

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE APPLICATION OF)	
ROCKY MOUNTAIN POWER FOR A)	DOCKET No. 09-035-54
CERTIFICATE OF CONVENIENCE AND)	
NECESSITY AUTHORIZING CONSTRUCTION)	DPU EXHIBIT 1.0
OF THE MONA-OQUIRRH 500/345 KV)	
TRANSMISSION LINE)	

DIRECT TESTIMONY

JONI S. ZENGER, PHD

ON BEHALF OF THE

UTAH DIVISION OF PUBLIC UTILITIES

MARCH 30, 2010

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	PURPOSE AND SUMMARY OF TESTIMONY	2
III.	BACKGROUND	3
IV.	DESCRIPTION OF PROJECT	5
V.	PUBLIC CONVENIENCE AND NECESSITY	8
VI.	PUBLIC INTEREST CONCERNS	21
VII.	FINANCIAL VIABILITY	26
VIII.	ALTERNATIVES CONSIDERED	28
IX.	CONCLUSIONS AND RECOMMENDATIONS	30
X.	EXHIBITS	
	Exhibit 1.1 Statement of Qualifications	
	Exhibit 1.2 Schematic Diagram of the Project	
	Exhibit 1.3 List of Potential Permits Required	
	Exhibit 1.4 Map of Energy Gateway Project	
	Exhibit 1.5 PacifiCorp's Transmission Topology	

1

Introduction

2 **Q. Please state your name and occupation.**

3 A. My name is Dr. Joni S. Zenger. I am employed by the Division of Public Utilities
4 (Division) of the Utah Department of Commerce as a Technical Consultant.

5 **Q. What is your business address?**

6 A. Heber M. Wells Office Building, 160 East 300 South, Salt Lake City, Utah, 84111.

7 **Q. On whose behalf are you testifying?**

8 A. The Division.

9 **Q. Do you have any attachments that you are filing that accompany your testimony?**

10 A. Yes. Exhibit 1.1 lists the previous dockets and dates in which I have testified in Utah.
11 Exhibit 1.2 is a schematic diagram of the proposed project. The table that identifies the
12 federal, state, and local permits or licenses that are potentially required for the
13 construction of this project is replicated as Exhibit 1.3.¹ Exhibit 1.4 represents the
14 Company's Energy Gateway Transmission Expansion Project, and it illustrates the
15 relationship of the Mona to Oquirrh transmission segment to the project as a whole.²

¹ Draft Environmental Impact Statement for the Mona to Oquirrh Transmission Corridor Project and Draft Pony Express Resource Management Plan Amendment, April 2009, Table 1-3.

² [http://www.pacificorp.com/content/dam/pacificorp/doc/Transmission/Transmission Projects/507-8 EnergyGateway FactSheet Web.pdf](http://www.pacificorp.com/content/dam/pacificorp/doc/Transmission/Transmission%20Projects/507-8_EnergyGateway_FactSheet_Web.pdf).

16 PacifiCorp's transmission network is illustrated by the topology map provided as Exhibit
17 1.5.³

18 **Q. Please describe your education and work experience.**

19 A. I began working for the Division in the fall of 2000 and completed my Doctorate degree
20 in Economics at the University of Utah in early 2001. At the Division, I work on various
21 energy-related projects such as general rate cases, renewable energy, integrated resource
22 planning, and electric transmission. I have testified before the Utah Public Service
23 Commission (Commission) on numerous occasions for the Division. (See Exhibit 1.1).

24 **Purpose and Summary of Testimony**

25 **Q. What is the purpose of the testimony that you are now filing?**

26 A. My testimony addresses Rocky Mountain Power's (the Company) Application for a
27 Certificate of Public Convenience and Necessity (CPCN) for its proposed Mona to
28 Oquirrh transmission line (Line or Project). The purpose of my testimony is three-fold.
29 First, I provide the procedural background and description of the Project. Second, I
30 review the statutory guidelines that govern this application as well as the scope of the
31 Division's investigation in this case. Third, I present the Division's analysis and findings
32 supporting the need and associated benefits for the proposed CPCN.

33 **Q. Please summarize the Division's recommendations regarding this Application.**

³ PacifiCorp's 2008 Integrated Resource Plan, May 29, 2009, p. 138.

34 A. Based on the Company's requirement to meet future electrical load growth in Utah and to
35 provide current and future service in a reliable and economic manner to its customers and
36 based on the Company's existing transmission capacity, the Division finds there is a
37 legitimate need for this Line to be built. The construction of this transmission and its
38 associated facilities meets the statutory Public Convenience and Necessity requirement, is
39 in the public interest, and will benefit Utah ratepayers. The Division recommends that
40 the Commission grant the application contingent upon the Company obtaining all of the
41 necessary permits required to construct and complete the proposed Mona to Oquirrh
42 Line. The Division also recommends that the Commission require the Company to
43 submit information regarding its plans for use of this and future transmission lines with
44 regard to serving its native load and other customers at the time cost recovery is sought
45 and in future CPCN applications.

46 **Background**

47 **Q. Will you briefly explain the procedural history of this case?**

48 A. On June 30, 2009, the Company filed a document titled "Rocky Mountain Power's
49 Notice of Intent to File Application for Certificate of Public Convenience and Necessity."
50 In this filing, the Company describes that it was unable to file its formal application for
51 the CPCN because the Company was currently in the process of obtaining federal
52 approval for the Project pursuant to the National Environmental Protection Act (NEPA).
53 During the federal review process, the Company asked the Commission to open a docket,
54 issue a protective order, and allow discovery in the case, as the Company's plans were to

55 have a CPCN issued no later than December 15, 2009. The Company's June 30, 2009
56 filing stated that the Company would be filing Preliminary Testimony within one week of
57 the filing of the Notice of Intent.

58 Approximately four months later, on November 23, 2009, the Company filed its
59 formal Application for the CPCN along with accompanying testimony of Mr. Darrell T.
60 Gerrard and Mr. Bruce N. Williams. The Commission issued its Scheduling Order on
61 January 12, 2010.

62 **Q. What was the significance of the Commission's Scheduling Order?**

63 A. Besides establishing the dates governing the scheduling of this docket, the Commission's
64 Order clarified that the purpose of this proceeding is limited to the issue of whether the
65 present or future public convenience and necessity does or will require the construction
66 of the Line.

