

BEFORE THE PUBLIC SERVICE COMMISSION OF WYOMING

IN THE MATTER OF THE APPLICATION) DOCKET NO. 20000-545-EA-18
OF ROCKY MOUNTAIN POWER FOR)
MODIFICATION OF AVOIDED COST) RECORD NO. 15133
METHODOLOGY AND REDUCED)
CONTRACT TERM OF PURPA POWER)
PURCHASE AGREEMENTS WITH)
QUALIFYING FACILITIES)

PRE-FILED DIRECT TESTIMONY OF

Belinda J. Kolb, Ph.D.

On Behalf of the Wyoming Office of Consumer Advocate

Testimony Filed: April 19, 2019
Hearings Begin: July 9, 2019

1 **Q. PLEASE STATE YOUR NAME, ADDRESS, AND OCCUPATION.**

2 A. My name is Belinda J. Kolb. My business address is 2515 Warren Avenue, Suite 304,
3 Cheyenne, WY, 82002. I am a Senior Rate Analyst in the Wyoming Office of Consumer
4 Advocate (OCA). The OCA is an independent consumer advocacy agency within the
5 Wyoming Public Service Commission (PSC) created by an act of the state legislature in
6 the 2003 general session.

7 **Q. WHAT IS THE FUNCTION OF THE OCA?**

8 A. Pursuant to W.S. § 37-2-401,

9 *The office of consumer advocate shall represent the interests of Wyoming*
10 *citizens and all classes of utility customers in matters involving public*
11 *utilities. In the exercise of its powers, the office of the consumer advocate*
12 *shall consider all relevant factors, including, but not limited to, the*
13 *provision of safe, efficient, and reliable utility services at just and*
14 *reasonable prices.*

15
16 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**
17 **PROFESSIONAL EXPERIENCE.**

18 A. My undergraduate degree is a Bachelor of Science in civil engineering with a concentration
19 in structural engineering. I was employed in the oil and gas industry during my
20 undergraduate studies. Upon graduation, I accepted a one-year visiting instructor position
21 to teach undergraduate engineering sciences and mathematics at Northwest College in
22 Powell, Wyoming. I spent the next several years in both business and academia as an
23 engineer, financial analyst for a bond insurance company, and as a community college
24 instructor. In 1994, I enrolled in the Master of Science degree in business administration
25 (MBA) from the University of Wyoming. I continued to teach part-time during my
26 graduate studies. I graduated in 1998 with an MBA and in 2000 began a full-time career
27 teaching business, finance, and mathematics at Northwest College and from 2005 to 2009
28 at Laramie County Community College in Cheyenne, WY. In 2005, I also began a course

1 of study to earn a doctoral degree in adult education at the University of Wyoming. I
2 completed my Ph.D. in May 2010. In June 2011, I joined the Office of Consumer Advocate
3 as a Rate Analyst utilizing my diverse interests, career experiences, and education.

4 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE AND**
5 **EDUCATION AS A UTILITY RATE ANALYST.**

6 A. Since June 2011 I have consistently availed myself of regulatory training and been tasked
7 with challenging regulatory assignments that have advanced my skills as a utility rate
8 analyst. In August 2011, I attended the 53rd Annual Regulatory Studies Program conducted
9 by the Institute of Public Utilities at Michigan State University. In October 2011, I joined
10 the Northern Tier Transmission Group (NTTG) Cost Allocation Committee and have
11 participated in numerous meetings with regard to the FERC Order 1000. I continue to serve
12 on the Cost Allocation Committee at the present time.

13 I periodically attend the National Association of Regulatory Utility Commissioners
14 (NARUC) conferences and have attended several meetings of the NARUC Accounting and
15 Finance Staff Sub-Committee in the past eight years. I joined the NASUCA Gas
16 Committee in early 2012 and regularly participate in monthly webinars. In early 2013, I
17 was promoted to the Senior Rate Analyst position in the OCA and I attended the Advanced
18 Regulatory Program at Michigan State's Institute of Public Utilities in October 2013. I
19 consistently participate in technical, operational, and business updates as they become
20 available to the Commission and/or the OCA. I seek to remain current with state and
21 national events, FERC rulings, and other developments that affect my work as a utility
22 analyst for the OCA. At the end of 2014, I was appointed to serve as a Consumer Advocate
23 representative to the Public Interest Advisory Committee (PIAC) of the Gas Technology
24 Institute (GTI). The PIAC meets twice per year to help the GTI Board focus its R&D efforts
25 to maximize gas consumer benefits. Finally, I continue to develop relationships with my
26 regulatory peers in other jurisdictions and with utility regulatory staff, which I believe is
27 vital to being effective in my role at the OCA.

28 **Q. PLEASE DESCRIBE YOUR EXPERIENCE AS A WITNESS FILING DIRECT**
29 **TESTIMONY AND TESTIFYING BEFORE THIS COMMISSION.**

1 A. I have had the opportunity to pre-file direct testimony and/or testify before the Wyoming
2 Commission in several Dockets since June 2011. Appendix A provides a list of the Dockets
3 in which I have filed testimony as an OCA witness. I have also substantially participated
4 in settlement negotiations with regard to several Dockets since 2011.

5 **Q. ON WHOSE BEHALF DO YOU APPEAR HERE TODAY?**

6 A. I appear here today on behalf of the OCA, who represents the interests of Wyoming
7 citizens and all classes of utility customers in matters involving public utilities. As
8 previously stated, the OCA is an independent party in this proceeding, separate and apart
9 from the Commission or its advisory staff.

10 **Q. AS A MEMBER OF THE OCA, DO YOU ADVOCATE THE INTERESTS OF**
11 **CERTAIN GROUPS OF CONSUMERS OVER OTHERS?**

12 A. No. As a member of the OCA, it is my statutory obligation to advocate the best interest
13 of all citizens in the state. Specifically, W.S. § 37-2-401 states that the OCA “shall
14 represent the interests of Wyoming citizens and all classes of utility customers in matters
15 involving public utilities.” This public interest standard requires the OCA to represent the
16 broadest possible utility consumer constituency, even though some of those consumers
17 may also be represented independently as parties in this case. The OCA is tasked with
18 arriving at a set of recommendations that serve the overall long-term public interest.

19 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

20 A. The purpose of my testimony is to discuss my analysis, concerns, and recommendations
21 relative to Rocky Mountain Power’s (RMP or the Company) request to modify the avoided
22 cost methodology and the contract term length of its Public Utility Regulatory Policies Act
23 (PURPA) Power Purchase Agreements with Qualifying Facilities (QFs).

