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Rocky Mountain Power

Docket No. 17-035-40

Witness: Chad A. Teply

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

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Direct Testimony of Chad A. Teply

June 2017

1 **Q. Please state your name, business address, and present position.**

2 A. My name is Chad A. Teply. My business address is 1407 West North Temple, Suite 310,
3 Salt Lake City, Utah 84116. My position is Vice President of Strategy and Development
4 for Rocky Mountain Power (“Company”), a division of PacifiCorp.

5 **QUALIFICATIONS**

6 **Q. Briefly describe your education and business experience.**

7 A. I have a Bachelor of Science Degree in Mechanical Engineering from South Dakota
8 State University. I joined MidAmerican Energy Company (a Berkshire Hathaway
9 Energy affiliate company) in November 1999, and held positions of increasing
10 responsibility within the generation organization, including serving as project manager
11 for a new 780 megawatt (“MW”) supercritical coal-fueled generation resource placed
12 in service in 2007. In April 2008, I moved to Northern Natural Gas Company (a
13 Berkshire Hathaway Energy affiliate company) as Senior Director of Engineering. I
14 joined PacifiCorp in February 2009. In my current role as Vice President of Strategy
15 and Development, my responsibilities encompass strategic planning, regulatory
16 support, stakeholder engagement, development, and execution of major generation
17 resource additions, major environmental compliance projects, and major transmission
18 projects.

19 **PURPOSE AND SUMMARY OF TESTIMONY**

20 **Q. What is the purpose of your testimony?**

21 A. The Company’s 2017 Integrated Resource Plan (“2017 IRP”) preferred portfolio
22 identified a time-limited opportunity to procure approximately 1,100 MW of cost-

23 effective wind facilities and construct transmission facilities to relieve existing
24 congestion and allow interconnection of those new wind facilities, while providing all-
25 in customer savings. To capture the substantial customer benefits resulting from this
26 time-limited opportunity, the Company has filed a request for an order approving its
27 “significant energy resource decision” for the construction or acquisition of
28 approximately 860 megawatts (“MW”) of new wind facilities (“Wind Projects”).¹ The
29 Company has secured development and implementation rights for the Wind Projects,
30 which consist of four individual wind facilities located in the state of Wyoming.

31 The Wind Projects rely upon the construction of the Aeolus to Bridger/Anticline
32 transmission line and other associated network upgrades (collectively, the
33 “Transmission Projects”), which will relieve existing congestion and allow
34 interconnection of the Wind Projects.² In turn, the benefits generated by the Wind
35 Projects—zero-fuel-cost generation that lowers net power costs and ten years of federal

¹ None of the four wind facilities are qualifying facilities under the Public Utility Regulatory Policies Act. *See* 18 C.F.R. § 292.204 (defining criteria for qualifying facilities).

² As more specifically described in the testimony of Mr. Rick A. Vail, the Transmission Projects include: (1) a new 140-mile, 500 kilovolt (kV) transmission line segment and associated infrastructure running from the new Aeolus substation near Medicine Bow, Wyoming, to the new Anticline substation located near the existing Jim Bridger substation, which includes construction of the new Aeolus and Anticline substations; (2) a new five-mile 345 kV transmission line that will extend from the proposed Anticline substation to the existing Jim Bridger substation, which includes modifications at the existing Jim Bridger substation to allow termination of the new 345 kV line; (3) installation of a voltage control device at the Latham substation (items 1 through 3 collectively referred to as the “Aeolus-to-Bridger/Anticline line”); (4) a new 16-mile, 230 kV transmission line running from the Company’s existing Shirley Basin substation to the proposed Aeolus substation, which requires modifications to the Shirley Basin substation and interconnection facilities in the new Aeolus substation to accommodate the new line; (5) reconstruction of four miles of an existing 230 kV transmission line between the proposed Aeolus substation and the Freezeout substation, which requires modifications to the Freezeout substation and interconnection facilities in the new Aeolus substation to accommodate the rebuilt line; and (6) reconstruction of 14 miles of an existing 230 kV transmission line between the Freezeout substation and the Standpipe substation, which requires modifications to the Freezeout and Standpipe substations to accommodate the rebuilt line (items 4 through 6 collectively referred to as the “230 kV Network Upgrades”).

