as well as increased customer bills. NMGC avers that it has conducted a thorough, multi-year analysis of reasonable options that it could take to address these issues. "The result of the analysis," NMGC submits, "was that an LNG storage facility would provide the best balance between improved supply reliability and cost to customers."[129] NMGC claims that its analysis of feasible alternatives "included consideration and elimination of many potential options over the years."[130]

Intervenors generally criticize NMGC's evaluation process and specifically contest various aspects of the evaluation process. First, emphasizing the extended period of time over which NMGC says it conducted the analyses and the potential for stale information included in the

[128] Bullard Dir. at 3.

[129] NMGC Br. at 4.

[130] NMGC Br. at 6.

analyses presented in this case, Intervenors take issue with NMGC's above-quoted claims that it conducted "a thorough, multi-year analysis of reasonable options" to address "supple disruptions and extraordinary price volatility *over the last thirteen years*[,]" and the Company's "consideration and elimination of many potential options *over the years*."[131] These statements alone, Intervenors suggest, begs the question of the extent to which the information relied upon by NMGC in reaching its decision to propose the LNG facility (and upon which NMGC is asking the Commission to rely on to approve the CCN for the LNG Facility) is contemporaneous, citing in support the recent *Recommended Decision* in Case No. 22-00270-UT, the *PNM Rate Case* wherein the Hearing Examiners repeatedly stressed the role and importance of information and documentation that is reasonably contemporaneous to the utility's resource decision in finding PNM acted imprudently in extending its participation in the Four Corners Power Plant beyond June 30, 2016.[132]

Focusing, first, on NMGC's purported need to address "supply disruptions" and prevent curtailments like the 2011 event, Intervenors maintain the problems have been already addressed by the infrastructure improvements approved for that purpose in the *Fresh Look Solutions Case*, docket 16-00097-UT discussed above.[133] Focusing, next, on options available to NMGC to address "extraordinary price volatility," Intervenors contend that NMGC's presentation of evidence demonstrates that its analysis was not sufficiently thorough or transparent for the Commission to conclude that the LNG facility is the most feasible cost-effective alternative to

[131] Intervenors' Resp. Br. at 8 (quoting NMGC Br. at 4, 6) (emphasis added).

[132] *Id*. (citing Case No. 22-00270-UT, *Recommended Decision* (NMPRC 12/8/2023), at 41-155, approved in *Final Order* (NMPRC 01/03/2024).

[133] *Id*. 2-3, 8. See *supra* n. 71 and accompanying text (regarding *Fresh Look Solutions Case*).

Keystone or that it would result in price spike mitigation as the Commission required in the *Extraordinary Cost Recovery Case*, docket 21-00095-UT.[134]

The alternatives that NMGC evaluated, Intervenors' criticisms, and the Hearing Examiner's determinations where alternatives are disputed proceeds as follows.

However, one significant evidentiary issue should be highlighted and dispensed with before discussing NMGC's evaluation of alternatives. Intervenors correctly note in their Response Brief that NMGC relies primarily on their Compliance Filing in the *Extraordinary Cost Recovery Case*, 21-00095-UT (discussed above) for proof of their evaluation of contractual changes for gas supply and hedging, wherein the prudence and reasonableness of their contracting, hedging and supply practices were at issue.[135] Intervenors description of the *Extraordinary Cost Recovery Case* is accurate. In that case, NMGC had the burden of proving the extraordinary costs it incurred in February 2021 during Storm Uri were reasonably and prudently incurred. If the Commission wasn't undertaking a prudence review in that case – and it certainly was as it does and must in all general and piecemeal ratemaking proceedings – NMGC wouldn't have been asserting in that proceeding that "its actions to ensure gas utility service to customers in the middle of a winter storm at prices similar to those of similarly situated utilities in New Mexico were prudent and reasonable."[136]

Intervenors thus posit, persuasively, that it would have been against NMGC's interest to seek and identify improvements, let alone critically evaluate, its gas supply and hedging practices when that docket was initiated at the Company's request for approval of a mechanism to recover

[134] *Id*. 8-9.

[135] Intervenors' Resp. Br. at 9.

[136] Case No. 21-00095-UT, *Final Order*, at 11 (citing NMGC Application, at 16-17).

and finance the extraordinary gas costs incurred during Storm Uri in 2021.[137] Additionally, the Compliance Filing was filed on March 31, 2022, *after* the Commission's issuance of the *Final Order* in Case No. 21-00095-UT and subsequently was not subjected to cross-examination in any hearing. As a consequence, the Hearing Examiner agrees that the purpose and orientation of the *Extraordinary Cost Recovery Case* casts a negative light, at least as far as this case is concerned, on the competence and trustworthiness of the Compliance Filing and Mr. Bullard's unexamined testimony. What's worse, as Intervenors also point out, although NMGC failed to request that administrative notice be taken of the Compliance Filing and the untested Bullard testimony pursuant to 1.2.2.35(D)(1)(d) NMAC,[138] the Company nonetheless proceeds to cite the Bullard testimony submitted with the Compliance Filing some *thirty-one* times in footnotes to its brief-in-chief and repeats the troublingly improper practice once in its Response Brief. Accordingly, the Commission should treat the vast majority of the citations to Mr. Bullard's testimony submitted in the *Extraordinary Gas Cost Recovery Case* as if they were stricken from NMGC's post-hearing briefs;[139] the Hearing Examiner, thus, ignores the improper references in this decision, with certain limited exceptions.[140]

[137] Intervenors' Resp. Br. at 9.

[138] *Id*. 9 n. 40.

[139] *See, e.g., Kepler v. Slade*, 1995-NMSC-035, ¶ 13, 119 N.M. 802, 896 P.2d 482 ("'Matters outside the record present no issue for review.'") (citing *State v. Smith*, 1979-NMSC-020, ¶ 3, 92 N.M. 533, 591 P.2d 664).

[140] The exceptions to this ruling striking citations to the Bullard Compliance Filing testimony entail those references in testimony admitted as evidence *in this case* to Mr. Bullard's Compliance Filing testimony. *See, e.g.*, NMGC Br. at 14, nn. 59, 61, 63 (NMGC Exh. 3 (Reed Dir.) at 63, *citing* Case No. 21-00095-UT, Dir. Test. of Tom C. Bullard). Also excepted from the ruling is NEE's reference in its brief-in-chief to the Bullard Compliance Filing testimony. *See* NEE Br. at 49, nn. 245, 246 (citing Case No. 21-00095-UT, Bullard Compliance Filing Test. at 28-30).

The first few options NMGC reviews in its brief-in-chief (supply contract changes, hedging options, and new supply points) rely heavily, if not almost exclusively, for evidentiary support on serial citations to NMGC witness Bullard's Compliance Filing testimony in the *Extraordinary Cost Recovery Case*. Unfortunately, given the Hearing Examiner's ruling that those citations were inappropriate for the reasons stated above, NMGC's evidentiary foundation for proving the reasonableness of its evaluations of the first few options is undermined considerably.

4.2.1. Evaluation of Contractual, Hedging, and New Supply Point Options

4.2.1.1. Gas Supply Contract Options

In its brief-in-chief, NMGC states that the Company evaluated its baseload and swing gas acquisition policies to determine whether raising the level of baseload gas retained on the system could in turn reduce the amount of gas NMGC would have to purchase in the daily market during any winter event and thus potentially reduce the susceptibility of the Company to prices influenced by a winter pricing event.[141] Prior to that review, NMGC contracted for approximately 70% of the average throughput in the winter months. NMGC determined that this level of baseload gas was "the best balance of the level of gas on the system, the system's need, the cost of hedging the baseload, the availability and cost of swing (daily) gas in normal winter, and the availability and cost of swing gas in an extreme winter event to cost-effectively protect the customer."[142]

In reviewing whether 70% was still an appropriate level of baseload gas, NMGC states that the Company considered that increasing the amount of baseload gas could potentially reduce reliance on the daily market and provide greater price protection through the existing hedging program. However, NMGC said this would be very expensive and not efficient during normal

[141] NMGC Br. at 6.

[142] *Id*. (citing Bullard Dir. at 28-29).

weather because increasing the amount of baseload gas would increase the amount of gas that the Company hedges and, therefore, increase the cost of the hedging program.[143] In addition, NMGC noted that "overbuying" baseload gas would require NMGC to sell excess baseload gas into the market or operate its storage with lower inventory levels in order to regularly inject excess baseload gas.[144] After this review, quoting Mr. Bullard's testimony in the *Extraordinary Cost Recovery Case*, "NMGC consider[ed] that it currently arranges for an appropriate level of baseload purchases to balance costs with business operations, and that contracting for more baseload gas on an annual basis will not efficiently allow the Company to mitigate the effects of periodic and unpredictable extraordinary winter events."[145]

Intervenors point out that while Mr. Bullard indicated the Company looked at baseload percentages above and below the 70% level, no detail whatsoever is provided to assure the Commission that NMGC's examination was rigorous and that 70% strikes the appropriate balance in relation to the benefits and costs of the LNG Facility.[146]

The Hearing Examiner agrees with the Intervenors that the paucity of detail NMGC provided respecting its gas supply analysis is a deficiency in the Application. Moreover, the limited information that was provided – mostly from a filing made March 31, 2022 in the *Extraordinary Cost Recovery Case* – was stale and out-of-date.[147] Therefore, the Hearing Examiner finds that NMGC failed to lay a sufficiently detailed and contemporaneous evidentiary

[143] *Id*. 6-7.

[144] *Id*. 7.

[145] *Id*. (citing Bullard Dir. at 29).

[146] Intervenors' Resp. Br. at 10.

[147] *See, e.g.*, Bullard Dir. 28-29 (partially restating, sometimes almost verbatim, Mr. Bullard's testimony attached to NMGC's Compliance Filing in Case No. 21-00095-UT, at 6-9).

foundation to support the Company's evaluation of its baseload and swing gas acquisition policies.[148] In short, NMGC's evaluation of gas supply contract options – failing to show that the Company systematically considered a broad array of contemporary information and data – was unreasonable. This issue is touched on again below in addressing NMGC's failure to perform a comprehensive evaluation its gas supply, transportation, storage portfolio, hedging strategies, and purchasing practices in Section 4.4.4.

4.2.1.2. Hedging Strategy Changes

Relying heavily, again, on its Compliance Filing in Case No. 21-00095-UT, NMGC states that the Company reviewed its hedging programs to explore whether changes could be made to its financial call options to hedge swing gas.[149] As part of the hedging review, NMGC witness Bullard explained that the Company contacted a significant swing gas provider to see if it was possible to purchase financial hedges on swing gas to provide additional price protection for the Company.[150] NMGC learned that "[t]he cost to hedge this contracted for swing gas volume would be over $100 million a year given the current market."[151] NMGC thus concluded that "[t]he infrequency and unpredictability of extraordinary weather events means that the incurrence of the extraordinary

[148] *See* Case No. 22-00270-UT, *Recommended Decision*, at 40-41 (discussing the Washington Utilities and Transportation Commission's (WUTC) determination in its 2016 Final Order in Docket UE-152253 that Pacific Power failed to update its analysis before greenlighting the installation of Selective Catalytic Reduction pollution control equipment at the Jim Bridger coal-fired power plant and further failed to provide supporting documentation of a contemporaneous assessment. *See Washington Utilities and Trans. Comm'n v. Pacific Power & Light Company,* Docket UE-152253, Order 12 (*Final Order*, Redacted Version) at 25, 38, 40, 332 P.U.R. 4th 1, 2016 WL 7245476 (WUTC 9/01/2016) ("*WUTC Pacific Power Order*").

[149] *See* NMGC Br. at 7-8.

[150] NMGC Br. at 7 (Bullard Dir. at 30).

[151] *Id*. (citing Bullard Dir. at 30).

costs discussed above would pay off infrequently and is not a prudent cost for the customer to bear regularly."[152]

At the hearing in this case, Mr. Bullard further elaborated that the Company has explored hedging swing gas volumes over the winter months "on a number of occasions, and it was prohibitively expensive."[153] He testified that in addition to looking at hedging the entire amount of swing gas:

> Then we looked at a subset of that, and it's still prohibitively expensive and you get a very small amount. You don't get to hedge all of it, you hedge a much smaller amount, but it still didn't make sense, especially compared to, say, LNG. To hedge a small volume was more than the differential in the Revenue Requirement for the LNG.
>
> In fact, just this past week we reached out again, because this week is cold. We saw this cold weather coming in and we started to see some price volatility over the weekend. We saw price spikes from, you know, $4 and $5, into the $10 and $15 range.
>
> Again, we reached out to see if it is possible to just get a price collar on the amounts of gas we were buying for the week, and we had one respond who said no, we could not do that. The other three we reached out to didn't even respond. It is either very expensive or not available has been our experience.[154]

NMGC witness Reed seconded the Company's conclusion, explaining that "under common gas procurement activities, hedging swing gas in large quantities is either extremely expensive, or more likely, not available in the marketplace" and "there is no evidence to suggest that such contractual arrangements existed in New Mexico at the time of winter storm Uri, nor do they exist

[152] *Id.* 7-8 (citing Bullard Dir. at 30).

[153] *Id*. 8 (citing Tr. (Vol. 1) 169 (Bullard)).

[154] *Id*. (citing Tr. (Vol. 1) 170 (Bullard)).

today."[155] Based on this evaluation, NMGC concluded that it is not reasonable to enter into a program to hedge its swing gas.[156]

Like the Company's gas supply contract evaluation found wanting for lack of supporting, contemporaneous detail, Intervenors contend that NMGC's attempt to validate the Company's review of the potential to hedge swing gas raises similar concerns because the information NMGC provided is not sufficient to assure the Commission that the Company's examination of this option was timely, rigorous, and complete. Intervenors point to, for example, Mr. Bullard's testimony on the topic in this case, which simply restates his testimony in their 21-00095-UT Compliance Filing (stricken, for the most part, from this record as ruled above) that the Company contacted a "significant swing gas provider."[157] At the hearing, Intervenors note that Mr. Bullard testified that the provider was ConocoPhillips, an NMGC supplier with an interest in selling high-priced gas to NMGC, and that NMGC has since spoken to at least two other suppliers (although these later contacts are not documented in the case record).[158] Intervenors further note that at the hearing Mr. Bullard indicated that the Company, starting to see some price volatility during cold weather that was coming in, "reached out" again to see if they could just get a "price collar" with one "no" response and several non-responses.[159] This anecdotal information, Intervenors point out, was included in NMGC's brief-in-chief.[160] However, Intervenors point out, Mr. Bullard admitted at the hearing that NMGC has not hired an investment bank or financial advisor to perform an

[155] *Id*. (citing NMGC Exh. 4 (Reed Reb.) at 22).

[156] *Id*. (citing Bullard Dir. at 30-31).

[157] Intervenors' Resp. Br. at 11 (citing Bullard Dir. at 29-31).

[158] *Id*. (citing Tr. (Vol. 1) 171-72 (Bullard)).

[159] *Id.* (citing Tr. (Vol. 1) 170 (Bullard)).

[160] *Id*. (citing NMGC Br. at 8).

analysis of different hedging strategies for their swing gas volumes "despite the fact," Intervenors assert, "that call options from big trading desks and financial institutions like Morgan Stanley and Goldman Sachs have been very successful baseload gas hedging strategies."[161] Essentially, Intervenors conclude, Mr. Bullard testified that "[a] couple years ago, and I forget exactly when, but we looked at hedging to swing volumes over the winter months and it was very expensive."[162]

"All this discussion," Intervenors conclude, "amounts to no other conclusion than that the Company's analysis of options to address extraordinary price volatility has not been 'thorough.'"[163] Intervenors thus recommend that before the Commission considers approval of the LNG facility, "a truly thorough independent examination of NMGC's contractual options should be conducted, including but not limited to supplier default provisions, weather derivatives, hedging combinations, and 'park and loan' services available from Keystone."[164]

The Hearing Examiner concurs with the Intervenors with regard to NMGC's rather perfunctory showing on hedging strategy alternatives. NMGC's analysis of hedging options relies on stale anecdotal information[165] and thus lacks contemporaneous evidentiary support. NMGC's hedging strategy evaluation therefore cannot be accepted by the Commission as a reasonably

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[161] *Id*. (citing Tr. (Vol. 1) 168, 173 (Bullard)).

[162] *Id.* (citing Tr. (Vol. 1) 169 (Bullard)).

[163] *Id*. 12.

[164] Intervenors' Resp. Br. at 11. Intervenors note that according to *Unocal Keystone Gas Storage, LLC*, 2005 WL 3445806, FERC Docket No. PR05-19-000, *Order Accepting Filing and Rejecting Request for Waiver* (12/15/2005), Keystone Gas Storage offers "storage, park and loan, and interruptible wheeling services." *Id*. n. 53. The FERC Order was issued in 2005. Whether Keystone Storage presently offers park and loan services is not clear from the record. In this case, Mr. Bullard testified that park-and-loan services were available on only one interstate pipeline for a small amount of gas and dependent on that pipeline's availability. Tr. (Vol. 1) 242-43) (Bullard).

[165] *See, e.g.*, Bullard Dir. at 29-30 (Hedging program was evaluated *three years ago* "following the 2021 Winter Event" and in that review "NMGC contacted a significant swing gas provider . . . .").

thorough, much less sophisticated, financial institution level evaluation of this option.[166] Again, since hedging practices are part of a broader array of options NMGC should have, but failed to, evaluate in a systematic fashion, this issue is touched on again below in Section 4.4.4.

4.2.1.3. Addition of New Supply Points

NMGC states that it also considered the addition of new sources of supply to its gas portfolio.[167] As already noted, New Mexico contains two significant natural gas production basins that NMGC primarily relies on for its gas: 1) the San Juan Basin in the northwest, and 2) the Permian Basin in the southeast.[168] After the 2011 curtailment, the Company further diversified its portfolio and acquired access to new supply resources in the Piceance Basin in northwestern Colorado and the Green River Basin in southwest Wyoming.[169] NMGC has used these diversified supplies, including in 2021, and they allowed the Company access to greater weatherized supply. "However," Mr. Bullard cautioned in his Compliance Filing testimony, use of these resources on their own was not able to alleviate the prices spikes observed in 2021 because virtually all gas in the region was incurring price spikes of some note."[170]

NMGC explains that, given the contracts and interconnects the Company already has with major suppliers and interstate pipelines in the region, any additional interconnects would have to

[166] *See, e.g.*, Case No. 22-00270-UT, *Recommended Decision*, at 104 (finding PNM's failure to update Strategist analyses between May 2012 and October 2013 was imprudent), 107 (finding PNM was imprudent in failing to conduct updated analyses of the cost-effectiveness of extending its participation in the Four Corners Power Plant), 127 ("A reasonable utility, when faced with a net liability of $27.9 million, and given the increasing pressures on coal plants at the time, would at least have updated its analysis prior to deciding to extend the coal supply agreement, or would have elected to exit Four Corners.").

[167] NMGC Br. at 9-10.

[168] NMGC. Br. at 9 (citing Bullard Dir. at 7).

[169] *Id*.

[170] *Id*.

be completely new sources in order for NMGC to benefit.[171] However, even with access to new supply resources, NMGC believes it would be subject to the same price swings it currently experiences due to having to buy gas on the market. NMGC points out that this would also still require dependence on third-party suppliers and interstate pipelines to deliver gas when it is needed.[172] Therefore, NMGC concluded that there are no additional supply sources in close enough proximity to provide value,[173] additional sources of gas, in addition to those already arranged, will not provide the type of "storage" the Commission is asking the Company to consider,[174] and given market price increases observed in February 2021, additional supply sources will not be beneficial to prevent a reoccurrence of the 2021 Winter Event and the potential for extraordinary gas expenses and curtailments to customers.[175]

Like the gas supply contract and hedging options, NMGC's review of the Company's consideration of new supply points relies on citations to the Bullard Compliance Filing testimony that the Commission should not credit for the reasons set forth above. While NEE argues that NMGC might achieve redundancy by strengthening or introducing access to alternative load paths, NEE provides no evidentiary support or explanation for its claims.[176] No other party specifically addressed NMGC's evaluation of adding supply points as an option.

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[171] *Id*.

[172] *Id*.

[173] *Id*.

[174] *Id*. 9-10 (citing Bullard Dir. at 40).

[175] *Id*. (citing Bullard Dir. at 40).

[176] NMGC Resp. at Br. 14.

4.2.2. Evaluation of Options to Reduce Customer Demand

4.2.2.1. Energy Efficiency

Next, NMGC states that it evaluated whether it could take any action to manage demand through its energy efficiency program and thereby reduce the amount of gas needed during severe storms.[177] NMGC points out that its three-year energy efficiency action plan (in Case No. 22-00232-UT) was approved for implementation beginning April 1, 2023.[178] NMGC says that it significantly increased its annual energy efficiency budget to approximately $15 million, consistent with recent legislation that allows utilities to increase energy efficiency program cost caps for gas utilities, to no more than 5% of customer bills.[179] NMGC notes that the approved plan increases the projected savings by 200%, with an estimated net savings of 4.5 million therms annually. NMGC adds that the plan includes a variety of programs and measures to assist customers in reducing their usage.[180]

NMGC asserts that further expansion of the Company's energy efficiency programs is inadequate to significantly reduce demand or to impact NMGC gas supply needs. NMGC gives three reasons in support of this position. First, NMGC says that energy efficiency programs are not primarily intended to reduce peak demand by customers for natural gas. Rather, in NMGC's view, energy efficiency programs are meant to help individual customers save energy and reduce energy bills.[181] Second, as already indicated, NMGC significantly increased its annual energy

[177] *See* NMGC Br. at 10-11.

[178] *Id*. 10 (citing Bullard Reb. at 53).

[179] *Id*. (citing Reed Dir. at 27).

[180] *Id*. (citing Bullard Reb. at 53-54).

[181] *Id*. 10-11 (citing Bullard Reb. at 54).

efficiency budget and the projected savings of the plan. With these enhancements, NMGC expects customers to save approximately 453,000 Dekatherms (Dth)[182] annually from its energy efficiency programs, which translates to an average of approximately 1,240 Dth/day.[183] NMGC notes that this is only a small fraction of the deliverability of the LNG Facility of 195,000 Mcf or 195 MMscf/d.[184] In short, NMGC concludes that even with its robust energy efficiency programs, NMGC cannot shed enough load to make a difference during severe weather.[185] Third, NMGC maintains that its energy efficiency program is already close to the statutory limits in New Mexico for such programs, as NMGC's latest approved energy efficiency program budget is approximately 91% of available statutory limits.[186] NMGC thus reasons that it cannot be required to increase its energy efficiency programs above the statutory limits of the Public Utility Act, and even if it could it would not have enough impact to eliminate the need for on-system LNG.[187]

Because CCAE recommends that instead of investing in the LNG facility, the Commission require NMGC to invest in, among other things, energy efficiency programs and demand response programs,[188] CCAE's position is addressed after the next section addressing demand-side measures.

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[182] By way of reference, NMGC notes that a Dth is a unit of energy equal to one million British Thermal Units (MMBtu), whereas an Mcf is a measure of volume equal to 1,000 cubic feet. By way of comparison, 0 MMscf = 10,000 Mcf ≈ 10,000 MMBtu = 10,000 Dth. 1 Bcf = 1,000 MMscf or 1 million Mcf. NMGC Br. at 11 n. 39.

[183] *Id*. 11.

[184] *Id*. (citing Reed Dir. at 27).

[185] *Id*.

[186] *Id*. (citing Bullard Reb. at 54).

[187] *Id*.

[188] *See* CCAE Br. at 15.

4.2.2.2. Demand-Side Management Measures

NMGC states that it also evaluated whether it could manage customer demand through a demand response program.[189] However, as acknowledged by NMAG witness John A. Rosenkranz, principal of North Side Energy, LLC, "NMGC has not identified any demand-side management measures that would significantly reduce gas use during peak periods, or during a market disruption event."[190] NMGC says Mr. Rosenkranz's finding is true because the Company does not have a realistic customer base for interruptible customer service. NMGC is a winter heating load utility with over 99% of its customers being residential and small business heating customers.[191] NMGC notes that it has few large customer facilities with dual fuel-use options to approach with demand response proposals to effect substantial load reductions.[192] Typically, NMGC expounds, demand response programs are effective at utilities, like National Grid, with significant large commercial or industrial loads and customers who can be incentivized to participate in such programs and who are able to either operate on an alternative fuel or cease operations. Those circumstances, NMGC submits, are not present on the Company's system.[193]

NMGC notes, moreover, that the Company does not have advanced metering infrastructure that would allow it to direct a demand response program.[194] Finally, NMGC states that the Company already makes efforts to reach out to customers to encourage gas conservation during constrained periods. However, given the customer base, NMGC says it finds it difficult to

[189] *See* NMGC Br. at 11-12.

[190] NMGC Br. at 11 (quoting NMAG Exh. 2 (Rosenkranz Dir.) at 26).

[191] *Id*. (citing Bullard Reb. at 51).

[192] *Id*. 11-12 (citing Bullard Reb. at 52).

[193] *Id*. 12 (citing Reed Reb. at 34).

[194] *Id*. (citing Bullard Reb. at 52).

predictably affect load during peak hours through such efforts.[195] In short, quoting Mr. Bullard's rebuttal testimony, NMGC concludes that "[d]emand response programs available to NMGC cannot reasonably be expected to provide a meaningful reduction in the amount of gas the Company would purchase in response to its load forecasts."[196]

CCAE asserts that instead of instead of authorizing the Company to invest in the proposed LNG facility that CCAE sees as having no role to play in New Mexico's clean energy future, CCAE recommends that the Commission require the NMGC to:

1. Establish robust demand response programs to reduce system peak load, especially during extreme weather events;
2. increase incentives for cost-effective building envelope and duct energy efficiency, with a focus on low-income households; and,
3. provide robust incentives for all-electric new construction to mitigate forecasted growth in gas demand.[197]

CCAE concludes that, "considering the climate policy landscape in New Mexico and the authorities that exist in the Governor Lujan Grisham's 2019 Executive Order on Climate Change and Energy Waste Production (*EO 2019-003*), as well as economic realities, New Mexico, like other places, will experience increasingly faster electrification in the residential and commercial sectors."[198] CCAE contends that the recommendations it is making are relevant to the Application "because they can decrease load, thereby impacting whether this proposed facility is even needed

[195] *Id*. (citing Bullard Reb. at 52).

[196] *Id*. (citing Bullard Reb. at 52).

[197] CCAE Br. at 15.

[198] *Id*. 15-16 (citing CCAE Exh. 1 (Velez Dir.) at 4 ("The climate policy landscape in the West is clear: many Western states, bolstered by incentives from the federal government, are already transitioning to efficient, all-electric appliances to decarbonize existing gas end uses.").

or would be used during higher demand events, thereby decreasing GHG emissions, and mitigating climate change."[199]

Lastly, in their response brief, Intervenors take issue with Staff's claim in its post-hearing brief, at 9, that electrification is not an economic alternative. Intervenors argue Staff's claim is unsubstantiated.[200] Intervenors maintain the record is replete with evidence with evidence that electrification, efficiency measures, and demand response programs can adequately curb high use of gas, potentially eliminating the need for the proposed LNG facility.[201]

In its response brief, NMGC asserts that CCAE's claims that NMGC should increase energy efficiency incentives and establish a robust demand response program to reduce peak load lack evidentiary support. NMGC states that it has evaluated these possibilities and demonstrated that (1) NMGC's energy efficiency program has almost reached the statutory limit and cannot shed enough load to make a difference during severe weather;[202] and (2) demand response programs available to NMGC cannot reasonably be expected to provide a meaningful reduction in the amount of gas the Company would purchase in response to its load forecasts.[203]

The Hearing Examiner finds that CCAE's recommendations are well-intentioned but, unfortunately, they are misplaced in this case. NMGC has shown that the energy efficiency incentives and demand response programs that CCAE advocates wouldn't reduce demand anywhere near the order of magnitude required to respond in times of stress like peak demand in

[199] *Id*. 16.

[200] Intervenors' Resp. Br. at 18.

[201] *Id*.

[202] NMGC Resp. Br. at 14.

[203] *Id*.

winter or, worse yet, to deal with a market disruption event. As things now stand, NMGC's energy efficiency program budget is nearly maxed out at 91% of the statutory limits. Using up the remaining 9% under the statutory spending cap on additional energy efficiency incentives or a new demand response program will not eliminate the need for a robust gas storage alternative, whether it be the proposed LNG Facility, the current Keystone Storage lease, or some other storage arrangement.

