BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF THE JOINT APPLICATION)	
FOR THE LOCATION APPROVAL OF THE)	
EXPANDED CORONA WIND PROJECTS AND THE)	
REVISED CORONA GEN-TIE SYSTEM AND FOR)	
RIGHT-OF-WAY WIDTH APPROVAL PURSUANT)	Case No. 21-00UT
TO THE PUBLIC UTILITY ACT, NMSA 1978, §62-9-)	
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)	
ANCHO WIND LLC, COWBOY MESA LLC,)	
GALLINAS MOUNTAIN WIND LLC, MESA)	
CANYONS WIND, LLC, PATTERN SC HOLDINGS)	
LLC, VIENTO LOCO LLC,	
)	
)	
JOINT APPLICANTS.	

DIRECT TESTIMONY OF CRYSTAL COFFMAN

1 INTRODUCTION

2 Q). P	LEASE	STATE	YOUR	NAME AND	BUSINESS	ADDRESS.
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- A. My name is Crystal Coffman. My business address is 1201 Louisiana St. Suite 3200
 Houston, Texas.
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Q. BY WHOMARE YOU EMPLOYED AND WHAT IS YOUR POSITION?

A. I am employed by Pattern Energy Group LP (together, with Pattern Energy Group 2 LP,
("Pattern Energy") as the Director, Business Development.

8 Q. PLEASE DESCRIBE YOUR EDUCATION BACKGROUND AND EXPERIENCE.

- 9 A. I have a Bachelor of Science degree in both Architecture and Civil Engineering from Texas
- 10 Tech University and a Master of Business Administration degree from Rice University. I
- 11 have worked in the renewables industry for Pattern Energy or its predecessor, Babcock &
- 12 Brown, since 2007 and have experience in both Project Finance and Development. I played
- a direct role in the financing and development of over 2,800 megawatts ("MW") of wind
- 14 farms in operation to date.

15 Q. PLEASE DESCRIBE THE DUTIES AND RESPONSIBILITIES FOR YOUR 16 CURRENT POSITION.

- 17 A. As Director, Business Development, my duties include the following:
- Coordinating activities and communicating project objectives among the Permitting,
 Land, Power Marketing, Transmission, Meteorology, Engineering and Construction,
 Legal, Finance and Accounting teams.

- Ensuring timely decisions are made in collaboration with other stakeholders of the
 development.
- Regularly reviewing the risks, schedule, and budget progress of a project.
- Actively negotiating with permitting agencies, landowners, local and state
 governmental agencies with assistance and guidance of my colleagues to facilitate the
 development of renewable energy projects.
- Delivering high-quality, low-risk, construction-ready projects.

8 Q. ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

- 9 A. I am testifying on behalf of the Joint Applicants, Ancho Wind LLC, Cowboy Mesa LLC,
- 10 Gallinas Mountain Wind LLC, Mesa Canyons Wind, LLC, Pattern SC Holdings LLC, and
- 11 Viento Loco LLC, (collectively, the "Corona Wind Companies" or the "Joint Applicants")
- 12 in support of this Joint Application for location control approval before the New Mexico
- 13 Public Regulation Commission ("Commission") pursuant to NMSA 1978, §§62-9-3, 62-
- 14 9-3 and Commission Rule 17.9.592 NMAC ("Joint Application").

15 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I am submitting testimony in support of this Joint Application for location approval to
authorize the Joint Applicants to: a) expand the area for the wind turbines beyond that
previously approved by the Commission in NMPRC Case Nos. 17-00221-UT and 1800065-UT; b) modify the proposed route for the 345- kilovolt ("kV") Corona Gen-Tie
System approved in NMPRC Case No. 18-00065-UT and reconfigured and expanded in
NMPRC Case No. 20-00008-UT; and, c) provide the necessary approval to the extent
required by law, for the right-of-way ("ROW") for that portion of the revised Corona Gen-