36 productions tax credits (“PTCs”)—support cost-effective development of the
37 Transmission Projects. Together, the Wind Projects and the Transmission Projects
38 provide significant savings to customers over the lives of the resources.

39 The Company is now conducting a competitive market renewables request for
40 proposals (“2017R RFP”). Upon conclusion of the 2017R RFP, the Company will
41 confirm the specific wind facilities that it plans to construct or acquire. In its
42 Application, the Company provides detailed information on four wind facilities to meet
43 the Utah Public Service Commission’s (“Commission”) resource approval
44 requirements. The Company is submitting these four wind facilities as benchmark
45 resources in the 2017R RFP and proxy resources in the Application, pending the final
46 results of the 2017R RFP. My testimony and exhibits provide the information required
47 by Utah Code Ann. § 54-17-302 and Commission Rule 746-430-2(1) related to the
48 Wind Projects.

49 **Q. Please summarize your testimony.**

50 A. My testimony demonstrates that the Company’s proposals to construct or acquire
51 approximately 860 MW of new Wind Projects and construct the Transmission Projects
52 (collectively “Combined Projects” or “Projects”) are in the public interest, and in the
53 best interest of customers. Together, the Projects provide substantial customer benefits
54 as long as both achieve commercial operation by the end of 2020. My testimony
55 explains how the Company intends to further develop and procure the Wind Projects
56 and why it is necessary to submit the Wind Projects as “proxy” facilities at this time
57 while the Company conducts the 2017R RFP in parallel with this Application.

58 **Q. Why is the Company pursuing the Wind Projects?**

59 A. As further described in the testimonies of Ms. Cindy A. Crane and Mr. Rick T. Link,
60 the Company is pursuing the acquisition and development of the Combined Projects to
61 deliver a time-sensitive opportunity for customers that is identified in the Company's
62 2017 IRP preferred portfolio (*i.e.*, addition of approximately 1,100 MW of new wind
63 resources and the associated new transmission infrastructure by 2020). The Company
64 has executed the necessary agreements and engaged in the appropriate development
65 activities to ensure that viable Wind Projects to support the Transmission Projects are
66 available and positioned to ensure competitive market engagement, and have directly
67 controllable implementation plans. The Wind Projects support both this Application
68 and the Company's parallel 2017R RFP process.

69 **GENERAL DESCRIPTION OF THE WIND PROJECTS**

70 **Q. Please describe the Wind Projects.**

71 A. The Wind Projects information incorporated into this Application is intended to allow
72 the Commission to review the need, economic analyses, and customer benefits of the
73 Wind Projects while the Company's 2017R RFP is pending. The Wind Projects include
74 three nominal 250 MW facilities in Wyoming (referred to as Ekola Flats, TB Flats I,
75 and TB Flats II) that a third-party is currently developing. Each facility will consist of
76 the commensurate number of 2.0 MW to 4.2 MW wind turbine generators to achieve
77 up to a nominal 250 MW nameplate capacity, an electrical collection system, a 34.5 kV
78 to 230 kV collector substation, 230 kV breakers, a 230 kV tie-line between the wind
79 project and the point of interconnection substation, meteorological towers, access

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80 roads, an operations and maintenance (“O&M”) building and required communication
81 and control facilities (*e.g.*, metering, hardware, software, and associated
82 communication circuits and other equipment).

83 The Wind Projects also include a fourth nominal 110 MW wind facility
84 (McFadden Ridge II), which the Company is currently developing on a Company-
85 controlled site in Wyoming. McFadden Ridge II is expected to consist of approximately
86 forty-four 2.3 MW to 2.5 MW wind turbine generators and similar project infrastructure
87 as those described for the 250 MW facilities.

88 The Wind Projects incorporated into the Application total 860 MW nominally,
89 and represent facilities for which the Company has secured the rights to carry forward
90 through development. The Company will submit the Wind Projects into the 2017R RFP
91 as benchmark proposals, and will construct these facilities if they are the winning bids
92 in the 2017R RFP.

93 The Wind Projects are estimated to cost approximately [REDACTED].

94 **Q. Why does the Company’s Application request approval of only 860 MW of wind**
95 **facilities, when the 2017 IRP identified a resource opportunity of approximately**
96 **1,100 MW of wind facilities?**

97 A. The Company is seeking approval for only those facilities to which it has development
98 and implementation rights.

