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IDAHO PUBLIC
UTILITIES COMMISSION

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE)
APPLICATION OF ROCKY) CASE NO. PAC-E-10-07
MOUNTAIN POWER FOR)
APPROVAL OF CHANGES TO ITS) Rebuttal Testimony of Darrell T. Gerrard
ELECTRIC SERVICE SCHEDULES)
AND A PRICE INCREASE OF \$27.7)
MILLION, OR APPROXIMATELY)
13.7 PERCENT)

ROCKY MOUNTAIN POWER

CASE NO. PAC-E-10-07

November 2010

1 Q. Please state your name.

2 A. My name is Darrell T. Gerrard.

3 Q. Are you the same Darrell T. Gerrard who has testified previously in this
4 case?

5 A. Yes.

6 Q. What is the purpose of your testimony?

7 A. The purpose of my testimony is to provide evidence in rebuttal to the Direct
8 Testimony of Mr. Dennis E. Peseau, on behalf of Monsanto Company and
9 rebuttal to the Direct Testimony of Mr. Randy Lobb, on behalf of the Idaho Public
10 Utilities Commission staff, in regards to the Company's Populus to Terminal
11 transmission project.

12 Q. Would you please summarize your rebuttal testimony?

13 A. Yes. My testimony will respond to the following items. First, statements by Mr.
14 Peseau that "most of the Gateway Central rate base will not be used and useful at
15 the outset due to its over sizing,"¹ and Mr. Lobb's statement that it is an
16 "undisputed fact that the project is oversized and will not be fully utilized unless
17 or until Energy Gateway is completed."² The Company strongly disagrees with
18 both witnesses' conclusions that the project is oversized or overbuilt and does not
19 benefit customers and their recommendations that the project is not used and
20 useful and should not be fully allowed in rates. As explained in more detail
21 below, the project is designed to meet the current and future electrical needs of
22 the Company's customers and provides important and needed reliability benefits

1 Peseau, Direct Testimony page 3, lines 6-7.

2 Lobb, Direct Testimony page 27, lines 20-22.

1 immediately while also addressing future system needs in a prudent and
2 reasonable manner.

3 Second, the Company vehemently disagrees with Mr. Peseau's statements
4 that the Company's strategy for Energy Gateway is to "dominate transmission
5 services throughout the western U.S." and provide "the 'highway' to California
6 and southern Nevada for sales of PacifiCorp's existing and developing wind
7 projects."³ This is a misstatement of the project and its intended purpose, which
8 is to serve all of PacifiCorp's electric customers.

9 Third, the Company strongly disagrees with Mr. Peseau's statement that
10 "there is a real possibility that Gateway South may be delayed or disapproved by
11 virtue of other competing high voltage transmission line [sic] servicing similar
12 markets."⁴ As explained more fully below, Energy Gateway is the only
13 transmission project proposed in the region that will connect the Company's load
14 centers to the Company's existing and future resources. Reference to other
15 proposed projects in the region as being of potential benefit to PacifiCorp
16 customers is, therefore, irrelevant.

17 Fourth, the Company disagrees with Mr. Peseau's statements regarding
18 project comparisons made between actual costs for Populus to Terminal and
19 conceptual cost estimates made regarding other "similar and competing" projects
20 planned for Nevada and elsewhere. As explained below, such comparisons are
21 overly simplified and do not take into account the specific cost characteristics and
22 requirements of the project.

³ Peseau, Direct Testimony page 7, lines 5-10.

⁴ Peseau, Direct Testimony page 11, lines 4-8.

1 Finally, the Company refutes various witness claims related to the impact
2 of the Populus to Terminal project on disturbance events, system benefits of the
3 Populus to Terminal project for Path C capabilities, and the project as it relates to
4 MidAmerican Energy Holdings Company (“MEHC”) transaction commitments.
5 In conclusion, my testimony and the evidence presented therein reaffirms that the
6 Populus to Terminal project is properly sized to meet our customers’ needs, both
7 current and future, the specific project costs were justified and prudent, and the
8 entire project is used and useful to the benefit of all the Company’s customers.

9 **Project Sizing**

10 **Q. Do you agree that the Populus to Terminal project is “over built” as alleged**
11 **by Mr. Peseau or agree that it is an undisputed fact that the project is**
12 **oversized as argued by Mr. Lobb in their respective testimonies?**

13 **A.** No, I do not agree with either witness on this point. The project is sized and
14 constructed as the best cost alternative for customers to properly meet current and
15 future electrical needs. The project addresses existing constraints across Path C,
16 eliminates the existing reliability concerns and constraints identified by the
17 Western Electricity Coordinating Council (“WECC”) following disturbances on
18 Path C and portions of the system directly south, and provides an immediate
19 increase in capacity necessary to meet existing customer load service and reserve
20 obligations. The Company has achieved an appropriate balance between building
21 transmission infrastructure to meet current service and reliability needs while also
22 ensuring that future needs are met which also support the transmission system as a
23 whole on a long-term basis. This “right-sizing” approach appropriately

1 recognizes the inherent “lumpy” nature of transmission investment but limits the
2 impact by proceeding with the most reasonable, best cost alternative.

