#### BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE APPLICATION OF MILFORD WIND CORRIDOR PHASE I, LLC AND MILFORD WIND CORRIDOR PHASE II, LLC FOR CERTIFICATES OF CONVENIENCE AND NECESSITY FOR THE MILFORD PHASE I AND PHASE II WIND POWER PROJECT

Docket No. 08-2490-01

Sur-Rebuttal Testimony of

Krista Kisch

Exhibit MWC 2.0 SR

On behalf of

Milford Wind Corridor Phase I, LLC and Milford Wind Corridor Phase II, LLC

September 22, 2008



Sur-Rebuttal Testimony of Krista Kisch Exhibit MWC 1.0 SR Docket No. 08-2490-01 September 22, 2008 Page 2

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| 1  |   | TESTIMONY OF KRISTA KISCH  |
|----|---|--|
| 2  | Q | Please state your name and business address.   |
| 3  | А | Krista Kisch. My business address is 110 West A Street, Suite 675, San Diego,        |
| 4  |   | California 92101.  |
| 5  | Q | What is your occupation?   |
| 6  | А | I am the Vice President, Business Development - West Region for First Wind.          |
| 7  | Q | On whose behalf are you appearing in this proceeding?                                |
| 8  | А | I am appearing on behalf of Milford Wind Corridor Phase I, LLC and Milford Wind      |
| 9  |   | Corridor Phase II, LLC ("Milford Wind").   |
| 10 | Q | Are your educational background and experience described in the CV                   |
| 11 |   | attached as Exhibit MWC 2.1 SR.?   |
| 12 | А | Yes.   |
| 13 | Q | What is the purpose of your testimony?   |
| 14 | А | I will adopt some of the statements of Evelyn Lim in Milford Wind's Application      |
| 15 |   | and the associated exhibits. In addition, I respond to issues raised in the rebuttal |

| 16 |   | testimonies of Dr. Joni Zenger on behalf of the Division of Public Utilities       |
|----|---|--|
| 17 |   | ("Division") and Mike Velarde on behalf of UAMPS on September 8, 2008. In          |
| 18 |   | particular I address the following issues:   |
| 19 | • | The impact of Milford Wind's 345 kV line on certificated public utilities in Utah; |
| 20 | • | The status of the consents and permits necessary to build the 345 kV line; and     |
| 21 | • | The reasonable need for the 345 kV line.   |
| 22 | Q | Which statements and exhibits from the application are you adopting?               |
| 23 | А | I am adopting paragraphs 5 through 13 and 17 through 24 of the Application and     |
| 24 |   | the exhibits associated with those paragraphs. A copy of these are included at     |
| 25 |   | the end of this testimony as Appendix I:   |
| 26 | Q | Do you have any changes to make to those statements?                               |
| 27 | А | Yes. Since filing the Application, the wind farm is no longer required to obtain a |
| 28 |   | certificate, and Milford Wind has made significant progress toward planning and    |
| 29 |   | permitting the interconnection line. Some of the statements made in the            |
| 30 |   | Application, therefore, should be updated to reflect these recent developments.    |
| 31 |   | Other than those updates, which I identify and discuss below, I have no changes    |
| 32 |   | to make to the statements in the Application.                                      |
| 33 | Q | In light of the building of the generating plant, does the transmission line       |

## conflict with or adversely affect the operations of any existing certificated public utility in the state?

A No. Based on our investigations and understanding, the only certificated public
 utility in the area of the transmission line is PacifiCorp dba Rocky Mountain
 FirstWind

Power. During this proceeding, the Division made several inquiries of PacifiCorp
 investigating this specific issue.

PacifiCorp's responses to DPU Data Requests 1.1, 1.3, 1.4, 1.5, and 1.6 are
attached hereto as Exhibit MWC 2.2 SR. In essence, a direct interconnection to
the IPP system and then to the Los Angeles Department of Water & Power's
balancing area, will have no impact on PacifiCorp's operations. It should have no
impact on any of PacifiCorp's projects, and PacifiCorp sees no unintended
consequences. There may be a potential of line crossings, but any impacts
resulting from this would be paid for by Milford Wind.