Tie System which is the subject of this Joint Application. The expanded area for wind 1 turbines for which Commission approval is sought in this Joint Application is hereafter 2 referred to as the "2021 Corona Generation Expansion" and is more specifically described 3 in Exhibit JA-1 attached to the Joint Application. The proposed revisions to the previously 4 approved route for the Corona Gen-Tie System are hereafter referred to as the "2021 5 6 Revised Corona Gen-Tie System" and are more specifically described in Exhibits JA-2 and JA-3 attached to the Joint Application. I am co-sponsoring all of these Exhibits. 7 Collectively, I refer to the 2021 Corona Generation Expansion and the 2021 Revised 8 9 Corona Gen-Tie System in my testimony (and the Joint Application) as the "2021 Corona Wind Update". 10

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Q. HOW IS YOUR TESTIMONY ORGANIZED?

First, I will provide an overview of Pattern Energy and the Joint Applicants. Then, I will 12 A. review the Joint Applicants' currently approved wind energy facilities, including the Mesa 13 Canyons Wind Project and their relationship with the 345-kilovolt ("kV") transmission 14 system and associated transmission facilities, including a 180 to 200-foot right-of-way 15 16 ("ROW") width. Collectively, the wind generation and associated Gen-Tie System and facilities that were approved in NMPRC Case Nos. 17-00221-UT, 18-00065-UT, and 20-17 00008-UT, as well as the 2021 Corona Wind Update which is the subject of this 18 19 proceeding, comprise the Corona Wind Project. In my testimony I discuss the reason for the changes contemplated in the 2021 Corona Wind Update. 20

- 21 Q. WHAT SUBJECTS WILL OTHER WITNESSES ADDRESS?
- 22 A. The Joint Application will have the supporting testimony of the following witnesses:

1	•	Adam Cernea Clark, Senior Environmental and Natural Resources Manager of Pattern
2		Development, will provide more detailed testimony about the environmental values
3		which are incorporated into the planning, design, construction, and operation of our
4		projects. He will also describe the 2021 Corona Wind Update and the Joint Applicants'
5		commitment to comply with federal, state, and local law. He provides detailed
6		testimony regarding the environmental report prepared by Burns & McDonnell
7		Engineering Company, Inc. ("Burns & McDonnell"), hereafter referred to as the
8		"Environmental Report." His testimony will address the environmental, biological,
9		cultural, and archeological studies performed at the location of the Updated Corona
10		Gen-Tie System. Finally, Mr. Cernea Clark will again commit the Joint Applicants to
11		comply with all the same conditions and best management practices that were advanced
12		by Pattern Energy and approved by the Commission in the Joint Applicants' last filing
13		in NMPRC Case No. 20-00008-UT.

Greg Parent of Ulteig Engineers, Inc. will describe the technical design of the 2021 Revised Corona Gen-Tie System, including design conditions, ROW width determination, structure spans and footprints, and transmission structure design.

- Jeremy Turner, Director, New Mexico Project Development of Pattern Energy will
 testify as to the Joint Applicants' efforts to secure all required approvals and consents
 from local government entities and impacted landowners in connection with this
 proceeding. He will also discuss the support that the Joint Applicants have received for
 this project from various interest groups.
- Nathan Olday, the Department Manager within the Houston Environmental Services
 Group of Burns and McDonnell, will discuss in detail the Environmental Report which