4.2.3. Evaluation of Infrastructure Changes

Turning to the Company's evaluation of potential infrastructure change options, NMGC identified five types of facilities that it considered: (i) new pipelines; (ii) compressed natural gas (CNG); (iii) propane air; (iv) acquiring wellheads and processing; and (v) a new or different underground storage facility.

4.2.3.1. New Pipelines

The first potential infrastructure change NMGC identifies as having evaluated is the viability of building new pipelines to connect its system to additional gas supply sources.[204] NMGC says it analyzed this alternative to an LNG facility in its 2012 CCN filing, its 2016 *Fresh Look Solutions Case*, and in its updated analysis for this case.[205] According to NMGC, an overarching disadvantage to building new pipelines as a supply option – regardless, it emphasizes, of the details of any particular pipeline project – is that the Company would still be reliant on remote, third-party supplier performance.[206] NMGC states that its history instructs that reliance on third-parties introduces the risk of reliability issues. Nevertheless, the Company claims that it

[204] *See* NMGC Br. at 12-13.

[205] NMGC Br. at 12 (citing Reed Dir. at 58).

[206] *Id*. 12-13 (citing Reed Dir. at 58).

"has explored building pipelines as an alternative to LNG multiple times over the last decade-plus."[207]

For example, in the 2012 CCN case, the Company evaluated building a pipeline from the Raton Basin to NMGC's Northwest System. NMGC says it rejected the Raton Basin project due to high construction costs and the difficulty of constructing a pipeline across mountainous terrain and environmentally sensitive areas.[208] In Case No. 16-00097-UT, the *Fresh Look Solutions Case*, the Company again studied the feasibility of building a pipeline from its system to the Raton Basin, as well as other pipeline projects, and estimated the cost of this project to be $215 million.[209] Given the significant cost, NMGC says it opted not to proceed with these other pipeline projects.[210] In this case, NMGC witness John Reed requested that NMGC's engineering team update its cost estimate for the Raton Basin project, which was previously $215 million. The updated estimate reported to Mr. Reed for that project was $257 million.[211] NMGC emphasizes the updated estimate for the Raton Basin project is over $76 million above the $180.9 million cap on construction costs to which NMGC has committed for the LNG Facility.[212]

Given the facts set forth above, NMGC asserts that it conducted a reasonable analysis of building new pipelines and concluded that it was an inferior option to the LNG Facility.[213]

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[207] *Id*. 13.

[208] *Id*. (citing Reed Dir. at 58).

[209] *Id*. (citing Reed Dir. at 58).

[210] *Id*.

[211] *Id*. (citing Reed Dir. at 58).

[212] *Id*. (citing Reed Dir. at 58; Bullard Reb. at 13-14).

[213] *Id*.

The Intervenors do not appear to contest NMGC's evaluation of the feasibility of new pipelines as a viable alternative to gas storage.

4.2.3.2. Compressed Natural Gas

Second, NMGC says it assessed the viability of deploying compressed natural gas (CNG) facilities at strategic locations across the Company's distribution system.[214] NMGC set forth its analysis of CNG facilities as a gas storage option in its compliance filing in NMPRC Case No. 21-00095-UT, the *Extraordinary Cost Recovery Case*.[215] Therefore, like some options addressed in sections above and below, the Company's claims regarding CNG rely heavily on the testimony of Mr. Bullard from that case that cannot be considered in this case for NMGC's failing to request that administrative notice be taken of that testimony.

Nevertheless, according to NMGC's brief-in-chief, NMGC concluded through the analysis conducted in Case No. 21-00095-UT, that although CNG facilities have the operational benefits of being on-system and under Company control, they are not a feasible replacement gas supply source.[216] CNG tanks offer limited storage capacity, which means that a CNG storage strategy would be costly because it would require deploying many of these smaller facilities across the state.[217] NMGC alleges that having many small CNG facilities across the state would also have operational drawbacks, because it would hinder the flexibility that is required for the Company's

[214] *See* NMGC Br. at 13-14.

[215] NMGC Br. at 13-14 (citing Reed Dir at 57 (Table 2)).

[216] *Id*. 14 (citing Bullard Dir. at 41; Reed Dir. at 64, which, in turn, cited Case No. 21-00095-UT, Bullard Compliance Filing Test. at 39-40).

[217] *Id*. (citing Reed Dir. at 64).

normal balancing operations.[218] NMGC notes that, as stated in the *Recommended Decision* in Case No. 16-00097-UT, in order to obtain additional supply reliability of 100 MMcf/d, NMGC would need to install 900 CNG modules, with four CNG tanks per module.[219] Thus, the need to fill, maintain, and operate in unison some 3,600 CNG tanks makes the operational aspect extraordinarily complex. NMGC therefore maintains that "through its reasonable analysis of non-LNG supply options, NMGC has determined that, both from an operational and financial perspective, CNG facilities are not a feasible solution to the Company's overall gas storage needs."[220]

None of the Intervenors challenges NMGC's assessment of CNG as a non-viable option.

4.2.3.3. Propane Air

The third infrastructure change NMGC says it analyzed is whether additional storage could be provided through blending a combination of natural gas, propane, and air.[221] Like While propane air is a known source of additional gas supply, NMGC states that it and the Company's outside engineers identified several drawbacks unique to these facilities. First, NMGC explains that for propane air facilities to benefit customers, the mixture of propane, air, and natural gas must be precise at each location where the supply of gas is being added. If the mixture is off, which is

[218] *Id*. (citing Reed Dir. at 64, which cited Case No. 21-00095-UT, Bullard Compliance Filing Test. at 39-40).

[219] *Id*. (citing Case No. 16-00097-UT, *Recommended Decision* (NMPRC 11/14/ 2016) at 10).

[220] *Id*. (Bullard Dir. at 41; Reed Dir. at 64, which cited Case No. 21-00095-UT, Bullard Compliance Filing Test. at 39-40).

[221] *See* NMGC Br. at 14-16.

always possible in extreme weather events, NMGC says that customer appliances can be negatively impacted and thus eliminate the benefit of the additional supply.[222]

Second, because of the precise blending requirements, NMGC states that it must have numerous propane sites across its system, rather than a single point to inject large quantities into the heart of the load centers. Again, NMGC stresses, this increases complexity and requires more operational activity and coordination during severe winter weather.[223]

Third, NMGC says that propane cannot be transported on interstate pipelines. As a consequence, NMGC states it would have to purchase new propane supplies from third parties that it does not already have a relationship with and arrange for large quantities of propane to be trucked through the state to the various blending locations.[224] Thus, in NMGC's estimation, "the ability to quickly source and arrange transportation of large quantities of propane" would be "a concern."[225]

Fourth, NMGC notes that propane is historically three to four times the cost of natural gas, not including the cost of trucking.[226] This high cost differential, NMGC posits, limits the price mitigation potential of such facilities, as does the unproven ability to source and transport large volumes on short notice.[227]

Fifth, and finally, NMGC points out that because propane is stored separately from natural gas, the Company would entirely lose the ability to inject overbuys of gas due to warmer than expected weather unless it retained Keystone or other storage options. "Propane," NMGC

[222] *Id*. 15.

[223] *Id*.

[224] *Id*.

[225] *Id*.

[226] *Id*.

[227] *Id*.

concludes, is therefore one-dimensional and does not provide the same flexibility as NMGC's current system."[228]

No intervenor questioned NMGC's assessment of propane air as an unattractive option for the five reasons the Company articulated.

4.2.3.4. Acquisition of Wellheads and Processing

The final infrastructure change option that NMGC evaluated was the potential for the Company to create its own supply of gas by investing in wellheads and processing infrastructure in the San Juan Basin.[229] NMGC identified two primary drawbacks to this possibility. First, NMGC said that natural gas production and processing presents significantly different operational challenges and risks than NMGC's current distribution of processed natural gas.[230] NMGC believes the new enterprise would be a stretch considering that the Company and its personnel have never drilled wells, operated gas wellheads, or operated gas processing facilities necessary to take field gas and make it meet certain quality standards.[231]

Second, the Commission previously prohibited NMGC's predecessor-in-interest from being involved in the actual production of natural gas.[232] This concern arose because Southern Union Gas Company abused its position as a completely vertically integrated gas utility and gas exploration company.[233] While NMGC played no role in the issues involving Southern Union,

[228] *Id*. 15-16.

[229] *See* NMGC Br. at 16.

[230] *Id*.

[231] *Id*.

[232] Case No. 1891/1892, *Final Order* at 12-13 (NMPSC 12/12/1984); Case No. 16-00097-UT, *Recommended Decision* (NMPRC 11/14/2016), at 11.

[233] Case No. 1891/1892, *Final Order* at 12-13, 20.

NMGC understands that this prohibition continues to apply to NMGC, and in order for NMGC to enter into production the Commission would have to specifically grant such approval after an analysis requiring strict scrutiny of any proposed entry into the production space.[234]

Perhaps it should go without saying, given the intertwined policies of electrification and decarbonization several of the Intervenors generally promote,[235] but no intervenor proposed that NMGC go into the natural gas production and processing business as an alternative to the LNG Facility.

4.2.3.5. Alternative or Additional Underground Storage

NMGC avers that explored multiple changes to its existing underground storage programs to improve NMGC's ability to access its natural gas supplies. The changes fell into three categories: (i) changes in its contractual relationship with Keystone Storage; (ii) contracting with a different underground storage facility; and (iii) developing a Company-owned underground storage facility.[236]

[234] NMGC Exh. 1 (Bullard Dir.) at 39; Case No. 16-00097-UT, *Recommended Decision*, at 11.

[235] *See e.g.*, CCAE Br. at 12-16 (emphasis on reducing GHG emissions); NEE Br. at 39-41 ("Climate change cannot be ignored"), 41-44 ("Approval of the CCN for LNG Facility and LNG Trucking will exacerbate carbon emissions and Climate Change Contrary to the Policies of the United States and New Mexico . . . ."); Tr. (Vol. 3) 829, 830 (WRA witness Aaron J. Gould) (wherein Mr. Gould conceded that ". . . If our policy is to have zero emissions in the energy sector by 2050, I mean I can't see how – I mean we may be able to invent a case, but I can't see how we would support such a significant investment in natural gas infrastructure given the goals of WRA." And, subsequently, in response to the Hearing Examiner's questions (combined for clarity at 830 and 831) "Wouldn't a more salutary alternative for WRA be, given the objectives of electrification, that Gas Company's customers become electric utility customers[] . . . [w]ith the ultimate objective that gas utilities no longer exist," Mr. Gould responded, "Our goal is to completely reduce emissions and decarbonize the energy industry by 2050; I guess that would be the result of that logic[.]").

[236] *See* NMGC Br. at 17-25.

4.2.3.5.1. Changes to the Keystone Storage Contract

As part of its 2016 *Fresh Look Solutions Case*, NMGC indicates that it was able to increase its storage at Keystone and negotiate for Keystone to install backup electric generation in the hopes of improving reliability. NMGC analyzed whether changes to its current storage arrangement at Keystone could improve the gas supply program. NMGC states that it made efforts to negotiate better contractual terms, including negotiating with Keystone to provide more reliability.[237]

Subsequently, as part of the analysis ordered by the Commission in the *Extraordinary Cost Recovery Case* (21-00095-UT), NMGC says it approached Keystone about additional changes that could be accomplished to improve Keystone's operations. NMGC, alluding to Mr. Bullard's testimony on this subject, claims that it was unable to negotiate better contractual terms or more reliability with Keystone.[238]

NMGC asserts that the inability to improve Keystone's operations or obtain better contractual terms "means that keeping or expanding Keystone does not improve NMGC's ability to access its gas at key moments."[239] Additionally, NMGC points out citing the Bullard Compliance Filing testimony that cannot be considered in this case, interstate pipelines connected to Keystone do not have additional capacity to move gas from Keystone to NMGC's main load centers.[240] NMGC therefore contends that the Commission's directive in Case No. 21-00095-UT to analyze possible ways to "prevent a reoccurrence of this event and the potential for extraordinary

[237] NMGC Br. at 17 (citing Case No. 16-00097-UT, *Recommended Decision*, at 15-16).

[238] *Id*. (citing Bullard Dir. at 37).

[239] *Id*.

[240] *Id*.

gas expenses and curtailments to customers" cannot be fulfilled with changes or expansion at Keystone.[241]

WRA, which opposes the LNG Facility, suggests that NMGC "could do more to manage its business with Keystone more effectively[,]" and, furthermore, "[b]efore even considering approval of the proposed LNG facility on grounds that include Keystone performance, the Commission should seek assurances from NMGC that it has taken commercially reasonable steps to manage its business and contractual relationship with Keystone."[242]

In fact, the record demonstrates that, despite apparently reasonable commercial efforts, NMGC was unsuccessful in obtaining better contractual terms from Keystone. However, this discrete observation does not also answer whether the NMGC's alleged loss of confidence in Keystone Storage is material to determining whether the proposed LNG Facility is needed to provide reliable service. In other words, the limited conclusion drawn in this section does not address the significance or weight of the *force majeure* events or the cuts in nominations, detailed in NMGC's response and supplemental response to the first bench request, on the issue of reliability discussed below in Section 4.4.1 below. Nor does it address the issue of whether NMGC witness Reed's decision to not evaluate the option of retaining Keystone Storage as a potential solution in his economic comparison of alternatives exposes another inadequacy in NMGC's Application, an issue addressed under Section 4.4.4.

4.2.3.5.2. Obtain new lease at another facility

Considering storage facilities apart from Keystone Storage, NMGC says it investigated potential additional storage facilities close to the interstate pipelines on which the Company

[241] *Id*.

[242] WRA Br. at 9, 10.

already has transportation rights, and whether any new storage projects were being developed. In terms of operational facilities, NMGC says it did not locate any suitable storage that offered the parameters that would allow NMGC to further mitigate extraordinary gas prices and mitigate the likelihood of customer curtailments. NMGC notes that, as Mr. Bullard testified, the Company considered one of the closest existing storage facilities, Grama Ridge, as a Keystone replacement or in conjunction with Keystone.[243] NMGC explains that Grama Ridge was rejected "for operational reasons – namely because Grama Ridge is a depleted reservoir storage facility and requires large amounts of working gas, with low deliverability rates, and insufficient interconnects to interstates."[244]

Further, NMGC points to Mr. Reed's testimony that that there is strong demand for storage in the West Texas area, and even if the Company could find a suitable replacement for Keystone, NMGC would have to outbid other parties and would end up having to pay an "incredible premium" to enter such storage.[245]

In addition, NMGC says it looked into whether anyone was developing new storage facilities in the area. Mr. Reed, a national expert on energy, testified that he was unaware of any new West Texas storage projects under development, or any feasibility studies being conducted by third-party developers.[246] Likewise, NMGC notes, no intervenor identified a feasible new storage

[243] NMGC Br. at 18 (citing Tr. (Vol. 1) 180-81 (Bullard)).

[244] *Id*. (citing Tr. (Vol. 1) 180-81 (Bullard)).

[245] *Id*. (citing Tr. (Vol 2) 537-38 (Reed)).

[246] *Id*. (citing NMGC Exh. 3 (Reed Dir.) at 61).

facility under development in the area that would be ready to provide gas storage facilities in the foreseeable future.[247]

NEE acknowledges that in order to be resilient and avoid disruption, whether at Keystone or a company owned or controlled storage facility, NMGC must have access to other gas at reasonable prices. NEE submits that is why hedging strategies or contractual agreements under firm transportation agreements or other storage facilities in Texas or New Mexico that NMGC could rely on during a financially volatile period is key. NEE surmises the solution could be access to a combination of multiple storage facilities. The point of redundancy and resiliency, from NEE's perspective, is to maintain or restore function when there is a failure to deliver gas from one source. NEE argues that the Commission has not been presented with these alternative options because NMGC did not pursue a meaningful price mitigation strategy.[248]

The Hearing Examiner finds that NMGC appears to have reasonably evaluated the option of obtaining a new lease at another underground storage facility close to the interstate pipelines on which the Company already has transportation rights. There appear to be no viable options according to Messrs. Bullard and Reed. The same appears to be true regarding no new storage projects being developed in the area. The other options implicated in NEE's objection are addressed in Section 4.4.4 below, where the Hearing Examiner considers NMGC's overall evaluation of alternatives.

4.2.3.5.3. Develop a new underground storage facility

Finally, rounding out NMGC's evaluation of underground storage alternatives, NMGC says it considered the possibility of developing a new company-owned underground storage

[247] *Id*.

[248] NEE Br. at 27.

facility in New Mexico. NMGC notes that its predecessor, Public Service Company of New Mexico's (PNM) Gas Division (a/k/a Gas Company of New Mexico), owned and operated its own underground storage facility in New Mexico for 30 years, so the possibility of a project akin to PNM's San Ysidro facility is not unknown in New Mexico.[249] However, PNM's experience with underground storage, NMGC submits, highlights the uncertainties present in underground storage development. According to Mr. Reed and Mr. Bullard, in the 1990s the San Ysidro facility was experiencing high levels of lost and unaccounted for gas, and ultimately had to abandoned.[250] NMGC thus concludes that "[t]he risk of developing underground storage is that it costs millions of dollars to initially develop a possible facility without any assurance that the project will perform long-term."[251]

None of the Intervenors appear to contest NMGC's reasonable assessment that pursuing the development of a new underground storage facility is not a feasible alternative to either Keystone Storage or the proposed LNG Facility.

4.3. Operational Characteristics of the LNG Facility

NMGC states that once the Company decided that LNG was the most appropriate solution, NMGC evaluated and determined the operational characteristics for the proposed LNG Facility.[252] This included decisions regarding the site for the facility, tank size, liquefaction rate, and vaporization rate. To make these operational decisions, the Company's engineering group began meeting with the Lisbon Group in 2021. NMGC says that Lisbon and Company representatives

[249] *Id*. 19.

[250] *Id*. (citing Reed Dir. at 61).

[251] *Id*.

[252] NMGC Br. at 19.

met dozens of times to discuss NMGC's operational needs.[253] NMGC states that the primary operational objectives were (1) to design a stand-alone storage facility that allowed the Company to eliminate Keystone storage, (2) to provide reliability and price variability mitigation solutions, and (3) to accomplish this as cost-effectively as possible.[254]

This section of the decision describes the operational characteristics of the LNG Facility according to the Company's description of the facility it has proposed. This section does not take up Intervenors' numerous objections to and concerns regarding the proposed LNG Facility. The Intervenors' objections and concerns are taken up below in the Hearing Examiners' analysis of contested issues under Sections 4.4.1 to 4.4.7.

4.3.1. Siting

NMGC believes that the proposed location for the LNG Facility in Rio Rancho meets the siting criteria that the Company established to optimize the facility's operational benefits.[255] NMGC Witness Bullard outlined the siting criteria that the Company considered in his direct testimony and during the Hearing. First, the LNG Facility needed to be situated on the Company's system and near the Company's gas transmission lines, where the Company can "provide LNG directly onto the system, quickly and reliably[.]"[256] More specifically, Mr. Bullard explained at the hearing, the Company believed it was important for the LNG Facility to be located where NMGC has two parallel transmission lines, because the Company can "take gas off of one

[253] *Id*. (citing NMGC Exh. 6 (Barclay Reb.) at 27).

[254] *Id*. (citing Barclay Reb. at 28).

[255] NMGC Br. at 20.

[256] Bullard Dir. at 50.

[transmission line] and inject it into the other."[257] Second, the LNG Facility needed to be located near a source of electric power sufficient to run the facility's liquefaction train and vaporizers.[258] Third, the LNG Facility needed to be located where NMGC's pipelines had sufficient pressure to facilitate the liquefaction process.[259] Fourth, NMGC looked at the quality of the roads in the area of the LNG Facility for construction purposes.[260] Fifth, soil conditions must be able to support a storage tank holding 12 million gallons of LNG.[261] Sixth, NMGC kept in mind the proximity of the LNG Facility to the interstate transmission pipelines that cross New Mexico.[262] Seventh, the LNG Facility can only be located on a parcel of land large enough to house the Facility and that NMGC could purchase. This criterion, NMGC explained, implicates safety considerations, which are addressed in Section 4.4.7, as well as "the practical realities of purchasing 160 acres of land in New Mexico."[263] As Mr. Bullard testified, much of the land along the Company's transmission lines "from Albuquerque up to the Blanco Hub [in Northwest New Mexico, *see* NMGC Exhibit TCB-2] is tribal land of some sort, Pueblo or Navajo Nation; [there is] very little land available for a site." [264] NMGC's chosen location for the LNG Facility is in an area zoned for industrial use,

[257] Tr. (Vol. 1) 222 (Bullard).

[258] Bullard Dir. at 50.

[259] Tr. (Vol. 1) 222 (Bullard).

[260] Bullard Dir. at 50; Tr. (Vol. 1) 230 (Bullard).

[261] Bullard Dir. at 50.

[262] Tr. (Vol. 1) 225 (Bullard).

[263] NMGC Br. at 20.

[264] Tr. (Vol. 1) 227 (Bullard).

close to PNM's Rio Rancho Solar Energy facility for access to electricity and as it turns out close to the Commission approved Atrisco Solar Facility.[265]

NMGC says it considered other potential locations for the LNG Facility,[266] but as Mr. Bullard claimed, other locations along the Company's transmission lines were not suitable for the LNG Facility.[267] Bullard said some locations were ruled out because NMGC's pipelines would not have sufficient pressure to facilitate the liquefaction process,[268] and other locations were not suitable because they were on tribal land[269] or too far from the interstate pipelines.[270]

4.3.2. Tank Size

In determining the size of the tank, NMGC states that the Company began by considering its operational needs and the minimum tank size necessary to meet them.[271] NMGC, in consultation with Lisbon, considered a 1 Bcf tank and larger as being the size necessary to provide the Company with sufficient storage capacity to address storms throughout the year, give the Company the opportunity to use the LNG Facility for other gas supply needs in addition to storm response, and allow the Company to cease its reliance (and the cost of such reliance) on the Keystone Facility.[272]

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[265] *See* NMGC's Resp. to Hearing Examiner's Fourth BR, Resp. No. 4-1 (Exh. 4-1).

[266] Tr. (Vol. 1) 222 (Bullard).

[267] *See id.* 222-29 (Bullard).

[268] *Id.* 222 (Bullard).

[269] *Id.* (Bullard).

[270] *Id.* 227 (Bullard).

[271] NMGC Br. at 21.

[272] Bullard Reb. at 28-29.

NMGC knew, based on its application in Case No. 12-00364-UT ("*First LNG Case*"), that a smaller tank would not be able to fully replace Keystone. In the *First LNG Case*, the proposed facility would have been smaller, and would have been more of an insurance policy for a single winter weather event once a year.[273] Additionally, Lisbon advised NMGC that a ½ Bcf tank is not ½ the cost of a 1 Bcf tank, but more likely 65%-70% the cost of a 1 Bcf tank.[274] Having determined that a tank smaller than 1 Bcf would not meet NMGC's operational needs, or proportionally reduce the cost, the Company did not expend the time and cost to run a detailed cost analysis of a tank smaller than 1 Bcf.[275]

NMGC says the Company considered and ran cost analysis of larger tanks – 1.5 and 2 Bcf. However, the Company learned each was progressively more expensive, and determined that its needs could be met with a 1 Bcf tank, making a larger tank unnecessary and not cost-effective.[276] NMGC explains that a 1 Bcf tank bests meet the Company's operational needs because it allows the Company to deliver five days of LNG into its system using all vaporizers at full capacity, and several more days of delivery if using the vaporizers at less than full capacity.[277] NMGC concludes that "[a] 1 Bcf tank affords the Company the amount of gas needed, when it is needed, providing flexibility and reliability."[278]

[273] *Id*. 20.

[274] Barclay Reb. at 29.

[275] Bullard Reb. at 29; Barclay Reb. at 29.

[276] Barclay Reb. at 29; Bullard Reb. at 29.

[277] Bullard Reb. at 29.

[278] NMGC Br. at 22 (citing Bullard Reb. at 29).

4.3.3. Liquefaction Process

As with the tank size, NMGC began its liquefaction analysis by considering its operational needs and the liquefaction capabilities necessary to meet them. NMGC considered it operationally beneficial to be able to timely fill the LNG Facility in the spring, summer, and fall, and to maintain the option of "topping off" the facility in the winter when feasible (after use) in order to preserve its capability to provide gas throughout the winter.[279] According to NMGC witness Barclay, the Lisbon Group's Technical Director, the operational objective was to be able to fill the plant in 100 days during the shoulder months of spring and fall, and to be able to timely "top off" the plant in the winter when conditions were appropriate to do so.[280] Based on these needs, NMGC selected the ability to liquefy at a rate of 10 MMscf/d.[281]

Given the operational just described, NMGC relates that the Company determined that liquefaction capabilities below 10 MMscf/d were insufficient and did not expend the time or money to run a detailed cost analysis of liquefaction at a rate of MMscf/d.[282] NMGC did evaluate liquefaction rates higher than 10 MMscf (i.e., 20 MMscf and 30 MMscf) and determined that such high rates were not necessary to meet the Company's needs. NMGC did not believe the greater liquefaction capability justified the approximately $30 million incremental cost. More importantly, Mr. Bullard emphasized, liquefaction at a rate of 10 MMscf/d of gas will meet NMGC's needs and is similar to facilities owned and operated by other utilities.[283]

[279] Bullard Reb. at 30.

[280] Barclay Reb. at 29.

[281] Barclay Dir. at 16.

[282] Barclay Reb. at 27-28.

[283] Bullard Dir. at 47.

4.3.4. Vaporization Process

To determine the vaporization rates of the LNG Facility, NMGC says it began with its operational needs and the capabilities necessary to meet them.[284] Based on NMGC's historical requirements for stored gas, Mr. Barclay testified that the primary operational objective was the ability to vaporize 130 MMscf/d reliably.[285] This delivery rate would allow NMGC to provide more than seven continuous days of gas.[286] At that rate, on a daily basis NMGC would be able to operate one or two pumps, with a third normally held in reserve and available as needed.[287]

In discussions with NMGC, Lisbon considered and priced several vaporization options including using two to three 65 MMscf/d, 90 MMscf/d,[288] or 95,000 Mcf/d vaporizers.[289] Based on the Company's historical needs, NMGC determined that pumps larger than 65 MMscf/d were not necessary.[290] After analyzing all of the options, NMGC felt that three 65 MMscf/d vaporizers were the best match for its operational needs, offering variable vaporization rates and redundancy.[291] Three 65 MMscf/d vaporizers provide flexibility to vaporize from 20 MMscf/d 1 to 195 MMscf/d as needed and provide redundancy so that an operationally significant vaporization rate of 130 is reliably achievable.[292] At a maximum vaporization rate of 195,000

[284] NMGC Br. at 23.

[285] Barclay Reb. at 28.

[286] Bullard Dir. at 46.

[287] *Id*.

[288] Barclay Reb. at 28.

[289] Bullard Dir. at 49.

[290] *Id*. 49.

[291] Bullard Reb. at 30.

[292] Barclay Reb. at 28-29.

Mcf/d, NMGC adds that the LNG Facility will have a slightly higher maximum delivery rate than what NMGC contracts for at the Keystone Facility.[293] Given the size of the tank, this will allow for approximately five days of full capacity vaporization. This is longer, Mr. Bullard notes, than any previous supply disruption that the Company has experienced.[294]

4.3.5. Merchant-Owned vs. Company-Owned Option

According to NMGC witness Barclay, there are approximately "70 active LNG facilities classified as peak shavers by the Pipeline and Hazardous Materials Safety Administration ('PHMSA') located in 26 states along with a number of very similar LNG storage facilities classified as baseload or 'other", often because they are not operated by the gas utility."[295] The list of active peak shavers and those in development in the United States, Canada, and Mexico was provided in response to Bench Request No. 3.[296] That bench request response reflects that the vast majority of peak shavers in the United States are owned and operated by utilities, as opposed to being owned by a third party as a merchant facility. NMGC witness John Reed, an expert in natural gas markets, explained during the hearing that, based on his experience, the vast majority of peak-shavers are owned by utilities because, as an owned facility, they are able to be built "on the edge of the distribution system", are "directly controlled by the Gas Company" for decision making regarding operations and expansion etc., and are "dedicated to the distribution company."[297] By contrast, a merchant plant results in diluted control and dedication to the utility, and probably

[293] NMGC Br. at 24.

[294] Bullard Dir. at 46.

[295] Barclay Dir. at 15.

[296] *See* NMGC's Resp. to Hearing Examiner's Third Bench Request, Resp. No. 3-1.