67 **Q. What topics are not part of this proceeding?**

68 A. The Commission clearly stated that it does not have jurisdiction over the location or
69 siting of the Line; therefore, no siting issues are to be addressed. Other issues that the
70 Commission identified that are not to be addressed in this proceeding include concerns
71 related to cost issues or pertaining to Utah local government entities' requirements for
72 siting that should be addressed by the Electric Facilities Review Board.⁴

73 The Division has conducted its analysis in this docket under the standards for
74 issuance of a CPCN and has not conducted an analysis of the prudence of the Project's

⁴ Scheduling Order, Docket No. 09-035-54, January 12, 2010, pp. 1-2.

75 costs. Therefore, the Division's support for the issuance of a certificate in this docket
76 should not be taken as a finding that the costs incurred for the Project were prudent. The
77 Division will address prudence issues at the appropriate time during a rate case or in
78 another appropriate filing.

79 **Description of Project**

80 **Q. Will you please describe the Company's Mona to Oquirrh transmission Line that is**
81 **the subject of the proposed CPCN Application?**

82 A. The exact placement of the Line has yet to be finalized, as the Company is working on
83 obtaining the required permits for the project. The currently proposed Mona to Oquirrh
84 Project consists of 345 kV and 500 kV segments of an approximately 140 mile overhead
85 transmission line passing through the following four Utah counties: Juab, Salt Lake,
86 Tooele, and Utah. The Project is located entirely within the state boundaries and does not
87 require construction that would cross state lines.

88 The proposed Project also includes two future substations—the Mona Annex
89 Substation near the community of Mona, in Juab County and the Limber Station to be
90 located in Tooele County. The Project includes a three-mile long single circuit 345 kV
91 transmission line that would connect the existing Mona Substation to the future Mona
92 Annex Substation and then a 500 kV line would extend north approximately 62 miles to
93 the future Limber Substation. Two double circuit 345 kV lines will run from the
94 proposed Limber substation, one line extending to the existing Oquirrh Substation located
95 in West Jordan and the second line running to the existing Terminal substation located

96 near the Salt Lake City International Airport. The U.S. Bureau of Land Management
97 (BLM) prepared a schematic diagram of the proposed Line and associated substations.
98 This diagram is reproduced and attached to my testimony as Exhibit 1.2.⁵

99 If completed, the Project will add incremental transmission capacity at a planned
100 rating of up to 1,500 MW to the electrical system. Company witness Mr. Darrell T.
101 Gerrard describes the Project in further detail in his Direct Testimony, including the
102 mileage of each segment and the necessary upgrades of existing transmission plant.⁶

103 **Q. You previously mentioned that the Project is under federal review. Please explain**
104 **and provide a status update on the Project's NEPA review?**

105 A. The NEPA requires federal agencies to consider environmental effects in their decision-
106 making processes by evaluating the environmental impacts of their proposed actions and
107 by considering reasonable alternatives to those actions. In accordance with the NEPA
108 review, the BLM and coordinating agencies prepared a Draft Environmental Impact
109 Statement (DEIS) that was published in the Federal Register for public comment on May
110 15, 2009. The BLM has been holding public meetings and evaluating proposed
111 alternative routes. However, to date a final Environmental Impact Statement (EIS) has
112 not been issued. After the final EIS is issued there will be a subsequent protest period
113 and a concurrent review by the Utah Governor's Public Lands Policy Coordination
114 Office. After that period, a Record of Decision will be issued by the BLM. The Record

⁵ Draft Environmental Impact Statement for the Mona to Oquirrh Transmission Corridor Project and Draft Pony Express Resource Management Plan Amendment, April 2009, Table 1-3.

⁶ Direct Testimony of Darrell T. Gerrard, Docket No. 09-035-54, November 2009, lines 59-80.

115 of Decision that identifies the selected siting of the Line must be issued before any
116 construction of the Project can begin. The Company needs federal approval to ensure
117 that the Project complies with all applicable environmental laws and regulations. In
118 addition, the Project requires approval from local governments, municipalities, and cities
119 as part of the local permitting process. The Division notes that the Company has yet to
120 obtain an amendment to a Tooele County ordinance and has not, at the time of this
121 writing, obtained a conditional use permit from Tooele County.⁷

122 **Q. What is the significance of the NEPA review in this docket?**

123 A. Approximately 24 percent, or about 34 miles, of the Mona to Oquirrh Project would be
124 located on lands administered by the BLM.⁸ Other portions are located on state and
125 private land or within easements already owned by the Company. The proposed Project
126 has been going through an extensive environmental and permitting review by the BLM
127 and other stakeholders. The NEPA process identifies significant environmental impacts,
128 provides mitigation measures to avoid or minimize adverse impacts, and informs local
129 governments and the public of reasonable alternatives to the plan filed by the Company.
130 The BLM as well as Rocky Mountain Power have been involved in this federal review
131 process since 2007.

⁷ http://www.transcriptbulletin.com/view/full_story/6572427/article-Planning-commission-says-no-to-RMP-route?instance=home_news_left.

⁸ http://www.blm.gov/pgdata/etc/medialib/blm/ut/salt_lake_fo/planning/monatransmission.Par.71455.File.dat/Dear%20Reader%20Letter%205-5.pdf.

132 The Company has complied with the statutory requirements of Utah Code Ann. §
133 54-18-102 by holding formal and informal public meetings along the proposed corridor
134 and by providing information in the form of newsletters, mailings, and publications in
135 weekly newspapers, and by maintaining a website devoted to the Mona to Oquirrh
136 Project that is updated regularly. Many direct, indirect, residual, and cumulative impacts
137 from the proposed Line or alternatives to the Line will have been fully vetted and
138 considered once federal authorities issue an approval. I will discuss this further in the
139 section on alternatives.

Public Convenience and Necessity

141 **Q. Why does the Company need to obtain a CPCN from the Commission?**

142 A. In addition to obtaining local permitting and federal requirements, Utah statutes require
143 that the Company must also obtain Commission approval for a CPCN prior to
144 construction of certain utility plant, route, or system. Utah Code Ann. § 54-4-25
145 addresses the need for the certificate and is restated in part below:

146 (1) Except as provided in Section 11-13-304, a gas corporation,
147 electric corporation, telephone corporation, telegraph corporation,
148 heat corporation, water corporation, or sewerage corporation may
149 not establish, or begin construction or operation of a line, route,
150 plant, or system or of any extension of a line, route, plant, or
151 system, without having first obtained from the commission a
152 certificate that present or future public convenience and necessity
153 does or will require the construction.⁹

⁹ Utah Code Ann. § 54-4-25.