1		provides the analysis performed in connection with the 2021 Corona Update and the
2		protective measures and best management practices recommended therein.
3	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY REGULATORY
4		AUTHORITIES?
5	A.	Yes. I provided testimony before the Commission in NMPRC Case No. 18-00065-UT and
6		NMPRC Case No. 20-00008-UT.
7	II.	OVERVIEW OF PATTERN ENERGY AND THE JOINT APPLICANTS
8	Q.	PLEASE PROVIDE SOME BACKGROUND OF PATTERN ENERGY.
9	A.	Pattern Energy is a leading developer of renewable energy and transmission assets
10		throughout the world. With a global footprint spanning all over the United States, Canada,
11		Mexico, Chile and Japan, the highly experienced Pattern Energy team has brought more
12		than 6,000 MW of renewable power projects to market. Pattern Energy's headquarters are
13		in San Francisco, California.
14	Q.	PLEASE PROVIDE AN OVERVIEW OF THE JOINT APPLICANTS.
15	A.	The Joint Applicants are limited liability companies, organized under the laws of the State
16		of Delaware. These companies will obtain the land rights and permits needed for the
17		development and construction of the Corona Wind Project, including the Corona Gen-Tie
18		System. An organization chart showing the relationship of the Joint Applicants with Pattern
19		Energy is attached to my testimony as Exhibit CC-1.
20	Q.	WILL PATTERN ENERGY IMPLEMENT COMPANY ENVIRONMENTAL
21		POLICIES OR PRACTICES REGARDING THE 2021 CORONA WIND UPDATE?

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1 A. Yes. As discussed in more detail in the testimony of Adam Cernea Clark, Pattern Energy 2 actively participates in wind industry efforts to understand, study, and minimize the environmental impacts of wind energy and to advance the development of technology and 3 best practices. Pattern Energy also routinely implements voluntary best management 4 practices ("BMPs") and mitigation strategies that further its environmental values. As 5 6 evidence of our commitment to implementing environmental best practices with all of our projects, when Pattern Energy acquired the Mesa Canyons Wind Project in 2018, a wind 7 8 farm located in Lincoln County, New Mexico, which was previously approved by the 9 Commission in its Final Order in NMPRC Case No. 17-00221-UT, we voluntarily elected to implement the same BMPs and Protective Measures that we proposed, and which were 10 accepted by the Commission for the Corona Wind Project in Case No. 18-00065-UT. These 11 additional BMPs and Protective Measures were not a requirement of the Commission's 12 Final Order in NMPRC Case 17-00221-UT. Subsequently we incorporated all the same 13 14 BMPs in our Joint Application in NMPRC Case No. 20-00008-UT, which the Commission approved. 15

16

Q.

WHO WILL CONSTRUCT THE EXTENDED CORONA GEN-TIE SYSTEM?

A. Construction will be managed by Pattern Energy's in-house construction group, which has
successfully overseen the development of 6,262 MW of wind projects, including the Clines
Corners, Duran Mesa, Red Cloud Wind, and Tecolote Wind Projects (of which the latter
three are parts of the Corona Wind Project) near Corona, New Mexico. Construction of the
2021 Revised Corona Gen-Tie System will be performed under one or more balance of
plant agreements by one or more qualified third-party contractors. This is likely to be the
same group of third-party contractors used for the 2021 Corona Generation Expansion.

Q. WHAT COMMISSION APPROVALS ARE THE JOINT APPLICANTS REQUESTING?

3 A. The Joint Applicants request that the Commission approve the location of the 2021 Corona 4 Wind Update, including the 2021 Corona Generation Expansion and the 2021 Revised Corona Gen-Tie System. Joint Applicants are also requesting approval by the Commission 5 6 of the right-of-way ("ROW") width for the entire 2021 Revised Corona Gen-Tie System. 7 Previously, in NMPRC Case Nos. 18-00065-UT and 20-00008-UT we obtained approvals 8 for a 180-foot right-of-way ("ROW") for the entire Gen-Tie System. In this proceeding, we are requesting that certain portions of the 2021 Revised Corona Gen-Tie System, 9 including some for which prior approvals were already obtained, be approved for a 200-10 foot ROW width to allow us to collocate two circuits on a single set of transmission 11 structures, rather than constructing two independent parallel segments, thereby reducing 12 both costs and overall environmental impacts. The segments of the 2021 Revised Corona 13 14 Gen-Tie System that will require a 200-foot ROW are specifically identified in the testimony of Greg Parent. 15

Q. ARE THE CORONA WIND COMPANIES REQUESTING THE COMMISSION ISSUE A PUBLIC CERTIFICATE OF CONVENIENCE AND NECESSITY?

A. No. Neither the Joint Applicants, Pattern Energy nor any affiliates of Pattern Energy are or
 will be public utilities if the proposed location permits are granted and the Corona Wind
 Project and associated Gen-Tie System constructed.

