

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 1802

In the Matter of)
)

Investigation into PacifiCorp's Non-Standard)
Avoided Cost Pricing.)
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REPLY TESTIMONY OF

JOHN R. LOWE

ON BEHALF OF THE

RENEWABLE ENERGY COALITION

May 5, 2017

1 **I. INTRODUCTION**

2 **Q Mr. Lowe, please state your name and business address.**

3 **A** My name is John R. Lowe. I am the director of the Renewable Energy Coalition
4 (the "Coalition"). My business address is P.O. Box 25576 Portland, Oregon
5 97298.

6 **Q Please describe your background and experience.**

7 **A** In 1975, I graduated from Oregon State University with a Bachelor of Science
8 degree. I was employed by PacifiCorp for over 30 years, most of which was
9 spent implementing the Public Utility Regulatory Policies Act ("PURPA")
10 regulations throughout the utility's multi-state service territory. My
11 responsibilities included all PURPA contractual matters and supervision of other
12 matters related to both power purchases and interconnections. Since 2009, I have
13 been directing and managing the activities of the Coalition as well as providing
14 consulting services to individual members of the Coalition related to both power
15 purchases and interconnections. Further details are included on Exhibit REC/101.

16 **Q On whose behalf are you appearing in this proceeding?**

17 **A** I am testifying on behalf of the Coalition.

18 **Q Please describe the Coalition and its members.**

19 **A** The Coalition was established in 2009, and is comprised of over 30 members who
20 own and operate over 50 mostly small renewable energy generation qualifying
21 facilities ("QFs") in Oregon, Idaho, Montana, Washington, Utah, and Wyoming.
22 Several types of entities are members of the Coalition, including irrigation
23 districts, waste management districts, water districts, electric cooperatives,

1 corporations, and individuals. Most are small hydroelectric projects, but the
2 membership includes biomass, geothermal, solid waste, and solar projects.

3 **Q Please summarize your testimony.**

4 **A** The Coalition recommends that the Commission allow all renewable QFs the
5 option to sell renewable power at fair, just and reasonable renewable generation
6 based avoided cost prices or rates to PacifiCorp, including those above the size
7 threshold for standard rates (currently 10 megawatts (“MW”) for all resources,
8 except solar, which is 3 MW).

9 **Q What do you mean by fair, just and reasonable rates?**

10 **A** The avoided cost based price offered to all renewable QFs should be fair to both
11 ratepayers and the renewable generation facility. My standard for determining a
12 “fair, just and reasonable” price should be a non-standard negotiated price for
13 large QFs that is roughly comparable to the published price offered for QFs below
14 the applicable size threshold for standard contracts and published prices.

15 For example, standard renewable rates are based on a proxy wind plant
16 after the date upon which PacifiCorp is planning on acquiring its major renewable
17 resource, and market prices in the years prior to the date of resource deficiency.
18 Compared to standard prices for wind, those prices are slightly higher for solar
19 resources and modestly higher for baseload resources because those forms of
20 generation provide higher capacity values. PacifiCorp’s computer model
21 approach could be used to set a more “accurate” price based on the project’s
22 unique characteristics (which is generally likely to be lower given that PacifiCorp
23 controls the model). However, the project specific characteristics should not

1 result in radically different results. If they do, then the Commission should reject
2 the computer model approach and return to using its longstanding method of
3 basing large QFs avoided cost rates based on specific Federal Energy Regulatory
4 Commission (“FERC”) recognized adjustments to the proxy resource.

5 **Q Can you provide examples?**

6 **A** Yes. A 3 MW fixed solar QF would be paid a published renewable rate of 8.55
7 cents per kilowatt hour (“¢/kWh”) in 2028 (the first year of PacifiCorp’s resource
8 need under the current acknowledged 2015 integrated resource plan (“IRP”)), and
9 a 10 MW biomass QF would be paid 10.26 ¢/kWh in 2028. If PacifiCorp’s
10 computer model approach results in prices that are radically lower for a 5 MW
11 solar QF or 15 MW biomass QF, for example, it would be patently unfair and
12 demonstrates that the Commission should reject the results and the process that
13 created such results. The same is true for other types of larger QFs. In the end,
14 the approach that the Commission takes must be fair, just, reasonable and non-
15 discriminatory to all QFs, and a comparison to the rates for smaller QFs is a good
16 test to determine whether the computer model approach can produce reasonable
17 results.