# 47 Q Mr. Velarde suggests at p. 3 of his testimony that a reduction of IPP Units I 48 and 2 may have an effect on Utah purchasers, which was not explained in 49 the studies. How do you respond?

50 А As Dr. Zenger concluded after reviewing the system impact studies, "the 51 evidence shows that the transmission line does not conflict with or adversely 52 affect the operations of any existing certificated public utility in the state." Zenger 53 at L. 122-124. While Mr. Velade states that the effect on Utah purchasers has 54 not been explained, UAMPS was unable to identify any additional information that would be more helpful than the system impact studies in determining 55 56 whether a reduction of Units 1 and 2 would affect Utah ratepayers. Moreover, it is my understanding that the Commission's inquiry pertains to whether 57 construction of the interconnection line would have an adverse effect on the 58 59 operations of a certificated utility, not on the ratepayers of any utility.

Dr. Zenger concludes at L.167, n.15 that the Transmission line does not Q 60 61 constitute an extension into the certificated territory of a certificated public utility in the state. Do you agree? 62 А Yes. Based on our investigations and understanding, the only certificated public 63 utility in the area of the transmission line is PacifiCorp dba Rocky Mountain 64 Power. The Division posed this question to PacifiCorp as DPU Data Request 65 1.2, and PacifiCorp responded: 66 The applicant will serve no retail load. A transmission line 67 used for wholesale power delivery does not effect territory 68 certification. The Company will need to serve the wind farm 69 load during periods when the project is not generating but 70 consuming energy from the transmission system load. 71 72 A copy of this response is attached hereto as Exhibit MWC 2.3 SR. 73 Q Dr. Zenger's testimony about whether the line constitutes an extension into the certificated territory of another certificated public utility, at L. 171-173, 74 suggests that the Commission should "require Milford Wind to report any 75 changes or expansions to Milford Phase I and Milford Phase II in order to 76 monitor whether the project continues to pose no interference in other 77 transmission facilities." Does Milford Wind plan future expansion of the 78 project? 79 Yes. Dr. Zenger notes that Milford plans to expand the generation capacity of А 80 the project by as much as 600 MW beyond Phase I and Phase II. The plan is to 81 expand it to a total capacity of 1000 MW. 82 Q Will that require expansion of the interconnection line? 83

A As proposed, the line will have sufficient capacity to transmit the output of all five phases of the generation facility. Milford Wind has no plans to expand the line geographically, or to increase the capacity of the line, as it proceeds to develop and expand the generation capacity. Unless the capacity of the line itself is expanded or the line is expanded geographically, there should be no reason to report changes, if any, to the generation projects, which the Commission has ruled are exempt.

91 Q Has Milford Wind either received or begun the process of receiving the 92 necessary consents and permits to build the facility?

93 A Yes. As detailed in Milford Wind's Application, we are in the process of receiving 94 the necessary consents and permits. In addition, a table listing the required 95 consents, permits and authorizations, and the status of each as of the filing of 96 this testimony is attached hereto as Exhibit MWC 2.4 SR. Milford Wind will 97 provide the Commission with notice of, and/or a copy of the required 98 authorizations when they are received.

Q In light of building a generating facility that does not need a certificate, is
 there a reasonable need for the transmission line to get the output of the
 plant to its contracted market?

102 A Yes. The Project is to be located in Beaver and Millard Counties. The power 103 from the turbines will be carried to an onsite substation, where the power from 104 the turbines will be stepped up to 345 kV. Milford Wind's power purchase 105 agreement requires delivery of the power generated by Phase I of the Project to FirstWind the Southern California Public Power Authority ("SCPPA"), which will take
delivery at IPP. Because there already exists a line from IPP to the area served
by SCPPA, the only additional connection necessary to carry the power to Milford
Wind's "contracted market," is an interconnection line from the substation at the
wind farm to IPP.

Mr. Velarde states at p.5 of his testimony that the only reported analysis of
 alternatives to constructing the line proposed was the PacifiCorp Draft
 Facilities Study. Did Milford Wind investigate other options for getting
 power from the wind farm to a transmission provider?