24 **Q. IN THE COURSE OF YOUR REVIEW OF THIS MATTER, DID YOU USE**
25 **INFORMATION THAT THE COMPANY DEEMED CONFIDENTIAL?**

26 A. Yes. Certain Company responses to data requests were submitted as confidential.

1 **Q. DOES YOUR TESTIMONY CONTAIN INFORMATION THAT THE COMPANY**
2 **HAS DEEMED CONFIDENTIAL?**

3 A. No.

4 **Q. WAS THE USE OF INFORMATION DEEMED CONFIDENTIAL BY THE**
5 **COMPANY NECESSARY IN ORDER FOR YOU TO PERFORM YOUR REVIEW**
6 **AND PRESENT YOUR TESTIMONY?**

7 A. Yes. Certain Company responses to data requests and workpapers were submitted as
8 confidential. I reviewed these and considered this confidential information in my analysis
9 and in forming my recommendations.

10 **Q. ARE YOU SPONSORING ANY EXHIBITS IN THIS PROCEEDING?**

11 A. No.

12 **Q. PLEASE BRIEFLY DESCRIBE THE MATTER UPON WHICH YOU ARE**
13 **PROVIDING ANALYSIS AND RECOMMENDATIONS.**

14 A. This matter involves Rocky Mountain Power's application to change the current 20 year
15 fixed price contract length of Schedule 37 and Schedule 38 new QF's to 7 year fixed price
16 contract length. The Company's application also requests authority to make changes to its
17 Schedule 38 and also adopt its requested modified Schedule 38 Avoided Cost Partial
18 Displacement Differential Revenue Requirement (PDDRR) methodology for Schedule 37
19 as well.

20 **Q. PLEASE DESCRIBE YOUR ANALYTIC PROCESS.**

21 A. First I reviewed the Company's application and the Commission's Orders in recent avoided
22 cost dockets. I then met with Company witnesses in Portland, Oregon for a regulatory field
23 audit, issued data requests to the Company, and reviewed the data requests of WY PSC
24 staff and the other Intervenors to the Wyoming case. The specific focus in my analysis does
25 not imply support nor objection to the issues of any other party to this matter. I believe the
26 efforts of each party to a filing produce a robust analysis and contribute information to the

1 record in support of the Commission's task to make fully informed decisions that best serve
2 rate-paying customers.

3 **Q. WHAT IS THE OVERALL STRUCTURE OF YOUR TESTIMONY?**

4 A. My testimony is organized according to how I approached the review of this application.
5 I discuss the ratepayer, public interest, and overall policy decision required in this matter.
6 Next, my testimony generally addresses the Company's application by providing the
7 historical context of recent filings in this matter and macro environmental factors that have
8 some level of impact on this matter. I then move on to the contract length decrease
9 requested and the avoided cost methodology modifications requested by the Company. My
10 testimony includes information I learned in my discussions with the Company witnesses,
11 its application, and the Company responses to the considerable amount of discovery issued
12 in this case. Finally, my testimony concludes with a summary of my recommendations I
13 arrived at in this matter.

14 **Q. WHAT DO YOU BELIEVE IS THE ESSENCE OF THE PUBLIC INTEREST IN**
15 **THIS MATTER?**

16 A. I believe the ratepayer and the public interest in this matter is multi-faceted. Customers and
17 the greater public interest is best served by adherence to simple, stable, gradual, and non-
18 discriminatory ratemaking.

19 I believe the current set of PURPA QF tariffs in Schedule 37 and 38 have been determined
20 in multiple past proceedings to be appropriate for most economic, public policy, and tax
21 policy environments. However, the Company can be expected to adapt and improve its
22 modeling processes and to the extent the Company can improve the forecast accuracy of
23 its avoided cost methodology this serves both ratepayers and the public interest. Just as in
24 the Company's 2015 PURPA docket, I still contend that in most cases, QF contracts serve
25 to mitigate ratepayer risk by adding generating diversity that balances fuel price risk,
26 environmental compliance risk, and may defer or avoid expensive utility capital
27 investment. The Company's portfolio of non-owned PPAs and PURPA QFs offer both
28 economic and diverse resources to meet load. Customers should be indifferent as to the

1 type of generating resource that serves their load as long as the avoided cost methodology
2 used is as consistent and as accurate as possible.

3 Finally, according to PURPA law, QFs must have a reasonable opportunity to sell the
4 power they generate to the Company at a fair value. Furthermore a “reasonable opportunity
5 to sell”, in my opinion, indirectly depends on a myriad of factors, including the QF being
6 able to obtain investor financing to develop a project in the first place. Successful QF
7 project development is undeniably related to contract length even if contract lengths are
8 trending shorter. The Company’s request introduces a 13-year reduction to contract length
9 that is not exactly a gradual change. The original and continued intent of PURPA is to
10 “level the playing field, reduce foreign energy dependence, and enable renewable power
11 development.” While PURPA does not dictate contract length, I still believe the intent of
12 PURPA is for individual states to order terms such that the possibility of investor financing
13 is feasible, not guaranteed, just feasible.

14 **Q. PLEASE DISCUSS THE POLICY DECISION NATURE OF THIS APPLICATION.**

15 A. Since my involvement in the 2015 PURPA case, I have followed PURPA related activity
16 and published articles about what is happening in many areas of the United States. I have
17 been rather amazed, along with many others, at the rapid year over year declines in prices
18 for renewable resources and to a lesser extent changes in the QF investor/developer model.
19 Policy decisions are being adjudicated in various states with regard to PURPA and
20 complaints by QF developers and other stakeholders are on the rise in many jurisdictions.
21 PURPA provides a wide range of authority for state utility regulators to adopt specific
22 PURPA terms that best serve the customers of a given state while still serving the intent of
23 the Federal Act.

24 It appears to me that the PURPA issues all around the nation, and again in the current
25 Wyoming application, swing between two opposing positions. One position is that
26 investors and/or QF developers and the Utility’s “must buy” obligation under PURPA, pits
27 the QF against ratepayers and may cause ratepayers to subsidize QF projects. The flip side
28 of that position is the view that QFs add diversity to a utility’s resource mix, avoids
29 expensive capital investment by the utility, and may actually hold down customer rates in

1 the long-term. Some mix of both positions are certainly true under various circumstances
2 and times. The difficulty is striking the correct balance between the two positions to
3 achieve ratepayer indifference.

4 The Commission is again faced with making a policy decision that can appropriately
5 protect ratepayers and serve the overall public interest. I believe the Commission will hear
6 many interesting and/or convincing arguments from all parties to this matter, but there may
7 be very few concrete facts. The decision in this case will need to reflect the enhanced and
8 nuanced Company modeling abilities in its determination of avoided costs, the ever-
9 changing environment for QF project finance and development, and the customer
10 indifference standard. There are risks and benefits for all stakeholders, but ratepayers are
11 best served by adopting a balanced solution.