18 **Q Should the Commission allow QFs to challenge the computer model on an as**
19 **applied basis?**

20 **A** Yes. If the Commission approves the use of PacifiCorp’s computer model to
21 calculate avoided cost rates, then the Commission should explicitly allow a QF to
22 challenge its implementation as producing unreasonable results. Kevin Higgins,
23 on behalf of the Coalition and the Community Renewable Energy Association,
24 has sponsored testimony to make the computer model approach more reasonable.

1 However, we cannot predict all the ways in which this computer model could be
2 used to calculate rates. For example, if the computer model results in renewable
3 prices at 1 ¢/kWh for a particular QF, then those results are patently unreasonable.
4 The QF should be able to bring a complaint before the Commission to request that
5 a different method be used to calculate its rates, even if the computer model
6 produces generally reasonable results in most other circumstances.

7 **II. RENEWABLE RESOURCE RATE**

8 **Q What are avoided cost rates?**

9 **A**PURPA requires electric companies pay the “incremental cost” for energy
10 produced by QFs. FERC regulations define the incremental costs as the cost to an
11 electric utility, which but for the purchase from the QF, such utility would
12 generate or purchase from another source. FERC relies upon the states to
13 implement PURPA, and to determine avoided cost rates.

14 **Q Why did the Commission distinguish between renewable and non-renewable**
15 **avoided cost rates?**

16 **A**The separate renewable avoided cost rate reflects the fact that renewable QFs help
17 utilities meet more than just their load requirements, and also help utilities comply
18 with their state renewable portfolio standard (“RPS”) requirement. Because
19 Oregon requires utilities to generate a certain amount of qualifying renewable
20 power, it is reasonable to differentiate regardless of size between the cost of the
21 utility’s next planned renewable and non-renewable resources. More specifically,
22 the Commission explained that, when renewable QFs are willing to sell their
23 output and cede their renewable energy credits (“RECs”) to the utility, those QFs
24 allow the utility to avoid building or buying renewable generation to meet their

1 energy and capacity needs as well as their RPS requirement.¹ The renewable
2 avoided cost rate has been higher than the non-renewable avoided cost rate
3 because renewable generation has historically been more expensive than the non-
4 renewable generation and the prices include an imputed value for RECs whose
5 ownership is transferred to the purchasing utility when applying such renewable
6 rates.

7 **Q Did PacifiCorp support the concept of a renewable avoided cost rate?**

8 **A** Yes. In UM 1396, the Commission investigated the concept of a separate
9 renewable resource avoided cost rate and almost every single party, including
10 PacifiCorp, supported the idea. Several parties disagreed about how a renewable
11 avoided cost should be determined, and ultimately the Commission adopted a rate
12 based on the next deferrable renewable resource in the utility's IRP.

13 **Q Why did the Commission decide to allow renewable QFs to choose between a**
14 **renewable and non-renewable avoided cost rates?**

15 **A** The Commission allowed renewable QFs to choose which avoided cost stream
16 might better reflect the value of its resource. Allowing QFs this option was
17 important to account for different types of renewable generation and QF business
18 models, including the fact that some QFs may have already sold their renewable
19 energy certificates, or need to keep them to obtain financing. Having two
20 different choices is all the more important as the utilities' resource plans change.
21 For example, when the utilities are planning on acquiring non-renewable
22 resources, but not renewable resources, then the QF should be able to keep its
23 renewable energy certificates and sell only its power to help the utility avoid its

¹ UM 1396, Order No. 11-505 at 9 (Dec. 13, 2011).

1 non-renewable resource need. The opposite is also true. Without this optionality,
2 then certain QFs may be unable to defer the utility's actual next resource when the
3 utilities' renewable and non-renewable resource acquisition dates do not perfectly
4 match. In adopting renewable rates, the Commission noted that allowing QFs to
5 choose between the separate avoided cost rate streams was consistent with a
6 FERC ruling declaring that states could determine avoided costs associated with
7 utility purchases of energy from generators with certain characteristics.