3 **Q. Please describe Path C and explain the reduction in constraints on Path C as**
4 **a result of the Populus to Terminal project.**

5 A. Path C is a major transmission path that runs north/south between Idaho and Utah
6 and includes a mix of existing transmission lines at various voltages. As noted,
7 the Populus to Terminal project facilitates improved performance and reliability
8 of the entire system, including Path C. Currently, Path C capability is limited in
9 the winter and summer seasons; scheduled or real time flows over this path may
10 not exceed these limits without violating reliability standards. Power flow
11 simulations used in planning and rating the project demonstrate that the addition
12 of the Populus to Terminal project will result in the elimination of the current
13 seasonal limitations for Path C, also allowing flows to reach as high as 2800 MW
14 during outages facilitating firm ratings for Gateway West or Gateway South.
15 Please refer to the Executive Summary (Section 1) of the October 6, 2008 WECC
16 approved Phase 2 Study Report,⁵ which describes the facilities that must be added
17 to obtain the necessary new capacity requirements for the Populus to Terminal
18 project. Also refer to Exhibit No. 65, in which Figure 1 depicts Path C operating
19 limits before the Populus to Terminal project and Figure 2 shows the new Path C
20 operating limits after project is in-service. I further discuss these items later in
21 this testimony.

⁵ Provided as Attachment IPUC 202b in response to IPUC Production Data Request 202.

1 **Q. Does prudent planning require consideration of future system needs when**
2 **developing a project like Populus to Terminal?**

3 A. Yes. It would be imprudent of the Company to only consider the current needs of
4 the system when making such a significant investment. Please refer to the
5 September 2008 PacifiCorp Analysis of the Populus to Terminal Project,⁶ which
6 includes analysis and facts that clearly show this project and its planned capacity
7 are required in the future. This project is sized and constructed to meet those
8 requirements, in addition to the requirement to provide a significant capacity
9 benefit to Path C. I further discuss this matter later in this testimony.

10 **Q. Why build the project now for future capacity rather than build a smaller**
11 **capacity project now and add another project later to meet future needs as**
12 **suggested through the testimony of Mr. Peseau and Mr. Lobb?**

13 A. The project as planned, designed and constructed has a lower cost to our
14 customers and lower impact on communities, the environment, and public and
15 private lands compared to an alternative proposing multiple projects. In order to
16 complete the project, a new transmission line corridor was required between the
17 Populus and Ben Lomond substations and the use of an existing corridor
18 previously established between Ben Lomond substation and Terminal substation.
19 There was significant public opposition and major challenges to overcome in
20 obtaining the required new corridor to accommodate one transmission line. It was
21 made very clear by all stakeholders involved during the siting and permitting
22 process that any additional or future corridors will not be tolerated or approved.

⁶ Provided as Confidential Attachment Monsanto 1.11 -2 in response to Monsanto Data Request 1.11.

1 Q: Would it have been more cost effective for the Company to build a smaller
2 project at this time and to then build a future expansion?

3 A: No. Had the Company made the decision to build a single circuit 345kV lower
4 capacity line in the new corridor, the only option available to the Company to
5 gain the required future capacity would be to remove the line and replace it with a
6 higher capacity line, either 345kV double circuit or 500kV single circuit. The
7 Company estimates that, if it had pursued this option and had to replace the single
8 circuit 345kV line with a double circuit 345kV line in the future, the cost to
9 customers would be \$1.24 billion (see Exhibit No. 66), or 54 percent higher than
10 the total cost to date for the Populus to Terminal project. Additionally, the
11 Company had formally rejected a 500kV alternative due to its high cost and
12 inability to effectively site and operate that voltage in the existing corridor
13 between Ben Lomond and Terminal. The cost and environmental and public
14 impacts of building multiple smaller projects over time to gain incremental
15 capacity is significantly more than building a double-circuit 345 kV project once.
16 In addition to excess capital costs associated with multiple projects over time,
17 each would require extensive line outages for a construction period of more than a
18 year and would reduce Path C capacity back to today's levels or lower. Under
19 such alternatives, the Company would have to build additional generation or
20 purchase energy, if any was available, to serve customers during such
21 construction outages. The aforementioned alternatives were all evaluated and
22 rejected as more costly and obviously imprudent approaches to address the needs
23 identified for the Populus to Terminal project. Please refer to Sections 3 and 4 of

1 the September 2008 PacifiCorp Analysis of the Populus to Terminal Project,⁷
2 where alternatives are discussed in detail.