[297] Tr. (Vol. 2) 549-50 (Reed).

moves the location off the company's distribution network and closer to a trading hub or liquid market.[298] Lastly, Mr. Reed notes that there are no economic or financial advantages to adding a third-party (merchant) to the equation.[299]

4.4. Analyzing Whether the LNG Facility Provides a Net Public Benefit and is in the Public Interest

NMGC asserts that the LNG Storage Facility provides a net public benefit by increasing reliability of gas supply for customers as well as providing the Company with a tool that can be used to help mitigate possible extraordinary gas cost spikes. NMGC acknowledges the increased cost to customers associated with the new facility. However, NMGC contends the higher cost (as juxtaposed against the current Keystone Storage lease arrangement) is reasonable in light of the additional benefits provided by the LNG Storage Facility.[300] The Intervenors – the Attorney General, CCAE, WRA, and NEE – staunchly disagree with NMGC's assertions. They argue that the LNG Storage Facility fails the net public benefit test on several grounds. Some of them also contend that the LNG Facility, being a discretionary project, fails the heightened standard of review delineated and applied to disapprove PNM's AMI project in Case No. 15-00312-UT. Staff, on the other hand, believes the LNG Storage Facility will enable NMGC to provide reliable service and its customers will receive better service at a reasonable rate.[301] Staff concludes that the LNG Facility will provide a net public benefit to the Company's consumers and therefore is in the public interest.[302]

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[298] *Id.* 550-52 (Reed).

[299] *Id.* 552-53 (Reed).

[300] NMGC Br. at 25.

[301] Staff Br. at 8, 13.

[302] *Id*. 13.

The discussion below sets forth the parties' positions on the major issues raised and contested in this proceeding. Generally speaking, NMGC plays up the reliability and price mitigation advantages or attributes it sees in the LNG Facility versus the status quo Keystone Storage arrangement and attempts to downplay the increased cost to customers of the LNG Facility (at least $100.4 million, based on a 30-year net present value (NPV) of net revenue requirements). Intervenors refute NMGC's reliability and price mitigation premises and assert the estimated cost of the LNG Facility is likely understated to a significant degree, resulting in at least a 5% increase on customer bills (on a total revenue basis in 2027).[303] Intervenors then proceed to make several additional arguments against approving a CCN for the LNG Facility, including NMGC's failure to thoroughly analyze alternatives to the LNG Facility, NMGC's failure to provide conduct a benefit-cost analysis, and the potential adverse safety and environmental effects of, and associated public opposition to, siting the LNG Facility within the Albuquerque metropolitan area.

The exposition of the parties' arguments below is followed by the Hearing's analysis and findings on the issues salient to his determination on the merits of the Application.

4.4.1. Reliability

While NMGC's gas supply is "generally very reliable" – including deliveries from the Keystone Storage Facility, as NMGC now admits,[304] in the wake of the Hearing Examiner's Bench Request (BR) No. 1 addressing cuts in nominations and *force majeure* declarations by Keystone (Kinder Morgan) – there have been times when the system falters and, NMGC says, its customers

[303] Intervenors' Resp. Br. at 4. *See* NMAG Exh. 1 (Crane Dir.) at 19 ("On a total revenue basis, assuming 2026 revenues of $549.7 million projected by the Company, the 2027 increase would still be over 5%.").

[304] NMGC Br. at 25 (citing Tr. (Vol. 2) 429 (Reed)).

must bear the brunt of those failures.[305] NMGC states that, as demonstrated in the NMGC's Response to BR No. 1, as well as the *Curtailments Investigation* following the 2011 severe weather event and the subsequent *Extraordinary Cost Recovery Case* following Storm Uri in February 2021, there are aspects of the supply chain and current storage operations that have failed to provide NMGC and its customers with gas that the Company has ordered "at critical junctures and on critical days."[306] NMGC maintains that while the amount of the cuts on the days identified in NMGC's supplemental response to BR. No. 1-1[307] "may not be large in relation to the percentage of gas received that day, even a small cut on a critical day can materially impact the reliability of the service to customers."[308] Thus, as Mr. Bullard explains, "had we just been able to put 60,000 into the system [during the weather event in 2011] we would have been able to prevent that curtailment."[309] Moreover, according to Mr. Bullard, "It doesn't have to be a severe winter event. It could just be a high load winter day, and we see cuts at storage and/or interstate, or both. It could result in curtailments, and that is a risk that we are concerned about."[310] So, NMGC asserts, "small cuts on critical days can be material and cause the Company concerns over the reliability of its storage gas. These failures have left customers without gas service or with extraordinary

[305] *Id*.

[306] *Id*.

[307] NMGC's Jan. 26, 2024 supplemental response to BR No. 1-1 clarified some of the cuts and nominations and deleted others reported in its original Jan. 12, 2024 response that, "for various [unexplained] reasons . . . ultimately did not result in a cut." NMGC Supp. Resp. to BR No. 1-1, at 3. Notably, among the cuts deleted in the supplemental response are the only two reported in 2023, meaning there apparently were no cuts during the entirety of 2023.

[308] NMGC Br. at 25-26 (citing Tr. (Vol. 1) 44 (Bullard)).

[309] *Id*. 26 (quoting Tr. (Vol. 2) 307 (Bullard)).

[310] *Id*. (quoting Tr. (Vol. 1) 44 (Bullard)).

commodity costs that must be paid for and have led the Company to look for alternative storage options."[311]

NMGC says it has "*tried* various improvements," as identified in 2016 in the *Fresh Look Solutions Case*,[312] and as discussed above, NMGC has evaluated many possible changes and projects that would provide more reliable gas supply, at reasonable costs, during weather events. NMGC thus maintains that the most reliable and cost-effective solution to achieve the reliability necessary to mitigate curtailments and offer the potential for price mitigation is an LNG Storage Facility.[313]

NMGC's strongest reliability argument centers on the operational benefits and local control aspect of the proposed LNG Facility.[314] In short, NMGC submits, "the operational benefits are key" and determinative in this case.[315] Indeed, NMGC submits that the "operational advantages" it sees in the LNG Facility, "particularly in contrast to the status quo with Keystone, are [*sic*] the primary reason why NMCG is seeking a CCN for approval of the LNG Facility.[316] NMGC argues that those operational and tactical advantages to NMGC, tailored to avoid the reliability and price

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311 *Id*.

312 *Id*. (emphasis added). It is unclear whether NMGC's representation that it has "tried" infrastructure improvements suggests that the improvements have not improved the Company's infrastructure sufficiently or used "tried" as a synonym for implemented. If NMGC intended the former interpretation, that representation would run counter to the preponderance of the evidence in the record, discussed below, which indicates that the infrastructure improvements the Commission accepted as reasonable in the *Fresh Look Solutions Case* "prove[d]," according to NMGC own expert witness, John Reed, "effective against customer curtailments during the 2021 winter event[.]" Reed Dir. at 54.

313 *Id*.

314 NMGC Resp. Br. at 26. *See* NMGC Br. at 26-28 (e.g., operational value of on-system storage, at 26-27, and "ability to control the design, maintenance, and operation of the facility, all of which will help enhance reliability to customers," at 27-28.

315 NMGC Resp. Br. at 26.

316 NMGC Resp. Br. at 27.

mitigation problems of concern to the Commission as expressed in the *Extraordinary Cost Recovery Case*, are largely ignored by the Intervenors "in favor of looking for flaws in an otherwise extensive and reasonable analysis of the situation" presented by NMGC.[317] Thus, parenthetically, the Hearing Examiner acknowledges that, contrary to the argument addressing Intervenors' alleged contentions to the contrary, that the Company indeed has considered reliability and preventing curtailments in its analysis, in addition to price mitigation.[318] Whether the Company's analysis is persuasively prevails, however, is an entirely different matter.

Among the operational and tactical advantages Intervenors purportedly ignore are the seven primary operational advantages of local on-system storage over any alternative explained in detail in Mr. Bullard's direct and rebuttal testimonies.[319] Mr. Bullard explained in his rebuttal testimony that a key consideration was the ability to avoid problems on interstate pipelines, such as those that occurred in 2011. Additionally, Bullard said that local on-system storage avoids the

[317] *Id*. *See also* NMGC Resp. Br. at 6-7 where, after quoting paragraph N of the Commission's June 15, 2021 Order in the *Extraordinary Cost Recovery Case*, NMGC elaborates,

> While all parties quote the Order correctly, it appears at times that the Intervenors lose sight of the full scope of the Commission's Order to NMGC and stress the price mitigation directive over the directive to prevent curtailment. Adoption of these unbalanced interpretations of the Order can lead to a failure to consider all three aspects of the Order. Addressing all three aspects of the Order, as NMGC has done, eliminates certain price only options, or reliability only options. The parties all acknowledge that NMGC has taken steps since 2011 to avoid further curtailments. But unlike the Intervenors, NMGC is not convinced that new curtailments could not result from a storage disruption at an inopportune moment. In fact, as the party responsible for providing service, NMGC takes this concern seriously. Apparently so did the Commission when it included language requiring NMGC to evaluate preventing curtailments in the Order. Accordingly, regardless of what the Intervenors contend, the Company has considered reliability and preventing curtailments in addition to price mitigation in its analysis.

Id. (internal citations omitted).

[318] NMGC Resp. Br. at 7.

[319] Bullard Dir. at 58-61; Bullard Reb. at 9-11. In both testimonies, Mr. Bullard describes the seven primary operational advantages: 1) location, 2) control, 3) system-wide impact, 4) speed, 5) flexibility, 6) reliability, and 7) confidence.

rigid scheduling requirements imposed by the interstate pipelines and allows NMGC to more precisely use its gas supply program to benefit customers.[320]

None of the advantages Mr. Bullard portrays would be present, NMGC asserts, if local storage was not the primary or sole source of storage. NMGC contends that "relying on Keystone, or Keystone in combination with other on-system or off-system storage, or Keystone in combination with other non-storage options such as contract negotiation or hedging activities, does not provide the flexibility or avoid the third-party issues related to interstate transmission pipelines."[321] As Mr. Bullard said, "these attributes/benefits, coupled with the other improvements to the Company's system over the last several years, including the looping of several of the Company's mainlines such as the Santa Fe Mainline, Rio Puerco Mainline, and the construction of the Malaga Pipeline, will enable the Company to better shape its gas supply and gas control operations when using LNG as part of its overall gas supply strategy."[322]

Another advantage NMGC sees in a Company-owned storage facility is the ability to control the design, maintenance, and operation of the facility, all of which NMGC believes will help to enhance reliability to customers.[323] NMGC says it is designing the LNG Facility to store and inject enough natural gas to make a meaningful impact on gas supply during winter storms. NMGC notes that it has never needed 1 Bcf of gas from storage within a one-month period. Because the LNG Facility is designed to store 1 Bcf of gas, the Company anticipates being able to use gas for price mitigation efforts as well as system support. Additionally, NMGC emphasizes "a

[320] Bullard Reb. at 10-11.

[321] NMGC Br. at 27.

[322] Bullard Dir. at 61.

[323] *See* NMGC Br. at 27-28.

key aspect of getting gas to customers during a winter storm is the reliability of the Facility's vaporization system."[324] NMGC maintains that the LNG Facility's design offers high deliverability because it provides NMGC with three vaporizers to call upon when it calls for gas, as well as redundancy. In the unlikely event one of the vaporizers malfunctions, NMGC would still have two additional vaporizers to ensure reliability and full operation when needed.[325]

In addition, NMGC notes that its ability to control maintenance activities for the LNG Facility will allow the Company to properly time maintenance to avoid peak winter demand months, as well as perform the work necessary to winterize the equipment to help ensure the equipment is operational even in adverse conditions.[326]

Finally, NMGC once again emphasizes its ability to control the operation of the LNG Facility. Decisions regarding the use of the stored gas would be solely at NMGC's direction[327] and NMGC would be able to begin the process of "warming up" the LNG Facility equipment before cold weather strikes New Mexico and inject any needed gas supplies with only a few hours' notice.[328] NMGC describes the control attribute as being a "a key advantage of an on-system LNG Facility," because as Mr. Bullard stressed, there can be up to a 20-hour lag between nominating day-ahead gas and when the gas from Keystone begins flowing as compared to receiving gas from an on-system LNG Facility.[329]

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[324] NMGC Br. at 27 (citing Bullard Dir. at 61).

[325] *Id*. 27-28 (citing Bullard Dir. at 61).

[326] *Id*. 28 (citing Bullard Dir. at 60).

[327] *Id*. (citing Bullard Dir. at 59, 60).

[328] *Id*. (citing Bullard Dir. at 60).

[329] *Id*. (citing Bullard Dir. at 17-18).

As suggested at the beginning of this section, Intervenors contend that NMGC continues to overstate the need to improve reliability based on references to the 2011 extreme winter event that led to system emergencies, whereas the LNG Facility's actual intended purpose is to prevent price spike mitigation.[330] Yet, in reality, according to Intervenors, the Company's claims that reliability still needs to be improved based on what actually led to the gas supply curtailments in 2011 are unfounded.[331] Intervenors argue that NMGC's repeated references to the extreme winter storm in 2011 in hopes of showing Keystone is unreliable are misplaced and confuse the record. Intervenors explain that while it is true that significant supply disruptions occurred during that storm, ultimately leading to curtailment of approximately 28,000 NMGC customers, it is also true that that event is considered a once in 50-year storm and that no curtailments have occurred since.[332]

The truth of the matter, as the Company itself acknowledges, is that the 2011 supply disruptions were not the result of a specific failure of Keystone, but rather the result of freezing issues with wells, gathering lines, and processing plants.[333] In fact, lest there be any doubt on this

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[330] Intervenors' argument is succinctly made for them by NMGC witness Reed's direct testimony, where he stated,

> The significance of this 2016 filing [the *Fresh Look Solutions Case*] to this testimony is that in 2016 the Company 'determined that the gas supply, transportation, and system enhancements completed since February 2011, combined with those enhancements that are currently in progress, provide NMGC's customers with improved gas supply reliability at a reasonable cost.' Indeed, in hindsight, the Company's 'gas supply, transportation, and system enhancements' were proven effective against customer curtailments during the 2021 winter event; *however, these improvements were insufficient to protect against extraordinarily high-priced spot market purchases necessary to meet the Company's forecasted demand*.

Reed Dir. at 54 (internal citations omitted, emphasis added).

[331] *See* Intervenors' Resp. Br. at 1-3.

[332] Bullard Reb. at 19; Tr. (Vol. 1) 35 (Bullard).

[333] *Id*. (citing Application, p. 4; Tr. (Vol. 1) 35-37 (Bullard).

issue, the Commission found in its 2011-2012 *Curtailments Investigation* that the phenomenon called a "freeze-off" caused "failures at the wellheads, gathering lines and processing plants of suppliers to NMGC and others."[334] "These failures and related interstate pipeline conditions, in combination with the increased demand also caused by the storm," the Commission concluded, left NMGC with no option except to declare system emergencies in order to match available gas supplies to demand and begin to bring pressures back to normal on both the South and North segments of the system."[335] Hence, one can glean the significance of NMGC witness Reed's testimony that the Company's infrastructure improvements approved by the Commission in the 2016 *Fresh Look Solutions Case*, fixes that subsequently proved effective in preventing customer curtailments during Storm Uri in February 2021 were, nonetheless, "insufficient to protect against extraordinarily high-priced spot market purchases necessary to meet the Company's forecasted demand."[336] It is in this context, succinctly stated by Mr. Reed, that Intervenors argue that NMGC's claims that the it needs to improve reliability, on the basis of what happened in 2011, "*in order to mitigate price spikes*"[337] are unsubstantiated.[338]

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[334] Case No. 11-00039-UT, *Final Order*, at 19.

[335] *Id*. 21.

[336] Reed Dir. at 54.

[337] Intervenors' Resp. Br. at 2.

[338] Whether NMGC is aware of its expert witness Reed's findings that the infrastructure improvements addressed in Case No. 16-00097-UT proved "effective against customer curtailments during the 2021 winter event[,]" (Reed Dir. at 54) is not clear. Nevertheless, in spite of Reed's findings, NMGC attempts to distinguish Storm Uri from the 2011 severe weather event to support NMGC's thesis that the LNG Facility is required to reduce the risk of curtailments during a winter weather even on the same scale as the February 2011 event. It is in this context that NMGC maintains that Storm Uri was a was a relatively normal storm for New Mexico, with demand reaching approximately 596,000 MMcf/d, significantly below the level of demand reached in 2011[,] when "NMGC's customer demand to skyrocket to 719,000 MMcf/d." NMGC adds that the peak demand in February 2021 was similar to the peak demand that NMGC saw during the winter of 2022, which was approximately 589,000 MMcf. In addition, "unlike 2011," NMGC concludes, "during Winter Storm Uri the

Furthermore, Intervenors observe that in pre-filed and hearing testimony, Company witnesses made repeated references to its loss of confidence in Keystone's performance in support of its purported need to improve reliability.[339] However, as Intervenors correctly perceive, those concerns have been de-emphasized in NMGC's post-hearing briefing in the wake of the NMGC's responses to the First Bench Request.[340] As Intervenors put it, "NMGC pivots" in its brief-in-chief, "acknowledging that 'the amount of the cuts on the days identified there may not be large in relation to the percentage of gas received that day,'" but then confuses the issue by following with already quoted contradictory statement by Mr. Bullard: "had we just been able to put 60,000 into the system [during the weather event in 2011] we would have been able to prevent curtailment," and subsequently alleging in its brief-in-chief, "NMGC has *tried* various improvements, as identified in NMPRC Case No. 16-00097-UT."[341]

However, as Intervenors point out, the record shows that freeze-offs of wells, gathering lines, processing plants, and interstate pipeline issues – not Keystone Storage cuts – directly led to the Company's single curtailment event in the last 13 years. And, while NMGC claims that owning and operating the LNG facility will result in greater reliability,[342] Intervenors further point out that NMGC failed to provide an operating plan that details how the Company would manage the

interstate pipeline system was not negatively impacted, and gas was able to flow to NMGC." NMGC Resp. Br. at 9 (internal citations omitted).

[339] *Id*. (citing, e.g., Tr. (Vol 1) 255-56; Bullard Reb. at 32-33, 42).

[340] *Id*. (citing NMGC's Resp. to Hearing Examiner's First BR (01/12/2024) and NMGC's Supp. Resp. Hearing Examiner's First BR No. 1-2 and Resp. to WRA's Motion (01/26/2024).

[341] *Id*. 2-3 (citing NMGC Br. at 25-26) (emphasis in original).

[342] *Id*. 3 (citing NMGC Br. at 27-28).

facility, "making the promised benefits," Intervenors conclude, "contingent on implementation of an operating plan that is not in evidence."[343]

The Hearing Examiner has no reason to doubt NMGC's assertions that the proposed LNG Storage Facility would provide the Company "operational advantages" or "reliability enhancements"[344] over its current Keystone Storage arrangement for the reasons NMGC witness Bullard outlines in his testimony.[345] Apart from those operational benefits – which in and of themselves are insufficient to show a net public benefit in the LNG Facility when all relevant factors are weighed – the record is confused on this central issue of reliability. The confusion in the record mostly stems[346] from NMGC's contradictory portrayals of the Company's current state of

[343] *Id*. (Intervenors note that while Mr. Bullard provides some testimony regarding how the LNG facility would be operated starting on page 58 of his direct testimony, it is unclear whether this testimony is consistent with how the plant actually *could* be operated. For example, Mr. Bullard testified at the hearing (Tr. (Vol. 2) 304) that the plant could flip from vaporization to liquefaction "in an hour or two" but Michael Barclay, who sponsored NMGC's pre-FEED study testified (Tr. (Vol 3) 647-48) that it takes 8-10 hours to convert from one mode to the other.).

[344] NMGC Resp. Br. at 7.

[345] *See* Bullard Dir. at 58-61; Bullard Reb. at 9-11.

[346] NMGC also confused the record in another way by asserting that reliability would be increased if the Company is allowed to replace Keystone Gas Storage with the LNG Facility through NMGC's attempting to tie the Keystone Facility's alleged unreliability to the threat of curtailments evinced by the 2011 severe weather event, which Keystone played no appreciable role in contributing to, or to the threat of some similar future black swan event. *See, e.g.*, NMGC Br. at 1, 5, 9, and 26; *see also* WRA Br. at 5, n. 20. The confusion is compounded because NMGC minimizes that it subsequently made certain improvements to its gas supply, transportation, and system enhancements pursuant to its "proposed solution" in Case 16-00097-UT that was accepted and found reasonable by the Commission in that *Fresh Look Solutions Case*. Indeed, as NMGC's own expert witness, John Reed, found in his direct testimony those improvements proved effective "against customer curtailments" during the next severe weather event ten years later – Storm Uri in February 2021. Reed Dir. at 54. Moreover, as WRA witness Aaron Gould observed at the hearing, "I do think that there has been a blurring of this reliability issue and price spike mitigation throughout this hearing. Winter Storm Uri did not affect reliability." Tr. (Vol. 3) 846 (Gould). Therefore, the Company's claims that reliability needs to be improved on the basis of what happened in February 2011 or what might happen in some other 1-in-50 year (or 1-in-100 in the case of Storm Uri) black swan event are unfounded and further confuse the record on the issue of reliability. *See* Reed Dir. at 7 (describing Storm Uri as a "once-in-a century level of [price] disruption"); NEE Exh. 1 (Subra Dir.) at Exh. WS-7, pp. 4-5 ("What we were referring to as a 1 in 100 year event . . . was that Winter Storm Uri produced price spikes that were a 1-in-100 probability based on the fluctuation from pre-event prices to peak prices.").

reliability as it pertains to the storage facility arrangement NMGC wishes to replace with the LNG Facility.

In its initial story elucidated in support of the Application, NMGC repeatedly laments the "erosion in confidence NMGC has in the reliability of the Keystone Facility"[347] as the Company's fundamental reliability problem that is animating its LNG Facility proposal. The Company's respected energy industry expert, John Reed,[348] forcefully asserted in his direct testimony that he had "never seen this level of supply unreliability in any other market, including other markets in supply producing regions."[349] At hearing, Mr. Reed made it clear that the "unreliability" he was alluding to involved mostly the Keystone Storage Facility; in his own words, "To be clear, *the concern with regard to reliability is with Keystone*."[350]

However, after NMGC was compelled to provide proof of the cuts in nominations and *force majeure* events declared by Keystone Storage in response to the Hearing Examiner's first bench request, there was an unmistakable shift, or "pivot" as intervenors put it, in NMGC's

[347] Bullard Dir. at 37; *see id.* Bullard Dir. at 34 (". . . NMGC continues to rely on a facility that the Company does not have absolute confidence in despite its best efforts to contract for further security."); Tr. (Vol. 1) 255-56 (Bullard); Bullard Reb. at 32-33, 42.

[348] *See* Tr. (Vol. 3) 839 (Gould) ("My first reaction to the case was the intimidation by John Reed, given that he was the expert witness, so I was like, "Oh, no; what have I walked into?").

[349] Reed Dir. at 7. Mr. Reed went on to observe, at 7-8, "[t]he fact that supply and infrastructure offering available to NMGC have experienced this level of unreliability requires a much more aggressive stance for the LDC in terms of controlling its own supply infrastructure as a means of insuring adequate reliability." While Mr. Reed ostensibly was referring generally to "failures with production, interstate pipeline transportation, and underground storage . . .," it is made abundantly clear in his testimony at hearing that Mr. Reed thought that "[t]o be clear," the primary problem or "concern with regard to reliability *is with Keystone*." Tr. (Vol. 2) 491 (Reed) (emphasis added). Continuing to elaborate on what he thought the primary reliability concern the LNG Facility proposal was addressing, Reed testified, [t]here have been Force Majeures on Transwestern, on El Paso, *but the reliability concern we are addressing through LNG is almost entirely Keystone*; okay? It is the Keystone Force Majeures, or the cuts on critical days." *Id*. (emphasis added).

[350] Tr. (Vol. 2) 492 (emphasis added).

narrative on reliability.[351] Now, attempting to de-emphasize the loss of confidence in Keystone and the significance of the cuts in nominations and *force majeures* events, NMGC frames the reliability question differently. To NMGC, the "important question" ***now*** "is not whether NMGC receives most of the gas it nominates from Keystone [at least 99% of all gas NMGC has nominated], whether any cuts occurred in 2023 [there were zero cuts in 2023; none whatsoever since February 2022], or whether failures at Keystone were the sole reason for the 2011 curtailments [it was not, as the evidence shows]. Instead, the key question [now] is whether NMGC and its customers can rely on Keystone to deliver the Company's stored gas *at critical times*, during high-load winter days or the 1-in-5-year and 1-in-50-year storms in New Mexico's past and future."[352]

Still, even if the Commission accepts NMGC's new, narrower framing of the reliability issue to the availability of "stored gas at critical times," before turning to the next issue below (price spike mitigation), the Commission should closely evaluate Keystone's performance *vis á vis* NMGC. The best evidence for that evaluation is contained in NMGC's responses to the Hearing Examiner's first bench request. At least two of the Intervenors, NEE and WRA, assert that the declining rate of cuts in nominations and *force majeures* reported in response to the first bench request show that Keystone-related problems are not increasing or unmanageable[353] and do not justify the extraordinary expense associated with the proposed LNG Facility.[354] Having

[351] As WRA asserts with justification, "NMGC has not shown that its 'loss in confidence' in Keystone is supported by evidence in the record." WRA Br. at 10.

[352] NMGC Resp. Br. at 7-8 (emphasis in original).

[353] WRA Br. at 8-11.

[354] NEE Br. at 48-50.

closely evaluated the evidence, the Hearing Examiner concludes that both Intervenors are correct in their assessments.

In fact, the data presented in response to the first bench request demonstrate that NMGC has received the vast majority of all gas it has "nominated," or requested, and that the *force majeure* declarations and gas cuts at Keystone that the Company allegedly found so vexing have been declining, relatively steadily, to the point where there were no cuts reported for the entirety of 2023. Indeed, there have been no reported cuts for two full years, with the last cut of any kind having occurred on February 17, 2022.[355] The table below aggregates and illustrates the data NMGC reported in its supplemental response to BR No. 1-1 (nominations and cuts) and BR No. 1-2 (*force majeure* declarations).[356]

Year	# of Cuts	Total Vol. of Cuts (in MMBtu)	Number of *Force Majeures* (impacting withdrawal)	# of Cuts due to *Force Majeure*
2023	0	-	-	-
2022	3	23,045	1	-
2021	5	85,356	1	3
2020	0	-	-	-
2019	6	24,044	-	-
2018	9	45,745	2	1
2017	2	36,440	-	-
2016	4	20,024	-	-
2015	14	128,969	3	11
2014	3	4,972	-	-
2013	1	4,000	-	-

The data in the table show seven *force majeure* declarations at Keystone by Kinder Morgan that have impacted withdrawal capability since 2013. Only four of those *force majeure* declarations resulted in cuts to NMGC-nominated natural gas. And, of those four *force majeure*

[355] *See* NMGC Supp. Resp. to BR No. 1-1, p. 2 of 2.

[356] The data in the table were culled from a similar table in NEE's brief-in-chief, at 48.

events, in the past five years only one event has caused any cuts to gas NMGC nominated. That lone event in the last five years was the *force majeure* Keystone declared during Storm Uri in February 2021. Even still, as NMGC witness John Reed showed, in spite of the cuts during Storm Uri, Keystone still provided almost 550,000 Mcf of gas over the course of the storm.[357] Moreover, despite the cuts shown in the table, NMGC has received at least 99% of all gas it has nominated.[358]

Concerning the non-*force majeure* cuts, NMGC concedes it has no information or explanation for any of the cuts. Mr. Bullard testified at the hearing that "sometimes" cuts are correlated with *force majeure* events, "and sometimes they are operational constraints. It might be pipeline constraints. 'We can't get past this point,' or it's over-nominated, you know. They will allocate based on things like that. . . . It's a mixed bag; sometimes it's force majeure, sometimes it's not."[359] Thus, as WRA points out, "[t]he most significant part of the Company's supplemental response [to the first BR] was that the Company admitted they could not provide an explanation of cuts that did not occur during a *force majeure* event."[360] In other words, as far as non-*force majeure* cuts are concerned, NMGC doesn't know whether Keystone Storage can even be blamed or faulted for such cuts, if any.

Finally, it should be noted that, as NEE points out in its brief-in-chief, NMGC's existing strategies have recently proven sufficient for the Company to cope with the impact of a *force majeure* declaration and associated gas cuts at Keystone. In response to a February 2022 severe cold weather event, NEE states that as the Company itself reported, "NMGC increased line pack,

[357] Reed Dir. at JJR-3, l. 5, col. 9 ("Total").