99 **Q. Does the Company’s economic analysis supporting the Application for the**
100 **Transmission Projects include approximately 1,100 MW of new wind facilities?**

101 A. Yes. As the testimony of Mr. Link explains, the Company’s economic analysis includes

102 certain known qualifying facilities (“QFs”) now in development that are located in the
103 Aeolus area, hold preferential interconnection queue positions, have executed power
104 purchase agreements contracts, and are reasonably expected to be in service by year-
105 end 2021. When these QFs are considered in conjunction with the nominal 860 MW of
106 secured development opportunities, the total generating capacity equates to the 1,180
107 MW of new wind facilities analyzed in support of this Application.

108 **Q. Please describe the time-sensitive nature of the Combined Projects.**

109 A. The time-sensitive nature of the Combined Projects is primarily driven by the pending
110 phase-out of the federal PTC for new wind resources. In Internal Revenue Code
111 (“IRC”) section 45, the U.S. Internal Revenue Service (“IRS”) provides for a PTC at
112 the 2017 full rate of 2.4 cents per kilowatt hour of electrical energy production by a
113 wind facility. The PTC is available for a 10-year period that begins when the facility is
114 placed in service. The Protecting Americans from Tax Hikes Act of 2015 (“the PATH
115 Act”) extended the availability of the PTC for wind facilities under construction before
116 January 1, 2020. The PATH Act extension, however, also provides for a phase-out of
117 the PTC. Wind facilities that began construction before January 1, 2017, will realize
118 the full PTC credit, which is the case for the Wind Projects in this Application. If a
119 wind facility begins construction in 2017, the PTC is reduced by 20 percent. The PTC
120 is reduced by 40 percent if construction begins in 2018, and by 60 percent if
121 construction begins in 2019. The PTC is not available for wind facilities that begin
122 construction after December 31, 2019.

123 To receive “safe-harbor” PTCs, the facilities must be placed into commercial

124 operation by the end of the fourth calendar year following the year in which
125 construction began (the “start-of-construction” standard) or otherwise meet specific
126 IRS requirements for demonstrating the “continuity requirement” throughout the
127 implementation timeline. To mitigate the risk of interpretation associated with the IRS’s
128 “continuity requirements,” the Wind Projects (or other wind facilities selected in the
129 2017R RFP that rely on (i) the Transmission Projects and (ii) also began construction
130 prior to January 1, 2017) must be reviewed, approved, implemented, and placed in
131 service by year-end 2020 in accordance with the “start-of-construction” standard, and
132 meeting the “safe harbor” with respect to the “continuity requirement,” to be eligible
133 for the full PTC. The Company’s Application is designed to meet this schedule and
134 provide customers the full economic benefit of the Combined Projects.

135 **Q. Do the Wind Projects meet the IRS’s “start-of-construction” criteria?**

136 A. Yes. The Company acquired, or has the rights to, sufficient wind turbine generator
137 equipment and other facility-specific components for the Wind Projects. To meet the
138 start-of-construction definition for tax purposes, the Company secured the equipment
139 before December 31, 2016. These transactions satisfy the “safe-harbor” requirements
140 under the PTC guidance issued by the IRS.

141 **Q. How does the Company plan to procure the Wind Projects, or other new wind**
142 **facilities?**

143 A. As discussed in the testimony of Mr. Link, concurrent with the Application, the 2017R
144 RFP will be issued to the competitive market requesting up to 1,270 MW of wind
145 facilities to align with the new resource interconnections enabled by the Transmission

146 Projects and to facilitate assessment of a wider range of market responses. The
147 Company will submit the Wind Projects as Company benchmark proposals in the
148 2017R RFP in October 2017. The Company anticipates that the 2017R RFP final
149 shortlist of bids will be determined by mid-January 2018.

150 The Company will supplement its Application at that time to incorporate the
151 results of the 2017R RFP. Depending on the outcome, the results will: (1) identify the
152 Wind Projects as the winning bids and validate their benefits; (2) identify winning wind
153 facilities that are in addition to the Wind Projects and request approval of those projects;
154 or (3) identify winning wind facilities that have been selected instead of one or more
155 of the Wind Projects and request approval of those facilities. In any scenario, this will
156 result in final wind facility decisions that are assessed as equal to or better than the
157 Wind Projects in the Application.