154 Title 54 of the Utah Code also requires that the construction of such facilities does
155 not adversely conflict with or extend into the territory of another existing certificated
156 public utility territory. The Company states in its Application that this Line is not an
157 extension into service territory of another public electric utility, and that no other public
158 utility has intervened in this docket.¹⁰ The Western Electricity Coordinating Council
159 (WECC) three-step path rating process requires the Company to follow certain steps and
160 guidelines to work with neighboring utilities. In addition, the Division, through its
161 discovery, can confirm that the Company is currently in the process of acquiring the
162 requisite permits and rights of way, but to date has not yet obtained all of the necessary
163 approvals required to go forward with building this Line. The list of major permits that
164 the BLM identified as potentially requiring approval in order to construct, operate, and
165 maintain the Project is attached as Exhibit 1.3.

166 **Q. How does the Division determine “the present or future public convenience and**
167 **necessity” referenced above?**

168 A. The Division’s analysis in this investigation is based on guidance from the *Mulcahy v.*
169 *Public Service Commission of Utah* case where the Utah Supreme Court discussed at
170 length the question as to what constitutes the “public convenience and necessity”
171 contemplated by Utah Code Ann. § 54-4-25. The Division finds the following excerpts
172 from *Mulcahy* instructive (bold added):

¹⁰ Rocky Mountain Power’s Application for Certificate of Public Convenience and Necessity, Docket No. 09-035-54, November 21, 2009, p. 9, ¶ 23.

173 The “convenience” and “necessity” required to support an
174 application for a certificate of convenience and necessity are those
175 of the UCA § 54-4-25, **not those of individuals**. “Necessity” and
176 “convenience” are not to be construed as synonymous.
177 Convenience is much broader and more inclusive than necessity,
178 but effect must be given to both.¹¹

179 And in determining whether or not the convenience and necessity
180 of the public is best subserved by the proposed service, **the needs**
181 **and welfare of the people of the territory or community**
182 **affected are considered as a whole**.¹²

183 Necessity means **reasonably necessary** and not absolutely
184 imperative. It does not mean “necessary” in the ordinary sense of
185 the term. The convenience of the public must not be circumscribed
186 by holding the term “necessity” to mean an essential requisite. **It**
187 **means a public need without which the public, people generally**
188 **of the community, would be inconvenienced or handicapped in**
189 **the pursuit of business** or wholesome pleasure, or both.¹³

190 The statute implies that many factors need to be considered. However, the paramount
191 consideration is the benefit and welfare of the public as a whole. The applicant must
192 show that the existing service is not adequate and convenient and that the new service
193 would eliminate this inadequacy and inconvenience. In other words, the Company must
194 show that the public interest would be best served if the certificate were granted.

195 **Q. What reasonable need did the Division find that justifies Commission action to**
196 **grant this Application for a CPCN?**

197 **A.** The overarching and primary need for the proposed Project is based on the Company’s
198 obligation as a regulated utility to provide safe, reliable, and cost-effective electric

¹¹ *Mulcahy v. Public Serv. Comm’n*, 101 Utah 245, 117 P.2d 298 (1941), p. 8.

¹² 9.

¹³ *Id.*

199 transmission service to its customers. Due to population growth and customer usage in
200 Utah, the present and long-term demands for electricity require the Company to find a
201 means to supply that service both now and in the future. I will provide evidence of this
202 later in my testimony, including demographic data, current and projected electric
203 demand, and the characteristics of the existing transmission infrastructure that require this
204 Line to be built.

205 At the same time, the Company's transmission system must be designed to meet
206 strict WECC reliability criteria, individual utility criteria, and mandatory North American
207 Electric Reliability Corporation (NERC) standards that contain penalty provisions if not
208 met.

209 **Q. Please report the Division's findings with respect to demographic data that**
210 **substantiate the need for this Line?**

211 A. The Division updated the data filed by the Company with respect to Utah's population
212 growth. The Company, in Mr. Gerrard's testimony, referenced the 2009 Economic
213 Report to the Governor for population data. The Division updated the data filed by the
214 Company with more recent forecasts from the Governor's Office of Planning and Budget.
215 According to the updated information, the state's population increased to 2,800,089 as of
216 July 1, 2009, an increase of 1.5 percent over the previous year.¹⁴ The prior two year's
217 state growth rates were 2.2 percent in 2008 and a record 3.2% in 2007. The current long-
218 term forecast predicts that Utah's population is expected to more than triple from 2.2

¹⁴ <http://governor.utah.gov/DEA/ERG/2010ERG.pdf>

219 million in 2000 to 6.8 million in 2060, for an average annual growth of approximately 1.9
220 percent. Most importantly, approximately 60 percent of the state's projected population
221 growth of new residents is forecasted to be in northern Utah in Salt Lake, Davis, Utah,
222 and Weber counties.¹⁵ The proposed Line would facilitate the delivery of generation
223 resources to the Wasatch Front, where growth is forecasted to be the strongest and where,
224 due to reliability concerns, a separate corridor other than the existing Mona to Camp
225 Williams corridor is needed.

226 **Q. Will you please explain the need for this Line in terms of the expected load growth**
227 **and forecasted electric demand in Utah?**

228 A. Not only does the state's population continue to increase, but also electrical usage and
229 peak demand continues to increase over time. During the past few years, the Division,
230 the Company, and numerous stakeholders have been involved in discussions at state and
231 federal levels regarding the critical need to expand transmission systems in the region.
232 This process includes very long-range planning to ensure the transmission system
233 integrates well with other utility systems in the WECC.

234 To illustrate the need for this Line, average annual load growth, which is
235 primarily affected by population growth, is projected to increase by 2.5 percent for the
236 next ten years according to the Company's 2008 Integrated Resource Plan (IRP)
237 projections.¹⁶ The IRP is the long-term planning tool the Company uses to determine the

¹⁵ Id.

¹⁶ PacifiCorp's 2008 Integrated Resource Plan - Errata, July 24, 2009, p. 267.