3 **Export Highway**

4 **Q. Was Energy Gateway proposed as an “export highway to California and**
5 **southern Nevada,” as claimed by Mr. Peseau?**

6 **A. No.** The Energy Gateway project does not create any new transmission capacity
7 into California. The proposed Gateway South project provides a small increase in
8 new transmission capacity (approximately 300 MW) necessary to import energy
9 from Nevada into Utah required to serve customer load. The overall Gateway
10 project purpose is to deliver resources as defined in PacifiCorp’s Integrated
11 Resource Plan to PacifiCorp customers and to provide resource options over the
12 long term as required for serving PacifiCorp’s loads. Contrary to Mr. Peseau’s
13 assertion, PacifiCorp is not in the merchant transmission or generation business
14 and is not seeking to build an export highway.

15 **Gateway South Delay**

16 **Q. Mr. Peseau states that “there is a real possibility that Gateway South may be**
17 **delayed or disapproved by virtue of other competing high voltage**
18 **transmission line servicing similar markets.”⁸ Is that true?**

19 **A. Absolutely not.** A number of projects have been proposed in the region in and
20 around Energy Gateway; however, these projects do not connect the Company’s
21 load centers to the Company’s existing and future resources, and therefore are not
22 useful to the Company in serving its customers. These proposed projects are

⁷ Provided as Confidential Attachment Monsanto 1.11 -2 in response to Monsanto Data Request 1.11.

⁸ Peseau, Direct Testimony page 11, lines 4-8.

1 neither similar to nor in competition with Energy Gateway. Please refer to my
2 Exhibit No. 67, which provides the “Foundational Projects by 2020” map from
3 the August 11, 2010 Subregional Planning Group Coordination Group’s report to
4 WECC⁹ as part of its Regional Transmission Expansion Planning initiative. The
5 “Foundational Projects” list was developed through extensive planning and
6 collaboration efforts among subregional planning groups throughout the Western
7 U.S., and will be relied on heavily for WECC’s Transmission Expansion Planning
8 Policy Committee’s efforts to develop plans for the entire western
9 interconnection. The projects shown on this map are those identified as having “a
10 very high probability of being in service in the 10-year timeframe. As the map
11 shows, the Energy Gateway projects are the only high voltage transmission lines
12 that connect to the Company’s load centers in Idaho, Utah, Oregon and Wyoming.

13 Once again, the Gateway Project – and specifically Gateway Central – is
14 not being built to service external markets. It is totally inaccurate for Mr. Peseau
15 to state that “there is a distinct possibility that Gateway Central would become a
16 largely stranded investment.”¹⁰ Gateway Central is needed to reliably transport
17 new and existing resources to the Company’s customers to meet current and
18 future customer requirements. As stated above, no other projects proposed in the
19 region connect the Company’s existing and future resources to the Company’s
20 load centers in Idaho, Utah, Wyoming and the Pacific Northwest. More
21 specifically, no other project provides increased transmission capacity in the

⁹ Report available at
<http://www.wecc.biz/committees/BOD/TEPPC/SCG/Shared%20Documents/SCG%20Foundational%20Transmission%20Project%20List%20Report.pdf>

¹⁰ Peseau, Direct Testimony page 17, lines 2-4.

1 portion of the Company's transmission system in northern Utah and southern
2 Idaho and between the Populus and Terminal substations, where additional
3 capacity is presently needed.

4 **Project Cost**

5 **Q. Can you provide a justification as to why the cost per mile of the Populus to**
6 **Terminal project is higher than other projects sited by Mr. Lobb and Mr.**
7 **Peseau in their testimony?**

8 **A.** Yes. A comparison was made by Mr. Lobb, stating that the Populus to Terminal
9 Project is nearly twice the cost per mile of the Company's Camp Williams to 90th
10 South 345kV transmission line ("Camp Williams line").¹¹ Both witnesses
11 provided cost comparisons using a very simple calculation to show cost-per-mile
12 basis only and concluding, therefore, that a project with longer line miles will
13 result in an overall lower cost per mile. Comparison of these two projects is not
14 valid due to several factors discussed in detail in the Company's response to
15 IPUC Production Data Request 277, including the following:

- 16 • the Camp Williams line was a small-scale project, constructed on a low-
17 cost existing right of way and it is located in the city on flat and accessible
18 terrain that required few if any access roads. By contrast, the Populus to
19 Terminal line is a large-scale, mostly rural and remote project, with
20 significant hard-rock topography along the northern segment and soil
21 conditions along the southern segment that required foundations to be
22 drilled, on average, more than twice the depths required for the Camp
23 Williams line foundations. The drilling depths along the southern segment

¹¹ Lobb, Direct Testimony page 25, lines 8-17.