Milford Wind studied various options through the Generation 115 А Yes. 116 Interconnection study process on the Rocky Mountain Power grid before investigating the option addressed in the PacifiCorp Draft Facilities Study. We 117 118 did not find that option to be viable, or find any other existing transmission 119 facilities that would have allowed Milford Wind to construct a shorter 120 interconnection line, and still have accommodated the output from Phase I as 121 well as the planned expansion of the generation capacity. Because the wind 122 generation site is relatively remote and there are no suitable alternative facilities, 123 Milford Wind would be unable to get the output of the Project to its contracted 124 market. Thus, there is a reasonable need for the line.

### 125 Q Dr. Zenger states in her testimony at L. 203-205 that the Bureau of Land 126 Management ("BLM") is evaluating two possible routes for the

interconnection line. Do you have updated information on the BLM's
 selection of the route?

Yes. In Milford Wind's Application, we described two possible routes for 129 Α 130 the line [see paragraphs 8 and 9 in Appendix I attached to this testimony]. One route, which was identified by Milford Wind as its preferred route, would follow 131 132 the existing IPP 500 kV direct current transmission line and enter the IPP substation from the west. The other route would follow State Highway 257 to a 133 point approximately 10 miles south of Delta, where it would turn east and then 134 north and then back west. This latter route was rejected by the BLM in its 135 136 environmental assessment of the project on September 3, 2008. It stated as 137 follows:

138The Utah State Route 257 alternative transmission line route was139ultimately eliminated from further consideration in May 2008140because the route was unacceptable in Millard County due to141incompatible land use designations and planned land uses in the142portion of the county through which it would have passed.

Environmental Assessment of Milford Wind Corridor Project, Millard and Beaver Counties, Utah, (Docket Nos. UT-040-07-20 UTU-82972 and UTU-82973) (September 3, 2008) ("Environmental Assessment") at p. 38. A copy of the relevant sections of the Environmental Assessment is attached as Exhibit MWC 2.5 SR. Thus, the BLM is is no longer considering the Highway 257 route, but is continuing to consider the proposed route through the BLM's "West-Wide Corridor" along the IPP transmission line.

### Q Are there quantifiable benefits to Utah that result from construction of the interconnection line?

Yes. As we explained in the Application, the Project will provide significant 152 А 153 benefits to the economies and tax base of Beaver and Millard Counties and the State of Utah. The Application quantifies those benefits with respect to the Wind 154 Farm and the interconnection line [see paragraph 18 of the Application attached 155 as Appendix 1]. The interconnection line alone is projected to have a total cost of 156 as much as \$80 million. During construction of the line, there will be a large 157 158 infusion of spending in the local and state economy. Approximately 69 workers, 159 many of them locals, will be involved in the construction phase of the line, and it 160 is expected that up to \$1.5 million in construction related expenses will be spent 161 in the local counties. Up to 5 permanent jobs will be created for operation and 162 maintenance of the interconnection line facilities, and the Project (including Phase I of the wind farm) will pay over \$1.2 million per year of property taxes, 163 164 most of which will go to the local school systems. In addition, it is expected that 165 power from future phases of the Project will be available on a wholesale basis for 166 potential purchase by Utah public utilities, municipalities, inter-local agencies, 167 electric cooperatives, or other Utah electrical corporations. Finally, residents of 168 Utah will benefit from the environmental advantages of having non-polluting 169 renewable electric generation facilities located in the state. Additionally, the generation of electrical energy from wind energy is seen as part of the strategy 170

- for addressing global climate change, with benefits to citizens of Utah, the nationand the world.
- 173 Q Do you have any other updates to the statements filed in the Application?
- A Yes. As an update to the statement in paragraph 13 of the Application, it is
  anticipated that Phase II construction would commence in 2010, not in 2009 as
  originally stated.
- 177 Q Do you have any comment about maintenance of the interconnection line?
- A First Wind will comply with all applicable regulations and standards of
   maintenance. Mr. Henriksen's testimony indentifies maintenance operations that
   likely will be required to maintain the line.
- 181 Q Does this conclude your testimony?
- 182 A Yes.
- 183

184

#### APPENDIX I

### 185STATEMENTS FROM MILFORD WIND'S APPLICATION ADOPTED BY186KRISTA KISCH

For the purposes of this Application, the Milford Phase I and II Wind Power
Project ("Project") is described with respect to its two primary components, a wind farm
and a transmission line, both of which will be located on federal, state and private land in
Beaver and Millard Counties, Utah. An overview map of the proposed Project facilities
is attached to Milford Wind's Application as Exhibit 1 [This Exhibit is attached to the
Testimony of Krista Kisch at Exhibit MWC 2.6 SR]