158 **Q. Why is the Company providing facility-specific information for the Wind Projects**
159 **in the Application and also planning a supplemental filing in the docket to**
160 **incorporate the results of the 2017R RFP?**

161 A. The Company's request for approval of the Combined Projects is driven by the time-
162 sensitivity and scale of the filing. If the Company waited until the anticipated
163 conclusion of the 2017R RFP process in early 2018 to begin the resource approval
164 process, the Company would not receive the requested resource approvals for the
165 Transmission Projects and could not complete those projects by year-end 2020. The
166 critical path schedules of the Transmission Projects are the drivers for the proposed
167 procedural schedule for review of the Application, and the Company needs resource

168 approval by March 30, 2018, to maintain the development schedules. Critical path
169 schedule activities for the Transmission Projects are further described in the testimony
170 of Mr. Vail.

171 **Q. On a stand-alone basis, would the Company's ability to construct the Wind**
172 **Projects by year-end 2020 be in jeopardy if the Company was prevented from**
173 **submitting the Application until after completion of the 2017R RFP?**

174 A. No. On a stand-alone basis, the critical path schedule for the Wind Projects could
175 accommodate a resource approval process that follows the 2017R RFP. As noted
176 before, however, the economics of the Wind Projects are only viable with the
177 Transmission Projects and vice versa; the Transmission Projects are critical path.

178 **Q. How did the Company develop the Wind Projects?**

179 A. The Company investigated the transmission interconnection queue in the area of the
180 Transmission Projects and engaged a third-party wind facility developer to identify
181 facilities that held preferred interconnection queue positions, are commercially viable
182 and are reasonably likely to achieve commercial operation by the end of 2020. The
183 Wind Projects have undergone preliminary vetting for interconnection status,
184 permitting, constructability, wind resource performance, and equipment supply.

185 **Q. Does the Company anticipate that it will develop additional information for the**
186 **Wind Projects presented in the Application?**

187 A. Yes. The Company will continue to work on the Wind Projects to ensure that the
188 Company makes the most competitive benchmark proposals available to customers.
189 The Company will supplement its filing as necessary.

190 **Q. Does the Company’s proposed procedural process allow the Company to support**
191 **its Application with market-based information?**

192 A. Yes. The Company will demonstrate the economic benefits of the Combined Projects
193 with all available competitive market-based information. The concurrent development
194 of the Wind Projects and the 2017R RFP process will enable the Company to validate
195 the reasonableness of the winning facilities based on current market information.

196 **Q. Does the Company’s submittal of benchmark resources in the 2017R RFP**
197 **preclude other competitive market proposals from being selected for**
198 **implementation?**

199 A. No. The Company has assessed and identified only a portion of the competitive market
200 wind facilities that are reasonably assumed to be viable considering interconnection,
201 permitting, construction, performance, and implementation. The Company expects
202 robust competitive market response to the 2017R RFP, and selection of any facility that
203 is successful in that process.

204 **Q. Has the Company filed applications with the Wyoming Industrial Siting Council**
205 **(“ISC”) for the Wind Projects?**

206 A. No. The Company intends to submit applications to the Wyoming ISC for any
207 Company benchmarks selected as successful bids in the 2017R RFP following
208 completion of that process. The Company expects that the ISC review process and
209 hearings will proceed through October 2018. The ISC is required to hold a hearing
210 within ninety days of application under W.S. § 35-12-109.

DEVELOPMENT OF WIND PROJECTS

211

212 **Q. Has the Company performed preliminary evaluations of the wind potential at**
213 **each Wind Project site?**

214 A. Yes. Studies completed by the Company indicate that the each of the Wind Project sites
215 are suitable for a wind facility. The Ekola Flats and TB Flats I and II sites are adjacent
216 to the Company’s existing Dunlap and Seven Mile Hill wind projects. The McFadden
217 Ridge II facility is an expansion of the Company’s High Plains/McFadden Ridge wind
218 facility. Wind data collected from existing operations and the area of the Wind Projects
219 indicate that these sites have favorable wind regimes suitable for high performance
220 wind resources.