12 **Q. DO YOU BELIEVE THE SIZE OF THE COMPANY'S QF QUEUE IS CAUSE FOR**
13 **ALARM OR HAS CHANGED DRASTICALLY SINCE THE 2015 DOCKET?**

14 A. No. In fact, not all that much has changed with the queue activity since these issues were
15 examined from 2015 through 2017. It is still the case that the Company's queue of QF
16 projects that request pricing is large. From 2010 to the present time there have been 236
17 projects of various size to request pricing or "enter into the queue". However, the
18 Company's response in Attachment RMCRE 2.19 1st Revised reveals that since 2010,
19 approximately only 12-13% of projects in the queue obtained an executed PPA with the
20 Company and of that amount only about 10% of projects in the queue since 2010 have
21 achieved commercial operation. The queue is full of many entrepreneurial QF developers
22 with possible projects but the data shows that the majority of projects do not materialize.

23 To the benefit of customers, the cost of renewables has continued to decline and the
24 Company recalculates its standard avoided cost no less than every two years. I do not
25 consider the size of the queue as cause for alarm or a reason to make unreasonable changes
26 to Wyoming's PURPA contract length, however, I have in the past and I continue to
27 support adaptations that improve the avoided cost methodology.

28

1 **Q. PLEASE BRIEFLY SUMMARIZE AT A HIGH LEVEL THE MAJOR FACTORS**
2 **YOU CONSIDERED IN ARRIVING AT YOUR RECOMMENDATION.**

3 A. Several factors that were important to me in considering this application. First, it was
4 obvious that it would be very difficult, once again, to please all parties or stakeholders in
5 this proceeding. What is best for ratepayers in the context of both short term and long-term
6 horizons is not a simple decision. I believe that many important goals of the original intent
7 of PURPA have materialized, and at the same time, unintended consequences have
8 emerged since 1978 when PURPA originated. However, one fact remains: that PURPA is
9 still current Federal law and each state has a regulatory authority, and an obligation, to
10 adopt certain tariffs and terms that best work for its customers and other stakeholders.

11 Tax policy for renewable generation such as Wind Production Tax Credits and Solar
12 Investment Tax Credits continue to be a substantial factor behind both Utility and QF
13 project planning for renewable resources. In addition, the Federal discount rate continues
14 to impact investment activity in many sectors of the economy. I do believe the former
15 interest rate environment (2008 to 2015), of artificially low interest rates, led to a surplus
16 of investor funds seeking worthy projects (i.e. QFs) to back. However, the Federal Reserve
17 through most of 2016, 2017, and 2018 implemented interest rate increases that slowly has
18 return the fed funds rate to a more “neutral” rate. The gradual interest rate increases came
19 after the protracted low interest rate environment since 2008 and have not created drastic
20 market changes in the capital markets. In its most recent meeting in March 2019, the Fed
21 has signaled that it has largely concluded its systematic quarter point increases through
22 2021. The federal fund rate is now in the range of 2.25% to 2.5% and will likely affect the
23 future choices investors make with their available funds.

24 Just as in the Company’s 2015 PURPA docket, there are many factors at play with any QF
25 project such as:

- 26 1. type, location, and MW size of QFs
- 27 2. actual completion percentage of QFs
- 28 3. contract negotiation process
- 29 4. interconnection agreement process
- 30 5. uncertainty of future fuel price and load growth
- 31 6. Integrated Resource Planning (IRP) and the Company’s preferred portfolio

1 These and other variables impact whether a contracted QF at a calculated avoided cost,
2 meant to hold ratepayers indifferent, will ultimately be favorable or unfavorable to
3 ratepayers. Even though the Company has a “must buy” obligation under PURPA, I still
4 believe the Company naturally possesses a distinct advantage in its interconnection
5 agreement processes and contract negotiation process. The Company is unquestionably
6 responsible for its GRID modeling to determine the indicative pricing and avoided costs.
7 To be clear, the Company does not control the pricing but instead calculates or forecasts
8 an avoided cost based on the forward price curve information available to it and all of its
9 other system inputs to the GRID model.

10 **Q. PLEASE BRIEFLY DEFINE PROVIDE SOME BACKGROUND REGARDING**
11 **AVOIDED COST PRICING IN WYOMING.**

12 A. In Wyoming, the Company’s establishment of avoided cost prices emerged from its 2007
13 general rate case Docket 20000-277-ER-07. A settlement was reached in the 2007 rate
14 case, which included an agreement to convene a Load Growth and Pricing Collaborative.
15 Avoided cost pricing was a related issue in the Collaborative and in its *Collaborative Final*
16 *Report* to the Commission, the Company agreed to file an application to establish a pricing
17 methodology for QFs seeking avoided cost prices. The Company fulfilled this agreement
18 when it filed general rate case Docket Number 20000-342-ER-2009 on February 3, 2009.
19 The settlement agreement in the 2009 rate case included the framework for establishing
20 avoided cost prices for QFs between 10 and 100 MWs and ultimately became a permanent
21 methodology as Schedule 38 tariff in the later Docket Number 20000-388-EA-11. The
22 Commission Order from the Docket Number 20000-388-EA-11 has since provided the
23 regulatory requirements for avoided cost methodology.

24 **Q. WHAT WAS THE COMPANY’S POSITION REGARDING CONTRACT**
25 **LENGTH IN DOCKET NUMBER 20000-388-EA-11?**

26 A. At that time, approximately eight years ago, the Company witness supported contract
27 lengths of up to 20 years, stating that term was also consistent with the contract lengths in
28 its multiple jurisdictions. The Company witness also stated that the 2009 “pilot” avoided
29 cost methodology was working well and recommended making it a permanent

1 methodology. The Company witness also expressed the viewpoint that contract terms in
2 excess of 20 years would introduce additional risk on retail customers and is not necessary
3 for the development of new QF facilities. In other words, the Company recognized at that
4 time 20-year contract length was reasonable and generally understood to be a feasible or
5 sufficient period for a QF to obtain investor financing.

6 **Q. WHAT WAS THE COMPANY'S POSITION REGARDING CONTRACT**
7 **LENGTH IN DOCKET NUMBER 20000-481-EA-15?**

8 A. In its 2015 PURPA application, the Company asserted that by offering 20-year PURPA
9 contracts it was essentially hedging gas prices for 20 years, which was contrary to its actual
10 gas hedging policy of three years. The Company further argued that offering 20 year QF
11 avoided cost contracts are a striking departure from most other power purchase decisions
12 it makes, and the Company believes this is a risk that customers do not want it to take based
13 on the recent stakeholder driven process to establish its current hedging policy.

14 The OCA did not agree that the gas hedging policy was a reasonable proxy, nor did the
15 OCA agree that it was reasonable to reduce contract terms to such an extent (i.e. 3 years),
16 as that would effectively eliminate any possibility of financing.

17 The Commission agreed with the OCA in its decision, keeping the 20-year contract term
18 in place while ordering a collaborative to attempt to find a middle ground outside of
19 litigation. Although the collaborative was unsuccessful in that regard, it allowed each party
20 more opportunity to express their concerns and will, I believe, make this current case a
21 more fully informed discussion.