21 III. <u>THE 2021 CORONA WIND UPDATE</u>

22 Q. PLEASE DESCRIBE THE 2021 CORONA WIND UPDATE.

A. The 2021 Corona Wind Update will consist of approximately 200 MW of wind power
facilities, in addition to the generation that has already been approved by the Commission
in related proceedings. The Corona Wind Project will still be located in Lincoln, Torrance
and Guadalupe Counties in New Mexico and will encompass approximately 500,000 acres
of private and state land within the three counties. The intention remains to interconnect
the 2021 Corona Wind Update to one of SunZia Transmission LLC's two proposed 500kV transmission lines ("SunZia Project").

To produce the desired energy, it is anticipated that the 2021 Corona Wind Update will 8 consist of approximately 50 additional wind turbines with a nameplate capacity ranging 9 from 2.3 MW to 4.5 MW. Each of the turbines in the 2021 Corona Wind Update will be 10 connected by 34.5-kV collection lines to up to five new substations ("Generation Project 11 Substations"). Exhibits JA-1, JA-2, and JA-3, attached to the Joint Application provide 12 maps showing the location of the 2021 Corona Wind Update. Of course, as noted in each 13 14 of our prior filings, the proposed route for the 2021 Revised Corona Gen-Tie System is subject to change as further onsite studies are performed and more information becomes 15 16 available about the proposed route. As in the past, the Commission will be notified of these 17 changes to the extent it involves movement of a turbine or segment of the Gen-Tie System outside of the area for which the required environmental analyses were conducted. 18

19 Q. IS THE PROPOSED LOCATION WELL-SUITED FOR WIND ENERGY 20 GENERATION?

A. Yes. In this regard there is no change to the suitability of the site from the initial information
 filed in prior Commission cases. Exhibit CC-2 shows the average wind speed across New
 Mexico at 80 meters above ground level (the approximate height of an average wind

Direct Testimony of Crystal Coffman

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turbine). Pattern Energy expects to pair industry leading wind turbine equipment with the strong wind resource in the Corona Wind Project area to maximize energy generation.

3 Q. HOW WAS THE LOCATION CHOSEN FOR THE CORONA WIND PROJECT?

As discussed previously, the 2021 Corona Wind Update is in an area with a wind resource 4 A. 5 superior to much of the rest of the State of New Mexico. After starting development for its 6 Broadview and Grady projects in Curry County, New Mexico, Pattern Energy began looking for more opportunities to leverage its experience elsewhere in the state. Once 7 Pattern Energy recognized the favorable resource at the location for the Corona Wind 8 Project, it also recognized that this site has relatively low numbers of sensitive species and 9 10 natural resources, broad support from private landowners for wind development, large areas of buildable terrain, and close proximity to the eastern terminus of the proposed 11 SunZia Project. 12

Q. WHAT IS THE TIMEFRAME FOR CONSTRUCTION OF THE CORONA WIND PROJECTS?

A. Construction of a portion of the 2021 Corona Wind Update is expected to begin once all
the necessary permits to begin construction are in hand. The in-service date for the 2021
Corona Wind Update is by the end of 2026.

Q. HAS THE TIMEFRAME FOR THE CONSTRUCTION OF THE CORONA WIND UPDATE BEEN DELAYED BECAUSE OF THE CHANGES DESCRIBED IN THIS FILING?

1	A.	No. The changes in this filing are the product of ongoing diligence and development by
2		Pattern Energy. Transmission route changes and project land additions are very common
3		in any wind farm development process.

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Q. WILL THE CORONA WIND UPDATE HAVE AN INCREASED NAMEPLATE

5 THAN WAS PREVIOUSLY ESTIMATED IN NMPRC CASE NO. 20-00008-UT?

A. The addition of private lands to the Corona Wind Update will offer increased flexibility
for siting wind turbines and potentially for additional MW. This has not been finalized
yet.