[358] *See* NMGC Br. at 7, n. 12 (acknowledging NEE's statement that "NMGC has received at least 99% of all gas it has nominated.").

[359] Tr. (Vol. 1) pp. 237-38 (Bullard).

[360] WRA Br. at 9.

purchased additional gas supplies, injected additional gas into storage, and diversified supply from four different basins in order to avoid needing to go into the intraday market during the storm to purchase additional gas."[361] Thus, despite the cuts by Kinder Morgan at Keystone on February 4, 2022,[362] the foregoing strategies proved successful.[363] Indeed, NMGC's gas industry expert witness, Mr. Reed, concedes that the Company will continue to provide reliable and affordable service without the LNG facility.[364]

In sum, while the Commission can acknowledge the operational attributes and advantages of the LNG Facility shown in the record,[365] nevertheless, the Hearing Examiner finds that the preponderance of the evidence does not support a finding that NMGC's reliability is impacted to any appreciable degree or manner that would warrant approval of a CCN for the LNG Facility, particularly when the reliability factor fully vetted above is considered alongside the other factors weighed in the net benefit test yet to be evaluated.

4.4.2. Price Mitigation

NMGC asserts that the LNG Facility will afford the Company and its customers greater protection from extraordinary price spikes, mindful of the extreme price volatility experienced

[361] NEE Br. at 49 (citing Case No. 21-00095-UT, Bullard Compliance Filing Test. at 28-30).

[362] *See* NMGC Resp. to BR No. 1-2, p. 5 (2/2/22 withdrawal limitation due to "[e]xtreme cold temperatures limiting withdrawal ability"). *See id*. Reed Dir. at 16 (Figure 3).

[363] NEE Br. at 49.

[364] NMGC Exh. 4 (Reed Reb.) at 4 (". . . the Company's evidence warrants issuance of the CCN, which is not to say that but for the proposed LNG Facility the Company could not continue to provide reliable and affordable service."); Tr. (Vol. 2) 433-34 (Reed) ("By the way I define 'necessary' [to provide reliable and affordable service], no. . . . I think it is too much to say that if the LNG Application is denied, the Company won't continue to be able to provide reliable service.").

[365] *See, e.g.,* Bullard Dir. at 58-61; Bullard Reb. at 9-11; NMAG Exh. 1 (Crane Dir.) at 29 (agreeing with NMAG witness John Rosenkranz (NMAG Exh. 2 at 22, 25) that the LNG Facility would provide "some increased reliability locally in the Company's service territory.").

during Storm Uri and the Commission's subsequent order in the *Extraordinary Cost Recovery Case* that NMGC should explore changes to its current storage agreement.[366] NMGC identified two areas where the LNG Facility may afford price spike mitigation: (i) a revised gas supply purchasing plan and (ii) estimated winter storm savings shown in a hypothetical analysis performed by NMGC witness John Reed considering whether and to what extent the LNG Facility might have mitigated the $107 million of extraordinary gas costs the Company incurred during Storm Uri.

First, NMGC estimates that by simply being able to rely more heavily on on-system LNG, the Company will be able to save customers approximately $3,000,000 per year in gas costs.[367] To arrive at the $3 million annual savings estimate, NMGC witness Reed examined gas prices for the five years from November 1, 2018 through March 2023. Mr. Reed determined that NMGC and its customers could have saved, on average, approximately $3 million annually during this "look-back period" through a combination of operational and price/forecast considerations over the past five years through the use of lower cost summer gas to offset more expensive winter gas during the heating season.[368] NMGC claims that these are for "routine" winter loads and exclude the extraordinary additional savings that could be captured when extreme events, such as Storm Uri, occur.[369] The savings are achievable, NMGC maintains, because the Company's concerns about cuts on the interstate pipelines and from storage has resulted in NMGC regularly procuring more

[366] Case No. 21-00095-UT, *Final Order*, at 39, ¶ N.

[367] NMGC Br. at 28-29.

[368] *See* Reed Reb. at 8, JJR-1 Errata.

[369] NMGC Resp. Br. at 24 (citing Reed Reb. at 8).

gas than the demand forecast would otherwise require.[370] "When everything goes fine," NMGC relates, the Company "adds this adds this higher priced gas to storage at Keystone, thus negating some of the benefits of low-priced warm weather gas purchases."[371] By thus having a more reliable gas supply, the NMGC believes it will be able to decrease the amount of extra gas it buys during the more expensive wintertime.[372]

Second, NMGC claims that Mr. Reed's analysis shows that the NMGC will likely be able to obtain savings for customers during winter weather events, relying on Reeds conclusions that "while the LNG Facility will not provide complete price protection, building the LNG Facility is certainly a major step in the right direction in terms of making a resource available that provides the Company with an opportunity to mitigate price spikes under similar circumstances."[373] Mr. Reed's demonstration purports to show that during Storm Uri, NMGC could have saved customers approximately $13.8 million by replacing some of the high-priced intraday gas purchases and all of the Keystone withdrawals with vaporized gas from the LNG Facility.[374] Curiously, however, NMGC adds the disclaimer in another part of its brief-in-chief that the hypothetical scenarios Mr. Reed developed and ran in this analysis "are done for illustrative purposes to show what is potentially possible."[375]

Taken at face value, Intervenors interject, under a best a best-case scenario, NMGC's LNG Facility proposal would only have saved customers $13.8 million out of the $107 million in

[370] *Id*. 28 (citing Bullard Reb. at 4, 12-13).

[371] *Id*. (citing Bullard Reb. at 26).

[372] *Id*. 28-29.

[373] *Id*. 29 (quoting Reed Dir. at 77).

[374] *Id*. (citing Reed Dr. at 74).

[375] *Id*. 31.

extraordinary gas costs incurred during Storm Uri, a 1-in-100-year event.[376] Intervenors stress that Mr. Reed's "hypothetical cost savings may show the *potential* of operating the LNG facility in a manner that provides savings, but it does not serve as reliable evidence that the Company could achieve such optimization."[377] Absent an operating plan document demonstrating in detail how NMGC would utilize the facility on a day-to-day basis, Intervenors contend the purported cost savings should not be credited as evidence of a net-benefit.[378] In addition, Intervenors suggest there are numerous facts in evidence indicating that eliminating Keystone Storage in favor of the proposed LNG Facility actually presents risks to customers that have not been adequately accounted for in NMGC's assessments of the costs and benefits.

For example, Intervenors allude to WRA witness Aaron Gould's testimony, wherein Mr. Gould opined that the LNG Facility would likely provide decreased access to stored gas in comparison to retaining the Keystone Storage arrangement. Mr. Gould was the Manager of Derivatives & Quantitative Analysis in Regulatory Affairs, Gas Supply, and Energy Trading for New Jersey Natural Gas from 2017 to 2021, and before joining WRA as a Senior Policy Advisor in 2023, ran his own consulting practice focusing on peak day or "design day" demand forecasting for gas utilities, including incorporating design day forecasts into regulatory filings.[379]

[376] Intervenors' Resp. Br. at 5 (citing Reed Dir. at 7 for ". . . once-in-a century level of [price] disruption that occurred during Winter Storm Uri[;]"; NEE Exh. 1 (Subra Dir.) at Exh. WS-7 (describing Storm Uri as a "once-in-a century level of [price] disruption"); NEE Exh. 1 (Subra Dir.) at Exh. WS-7, pp. 4-5 ("What we were referring to as a 1 in 100 year event . . . was that Winter Storm Uri produced price spikes that were a 1-in-100 probability based on the fluctuation from pre-event prices to peak prices.").

[377] Intervenors' Resp. Br. at 5-6 (emphasis in original).

[378] *Id*. 6.

[379] WRA Exh. 1 (Gould Dir.) at 1.

Mr. Gould posited that mid-winter liquefaction of substantial amounts of LNG is operationally unrealistic, and any wintertime liquefaction would be counterproductive to mitigating the impact of price spikes because if LNG is NMGC's only source of stored gas, then the Company would have to make overpriced market purchases of gas for liquefaction.[380] Accounting for this dynamic, Intervenors maintain, is critical because evidence in the record shows that the facility will lose .05% of its stored gas to boil-off per day.[381] Given, hence, that liquefaction is limited to 10,000 Mcf/day, boil off alone will require one to one-and-a-half days of liquefaction per month to simply maintain a consistent level of gas in the LNG tank.[382] Intervenors point out, again, that NMGC has not provided an operating plan that shows how it would operate the plant on a day-to-day basis, that accounts for the complexity of this dynamic. Absent such an operating plan, Intervenors believe that there is no basis for finding that NMGC would operate the facility in a way that would insulate customers from price spikes. In this respect, Intervenors emphasize, NMGC's claim of a net-benefit based on "show[ing] what is *potentially* possible" illustrates the uncertainty inherent in NMGC's analysis.[383]

Furthermore, Intervenors state that using LNG to contend with high gas prices is "extremely unusual," since the amount of LNG is limited, and reliability usually trumps price mitigation.[384] As Mr. Gould explained at the hearing, traders would often want to use LNG to save money on gas costs, but their requests are frequently denied because using facilities in that fashion

[380] Tr. (Vol. 3) 825-26, 842-44. *See also* Gould Dir. at 20-29.

[381] Intervenors' Resp. Br. at 6 (citing Bullard Dir. at Exh. TCB-3, p. 19).

[382] *Id*. (citing Bullard Dir. at 45).

[383] *Id*. 6-7 (citing NMGC Br. at 31) (emphasis in Intervenors' Resp. Br.).

[384] *Id*. 7.

jeopardizes reliability.[385] In support of this assertion, Intervenors bring up the example of CenterPoint Energy, an natural gas utility operating in Minnesota that experienced this exact scenario during the unprecedented gas prices of Storm Uri.[386] As the Minnesota Public Utilities Commission (PUC) found in its October 2022 order disallowing CenterPoint recovery of extraordinary natural gas costs incurred during Storm Uri, CenterPoint incurred an estimated $500 million in gas costs between February 12-22, 2021.[387] As Intervenors note, CenterPoint had a 1 Bcf LNG plant full of gas during the storm, but it refused to use any of the stored LNG "to reduce the volume of gas purchased on the daily spot market at extraordinary prices during [Storm Uri]," despite the fact that using the LNG could have saved customers tens of millions of dollars in gas costs.[388] In defense of its decision not to use LNG for price mitigation purposes, CenterPoint contended that it had held the LNG in reserve so it would be available if needed to respond to unanticipated system conditions, such as pressure issues, intraday variations in load, or gas supply cuts.[389] The utility claimed that using LNG "for price mitigation could have posed safety and reliability risks."[390] CenterPoint argued that if it had used LNG to reduce its spot-market gas purchases, but then system conditions changed and supply became unavailable, it may not have

[385] *Id*. (citing Tr. (Vol. 3) 840-42 (Gould)).

[386] *Id*.

[387] Docket Nos. G-008/M-21-138, G-999/CI-21-135, *Order Disallowing Recovery of Certain Natural Gas Costs and Requiring Further Action*, 2022 WL 13983107 (Minn. P.U.C. 10/19/2022), at *2 ("*Minnesota PUC Order*").

[388] Intervenors' Resp. Br. at 7 (citing *Minnesota PUC Order*, 2022 WL 13983107, at *15-16) ("CUB [Citizens Utility Board of Minnesota] contended that CenterPoint's failure to make use of its peak-shaving resources caused the utility to imprudently incur between $12.4 million and $96.9 million in additional gas costs.").

[389] *Id.* at *17.

[390] *Id.*

been capable of delivering enough LNG to maintain continuous service to customers.[391] The Minnesota PUC rejected CenterPoint's arguments and found, among other things, that the utility did not meet its burden to prove it acted prudently with respect to its peaking facilities and, therefore, disallowed recovery of $12,431,429.[392]

Intervenors submit that CenterPoint's predicament during Storm Uri is exactly the point Mr. Gould made in his testimony: when choosing between reliability concerns and price mitigation during an uncertain, volatile situation like Storm Uri and having a limited amount of LNG stored, reliability concerns will prevail, and customers will be stuck with extraordinary gas costs.[393] Because of the limited supply of LNG storage, Intervenors warn that it is likely to result in high extraordinary gas costs than a larger storage option like Keystone.[394]

The Hearing Examiner finds NMGC's claims that the LNG Storage Facility will offer significant price mitigation largely unsupported and unreliably speculative. NMGC's first claim, that the LNG Facility could save customers $3 million per year through reaping the benefits of additional, lower-priced purchases during injection season (April through October),[395] seems logical at a surface-level. But bereft of a detailed operating plan showing precisely how the LNG

[391] *Id*.

[392] *Id*. *19, *31 (Ordering ¶ 4). In so holding, the Minnesota Public Utility Commission disagreed with CenterPoint (and one of their co-experts in the case, John Reed,) finding that the utility had been imprudent in failing to dispatch any of its LNG to combat high prices during Storm Uri and, thus, disallowed recovery of the $12.4 million in extraordinary gas costs discussed above. *Id* *18-*19. The Minnesota PUC further found CenterPoint acted imprudently with respect to its Waterville/Medford underground storage facility (disallowing $3,810,503), did not act prudently with regard its BP Canada virtual storage facility (disallowing $12,195,499), and did not act prudently with respect to curtailment (disallowing $7,279,592). *Id*. (Ordering ¶¶ 2, 3, and 5).

[393] Intervenors' Resp. Br. at 8.

[394] *Id*.

[395] Gould Dir. at 29.

Facility would be run on a daily basis, it is virtually impossible to verify the substantial savings NMGC claims. Perhaps that is why NMGC is very careful to repeatedly characterize the estimated savings as "potential," as WRA notes.[396] Moreover, as WRA witness Gould noted, the primary mechanism for natural gas storage to provide costs savings to a gas utility is through the purchase and injection of low-priced gas during injection season for use in winter when prices are usually higher. "The proposed LNG Facility would accomplish this," Gould concludes, "but so does Keystone."[397]

Moreover, NMGC's analysis of gas cost savings for routine winter loads failed consider the effects replacing Keystone Storage with the LNG Facility would have on gas purchase costs.[398] Attorney General witness John Rosenkranz, the Principal of North Side Energy, LLC who has more than 40 years of experience in natural gas supply resource planning and contracting for natural gas storage and transportation services,[399] identified at least three reasons to expect gas purchase costs would increase:

(1) Replacing the 1.7 Bcf of Keystone Storage that NMGC uses today with 1.0 Bcf of LNG storage would reduce NMGC's capacity to hedge winter gas supply costs by injecting gas into storage during the summer and shoulder months.

(2) Replacing Keystone Storage with an LNG peaking facility would reduce NMGC's ability to manage supply-requirements imbalances caused by over-purchases by injecting the gas into storage.

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[396] WRA Br. at 12 (citing Reed Reb. at 1, 3, 5; Bullard Reb. at 34).

[397] *Id*. Incidentally, Mr. Gould's trenchant observation brings to mind another deficit in the Application taken up below: NMGC's failing to credibly analyze continuing its Keystone Storage lease as an alternative.

[398] *See* NMAG Exh. 2 (Rosenkranz Dir.) at 16 ("The cost estimates presented in the Application include the LNG Facility capital costs and Keystone Storage reservation costs, the LNG Facility operating costs, and the variable injection and withdrawal costs for both alternatives. NMGC says nothing about how replacing Keystone Storage with the LNG Facility would affect the gas purchase costs that the Company recovers from sales service customers.").

[399] Rosenkranz Dir. at 1.

(3) NMGC would need to modify its gas purchase plans to receive boil-off gas into the distribution system during the summer and replace boil-off during the winter to keep the LNG inventory at the desired levels.[400]

Having failed to account for potentially costly factors like those Mr. Rosenkranz identified that would tend to cause gas purchase costs to be higher than NMGC estimated and having failed to provide a detailed operating plan for the LNG Facility, the Hearing Examiner consequently finds NMGC's analysis of gas cost savings for routine winter loads unreliable.

Similarly, the Hearing Examiner finds NMGC witness Reed's analysis that NMGC could have saved $13.8 million by replacing high-priced intraday gas purchases and Keystone withdrawals with vaporized gas from the LNG Facility conjectural. To start, it gives pause to credit a price/cost optimization analysis when the proponent describes it as being submitted for "illustrative purposes to show what is potentially possible."[401] The Commission should expect a higher degree of certitude given the substantial investment involved and the concomitant burden the Company proposes that ratepayers absorb in placing the LNG Facility in rate base for 30 years or more.

Likely informing NMGC's equivocal advocacy of the hypothetical extreme winter event savings analysis,[402] the scenario through which Mr. Reed arrived at the hypothetical $13.8 million

[400] Rosenkranz Dir. at 27-28.

[401] NMGC Br. at 31.

[402] Emblematic of the highly speculative nature of the avoided gas cost analysis is NMGC's statement in its Response Brief that "[t]he precise amounts and details are unknown, and cannot be known, the thus the hypothetical analysis." NMGC Resp. Br. at 23. This particular statement brings to mind former U.S. Secretary of Defense Donald Rumsfeld's "unknown unknowns" (and inadvertently telling) response to a reporter's question, in the lead up to the eventual Iraq War, regarding the lack of evidence linking Iraq and Saddam Hussein to terrorist organizations to which Iraq might have supplied or was allegedly willing to supply weapons of mass destruction:

> Reports that say that something hasn't happened are always interesting to me, because as we know, *there are known knowns; there are things we know we know*. We also

in extraordinary gas cost savings during Storm Uri assumes, as Mr. Gould points out, that all withdrawals from Keystone Storage and all intraday purchases due to cuts from Keystone (amounting to 12.2% of Keystone's delivery commitments during the time in question) were replaced by vaporized LNG from the Facility.[403] On top of those unrealistic assumptions, as NEE further points out,[404] to use the LNG Facility as imagined in this gas cost savings scenario requires the Commission to accept two additional implausible assumptions: (1) that the LNG tank would be completely full at the beginning of Storm Uri on February 12;[405] and (2) that it would be operationally acceptable to run the tank virtually completely dry, down to 43,996 MMBtu, or slightly more than 4% of capacity.[406] The Hearing Examiner agrees that the assumptions built into

> know *there are known unknowns*; that is to say *we know there are some things we do not know*. But *there are also unknown unknowns – the ones we don't know we don't know*. And if one looks throughout the history of our country and other free countries, it is the latter category that tends to be the difficult ones.

In response to the reporter's follow-up question "is this [evidence of a terrorist link to Iraq] an unknown unknown?" Secretary Rumsfeld responded, "I'm not going to say which it is." *See* U.S. Dept. of Defense, Defense.gov News Transcript: *DoD News Briefing – Secretary Donald Rumsfeld and General Richard Myers, Chairman, Joint Chiefs of Staff* (2/12/202), quote retrieved at: https://web.archive.org/web/20160406235718/http://archive.defense.gov/Transcripts/Transcript.aspx?TranscriptID=2636 (emphasis added). As it turns out, Secretary Rumsfeld's "unknown unknowns" discourse was actually, according to numerous sources, an awkward attempt at applying the "Johari Window" developed by psychologists Joseph Luft and Harrington Ingham in 1955 as a psychological model for interpersonal communication and is primarily used in self-help groups, corporate settings, and the intelligence community as a type of heuristic exercise. The model is based on the idea that issues are known or unknown by an individual and known or unknown by others around them. The model is divided into four quadrants (known knowns [arena/open], known unknowns [façade/hidden], unknown knowns [blind spot], and unknown unknowns [unknown: not applicable/collective ignorance]). The model and its principles, which is most often employed to help explain and improve self-awareness and self-communication, can be applied to risk management and risk assessments. *See, e.g.,* https://www.forbes.com/sites/forbestechcouncil/2022/07/28/you-dont-know-what-you-dont-know-or-do-you/?sh=185eb7dc7c61; https://en.wikipedia.org/wiki/Johari_window.

[403] Gould Dir. at 22.

[404] *See* NEE Br. at 14.

[405] Tr. (Vol. 2) 451 (Reed).

[406] Reed Dir. at Exh. JJR-3, l. 50 (LNG inventory).

the Company's gas cost savings scenario seem highly implausible, especially given Mr. Gould's cogent explanation,[407] as further illustrated by the predicament CenterPoint Energy found itself in during Storm Uri in being reluctant to vaporize it peaking resources. The Hearing Examiner thus finds the hypothetical avoided gas cost savings analysis flawed and unreliable[408] and the purported finding of "tens of millions of dollars of replacement gas costs from [the Company's] use of the proposed LNG Facility" speculative.

Even if the Commission accepted the dubious replacement gas cost savings estimate – and as reflected in the findings above the Hearing Examiner advises against accepting it – the best possible outcome for ratepayers is that they would have saved $13.8 million out of $107 million in extraordinary gas costs. Given that Mr. Reed himself described Storm Uri as a "once-in-a century level of disruption,"[409] the savings realized would have been marginal, at best, and certainly insufficient to justify the substantial additional costs (over retaining Keystone Storage) associated with constructing the LNG Facility.[410] Indeed, considering, among other factors addressed in this decision, the significant additional cost NMGC proposes that ratepayers taken on

[407] Specifically, the Hearing Examiner is referring to Mr. Gould's thesis, borne of almost five years of experience being the manager of derivatives and quantitative analysis for New Jersey Natural Gas Company and interacting engineering and trading counterparts at the company, that using LNG to limit or constrain high gas prices is extremely unusual since LNG stores typically are limited and reliability eclipses price mitigation; more specifically, that deep winter liquefaction of substantial amounts of LNG is operationally unrealistic, and any wintertime liquefaction would be counterproductive to mitigating the impact of price spikes because if LNG is a utility's only source of stored gas, then the utility would have to make overpriced market purchases of gas for liquefaction. *See* Tr. (Vol. 3) 811-12, 825-26, 839-43, 845-46, (Gould); Gould Dir. at 1, 24, Exh. AJG-1.

[408] Tr. (Vol. 3) 859 (Gould) (citing "serious flaws in the analysis of savings as amended by the Errata[.]).

[409] Reed Dir. at 7.

[410] *See, e.g.*, Gould Dir. at 28 (concluding that "[n]either the existing Keystone storage facility nor the proposed LNG Facility could have significantly mitigated the effect of the price spikes on customer costs during Winter Storm Uri. The LNG Facility, had it been in existence, may have provided some marginal cost mitigation, $14.7 million of $107 million, but certainly not enough to justify the increased cost of constructing the LNG Facility.").

– to the tune of at least $100.4 million – the minimal 1-in-100 year savings opportunity the Company presents as "potentially possible" doesn't look like a bet worth taking on behalf of ratepayers, particularly when other critical factors are weighed in the net public benefit balancing test.

Finally, with regard to WRA witness Gould's testimony addressing the dynamic of reliability trumping price mitigation, the Hearing Examiner should clarify that the prospect that LNG Facility would likely provide decreased access to stored gas in comparison to retaining Keystone Storage and the cautionary tale in the *Minnesota PUC Order* finding CenterPoint Energy imprudent, in part, for failing to dispatch any of its peaking resources during Storm Uri do not pre-ordain that NMGC would err on the side of reliability in operating the LNG Facility in the manner CenterPoint treated its peaking resources during a similarly disruptive severe winter event. Nevertheless, absent a detailed operating plan showing precisely how the LNG Facility would be run, the CenterPoint example and the experience WRA witness Gould shared should give the Commission pause in crediting the proposed facility's price mitigation capabilities.

Accordingly, for the foregoing reasons and numerous others in the record,[411] the Hearing Examiner finds that NMGC has not demonstrated that the LNG Facility will provide ratepayers meaningful price mitigation.

[411] For instance, similar to Mr. Gould's testimony on the topic, NMAG witness Andrea Crane points out while the LNG Facility will provide some local reliability, it will limit the flexibility that a large storage facility capable of both injections and withdrawals provides. NMAG Exh. 1 (Crane Dir.) at 30-31. And, relatedly, as WRA concludes, "to provide the full potential reliability benefit of protection against cuts or customer outages, the LNG Facility should be fully charged with stored gas during severe winter storms. To instead use the LNG Facility to provide protection against price spikes during a winter storm event would reduce the availability of storage capacity for reliability purposes. WRA Br. at 13 (citing Tr. Vo. 2) 313 (Bullard). Therefore, a cost-benefit analysis for customer benefits *cannot reasonably assume the proposed LNG Facility can provide both price protection and reliability services at the same time*." *Id*. (emphasis added to reflect Hearing Examiner's concurrence in finding). The lack of a benefit-cost analysis in this case is addressed in Section 4.4.6 below.

4.4.3. Cost-effectiveness

In addition to the reliability and price mitigation attributes that NMGC claims the LNG Storage Facility would provide, NMGC asserts that the LNG Facility "is the lowest reasonable-cost solution."[412] NMGC witness Reed provided a financial analysis comparing the cost of several alternatives including constructing the proposed LNG Facility, acquiring additional underground storage, developing a propane air facility, and maintaining the status quo with the Keystone Storage agreement. Mr. Reed concluded that based on a 30-year, net present value (NPV) total revenue requirements scenario, the cost of the LNG Facility is $100.4 million more expensive than continuing the current arrangement with Keystone. Mr. Reed estimated that the LNG Facility will have a cost of $339.7 million on a net present value basis, versus a 30-year net present value cost for the Keystone Storage of $239.3 million.[413]

Contending with the substantial cost differential of $100.4 million over the status quo, NMGC attempts to prove its claim the LNG Facility is the lowest reasonable-cost solution through three distinct analyses: (i) Mr. Reed's financial analysis that shows an average annual increase of $3.3 million on an NPV basis; (ii) the analysis of hypothetical avoided gas costs during Storm Uri; and (iii) the analysis of gas cost savings for routine winter loads.[414] The Hearing Examiner has just analyzed and found flawed and unreliable the latter two analyses for the reasons discussed in Section 4.4.2 above.[415] NMGC's first NPV analysis is discussed below after addressing the parties'

[412] NMGC Br. at 2.

[413] *See* Reed Dir. at 64-70.

[414] *See* NMGC Resp. Br. at 17-25.

[415] The Hearing Examiner treated those two analyses under the rubric of price mitigation in part because NMGC addressed them as reasons the LNG Facility would provide price mitigation in its brief-in-chief. *See* NMGC Br. at 28-29.

differences of opinion on cost-related issues associated with the proposed LNG Facility. From this point forward, the debate on cost-related issues pits NMGC versus the Attorney General, more specifically NMGC witness John Reed vs. NMAG witness Andrea Crane.

To set the stage for that debate, as discussed earlier on in this decision, NMGC projects that the capital cost for the proposed LNG Facility to be $180.9 million, with a "contingency" or CAPEX range of accuracy of -20% to +25%.[416] The Company estimates that annual O&M costs will range from $4.7 to $5.3 million per year.[417] All costs are based on 2022 dollars and then inflated over a 30-year period in NMGC's financial model.[418] NMGC has agreed to cap the capital costs of the LNG Facility. The cap is set at $180.9 million with an escalator for inflation, an exception for taxes, and an "out" provision whereby NMGC can elect not to proceed with the project if all the bids come in too high.[419]

Turning, now, back to Mr. Reed's financial analysis, which concluded that the LNG Facility over its 30-year life would be $100.4 million more costly than Keystone on a NPV basis[420] and would result in an average increase in annual revenue requirements of approximately $3.3 million on a NPV basis,[421] NMGC concedes that, taken alone, Reed's financial analysis shows that the NPV of LNG is greater than that of Keystone over the 30-year timeframe.[422] However, NMGC

[416] Bullard Dir. at 55, Exh. TCB-4, pp. 9, 22 of 28.

[417] *Id*. 55. Maintenance costs comprise approximately 36.2% of the projected annual O&M costs, while salaries and wages account for approximately 31.5% of the projected operating costs. The remaining O&M costs are electricity and fuel. Crane Dir. at 14.

[418] NMAG Exh. 1 (Crane Dir.) at 14.

[419] Bullard Reb. at 13-14.

[420] Tr. (Vol. 2) 401:12-19 (Reed).

[421] NMGC Exh. 4 (Reed Reb.) at 9.

[422] Tr. (Vol. 2) 401 (Reed).

insists, this is just the start of the examination and the ineluctable conclusions of Reed's must be considered in context.[423]

First, while NMGC admits it did not quantify the operational advantages of the proposed LNG Facility, NMGC nevertheless maintains the LNG Facility will provide a higher degree of reliability than the status quo, which will help mitigate potential customer supply disruptions like the 2011 severe weather event and the need for more expensive replacement gas, particularly during extreme weather events like Storm Uri in 2021. Each instance of a disruption in storage or pipeline supply during the winter heating season, NMGC warns, "carries with it the potential for disruption of service to customers which carries with it immeasurable costs to customers."[424] NMGC therefore argues that mitigating the impact of events like these, as ordered by the Commission in Case No. 21-00095-UT is the strongest argument for the LNG Facility. Viewed in this context, then, NMGC submits that any annual incremental cost must be considered in view of the greater reliability and the greater protection from price spikes afforded by the proposed facility.[425]

Second, NMGC points out that the $3.3 million net present value revenue requirement impact Mr. Reed developed would be offset by the $3 million in annual cost savings derived gas cost savings for routine winter loads[426] that, unfortunately for NMGC's position in this context, the Hearing Examiner already discredited in Section 4.4.2 above.