22 **Q. PLEASE BRIEFLY DISCUSS THE COMPONENTS OF THE COMPANY'S**
23 **ARGUMENTS SUPPORTING ITS REQUEST FOR 7 YEAR CONTRACT**
24 **LENGTH IN ITS CURRENT APPLICATION.**

25 A. The Company's current arguments to support its request for a decreased QF contract length
26 request are no longer tied to its gas hedging policy. The Company points to its integrated
27 resource planning process, competitive solicitation process, QF activity in various states
28 around the country in which deals may be transacting for shorter time frames, and the level

1 of sophistication of the developers and/or their access to investor capital. Some of these
2 arguments are difficult if not impossible for the OCA to verify the underlying data, and
3 they may or may not be particularly relevant to Wyoming. The burden of proof rests with
4 the Company to support these arguments, and I do not believe they have done so in their
5 application up to this point.

6 The Company also asserts that its competitive solicitation or Request for Proposals (RFP)
7 is far better for customers since the process is transparent, involves diverse stakeholders,
8 and is facilitated normally by an independent evaluator. However, it can be observed in
9 non-confidential Data Request Response Attachment WIEC -VK-TR 2.5 and 2.6, which
10 are expanded versions of the 2017 IRP Tables 5.6 and 5.7, that even the competitive
11 solicitation Power Purchase Agreements that the Company enters into with non-QFs appear
12 to be for mostly 20 years. Zero contracts are for seven years and in fact, the shortest contract
13 is for 10 years.

14 **Q. PLEASE BRIEFLY DISCUSS THE COMPONENTS OF THE COMPANY'S**
15 **ARGUMENTS SUPPORTING ITS REQUEST TO MODIFY ITS AVOIDED COST**
16 **METHODOLOGY.**

17 A. The Company argues that Schedule 38 avoided cost methodology needs to be modified to
18 produce the most reasonable forecast of its avoided cost. The requested modification is to
19 allow deferral of cost-effective "like" renewable resources from its IRP preferred portfolio
20 by QFs of the same type. Currently Schedule 38 methodology is for non-wind QF resources
21 to displace gas resources and wind QFs defer wind resources. The Company further asserts
22 that the change is particularly appropriate at this time since its current preferred portfolio
23 (2017 IRP and 2017 IRP Update) includes both wind and solar resources and the 2017
24 Update no longer includes any proxy thermal (gas) resource.

25 For Schedule 37, the Company's argument is that the current method does not account for
26 avoided costs of different resource types and instead is based on a proxy combined cycle
27 gas combustion turbine (CCCT). The Company states that applying the Schedule 38 pricing
28 methodology to generic Wyoming QF resources of each type included in Schedule 37

1 (baseload, fixed solar, tracking solar, wind) better captures the resource characteristics
2 since its IRP preferred portfolio was first developed.

3 **Q. WHAT HAS BEEN AND REMAINS THE OCA'S POSITION REGARDING**
4 **AVOIDED COST METHODOLOGY AND CONTRACT TERMS?**

5 A. The OCA has always held the general position that to the extent the avoided cost
6 calculation is as accurate as possible, the customer indifference standard is met and
7 customer interest is protected. It is also the OCA's position that forecasts of any kind are
8 rarely perfect and the longer a forecast projects into the future the greater the uncertainty
9 exists, which can cut in either direction. The OCA would, of course, welcome the scenario
10 of perfect knowledge and decision making by the Company, but that scenario does not exist
11 in any of the Company's load and resource planning decisions. This level of certainty can't
12 be achieved in its PURPA obligations and negotiations either. The OCA's position on
13 contract length is not tied to an exact number of years, but instead for a term which keeps
14 QF financing possible, in order to adhere to the spirit and letter of PURPA.

15 **Q. WHAT RISK MITIGATION MAY BE POSSIBLE IN ARRIVING AT DECISIONS**
16 **TO CHANGE TO QF AVOIDED COST METHODOLOGY AND CONTRACT**
17 **TERMS?**

18 A. An important risk to mitigate, in the OCA's opinion, is over-reacting. The OCA agrees that
19 the resource planning risk environment keeps evolving in both pace and magnitude for the
20 Company and by extension its customers. It is reasonable to make gradual changes that
21 provide appropriate flexibility and balance risks. It is important however, that appropriate
22 changes remain in place for a long enough period of time to enable the actual consequences,
23 both anticipated and unintended, to be identified, understood, and verified.

24 The current PDDRR methodology has been in place for about 10 years, and it is appropriate
25 at this time to consider refinements and nuanced changes to Schedule 38. It is also
26 appropriate, in the OCA's opinion, to consider reasonable changes to the Schedule 37 tariff
27 at the same time.

1 The PURPA contract length of 20 years has also been in place for approximately 10 years
2 and the OCA believes it is also timely to consider adjustments that strike a balance. The
3 OCA struggles in that it believes factual evidence will be scarce which can identify a
4 contract length that is the absolute correct number of years in all cases. The OCA supports
5 a more gradual, balanced solution that will be satisfactory to keep this issue from
6 resurfacing in another application for at least five years.

7 **Q. WHAT DO YOU THINK HAS CHANGED SINCE THE 2015 DOCKET THAT HAS**
8 **CAUSED THE COMPANY TO RETURN WITH A NEW REQUEST TO MODIFY**
9 **ITS PURPA TERMS IN WYOMING?**

10 A. As previously mentioned, the pace and magnitude of load and resource changes, QF
11 development activity, its strategy to operate to its “least-cost least risk” preferred portfolio
12 strategy prompt the Company’s continual concern and review of this issue. The 2017
13 preferred portfolio has lower cost renewable resources, which of course has the natural
14 consequence of reducing the avoided cost. The 2017 IRP Update includes a reduction in
15 the load forecast over the 2018 through 2027 time period. The Company is also well
16 underway with its Energy Vision 2020 projects, which include 1311 MW of new wind
17 resources, new transmission, and 999 MW of repowered wind resources. The Energy
18 Vision 2020 projects have lengthened the Company’s resource sufficiency window, and
19 currently the Company does not expect to need a new gas generating resource until 2028.

20 Another significant driver for the current changes to Schedule 38 and also Schedule 37 is
21 the 2017 IRP Update in which no thermal resource was identified in the preferred portfolio.
22 This is the first time since the Company began producing IRPs for this to happen. It is a
23 significant change to the mix of resources that can be identified to be deferred or avoided,
24 as that currently there is no thermal resource to defer.

25 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS FOR THE REQUESTED**
26 **MODIFICATIONS TO AVOIDED COST METHODOLOGY.**

27 A. I believe that Mr. MacNeil has made a somewhat complex but credible argument regarding
28 the tariff changes to both Schedule 38 and 37, which in my opinion meet the Company’s

1 burden of proof for this issue. I support these changes as being foundational to producing
2 a more accurate avoided cost and offering greater opportunity for a capable QF to earn
3 increased compensation. The OCA has always held the position that to the extent the
4 avoided cost is as accurate as possible, the customer indifference standard is met. I
5 recommend the Company be granted authority for its requested PDDRR methodology
6 changes to both Schedule 37 and 38.