221 **Q. Has the Company determined who will be responsible for construction of the**
222 **Wind Projects?**

223 A. No. The Company has not currently identified who will be responsible for constructing
224 the Wind Projects. The Company will issue a competitive procurement request for
225 proposals to obtain firm fixed pricing to engineer, procure, construct and commission
226 each wind facility. The Company will do this as part of its development process for the
227 benchmark proposals.

228 **Q. Has the Company determined who will supply the wind turbine generators for the**
229 **Wind Projects?**

230 A. Not entirely. As discussed above, the Company has acquired or has rights to acquire
231 “safe-harbor” wind turbine generator equipment and other project-specific
232 components, which it proposes to use at the Wind Projects as required to meet the IRS’s

233 “start-of-construction” criteria. The Company intends to secure rights to procure
234 “follow on” wind turbine generator equipment through a competitive procurement
235 request for proposals. As with the Company benchmark contractor solicitation process,
236 this effort will be performed as part of the development process for the benchmark
237 proposals.

238 **Q. Will the Company seek confidential treatment of specific information regarding**
239 **the Wind Projects, including cost, performance, technical and commercial**
240 **information?**

241 A. Yes. The Wind Projects represent only a portion of the wind resources that the Company
242 expects to investigate for possible acquisition or development in response to the 2017R
243 RFP. Information specific to the Wind Projects includes pricing and performance data
244 from wind turbine generator suppliers and third-party project developers that is
245 commercially sensitive and is considered proprietary and highly confidential. As such,
246 project-specific cost, performance, technical and commercial information, as well as
247 other data, must be maintained as proprietary and highly confidential information. This
248 is in the best interest of customers because potential counterparties may use such
249 information to the disadvantage of customers in the bi-lateral proposals and
250 negotiations for other wind resource assets, sites, equipment, services (*i.e.*,
251 construction, or O&M services) or in competitive request for proposals processes.

252 **Q. How did the Company generate the cost information for construction, operation,**
253 **and maintenance of the individual wind facilities through their useful life?**

254 A. The Company prepared its capital cost estimates for the Wind Projects using

255 information from a variety of sources. The Company obtained wind turbine costs from
256 a competitive procurement process that was held in 2016 to procure the Company's
257 "safe harbor" wind turbine generator equipment.

258 Development costs reflect negotiated fees with the third-party project developer
259 for Ekola Flats and TB Flats I and II. The Company developed the balance of plant
260 engineering, procurement, construction, and commissioning costs using a cost model
261 similar to that used to develop supply side resource capital costs for the 2017 IRP.

262 The Company took the transmission interconnection costs from the respective
263 wind facility's transmission studies. Internal project management and permitting costs
264 were estimated based upon the Company's experience with construction of past wind
265 facilities and other recent generation resource additions.

266 The Company applied contingencies in various cost categories to account for
267 project uncertainties given the current stage of development of the Wind Projects.
268 O&M cost estimates were developed based upon Company's experience with wind
269 resource O&M budgets and third-party contracts for the Company's existing wind
270 facilities. Ongoing capital costs were estimated based upon the Company's experience
271 and indicative costs provided by wind turbine generator suppliers for critical capital
272 components.

273 **Q. Does the Company have any incentive to inflate the costs of the Wind Projects**
274 **incorporated into the Application?**

275 A. No. As discussed earlier in my testimony, and in the testimony of Mr. Link, the purpose
276 of the Company's application is to demonstrate the overall customer benefit of the

277 Combined Projects, and to further substantiate those benefits with the results of the
278 2017R RFP. With the inherent competitive market comparison to the RFP bids
279 underlying the process, there is no incentive or way for the Company to inflate the
280 costs, with recognition of the need for certain contingencies due to the current state of
281 development of the Wind Projects.

282 **Q. Will the Wind Projects' wind turbine generators or associated infrastructure be**
283 **built in Wyoming's Greater Sage Grouse Core area?**

284 A. No. The Wind Projects' wind turbine generators and associated infrastructure,
285 including the associated 230 kV interconnection tie-lines, will not be located within the
286 current boundaries of Wyoming's Greater Sage Grouse Core area.