193 6. The proposed wind farm will be located in Beaver and Millard Counties, Utah. A 194 figure illustrating the wind farm area and conceptual layout is attached to Milford Wind's 195 Application as Exhibit 2 [This Exhibit is attached to the Testimony of Krista Kisch at 196 Exhibit MWC 2.7 SR]. When Phase I and Phase II are completed, the wind farm will 197 generate approximately 300 megawatts of power (nameplate capacity) from a mix of 198 wind turbines ranging from 1.5 to 2.5 MW each. The turbines will be arrayed along a 199 series of parallel turbine corridors, with the precise location of each turbine to be fixed 200 during the final design and construction process, which allows the avoidance of any 201 sensitive resources or features. For Phase I, Milford Wind has entered into contracts for 202 the purchase and delivery of thirty-nine (39) GE wind turbine generators and up to fifty-203 eight (58) Clipper Liberty C99 wind turbine generators, for a total installed capacity 204 (nameplate) of 203.5 MW. It is anticipated that Phase II will consist of additional

installed capacity of approximately 100 MW<sup>1</sup>. The actual number and size of the
turbines has not been finalized due to uncertainties in the ability of turbine suppliers to
timely deliver on turbine orders.

208 7. The wind farm will include a system of buried lines that will collect power from 209 the turbines and carry it to an onsite substation. At the substation, transformers will step 210 the power up from 34.5 kV to 345 kV for transmission through the Project's 345 kV 211 transmission line. The wind farm will also include a road system that will be used to 212 build and then provide access to the turbines for maintenance. See Application Exhibit 2 213 [Exhibit MWC 2.7]. The wind farm will include an operations and maintenance facility 214 including an approximately 30,000 square foot building and associated parking and garage facilities. 215

216 8. The Project includes a proposed 345 kV alternating current transmission line that 217 will originate at the Phase I wind farm substation and terminate at the existing substation 218 at the Intermountain Power Project ("IPP") generating station north of Delta, Utah. Two 219 routes are being considered for the transmission line, both of which are illustrated in 220 Exhibit 1 of the Application [also at Exhibit MWC 2.6 SR]. One route, which has been 221 identified by Milford Wind as its preferred route, would follow the existing IPP 500 kV 222 direct current transmission line and enter the IPP substation from the west. This route 223 would be approximately 87 miles long. The other route would follow State Highway 257 224 to a point approximately 10 miles south of Delta, where it would turn east and then north

<sup>&</sup>lt;sup>1</sup> It is possible that there will be additional future phases to the Project which will add capacity in an amount yet to be determined. In its Application, Milford Wind seeks certificates for Phase I and Phase II; authorization is not sought with respect to potential future phases.

and then back west. This route, which would be approximately 91 miles long, wouldenter the IPP substation from the east.

9. Both routes would be located primarily on federal land managed by the Bureau of
Land Management of the United States Department of the Interior ("BLM"), and both
would be located primarily within BLM-designated utility corridors. The choice between
these routes will be made by the BLM based on an ongoing environmental review
process being conducted by the BLM under the National Environmental Policy Act
("NEPA"), which includes input by the public, resource agencies and the affected
counties.

10. At the IPP substation, the power from Phase I of the Project will be converted from alternating current to direct current and transmitted to southern California on the existing 500 kV DC transmission line that carries power from the IPP generating station to southern California. This interconnection, including the interconnection equipment and facilities, require an interconnection agreement with the Intermountain Power Agency ("IPA").

11. The market for power from Phase II of the Project is not currently finalized.
However, it is expected that the interconnection equipment and facilities for the 100 MW
of Phase II power will be built at the same time as the Phase I interconnect to the IPP
substation is made, although it is possible that additional interconnection equipment and
facilities may later be required when Phase II is constructed, depending on the power's
destination.