7 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS FOR THE REQUESTED**
8 **SCHEDULE 38 AND 37 TARIFF CHANGES INTENDED TO CLARIFY THE**
9 **POWER PURCHASE AGREEMENT PROCESS.**

10 A. Mr. Tourangeau at pages 31-34 of his direct testimony discusses more fully the several
11 tariff language additions that are intended to clarify the process by which a QF can
12 eventually achieve an executed PPA with the Company. I believe these clarifications are
13 reasonable and will serve the intended purpose of providing additional transparency to the
14 process for both Schedules. The proposed tariff changes include language that states:

- 15 1. a pro-forma PPA does not mean the negotiation stage has begun
- 16
- 17 2. the Company has the right to update pricing at any time prior to execution of the
- 18 PPA
- 19
- 20 3. QFs have 30 months to achieve commercial online date from the date its PPA is
- 21 executed and existing QFs have 30 months to start of delivery for a subsequent PPA
- 22
- 23 4. QFs must provide project development security within 30 days of its PPA being
- 24 filed with the Commission
- 25

26 **Q. DOES THE COMPANY HAVE LONG TERM CONTRACTS OR POWER**
27 **PURCHASE AGREEMENTS THAT ARE NOT PURPA QFs?**

28 A. Yes. The Company currently has many legacy PPAs and continues to enter into long-term
29 contracts or PPAs that are not with QFs, and most are for 20 years. In fact, the recent Cedar
30 Springs III Wind Project filed with the Wyoming PSC in February 2019 is for 20 years.

31 In its 2017 IRP, Tables 5.6 and 5.7 (pages 78 and 79) list the Non-Owned Wind and Solar
32 resources respectively. They are differentiated as PPA's or QFs. The PPA contracts are

1 presumably entered into through its competitive solicitation process and the Company is
2 not bound to offer a 20-year length. The contract length for each of these resources is not
3 listed in the tables in the IRP document. That information was provided by the Company
4 in its response and non-confidential Data Request Response Attachment WIEC -VK-TR
5 2.5 and 2.6. These two Attachments list all the non-QF wind and solar resource PPAs
6 contract length as 20 years except for two solar PPA's – of which one is for 10 years and
7 one for 16 years. The point is that the Company obtained the resource through its
8 competitive process, perhaps obtained a lower fixed price by offering a longer contract
9 length, and most are for 20 years.

10 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS FOR THE REQUESTED**
11 **REDUCTION TO QF CONTRACT LENGTH.**

12 A. I believe that 7-year contract terms are likely too short to balance the intent and obligations
13 of PURPA, and at the same time agree that 20 year contracts may no longer in the best
14 interest of ratepayers. The Company has provided no definitive proof that a 7-year term is
15 objectively correct, and it is the exact type of drastic change that I believe must be backed
16 up that with evidence to prevent a swinging from one extreme to another over the next
17 several years. I believe that providing QF's with a reasonable contract length that creates
18 the opportunity to finance projects can help defer or avoid expensive utility capital
19 investment and has an opportunity to hold down customer rates in the long-term. However,
20 I also agree with the Company that at this point in time it is reasonable to consider
21 decreasing the QF contract term from 20 years. However, I struggled to find definitive data
22 to prove the correct number of years. Having reviewed the evidence available to me, I
23 believe a range of 10-15 years for contract length is the appropriate balance for Wyoming
24 customers.

25 **Q. WHY DOES YOUR RANGE FOR CONTRACT LENGTH BEGIN AT 10 YEARS?**

26 A. My starting point of 10-year contract length is tied to my understanding of the IRP's focus
27 on the first 10 years of its 20-year planning horizon, the Company's preferred portfolio,
28 and how the resources identified in the IRP preferred portfolio impact the avoided cost
29 methodology. I also believe that any contract length of 10 or more years would have a

1 reasonable probability of obtaining investor financing, but it is difficult to obtain factual
2 evidence of this expectation. Therefore, I recommend the Commission determine a
3 Wyoming PURPA contract length of nothing less than 10 years.

4 **Q. WHY DOES YOUR RANGE FOR CONTRACT LENGTH END AT 15 YEARS?**

5 A. I recommend an upper limit to QF contract length of 15 years to keep Wyoming in
6 approximate alignment with its neighboring states (except Idaho). Reducing the contract
7 length by at least five years is a substantive enough change to be responsive to the
8 Company's request and still supports QF activity, as in evidenced in Utah which has 15
9 year terms. I would also find acceptable a combination of these ideas, such as a 15-year
10 contract term with repricing after 10 years. As I argued in the 2015 case, simply reducing
11 the contract length going forward is not going to correct any legacy avoided cost pricing
12 that now, in hindsight, is seen as unfavorable. By adopting a more gradual change to
13 contract length in this proceeding, the Commission would be adopting a balanced approach
14 to protect customers and uphold the intent of PURPA, which serves the greater public
15 interest.

16 There is a reason the Company contracts with non-QF resources for 20-year PPAs, and
17 there is a relationship between price and contract length. Generally, one would expect a
18 longer contract term would lead to a decrease in the contract fixed price. For example,
19 Idaho Power reported in late March 2019, that it has signed a 20-year PPA with Jackpot
20 Holdings, LLC for solar energy for a record low price of 2.2 cents per kilowatt-hour or
21 approximately \$21.75 per megawatt-hour. The 120 megawatt solar array will be built near
22 Twin Falls, Idaho and is expected to be completed by 2022. ¹

23 Likewise, there really are only two major components to the PURPA QF contract after the
24 interconnection agreement is complete. There is price and there is contract length. The two
25 are related and one typically impacts the other. If a QF contract term is too short, causing
26 most QF project developments to stall, customers may forfeit attractive QF avoided cost

¹ <https://www.energymanagertoday.com/idaho-power-signs-20-year-ppa-for-solar-energy-at-record-low-price-0182131/>

1 resources that offer diversity in type, cost, and may serve to defer expensive utility capital
2 investment in resources.

3 **Q. DO YOU HAVE ANY OTHER RECOMMENDATIONS IN THIS MATTER?**

4 A. As I stated previously, I am recommending balanced gradual changes that should not be
5 eligible for additional modifications for at least five years, so that impacts can be more
6 fully assessed and understood. The Company is here today asking for 7-year contract length
7 when just a couple of years ago the Company was adamant that it needed 3-year contract
8 length to meet the customer indifference obligation. I think it is reasonable to expect that,
9 without this protection and regardless of the outcome of this proceeding, the Company may
10 very well be back in a very short time frame to request further reductions in year contract
11 length.

12 It is my opinion that customers are better served if less time and money is expended arguing
13 over this issue in the future. I recommend a balanced resolution of the matter at this time
14 and recommend that the Company be ordered to not file any new PURPA modification
15 applications for at least five years. I acknowledge that changes will occur over the next five
16 years in both load, resource planning, and fuel prices. However, in the next five years the
17 solar ITC will have reduced from 30% to its permanent level of 10%.