287 **Q. Will the Company collaborate with the Wyoming Game and Fish Department, the**
288 **U.S. Fish and Wildlife Service, and other environmental agencies in developing**
289 **and implementing the Wind Projects?**

290 A. Yes. The Company has already initiated discussions with the Wyoming Game and Fish
291 Department and the U.S. Fish and Wildlife Service regarding developing and
292 implementing the Wind Projects. The Company, or in some instances the third-party
293 developer, has begun pre-construction usage surveys for various avian, bat, and wildlife
294 species utilizing recommendations from applicable state and federal guideline
295 documents, including the 2012 Land Based Wind Energy Guidelines. The Company
296 will coordinate with county, state, and federal agencies that have jurisdiction over
297 development, permitting, and operations to ensure appropriate environmental and
298 safety measures are implemented throughout the life of the Wind Projects. The

299 Company is committed to establishing development and implementation schedules and
300 protocols that recognize potential environmental impacts and strive to mitigate them.

301 **Q. How will potential visual and lighting impacts from the Wind Projects be**
302 **addressed?**

303 A. Wyoming state and county permitting regulations contain requirements that recognize
304 and address potential visual and lighting impacts. The Company will incorporate those
305 applicable measures into the siting, construction, and operations of the Wind Projects
306 as part of the permitting process. Such measures may include: down shielded lighting
307 on project infrastructure, Federal Aviation Administration approved/recommended
308 turbine lighting protocols, active aviation light management, and use of approved
309 turbine paint color schemes.

310 **Q. What is the expected operational life of the Wind Projects?**

311 A. The anticipated operational life of the Wind Projects has been assessed at 30 years for
312 the purposes of the Application, which aligns with the Company's currently approved
313 depreciable life for wind resources. The operational life may be reviewed and extended
314 based on advances in turbine technologies and/or improvements in maintenance
315 processes through the course of the Company's regular depreciation studies and filings.

316 **Q. Will the Wind Projects be decommissioned or repowered at the end of their**
317 **operational life?**

318 A. The Company may dismantle and reclaim the Wind Projects at the end of their
319 operational life based upon operating permit requirements. Typically, county and state
320 agencies identify the decommissioning requirements during the permitting process,

321 including expected reclamation efforts and overall decommissioning costs and security
322 requirements. The Company may also consider replacing or upgrading the existing
323 infrastructure at the end of the operational life if conditions (*i.e.*, economics, permitting,
324 customer load needs, etc.) are conducive to reinvestment in the Wind Projects.

325 **Q. When will construction of the Wind Projects begin and end?**

326 A. As described in detail in the exhibits attached to my testimony, site construction of the
327 Wind Projects will begin as soon as the fourth quarter of 2019. The Company will not
328 begin construction, however, until it has received all of the necessary regulatory
329 approvals and applicable permits and authorizations from other local, state, tribal or
330 federal governmental agencies that have jurisdiction over the construction or operation
331 of the Wind Projects, including approval from the ISC and conclusion of the 2017R
332 RFP to ensure that the projects ultimately selected are in the best interest of customers.
333 The Company anticipates that substantial completion, under normal construction
334 circumstances, weather conditions, labor availability and materials delivery, will be
335 achieved by November 15, 2020.

336 **Q. Please explain why the Wind Projects are in the public interest.**

337 A. The information and analysis in the Company's 2017 IRP and in this Application
338 demonstrate that the Company meets the public interest standard as articulated in Utah
339 Code Annotated § 54-17-302(3)(c). The Wind Projects are in the public interest
340 because: (1) they will become an essential element of the Company's diversified
341 resource portfolio that is needed to serve customers; (2) the facilities are desirable due
342 to location-specific attributes; and (3) the Wind Projects will benefit customers as a

343 whole.

344 **REQUIREMENTS OF COMMISSION RULE 746-430-2(1)**

345 **Q. Please summarize how the Company's Application meets the requirements for**
346 **approval of a significant energy resource.**

347 A. Commission Rule 746-430-2(1) describes what must be included in an application for
348 approval of a significant energy resource. As such, I have incorporated exhibits to my
349 testimony that provide information for the Wind Projects pertaining to R746-430-
350 2(1)(a), (b), (e) and (f) requirements. The other requirements under Rule 746-430-2(1)
351 are addressed in the testimony of the other witnesses supporting the Application.