[423] NMGC Resp. Br. at 17.

[424] *Id*. 18.

[425] *Id*.

[426] *Id*.

NMGC then attempts to rebut NMAG witness Crane's criticisms of Mr. Reed's financial analysis. This provides the Hearing Examiner the opportunity to examine the dueling party's positions on a point-counterpoint basis.[427] The Attorney General's central premise is that the evidence in this case shows that the cost of the LNG Facility assumed by Mr. Reed is understated, the cost assumed for Keystone Storage is overstated, and the differential between the cost of the LNG Facility and retaining the Keystone Storage is greater than the $100.4 million Reed estimated.[428]

First, NMAG witness Andrea Crane believes that NMGC has underestimated the construction costs of the proposed LNG Facility.[429] The Attorney General also questions in this context the purpose of the cap on initial capital costs.[430] To its point that Mr. Reed underestimated the construction costs, the Attorney General notes that Mr. Reed estimated that inflation would increase the initial capital costs to $207.5 million by 2027, and $207.5 million is the capital cost on which the Company's revenue requirement is based. [431] Further, Ms. Crane noticed that Mr. Reed apparently failed to account for the costs of constructing a 1,200-foot long buried steel pipe to connect the LNG Facility to NMGC's existing system as well as a small diameter 4-mile long distribution pipe to be built to transfer boil-off gas from the Facility to a nearby distribution

[427] The Attorney General's summary of Ms. Crane's analysis is set forth in his brief-in-chief, at 21-28.

[428] NMAG Br. at 21.

[429] Crane Dir. at 14-15, 17.

[430] *Id*. Because the Attorney General discusses underestimated capital costs and the cap on initial capital costs together and NMGC addresses them that way as well, the Attorney General's first (capital costs will likely be higher) and second (cap on capital cost concerns) arguments together.

[431] NMAG Br. at 21 (citing NMGC Errata Workpapers, JJR-WP-1, p. 11 of 70, (Errata Attachments, p. 56 of 120)).

system.[432] Ms. Crane also found that the costs estimated for tanker trucks and vaporization equipment used to vaporize LNG at critical sties other than the LNG storage tank site were not included in Mr. Reed's cost estimate.[433] In addition, the Attorney General also notes the capital costs have a range of accuracy of -20% to +25+. This degree of uncertainty, the Attorney General argues, weighs against finding a net-benefit.[434]

The Attorney General thus believes that there is a high likelihood that the initial cost of the LNG Facility will be higher than the costs projected by NMGC. NMGC initially estimated, based on the Company's May 2022 Financial Forecast, that the cost for the LNG Facility would be $120 million.[435] From the May 2022 estimate of $120 million to the January 1, 2023 projection of $181 million, estimated capital costs have increased by more than 50%. Given recent inflation, supply chain issues and other factors, the Attorney General reasons that it is entirely possible that actual costs will be even higher than those projected in the Application. To its credit, NMGC doesn't even attempt to deny the Attorney General's concern that actual LNG project costs may be significantly higher those the Company has projected. Instead, NMGC shrugs off the Attorney General's concerns, shifting attention to the cap on initial capital costs: "whether true or not [that the construction costs are underestimated], NMGC . . . has capped the capital costs of the LNG Facility."[436]

[432] Crane Dir. at 17.

[433] *Id*.

[434] NMAG Br. at 21.

[435] Tr. (Vol. 1) 134-36 (Bullard).

[436] NMGC Resp. Br. at 19.

Even still, the Attorney General takes issue with the significance of the initial cap of $180.9 million on capital costs, as well. The Attorney General notes that the initial cap is inclusive of the contingency and an allowance for funds used during construction (AFUDC)[437] based on 2022 dollars,[438] adjusted by the actual rate of inflation as measured by the Gross Domestic Product Price index (GDP) as reported in the Blue Chip Financial Forecasts between Jan. 1, 2023 and the date of project completion.[439] Mr. Crane notes the Company was not able to predict the amount of AFUDC that would be recorded in connection with the LNG project, but for a project of this magnitude, one would anticipate AFUDC "to amount to millions of dollars in additional costs to ratepayers."[440] Thus, the initial $180.9 million cap is just a starting figure that is likely to run significantly higher when it comes time for NMGC to decide whether to formally commit to the project. At this early stage, however, NMGC has not yet contracted for any components of the LNG Facility[441] and recognizes the possibility that the initial capital costs could be significantly higher than projected.[442]

Therefore, the Attorney General continues, NMGC's price cap guarantee is subject to the Company terminating the project entirely if the "received contractor bids are too high to accept

[437] AFUDC "represents the financing costs during construction, which are typically capitalized along with the direct costs of a project and depreciated over the useful life of the investment. The amount of AFUDC typically depends upon the construction period for a particular project as well as the utility's cost of capital." Crane Dir. at 14.

[438] As Ms. Crane indicated, this means that AFUDC is not included in the initial $180.9 capital cost estimate. For a project of this magnitude, Mr. Crane said "one would expect AFUDC to amount to millions of dollars in additional costs to ratepayers." Crane Dir. at 15.

[439] NMAG Br. at 21-22.

[440] Crane Dir. at 14-15.

[441] Crane Dir. at 14.

[442] Tr. (Vol. 1) 64-65 (Bullard).

without exposing the Company and its customers to unacceptable risk, including NMGC cost recovery . . . ."[443] NMGC essentially gives itself the option to forego the LNG facility once it receives actual bids. The aspect of the cap that troubles the Attorney General the most is that, when it comes time to determine whether or not to break ground on the LNG Facility, NMGC will evaluate whether the additional earnings expected to be generated for shareholders will justify the increased cost. In short, the Attorney General views the cap provision as providing a safety net for the Company's shareholders relative to the capital cost guarantee, further demonstrating the discretionary nature of the LNG Facility.[444] Lastly, the Attorney General notes that the initial $180.9 cap does not apply to capital additions that likely will be necessary and will be included in rate base over the 30-year life of the facility.[445]

NMGC asserts the "out" provision does not invalidate the cap, which it considers a significant commitment on the part of the Company.[446] Under the "out" provision, NMGC states that if the bids come in too high to proceed with the project, then the project should not go forward. If the project goes forward, then the construction cap remains in place, and the Company is responsible if any of its cost projections for the construction are invalid. NMGC adds that it has also agreed to cap operating costs for one year but reserves the right to seek actual operating costs after that date.[447] NMGC states that the cap on operating costs is an unusual concession by a utility that protects ratepayers from any construction cost overruns. On the other hand, NMGC notes that

[443] NMAG Br. at 22.

[444] *Id*.

[445] NMAG Br. at 22.

[446] NMGC Resp. Br. at 19.

[447] *Id*. (citing Bullard Reb. at 14; Tr. (Vol. 2) 358-59).

seeking operating costs is normal as a business cost and subject to ongoing prudency reviews in subsequent rate cases. NMGC further notes that there would be no cost cap for the Keystone facility if that resource were retained as the Company's source of storage. NMGC thus asserts that the LNG Facility's cost caps on capital and operating expenses are in the public interest.[448]

Second, the Attorney General points out that in Mr. Reed's revenue requirements model, which used various depreciable lives many of which exceed 30 years, the Company was left with stranded costs of $40.77 million in Year 30.[449] Nevertheless, the Company only included $5.6 million[450] of stranded costs in its analysis because it used a discount rate based on the weighted average cost of capital (WACC) of 6.44%. "The reality is," the Attorney General believes, "that the Company will likely seek full recovery of its stranded costs of $40.77 million from ratepayers at the end of the useful life of the facility."[451] If all components of the entire facility are depreciated over 30 years, there wouldn't any stranded costs associated with the initial investment. However, there could still be stranded costs associated with any capital additions made over the 30-year period. In that case, it is likely that NMGC would seek to recover the full value of stranded costs from ratepayers.[452]

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[448] NMGC Resp. Br. at 19.

[449] NMAG Br. at 22-33 (citing NMGC Errata Workpapers, JJR-WP-1, p. 13 of 70, (Errata Attachments, p. 58 of 120)).

[450] *Id*. 23 (citing NMGC Errata Workpapers, JJR-WP-1, p. 11 of 70, (Errata Attachments, p. 56 of 120).

[451] *Id*.

[452] *Id*. Moreover, although NMGC is not seeking any specific ratemaking treatment in this case, Ms. Crane noted that the Company did provide with the Application a 30-year revenue requirement cost of service that is based on a 70-year depreciable life for the LNG tank, the single largest project component. NMGC also used a 44-year depreciable life for compression equipment, a 40-year depreciable life for liquefaction components and a 33-year depreciable life for vaporization components, all well above the 30-year period Mr. Reed used in his NPV analysis. Crane Dir. at 15. Thus, Ms. Crane concluded, "[t]o the extent that shorter depreciable lives than those assumed by Mr. Reed were ultimately approved by the Commission, the annual depreciation expense to ratepayers would be higher." *Id*.

NMGC responds to the Attorney Generals concern that future ratepayers could be stuck paying upward of $40 million in standard costs with three points. First, NMGC states that discounting is a standard method of bringing future figures to the present day and particularly in a net present value analysis. Second, NMGC says the future is unpredictable and there is no evidence in this case to support any of the remaining assertions made by the Attorney General. Third, NMGC is not projecting that any of the LNG Facility's costs will be stranded; it expects the facility to operate to the end of its life (past year 30 of the analysis) and that all costs will be recoverable through traditional ratemaking.[453] "Needless to say," NMGC concludes, "the Company is always subject to Commission review of its actions now or in the future."[454]

Regarding the discount rate the Company used in its analysis and in deriving the $5.6 million quoted above, NMGC confirms it is using its current WACC as a discount rate.[455] This is a Commission authorized WACC for the Company and, NMGC asserts, was used by the Company as a reasonable discount rate.[456]

Third, the Attorney General states that NMGC's financial analysis is based on its currently-authorized WACC of 6.44%, which includes a cost of equity of 9.375% and a cost of debt of 3.27%. But Ms. Crane notes that in NMGC's recently-filed base rate case, NMGC is seeking authorization for a cost of capital of 7.38%, which includes a cost of equity of 10.50% and a cost of debt of 3.86%. Ms. Crane thus cautions that if NMGC's authorized cost of capital is higher than the currently authorized 6.44% when NMGC begins to recover the costs of the LNG Facility in rates,

[453] NMGC Resp. Br. at 20 (citing Tr. (Vol. 2) 439-40 (Reed).

[454] *Id*.

[455] NMGC Resp. Br. at 20 (citing Reed Dir., Errata Workpaper JJR-WP-1, p. 11 of 70).

[456] *Id*.

then the revenue requirement for the LNG Facility will be higher than those projected in its Application.[457]

NMGC argues that the Attorney General's concerns over the Company's future WACC should be immaterial to the decision made in this case on the merits of the requested CCN. What is material to this case, NMGC posits, is whether the concept of discounting future sums is reasonable and at the WACC rate. None of this, NMGC adds, was disputed by any intervenor in this case.[458]

Fourth, the Attorney General notes that in NMGC witness Tom Bullard rebuttal testimony, NMGC agreed to cap O&M expenses for the first full year of operation at $4.7 million.[459] The Attorney General notes that the $4.7 million already reflects a significant increase over the $3.5 million of O&M costs NMGC originally assumed in the Application, since operating costs were updated in the Company's errata filing to reflect a correction in projected electricity costs. The $4.7 million cap applies only to year 1, the Attorney General observes, but in subsequent years, ratepayers would have no protection against increasing O&M expenses.[460] In addition, the Attorney General notes that the Company also agreed in Mr. Bullard's rebuttal testimony to undertake a series of safety and environmental inspections and to provide various compliance reports to the Commission. That Attorney General indicates that these costs were not included in

[457] *See* NMAG Br. at 23; Crane Dir. at 16.

[458] NMGC Br. at 20-21.

[459] NMAG Br. at 23 (citing Bullard Reb. at 14).

[460] *Id*.

the revenue requirement developed by Mr. Reed but would be charged to ratepayers after the first year of operation.[461]

Concerning the Attorney General's fourth argument focusing on increasing O&M expenses, the Hearing Examiner has repeatedly scoured NMGC's Response Brief looking for its rebuttal, but he hasn't been able to locate that counter-argument. The Hearing Examiner thus assumes that NMGC's response regarding O&M expenses incurred after the first year of operation of the LNG Facility would refer back to NMGC's defense of the cap on first-year operating costs and its reservation of rights to seek actual operating costs thereafter subject to ongoing prudency reviews in subsequent rate cases.[462]

Fifth, the Attorney General, through Ms. Crane's analysis,[463] casts doubt on NMGC's Reed's projections for future costs associated with Keystone Storage. Mr. Reed included an annual growth rate of 6.2%, even though actual costs increased by approximately 3.0% annually from $5,469,173 to $6,842,947, during the 8-year period from 2014 to 2022.[464] While larger increases are projected for the last several years of the current agreement, Ms. Crane observed that the base costs of the Keystone Storage will have increased by approximately 62% over the 15 years of the contract (from $450,000 per month at September 1, 2013 to $729,000 at August 31, 2027), or again about 3% annually. This is less than half the 6.2% increase that Mr. Reed is projecting over the next 30 years. The Attorney General notes that Mr. Reed suggested that the reason he did not utilize the actual historic Keystone Storage costs was because he "wanted to focus on the increase

[461] *Id*. 24.

[462] *See* NMGC Br. at 19.

[463] *See* Crane Dir. at 24.

[464] *Id*. (citing NMAG Exh. 14, Resp. to NMAG 1-14).

for a given quantity" and "the quantities from 2018 forward were the same quantity . . . ."[465] However, the Attorney General states that NMGC has leased at least 2.7 Bcf of storage space at the Keystone facility since the 2011 Winter Event,[466] and Mr. Reed acknowledged that the reservation charge for the Keystone Storage will have increased by only 3% annually from 2013 to 2025.[467] Therefore, the Attorney General concludes, Mr. Reed's escalation rate for the Keystone Storage is more than double the actual annual growth rate experienced by NMGC.[468]

NMGC responds that the analysis performed by Mr. Reed that produced a 6.2% increase "was based on a desire to baseline the growth factor on the most supportable assumptions[,]" by which NMGC means "the most recent data, and data for the same given quantity.[469] NMGC stands by the 6.2% growth rate in its analysis "as the most reasonable."[470] NMGC states that the debate over the appropriate growth rate

> underscores the argument that what has occurred in the past is informative, but not determinative, of what will happen in the future. The actual level of increase in the future is *unknown or unknowable* at this time and it is reasonable to project forward based on the best available historic data. The actual increase *could be higher or lower, and this adds another element of uncertainty to the entire analysis* and emphasizes that one of the problems with Keystone Storage is that NMGC, to a large extent, is subject to the decisions and control of Keystone and interstate pipeline providers that critically affect NMGC's ability to provide reliable and affordable service.[471]

[465] NMAG Br. at 24 (citing Tr. (Vol. 2) 403 (Reed)).

[466] *Id*. (citing Bullard Dir. at 12).

[467] *Id*. (citing Tr. (Vol. 2) 403 (Reed)).

[468] *Id*.

[469] NMGC Br. at Tr. (Vol. 2) 402:15-403:19 (Reed).

[470] NMGC Resp. Br. at 21.

[471] *Id*. (emphasis added).

While the Hearing Examiner understands NMGC's argument to be that the operational control advantages identified in the LNG Facility favor it over the Johari window of "unknowns or unknowables" associated with Keystone Storage and interstate providers,[472] the Hearing Examiner pauses his exposition of the parties' arguments here to note that the passage quoted above from NMGC's response brief is actually troubling in a way NMGC obviously didn't intend. NMGC's argument illustrates, looking through the Johari window again, the numerous "unknown unknowns"[473] associated with the LNG Facility project, like the absence of a detailed operating plan that addresses fundamental aspects of concern raised by Intervenors, NMGC's dubiously *hypothetical* avoided cost of gas during Storm Uri savings analysis,[474] the serious gaps in NMGC's analysis of alternatives, and the missing quantification of benefits to ratepayers. To cut to the chase, the preponderance of the evidence indicates that uncertainties and lack of clarity on significant issues pervading the record work mostly *against* NMGC's Application, not in favor of it.

That said, turning back to the parties' cost-related arguments, the Attorney General's sixth and next to last argument involves Ms. Crane's observation that Mr. Reed's financial analysis didn't take into consideration the revenues the Company obtains from subleasing a portion of its Keystone Storage, which currently provides annualized revenues of $3.84 million, 70 percent of which is credited to customers through the PGAC.[475] Crane asserts that the sublease revenues make the Keystone alternative much less costly than those included in NMGC's financial

[472] *See* supra n. 402 an accompanying text.

[473] *See supra* n. 402 and accompanying text.

[474] About which, NMGC conceded, "[t]he precise amounts and details are unknown, and cannot be known, the thus the hypothetical analysis." NMGC Resp. Br. at 23.

[475] Crane Dir. at 16-17.

comparison. Additionally, she believes that, although the sublease expires on July 31, 2024, it is reasonably likely that NMGC would be able to either extend the sublease for find a new party to sublease the storage if the current sublease isn't renewed.[476]

NMGC's response on the sublease issue refers to Mr. Reed's rebuttal testimony, where he testified that there are no guarantees that the current Keystone sublessors will remain interested in subleasing space from the Company in the future. Reed explained that the current sublease contract terms are a recent phenomenon, short-term in length, and NMGC didn't assume that this short term interest in subleasing a subordinated storage service would remain in effect for the entirety of the 30-year evaluation period beginning in 2027.[477] NMGC concludes with Mr. Reed's summation on the issue at the hearing, where he stated that "they [the primary lease market at Keystone and the secondary sublease at Keystone] are fundamentally different products" and that the conclusion not to include the lease revenue was reasonable based on his experience in the industry.[478]

Finally, the Attorney General argues, incorporating Ms. Crane's last and most influential cost-related analysis, that even if one assumes all the Company's projections are accurate and reasonable, NMGC has still downplayed the relative cost of the LNG Facility.[479] Mr. Crane starts by pointing to Table 4 of Mr. Reed's testimony, where he represented that the proposed LNG Facility will result in an incremental revenue requirement of 0.6%.[480] This impact was derived,

[476] *Id*.

[477] NMGC Br. at 21-22.

[478] *Id*. 22.

[479] *See* NMAG Br. at 25-28.

[480] NMAG Br. at 23. *See* Reed Dir. at 70, 72, Errata Workpaper JJR-WP-1, p. 3 of 71).

Crane explains, by first comparing the NPV of the annual revenue requirements over a 30-year period for the LNG Facility with the NPV over 30 years of the cost of the Keystone Storage. Mr. Reed concluded, as already discussed, that the LNG Facility will cost ratepayers an incremental $100.4 million on a net present value basis over this 30-year period. Reed then divided the $100.4 differential by 30 years to develop an annual incremental revenue requirement of $3.3 million, which was then divided by total forecasted 2026 revenues of $549.7 million to develop NMGC' claimed 0.6% incremental revenue requirement.[481]

Ms. Crane asserted that the 0.6% incremental average annual revenue requirement "is a meaningless number that incorrectly compares apples and oranges."[482] Crane notes that the revenue requirements reflected in the numerator ($3.3 million) are discounted to a net present value basis over 30 years, while the denominator ($549.7 million) consists of the nominal total expected revenue in one year. This inapt comparison, then, overstates the current revenues in the denominator relative to the discounted thirty-year revenue requirement contained in the numerator, therefore making the percentage artificially low. Therefore, Ms. Crane concludes while the NMGC's simplistic math is correct, the concept is flawed, and the result provides no real meaningful information regarding the overall net impact to ratepayers.[483]

A far more meaningful calculation, Ms. Crane submits, would have used the 2027 revenue requirement of $29.09 million for the LNG Facility, expressed as a percentage of base rate revenues. Given the high capital costs for the LNG project, and the fact that the revenue requirement will be developed using the rate base/rate of return methodology, Ms. Crane, an expert

[481] *Id*. (citing Crane Dir. at 18). *See* Reed Dir. at 70, 72, Errata Workpaper JJR-WP-1, p. 3 of 71.

[482] Crane Dir. at 18-19.

[483] *Id.* 19.

in utility regulation who has testified in over 400 regulatory proceeding and numerous rate cases before this Commission and others,[484] believes this would provide a much more meaningful result. She notes that in NMGC's current base rate proceeding, Case No. 23-00255-UT, the Company is seeking a base revenue requirement of $265.2 million. Calculated from this perspective, Crane figures that the LNG Facility would result in a base revenue increase of approximately 10.5% in 2027 when the facility goes into service. On a total revenue basis, assuming the 2026 revenues of $549.7 million projected by the Company, Crane shows that the 2027 increase would still be over 5.0%.[485]

Ms. Crane adds that this 10.5% base revenue increase would be in addition to the 22.65% increase currently being requested in the pending base rate case. Therefore, assuming NMGC's current base revenue increase request were approved, and if the LNG Facility is constructed at the costs estimated by the Company, ratepayers could experience a base revenue increase of over 35% by 2027.[486]

The Attorney General indicates that Mr. Reed defended the $3.3 million net present value differential on the basis that "we're trying to put it in terms that a customer or average individual might understand."[487] The Attorney General believes that claiming the LNG Facility will increase rates only by $3.3 million annually is misleading and does not enhance customers' understanding of the project costs. The Attorney General acknowledges that the use of the Company's NPV analysis is entirely appropriate for comparing the costs of alternative projects, which was the

[484] *Id*. 3-4, Appendix A (Crane testimony filed over the past 5 years).

[485] *Id*. 19.

[486] *Id* 19-20.

[487] NMAG Br. at 27 (citing Tr. (Vol. 2) 412 (Reed)).

primary reason for the analysis Reed conducted. However, the Attorney General continues, the NPV analysis is of dubious value in helping customers to understand the actual rate impact that they will experience. The Attorney General thinks that "[c]ustomers are more concerned about what their utility rates will be next year than they are about what they will be in in 30 years."[488] In addition, the Attorney General believes that "while NPV is a useful analytic tool, ratepayers are more concerned about the actual dollar impact on their bills. When a customer hears that the annual rate impact is $3.3 million, they are likely to assume that the revenues collected by the utility associated with the project will increase by $3.3 million once the project is operational. The average customer is unlikely to understand that the actual impact in the early years of the project will be many times that amount."[489]

NMGC responds by resorting to Mr. Reed's testimony explaining that these numbers were derived to provide information so the customer can understand the likely impact of the cost of the LNG Facility over its life.[490] An average figure such as the $3.3 million annual incremental number, NMGC explains, recognizes that revenue requirements for a capital investment are comparatively high in the near term and decline over the life of the investment as the value of the underlying rate base declines as a result of annual depreciation expense. This point, NMGC asserts, was perhaps best illustrated by NMAG witness Rosenkranz in Figure 1 in his direct

[488] *Id*.

[489] *Id*.

[490] NMGC Resp. Br. at 22 (citing Tr. (Vol. 2) 413 (Reed)).

testimony[491] which illustrates that there comes a point in approximately 2041 where the revenue impact of Keystone rises above the revenue impact of the proposed LNG Facility.[492]

The Hearing Examiner finds that, while NMGC adeptly parried a few of Ms. Crane's criticisms and provided reasonable responses to some others, the preponderance of the evidence does not support a finding that the LNG Facility is the lowest reasonable-cost solution. On the whole, the Hearing Examiner finds that, as Ms. Crane showed, persuasively, in her analyses on pages 14-18, that NMGC has understated the LNG Facility's cost to ratepayers. For instance, NMGC's projection that future Keystone Storage costs will increase at the rate of 6.2% annually is not the most reasonable estimate, ignoring as it does the empirical data, which shows that Keystone's base costs have increased by less than half that rate, at approximately 3% annually, over the contract's 15 years. Indeed, Mr. Reed acknowledged at hearing that the reservation charge for Keystone Storage will have increased by 3% per annum from 2013 to 2025.[493] The Hearing Examiner therefore finds NMGC's Keystone Storage cost growth factor inflated in a manner that overstates future Keystone Storage costs, likely to a substantial degree according to Ms. Crane's assessment.

In addition, Mr. Reed's estimate that inflation would increase the initial capital costs of the LNG Facility to $207.5 million by 2027, the capital cost on which NMGC's revenue requirement is based, is probably closer to where the initial cost of the LNG Facility, estimated now at $180.9 million, would be in the 2026-2027 winter heating season when the Facility is supposed to be operational if AFUDC and inflation are accounted for. As a strictly rough comparison, the total

[491] *Id*. (citing Rosenkranz Dir. at 15 (Figure 1); Reed Reb. at 18 (Figure 1)).

[492] *Id*. 22.

[493] Tr. (Vol. 2) 403 (Reed).

estimated cost of the two LNG peaking facilities (Bluff Creek and Ixonia) approved by the Wisconsin Public Service Commission (WI PSC) in December 2021 was $185 million for each facility, but with AFUDC added, the approved LNG project costs increased to $205 million for Bluff Creek and $204 million for Ixonia.[494]

Moreover, given the substantial ratepayer benefit inhering the sublease, Mr. Reed's omission of the $3.84 million in annual sublease revenues apparently neglected to consider whether it would be imprudent for NMGC to not make reasonable efforts to extend the sublease or reasonably attempt to find a new party to sublease the storage if the Company's efforts to renew the sublease were unsuccessful.

Even if one doesn't quibble with NMGC's likely understated costs of the LNG Facility and overstated costs of Keystone Storage, the Hearing Examiner concurs with Ms. Crane's resonant assessment that the Company's NPV analysis significantly downplays the relative cost of the LNG Facility. The 0.6% incremental average annual revenue requirement Mr. Reed presented is not only a meaningless figure, it's a misleadingly skewed number that substantially understates the significant financial impact of the LNG Facility to ratepayers. NMGC's argument that NMAG witness Rosenkranz's Figure 1 shows that in 2041 the revenue impact of Keystone Storage rises above the LNG Facility's revenue impact would be true, but only if one accepted Mr. Reed's assumptions that (a) NMGC continues to contract for 2.7 Bcf of Keystone Storage capacity, (b) the 2027 reservation cost of $8.75 million in the current agreement escalates by 6.2 percent per year for the next 30 years, and (c) NMGC obtains no revenue from subleasing Keystone Storage

[494] *Application of Wisconsin Elec. Power Co. and Wisconsin Gas LLC for a Certification Certificate of Authority under Wis. Stat. § 196.49 and Wis. Admin. Code § PSC 133.03 to Construct a System of New Liquefied Natural Gas Facilities and Associated Natural Gas Pipelines near Ixonia and Bluff Creek, Wisconsin*, WI Pub. Serv. Comm'n Docket 5-CG-106, *Final Decision* (WI PSC 12/22/2021) (*"Wisconsin PSC Decision*"), at 34-35.

capacity.[495] Having just debunked the latter two assumptions, NMGC's postulation that future ratepayers will be better off financially with the LNG Facility in 2041 cannot be accepted as anything approximating an accurate financial forecast.

A more meaningful and accurate indicator of the financial impact of the LNG Facility on ratepayers is Ms. Crane's suggested percentage of base revenue increase calculation. Using that approach, the first year (2027) cost of $29.1 million shown in Mr. Reed's NPV analysis would result in a base revenue increase of approximately 10.5% assuming a base revenue requirement of $265 million.[496] The revenue requirement will decline over time, according to Mr. Reed's study. But, in Year 30 the revenue requirement of the LNG facility is still projected to be $19.4 million,[497] and, as the Attorney General emphasizes, could be even higher if additional capital investment is made during the 30-year period or if capital costs are higher than anticipated.[498] Moreover, as found above, Mr. Reed assumed that the 2027 Keystone Storage facility cost would be $8.8 million, ignoring the fact that approximately 50% of Keystone's current costs are covered by revenue from subleasing a portion of the capacity. Thus, assuming 2027 LNG Facility costs of $29.1 million and net Keystone Storage costs of $4.4 million (assuming 50% of the costs are offset by a sublease), during the first full year of operation, the net impact of the LNG facility would be a net increase of $24.7 million on customers' bills, a figure considerably higher than the $3.3 million touted by the Company. In sum, emblematic of the lack of clarity in the record on key

[495] Rosenkranz Dir. at 15.