18 **Table 1 – Solar Investment Tax Credits**

Type of Energy	Date Construction Begins	Placed in Service	Investment Tax Credit Amount
Solar	Before 1/1/2020	Before 1/1/2024	30%
	1/1/2020-12/31/2020	Before 1/1/2024	26%
	1/1/2021-12/31/2021	Before 1/1/2024	22%
	Before 1/1/2022	On or after 1/1/2024	10%
	On or after 1/1/2022	Any	10%

19
20 Also at the end of 2020, the wind PTC will no longer be at 100% and by 2019 and the
21 phase out process will have concluded. The diminished tax credits for solar and the phased-
22 out wind tax credits after 2024 and 2019 respectively will present a new planning

1 environment for both the Company and private developers and would be a more
2 appropriate time for further analysis of PURPA contract term modifications.

3 **Table 2 – Wind Production Tax Credits**

Type of Energy	Construction Commencement Year	Reduction in Production Tax Credit	Production Tax Credit
Wind	2016	None	100%
	2017	20%	80%
	2018	40%	60%
	2019	60%	40%
	Future Years	Phased-Out or 0%	

4
5 **Q. PLEASE DISCUSS HOW THE PDDRR METHODOLOGY FORECASTS**
6 **AVOIDED COSTS.**

7 **A.** The PDDRR method includes the fixed costs associated with a proxy resource, which is
8 the next deferrable resource from the IRP. Avoided fixed costs include the capital cost and
9 non-fuel fixed and variable operation and maintenance costs of the proxy resource. The
10 PDDRR method also produces a forecast of the avoided energy cost associated with the
11 incremental generation from a specific QF project by simulating the hourly operation of
12 the Company's system with and without the QF project.

13 **Q. PLEASE FURTHER DISCUSS HOW AVOIDED ENERGY COSTS ARE**
14 **CURRENTLY MODELED BY THE COMPANY.**

15 **A.** The Company uses its GRID (Generation and Regulation Initiative Decision Tools) model
16 to simulate the hourly operation of the Company's utility system plus the planned resources
17 from its preferred portfolio. Then the GRID model is adjusted to account for a proposed
18 QF project. The operating characteristics of the QF project are an input added to GRID and
19 the QF energy is dispatched at zero cost. The capacity of the proxy IRP resource is reduced
20 by an amount equal to the capacity contribution of the QF project. The difference between
21 these two GRID runs is the avoided energy cost.

1 **Q. PLEASE FUTHER DISCUSS HOW AVOIDED CAPACITY COSTS ARE**
2 **CURRENTLY MODELED BY THE COMPANY.**

3 A. The non-fuel variable operation and maintenance costs are converted into an annual cost
4 per kilowatt with adjustments for capacity factors and inflation and is added to the avoided
5 capital cost calculation. Avoided fixed capital costs associated with the proxy resource are
6 expressed in dollars per kilowatt and are also converted into an annual cost per kilowatt.
7 The result of these steps in the methodology are to produce a total avoided fixed cost that
8 increase over time. While the method is complex to discuss, the point is that the fixed costs
9 associated with the next deferrable proxy resource are a substantial part of the method.

10 **Q. PLEASE RESTATE THE COMPANY'S REQUESTED CHANGES TO THE**
11 **AVOIDED COST PDDRR METHODOLOGY.**

12 A. In the current application, the avoided cost modifications are targeted and logical
13 improvements to the calculation. A proposed QF will receive a PDDRR avoided cost
14 calculation based on the deferral of a "like cost effective renewable resource" in its IRP
15 preferred portfolio. This is logical and fair, as it better reflects the impact of the proposed
16 QF on the Company's actual system. The changes requested in the current application are
17 based on the preferred portfolio from the 2107 IRP Update published approximately in
18 April 2018. The 2017 IRP Update preferred portfolio did not include any new thermal
19 resources but did include new wind, solar, and geothermal resources. The current PDDRR
20 methodology is for a non-wind QF resource to displace proxy gas (thermal) resources in
21 the preferred portfolio and wind QF's displace wind resources. Thus, there is no proxy
22 thermal resource for non-wind (e.g. a solar QF) to displace. The Company has requested
23 an update to the PDDRR methodology such that when the preferred portfolio includes
24 renewable resources to meet system load that are the "same type" as a QF project, the
25 forecast of avoided capacity cost are the assumed fixed costs of the next deferrable
26 renewable resource. QF's would also be eligible to defer front office transactions (FOTs)
27 identified in the preferred portfolio. Mr. MacNeil also clarifies on page 8 of his testimony,
28 that "same type" means same or similar operational characteristics on PacifiCorp's system,
29 not necessarily the exact same resource.

1 **Q. WHAT IS YOUR CONCLUSION REGARDING THE AVOIDED COST**
2 **METHODOLOGY CHANGES REQUESTED BY THE COMPANY?**

3 A. These methodology changes are somewhat complicated but it is reasonable to expect that
4 they would produce a more accurate avoided cost. I believe they represent the Company's
5 ongoing effort to bring greater accuracy to its avoided cost forecast and PDDRR
6 methodology. Mr. MacNeil on pages 23-25 of his direct testimony provides explanation of
7 the method change with regard to on-peak and off-peak definitions and the alternative he
8 proposes. By making adjustments to the range of hours in a day for each definition and the
9 number of months in the winter and summer season in the GRID model, the high and low
10 price periods are more accurately categorized.

11 I believe these changes to both Schedule 38 and Schedule 37 have been thoroughly
12 considered by the Company; the modifications are logical and offer balanced opportunities
13 to a QF that can manage delivery of power in the Company's high value hours. I support
14 the modifications and expect them to result in more accurate avoided cost calculations for
15 the long term. This is the appropriate direction to be moving with regard to this issue.

16 **Q. WHAT HAVE YOU CONCLUDED REGARDING THE PURPA TARIFFS AND**
17 **TERMS IN THE COMPANY'S OTHER JURISDICTIONS?**

18 A. It can be informative to consider the range of PURPA issues that parties have identified in
19 each of the Company's jurisdictions. There is a certain similarity in the set of Intervenor
20 and the disparate positions presented complicated by the varying QF tariffs in each
21 jurisdiction. The Company has given some indication to the OCA that it may file a new
22 case in Utah with similar PURPA modifications after the conclusion of its case in
23 Wyoming. As with all similar applications that are filed in the multiple jurisdictions of the
24 Company, each state must consider its unique situation and how to best protect the
25 Company's ratepayers in its own state. The following table summarizes the current PURPA
26 terms used by each state that regulates the Company.

