STATE OF NEW MEXICO
LEA COUNTY
FIFTH JUDICIAL DISTRICT COURT

REPUBLICAN PARTY OF NEW MEXICO
DAVID GALLEGOS, TIMOTHY JENNINGS,
DINAH VARGAS, MANUAL GONZALES JR,
BOBBY AND DEE ANN KIMBRO,
And PEARL GONZALES

Plaintiffs,

D-506-CV-2022-00041

v.

MAGGIE TOULOUSE OLIVER in her official capacity as New Mexico Secretary of State, MICHELLE LUJAN GRISHAM in her official capacity as Governor of New Mexico, HOWIE MORALES in his official capacity as New Mexico Lieutenant Governor and President of New Mexico Senate, MIMI STEWART in her official capacity as President Pro Tempore of the New Mexico Senate, and BRIAN EGOLF in his official capacity as Speaker of the New Mexico House of Representatives,

Defendants,

and

THE BOARD OF COUNTY COMMISSIONERS
OF LEA COUNTY,

Plaintiff Intervenor

APPENDIX OF EXHIBITS AS TO LEA COUNTY'S CONSOLIDATED REPLY IN SUPPORT OF MOTION TO INTERVENE BY THE BOARD OF COUNTY COMMISSIONERS OF LEA COUNTY

APPENDIX TO LEA COUNTY CONSOLIDATED REPLY

The Board of County Commissioners of Lea County ("Lea County") files this Appendix of Exhibits as to its Consolidated Reply in Support of its Motion to Intervene and as to the Responses of all Defendants to Lea County's Motion to Intervene and would show the Court as follows:

The exhibits listed immediately below are attached to this Appendix and tendered to the Court in conjunction with Lea County's Reply in support of its Motion to Intervene:

INDEX OF EXHIBITS

1.	Statewide Map showing SB 1 District lines.	Footnote 1
2.	Southeast NM detail Map	Footnote 1, 5
3.	Hobbs Area detail Map	Footnote 1
4.	Article: "The Consequences of a Leasing and Development Ban on Federal Lands and Waters"	Footnote 4, 6
5.	Table: Oil & Gas Sector Employment	Footnote 7
6.	Waste Isolation Pilot Plant (WIPP) web page	Footnote 8
7.	Nuclear Regulatory Commission Notice Re Consolidated Storage Facility (CISF)	Footnote 9
8.	Permian Basin/ Delaware Basin Area Map	Footnote 10.

Respectfully submitted,

RAY | PEÑA | MCCHRISTIAN, P.C.