238 least-cost, least-risk portfolio of resources that will be needed to meet future load growth.
239 Due to the recession, a slowdown in net migration, and a decrease in the growth in usage
240 per customer, the rate of growth of retail sales have slowed, but growth is still expected to
241 increase over the long run.¹⁷

242 The Company's 2008 IRP uses the December 2008 forecast and shows the load
243 for PacifiCorp's service territories increasing at an average rate of 2.1 percent annually
244 from 2009 to 2018.¹⁸ The 2008 IRP estimates that there will be system-wide coincidental
245 peak load growth of 2.2 percent from 2009 to 2018 and a Utah average annual rate of
246 about 2.6 percent.¹⁹ Based on Utah demographic data discussed above and in IRP
247 modeling results, the Line is needed in order to meet projected near-term and future long-
248 term load.

249 **Q. According to the current 2008 IRP, when will PacifiCorp's electric system**
250 **experience a capacity deficit?**²⁰

251 A. The Company's system capacity load and resource balance, according to the IRP,
252 indicate that PacifiCorp's system will become capacity deficient on a summer hour basis
253 in the year 2011 using a 12 percent reserve margin.²¹ In addition, the Company also
254 prepares a capacity and energy balance on an east and west control area basis.²² The

¹⁷ Direct Testimony of Darrell T. Gerrard, Docket No. 09-035-54, November 2009, p. 11, lines 256-261.

¹⁸ Id.

¹⁹ Id. at p. 268.

²⁰ To date, the Commission has not issued an order acknowledging the 2008 IRP.

²¹ PacifiCorp's 2008 Integrated Resource Plan, May 29, 2009, p. 91.

²² PacifiCorp's 2008 Integrated Resource Plan was modeled using the November 2008 load forecast. The Company prepared a February 2009 load forecast, but it was not modeled in the 2008 IRP.

255 2008 IRP shows a deficit in PacifiCorp-East (PACE) area, consisting of Idaho,
256 Wyoming, and Utah, also beginning in 2011. The projected electrical shortfall is based
257 on factors I previously mentioned, such as population growth, customer usage, as well as
258 existing and projected resources.

259 According to the Company's Confidential Response to DPU data request #4.6-2, I
260 estimate that the Wasatch Front coincidental load will grow substantially between 2009
261 and 2018.²³ The Company states that 100 percent of the new Line is being built to meet
262 northern Utah (areas north of Mona) load needs.²⁴ These statistics show that there is a
263 significant need to bring resources from southern Utah to meet the energy needs along the
264 Wasatch Front. The recommended 1,500 MW transmission expansion plan remained
265 part of the preferred portfolio option throughout the IRP modeling process.

266 **Q. Is the transmission capacity of the existing transmission infrastructure sufficient to**
267 **meet future resource needs?**

268 A. Not for the long term. The existing generation resources that serve northern Utah come
269 primarily from the Carbon, Hunter, Huntington, Carrant Creek, and Lake Side plants. The
270 transmission system that provides the electric services from these generation load centers
271 to the Wasatch Front currently consist of two 345 kV lines running from Huntington and
272 Castle Dale to Spanish Fork and Camp Williams. There are also four 345 kV lines
273 running from Mona to Camp Williams, the fourth of which was constructed to carry load

²³ Company Confidential Response to DPU data request #4.6-2 Attachment, March 5, 2010.

²⁴ Company Response to DPU data request #2.20 (e), January 14, 2010.

274 from the existing Currant Creek plant. In addition, several smaller lines carry power
275 throughout the region, such as the line from the Helper area to Spanish Fork.

276 The Division conducted further discovery regarding the existing transmission
277 infrastructure. In the Company's Response to DPU data request #2.10 (b), the Company
278 states the following:

279 Currently the system has limited capacity to deliver energy north
280 of Mona Utah and into the northern part of the state.

281
282 Limitations exist today for delivery of energy north both during
283 both heavy load hours and light load hours of the year. The Mona
284 to Oquirrh transmission line is needed to provide an additional and
285 separate transmission path across this existing limitation. The line
286 has been physically located away from existing lines in the area to
287 provide the reliability necessary.²⁵

288
289 The Company's 2008 IRP includes the Energy Gateway Transmission Expansion
290 plan as part of the modeled transmission topology.²⁶ This was included based on results
291 from the Company's 2007 IRP which determined the Energy Gateway Plan was cost
292 effective from a system benefits perspective.²⁷

293 The Company's 2008 IRP preferred portfolio determined the need for an
294 additional 831 MW of gas fired generating resources to be acquired in the 2014 to 2016
295 time period.²⁸ While a specific generating resource has not yet been proposed,
296 expansions to the Currant Creek and Lake Side plants are two possibilities.

²⁵ Company's Response to DPU data request #2.10 (b), January 14, 2010.

²⁶ PacifiCorp's 2008 Integrated Resource Plan, May 28, 2009.

²⁷ PacifiCorp 2007 Integrated Resource Plan, May 30, 2007, p. 3, <http://www.pacificorp.com/File/File74765.pdf>

²⁸ PacifiCorp's 2008 Integrated Resource Plan, May 29, 2009, p. 254.

297 The additional 1,500 MW of transmission capacity from the Mona to Oquirrh
298 Project will facilitate bringing future generating resources to network customers. In
299 addition, the planned capacity of the proposed Line will provide greater flexibility and
300 opportunities for the Company to consider additional options regarding planned
301 generation capacity additions.

302 **Q. Please explain the Energy Gateway Transmission Project as it pertains to this**
303 **pending Application for a CPCN.**

304 A. The Energy Gateway Project is a major transmission expansion strategy that was
305 announced by PacifiCorp in 2007. The Company plans to build approximately 2,000
306 miles of new transmission lines across the west, designed as a hub and spoke
307 configuration that will move energy to retail loads. Energy Gateway will connect
308 PacifiCorp's east and west control areas, providing flexibility to access new and existing
309 resources and deliver electricity to the Company's customers throughout its service
310 territory. The Mona to Oquirrh Line is the second segment of the overall Gateway
311 Central project and plays an important role in the overall Energy Gateway strategy. The
312 first portion of the project, the Populus to Terminal line, for which the Commission
313 previously granted a CPCN, was recently completed and is now in operation.