8 **Q When did the Commission decide to eliminate the option to choose between a**
9 **renewable and non-renewable avoided cost rate for larger (non-standard)**
10 **renewable QFs?**

11 **A** It never explicitly considered the issue. PacifiCorp maintains that during Phase II
12 of UM 1610, when it offered its Partial Displacement Differential Revenue
13 Requirement ("PDDRR") method as the most appropriate way to calculate the
14 starting point for non-standard avoided cost negotiations, that it was sufficiently
15 clear that the PDDRR methodology would develop a single price stream rather
16 than two separate prices streams.

17 **Q Why didn't parties object to PacifiCorp's filing eliminating non-standard**
18 **renewable price stream?**

19 **A** The parties, including Staff, were unaware that the PDDRR would eliminate
20 renewable prices for larger QFs. The issue of eliminating the non-standard
21 renewable avoided cost stream was not litigated in UM 1610 when the
22 Commission considered using the PDDRR method. The Coalition's view is that
23 PacifiCorp never acknowledged that it was removing the renewable price stream
24 for large QFs. Thus, the topic was never addressed by the parties. PacifiCorp
25 argued that the Commission implicitly rescinded the Commission requirement to

1 offer a renewable avoided cost price stream for non-standard contracts when it
2 approved the PDDRR methodology for calculating non-standard avoided. The
3 Commission may have agreed with this argument, but has made it clear that
4 allowing PacifiCorp's PDDRR to eliminate the renewable price stream was only
5 an interim solution and did not provide PacifiCorp any authority to eliminate
6 renewable pricing for large QFs in this proceeding.

7 **Q What is PacifiCorp proposing now?**

8 **A** PacifiCorp would like to limit offering a renewable avoided cost rate to large QFs
9 unless: 1) its most recent IRP identifies a need for a renewable resource of the
10 same type; and 2) the identified need exists during the term of the QFs PPA.

11 **Q Is PacifiCorp required to use its most recent acknowledged IRP or would an**
12 **unacknowledged IRP affect the avoided cost rate as well?**

13 **A** This is not clear. The Commission order authorizing the PDDRR method simply
14 says IRP and does not clarify whether unacknowledged IRPs or IRP updates
15 could be relied upon. PacifiCorp's opening testimony in this docket, however,
16 indicates that since adopting the PDDRR methodology, the Company's non-
17 standard QF pricing includes deferral of thermal resources from the preferred
18 methodology in an unacknowledged IRP Update or new IRP filing.

19 **Q Why is the PDDRR portrayed as a more accurate method?**

20 **A** PacifiCorp's complex PDDRR methodology is based upon its production cost
21 model ("GRID") and runs the GRID model two separate times. First, it uses the
22 preferred portfolio from PacifiCorp's last IRP and then adds operating
23 characteristics with an adjustment proportionate to the QF's capacity to the
24 company's next deferrable resource. The Commission was persuaded that the

1 PDDRR method would more accurately value energy and capacity for large QFs
2 by taking into account a QF's location, delivery pattern, and capacity
3 contribution.

4 Ironically, PacifiCorp's proposal uses the PDDRR method to ensure that
5 renewable QFs are only compensated for the renewable aspects of their power
6 when they happen to generate power from the same type of renewable resource as
7 the proxy from PacifiCorp's IRP. The practical impact is that a renewable QF can
8 only sell renewable power to PacifiCorp if the Company is "planning" on
9 acquiring that specific type of resource. PacifiCorp most likely will not be
10 planning on acquiring biomass, hydro, or geothermal within its 15 year period,
11 which means that certain types of renewable resources will not be able to sell
12 renewable power to PacifiCorp. Similarly, PacifiCorp is currently not planning
13 on acquiring solar until 2028 or 2029, which means that a solar QF would not be
14 assumed to defer a renewable resource for over a decade, even though a solar QF
15 can defer PacifiCorp's planned wind acquisitions in the next few years.