By: */s/ Jeffrey Thomas Lucky*

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CERTIFICATE OF SERVICE

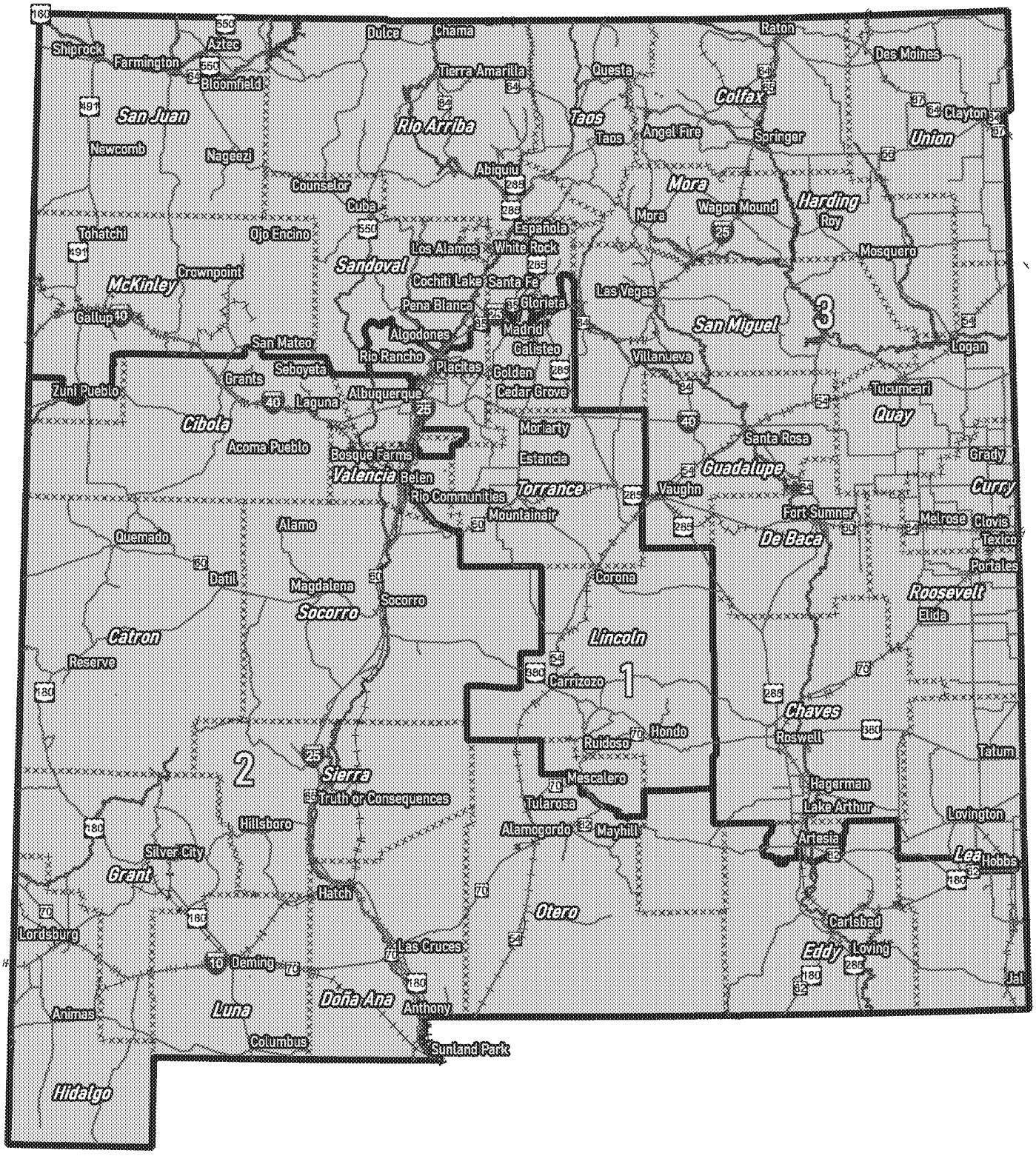
I hereby certify that on, a true and correct copy of the foregoing pleading was submitted to the Court's electronic filing system for electronic filing and service upon all counsel of record.