1 required larger and more expensive drilling equipment and drove a
2 significant difference in the volume of excavation and concrete required,
3 with an average volume of 134 cubic yards compared to an average of 53
4 cubic yards per foundation for the Camp Williams line; the Camp
5 Williams line is located in the Salt Lake City valley where materials and
6 supplies can be acquired, delivered, stored and staged for construction
7 with great efficiency. Construction equipment is readily available such as
8 excavation equipment, erection cranes and cement trucks. Again by
9 contrast, the location of the Populus to Terminal project is far from
10 materials and supplies, requiring additional logistics storage facilities,
11 trucking costs and mobilization/demobilization from multiple sites in
12 remote locations;

- 13 • the Camp Williams line did not require any new substations or sites to be
14 established, only modification of two existing substation facilities. The
15 requirement for substation interconnection to load centers and to resource
16 centers will significantly influence the cost-per-mile of a transmission
17 project. The Populus to Terminal project has functional requirements
18 which necessitate the establishment of a totally new “green field”
19 substation at Populus where the project interconnects with several new and
20 existing high voltage lines. It also requires interconnection at the
21 Company’s existing Ben Lomond substation load center and, further
22 south, interconnection to the existing Terminal Substation load center.

1 In summary, Mr. Lobb and Mr. Peseau's cost-per-mile comparisons are overly
2 simplistic and provide no real basis to assess or quantify system functionality,
3 capacity, performance or benefit to the system or to customers. By way of
4 example, their simple analysis would be akin to comparing the cost of two
5 vehicles based on their wheel-base dimension without any regard to respective
6 capability, performance or ability to meet customer need.

7 **Q. How did the Company ensure that the costs to build the project as scoped**
8 **were justified and reasonable?**

9 A. The Company employed an open competitive process to control costs where 75
10 vendors were identified and received an invitation to bid. The Company uses a
11 competitive blind-sealed bid process to contract for the development of each
12 project unless certain defined conditions apply, such as a restriction in the supply
13 of technology or design solutions that prevent an open competitive process. The
14 form of contract tendered is a turnkey, fixed-price, date certain basis for delivery,
15 referred to as an engineer, procure and construct approach. Further details on cost
16 controls are covered in my direct testimony.

17 **Disturbance Events**

18 **Q. Mr. Lobb states that it is unclear what impact the Populus to Terminal Line**
19 **would have had, had it been in place during the disturbance events sited by**
20 **the Company in this case.¹² Can you please explain the impact?**

21 A. Yes. The system disturbances and significant impacts are discussed in detail in
22 my Direct Testimony starting on page 9 line 1. As explained in that testimony,
23 the addition of the Populus to Terminal line directly mitigates reoccurrence of

¹² Lobb, Direct Testimony page 22, lines 7-12.

1 such disturbances. Mr. Lobb points out in his testimony that, according to the
2 WECC Abbreviated System Disturbance Reports¹³ the only customers curtailed
3 during the October 15, 2007 event were NUCOR and Monsanto, and no other
4 customers were impacted. It is true that these two were the only customers
5 curtailed during this particular event, but it is also true that these customers faced
6 curtailments multiple times in 2007, and as documented in a PacifiCorp System
7 Disturbance Report¹⁴ and further stated on page 10 of my direct testimony, more
8 than 1,450 additional customers were affected due to similar system outages in
9 this part of the system on September 27, 2007. In addition, several of the
10 disturbances had significant and detrimental impacts to other interconnected
11 utilities due to overloading of multiple transmission lines and curtailment of on-
12 line generation stations. With the advent of new FERC-mandated reliability
13 standards for Bulk Electric Systems transmission owners and operators, such
14 entities are subject to significant fines and sanctions if they do not plan and
15 operate their interconnected systems reliably. Path C operating capacity was
16 substantially decreased in 2008 subsequent to these events.

¹³ Provided as Confidential Attachments 6.6-1 and 6.6-2 in response to Monsanto's Data Request 6.6.

¹⁴ Provided as Confidential Attachment Monsanto 6.6 1st Supplemental.

1 Q. Mr. Lobb states that the system benefits of the Populus to Terminal project
2 to improve Path C capabilities and meet North American Electric Reliability
3 Corporation (“NERC”) WECC standards are “less than half of the 700 MW
4 currently provided by the project and less than 25 percent of the 1400 MW
5 capacity that the project could ultimately provide.”¹⁵ Is this accurate?