16 This is different from PacifiCorp's standard rates in which all renewable
17 resources are eligible to sell renewable power to PacifiCorp, and how Portland
18 General Electric Company's renewable rates for both large and small QFs work.
19 PacifiCorp's approach flips the meaning of accurate on its head. PacifiCorp's
20 proposal contradicts the Commission's determination that renewable generation
21 (no matter what kind of fuel source is used) allows utilities to defer or delay a new
22 renewable resource acquisition. In addition, since delivery and sale alternatives
23 are generally more favorable for larger projects, inconsistent treatment in the form

1 of limiting certain types of technologies, as PacifiCorp has suggested, places
2 PacifiCorp in a more favorable position in the utilities' traditional efforts to
3 minimize PURPA related purchase obligations.

4 **Q Did the Coalition support PacifiCorp's use of its PDDRR method?**

5 **A** No. The Coalition opposed the method because it would be too complex, too
6 expensive to access for independent review, not transparent and would be used to
7 harm large QFs. If the PDDRR method cannot be made to work fairly for all
8 large renewable QFs, then the Coalition believes that the Commission should
9 return to its previous approach of using the Commission approved rates as the
10 starting point for negotiations, as PGE currently does.

11 **Q How do standard non-renewable prices differ from renewable prices during**
12 **a utility's deficiency period?**

13 **A** PacifiCorp's current deficiency period for both non-renewable and renewable
14 resources begins in 2028. PacifiCorp's current published standard non-renewable
15 avoided cost prices for 2028 range between 3 and 6 ¢/kWh whereas its standard
16 renewable avoided cost prices for the same year range between 6 and 10 ¢/kWh.
17 By way of comparison, PGE's deficiency period in non-renewable resources
18 begins in 2021 and its renewable deficiency begins in 2020. PGE's published
19 standard non-renewable avoided cost prices for 2021 range within 6 ¢/kWh
20 whereas standard renewable avoided cost prices for the same year range from 11
21 to 12 ¢/kWh.

22 **Q How would PacifiCorp's proposal affect existing large QFs, above the**
23 **Commission's 10 MW standard contract threshold?**

24 **A** Currently there are only a few large renewable QFs in Oregon that rely upon the
25 large renewable rate. For these large renewable QFs, the difference between the

1 renewable and non-renewable rate means the difference between being able to be
2 built or remain operational. Eliminating the large renewable rate would mean that
3 currently operating large biomass QFs, which have been in business for decades
4 and could remain in business many more decades, would be forced out of
5 business, simply because their renewable power does not match the preferred
6 renewable resource from PacifiCorp's IRP.

7 The renewable avoided cost rate reflects the value of receiving green
8 power, which allow utilities to defer or delay a new renewable resource
9 acquisition. PacifiCorp receives that value, by way of RECs as well as the energy
10 and capacity, no matter what kind of fuel source is used to generate the green
11 power. It is particularly inappropriate that renewable resources with better
12 capacity values like biomass, hydro and solar could be ineligible to sell their
13 renewable power to PacifiCorp. Essentially, it is not fair for PacifiCorp to ignore
14 the value provided by other kinds of renewable generation.

15 **Q How would PacifiCorp's proposal affect new large QFs development?**

16 **A** Just as it would force existing large QFs out of business, PacifiCorp's PDDRR
17 method will effectively prohibit new large QF development by ensuring that new
18 projects are not cost effective, unless they happen to mirror PacifiCorp's preferred
19 portfolio.

20 **Q How would this affect existing solar QFs?**

21 **A** In UM 1734, the Commission lowered the standard size threshold for solar
22 projects from 10 to 3 MWs. Prior to the change, solar QFs 10 MW and below
23 were eligible for standard rates (including renewable rates), and did not need to

1 negotiate their prices. Despite the large number of solar projects in PacifiCorp's
2 queue, historic trends tell us that many of these projects will not be built.
3 However, some will. And when these 3 to 10 MW solar QFs look to renew their
4 contracts, they will not be eligible for the renewable rate. Thus, these projects
5 will face the same dilemma that other existing large QFs are currently facing, and
6 may be forced to shut down operations.

7 **Q How would this affect new solar QFs development?**

8 **A** By not allowing new solar projects above 3 MW access to a renewable avoided
9 cost stream, PacifiCorp may effectively shut down all new medium to large-scale
10 solar development in Oregon.