352 **Q. Please describe your exhibits for the nominal 250 MW Ekola Flats facility that**
353 **provide the information required by Commission Rule 746-430-2(1).**

354 A. Information for the nominal 250 MW Ekola Flats facility is included in Confidential
355 Exhibit RMP___(CAT-1) to my testimony. Confidential Exhibit RMP___(CAT-1)
356 Subparts are identified as follows:

- 357 • Highly Confidential Exhibit CAT1-1—Wind Turbine Generator Site Layout
- 358 • Highly Confidential Exhibit CAT1-2—Wind Turbine Generator Scope of Supply
359 Example
- 360 • Confidential Exhibit CAT1-3—Balance of Plant Scope of Work Template
- 361 • Confidential Exhibit CAT1-4—Capital Costs Detail
- 362 • Confidential Exhibit CAT1-5—Incremental Operational and Maintenance and
363 Ongoing Capital Costs Detail
- 364 • Confidential Exhibit CAT1-6—Indicative Project Execution Schedule

- 365 • Highly Confidential Exhibit CAT1-7—Preliminary Project Map
- 366 • Confidential Exhibit CAT1-8—Geotechnical Report
- 367 • Confidential Exhibit CAT1-9—Preliminary Topographical Map
- 368 • Confidential Exhibit CAT1-10—Preliminary Scenic Byways, Recreational Areas,
369 National Parks, and State Parks Review
- 370 • Highly Confidential Exhibit CAT1-11—Preliminary Cultural and Paleontological
371 Resources Review
- 372 • Confidential Exhibit CAT1-12—Preliminary Wildlife and Plant Species of
373 Potential Concern Review
- 374 • Confidential Exhibit CAT1-13—Preliminary Aviation and Airspace Review
- 375 • Confidential Exhibit CAT1-14—Interconnection Facilities Study
- 376 • Confidential Exhibit CAT1-15—Preliminary Local, State, Federal, and Tribal
377 Requirements Review

378 **Q. Please describe the exhibits to your testimony for the nominal 250 MW TB Flats I**
379 **wind facility and the nominal 250 MW TB Flats II wind facility provide the**
380 **information required by Commission Rule 746-430-2(1).**

381 A. Information for the nominal 250 MW TB Flats I wind facility and the nominal 250 MW
382 TB Flats II wind facility is included in Confidential Exhibit RMP___(CAT-2) to my
383 testimony. Confidential Exhibit RMP___(CAT-2) Subparts CAT2-1 through CAT2-16
384 are provided with the similar reference material designations as the CAT1 Exhibit
385 Subparts listed above. The required information for these two facilities is incorporated
386 into one set of exhibits due to the contiguous development and adjacent locations of

387 the facilities.

388 **Q. Please describe the exhibits for the nominal 110 MW McFadden Ridge II wind**
389 **facility that provide the information required by Commission Rule 746-430-2(1).**

390 A. Information for the nominal 110 MW McFadden Ridge II wind facility is included in
391 Exhibit RMP____(CAT-3) to my testimony. Exhibit RMP____(CAT-3) Subparts CAT3-1
392 through CAT3-17 are provided with similar reference material designations as the
393 CAT1 and CAT2 Exhibit Subparts listed above.

394 **Q. Do you propose to file supplemental testimony and exhibits to address certain**
395 **requirements of Commission Rule 746-430-2(1) upon completion of the 2017R**
396 **RFP?**

397 A. Yes. My supplemental testimony and exhibits will address additional information
398 required by 746-430-2(1)(a), (b), (e) and (f) as soon as that information is available
399 upon completion of the 2017R RFP.

400 **CONCLUSION AND RECOMMENDATION**

401 **Q. Please summarize your recommendation to the Commission.**

402 A. I recommend that the Commission determine that the Wind Projects, or the alternative
403 or additional wind facilities that result from the 2017R RFP, provide significant benefits
404 to customers and therefore are in the public interest. Based on this conclusion, I
405 recommend that the Commission grant the Company's request for approval of the Wind
406 Projects, or alternatives that result from the 2017R RFP, at the conclusion of these
407 proceedings.

408 **Q. Does this complete your direct testimony?**

409 **A. Yes.**