6 A. No, Mr. Lobb’s conclusion is not supported by the complete history and current
7 capacity status of Path C. His statement does not fully reflect the capacity
8 contribution to Path C provided by the Populus to Terminal project, as it only
9 considered path reductions due to reliability issues that occurred in 2008. Please
10 refer to my Exhibit No. 65 (Path C - Firm transmission capacity as a function of
11 ambient temperature and loads). This figure, obtained from an Operational
12 Transfer Capacity study approved by WECC, shows Path C Firm transmission
13 capacity as a function of ambient air temperature and as a function of southeast
14 Idaho electrical load prior to Populus to Terminal project in-service.

15 As set forth in the exhibit, the firm transmission capacity in summer is 575 MW at
16 100 degrees F prior to Populus to Terminal depicted on line “A”. When Populus
17 to Terminal is placed in service, Path C capacity is no longer a function of
18 temperature or loads and this chart is no longer valid. The Path C firm
19 transmission capacity increases to a set amount of 1600 MW. Therefore, the
20 capacity contribution to the system, and specifically to Path C, is nearly 1000
21 MW of its planned 1400 MW rating and not 335 MW of 1400 MW as stated in
22 Mr. Lobb’s testimony.

¹⁵ Lobb, Direct Testimony page 22, lines 1-6.

1 Q. Mr. Lobb states that the Populus to Terminal Project does not “simply
2 fulfill” the MEHC transaction commitment made in 2006.¹⁶ Do you agree
3 that is a fair criticism of the project?

4 A. No, I disagree with his statement. The project does meet the commitment made
5 by the Company while at the same time providing for additional system needs and
6 requirements that emerged after 2005 when the commitment was made and March
7 2006 when the commitment was approved by stakeholders. Transaction
8 Commitment No. 34 regarding “Transmission Investment” from Commission
9 Order No. 29998 (Case No. PAC-E-05-08), a portion of which Mr. Lobb
10 references in his testimony (page 20, lines 17-22), clearly acknowledges the
11 potential need for the Company to re-examine each proposed investment and
12 modify as appropriate to ensure each is optimal for customers, stating:

13 “While MEHC has immersed itself in the details of PacifiCorp’s
14 business activities in the short time since the announcement of the
15 transaction, it is possible that upon further review a particular
16 investment might not be cost-effective, optimal for customers or
17 able to be completed by the target date. If that should occur,
18 MEHC pledges to propose an alternative to the Commission with a
19 comparable benefit. The Commission may investigate the
20 reasonableness of any determination by MEHC/PacifiCorp that
21 one or more of the identified transmission investments is not cost-
22 effective or optimal for customers.” (Emphasis added.)

23 In addition, as I explained earlier, prudent planning and design of a project
24 of this size requires that the Company give consideration to future as well
25 as current system requirements.

26 Q. What were the additional system needs and what drove them?

27 A. Subsequent to the commitment, business conditions drove a significant change in

¹⁶ Lobb, Direct Testimony page 20, line 25.

1 transmission system requirements. In early 2007, the Company initiated its
2 annual load and resource study, required under its federal Open Access
3 Transmission Tariff (“OATT”), which forecasts network customer loads and
4 resources for the next ten years. Compliance with the OATT requires the
5 Company to respond to network customers’ forecast needs by upgrading the
6 transmission system to deliver network resources to reliably serve loads. The
7 results of the study further confirmed the need for additional long-term
8 transmission capacity and increased investment and upgrades in Path C well
9 beyond 300 MW. In addition, since 2005, several significant operational
10 disturbances occurred which demonstrated that Path C was subject to significant
11 reliability limitations resulting from double line outage contingencies. Moreover,
12 operational events between Ben Lomond and Terminal substations occurred that
13 demonstrated a clear need to improve capacity and reliability in the part of the
14 system south of Path C, as explained in my direct testimony, pages 9-11. With
15 the announcement of Energy Gateway in 2007, the segment between Populus and
16 Terminal (Segment B) became an integral part of the Energy Gateway program by
17 providing a critical link that connects Energy Gateway West and Energy Gateway
18 South, and supports designed capacity ratings based on WECC and NERC
19 planning standards and criteria.