11 **Q What would happen if the Commission's size threshold for standard**
12 **contracts changes again?**

13 **A** The dilemma for QFs in Oregon is exacerbated by the fact that the Commission
14 could reduce the size threshold for standard contracts again. PGE, PacifiCorp,
15 and Idaho Power have all requested the Commission lower size thresholds
16 numerous times in the past.² If the utilities are successful in lowering the size
17 threshold for solar projects from 3 MW to 100 kW, as previously requested, then
18 even more projects would be in jeopardy. The Commission could also lower the
19 size threshold for other resource types from 10 MW to 3 MW, as the utilities have
20 also attempted to do in the past. This is particularly problematic for existing
21 Oregon projects, as there are around 25 QFs in Oregon above 3 MWs, including
22 wind, solar, biomass, geothermal, combined heat and power, and methane. The

² See Docket Nos. UM 1129, UM 1610, UM 1725, and UM 1734.

1 vast majority of these projects that are currently eligible for renewable rates,
2 would not be eligible under PacifiCorp's proposal in this case.

3 **III. POTENTIAL QFs IN PACIFICORP'S QUEUE**

4 **Q What is PacifiCorp proposing with respect to potential QFs in its queue?**

5 **A** PacifiCorp would like to use all of the renewable projects in its queue (the
6 "potential QF queue") when modeling its capacity need. PacifiCorp suggests that
7 when the potential QF queue fully displaces the IRP renewable resources of a
8 given type, pricing would revert to the current non-renewable avoided cost pricing
9 methodology, where the QF partially displaces the next thermal resource
10 (adjusted for the capacity contribution of the QF). PacifiCorp argues that this is
11 one of the ways in which the PDDRR method more accurately values energy and
12 capacity offered by QFs.

13 **Q What kind of impact would this change have on PacifiCorp's avoided cost**
14 **prices?**

15 **A** This will lower PacifiCorp's avoided cost prices below the incremental costs by
16 artificially inflating the amount of capacity available to PacifiCorp. PacifiCorp's
17 proposal assumes that all of the potential QFs in the queue will come online,
18 which is not realistic, and will drastically decrease the amount of capacity
19 PacifiCorp appears to need. By artificially decreasing its capacity needs,
20 PacifiCorp lowers the value of QF capacity.

21 **Q Is there any support for PacifiCorp's proposal to rely on the potential QF**
22 **queue?**

23 **A** No. PacifiCorp's assumption that all of the potential projects will actually
24 provide a capacity benefit is not supported by historic trends because the vast
25 majority of QF projects in PacifiCorp's queue are not developed and never

1 become operational. It can be argued that even using all of the projects with an
2 executed power purchase agreement (“PPA”) with PacifiCorp would artificially
3 inflate capacity estimates, because many projects with PPAs are never
4 constructed.

5 **Q What is the Coalition proposing?**

6 **A** There are a number of options. The most accurate reflection of the number of
7 QFs coming online would use the historic percentage of QFs that are constructed
8 compared to the entire queue. Alternatively, the completion of certain milestones,
9 which show that a project is more likely to be constructed, is another option. For
10 example, completing most of the interconnection study process is a good indicator
11 that a project will come on line because the interconnection and transmission
12 study process identifies potentially significant additional costs that are unknown
13 when PPAs are executed that can make a project uneconomic to develop. Other
14 options include using the amount of projects with executed PPAs, but then allow
15 PacifiCorp to update the indicative pricing provided to a QF at set times. This
16 will allow for more accurate avoided cost rates, including updates, but provide the
17 QFs with some certainty regarding when the indicative prices would change.

18 **IV. EXISTING QFs PROVIDE UNIQUE BENEFITS**

19 **Q What are existing QFs?**

20 **A** Existing QFs are those that have already been constructed and are selling power
21 to the utilities.