27 **Table 3- PURPA Contract Terms by Jurisdiction**

State	Term (Years)	
	Standard/Schedule 37	Non-Standard/Schedule 38
California	Uses Oregon as a proxy	Uses Oregon as a proxy
Idaho	2 years wind and solar 20 years other resource types	2 years wind and solar 20 years other resource types
Oregon	20 years	20 years
Utah	15 years	15 years
Washington	5 years	5 years
Wyoming	20 years	20 years

1

2 **Q. WHY HAS MONTANA BEEN DISCUSSED IN THIS PROCEEDING SINCE THE**
3 **COMPANY DOES NOT HAVE ANY RETAIL CUSTOMERS IN MONTANA?**

4 **A.** It is my understanding that the Company has partial ownership of two substations,
5 transmission lines, and ten percent ownership share in the Colstrip power plant units 3 and
6 4 in Montana. The Company has no retail customers or tariffs in the state of Montana.
7 Company witness Mark Tourangeau, on page 8 of his direct testimony, has stated that
8 certain Montana QF developers have sought out a potential arbitrage opportunity since
9 Wyoming may have offered the opportunity for a longer contract length and he referenced
10 Montana Docket No. D2016.5.39 Order No. 7500c. Montana PURPA QF terms have been
11 the subject of many regulatory filings and much controversy for many years. There have
12 been sweeping changes resulting from filings by both NorthWestern Energy and QF
13 developers according to the September 2017 publication of the Montana State Legislature.²
14 This publication provides a concise history of PURPA policy in Montana and includes a
15 particular section on the solar QF activity since 2015.

16 On April 2, 2019, the Honorable James A. Manley vacated the Montana Public Service
17 Commission Final Order No's. 7500c and 7500d. Judge Manley stated that the
18 Commission acted in direct contravention to PURPA policy by reducing standard QF rates
19 (3 MW or less) and QF contract terms in an arbitrary manner without substantial evidence
20 or being based on reasoned analysis.³ Montana QF's under 3 MW are restored to a standard

² Qualifying Facilities in Montana: A Snapshot of QF Contracts and Policy

³ Montana 8th Judicial District Court, Cascade County, Cause No. BDV-17-0776, April 2, 2019

1 avoided cost of \$66 per MWh and 25 year contract length through this decision. By
2 extension, larger QF projects in Montana are likely to be negotiated in some type of similar
3 terms. Clearly, Montana has a serious problem with its avoided cost methodology and more
4 PURPA filings, appeals, and changes can be anticipated in the future for Montana.
5 Wyoming is in a much better position, and should build upon and continue to improve its
6 avoided cost methods and PURPA terms without regard to Montana.

7 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS IN THIS PROCEEDING.**

8 A. I believe the Company has adequately made its case for its tariff changes to Schedule 38
9 and how the modifications are also appropriate for Schedule 37. I support these avoided
10 cost methodology modifications under the expectation that they will enable the Company
11 to produce the most reasonable forecast of its avoided cost and believe that is appropriate
12 for both Schedule 38 and 37. Improving the accuracy of the forecast of avoided cost is the
13 obligation of the Company, protects ratepayers, and is fair to QFs.

14 I did not find the Company persuasive in its argument that the 7 years is the appropriate
15 contract length or that successful developer financing is feasible at 7 years. Just as in the
16 2015 case, it is impossible to prove or know the details of the deals that do not and cannot
17 get done. I cannot prove that 7 years is unworkable for every possible QF project. I have
18 greater expectation that there are deals that can work at 10 years and yet more deals that
19 will be feasible at 15 years. I support any fixed price contract length in the range of 10 to
20 15 years. A gradual decrease in the contract length strikes the necessary balance for both
21 ratepayers and provides a reasonable opportunity for QF developers to attract investors and
22 potentially complete projects. The Company's updated avoided cost calculations
23 consistently follow a decreasing trend and simply changing the contract length now will
24 do nothing to reverse higher avoided cost contracts of the past.

25 **Q. DOES THAT CONCLUDE YOUR TESTIMONY IN THIS PROCEEDING?**

26 A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION OF WYOMING

IN THE MATTER OF THE APPLICATION
OF ROCKY MOUNTAIN POWER FOR
MODIFICATION OF AVOIDED COST
METHODOLOGY AND REDUCED
CONTRACT TERM OF PURPA POWER
PURCHASE AGREEMENTS WITH
QUALIFYING FACILITIES

)
)
) DOCKET NO. 20000-545-ET-18
)
) RECORD NO. 15133
)
)

AFFIDAVIT, OATH AND VERIFICATION

Belinda J. Kolb, Ph.D. (Affiant) being of lawful age and being first duly sworn, hereby deposes and says that:

Affiant is a Senior Rate Analyst with the Wyoming Office of Consumer Advocate which is a party intervener in this matter pursuant to its Notice of Intervention filed on November 13, 2018. Affiant prepared and caused to be filed the foregoing testimony. Affiant has, by all necessary action, been duly authorized to file this testimony and make this Oath and Verification. Affiant hereby verifies that, based on Affiant's knowledge, all statements and information contained within the testimony and all of its attached schedules are true and complete and constitute the recommendations of the Affiant in her official capacity as Senior Rate Analyst with the Wyoming Office of Consumer Advocate.

Further Affiant Sayth Not.

Dated this 15th day of April 2019

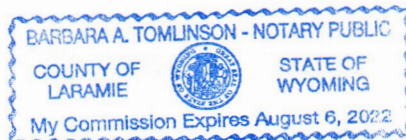
Belinda J. Kolb
Belinda J. Kolb, Ph.D., Senior Rate Analyst
Wyoming Office of Consumer Advocate
2515 Warren Avenue, Suite 304
Cheyenne, WY 82002
(307) 777-5705

STATE OF WYOMING)
COUNTY OF LARAMIE)

The foregoing was acknowledged before me by Belinda J. Kolb, Ph.D. on this 15th day of April 2019. Witness my hand and official seal.

Barbara A. Tomlinson
Notary Public

My Commission Expires: 8/6/22



APPENDIX A

Belinda J. Kolb, Ph.D., Wyoming Office of Consumer Advocate (OCA)

Docket No. 30003-52-GR-11, MGTC, Inc. General Rate Case, Pipeline Capital Projects witness regarding, testimony filed September 9, 2011. Participated in Settlement negotiations. Witness in Public Hearing before the Wyoming PSC October 2011.

Docket No. 300010-113-GR-11, Questar Gas Company General Rate Case, Revenue Requirement witness, testimony filed March 12, 2012. Witness at Public Hearing before the Wyoming PSC May 2012.

Docket No. 20000-432-EA-13, Rocky Mountain Power 2013 ECAM, Net Power Cost and Revenue Adjustment Mechanism witness, testimony filed July 10, 2013. Witness at Public Hearing September 2013.

Docket No. 30022-219-GA-13, SourceGas Distribution LLC, Certificate for Public Convenience and Necessity. Testimony filed on January 24, 2014. Witness at Public Hearing March 2014.

Docket No. 30005-182-GR-13, Cheyenne Light Fuel and Power Gas Rate Case, Revenue Requirement, Cost of Service, and Rate Design witness, testimony filed May 5, 2014. Participated in Settlement negotiations May –July 2014. Witness in Public Hearing July 2014.