[496] *See* Reed Dir. at Errata Workpapers, JJR-WP-1, p. 12 of 71.

[497] *Id*. JJR-WP-1, p. 14 of 71.

[498] NMAG Br. at 28.

issues, NMGC's focus on the $3.3 million impact would likely lead to customer confusion if and when the real financial impact of the LNG Facility was revealed.[499]

Finally, while the Hearing Examiner, eschewing Intervenors' enticement,[500] steers clear in this decision of questioning NMGC's motivations and incentives for seeking the inclusion in rate base of such a costly long-term asset investment, he nevertheless is compelled to note, given the weighing of shareholder and ratepayer interests called for in the heightened public interest scrutiny test, that while the potential earnings benefits of the LNG Facility to shareholders of Emera, Inc., NMGC's parent company, are quantified in the record, it is not so readily or clearly quantified for the ratepayers NMGC serves and will serve in the future. In the company's September 25, 2023 Investor Presentation, Emera cited rate base growth as the first financial priority identified, reporting the company's plan to deploy a capital plan of $8 to $9 billion to achieve forecasted rate base growth of 7-8% through 2025.[501] Emera projected a compound annual growth rate of 8.4% from NMGC during the 2021 to 2025 period.[502] Consistent with Emera's growth rate projections, Mr. Reed's financial analysis discloses Company returns of approximately $207 million over the

[499] *Id*.

[500] *See, e.g.*, NEE Br. at 2 ("NMGC documents New Energy Economy . . . received during litigation reveal that NMGC wants to build this LNG facility to meet internal financial metrics – to expand gas usage (as far as Mexico) and increase capital expenditures in order to enlarge rate base – which boosts earnings and provides dividends to shareholders. That is the *motive* for the LNG facility, not "price spike" protection.") (emphasis in original); *id*. 32 ("'Providing predictable, reliable earnings and cash flow growth for [NMGC's parent company's] shareholders' is not an acceptable rationale for constructing an LNG facility in New Mexico that may likely be unnecessary, expensive, and hazardous to humans and the environment."); NMAG Br. at 30)"Assets that are owned by a regulated utility increase the earnings potential of the utility and utilities therefore have an incentive to provide service with utility-owned assets, such as the LNG Facility, rather than through third-party agreements such as the Keystone Storage agreement.").

[501] Crane Dir. at 31.

[502] *Id*.

30-year period of his analysis, over 75% of which, approximately $157 million, would be after-tax return on equity to Emera shareholders.[503]

Consequently, while the proposed LNG Facility would undoubtedly be a more profitable venture for NMGC and its shareholders than continuing the Keystone Storage arrangement,[504] the purported benefits to ratepayers reflected in this record are far less tangible or certain. A benefit-cost analysis might have attempted to quantify the benefits to ratepayers over the life of the LNG Facility and shown its cost-effectiveness for ratepayers, but NMGC neglected to present a rigorous economic analysis of that sort in this case, an issue which is taken up below in considering additional public interest factors under the heightened scrutiny test.

4.4.4. NMGC's Evaluation of Alternatives Taken as a Whole

As discussed at the beginning of this decision, before going forward with a resource project, a utility applicant must show that it reasonably considered alternatives to the proposed resource.[505] The utility must show that the preferred resource alternative "is the most cost-effective among feasible alternatives."[506] Whether a utility has properly evaluated alternatives is an issue to be determined based upon the evidence in a hearing.[507]

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[503] *See* Crane Dir. at 22-23.

[504] *Id*. 23.

[505] *See* Case No. 22-00270-UT, *Recommended Decision* (NMPRC 12/08/2023), at 42 ("[U]tilities must conduct reasonable alternatives analyses before selecting resources. Deficiencies in analyses may warrant non-recovery of all or a portion of the costs of resources imprudently selected."), approved in *Final Order* (NMPRC 01/03/2024) at 20-24; Case No. 15-00261-UT, *Corrected Recommended Decision* (NMPRC 8/15/2016) at 96-99 (same), approved in *Final Order Partially Adopting Corrected Recommended Decision* (NMPRC 9/28/2016); NMPUC Case No. 2382, *Final Order Approving Recommended Decision* (NMPUC 11/20/1995), at 48-49.

[506] Case 19-00349-UT, *Recommended Decision* (NMPRC 11/16/2020), at 16-17 (*citing* NMPRC Case Nos. 15-00261-UT, 13-00390-UT, 15-00205-UT, and NMPUC Case No. 2382), adopted by order of the Commission (NMPRC 12/16/2020).

[507] Case 17-00129-UT, *Order Denying NEE's Motion to Dismiss* (NMPRC 8/11/2017), at 6.

The Hearing Examiner has already found, under Section 0 above, that NMGC's evaluation of gas supply contract and hedging strategy options, relying almost exclusively on outdated information provided in almost two years ago in the *Extraordinary Cost Recovery Case*, lacked a contemporaneous evidentiary foundation and therefore cannot be accepted by the Commission as a reasonably rigorous, much less comprehensive, evaluation of those options.

Considering, more broadly, NMGC's evaluation of alternatives as a whole, there is no evidence in the record to suggest that NMGC performed a systematic empirical analysis, based on contemporaneous information, comparing the status quo to other gas supply, transportation, storage portfolio, purchasing practices, hedging strategies, including risks, such as the forecasted impact of future gas purchase costs.[508] Moreover, as Intervenors assert, persuasively, NMGC's failure to seriously evaluate Keystone Storage as a potential solution was a fundamental error.[509] NMGC witness John Reed, a respected financial and economic consultant who specializes in energy market analysis and contract negotiations, focused his evaluation narrowly on how much price protection could be achieved from the LNG option rather than how much price protection could be achieved if NMGC were to reconsider its gas supply, transportation, storage portfolio, hedging and purchasing practices, or any combination thereof.[510] Mr. Reed admitted that he did not evaluate Keystone Storage as a potential solution because, as he maintained, Keystone did not alleviate NMGC's concerns about Keystone's "history of unreliability, as evidenced by the number of force majeures Keystone Storage called during recent years."[511] However, as the Hearing

[508] *See* Intervenors' Resp. Br. at 21.

[509] *See id*. 11-13.

[510] Tr. (Vol. 2) 444-47 (Reed).

[511] Reed Dir. at 52.

Examiner has already found, Reed's testimony is belied by the best, most probative evidence, NMGC's responses to the Hearing Examiner's First Bench Request regarding cuts in nominations and *force majeure* declarations, which does not support a finding that the Company's reliability is significantly impaired to any appreciable degree or manner that would warrant approval of a CCN for the LNG Facility. Nor did the Company endeavor to show that is has adopted recommended industry tools for managing tight supply conditions during extreme cold weather events.[512]

Therefore, the Hearing Examiner finds NMGC's Application deficient, in part, because NMGC failed to perform the rigorous investigation that a prudent utility should have performed prior to making a significant resource decision and committing to substantial, long-term capital investment expenditures in the process.[513] NMGC's failure to update time-sensitive elements of its analyses was improvident and determinative.[514] Additionally, to the extent that its evidence was proffered to defend the Company's actions in a prudence review in the *Extraordinary Cost Recovery Case*, i.e., NMGC witness Bullard's March 31, 2022 Compliance Filing testimony, the Company's evaluation was arguably biased and self-interested. Other alternatives were not afforded a vigorously disinterested evaluation, and the option of continuing its Keystone Storage

[512] *See*, *e.g.*, *In the Matter of: Electronic Investigation of Louisville Gas & Electric Co. & Kentucky Utilities Co. Service Related to Winter Storm Elliott*, Order, 2023 WL 9186673 (Ky. P.S.C 12/22/2023) ("*Kentucky PSC Order*"), at *104-*112 ("B. Natural Gas Infrastructure Cold Weather Reliability").

[513] *See, e.g.*, Case No. 22-00270-UT, *Recommended Decision*, at 93 (finding PNM failed to perform the rigorous review that a prudent utility should have performed prior to making a significant resource retention decision and incurring substantial life-extending expenditures in the process).

[514] *Id.* at 104 (finding, consistent with EPE's contrary example and the Oregon PUC, *In re PacifiCorp*, UE 246, Order No. 12-493 at 26-27, 2012 WL 6644237 (Or. P.U.C. 12/20/2012) ("*PacifiCorp*"), and the *WUTC Pacific Power Order* on an essential prudence issue, PNM's failure to update its Strategist analyses between May 2012 and October 2013 was imprudent), 107 (finding PNM was imprudent in failing to conduct updated analyses of the cost-effectiveness of extending its participation in the Four Corners Power Plant), and 127 ("A reasonable utility, when faced with a net liability of $27.9 million, and given the increasing pressures on coal plants at the time, would at least have updated its analysis prior to deciding to extend the coal supply agreement, or would have elected to exit Four Corners.").

lease was not fairly considered. The Commission should and not consider approval of a CCN for the LNG Facility without a full investigation of all salient financial and operational control options. Unfortunately, that systematic investigation was not presented in this case.

Accordingly, having found that NMGC failed to show, by a preponderance of the evidence, that the LNG Facility is necessary to enhance NMGC system's reliability and price mitigation capabilities and that the Facility is the most cost-effective among feasible alternatives, the Hearing Examiner finds that the LNG Facility would not provide a net public benefit.

4.4.5. NMGC's Primary Justifications for the LNG Facility are not Clearly Demonstrated in the Record

The heightened standard of scrutiny applied to discretionary resources directs the Hearing Examiner to consider the extent to which the applicant's justifications are not clearly demonstrated. Intervenors' contentions that NMGC has overstated the need to improve reliability in order to mitigate price volatility[515] was best summed up by WRA witness Aaron Gould when he observed that "there has been a blurring of this reliability issue and price spike mitigation throughout the [Jan. 8-11, 2024] hearing."[516] In fact, concerning NMGC's reliability claims, the Hearing Examiner has already found above, in Section 4.4.1, that NMGC's contradictory portrayals of the Company's current state of reliability as it pertains to the performance of Keystone Storage created a lack of clarity in the record on the central issue of reliability. NMGC's initial representations about its loss of confidence in Keystone and its problems with the storage facility shifted perceptibly after it was shown in its responses to Bench Request No. 1 that the declining rate of cuts in nominations and *force majeure* events are far from increasing or

[515] *See* Intervenors' Resp. Br. at 1-3.

[516] Tr. (Vol. 3) 846 (Gould).

unmanageable and certainly do not justify the extraordinary expense associated with the proposed LNG Facility.

In addition, Mr. Gould's apt "blurring" of issues observation actually refers to another way in which NMGC muddled the record. Inadvertently or not, NMGC sowed confusion in the record by suggesting that reliability would be enhanced if the Company were allowed to replace Keystone Gas Storage with the LNG Facility by attempting to link Keystone's alleged unreliability to the threat of curtailments evinced by the 2011 severe weather event, when in actuality, the record shows Keystone Storage played no demonstrable role in contributing to 2011 curtailments, or the threat of some similar future black swan event.[517] The confusion is compounded because NMGC downplayed the fact that it subsequently made certain improvements to its gas supply, transportation, and system enhancements pursuant to its "proposed solution" in Case 16-00097-UT that was accepted and found reasonable by the Commission in that *Fresh Look Solutions Case*. As NMGC's own expert witness, John Reed, found in his direct testimony, those improvements proved effective "against customer curtailments" during the next severe weather event ten years later – Storm Uri in February 2021.[518] Consequently, NMGC's claim that its reliability requires enhancements based on what happened in February 2011 or what might happen in some other 1-in-50 year (or 1-in-100 in the case of Storm Uri) black swan event are unfounded and further confuse the record on the issue of reliability.[519]

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[517] *See, e.g.*, NMGC Br. at 1, 5, 9, and 26; *see also* WRA Br. at 5, n. 20.

[518] Reed Dir. at 54.

[519] *See* Reed Dir. at 7 (describing Storm Uri as a "once-in-a century level of [price] disruption"); NEE Exh. 1 (Subra Dir.) at Exh. WS-7, pp. 4-5 (What we were referring to as a 1 in 100 year event . . . was that Winter Storm Uri produced price spikes that were a 1-in-100 probability based on the fluctuation from pre-event prices to peak prices.").

Finally, the conclusion that NMGC hasn't clearly demonstrated fundamental justifications for the LNG Facility is buttressed by the Hearing Examiner's findings regarding the heuristic exercise NMGC engaged in[520] by attempting to prove its case with the aid of "unknown and unknowable"[521] variables such as future gas storage costs, its hypothetical avoided cost of gas during Storm Uri savings analysis, the absence of a detailed operating plan that might address valid concerns raised by Intervenors, the glaring omissions and errors in NMGC's analysis of alternatives, and the omitted quantification of benefits to ratepayers.

4.4.6. NMGC's Failure to Present a Benefit-Cost Analysis or Other Similar Empirical Economic Modeling

Intervenors suggest that NMGC's failure to submit a benefit-cost analysis (BCA) constitutes additional grounds for denying the Application.[522] To be clear, given the Hearing Examiner's findings in the preceding sections of this decision, which support the conclusion that the Company's LNG Facility proposal will not provide a net public benefit, this inquiry is essentially completed because the foregoing findings and conclusions are determinative of the Application. Nonetheless, given the intense public interest in this matter and given that the LNG Facility proposal is a discretionary project, the Hearing Examiner deems it necessary and appropriate to consider additional factors under the heightened scrutiny standard in accordance with the guidance provided in Case No. 15-00312-UT.

Moreover, the Hearing Examiner is mindful of NMGC's preemptive argument that requiring benefit-cost analysis, like those cited by Intervenors, would violate NMGC's due process

[520] *See supra* n. 474 and accompanying text.

[521] NMGC Resp. Br. at 21 ("The actual level of increase [in contract inflation growth rates or future costs of storage] is unknown or unknowable at this time[.]"). *See supra* n. 402 and accompanying text.

[522] *See* Intervenors' Resp. Br. at 3-5, 21.

rights because requiring a benefit-cost analysis now would be tantamount to "implement[ing] new CCN standards in the middle of the case[]" and "would violate NMGC's due process rights."[523] Conscious of this argument and its potential resonance, that is why, in part, the Hearing Examiner reserved the consideration of the benefit-cost analysis issue to this post-net public benefit portion of the decision.

Still, the Hearing Examiner has already found that NMGC failed to provide a quantification of benefits to ratepayers over the life of the LNG Facility and, thus, failed to show that the Facility would be cost-effective *for ratepayers*. That finding does not mean that a benefit-cost analysis is requisite element of a CCN case in New Mexico. The finding simply means that NMGC failed to show that the LNG Facility would benefit ratepayers in stark contrast to how the record evidence shows the Facility would benefit Emera shareholders in terms of after-tax ROE and enhanced earnings. What is suggested here, then, is that a quantitative analysis, based on analyzing numerical data to test objective facts shown in calculations and graphs,[524] perhaps may have shown that the quantified benefits of the LNG Facility outweigh the costs to ratepayers. So, while NMGC was not required to submit such a benefit-cost analysis under prevailing CCN standards in New Mexico, it behooved the Company to provide more than a qualitative assessment of incremental benefits, which the Hearing Examiner found wanting, insufficient, and unreliable.

Consequently, while a benefit-cost analysis or other empirical analyses like those presented in the *Wisconsin PSC Decision* approving two peak shaving LNG facilities for two Wisconsin gas

[523] NMGC Resp. Br. at 11.

[524] *See* Intervenors' Resp. Br. at 3-4 (citing Denzin, Norman. K. and Yvonna S. Lincoln. "Introduction: The Discipline and Practice of Qualitative Research." In The Sage Handbook of Qualitative Research. Norman. K. Denzin and Yvonna S. Lincoln, eds. 3rd edition. (Thousand Oaks, CA: Sage, 2005).

utilities in 2021[525] or the New York PSC's Order Adopting Gas System Planning Process ("*New York PSC Order*")[526] – which requires gas utilities in New York to compare alternatives based on benefit-cost analyses (BCAs), bill impact analyses, the NPV of estimated costs, and emissions impacts – were not required in this CCN case, NMGC should have been aware of these precedents and perhaps considered patterning an empirical analysis or analyses founded on those precedents, which considered in the first precedent (the *Wisconsin PSC Decision*) and categorically requires in the latter (the *New York PSC Order*), the systematic quantification of benefits and costs in gas resource planning in an objective fashion.

Once again, the point of this section is to simply emphasize that, unfortunately, an objective quantification of benefits versus costs of the proposed LNG project was not presented for the Commission's consideration in this case. While the CCN standard did not require the applicant Company to present a BCA or other similar empirical modeling, the public interest cried out for such evidence in this case, particularly in light of the relatively staunch public opposition expressed against the LNG project and the unanswered safety and environmental siting questions summarized in the next section.

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[525] As NMAG witness Dr. Sol Deleon chronicled in her direct testimony, the gas utility applicants in the Wisconsin case, "performed," as the Wisconsin PSC described,

> three analyses to evaluate the overall economic benefit of the project: a scenario analysis that considered alternative planning assumptions under different load growth scenarios, including low, base, and high growth rates; a sensitivity analysis that determined how different values of an independent variable such as planning assumptions affected the economic value that the project would provide; and a risk analysis that was an extension of the sensitivity analysis but incorporated a complete enumeration of all changes in the independent variables and quantifies the potential cost to customers across almost 4,000 different unique scenarios.

NMAG Exh. 3 (Deleon Dir.) at 4-5 (quoting *Wisconsin PSC Decision*, at 16).

[526] Case 20-G-0131, Proceeding on Motion of Commission in Regard to Gas Planning Procedures, Case 12-G-0297, Proceeding on Motion of the Commission to Examine Policies Regarding the Expansion of Natural Gas Service, *Order Adopting Gas System Planning Process* (NY PSC 5/12/2022), at 12.

4.4.7. Siting-Related Concerns and Public Opposition

Intervenors assert that NMGC failed to fulfill its obligation to demonstrate the LNG Facility, and its location siting, is in the public interest when the alleged adverse effects upon the environment and upon the quality of life of the people of the State are considered.[527]

While NMGC demonstrated that the site proposed location for the LNG Facility in Rio Rancho meets the siting criteria the Company established to optimize the facility's operational benefits[528] – a site, incidentally, that is at precisely the same location as the site NMGC proposed in the *First LNG Case* in 2012[529] – it is undeniable that the NMGC's predetermined location is problematic given its location within the most populated region of New Mexico, the Albuquerque metropolitan area, and then within that broader area, within the steadily growing City of Rio Rancho and very near densely populated neighborhoods in northwestern Albuquerque like Ventana Ranch and Volcano Cliffs. As NEE witness Wilma Subra testified,

> While the 160-acre site itself may be 'undeveloped' and 'unpopulated' it is generally located in a populated area. The LNG Facility is 2 miles away from Double Eagle Airport, 2.10 miles away from Petroglyph National Monument, 2.29 miles away from the Westside Housing Shelter, 2.25 miles away from Ventana Ranch Neighborhood, 2.97 miles away from Volcano Vista High School, and 3.27 miles away from Volcano Cliffs neighborhood.[530]

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[527] *See* Intervenors Resp. Br. at 13-18.

[528] *See* Section 4.3.1 above; Bullard Dir. at 50.

[529] NMAG Br. at 7 and n. 6 (The Attorney General states that the 160-acre parcel on the outskirts of Rio Rancho is "the same site that [NMGC] proposed in Case No. 12-00364-UT." The Attorney General further reports, in footnote 6, that "[a]ccording to the response to NEE 3-14, NMGC has entered an option to purchase this site for $15,000 per acre. That option has not yet been exercised."). *See* Case No. 12-00364-UT, Application (10/25/2012), Dir. Test. of Kenneth L. Oostman (10/25/2012) at 7-8 ("The site selected for the LNG Storage Facility is near the Company's Santa Fe Junction in an area annexed by the City of Rio Rancho on the west side of Bernalillo County. The site is a 160 acre parcel of vacant land, located in a 6,500+ acre master planned area which has not yet been developed.").

[530] NEE Br. at 32 (quoting NEE Exh. 1 (Subra Dir.) at 8-9).

The site is also close to a PNM solar and battery storage facility; how close was not answered in NMGC's Response to Bench Request No. 4. Further, NEE notes that the City of Rio Rancho, the nearest populated community to the proposed site, is home to 108,082 residents (2023). Rio Rancho is currently growing at a rate of 1.51% annually and its population has increased by 6.19% since the most recent census, in 2020.[531] In the opinion of NEE's expert, Ms. Subra, "the LNG facility will put all the populations listed above at risk of having their health and environment negatively impacted over the short and long term due to exposure to toxic chemicals and operational risks associated with the facility, its operations, incidents, and deviations."[532]

The Bernalillo County Commission recognized these potential hazards and voiced its opposition to the proposed facility through a formal Resolution, about which the Hearing Examiner took administrative notice at the beginning of the hearing,[533] objecting to the location of the facility.[534] NEE contends that the local community's objection to an application for a CCN should be a relevant consideration when assessing public benefit, particularly as related to a site location.[535] Indeed, apart from some notable exceptions like the New Mexico Chamber of Commerce, the vast majority of the 126 public comments in the record, some of which include multiple signatories of interested persons and neighborhood associations,[536] oppose approval of LNG Facility and its proposed siting. Aware of the public comments and other public opposition

[531] *Id.* 33 (citing https://www.census.gov/quickfacts/fact/table/rioranchocitynewmexico/POP010210).

[532] Subra Dir. at 9.

[533] Tr. (Vol. 1) 22-23.

[534] NEE Br. at 33 (citing Bernalillo County Resolution No. 2023-110 (10/24/2023)).

[535] *Id.*

[536] Including a Nov. 10, 2023 letter expressing opposition to the LNG Facility signed by six State Senators and eight Sate Representatives representing districts in Bernalillo County and/or Sandoval County and a petition in opposition signed by approximately 46 residents of the Del Webb Mirehaven Neighborhood Association.

expressed against siting the LNG project so near well-populated residential neighborhoods (featuring, among other things, numerous schools, parks, and adjacent retail businesses, restaurants, churches, medical facilities, a housing shelter, Petroglyph National Monument, and Boca Negra Canyon), at the hearing, Commission James Ellison and the Hearing Examiner explored with NMGC witness Tom Bullard the feasibility of locating the LNG project in a more remote location but still near NMGC's pipeline system.[537] Mr. Bullard testified that the proposed location, where Quail Ranch in western Bernalillo County adjoins the Company's Rio Puerco Mainline[538] (and, as shown in map in Appendices D, just within the southern boundary of the City of Rio Rancho to the west of where Paseo Del Norte NW ends and Atrisco Vista Boulevard begins), was the "most optimal site" that fulfilled all the siting criteria discussed in Section 4.3.1 above. In reality, however, as Mr. Bullard later testified, the proposed site was not only the most optimal site, it was "the *only one* [the Company] found that checks all the boxes."[539] Because, Mr. Bullard concluded, if one of the boxes (siting criteria) were not checked, "then you would absolutely increase the cost of the facility."[540] The bottom line, then, as Mr. Bullard explained is that siting an LNG facility on Tribal land or some other area off of NMGC's pipeline "would increase the cost[]"[541] of the LNG project. Regrettably, no evidence on what that additional cost might entail

[537] *See* Tr. (Vol. 1) 222-30, 246-47 (Bullard).

[538] In addition, also significant to siting the LNG Facility at the Quail Ranch site is that that NMGC's Espejo Compressor Station (the Santa Fe Junction, a hub where several pipelines come together) is located just to the northwest of the proposed LNG project site. Mr. Bullard explained that this additional factor addressed one of the Company's key siting criteria, which was that the Facility "needed to be adjacent to one of our transmission pipelines ideally, and actually it really needed to be adjacent to where we have parallel pipelines such that we can take gas off of one and inject it onto another." Tr. (Vol. 1) 222-23 (Bullard).

[539] Tr. (Vol. 1) 247 (Bullard) (emphasis added).

[540] *Id*.

[541] *Id*. 247 (Bullard).

if a less "optimal" site were selected, viewed in isolation or with consideration of the safety and environmental concerns expressed by Intervenors and public commenters, was not presented in this case.

CCAE asserts that requested CCN is against the public interest because NMGC has not conducted a full assessment of local site impacts.[542] CCAE is joined by NEE on the concern over local site impacts. NEE asserts that the proposed siting of the LNG Facility is rife with potential environmental, safety, and Native American religious concerns that impact quality of life matters and were ignored or disregarded by NMGC when it chose the site.[543]

Subsequently, Intervenors, presenting a united front, took up the concerns over the LNG Facility's proposed siting in their Response Brief. They state that while it appears that NMGC's Application and testimony addresses a legal description of the property upon which the LNG peaking plant will be located, NMGC failed to produce – even after a specific bench request asking for the same[544] – a map that clearly identifies with *specificity* the locations of the battery storage facility, the closest schools, neighborhoods, the airport, Petroglyph National Monument, nearby Pueblos, and the like.[545] Intervenors entered the coordinates listed in Mr. Bullard's direct testimony, "approximate site coordinates: 35°10'59.16"N, 106°47'50.95"W,"[546] into Google maps

[542] *See* CCAE Br. at 10-12.

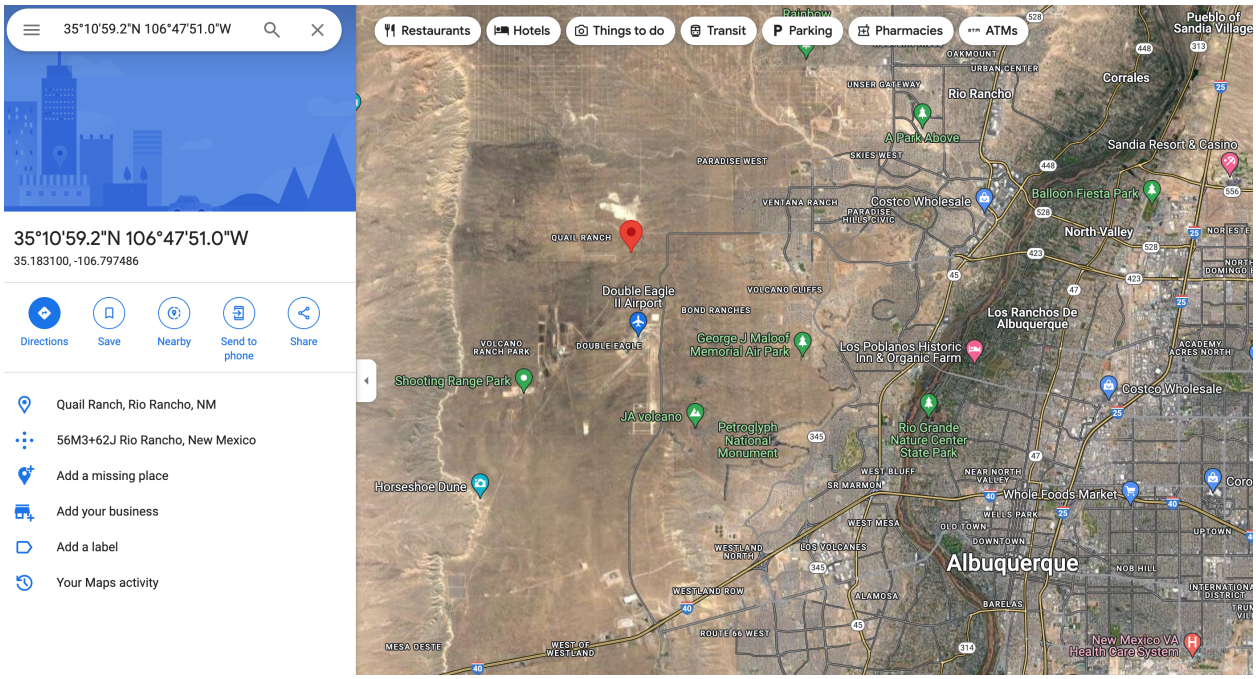
[543] *See* NEE Br. at 36-39 (discussing, among other catastrophic events and potentialities, the "veritable salad of toxic substances potentially emitted from the LNG Facility and associated "significant" risks to air quality "so close to a dense residential area," the 2014 Plymouth, Washington LNG plant explosion, other recent explosions and hazardous emission leaks at LNG import/export terminals in Texas and Louisiana, and the active seismic zone (Rio Grande Rift) atop which the LNG Facility would sit).

[544] *See* NMGC Resp. to BR No. 4 (1/12/2024). For a comparison to the map depicted above, the map NMGC supplied in response to BR No. 4 is attached to this decision as Appendix E.