/s/ Jeffrey Thomas Lucky

NM Congressional: 221648 SB 1

EXHIBIT
EX 1

New Mexico



RESEARCH & POLLING

xxxxx Counties

For the New Mexico Legislative Council Service

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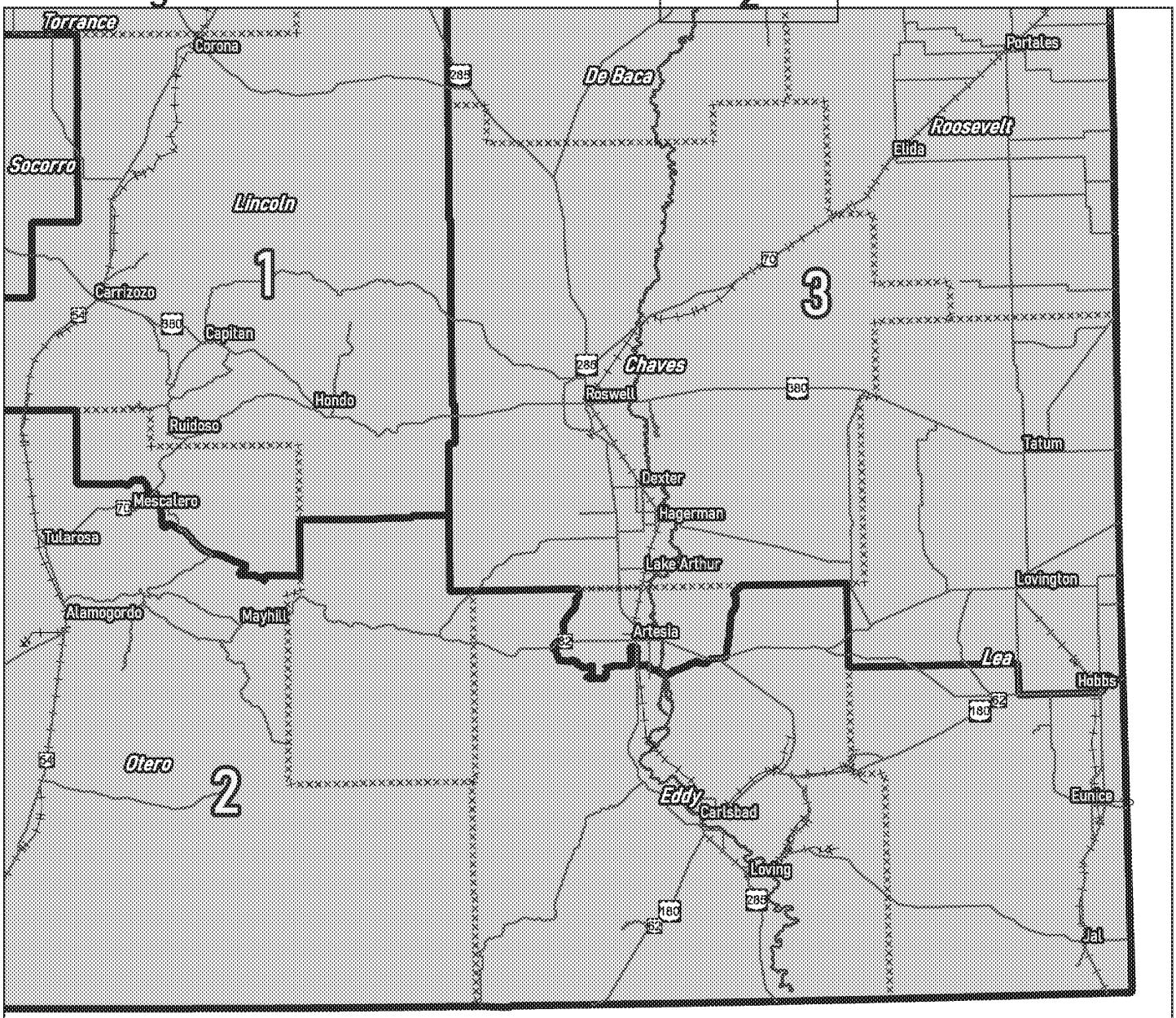
12/07/2021

EXXEXEXHIBHIBIT

NM Congressional: 221648 SB 1

EXHIBIT 2

SE New Mexico



RESEARCH & POLLING

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For the New Mexico Legislative Council Service

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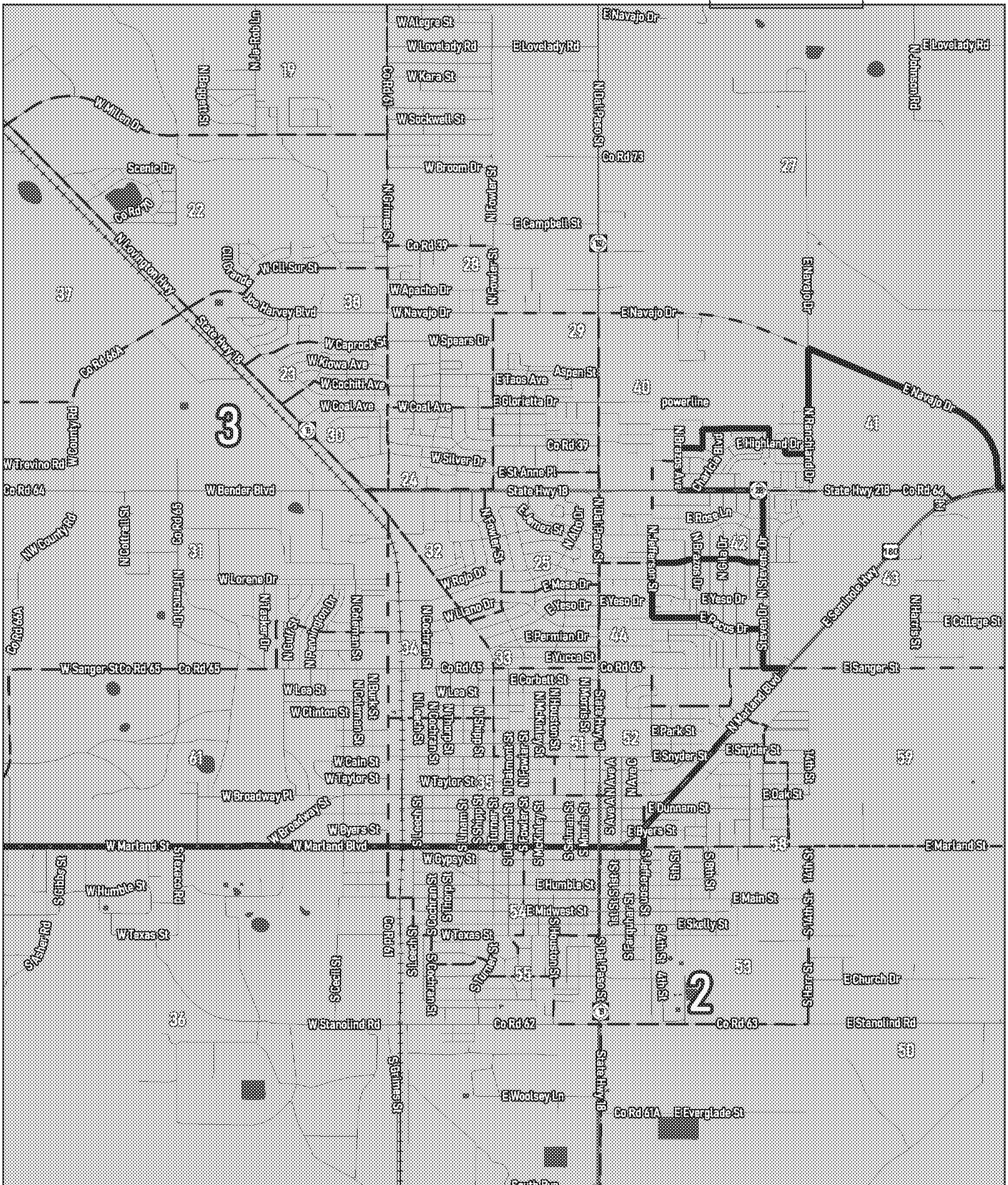
NM Congressional: 221648 SB 1