20 **Q. Can you please state how the project is “used and useful” and benefits the**
21 **Company’s Customers?**

22 **A.** As explained fully herein, my testimony provides clear evidence that the project is
23 not only fully used and useful but also the most prudent approach for all of the

1 Company's customers based on its ability to meet current system electrical
2 demands and those forecasted in the future. The project clearly provides
3 immediate reliability and capacity benefits to the system well in excess of the 700
4 megawatts suggested by both witnesses. The project and its resulting capacity is
5 required in order to reliably transport existing generation resources and those
6 included in the Company's current and subsequent integrated resource plans, and
7 to deliver those resources to our Customers. The project's used and usefulness is
8 further evidenced through the proceedings and supported through statements in
9 the Idaho and Utah Commission Orders granting Certificates of Public
10 Convenience and Necessity ("CPCN") for the project in 2008. The Idaho
11 Commission Order states:

12 "Thus, Staff believes that the necessity of the Project should be
13 viewed in conjunction with energy resources that are constructed,
14 under way or planned. PacifiCorp elected to undergo a
15 transmission upgrade as part of its preferred resource portfolio of
16 an additional 2,000 MWs of renewable resources by 2013 in the
17 Company's 2007 IRP. A significant portion of these renewable
18 resources will be located in Wyoming. Staff then listed more than
19 500 MWs of renewable resources that are either under construction
20 or in the final stage of development. In response to a Staff data
21 request, PacifiCorp provided four alternatives that it rejected
22 because the Company did not believe that these would provide
23 sufficient capacity for the new resources. Staff agreed that the
24 Project was necessary in order for the Company to continue to
25 provide reliable service from these new resources to growing load
26 centers."¹⁷

27 In its order granting the CPCN for the Project, the Utah Commission noted
28 several parties concurred with the need for the project, including the Division of
29 Public Utilities:

¹⁷ In the Matter of the Application of Rocky Mountain Power for a Certificate of Public Convenience and Necessity Authorizing Construction of the Populus-to-Terminal 345 KV Transmission Line Project, Case No. PAC-E-08-03, Order No. 30657 (October 10, 2008) at pp. 3-4.

1 “The Division states it has examined underlying information upon
2 which a need for these additional transmission facilities may be
3 found and concludes it supports RMP’s decision to build the
4 Transmission Line and confirms RMP’s planned integration and
5 operation of the line with future utility operations and activities.
6 The Division agrees with RMP’s conclusions that there is a need
7 for the Transmission Line and the Company’s future utility service
8 will be more reliable and efficient with the Transmission Line’s
9 addition.”¹⁸

10 I disagree with Mr. Lobb’s reference to Idaho Code 61-502A regarding the “used
11 and useful” standard and the implication that the Project includes unnecessary
12 capacity. The capacity of this project is required and it is necessary to meet the
13 energy needs of our customers, including those in Idaho.

14 **Q. If a facility is not fully subscribed, does that mean it is not “used and
15 useful?”**

16 **A. No. The only prudent approach to designing and building utility facilities is to
17 consider both current and future requirements of that facility.**

18 **Q. Please summarize your testimony.**

19 **A. The Idaho Public Utilities Commission has already approved the need and
20 necessity of the Populus to Terminal project as recommended by Commission
21 Staff. The Company planned, designed, engineered and constructed the line in a
22 cost effective and prudent manner. The Populus to Terminal line is fully used and
23 useful; it meets current needs and will meet expected future needs of our
24 customers, and it complies with the mandatory reliability standards and criteria
25 established by NERC and WECC entities. The project is properly sized and**

¹⁸ In the Matter of the Application of Rocky Mountain Power for a Certificate of Public Convenience and Necessity Authorizing Construction of the Populus to Terminal 345 KV Transmission Line Project, Docket No. 08-035-42, Report and Order Granting Certificate and Certificate of Public Need and Necessity, (September 4, 2008) at p. 3.

1 constructed as the best cost alternative for customers to meet performance
2 requirements and to function with the interconnected bulk electric system. The
3 project is used and useful to the benefit of all of our customers, including those in
4 Idaho, and should be fully included in rates.