[545] Intervenors' Resp. Br. at 14.

[546] *Id*. (citing Bullard Dir. at Exh. TCB-3, pdf p. 223 of 340).

to give the Commission a "much greater understanding of the siting for this proposed LNG site."[547] The map Intervenors provided is reproduced below.



Intervenors state, in addition, that NMGC has not provided a draft safety and security plan for the facility.[548] NMGC also has not identified, according to Intervenors, all applicable air and water pollution control standards and regulations, or an "exhaustive list of all the permitting and approvals that are required."[549] Intervenors say that NMGC failed to answer these critical questions positing instead, "it is too early to conduct any studies of air and water cumulative impacts."[550] Even though NMGC admits that the LNG facility will produce greenhouse gas

[547] *Id*. 15.

[548] *Id*. (citing Tr. (Vol. 2) at 349 (Bullard)).

[549] *Id*. (citing Tr. (Vol. 2) 349 (Bullard).

[550] *Id*. (citing Subra Dir. at Exh. WS-5, pdf p. 63 of 98).

(GHG) emissions,[551] Intervenors maintain that that Application and supportive testimonies are "devoid of details regarding the inherent risks of the LNG facility because NMGC has not conducted any kind of cumulative impact analysis of the direct or indirect greenhouse gas emissions that will result in the fugitive release or combustion of LNG."[552] According to Intervenors, "NMGC is not able to quantify to a reasonable degree of probability the negative impacts, if any, of the discretionary GHG emissions vent to atmosphere on the health of Rio Rancho and Albuquerque residents."[553] Continuing, Intervenors relate, "[t]he yearly emissions resulting from discretionary venting of [GHG] to the atmosphere is not reasonably determinable since it would vary depending on operations,"[554] (which NMGC has not attempted to quantify); and "NMGC is not able to quantify to a reasonable degree of probability the potential increased health care costs, if any, of the discretionary GHG emissions vent to Rio Rancho and Albuquerque residents." [555]

Intervenors concede that while it is not required that an applicant in a CCN case identify the seismic activity zone risks that Intervenor NEE identified,[556] or the battery storage risks identified by the Hearing Examiner,[557] "the lack of due diligence" they claim NMGC demonstrated is concerning to Intervenors for the following reasons set forth in the Response Brief:

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[551] *Id.* (citing Subra Dir. at Exh. WS-4, pdf p. 56 of 98 for "[T]he total annual CO_2 emissions will depend on the number of days of operation per year, which will depend on operating conditions and needs and cannot be determined to a reasonable degree of probability at this time.").

[552] *Id*. (citing Subra Dir. at Exh. WS-6, pdf p. 79 of 98).

[553] *Id*. 15-16 (citing Subra Dir. at Exh. WS-6, pdf p. 85 of 98).

[554] *Id.* (citing Subra Dir. at Exh. WS-6, pdf p. 83 of 98).

[555] *Id*. (citing Subra Dir. at Exh. WS-6, pdf p. 85 of 98).

[556] *Id*. (citing NEE Exhs. 10, 11, and 12; Tr. (Vol. 3) 712-14 (Jones)).

[557] *Id*. (citing Tr. (Vol. 3) 673 (Barclay)).

1) The Pre-FEED study claimed that the LNG facility site was "unpopulated,"[558] which may be true of the site itself but not of the very populated area surrounding the site according to the map reproduced above,[559] and also the Bernalillo County Resolution No. 2023-110. [560] "The false impression provided by NMGC," Intervenors allege, "impacts the credibility and trustworthiness of the information being provided to the Commission."[561]

2) The Pre-FEED study costing hundreds of thousands of dollars study[562] didn't even identify that the proposed site was located in a seismic zone.[563] Mr. Jones admitted on re-cross examination, "I won't say that you can overcome any seismic concern, but I will say that you can overcome many seismic concerns."[564] This lack of specificity, Intervenors posit, regarding the potential risks and possible future costs of creating a reasonable safety buffer to address the hazardous condition is an unknown gamble.[565] The answer provided by Mr. Barclay and the Company was that it would "be fully

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[558] *Id*. (citing Bullard Dir. at Exh. TCB-3, pdf pp. 104 and 223 of 340).

[559] Citing inapposite location control cases involving wind energy projects such as Case No. 17-00221-UT (Mesa Canyons Wind Project), Intervenors nevertheless correctly note that no detailed map of the site and its surroundings, including future economic development plans, battery storage plans, housing and community expansion, and other residential westward economic development have been included by NMGC as record evidence.

[560] *Id*. Intervenors point out, in footnote 80 that the Bernalillo County Resolution opposing the plant states that the LNG facility "is within ten miles of 51 public schools, residential neighborhoods, and a housing shelter. … the Board of County Commissioners shares the intervening parties' concerns regarding the potential environmental impacts of the project upon an area of great historical, cultural, and religious importance and natural beauty, including the Petroglyph National Monument and the Boca Negra Canyon[.]"

[561] *Id*. 16-17.

[562] *Id*. 17 (citing Tr. (Vol. 3) 613 (Barclay)).

[563] *Id*. (citing Tr. (Vol. 3) 721 (Jones)).

[564] *Id*. (citing Tr. (Vol. 3) 729 (Jones)).

[565] *Id*. (citing Case No. 18-00049-UT, *Recommended Decision* (NMPRC 7/31/2018), at 26, 29 approved by *Final Order* (NMPRC 9/5/2018) (cited for the statement, "There is not sufficient information in the record for the Commission to approve this NMGC Application without being adequately informed.").

compliant with 49 C.F.R. 193."[566] However, "the potential tendency to defer too much to the federal agency decisions is significant,"[567] Intervenors assert, because the public interest requires the Commission to consider more than a 49 C.F.R. 193 checklist;[568] it must properly assess, according to Intervenors, the costs and risks to the quality of life of the people when making a CCN determination.[569] This is especially noteworthy, Intervenors note, because NMGC explicitly declined to entertain the possibility of conducting an independent PHMSA study.[570]

3) The Pre-FEED study also failed to identify the potential threat of a fire from the nearby Atrisco battery storage facility.[571]

4) While the Pre-FEED study noted the proximity of the proposed LNG facility to Double Eagle airport, it did not address, nor did any NMGC witness address, the hazard due to storage of combustible fuel at the airport and the peril that may be caused should a flammable vapor cloud reach that area.[572]

Intervenors add that the same Pre-FEED contractor, the Lisbon Group, is the same entity that NMGC has already hired to prepare the PHMSA study going forward if the Commission grants NMGC a CCN.[573]

[566] *Id*. (citing Tr. (Vol. 3) 665 (Barclay)).

[567] *Id*. (citing Case No. 18-00049-UT, *Recommended Decision* (NMPRC 7/31/2018), at 110, approved by *Final Order* (NMPRC 9/5/2018).

[568] *Id*. (citing Tr. (Vol. 3) 612 (Barclay)).

[569] *Id*. (citing Case No. 15-00312-UT, *Recommended* Decision, 75-79).

[570] *Id*. (citing Tr. (Vol. 1) 243-46 (Bullard)).

[571] *Id*. (citing Tr. (Vol. 3) 673 (Barclay)).

[572] *Id.* 18 (citing Bullard Dir. at Exh. TCB-3, pdf pp. 223, 227, and 297 of 340).

[573] *Id.* (citing Tr. (Vol. 1) 243-46 (Bullard)).

Finally, Intervenors point out that the cost cap on initial capital costs agreed to by NMGC may not include what may be later determined to be necessary to meet federal and state requirements for water and air permits, special construction needs to address seismic activity, and/or the battery storage facility or other unknown issues.[574]

NMGC's responses to Intervenors' arguments that the proposed local siting of the LNG Facility presents significant safety and environmental risks are set forth in the Company's brief-in-chief. NMGC asserts generally that Intervenors' arguments lack evidentiary support,[575] and contends more specifically, with regard to Intervenors asserted safety concerns, that: in its design and engineering of the Facility, NMGC has considered and mitigated the safety risks of the LNG Facility;[576] Intervenors misapply data from export terminals or baseload LNG facilities to the peak-shaver facility being proposed here;[577] Intervenors exaggerate the risks to the public of the LNG Storage Facility by unreasonably comparing it to the event that occurred at the Plymouth peak-shaver LNG Facility in Washington State in 2014 and to other larger facilities;[578] Intervenors overlook the extent and value of the federal regulation on the design and construction of facilities such as this one, ignore the evolution of PHMSA regulation, and ignore the value of the incorporation of current standards into the proposed facility;[579] Intervenors ignore NMGC's commitment to work with the Commission to conduct annual safety inspections and report the

[574] *Id*. Tr. Vol 3 at 757 (Yardley).

[575] *See* NMGC Br. at 39-49.

[576] NMGC Br. at 40-41.

[577] *Id*. 41-42.

[578] *Id*. 42-43.

[579] *Id*. 43-44.

results annually;[580] Intervenors overlook the fact that thorough inspections will be completed and PHMSA will inspect the proposed LNG Facility prior to start-up to evaluate design and construction methods;[581] Intervenors overlook the thermal radiation [heat] and dispersion [vapor] studies performed by the Lisbon Group, as well as the other work that Lisbon performed as part of its design of the proposed LNG Facility.[582]

With regard to Intervenors asserted environmental concerns, NMGC contends that: the Company has considered and mitigated the environmental impact of the LNG Facility;[583] Intervenors misapply environmental data from terminal LNG facilities to peak shaver facilities such as the proposed LNG Facility;[584] Intervenors overstate the level of emissions anticipated from this facility by ignoring design aspects of this facility;[585] and Intervenors ignore NMGC's commitment to work with the NMPRC to conduct annual environmental inspections and report the results annually.[586]

The Hearing Examiner finds it is unnecessary to make definitive findings in this decision on the claimed safety and environmental risks associated with the LNG Facility. Frankly, given the Hearing Examiner's recommendation that the Commission should not approve a CCN for the Facility given his findings demonstrating that the LNG Facility would not provide a net public benefit, such findings would be superfluous in any event.

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[580] *Id*. 44.

[581] *Id*. 44-46.

[582] *Id*. 46.

[583] *Id*. 47.

[584] *Id*. 48.

[585] *Id*.

[586] *Id*. 49.

In conclusion, it suffices to find, in harmony the Hearing Examiner's findings in roughly analogous circumstances in Case No. 15-00312-UT,[587] that while the Hearing Examiner cannot and need not – based upon the record and his determinative findings and conclusions above – make explicit findings on the safety and environmental impacts and risks associated with the LNG Facility, it is unquestionable that a substantial number of people who would have little choice but to live in the vicinity of the Facility and many of their elected State and County representatives have expressed strong feelings in opposition to the siting of the Facility. Their ardently expressed concerns about the LNG Facility, and the public opposition generally speaking, are founded primarily in legitimate health and safety concerns associated with living in close proximity to the LNG Facility and worrying about their children attending school in equally close proximity to the Facility. The public interest dictates that their concerns deserve to be legitimated and are acknowledged accordingly in this decision.

Moreover, as Intervenors have demonstrated persuasively, there remain at the end of these proceedings too many significant unaddressed issues and concerns over the potential safety effects and environmental impacts associated with locating the LNG Facility at NMGC's preferred location. Among those unaddressed issues and concerns, NMGC failed to provide in this case a detailed draft safety and security plan for the LNG Facility. NMGC failed to conduct failed to conduct a cumulative impact analysis of direct or indirect GHG emissions in the fugitive release or combustion of LNG. NMGC neglected to quantify to any reasonable degree of probability potential increased health care costs to Albuquerque and Rio Rancho residents, if any, associated with discretionary GHG emissions venting. NMGC failed to identify and address in the Pre-FEED

[587] *See* Case No. 15-00302-UT, Recommended Decision, at 108-09.

study or elsewhere the potential threat from fire at the nearby Atrisco battery storage site or the potential hazard, if any, due to the storage of combustible fuel at the airport and the potential safety threat if a flammable vapor reached the area. And, lastly, NMGC declined to the opportunity to have PHMSA conduct an independent study that might have addressed or even assuaged some of the valid concerns expressed by the Intervenors and the Commission during the course of this case.

Accordingly, for the foregoing reasons and given other probative considerations addressed, findings made, and conclusions reached in this decision, the Hearing Examiner finds that approval of a CCN for the LNG Facility would be contrary to the public interest.

4.5. Hearing Examiner's Recommendation on the Merits of the Application

The Hearing Examiner, having considered the record as a whole, finds that the preponderance of the evidence weighs decisively against approving a CCN for the LNG Facility. The record lacks clarity on whether the primary rationale for the LNG Facility is to enhance NMGC's reliability and thereby decrease the risk of supply disruptions like the 2011 severe winter event or to promote price spike mitigation like the extreme price volatility experienced during Storm Uri in 2021. Irrespective of the confusion in the record, the preponderance of record evidence shows that the proposed LNG Facility is not required for NMGC to provide reliable service or that the alleged problems with Keystone Storage's performance and dependability that the Company cites are increasing or unmanageable; to the contrary, if anything, the evidence suggests the Keystone Storage's performance has improved.[588] Furthermore, NMGC has not

[588] As discussed more fully in Section 4.4.1 above, since 2013, only four of the *force majeure* declarations reported in the Company's response to BR No. 1 resulted in cuts to NMGC-nominated gas, and, of those four *force majeure* events, in the past five years only one event has caused any cuts to gas NMGC nominated and that isolated event was the *force majeure* Keystone declared during Storm Uri in February 2021. Moreover, according to NMGC's response and supplemental response to BR No. 1, NMGC has received at least 99% of all

shown that the LNG Facility can provide meaningful price volatility protection or that the Facility is the most cost-effective among feasible alternatives. As to NMGC's evaluation of alternatives, the record shows that NMGC failed to perform the rigorous investigation that a prudent utility should perform prior to making a significant resource decision and committing to substantial, long-term capital investment expenditures. Moreover, NMGC failed to update time-sensitive elements of its analyses of alternatives. Accordingly, the Hearing Examiner finds that the LNG Facility would not provide a net public benefit. The Hearing Examiner therefore recommends that the Commission disapprove NMGC's Application.

Applying the heightened standard of scrutiny to the discretionary LNG project, the Hearing Examiner finds that NMGC's primary justifications for the LNG Facility are not clearly demonstrated given the confusion propagated in the record by virtue of NMGC's contradictory and unfounded claims regarding enhancing reliability, on the one hand, and mitigating price volatility on the other. Furthermore, the Hearing Examiner finds that NMGC's failure to provide an objective quantification of benefits versus costs of the proposed LNG project was contrary to the public interest, particularly where, while the record shows a substantial benefit to Emera shareholders in terms of after-tax ROE and enhanced earnings with the LNG Facility in rate base, NMGC neglected to provide a corresponding quantification of benefits to ratepayers and, critically, failed to show that the Facility would be cost-effective for ratepayers. Moreover, the preponderant public opposition expressed against the proposed siting of the LNG Facility coupled with the significant unaddressed issues and concerns over the potential safety effects and environmental

gas it has requested (nominated) from Keystone Storage. Finally, the BR responses show that there have been no cuts in nominations *of any kind* reported since 2/17/2022, *fully two years ago*.

impacts associated with locating the Facility at NMGC's predetermined location counsel against approval of the Application.

Accordingly, considering that the LNG Facility would not provide a net public benefit, the additional public interest considerations reinforce the Hearing Examiner's findings and conclusions that the LNG Facility would not promote the public interest.

4.6. Unaddressed Issues Nevertheless Worth Noting for the Record

The parties raised certain significant issues in this proceeding that played no material role in the Hearing Examiner's analysis or recommendation on the merits of NMGC's Application. At least two of those issues are worth noting for the record.

4.6.1 Decarbonization Policies

In arguing for disapproval of the Application, CCAE and NEE urge the Commission to reject the proposed LNG Facility for, among other reasons, the likelihood that the facility and LNG trucking would exacerbate carbon and other GHG emissions and climate change in contravention of decarbonization policies of the United States[589] and this State.[590]

[589] NEE cites President Joseph Biden's Jan. 26, 2024 temporary pause on pending decisions on LNG exports to non-Free Trade Agreement countries pending a hard look by the Department of Energy at the impacts of LNG exports on energy costs, America's energy security, and the environment. NEE focuses specifically on the pause imposed on the Calcasieu Pass Uprate Amendment Project ("CP2") pending before the Federal Energy Regulatory Commission wherein the Venture Global Calcasieu Pass is requesting authority to increase the authorized peak liquefaction capacity of the existing Calcasieu Pass Export Terminal in Cameron Parish, Louisiana. *See* NEE Br. at 39-40. NEE contends that "[j]ust like President Biden wants to "*take a hard look at **the impacts of LNG exports on energy costs** ... **and our environment***," the New Mexico Public Regulation Commission must take a *hard look* at how NMGC's Quail Ranch LNG plant will drive up costs for consumers and will impact our environment and climate. If the Commission properly balances the interests of the NMGC's shareholders and the interests of customers, then the Commission will deny this CCN application." NEE Br. at 41 (emphasis in original).

[590] CCAE and NEE both emphasize Governor Michelle Lujan Grisham's 2019 Executive Order 2019-003, Executive Order Addressing Climate Change and Energy Waste Prevention ("EO 2019-003") and other state policies. *See* CCAE Br. at 12-14. NEE, for its part, asserts as follows:

NMGC argues that in making these decarbonization-centered arguments, "intervenors ask the Commission to exceed its authority and make predictions about the future regulatory landscape."[591] NMGC's point is that the law of New Mexico, as presently written, does not speak to the allegedly deleterious impacts on the environment of LNG facilities, much less ban their building. NMGC thus submits that "[t]he Commission cannot predict what the legislature will do in the future, and must apply the law as currently written."[592] NMGC reminds the Commission that the New Mexico Supreme Court, in *City of Albuquerque v. N.M. Pub. Serv. Comm'n* the Supreme Court rejected consideration of possible legislative changes in the Commission's decision-making, holding:

> It may well be, as the City informs us in its reply brief, that '[t]he long-awaited winds of change are blowing in New Mexico.' The City points to efforts in the United States Congress to stimulate or facilitate competition in the electric utility industry, through such devices as "wheeling" electric power from sources of generation to local distribution systems, by means of various competitive arrangements. All of these developments, and more, may occur; we have no crystal ball and can only apply New Mexico law as it is presently written to issues that may arise under arrangements like those contemplated by Albuquerque's Article XV. …Perhaps the regulatory climate will change, and perhaps the panacea apparently hoped for by the City will materialize. Only time, and legislatures around the country, including Congress, will tell. For the present, however, we are content -- indeed, we are dutybound – to recognize that the subjects of how utility rates paid by New Mexicans are to be determined, and of how providers of utility service are

> After the Governor's [EO-2019-003] which recognized New Mexico's responsibility to build a clean energy future and limit adverse climate change impacts that harm our natural and cultural heritage, the passage of the Energy Transition Act ('ETA') in 2019, and other state and national policies that advance climate change awareness and quality of life concerns, the PRC has incorporated environmental and human safety factors in its decisions in utility applications for resources in Certificate of Public Convenience and Necessity ('CCN') cases.

NEE Br. at 39 (footnote 202 citations omitted).

[591] NMGC Br. at 36.

[592] *Id*.

> to be selected, remain where the legislature placed them in 1941: in the exclusive domain of the Public Service Commission.[593]

For the record, there being no binding current law or prevailing policy around decarbonization or climate change applicable to the CCN Application under review, such considerations – important and profound as they in fact are[594] – have played no role or part in the Hearing Examiner's thinking and recommendation on the merits of the Application. Indeed, a ruling by the Commission denying NMGC a certificate for the LNG Facility on the basis of anticipating decarbonization policies and mitigating the likely consequences of climate change would constitute reversible error under the teaching of *City of Albuquerque v. N.M. Public Serv. Comm'n*. The Hearing Examiner declines the invitation to make that error.

4.6.2 NMGC's Additional Commitments and Staff's Proposed Conditions of Approval

Given the Hearing Examiner's recommendation that the Commission reject the Application for failing to demonstrate a net public benefit and not being consistent with the public interest, the additional commitments NMGC agreed to in this case that accept Staff's nine proposed conditions of approval, with certain some modifications, need not be addressed in this decision. However, if the Commission were inclined to reject the Hearing Examiner's recommendation on the merits and, instead, approve the Application, the Hearing Examiner would recommend that the

[593] *City of Albuquerque v. N.M. Pub. Serv. Comm'n*, 1993-NMSC-021, ¶ 38-40, 115 N.M. 521, 854 P.2d 348. *See also State ex rel. Sandel v. N.M. Pub. Util. Comm'n*, 1999-NMSC-019, ¶ 29, 127 N.M. 272, 980 P.2d 55 (noting "[o]ur conclusion that the NMPUC has exceeded its statutory authority does not rely on any preconceptions or predictions about what policy choices Congress or the Legislature will make in response to the nationwide trend toward deregulation of the electric power industry" and citing *City of Albuquerque*, *supra*.).

[594] *See, e.g.,* Case No. 20-00222-UT, *Order Granting Joint Motion to Take Administrative Notice of Climate Change, its Causes and its Likely Consequences* (NMPRC 6/21/2021).

Commission adopt the proposed conditions of approval as clarified during the hearing, specifically in the Hearing Examiner's colloquy on the subject with NMGC witness Tom Bullard.[595]

5. FINDINGS OF FACT & CONCLUSIONS OF LAW

The Hearing Examiner recommends that the Commission **FIND** and **CONCLUDE** as follows:

1. The discussion and all findings and conclusions contained in this Recommended Decision are hereby incorporated by reference as findings of fact and conclusions of law of the Commission.

2. NMGC is a public utility as defined by NMSA 1978, § 62-3-3(G) and is subject to the jurisdiction of the Commission under the Public Utility Act.

3. The Commission has jurisdiction over the parties to and subject matter of this case.

4. Reasonable, proper, and adequate notice of this case was provided as required by law.

5. The Commission should not approve NMGC's Application. The proposed LNG Facility does not provide a net public benefit and it does not promote the public interest.

6. Any finding not expressly mentioned here but stated in the body of this decision is embraced by the Commission. Similarly, and fact rejected in the body of this decision not expressly identified hereunder is rejected by the Commission.

6. DECRETAL PARAGRAPHS

The Hearing Examiner recommends that the Commission **ORDER** as follows:

A. The findings, conclusions, decisions, rulings, and determinations in this Recommended Decision are adopted, approved, and ordered by the Commission.

[595] *See* Tr. (Vol. 2) 357-66 (Bullard). *See* NMGC Br. at 34-35; Staff Exh. 1 (Rilkoff Dir.) at 22-25.

B. NMGC's Application is disapproved.

C. Any conclusion or recommendation included in this Recommended Decision not specifically stated herein is adopted by the Commission as if it were and the full legal consequence of those conclusions or orders is imposed.

D. NMGC's responses to Bench Bequest Nos. 1-6 are admitted into evidence of record in this case consistent with 1.2.2.35(A) and 35(K) NMAC.

E. Consistent with 1.2.2.35(D) NMAC, the Commission has taken administrative notice of all Commission orders, rules, decisions, and other relevant materials in all Commission proceedings cited in this Order.

F. Any matter not specifically ruled on during the hearing or in this Recommended Decision is resolved consistent with this decision.

G. The Certificate of Service attached hereto, as amended, shall be the official service list in this case. Accordingly, effective immediately and subject to subsequent amendment, service of pleadings and other documents shall be made upon all persons whose email addresses are listed on the Certificate of Service.

H. Copies of this Recommended Decision will be provided to the official service list per the Commission's electronic filing and service rules.

ISSUED under the Seal of the Commission at Santa Fe, New Mexico this **21st** day of **February 2024**.

NEW MEXICO PUBLIC REGULATION COMMISSION

Anthony F. Medeiros

Anthony F. Medeiros
Chief Hearing Examiner

APPENDIX A

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF NEW MEXICO GAS COMPANY INC.'S APPLICATION FOR THE ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A LIQUIFIED NATURAL GAS FACILITY.	)	**Case No. 22-00309-UT**
NEW MEXICO GAS COMPANY, INC.,	)	
APPLICANT.	)	

PARTY WITNESSES AND EXHIBITS ADMITTED INTO EVIDENCE

New Mexico Gas Company's Application was supported by testimony from the following witnesses:

- John J. Reed, Chairman of the Board of Concentric Energy Advisors, Inc.
- Michael A. Barclay, Technical Director for The Lisbon Group LLC.
- Edward Jones, Founder and President of JEI Engineering, Inc.
- Jimmie L. Blotter, Vice President, Finance and Vice President, Safety and Business Support of New Mexico Gas Company, Inc.
- Daniel P. Yardley, Principal of Yardley Associates Consulting

New Mexico Gas Company (NMGC) presented the following witnesses:

- Tom C. Bullard, Vice President of Engineering, Gas Management and Technical Services for New Mexico Gas Company, Inc.
- John J. Reed, Chairman and Chief Executive Officer of Concentric Energy Advisors, Inc.
- Michael A. Barclay, Technical Director for The Lisbon Group LLC.
- Edward Jones, Founder and President of JEI Engineering, Inc.
- Erik C. Buchanan, Vice President of Finance for New Mexico Gas Company, Inc., Adopting Direct Testimony of Jimmie L. Blotter

Coalition for Clean Affordable Energy (CCAE) presented the following witnesses:

- Kiki Velez, Natural Resources Defense Council's (NRDC) expert on building decarbonization, gas system transition, and alternative fuel issues.

New Energy Economy (NEE) presented the following witnesses:

- Wilma Subra, M.S., President of consulting firm Subra Company

The New Mexico Department of Justice, f/k/a New Mexico Attorney General (NMAG) presented the following witnesses:

- Andrea C. Crane, President of the Columbia Group, Inc.
- John A. Rosenkranz, Principal of North Side Energy, LLC.
- Sol Deleon, Principal Associate at Synapse Energy Economics, Inc.

NMPRC Utility Division Staff presented the following witnesses:

- Ed Rilkoff, Director of the Utility Division of the NMPRC.

Western Resource Advocates (WRA) presented the following witnesses:

- Aaron J. Gould, Senior Policy Advisor at WRA.