EXHIBIT
3

Hobbs



RESEARCH & POLLING

For the New Mexico
Legislative Council Service

Precincts
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EXHIBIT
4

The Consequences of a Leasing and Development Ban on Federal Lands and Waters

Prepared for the American Petroleum Institute

Prepared By OnLocation, Inc.

September 2020

Executive Summary

Modeled impacts of stopping oil and gas development offshore and on federal lands

The goal of this analysis is to project the impact that stopping leasing and development on federal lands and offshore would have on oil and gas production, energy prices, the economy, employment and the American consumer through 2030

Energy Security Impacts

- Net Imports Of Crude Oil Rise by 2 MMB/D by 2030
- Net Exports Of Natural Gas Decrease by 0.8 Tcf by 2030
- U.S. Pays A Cumulative Extra $0.5 Trillion ($2018) To Foreign Energy Suppliers
- Offshore Oil And Gas Production Are Down By 44 And 68 Percent in 2030, Respectively

Economic Impacts

- GDP Cumulative Decline Totals $0.7 Trillion ($2018)
- Relative to the Reference Case in 2022, Job Losses Peak Around 1 Million And Average 416,000 jobs
- Relative to the Reference Case in 2022, Wyoming And New Mexico Lose Over 5 Percent Of The *Total* Jobs In Each State.
- Relative to the Reference Case Texas Loses Almost 120,000 Jobs In 2022

Environmental Impacts

- Hold On To (Do Not Retire) 31 GWe of Coal Capacity
- Coal Generation Initially Increases by 6 Percent and continues to increase by 15 Percent In 2030
- CO2 Emissions Increase by an Average of 58 MMT And Keep Rising to Represent a 5.5 Percent Increase by 2030

Objective

- **This *analysis*** follows the one released in February that addressed the impact of a ban on fracking and federal leasing
- **The goal** of this analysis is to project the impact that stopping leasing and development on federal lands and offshore would have on oil and gas production, energy prices, the economy, employment and the American consumer
- **By modifying assumptions** going into the Energy Information Administration's National Energy Modeling System (NEMS), which is a well-known and vetted model, we can develop an objective assessment of the potential impacts on the US
  - To distinguish the model and analysis from that conducted by EIA, the model is referred to as NFS-NEMS, see Caveats and Assumptions at the end of the report
  - EIA Caveats on NEMS and the Reference Case are provided at the back of the presentation and can be found here https://www.eia.gov/outlooks/aeo/pdf/aeo2019.pdf