314 The Company is currently in the project siting and planning stages of the two
315 subsequent segments--Gateway South and Gateway West. Gateway West is expected to
316 be in service sometime in the 2014 to 2018 timeframe, followed by Gateway South in the

317 range of 2017 to 2019.²⁹ Exhibit #1.4 illustrates the various Gateway segments and the
318 approximate locations of the planned future segments.³⁰

319 As illustrated in the attached map, Gateway South, as presently planned, will
320 interconnect Gateway Central through the proposed Mona Annex Substation. Mona will
321 be a major collection point where energy will be delivered from various resource areas
322 and delivered in the state and throughout the region. Terminal will also be a point of
323 receipt and delivery, where energy will connect to the Populus substation in Downey,
324 Idaho.

325 **Q. What is the present and future need of the new Mona Annex substation?**

326 A. The current Mona substation was historically engineered and constructed for 345 kV
327 operations. The existing substation has been an important interconnection link with
328 Deseret Generation and Transmission's (DG&T) Bonanza Plant and the Intermountain
329 Power Plant. As part of the Energy Gateway Project review, the Company determined
330 that it was not feasible to upgrade the existing substation site to meet the large scale
331 expansion plans required for the long-term needs of the Energy Gateway Project.³¹
332 Therefore, the Mona Annex substation, approximately three miles from the current
333 substation, will be built to withstand the congestion of multiple existing and new
334 terminating lines at various voltages. The Mona Annex Substation will also be a major
335 interconnection point for power sales, transfers, and purchases. Exhibit 1.5 illustrates the

²⁹ Company's Response to DPU data request #2.10 (c), January 14, 2010.

³⁰ http://www.pacificorp.com/content/dam/pacificorp/doc/Transmission/Transmission_Protocols/507-8_EnergyGateway_FactSheet_Web.pdf.

³¹ Company's Response to DPU data request #2.28, January 14, 2010.

336 PacifiCorp transmission system topology and shows the designated load and generation
337 centers, as well as the geographical transmission paths linking to and from the Mona
338 Substation.³²

339 The completion of upgrades and new build outs at the Terminal and Limber
340 substations will complete the Gateway Central project. The Terminal line extends to
341 Downey, Idaho, connecting the southeast Idaho transmission network to the Wasatch
342 Front. This interconnection of transmission lines and substations is required to meet
343 current and long-term electrical demand as part of the Company's long-term business
344 plan. The completion of this remaining segment of the Gateway Central project will
345 mean that more energy can be transported to and from the southern portion of the state to
346 the Wasatch Front and to and from southern Idaho during the respective on and off peak
347 seasons. There are several needs that the proposed Line will meet, including improving
348 reliability, enhancing operational flexibility, facilitating economic market sales and
349 purchases, and providing transmission capacity for projected generation resources.

350 **Q. Please identify the constraints on the current transmission system that would be**
351 **alleviated if this Line is built.**

352 A. PacifiCorp's transmission system consists of an interconnection of transmission lines.
353 Every generator, line, and customer is connected together such that anything that happens
354 to the grid can constrain or affect to some degree everything else in the network. The
355 existing infrastructure in the Mona to Camp Williams corridor, along with the projected

³²PacifiCorp's 2008 Integrated Resource Plan, May 29, 2009, p. 138.

356 load demands will, in the near future, put added stress on the existing transmission
357 network as additional power is added to the system. Portions of the transmission system
358 are becoming loaded to their maximum reliability limits as the uses of the transmission
359 systems change relative to the limits that they were designed for.

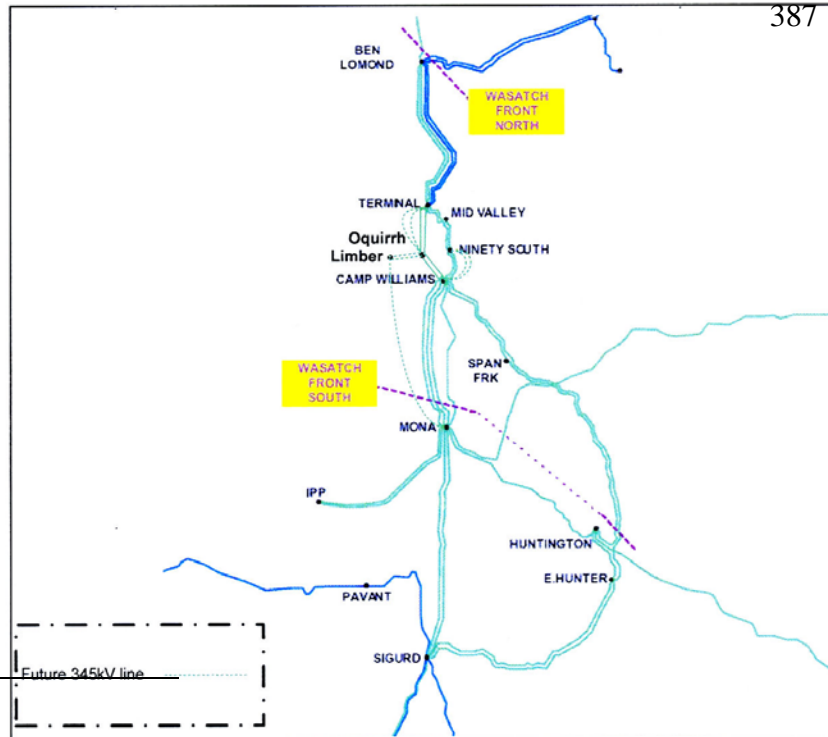
360 According to the Company's Response to DPU data request #2.26, with one
361 element out of service in the corridor north of Camp Williams, the normal system
362 capacity of 2,762 MW to 3,350 MW will decrease by anywhere from 827 MW to 1,130
363 MW. According to NERC standards, a N-2 incident means that two or more transmission
364 facilities, triggered by a single common mode, are out of service at the same time. With a
365 N-2 loss of 345 kV lines, the loss of load and generation increases to almost the system
366 capacity (2,000 MW to 4,000 MW) with potential voltage collapses in the Wasatch Front
367 area. The new Line would reduce the possibility of thermal overloading on the one
368 remaining 345 kV line running from Camp Williams to the Wasatch Front in the same
369 right-of-way.