22

23

1 **Q What are some of the unique problems facing existing QFs.**

2 **A** Existing QFs, similar to proposed QFs, do not have access to other markets to sell
3 their power. When their PPA expires, existing QFs need to enter into a new
4 contract with their utility. Unlike proposed QFs, existing QFs do not have the
5 ability to time their decision to construct their facility when power prices are
6 favorable, and have to enter into new contracts based on current market
7 conditions. This provides a unique problem because they cannot time their
8 contract renewals to times of good avoided cost prices the way a new QF can
9 because it has more flexibility to wait until the most opportune time to enter into a
10 contract. Similar to proposed projects, existing QFs often need long-term
11 contracts to make significant investments in project and interconnection facilities
12 to keep operating.

13 **Q Does Oregon have existing QFs?**

14 **A** Yes. There are a number of existing QFs that will need to renew their contracts.
15 There are around fifty operating QFs selling power to PacifiCorp in Oregon,
16 including two biomass QFs above 10 MW. In addition, as mentioned above, there
17 are solar QFs above 3 MWs that entered into contracts when they were eligible
18 for standard rates up to 10 MWs, but these solar QFs will now need to renegotiate
19 follow-on contracts based on the PDDRR model. Biomass One is such large
20 existing project that will be required to negotiate a non-standard contract with
21 PacifiCorp. Biomass One hopes to be able to sell power under a renewable rate,
22 and would likely need to shut its operations if it was forced to only sell power
23 under rates similar to the current standard non-renewable rates.

1 **Q Please describe Biomass One.**

2 **A** Biomass One is a 30 MW wood debris fired power plant in Jackson County,
3 Oregon. Because the U.S. Forest Service, BLM, Oregon Department of Forestry,
4 and private timber managers have failed to establish an economically feasible
5 alternative to burning forest operations slash, Biomass One offers a unique and
6 valuable alternative. Without Biomass One, tons of wood debris would inevitably
7 lay in piles, find its way into local landfills, or be burned in open fields.

8 Currently, Biomass One recovers 70% of the woody debris generated in Jackson
9 County, Oregon.

10 **Q How does Biomass One contribute to the local community?**

11 **A** Since 1980, Biomass One has invested over \$50 million in its wood debris fired
12 power plant, making it one of the most efficient and cleanest wood burning plants
13 in the nation. Biomass One collects or purchases over 400,000 tons of waste
14 wood including from its public wood debris collections, drop-off recycling
15 centers, and a majority from forests where such waste would otherwise be burned.
16 In addition to generating electricity, the investment Biomass One has made in its
17 local community creates over 200 direct and indirect local jobs, and makes a
18 significant contribution to local air quality.

19 **Q Are there environmental benefits from burning timber waste at a biomass**
20 **facility?**

21 **A** Yes. Biomass one boasts a 500 to 1 reduction in particulate emissions when
22 comparing burning in its facility to open burn piles.

23 **Q Are there carbon sequestration benefits from cutting timber?**

24 **A** Yes. It is a well-known fact that trees store carbon, but the rate of carbon

1 sequestration is generally higher in young trees. Younger, and faster growing
2 trees tend to hold more carbon than old trees. Wood products, just like trees, also
3 store carbon. So, when trees are harvested and used to make wood products, the
4 carbon remains stored in the wood for the life of that product. Biomass One
5 supports the timber industry and helps it to be more environmentally friendly.
6 These benefits to the Oregon economy will be lost if Biomass One is not able to
7 renew its contract at fair, just and reasonable avoided cost rates.

8 **Q Are there other existing QFs?**

9 **A** Yes. Many existing QFs in Oregon are hydroelectric projects, but there are also
10 geothermal, wind, methane, biomass, and recently solar QF projects in Oregon
11 too. When solar QFs renew their contracts, they will be forced to have their rates
12 set under the PDDRR method. Other existing projects will also be covered, if the
13 Commission drops the size threshold in the future. Under PacifiCorp's proposal,
14 the unique renewable attributes from these QFs would not be accounted for and
15 they will not be able to sell renewable power to PacifiCorp. If that happened in
16 the current environment of higher renewable prices and a very extended non-
17 renewable resource sufficiency period, then they will also need to shut down.

18 **VI. CONSISTENT PURPA POLICIES**

19 **Q Do PacifiCorp and PGE business practices currently reflect the same**
20 **PURPA policy?**

21 **A** No. PGE is still using the Commission's old methodology for calculating non-
22 standard avoided cost pricing (start with standard rate and make discrete
23 adjustments) while PacifiCorp is using the PDDRR methodology (no large
24 renewable rate, unless the same type of resource as the preferred portfolio from its

1 last IRP).