Background

Starting Point

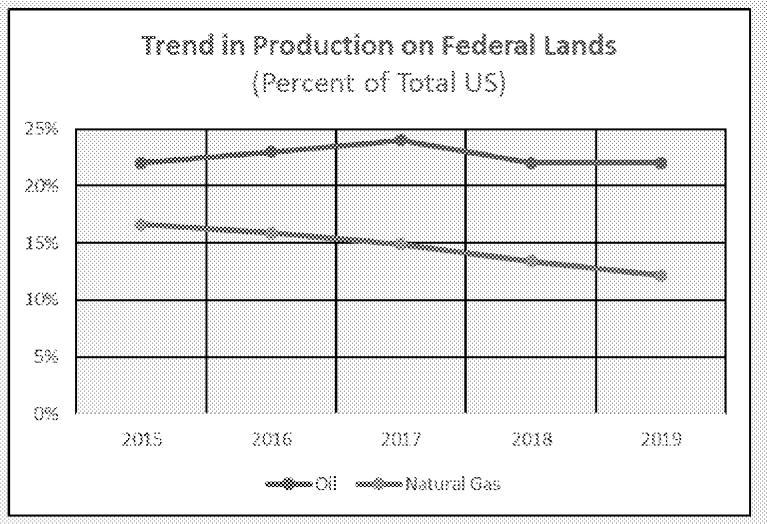
- In 2019, Federal lands accounted for 22% and 12% of total oil and gas production, respectively
- Offshore production represented 71.5% and 24.3% of Federal Production in 2019
- The graph shows the trend in federal lands and waters production over the last 5 years

This Analysis Assumed No Further Development on Federal Lands or Offshore

- All New development offshore was stopped
- Development of onshore federal lands was stopped
- No further development in the North Slope of Alaska

2019	Oil (MMB/Day)		Natural Gas (TCF)	
Federal Production *	**2.67**		**4.37**	
Offshore	*1.91*	*71.5%*	*1.06*	*24.3%*
Onshore	*0.76*	*28.5%*	*3.31*	*75.7%*
Total Production **	**11.99**		**36.20**	
Federal % of Total	**22%**		**12.1%**	
Offshore	*15.9%*		*2.9%*	
Onshore	*6.4%*		*9.2%*	

* From DOI/BLM: https://revenuedata.doi.gov/downloads/production-by-month/
** EIA



Approach

Starting Point

- We assumed stopping federal leasing would reduce future production and development at the state level by its historical 2017 share
- The reduction was applied to each state's future oil and gas production is shown in the table
  - For example, production from oil fields in Utah were assumed to produce only 72.3% of what they otherwise would have (1-.277=.723)
- The states shown represent the vast majority of the total production from onshore federal leased lands
  - Wyoming, New Mexico, and Colorado accounted for 88% of total onshore natural gas produced on federal land in 2017
  - The six states listed with oil production account for 96% of onshore oil production on federal land

2017 Federal Lands Share %

Excluded Amount

	Oil	NG
California	5.6%	
Colorado	4.1%	41.6%
New Mexico	51.9%	66.8%
North Dakota	9.0%	14.2%
Texas		9.0%
Utah	27.7%	63.2%
Wyoming	51.0%	92.1%

Source: U.S. Crude Oil and Natural Gas Production in Federal and Nonfederal Areas, Updated October 23, 2018, Congressional Research Service:

https://crsreports.congress.gov/product/pdf/R/R42432

EXHIBIT 5

EXHIBIT to LEA COUNTY REPLY **Re Community of Interest Factors**

OIL & GAS SECTOR EMPLOYMENT

(by county within each group (source: NM Oil & Gas Assoc. circa 2021[1]))

Economic Impact of Oil & Gas industry in Lea & Nearby counties

(Permian Basin Area & Adjacent)

COUNTY	O/G jobs	Approx. Total Pop.	O/G jobs as % of Pop.
CHAVES	5,649	64,615	8.7 %
EDDY	16,572	58,460	28.3 %
LEA	18,329	71,070	25.8 %
LINCOLN	1,163	19,572	5.9 %
S.E NM Region	41,713	213,717	**19.5 %.**
			Range: 5.9- 28.3%

Compared to Non-Permian Basin Counties

(Outside of SE NM &partially or wholly contained within either District 2 or 3)