370 The proposed Line must adhere to all minimum regional planning criteria and
371 strictly enforced NERC reliability standards to ensure operational reliability. The NERC
372 has worked diligently over the past few years to strengthen its reliability standards and
373 has not been shy in imposing penalty payments for those utilities that do not conform to
374 the stricter standards. Therefore, it is important for the Company to work to improve and
375 strengthen its transmission system to avoid making penalty payments and to keep the
376 operating system safe, secure, and reliable not only now, but also in the future. The

377 Company states that this Project is not being built due to a regulatory commitment such
378 as a merger commitment, but because it is truly needed as a system improvement to the
379 existing transmission network in order to serve the needs of current and future
380 customers.³³

381 **Q. How will the proposed Line improve the operational limitations of PacifiCorp's**
382 **transmission system?**

383 A. The Company described in its Response to DPU data request #2.10 (b) that the existing
384 electrical grid has limited capacity to import energy from Wasatch Front South to the
385 northern part of the state. The map below illustrates the designated Wasatch Front North
386 and South



South areas.³⁴

³³ Rocky Mountain Power's Pending Application, June 30, 2009, p. 5 and Rocky Mountain Power's Application for a CPCN, November 21, 2009, p. 4.

³⁴ Company's Response to DPU data request #2.10 (b), January 14, 2010.

395

396

397

398 The proposed Line will alleviate the existing limitation by adding available transfer
399 capability. This will facilitate delivering energy north of Mona, where demand accounts
400 for 80% of the state's load.³⁵

401 Also illustrated in the map are the four existing lines running from Mona to Camp
402 Williams. The proposed Line is needed to provide a separate and additional path through
403 the state. Adding an alternative transmission path such as the proposed Line will increase
404 operational flexibility for the Company to perform maintenance work on the system or
405 should there be an outage on the system due to weather or other emergencies. The
406 Company's projections show that if the currently proposed Line is placed into service by
407 2014, the import limitations that currently exist will be relieved and extended beyond the
408 year 2019.³⁶

409

410

Public Interest Concerns

411 **Q. Mr. Gerrard discusses the benefits of the proposed Line to the Company's wholesale**
412 **transmission customers.³⁷ Will you please clarify if the transmission capacity from**

³⁵ Direct Testimony of Darrell T. Gerrard, Docket No. 09-035-54, November 2009, p. 18, lines 404-406.

³⁶ Company's Response to DPU data request #2.10 (c), January 14, 2010.

³⁷ Direct Testimony of Darrell T. Gerrard, Docket No. 09-035-54, November 2009, pp. 20-21, lines 466-490.

413 **the proposed Line will benefit Utah retail customers or wholesale customers (which**
414 **may be located outside of the state)?**

415 A. In general, upgrades to the existing transmission system will necessarily improve
416 reliability to all users of the system, including wholesale and retail customers. The
417 Company claims, however, that “100 percent of the capacity from the proposed Line will
418 be reserved to serve the needs of PacifiCorp’s network customers” and in the same data
419 request that “100% of the new line is to meet northern Utah load service needs.”³⁸ While
420 it is true that without increased northbound transmission capacity, the Company, Utah
421 Associated Municipal Power Systems (UAMPS), and other entities such as Utah
422 Municipal Power Association (UMPA) and DG&T, may be required to find alternative
423 resource energy supply to serve load growth, potentially increasing their power costs.
424 What is not true is that UAMPS, UMPA, and DG&T are network customers in the
425 technical sense of the definition. The definition of “network customers” includes Utah
426 retail ratepayers as well as transmission providers that request service through
427 PacifiCorp’s Open Access Same-Time Information System (OASIS) as determined by
428 the Federal Energy Regulatory Commission (FERC) Pro Forma Open Access
429 Transmission Tariff (OATT). The Company clarifies in its Response to DPU data
430 request # 2.20 (a), that because UAMPS, UMPA, and DG&T have contracts that have
431 been in place pre-OATT, the Company classifies these contracts as “legacy contracts”

³⁸ Company Response to DPU data request #2.20(d) and (e), January 14, 2010.

432 with terms and conditions like network service. In the Company's Response to DPU data
433 request #4.8, the Company states the following:

434 Unlike PacifiCorp Commercial & Trading, UAMPS,
435 UMPA, and Deseret are not network customers under
436 PacifiCorp's Open Access Transmission Tariff. These three
437 customers have network "like" service which means that
438 network transmission is used for serving their loads.
439

440 As far as the portion of Utah retail ratepayers that will benefit from the
441 incremental capacity addition of the Line, Attachment R of PacifiCorp's OATT, breaks
442 down the tariff network load (retail) load and non-tariff network load (wholesale). The
443 transmission system load ratio share as of August 1, 2009 is as follows:

444

	MW
Total Tariff Network Load	8,639
Total Non-Tariff Network Load	1,238
Total Network Load	9,877

445

446 According to the load ratio table above, the non-tariff network load served is 12.5 percent
447 of the total network load. In addition, PacifiCorp's retail Utah load is 1,966 MW or
448 22.76 percent of the PacifiCorp's system wide retail peak according to the Company's
449 Response to DPU data request #3.1. The total non-tariff (wholesale) network load is
450 1,238 MW. The Company claims that over 300 MW of this load is geographically
451 located around St. George, Utah and that the non-tariff network load in the Wasatch Front

452 is estimated to be 938 MW.³⁹ The Division estimates that the total Utah network load
453 served by the Mona to Oquirrh transmission system is around 2,904 MW (1,966 MW
454 plus 938 MW). Although the Company claims that 90.5 percent of the proposed Project
455 will be used to serve PacifiCorp's retail customers system wide,⁴⁰ the Division finds that
456 approximately 67 percent of the Project will serve Utah retail customers (1,966 MW
457 divided by 2,904 MW).

458 **Q. Please describe how costs for this Line will be allocated among PacifiCorp tariff**
459 **(retail) customers and non-tariff network customers?**

460 A. PacifiCorp's network customers include retail (tariff) and wholesale (non-tariff)
461 customers. Retail rates are recovered through a general rate case proceeding or other
462 regulatory filing before each respective state commission. PacifiCorp's wholesale and
463 transmission business is regulated by the FERC. PacifiCorp's non-tariff customers pay
464 rates as determined by the FERC Pro Forma OATT, which is updated annually.⁴¹
465 According to the current Electric Tariff, 7th Revised Volume No. 11, the load ratio share
466 calculations can change due to the following four conditions: (1) new network load is
467 added by a network customer, (2) existing network load is removed by a network
468 customer, (3) existing network load changes from one network customer to another, or
469 (4) a transmission rate case is filed with FERC.