The following Exhibits were admitted at hearing:

For NMGC

NMGC Exh. 1	Direct Testimony and Exhibits of Tom C. Bullard, December 16, 2022 (as Amended)
NMGC Exh. 2	Rebuttal Testimony and Exhibits of Tom C. Bullard in Support of Application for CCN, November 13, 2023
NMGC Exh. 3	Direct Testimony and Exhibits of John J. Reed, December 16, 2022 (as Amended)
NMGC Exh. 4	Rebuttal Testimony of John J. Reed in Support of Application for Certificate of Public Convenience and Necessity, November 13, 2023 (as Amended)
NMGC Exh. 5	Direct Testimony of Michael A Barclay, December 16, 2022
NMGC Exh. 6	Rebuttal Testimony of Michael Barclay in Support of Application for Certificate of Public Convenience and Necessity, November 13, 2023
NMGC Exh. 7	Direct Testimony and Exhibits of Edward Jones, December 16, 2022
NMGC Exh. 8	Rebuttal Testimony of Edward Jones in Support of Application for Certificate of Public Convenience and Necessity, November 13, 2023
NMGC Exh. 9	Direct Testimony and Exhibits of Jimmie L. Blotter (as Adopted by Erik Buchannan and as Amended) December 16, 2022
NMGC Exh. 10	Direct Testimony and Exhibits of Daniel P. Yardley December 16, 2023 (as Amended)

NMGC Exh. 12	Letter dated June 27, 2022, from the Department of Cultural Affairs Historic Preservation Division to Brian Cribbin, NMGC | *Re: HPD Log#117418, liquified natural gas (LNG) peak-shaving facility west of the City of Albuquerque, on private lands in Bernalillo County, New Mexico*

For CCAE

CCAE Exh. 1	Direct Testimony of Kiki Velez on Behalf of CCAE, October 27, 2023
CCAE Exh. 2	Rebuttal Testimony of Kiki Velez on Behalf of CCAE, November 13, 2023
CCAE Exh. 3	NMGC's Formal Response to Joint Questions from Intervenors and Staff Propounded on May 19, 2023 and May 25, 2023
CCAE Exh. 4	NMGC's First Supplemental Response to CCAE's First Set of Interrogatories and Request for Production of Documents
CCAE Exh. 5	NMGC's Response to CCAE's First Set of Interrogatories and Requests for Production of Documents

CCAE Exhibits that have been administratively noticed from Bernalillo County Board of County Commissioners

CCAE Exh.	Bernalillo County Commission Administrative Resolution Number 2023-110

For NEE

NEE Exh. 1	Direct Testimony and Exhibits of Wilma Subra, M.S. on Behalf of NEE, October 27, 2023
NEE Exh. 2	NMGC's Response to NEE's First Set of Interrogatories and Requests for Production of Documents
NEE Exh. 3	NMGC's Response to NEE's Fourth Set of Interrogatories and Requests for Production of Documents, specifically 4- (1, 6-7, 9, 20-21, 23, 25-26)
NEE Exh. 4	NMGC's Response to NEE's Fourth Set of Interrogatories and Requests for Production of Documents, specifically 4- (13)
NEE Exh. 5	NMGC's Response to AG's Second Set of Interrogatories and Requests for Production of Documents
NEE Exh. 6	NMGC's Response to NEE's Third Set of Interrogatories and Requests for Production of Documents
NEE Exh. 7	NMGC's Response to New Energy Economy's Second Set of Interrogatories and Requests for Production of Documents,

NEE Exh. 8	NMGC's Response to NEE's Fifth Set of Interrogatories and Requests for Production of Documents
NEE Exh. 9	Staff's Objections and Responses to NEE's First Set of Interrogatories and Requests for Production to PRC Staff
NEE Exh. 10	Rio Rancho New Mexico Official Website – History
NEE Exh. 11	*Earthquake Scenario and probabilistic ground-shaking hazard maps for the Albuquerque-Belen-Santa Fe, New Mexico, corridor*, New Mexico Bureau of Geology & Mineral Resources, New Mexico Mining & Technology
NEE Exh. 12	United States Seismic Zones Map NRC-070, Submitted: 5/8/2015
NEE Exh. 13	Failure Investigation Report – Liquefied Natural Gas (LNG) Peak Shaving Plant, Plymouth Washington | US Department of Transportation

NEE Exhibits that have been administratively noticed from Bernalillo County Board of County Commissioners

NEE Exh.	Bernalillo County Commission Administrative Resolution Number 2023-110

For NMAG

NMAG Exh. 1	Direct Testimony of Andrea C. Crane on Behalf of NMAG, October 27, 2023 (Amended)
NMAG Exh. 2	Direct Testimony of John A. Rosenkranz on Behalf of NMAG, October 27, 2023 (Amended)
NMAG Exh. 3	Direct Testimony of Dr. Sol Deleon on Behalf of NMAG (Amended)
NMAG Exh. 4	NMGC's Formal Response to Joint Questions from Intervenors and Staff Propounded on May 19, 2023 and May 25, 2023
NMAG Exh. 5	NMGC's Response to AG's First Set of Interrogatories and Requests for Production of Documents 1-(01)
NMAG Exh. 6	NMGC's Response to AG's First Set of Interrogatories and Requests for Production of Documents 1-(02)
NMAG Exh. 7	NMGC's Response to AG's Third Set of Interrogatories and Requests for Production of Documents
NMAG Exh. 8	NMGC's Response to WRA's Fourth Set of Interrogatories and Requests for Production of Documents

NMAG Exh. 9	NMGC's Response to CCAE's First Set of Interrogatories and Requests for Production of Documents
NMAG Exh. 10	NMGC's Response to AG's Second Set of Interrogatories and Requests for Production of Documents
NMAG Exh. 11	NMGC's Response to Attorney General's Second Set of Interrogatories and Requests for Production of Documents

For Staff

STAFF Exh. 1	Prepared Direct Testimony of Ed Rilkoff, New Mexico Public Regulation Commission Utility Division Staff, October 27, 2023 (Amended)

For WRA

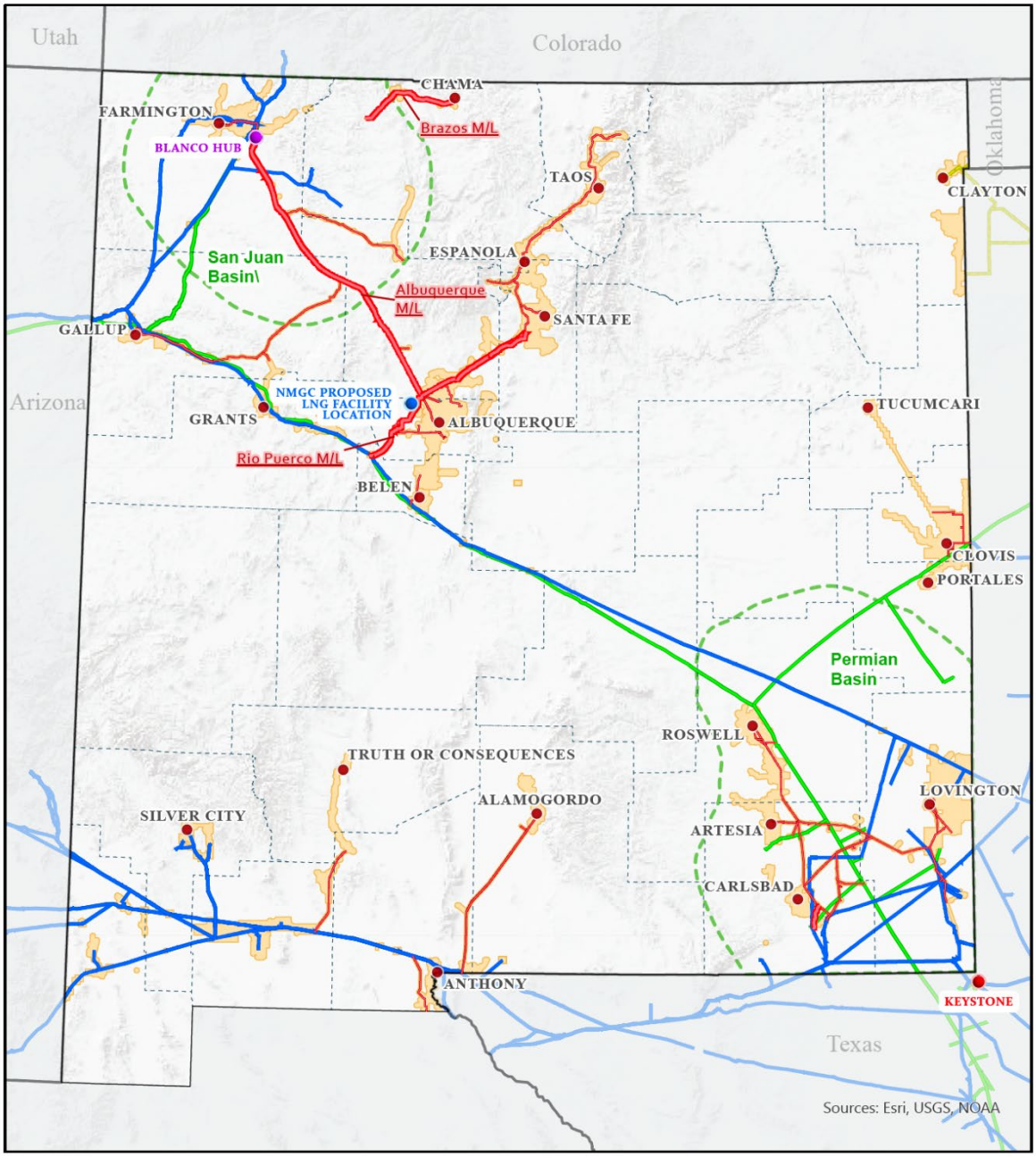
WRA Exh. 1	Direct Testimony of Aaron J. Gould on Behalf of WRA, October 27, 2023 (as Amended)
WRA Exh. 2	Rebuttal Testimony of Aaron J. Gould on Behalf of WRA, November 13, 2023 (as Amended)
WRA Exh. 9	Case No. 21-00095-UT – Winter Weather Event - NMGC's Response to Third Bench Request
WRA Exh. 10	Case No. 21-00095-UT - NMGC's Response to Bench Request Issued May 3, 2023
WRA Exh. 12	Print-out of Keystone Gas Storage Company, L.L.C. *Critical Notices, Force Majeure*

WRA Exhibits that have been administratively noticed from Case No. 16-00097-UT

WRA Exh.	*Recommended Decision* issued Nov. 14, 2016
	Final Order Adopting Recommended Decision issued Dec. 21, 2016

APPENDIX B

NMGC Exhibit Number 1 as Amended



- NMGC Proposed LNG Facility Location
- Keystone
- Blanco Hub
- NMGC Townplants
- NMGC Transmission Mainlines
- El Paso Natural Gas Co.
- Transwestern Pipeline Co.
- West Texas Gas
- NMGC Service Territories
- Natural Gas Basin

N

New Mexico GAS COMPANY® AN EMERA COMPANY

3.2.1 HOLDING Mode

HOLDING mode is the simplest operating mode for the facility with minimal equipment and subsystems operating. During this mode critical utilities, the LNG storage tank, safety and control systems, and BOG Compression are active. These are all high priority systems and great effort has been paid to ensure they reliable operate. For instance, a full spare BOG Compressor is included in the design. This means that even if one machine is down for maintenance or repair, all the BOG produced in the LNG storage tank can still be compressed and send-out to the NMGC distribution piping connected to the plant.

The equipment operating in HOLDING Mode are highlighted below in Figure 4.

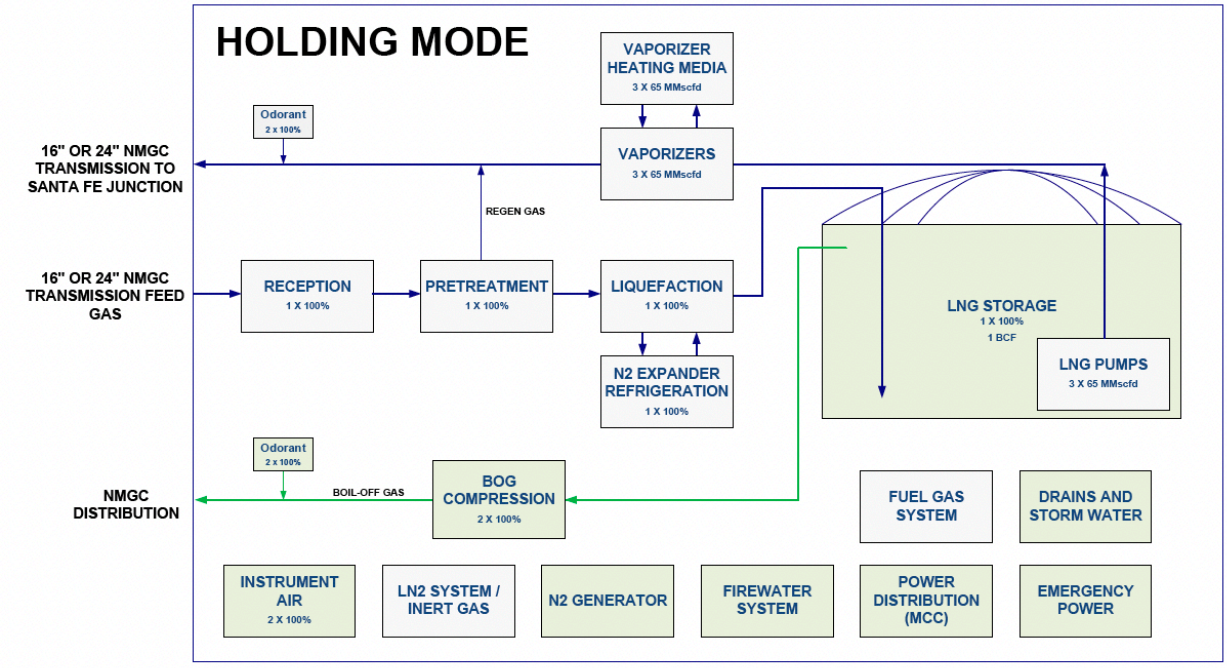


Figure 4. HOLDING Mode - active units highlighted in green.

3.2.2 Vaporization Mode

VAPORIZATION Mode refers to an operational mode of the facility where LNG stored in the storage tank is pumped to transmission line pressures, send through the STV vaporizers, and then directed to NMGC transmission lines to provide reliable on-grid natural gas for their network. This operational mode decreases the level in the storage tank. The active facilities include everything that was functional for HOLDING mode as well as the LNG Pumps, STV Vaporizers, Vaporizer Heating Media, and the send-out pipeline to Transmission.

Extreme cold weather tolerance is a critical functional requirement of the VAPORIZATION Mode equipment because this equipment is more likely to be required to function during cold weather when supply disruptions or shortfalls are more likely to occur. The Rio Puerco LNG facility will form part of critical energy supply infrastructure to New Mexico and vaporization facilities are designed to be able to operate below the coldest low ambient temperature (design = -20 ºF) vs. -17 ºF recorded in January 1971, over 50 years ago.

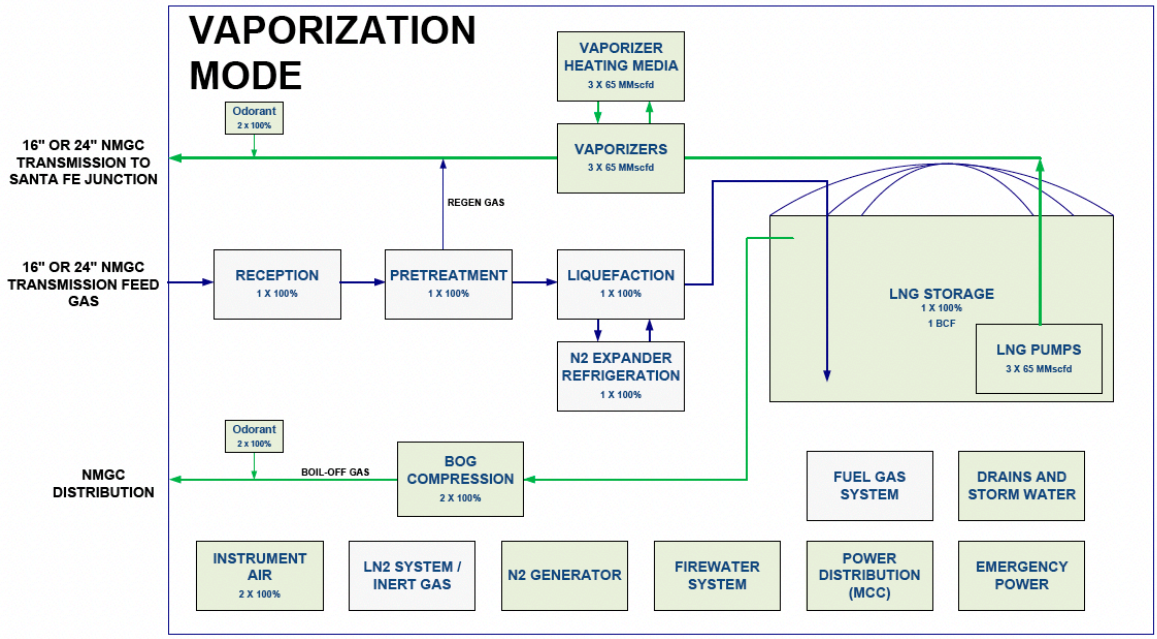


Figure 5. VAPORIZATION Mode - active units highlighted in green

3.2.3 Liquefaction Mode

LIQUEFACTION Mode refers to an operational mode where the facility is building inventory in the LNG storage tank by running the LNG production liquefaction (Reception, Pretreatment, Liquefaction, and Refrigeration).

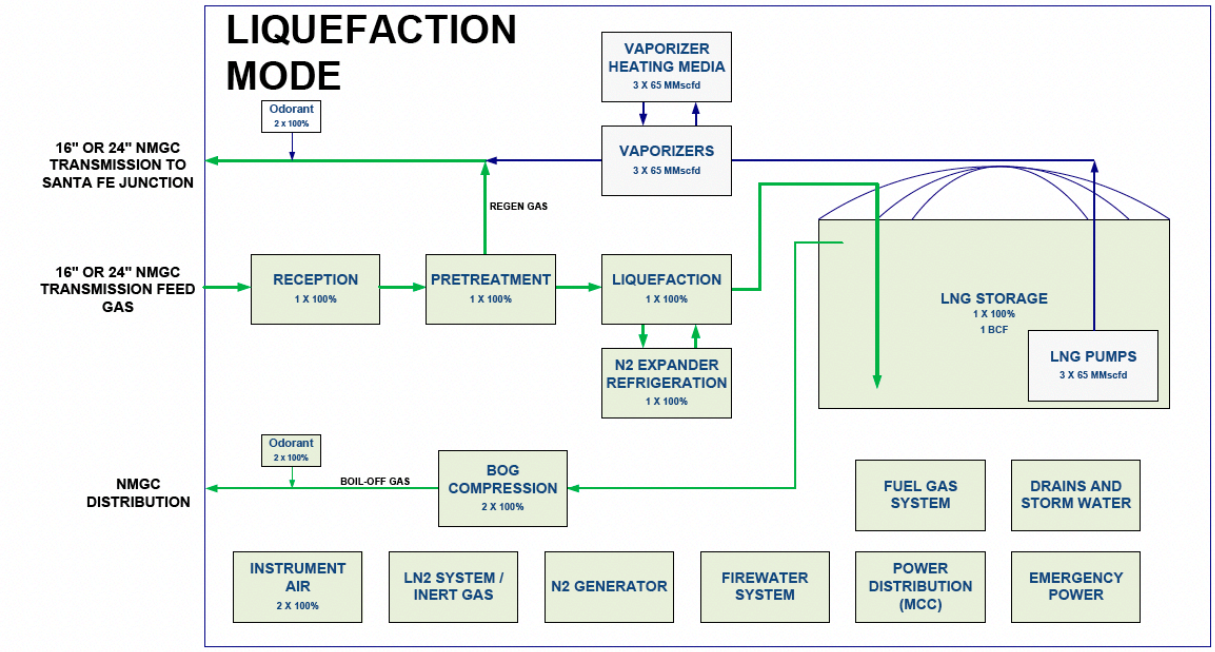
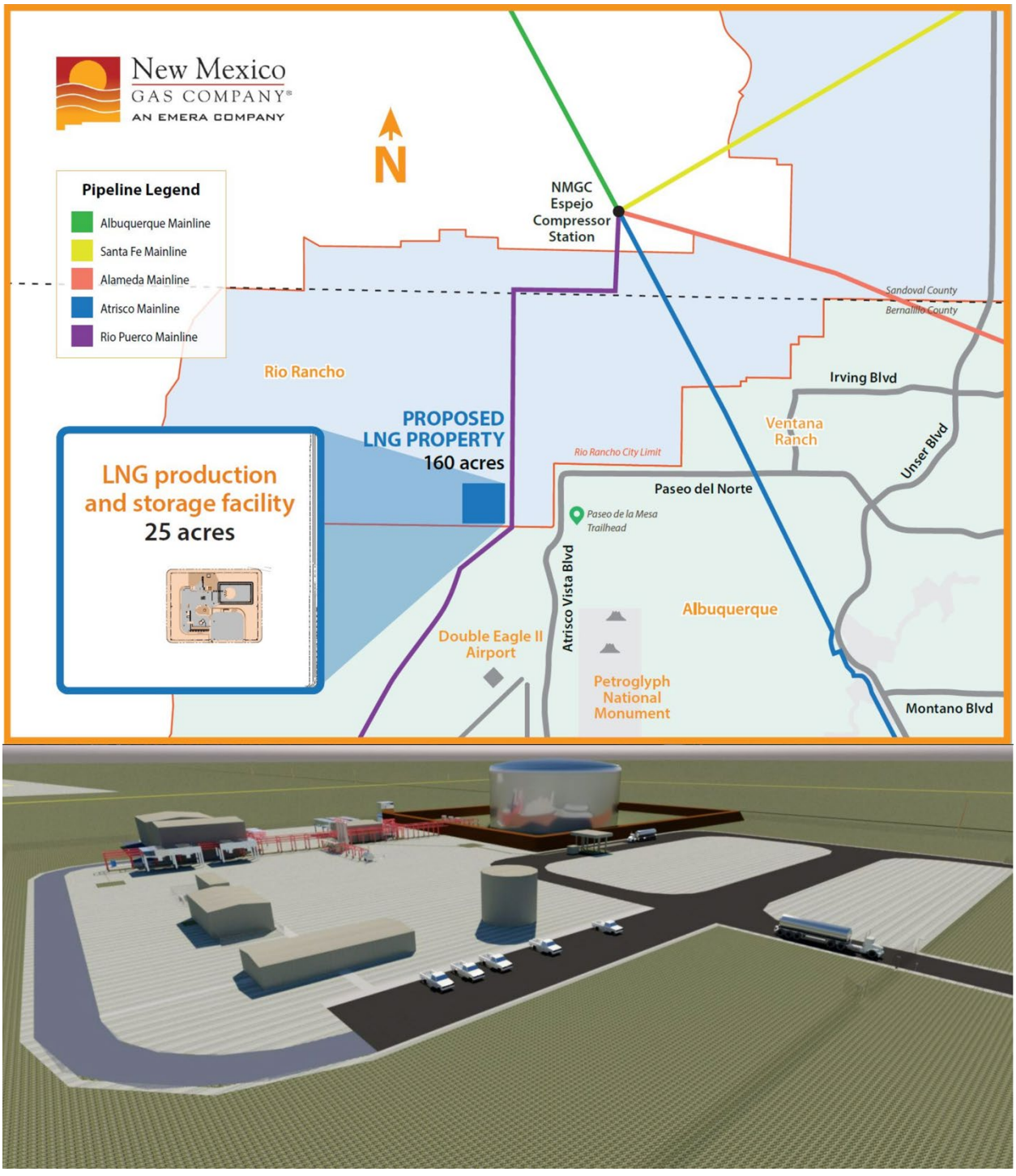


Figure 6. LIQUEFACTION Mode - active units highlighted in green

APPENDIX D



Source – NMGC webpage, entitled LIQUIFIED NATURAL GAS STORAGE, at: https://www.nmgco.com/es/lng?LAN=es#:~:text=This%20storage%20facility%20will%20be,in%20service%20by%20late%202026.

NMGC Exhibit Number 1 as Amended

NMGC Exhibit TCB-4
Page 7 of 30

Doc #	N2101-S-902 Rev. B~~-~~ C
Name	PreFEED Cost Estimates
Date	~~07/14/2022~~ *11/2/2023*

A model of the Rio Puerco facility is seen below in Figure 1 showing the vaporizer building the foreground and the LNG storage tanks and truck loading in the background.

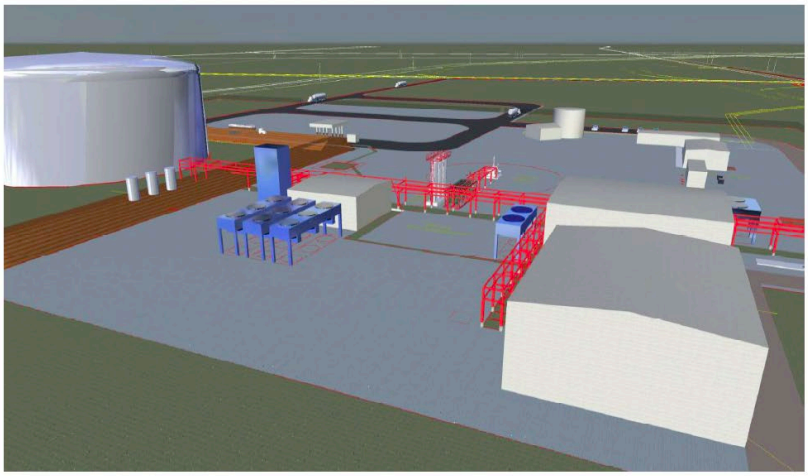
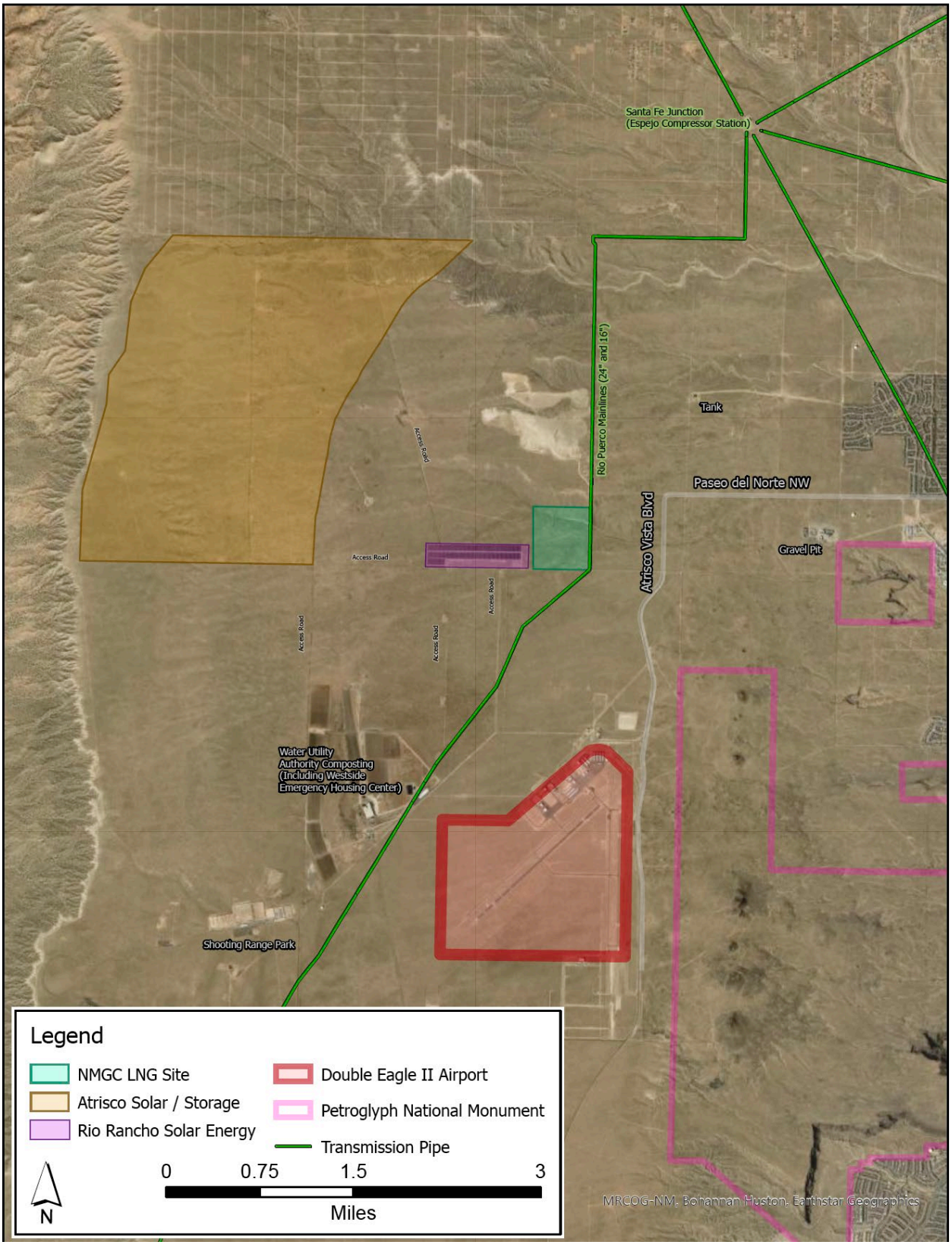


Figure 1. Rio Puerco LNG Facilities

APPENDIX E


Santa Fe Junction
(Espejo Compressor Station)
Rio Puerco Mainlines (24" and 16")
Tank
Paseo del Norte NW
Atrisco Vista Blvd
Gravel Pit
Access Road
Access Road
Access Road
Access Road
Water Utility
Authority Composting
(Including Westside
Emergency Housing Center)
Shooting Range Park
Legend
NMGC LNG Site
Atrisco Solar / Storage
Rio Rancho Solar Energy
Double Eagle II Airport
Petroglyph National Monument
Transmission Pipe
0
0.75
1.5
3
Miles
N
MRCOG-NM, Bohannan Huston, Earthstar Geographics

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF NEW MEXICO GAS COMPANY INC.'S APPLICATION FOR THE ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A LIQUIFIED NATURAL GAS FACILITY.	)	**Case No. 22-00309-UT**
NEW MEXICO GAS COMPANY, INC.,	)	
APPLICANT.	)	

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing ***Recommended Decision*** was e-mailed on this date to the parties listed below.

PRC Records Management Bureau	prc.records@prc.nm.gov;
Ana Kippenbrock	Ana.Kippenbrock@prc.nm.gov;
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DATED this **21st** day of **February 2024.**

NEW MEXICO PUBLIC REGULATION COMMISSION

Anthony F. Medeiros

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