COUNTY	O/G jobs	Approx. Total Pop.	O/G jobs as % of Pop.
BERNALILLO	25,866	679,121	3.8 %
RIO ARRIBA.	1,372	38,921	3.5 %
SAN JUAN	14,180	123,958	11.4 %
SAN MIGUEL	1,109	27,277	4.1 %
Totals	42,609	870,277	**3.7 %.**
			Range: 3.5 - 11.4%

[1] https://d3n8a8pro7vhmx.cloudfront.net/nmoga/pages/849/attachments/original/1639515970/NMOGA_Fueling_New_Mexico_2021_Full_Report.pdf?1639515970

Introduction to the Proposed Consolidated Interim Storage Facility for Spent Nuclear Fuel in Lea County, New Mexico

EXHIBIT
7

Holtec International (hereafter referred to as Holtec) has submitted a license application for a Consolidated Interim Storage Facility (CISF) for approval by the United States Nuclear Regulatory Commission (NRC) under the requirements specified in Title 10 of the Code of Federal Regulations (CFR), Part 72, Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater Than Class C Waste. The proposed site for the Holtec CISF is located in Lea County, New Mexico.

Holtec's License Request

On March 30, 2017, Holtec submitted an application, including a Safety Analysis Report (SAR) and Environmental Report (ER), requesting that the NRC grant a license to Holtec for the construction and operation of a CISF for spent nuclear fuel (SNF) and reactor-related Greater than Class C (GTCC) low-level radioactive waste (LLRW) generated at commercial nuclear power reactors (referred to collectively as "SNF"). Holtec's application materials are available at: https://www.nrc.gov/waste/spent-fuel-storage/cis/holtec-international.html

- The proposed CISF would be located on approximately 420.9 ha [1,040 ac] of land in southeastern New Mexico. The land for the Holtec CISF is owned by the Eddy-Lea Alliance, but would be purchased by Holtec prior to construction; however, access to the site and a proposed rail spur would require a BLM easement.
- In its license application, Holtec requests authorization in the initial phase of the project to store 5,000 metric tons of uranium (MTUs) in approximately 500 canisters for a license period of 40 years. However, because the capacity of individual canisters can vary, the 500 canisters proposed in the Holtec license application have the potential to hold up to 8,680 MTUs. The NRC's safety and environmental analyses will take into account the maximum potential capacity of the facility. The larger capacity was clarified through NRC's Request for Additional Information (RAI) process.
- In addition to the first phase, Holtec has stated its intent to request license amendments in the future to expand the facility to eventually store up to 10,000 canisters of SNF. Additional NRC reviews would take place for subsequent license amendments.

NRC's Role and Licensing Action Review

The NRC licenses and regulates the nation's civilian use of radioactive materials to protect public health and safety, promote the common defense and security, and protect the environment. The NRC review of Holtec's application consists of a safety review and an environmental review to support a final licensing decision:

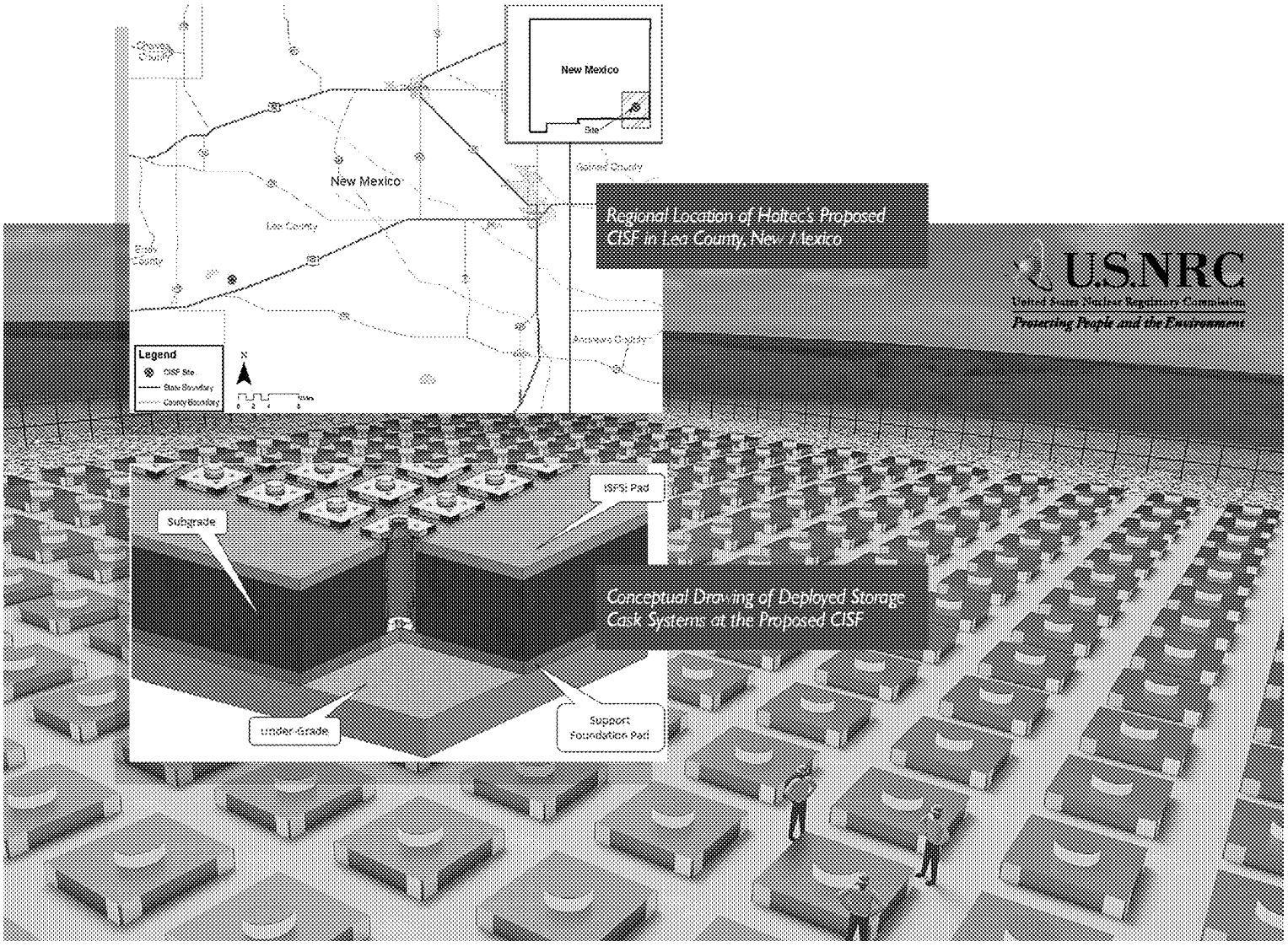
- Safety Review – A Safety Evaluation Report (SER) documents the NRC's evaluation of potential radiological consequences of Holtec's proposed action to determine if that action (constructing and operating the CISF) can be accomplished safely and securely.
- Environmental Review – The NRC's Environmental Impact Statement (EIS) documents the NRC's thorough independent evaluation of the significance of the potential environmental impacts of the proposed action and reasonable alternatives to the proposed action. During this process, the public has the opportunity to comment on the scope of the review and on the draft report.

What the EIS Will Contain

In accordance with the National Environmental Policy Act (NEPA), as well as NRC's NEPA-implementing guidance in NUREG-1748, Environmental Review Guidance for Licensing Actions Associated with NMSS Programs, the EIS contains:

- Descriptions of the Proposed Action, No-Action alternative, and Purpose and Need for the Proposed Action, as defined during the EIS scoping process
- Descriptions of the affected environment
- Evaluation of the potential environmental impacts that would result from the Proposed Action and No-Action Alternative
- Evaluation of the cumulative impacts of Holtec's proposed action and other reasonably foreseeable future actions in the vicinity of the proposed project

In developing the EIS, the NRC will consider input from other Federal, state and local agencies, tribal input from National Historic Preservation Act Section 106 activities, information from the NRC staff site visit and audit, the Holtec CISF application, and public comments. The draft EIS was issued for public comment on March 20, 2020. The EIS includes the NRC's preliminary recommendation of the preferred alternative, which is issuance of an NRC license to Holtec to construct and operate a CISF for SNF at the proposed location. Additional information and a readers guide can be found on the NRC public webpage for Holtec's application for the CISF at https://www.nrc.gov/waste/spent-fuel-storage/cis/holtec-international.html.