³⁹ Company Response to DPU data request #3.1, March 5, 2010.

⁴⁰ Id.

⁴¹ <http://www.oasis.pacificorp.com/oasis/ppw/PACRESTATEDOATTASOF1-10-10.PDF>.

470 The Company is required by FERC to update its load ratio share annually on
471 August 1 of each year, but may file for tariff rate changes at the Company’s discretion.
472 The previous OATT was filed in 2008 when the Company requested incentive rate
473 treatment for the Energy Gateway Project.⁴² The Division does not know when the
474 Company will file its next FERC rate case. Therefore, the cost impacts of the proposed
475 \$450 million project on Utah retail, wholesale, and customers purchasing power from
476 UAMPS, UMPA, or DG&T will be an issue to contend with in a future prudence review,
477 which is outside the scope of this proceeding.⁴³ These issues are not reasons for us to
478 find the Project not reasonably necessary.

479 The current practice for the Company’s transmission assets is to recover all costs
480 through rates charged to retail customers and to credit back to them any revenues
481 obtained from transmission service. Where the large majority of a line’s load is intended
482 for retail service, this practice is reasonable. In essence, transmission revenues serve as a
483 “bonus” to customers. However, if a significant portion of a new line is expected to serve
484 the load of another utility or to provide network sales, retail customers may be placed at
485 risk if all costs are initially charged to them. For example, a decline in anticipated load in
486 another state could depress sales, or wholesale prices could depress sales revenue, thus
487 leaving retail customers to pay a disproportionate net share of the cost of a line relative to
488 their use. In some cases, it might be more appropriate for ratepayers to pay directly only

⁴² http://www.pacificorp.com/content/dam/pacificorp/doc/Transmission/Transmission_Services/EL08_75.pdf.

⁴³ PacifiCorp has a transmission service and operating agreement in place with UAMPS (FERC Rate Schedule No. 297) with UMPA (FERC Rate Schedule 637), and DG&T (FERC Rate Schedule No. 280).

489 for an allocated share of a new line, leaving to wholesale customers payment of the
490 remaining share and allowing the Company to assume the risk, and to retain revenues
491 from such customers. While the Division makes no conclusion as to which is more
492 appropriate on the Mona to Oquirrh Project, it feels that examination of such issues
493 would be appropriate at the point that cost recovery is sought for the Project. The
494 Division therefore recommends that the Commission require the Company, at the time it
495 seeks cost recovery on this line, to file detailed information relating to the expected
496 shares of native load, service to other Utah utilities, and network sales that the line is
497 anticipated to support, both in the near and long terms. Because several additional
498 transmission segments are anticipated in the coming years, the Division also recommends
499 that the Commission require in its order that such information be provided in both CPCN
500 and cost recovery filings for future transmission projects.

501 **Financial Viability**

502 **Q. Is the Company capable of financing the construction of this Project?**

503 A. Yes. In spite of hard times for the rest of the nation, the Company has not only
504 committed to build this Project, but also has access to capital markets at favorable rates to
505 do so. According to the most recent filing in the 2009 General Rate Case, PacifiCorp has
506 an A- rating by Standard & Poor's and a A3 rating by Moody's Investors Service--both
507 investment grade ratings.⁴⁴ These data support the filing made by Mr. Bruce N. Williams
508 in the current docket. Mr. William's also notes that the Company obtained \$1,000

⁴⁴ Docket No. 09-035-23, Company Response to MDRB 2.18.

509 million of first mortgage bonds, as well as cash equity contributions from its parent
510 company last year. The Company's parent company, MidAmerican Energy Holding
511 Company (MEHC) has shown itself to be a long-term investor in capital intensive energy
512 businesses. MEHC is associated with Berkshire Hathaway (rated AAA), facilitating
513 PacifiCorp's access to capital and reducing long-term debt financing costs. Finally, the
514 Company has authority to issue securities for this Project.⁴⁵ Based on its review, the
515 Division concludes that the Company should have access to capital markets in order to
516 build, operate, and maintain the Project.

517 **Q. How much money will the proposed Line cost Utah ratepayers?**

518 A. The estimated Project cost at the current time is \$450 million.⁴⁶ The estimated
519 annualized first year revenue requirement is \$71,694,000 on a total company basis, with
520 Utah's share (assuming all costs are recovered initially from ratepayers) being
521 approximately 42% of this amount or about \$30.1 million. Transmission function items
522 are allocated to the individual jurisdictions that PacifiCorp serves on a system generation
523 (SG) allocation code. Rate recovery for the tariff customer charges will be determined
524 through the appropriate general rate case or other type of filing.⁴⁷ Costs will be allocated
525 to non-tariff network customers as described above according to the tariff process for
526 determining load share allocation (Attachment R filing with FERC). Transmission assets
527 are included in FERC rate base, and revenues received from third-party customers are

⁴⁵ Direct Testimony of Bruce Williams, Docket No. 09-035-54, November 2009, p. 2.

⁴⁶ Company Response to DPU data request #2.5, January 14, 2010.

⁴⁷ Company's Response to DPU data request #2.4 and #2.6, January 14, 2010.

528 credited back to retail rates as wheeling revenues through net power costs, thus benefiting
529 Utah retail ratepayers.

530

531

Alternatives Considered

532 **Q. Were there any alternatives that the Division looked at in lieu of constructing the**
533 **transmission Line?**

534 A. A plausible alternative that the Division considered is demand side management and
535 energy efficiency measures. Efficient use of energy and demand-side measures would
536 reduce usage and are important measures to reduce energy consumption. However, even
537 with efficiency measures, the existing transmission system is severely constrained and
538 fully subscribed, as I described above. The transmission line would still need to be built
539 to meet growing energy and system capacity needs. None of the above alternatives
540 would achieve the long-range, system-wide needs, such as meeting load growth, system
541 reliability, operational flexibility, market transfers, and the delivery of power from
542 renewable resources.