12. The Phase I facilities consist of wind turbines of up to 203.5 MW of installed 246 247 capacity, the collector lines and roads associated with those turbines, an onsite substation, 248 an onsite control facility, the transmission line, and the IPP interconnection facilities. 249 Under the power purchase agreement described in the Application and in Paul Gaynor's 250 testimony, filed concurrently herewith, the Phase I facilities must be placed in service no 251 later than March 31, 2009. Milford Wind originally requested that the Commission grant 252 a certificate of convenience and necessity for the Project by April 15, 2008, in order to 253 allow Milford I to construct the facilities.

13. The Phase II facilities are comprised of the turbines required for up to 100 MW (or the balance of the 300 MW total wind farm facility), and the collector lines and roads associated with those turbines. It may also include any additional IPP interconnection facilities that may be required to allow transmission of this power to purchasers. It is anticipated that Phase II construction would commence in early 2009. Because Phase II will likely follow closely on the heels of Phase I, Milford Wind originally asked that this certificate also be granted by April 15, 2008.

261

. . . .

262 17. Because the output from Phases I will not be available to Utah consumers,
263 Milford Wind does not assert that the public convenience and necessity require
264 construction of the Project to provide electrical service to Utah residents.

265 18. The Project, however, will provide significant benefits to the economies and tax
266 base of Beaver and Millard Counties and the State of Utah. The Project is projected to
267 have a total cost of as much as \$80 million. During construction of the Project, there will

be a large infusion of spending in the local and state economy. Approximately 69 268 269 workers, many of them locals, will be involved in the construction phase, and it is 270 expected that up to \$1.5 million in construction related expenses will be spent in the local 271 counties. Up to 4 permanent jobs will be created for operation and maintenance of the 272 Project facilities, and the Project will pay over \$1.2 million per year of property taxes, 273 most of which will go to the local school systems. Letters in support of the Project from 274 the Office of the Governor's Energy Advisor and from Beaver County were attached to 275 Milford Wind's Application as Exhibit 7.<sup>2</sup>

In addition, it is expected that power from future phases of the Project will be
available on a wholesale basis for potential purchase by Utah public utilities,
municipalities, inter-local agencies, electric cooperatives, or other Utah electrical
corporations.

280 20. Finally, residents of Utah will benefit from the environmental advantages of 281 having non-polluting renewable electric generation facilities located in the state. 282 Additionally, the generation of electrical energy from wind energy is seen as part of the 283 strategy for addressing global climate change, with benefits to citizens of Utah, the nation 284 and the world.

# 285 21. The Project complies with the criteria set out at Utah Code Ann. § 54-4-25(3) 286 because the Project will not interfere with the operation of the facilities or systems of any 287 public utilities. As described above, the power from Phase I will be delivered by Milford

<sup>&</sup>lt;sup>2</sup> The letter from Beaver County that is included in Exhibit 7 is a copy of the original, which UPC understands was sent directly from the Beaver County Commission to the Public Service Commission. FirstWind

Wind to its customer through interconnection facilities at the IPP substation, and that power will then be transmitted through the existing IPA 500 kV DC transmission line to southern California. None of the Phase I power will enter a transmission system owned by or serving any Utah public utility, and there will be no effect on any such system.

292 22. In the event that Milford Wind sells some or all of the power from Phase II to 293 entities providing retail service to Utah consumers, it will take appropriate steps to obtain 294 the approval of state or federal authorities, if any is required. Because Milford Wind 295 does not seek authority in this Application to furnish electric power to the public or to 296 any consumer in the state of Utah, there will be no interference from Phase II on the 297 system of any public utility.

23. With respect to Utah Code Ann. § 54-4-25(3), Milford Wind is in the process of obtaining all required consents, permits and other authorizations for the Project. A table listing the required consents, permits and authorizations, and the status of each as of the filing of the Application was attached to Milford Wind's Application as Exhibit 8 [and attached hereto as Exhibit MWC 2.8 SR]. Milford Wind will provide the Commission with notice of, and/or a copy of the required authorizations when they are received.

304 24. As required by Section 54-4-25(4)(B) of the code, Milford Wind states that none 305 of the proposed facilities will conflict with or adversely affect the operations of any 306 existing certificated fixed public utility which supplies electric power or service to the 307 public, and that Milford Wind facilities will not constitute an impermissible extension 308 into the territory certificated to an existing fixed public utility.