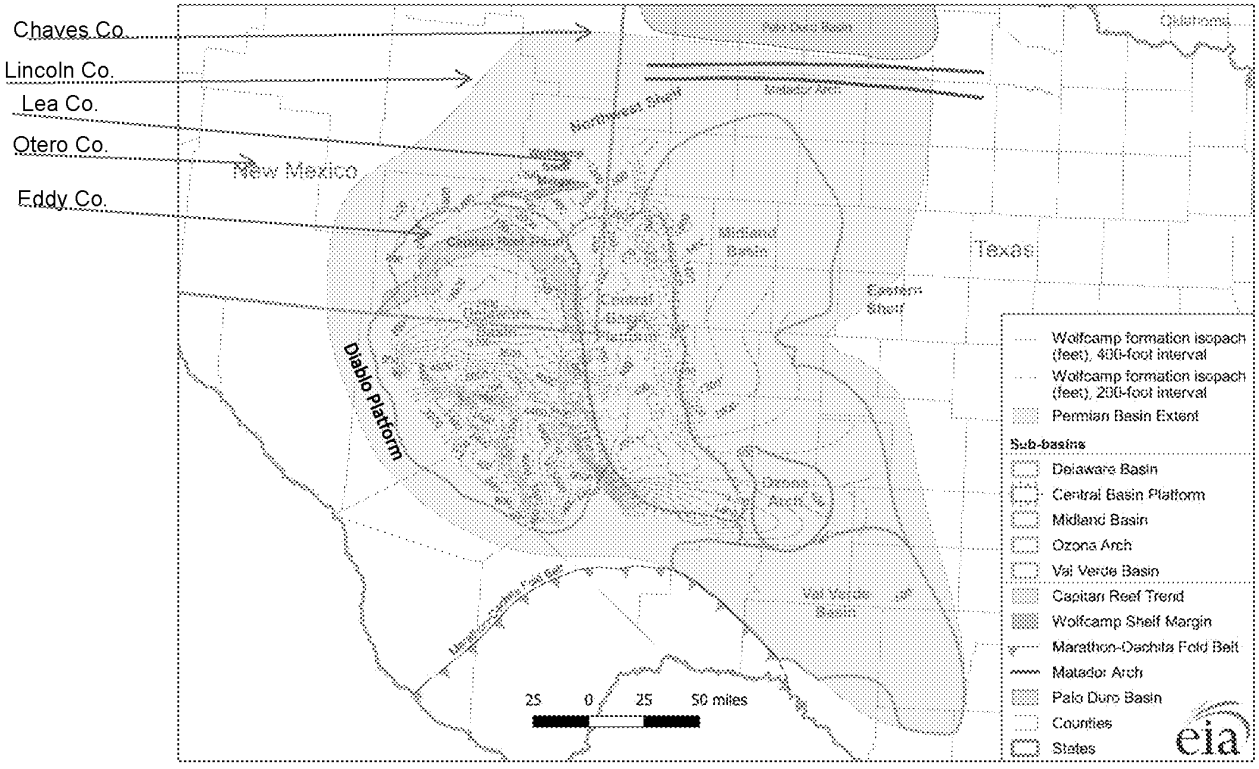


EIA constructs contoured elevation maps of subsea depth to the top of a geologic formation (also called structure maps) from point-measurement depth referenced to sea level (well observations) for the formation in the subsurface. These elevation measurements provide the third dimension for characterizing the depth or elevation of a reservoir on an otherwise two-dimensional map. Enverus DrillingInfo Inc. provides these stratigraphic picks, or formation depths, based on well log interpretation from 7,730 wells. Subsea depth of Wolfcamp in the Delaware Basin varies from 0 feet in the west to -9,500 feet subsea in the central areas, and in the Midland Basin, it varies from -2,000 feet subsea in the east along the Eastern Shelf to -7,000 feet subsea along the basin axis near the western basin edge (Figure 7).

Thickness map of the Wolfcamp formation

Thickness maps (isopachs) show spatial distribution of the formation thickness across the formation footprint. Thickness values are used, in combination with reservoir petrophysical properties such as porosity and thermodynamic parameters (reservoir temperature and pressure), to calculate resource volumes, such as oil-in-place and natural gas-in-place estimates.

Figure 8. Thickness map of the Wolfcamp formation



Source: U.S. Energy Information Administration based on Enverus DrillingInfo Inc., U.S. Geological Survey.
Note: To the east of the Central Basin Platform, stratigraphic picks for the Wolfcamp formation top are available, although stratigraphic picks for the Wolfcamp formation bottom are very limited.

The isopach map for the Wolfcamp formation is constructed from subsurface point measurements from 2,040 individual wells that include both depth to the top and to the base of the Wolfcamp formation.