543 **Q. Will you please discuss other alternatives that were considered in this case?**

544 A. Yes. One alternative that the Division looked at would be not to build the Line. To
545 serve the expected continued growth in electricity consumption and peak demand,
546 especially along the Wasatch Front, additional electricity would need to be generated or
547 imported into Utah by existing transmission facilities. The load would have to be met by
548 curtailing or interrupting other customers. In the event that the Commission decides to

549 not grant this application, the Company would not be able to meet its previously planned
550 resource additions or its network load obligation without curtailing energy or purchasing
551 front office transactions that may not be economical at the time of need. Transmission
552 projects can take up to five years to plan, permit, design, and construct. Since many
553 potential and confirmed resources are located far from population centers where the
554 power must be delivered, the Company would not have time to find alternatives to the
555 current plan, design, and construction layout. Additional transmission capacity must be
556 built to deliver energy to customers.

557 The Division finds this alternative to be unacceptable. It would not meet future
558 load growth needs, would not address the Integrated Resource Plan and Business Plan of
559 the Company, and would not add the incremental capacity and reliability needed on the
560 network.

561 The Division also reviewed alternatives in the Company's financial analysis
562 results, which found the proposed project the least expensive alternative to deliver the
563 required 1,500 MW system.⁴⁸

564 The Division studied the BLM's review of alternatives, which was wide-ranging
565 and comprehensive. The BLM looked at the Project in terms of the best overall
566 combination of criteria that include system reliability, constructability, economics,
567 environmental, and community concerns. The BLM determined that the Project was in

⁴⁸ Company's Confidential Response to DPU data request #4.6-2, March 5, 2010.

568 fact needed and the no action alternative was unacceptable. The Division concurs with
569 the BLM's determination of need for this Project.

570 The BLM's analysis also considered alternative transmission technologies,
571 developing new generation facilities in northern Utah, and the use of existing
572 transmission lines. The BLM looked at 22 alternate substation sites as well as numerous
573 possible transmission line routes, all of which were studied, assessed, and compared by
574 teams of professionals in their fields. The Division commends the BLM for including
575 federal, state, and local agencies in the scoping, consultation, and coordination of the
576 project study. A broad range of stakeholders provided input to the BLM on this Project,
577 including the Utah Governor's Public Lands Policy Coordination Office.

578 At this time the BLM has not issued its Final EIS Report. However, the Draft EIS
579 report supports the proposed Line and associated substations (as currently filed in this
580 docket) as superior to all other choices and concludes that it is not only environmentally
581 benign, but serves the needs of the public as a whole.⁴⁹ As previously described, the
582 Division agrees that the present and future public convenience and necessity must serve
583 the needs of the public as a whole. Due to the scope of this proceeding, the Division
584 makes no finding on the timing of the construction of the Project or the route selection.

Conclusion and Recommendations

585
586 Q. Will you please summarize the Division's analysis and findings?

⁴⁹http://www.blm.gov/pgdata/etc/medialib/blm/ut/salt_lake_fo/planning/monatransmission.Par.94024.File.dat/Volume%20II%20-%20Appendices,%20Maps,%20and%20Simulations.pdf.

587 A. The Division studied and reviewed the statutory requirements applicable to this case, and
588 then applied them to the variety of factors demonstrating the public interest requirement
589 and the “convenience and necessity” requirement both for the future and the current time
590 period. The Division makes the following findings in this case:

- 591 • The Company will be able to finance the transmission Line either from its own
592 funds or through external capital sources. The estimated Project costs are in the
593 range of \$450 million. The first year revenue requirement is approximately \$30.1
594 million on a Utah basis.
- 595 • The Company has secured franchise agreements permitting construction within
596 public thoroughfares and has applied, or is in the process of applying, to local
597 governmental entities for conditional-use permits and similar land use
598 authorizations. To date, the Division is aware of an outstanding conditional use
599 permit in Tooele County.
- 600 • The transmission Line will not conflict with or adversely affect the operations of
601 any existing certificated fixed public utility providing retail electric service to the
602 public. The transmission Line does not constitute an extension into the
603 certificated service territory of any existing public electric utilities. To date no
604 other party has requested intervention in this case.

605 The Division finds this Line is needed and complies with the “convenience and
606 necessity” requirement based on the following reasons:

- 607 • The public welfare as a whole will be inconvenienced if no action is taken.

- 608 • The Company must meet its load growth obligation, and forecasts show that both
609 load and peak demand will continue to grow, especially along the Wasatch front;
610 this Line is needed to provide operational and system flexibility on the
611 Company's transmission network. In other words, the existing service is not
612 adequate and convenient, and the construction of the proposed Line will eliminate
613 this inadequacy and inconvenience.
- 614 • Ratepayers will benefit by having reliable service due to the increased transfer
615 capability and operational flexibility provided by the Line. The Division finds that
616 the other considered alternatives were inferior to this Line being constructed.
- 617 • The Company is willing to invest in this Line, and this Line provides the
618 necessary link in order for the Gateway Energy Transmission Expansion Project
619 to realize the full benefits of the Project.

620 **Q. What is the Division's recommendation in this case?**

621 A. The Division recommends issuance of the certificate contingent upon the Company
622 acquiring all necessary permits. If the Commission grants the certificate, the Division
623 further recommends that the Company file within ten days of the Commission's order a
624 report detailing all necessary permits indicating which ones are yet to be obtained and a
625 time line of the expected acquisition for each outstanding permit. If after a reasonable
626 time all necessary permits have not been acquired, the Division recommends that the
627 Company be ordered to appear before the Commission explaining in detail any delays in
628 obtaining the permits. Based on the Company's explanations of any delays, intervening

629 parties may request additional information from the Company and the opportunity to file
630 additional evidence in this case. The Division suggests 90 days after the Commission's
631 order is a reasonable amount of time.

632 **Q. Does the Division have any additional recommendations or proposals that pertain to**
633 **this case?**

634 A. The Division wants to be clear that the Tooele County conditional use permit or land
635 ordinance amendment issue must be resolved before the Company is awarded a
636 construction CPCN. Therefore, our recommendation for the Commission to grant a
637 conditional CPCN hinges on the Company obtaining all permits, including Tooele
638 County, before it grants blanket approval of the CPCN. The Division also recommends
639 that the Commission require that the Company, at the time that it seeks cost recovery for
640 this Project, submit detailed information relating to the expected shares of native load,
641 service to other Utah public utilities, and network sales that the Line is anticipated to
642 support, both in the near and long terms. The Division also recommends that the
643 Commission require such information to be provided in both CPCN and cost recovery
644 filings for all future transmission projects.

645 **Q. Does this conclude your testimony?**

646 A. Yes.