9 Q. HOW MANY ADDITIONAL TURBINES WILL THERE BE COMPARED TO THE 10 NUMBER ESTIMATED IN NMPRC CASE NO. 18-00065-UT?

A. Although the overall nameplate capacity of the wind farm may increase the number of
turbines is still expected to be approximately 950. This is possible because the nameplate
of each turbine is expected to be closer to 4.0 MW, which is the upper limit in the 2.3 - 4.5
MW range stated in this testimony.

15 IV. <u>THE 2021 REVISED CORONA GEN-TIE SYSTEM</u>

16 Q. PLEASE DESCRIBE THE 2021 REVISED CORONA GEN-TIE SYSTEM.

17 A. The 2021 Revised Corona Gen-Tie System is a 345-kV transmission system and associated

- 18 transmission facilities, including a 180-200-foot ROW, as described in detail in Exhibits
- 19 JA-2 and JA-3 to the Joint Application. The 2021 Revised Corona Gen-Tie System will be
- 20 located within the Corona Wind Project Area.

1	Q.	WHAT IS THE TIMEFRAME FOR CONSTRUCTION OF THE 2021 REVISED
2		CORONA GEN-TIE SYSTEM?
3	A.	The 2021 Revised Corona Gen-Tie System is expected to be in service by the end of 2026.
4	Q.	HOW WILL THE 2021 REVISED CORONA GEN-TIE SYSTEM FACILITATE
5		THE DEVELOPMENT OF THE CORONA WIND PROJECT?
6	A.	The addition of the 2021 Revised Corona Gen-Tie System provides an interconnection
7		route to the SunZia Transmission line for the 2021 Corona Wind Update.
8	Q.	ARE YOU FAMILIAR WITH THE CONDITIONS PLACED UPON THE JOINT
9		APPLICANTS AS PART OF THE COMMISSION'S FINAL ORDER IN NMPRC
10		CASE NOS. 18-00065-UT AND 20-00008-UT?
11	A.	Yes. I was intimately involved in those proceedings and agreed to those conditions at that
12		time.
13	Q.	ARE YOU AUTHORIZED TO AGREE TO THE SAME CONDITIONS AS PART
14		OF THIS JOINT APPLICATION AS WERE IMPOSED UPON JOINT
15		APPLICANTS IN THOSE PROCEEDINGS?
16	A.	Yes, I am. I do agree to the numerous conditions and environmental protections that were
17		included as conditions of the Final Order in NMPRC Case Nos. 18-00065-UT and 20-
18		00008-UT.
19	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?
20	A.	Yes.

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IN THE MATTER OF THE JOINT APPLICATION FOR THE LOCATION APPROVAL OF THE EXPANDED CORONA WIND PROJECTS AND THE REVISED CORONA GEN-TIE SYSTEM AND FOR RIGHT-OF-WAY WIDTH APPROVAL PURSUANT TO THE PUBLIC UTILITY ACT, NMSA 1978, §62-9- 3	Case No. 21-00
ANCHO WIND LLC, COWBOY MESA LLC, ,) GALLINAS MOUNTAIN WIND LLC, MESA) CANYONS WIND, LLC, PATTERN SC HOLDINGS) LLC, VIENTO LOCO LLC,)	
JOINT APPLICANTS.	
AFFIDAVIT OF CRYSTAL COFFMAN	MAN
STATE OF Texas) COUNTY OF Hallis) ss.	
I have read the foregoing Direct Testimony and under penalty of perjury under the laws	nalty of perjury under the laws
of the State of New Mexico the statement is true and correct based on my own knowledge and	ed on my own knowledge and
belief. Crystal Coffman	man Coffrence
SWORN on this 1th day of <u>November</u> 2021.	WW
Addin Des 7 Notary Public	ic // /

My Commission Expires

Ð BAO A HUYNH Notary ID #125533804 My Commission Expires April 1, 2022

EXHIBIT CC-1