2 **Q What happens when Oregon's regulated utilities have divergent PURPA**
3 **policies?**

4 **A** The Coalition has historically supported modest differences in the policies
5 between the three major Oregon investor owned utilities, but the Commission
6 should not allow Oregon's utilities to have significantly different PURPA
7 practices. This is especially true, given that PacifiCorp's practice appears
8 inconsistent with the Commission's own PURPA policies. PacifiCorp has offered
9 no justification for removing the large renewable avoided cost price stream and
10 doing so would encourage all QF development to shift to PGE, which would
11 effectively allow PacifiCorp to opt-out of PURPA.

12 **Q What caused this PURPA policy problem?**

13 **A** This is a problem entirely of PacifiCorp's own making, rising out of its proposal
14 to use an overly complex modeling methodology. The Commission authorized
15 PacifiCorp to use the PDDRR model over objections that the model was too
16 complex. As such, PacifiCorp should not be permitted to say that the model is too
17 cumbersome to determine a separate large renewable avoided cost price stream.

18 **Q What is the easiest way to resolve this PURPA problem?**

19 **A** PacifiCorp created this problem, and it should be required to fix it. If PacifiCorp
20 cannot resolve the problem by using the PDDRR model to provide both
21 renewable and non-renewable non-standard avoided costs price streams that
22 reflect the renewable attributes of all types renewable generations, then
23 PacifiCorp should not be allowed to use the PDDRR model. PacifiCorp should
24 simply go back to using the Commission's old method, like PGE.

1 **VI. OREGON QF COSTS AND BENEFITS SHOULD NOT BE ALLOCATED**
2 **ONLY TO OREGON**

3 **Q Do you agree with PacifiCorp's suggestion that Oregon QFs costs and**
4 **benefits only be allocated to Oregon?**

5 **A** No. My understanding is that inter-state cost allocation issues are outside the
6 scope of this proceeding, and I am not an expert on those issues. However,
7 Oregon already has a wide variety of renewable and non-renewable rates,
8 including solar and baseload renewable rates that are higher than the Company's
9 wind renewable rate. My understanding is that the costs and benefits of those
10 small QFs are allocated on a system wide basis. I do not believe there is any
11 reason to treat large QFs differently.

12 **VII. GRIDD SOLUTIONS**

13 **Q Are you addressing the GRIDD model calculations using the PDDRR**
14 **method?**

15 **A** No. Kevin Higgins is sponsoring testimony on this issue.

16 **Q Please summarize Mr. Higgins recommendations.**

17 **A** One, that PacifiCorp should not be able to limit the renewable rate to only those
18 QFs that defer a renewable resource of the same type in the Company's IRP.
19 Two, Oregon renewable QFs should be allowed to defer Wyoming wind. Three,
20 QFs should be provided both renewable and non-renewable indicative pricing at
21 the time they request their PPA. Four, a more reasonable large QF queue based
22 on executed PPAs rather than requests for PPAs should be used. Five, the market
23 price floor should not be eliminated. While the Coalition supports Mr. Higgins
24 recommendations, we caution that that the Commission should continue to
25 monitor and be willing to address again whether the PDDRR method produces

1 reasonable results for any specific QF.

2 **VIII. CONCLUSION**

3 **Q Does this conclude your testimony?**

4 **A Yes**

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UM 1802

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**EXHIBIT COALITION/101
QUALIFICATIONS OF JOHN LOWE**

May 5, 2017

Overview

Director, Renewable Energy Coalition

Relevant Work Experience

2009-Present: Renewable Energy Coalition

Represent the Coalition and individual members in five regional states; power purchase agreement and interconnection consulting.

1975-2006: PacifiCorp, left as Manager of Qualifying Facility contracts, Portland, OR
Lead roles in company implementation of Public Utility Regulatory Policies Act, including, but not limited to power purchase agreements and interconnection contracting, staff supervision and management, and high level coordination of company's distribution interconnections for qualifying facilities.

1975: Graduate Oregon State, BS