Docket No. 20000-446-ER-14, Rocky Mountain Power 2014 General Rate Case, Net Power Costs, Energy Imbalance Market, and Major Transmission Project(s) witness, testimony filed July 25, 2014. Witness in Public Hearing October 13, 2014.

Docket No. 20000-447-EA-14, Rocky Mountain Power 2014 ECAM, Net Power Cost and Revenue Adjustment Mechanism witness, testimony filed August 25, 2014. Witness in Public Hearing on November 4, 2014.

Docket No. 300010-135-GR-14, Questar Gas Company, Revenue Requirement, Cost of Service, and Rate Design witness, testimony filed September 26, 2014. Witness in Public Hearing on December 3, 2014.

Docket No. 20000-464-EA-14, Rocky Mountain Power, Deer Creek Coal Mine Closure and Deferred Accounting Order witness, testimony filed March 11, 2015. Witness in Public Hearing on May 5, 2015.

Docket No. 20000-472-EA-15, Rocky Mountain Power 2015 ECAM, Net Power Cost and Revenue Adjustment Mechanism witness, testimony filed June 30, 2015. Witness in Public Hearing September 8, 2015.

Docket No. 20000-469-ER-15, Rocky Mountain Power 2015 General Rate Case, Net Power cost and Energy Imbalance Market witness, testimony filed on July 28, 2015. Witness in Public Hearing October 26, 2015.

APPENDIX A

Docket No. 20000-481-EA-15, Rocky Mountain Power, Modification of Contract Term with PURPA Power Purchase Agreements with Qualifying Facilities. Testimony Filed on January 4, 2016. Witness in Public Hearing March 30, 2016.

Docket No. 10014-168-CR-16, Powder River Energy Corporation General Rate Case, Rate Design and Cost of Service witness. Testimony Filed on June 3, 2016, Witness in Public Hearing beginning August 31, 2016.

Docket No. 20000-492-EA-16, Rocky Mountain Power 2015 ECAM, Net Power Cost and Revenue Adjustment Mechanism witness, testimony filed July 22, 2016. Witness in Public Hearing beginning October 10, 2016.

Docket No. 20004-117-ER-16, Montana-Dakota Utilities Co., Cost of Service and Rate Design witness. Testimony filed October 13, 2016. Witness in Public Hearing beginning January 18, 2016.

Docket No. 30009-60-GR-16 and 50051-2-PR-16, Wyoming Gas Company, Merger with NG Transmission, Revenue Requirement, Cost of Service, and Rate Design witness. Testimony filed February 28, 2017. Witness in Public Hearing beginning May 09, 2017.

Docket No. 80007-42-WR-17 Vista West Water Company, Revenue Requirement, Cost of Service, and Rate Design witness. Testimony Filed August 14, 2018. Witness in Public Hearing beginning November 8, 2018.

Docket No. 80024-6-WR-18, Nordic Ranches Water, LLC, Revenue Requirement, Cost of Service, and Rate Design witness. Testimony to be filed October 19, 2018 and Witness in Public Hearing beginning April 3, 2019.

Docket No. 30022-313-GA-18, Black Hills Gas Distribution, LLC d/b/a Black Hills Energy for a Certificate of Public Convenience and Necessity to Construct and Operate a High Pressure Gas Transmission Pipeline and Related Facilities in Converse and Natrona, Counties, Wyoming.

Docket No. 20000-545-ET-18, Rocky Mountain Power, Modification of Avoided Cost Methodology and Reduced Contract Term PURPA Power Purchase Agreements with Qualifying Facilities. Testimony Filed April 19, 2019. Witness in Public hearing beginning July 9, 2019.

Docket No. 20000-550-EA-18, Rocky Mountain Power, Accounting Order for Settlement Charges related to its Pension Plans. Testimony Filed date BD. Witness in Public hearing beginning August 7, 2019.

Docket No. 20000-553-EN-19, Rocky Mountain Power, Certificate of Public Convenience and Necessity to Construct New Wind Turbines and Update Collector Lines at the Existing Foote Creek I Wind Energy Facility. Testimony Filed March 22, 2019. Witness in Public hearing beginning April 25, 2019.

CERTIFICATE OF SERVICE

I hereby certify that on April 19, 2019, I served the foregoing Direct Testimony of Belinda Kolb, by delivering copies thereof to the individuals/entities below, by the method(s) indicated:

Jacob A. McDermott
Senior Attorney
Rocky Mountain Power
1407 West North Temple, Suite 320
Salt Lake City, UT 84116
jacob.mcdermott@pacificorp.com
yvonne.hogle@pacificorp.com
e-mail

Stacy Splittstoesser
Wyoming Regulatory Affairs Manager
Rocky Mountain Power
315 West 27th Street
Cheyenne, WY 82001
stacy.splittstoesser@pacificorp.com
e-mail and U.S. Mail

Data Request Response Center PacifiCorp
825 NE Multnomah, Suite 800
Portland, Oregon 97232
datarequest@pacificorp.com
e-mail

Crystal J. McDonough
Callie Capraro
McDonough Law LLC
1635 Foxtrail Dr.
Loveland, CO 80538
Telephone: 970-302-2141
Fax: 877-800-5583
crystal@mcdonoughlawllc.com
callie@mcdonoughlawllc.com
e-mail and U.S. Mail

Renewable Energy Coalition
Attn: John Lowe
PO Box 25576
Portland, OR 97298
Telephone: (503) 717- 5375

iravenesanmarcos@yahoo.com
e-mail

Irion A. Sanger
Sanger Law, P.C.
1117 SE 53rd Avenue
Portland, OR 97215
Telephone: (503) 756-7533
irion@sanger-law.com
marie@sanger-law.com
e-mail and U.S. Mail

Dale W. Cottam
Bailey Stock Harmon Cottam Lopez LLP
80 E. 1st Ave.
Box 850
Afton, WY 83110
Telephone: (307) 459-1120
dale@performance-law.com
ronnie@performance-law.com
e-mail and U.S. Mail

Phillip J. Russell
HATCH, JAMES & DODGE, P.C.
10 West Broadway, Suite 400
Salt Lake City, Utah 84101
prussell@hjdllaw.com
e-mail and U.S. Mail

Michelle Brandt King
Abigail C. Briggerman
Holland & Hart LLP
6380 South Fiddler's Green Circle, Suite 500
Greenwood Village, CO 80111
Telephone: (303) 290-1600
mbking@hollandhart.com
acbriggerman@hollandhart.com
acleee@hollandhart.com
e-mail and U.S. Mail

OFFICE OF CONSUMER ADVOCATE



Christopher Leger, Counsel
Wyoming Bar # 6-3963
Wyoming Office of Consumer Advocate
2515 Warren Avenue, Suite 304
Cheyenne, WY 82002
(307) 777-5709
christopher.leger@wyo.gov