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

6 **A. Yes.**

Case No. PAC-E-10-07
Exhibit No. 65
Witness: Darrell T. Gerrard

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

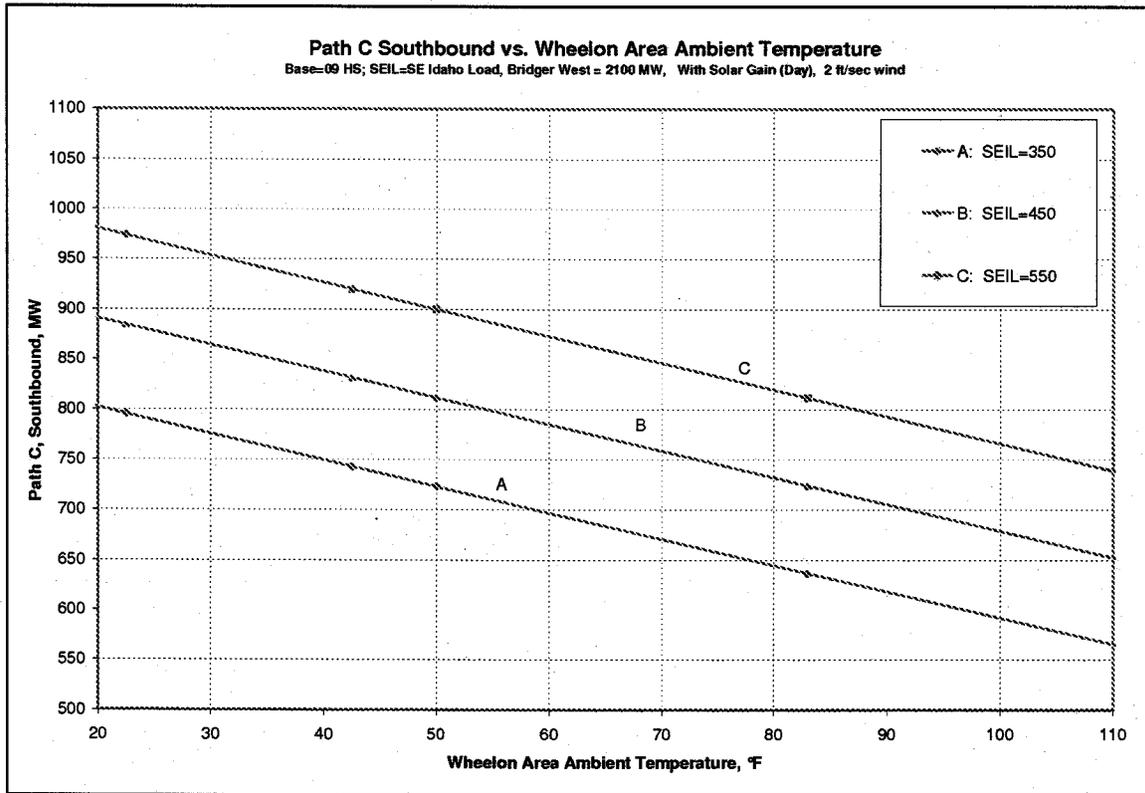
Exhibit Accompanying Rebuttal Testimony of Darrell T. Gerrard

Path C Transfer

November 2010

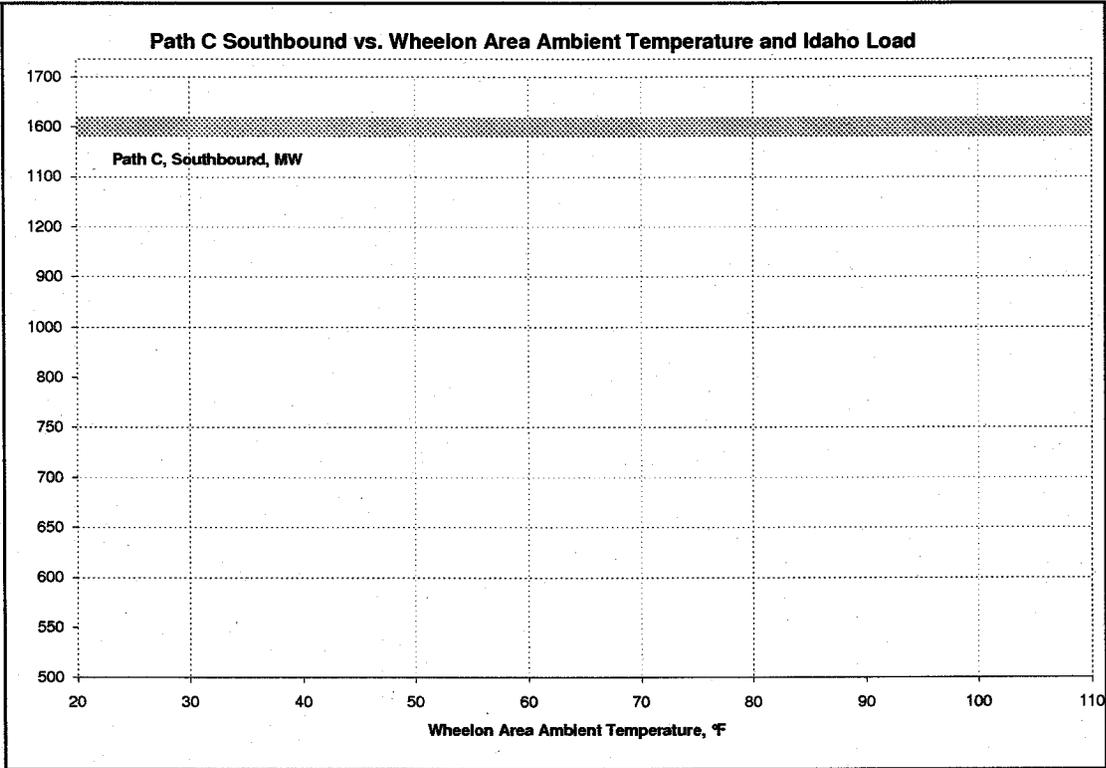
Exhibit No. 65 – Path C Transfer Capability as a function of ambient temperature and southeast Idaho load BEFORE in-service of the Populus to Terminal Project.

FIGURE 1



Path C Transfer Capability as a function of ambient temperature and southeast Idaho load AFTER in-service of the Populus to Terminal Project.

FIGURE 2



Case No. PAC-E-10-07
Exhibit No. 66
Witness: Darrell T. Gerrard

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Rebuttal Testimony of Darrell T. Gerrard

Alternative Cost Options

November 2010

Populus - Terminal 345 kV Single Circuit Estimate + Removal + Double Circuit Construction Forecast

Construction 345 kV Single Circuit Based on Block Estimates:									
Construction 345 kV Single Circuit	Description	Transmission build per unit	ROW cost per mile	Sub-Total	Units	Sub-Total	Related project costs @ 25%	Total	
	345kV Single Circuit Steel H w/Doubled bundled 1272 ACSR	\$718,561	\$601,980	\$1,320,541	135 miles	\$178,273,035	\$44,568,259	\$222,841,294	
	345kV Single Circuit Substation	\$44,634,838		\$44,634,838	3 subs	\$133,904,514	\$33,476,129	\$167,380,643	
	Total					\$312,177,549	\$78,044,387	\$390,221,936	

Removal of 345 kV Single Circuit Line and Substation Facilities Based on Block Estimates:									
Removal 345 kV Single Circuit	Description	Transmission build per unit	ROW cost per mile	Sub-Total	Units	Sub-Total	Related project costs @ 25%	Total	
	345kV Single Circuit Steel H w/Doubled bundled 1272 ACSR	\$289,913	0	\$289,913	135 miles	\$39,138,309	\$9,784,577	\$48,922,886	
	345kV Single Circuit Substation	\$17,899,661	0	\$17,899,661	3 subs	\$53,698,983	\$13,424,746	\$67,123,728	
	Total					\$92,837,292	\$23,209,323	\$116,046,614	

Actual Construction Cost of Populus - Terminal 345 kV Double Circuit Line and Substations									
October 2010 Forecast									\$832,219,636

Total Cost of Build/Remove Single Circuit 345 kV & Build 345 kV Double Circuit Line and Substations									
Build/Remove Single Circuit 345 kV & Build 345 kV Double Circuit Line and Substations									\$1,338,488,187
Remove Duplicate ROW Cost in Estimate									-\$101,584,125
Net Cost									\$1,236,904,062

Case No. PAC-E-10-07
Exhibit No. 67
Witness: Darrell T. Gerrard

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Rebuttal Testimony of Darrell T. Gerrard

Foundational Project Map

November 2010

FOUNDATIONAL PROJECTS BY 2020

- NTTG**
- NTTG01 Gateway South Phase 1
- NTTG02 Gateway Central Phase 1
- NTTG03 Gateway West Phase 1
- NTTG05 Hemingway -- Boardman
- NTTG06 Cascade Crossing

- CG**
- CG01 I-5 Corridor
- CG02 West McNary
- CG03 Big Eddy -- Knight
- CG04 Little Goose Area Reinforcement

- BCH**
- BCH01 Nicola -- Meridian
- BCH03 BC-US Interstate

- Alberta AESO**
- AESO03 1202L Conversion
- AESO04 Heartland
- AESO05 West HVDC
- AESO06 East HVDC
- AESO07 Fort McMurray - East Line
- AESO08 Fort McMurray - West Line

Rocky Mountain Power
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Legend

- 500 kV Single Circuit Line
- 345 kV Single Circuit Line
- 500 kV Double Circuit Line
- 345 kV Double Circuit Line
- DC Circuit (various voltage)
- Termination Substations
- Intermediate Substations

(1) Map does not reflect 230 or 240 kV lines that are included in the Foundational Transmission Project List
 (2) Internal reinforcements projects not shown for clarity.
 All lines shown are for illustrative purposes only and may not reflect final line routing.

- CAISO**
- CAISO02 Sunrise
- CAISO03 Blythe-Devers
- CAISO04 Tehachapi Upgrade
- SSPG**
- SSPG02 SWIP South
- SSPG05 TCP Harry Allen - Northwest
- SSPG06 TCP Northwest - Amargosa
- SWAT**
- SWAT01 PV-NG02
- SWAT06 Pinal Central -- Tortoise
- SWAT07 Southeast Valley (SEV)
- SWAT08 PV - Morgan
- CCPG**
- CCPG02 Pawnee -- Smoky Hill
- CCPG03 Waterford-- Midway
- CCPG04 San Luis Valley

