

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 1129

**In the matter of:
Investigation Related to Electric Utility
Purchases from Qualifying Facilities**

DIRECT TESTIMONY OF DOUG PEGAR

ON BEHALF OF

THE FAIR RATE COALITION

PHASE I

December 9, 2005

1 Q. Please state your name.

2 A. My name is Douglas W. Pegar and I live in Gladstone, Oregon. I am the same
3 Doug Pegar who submitted testimony on August 2, 2004, in this docket, sponsored by the
4 Fair Rates Coalition.

5 Q. What is the purpose of your testimony?

6 A. The purpose of my testimony is to explain my experience in small scale power
7 production and explain why certain contract terms in the Portland General Electric standard
8 contract have the unintended consequence of hindering and burdening the continued
9 operation of small scale projects and may contravene the command of PURPA to protect
10 the very smallest QFs with contract terms suited to small operations.

11 Q. Why are the 100 kW QFs in need of such consideration?

12 In the earlier filed testimony sponsored by FRC, we tried to show that the needs of
13 the smallest producers are distinct from those of larger producers. FRC identified ways in
14 which the standard terms ignore the small profit margins and limited resources of small
15 producers. To the extent that some topics, such as default and dispute resolution, are being
16 dealt with by the entire group of participants in negotiations, FRC wishes to bring a
17 particular perspective to how any term which *might* be economically reasonable for a
18 larger producer may be inapplicable or administratively burdensome and inconsistent with
19 18 CFR § 292.304(c) as to the smallest producers.

20 Q. Can you further explain?

21 Yes. Order No. 69, Small Power Production and Cogeneration Facilities, FERC

1 Reg Preambles 1977-1981 ¶ 30,128, 45 FedReg 24, 126 (April 9, 1980), codified at 18
2 CFR 292.304(c)(1), mandates a “standard contract” for facilities of 100 kW or less, so
3 federal law recognizing this size threshold as a "tipping point" at which transaction costs
4 can cause barriers to participation in the market and make negotiations difficult for the
5 smallest facilities . While the regulator can require standard contracts for larger producers,
6 PURPA requires particular interest in standard contracts for this economically vulnerable
7 group of smallest QFs and FRC members all face burdens under the current contract
8 regime.

9 Q. What is your relevant experience in the economics of small QFs?

10 A. I described my experience in my earlier filed testimony, which I refer to and
11 incorporate by reference herein. In short summary, I planned, constructed and operate
12 Canyon Creek Hydro and I have been involved in small scale hydro-electric development
13 for more than 26 years. I began before the energy shortage of the late 1970s and before
14 PURPA was enacted.

15 About that time I designed and built a small scale (under 100 kw) water powered
16 plant. It took several years to obtain the licenses, permits and other regulatory and
17 agency clearances. I have been operating the Canyon Creek Hydro since 1985. It is
18 located on U.S. Forest Service land 50 miles from my home. I have also done consulting
19 on a per-bono basis for others interested in exploring small hydro. There is not a deep
20 pool of knowledgeable technicians and operators for us to fall back on for advice.

21 Q. What terms of the standard contract have the unintended consequences which

1 hinder your planning and operation?

2 A. First, I will discuss the default provisions (10.2 in PGE). These will be very
3 stringent applied to my operation, or any small producer. In particular thee penalties are
4 too severe and instead of encouraging compliance, will have the unintended consequence
5 of making continued operation nearly impossible financially.

6 Q. What are the burdensome penalties?

7 A. Since 2004, I have had some major repairs and expenses to my turbines. I have
8 had to install new bearings, new bushings, and a new shaft. These costs for repairs and
9 the loss of generation while work was being performed are difficult financially. To add
10 penalties would be pretty close to “capital punishment.”

11 Q. Do the penalties encourage you to spend more on preventative maintenance?

12 A. No. I have been in business over a quarter century. As I described in earlier
13 testimony, I continually maintain and upgrade my equipment. My next step will be to
14 replace my existing equipment with new and newer equipment--at a substantial cost. All
15 of these expenses are part of my business projections, and I strive to meet them, but I
16 cannot contend with, or plan for, additional penalties.

17 Costs for parts and supplies for the O&M of the project have risen significantly.
18 The turbines are the two original Pelton wheels dating back to 1903. The bearing system
19 was up-graded in 1985. I plan to replace the 1903 Pelton wheels with a new, modern and
20 more efficient turbine as soon as it is economically feasible. Other components are
21 coming to the end of their useful life and need to be replaced.

1 Q. Do the default provisions encourage you add employees or to institute more
2 employee training?

3 No. I do not have employees. I provide the labor for the O&M of the Canyon
4 Creek Hydro-electric Project. I monitor the projects remotely by telephone/cellphone. I
5 am alerted of a abnormal condition or shutdown. The project is located fifty (50) miles
6 from my home, about a one hour driving time each way. In recent years auto/truck fuels
7 and operating costs have drastically escalated.

8 The penalty provisions do not give me an incentive to hire an additional employee
9 to do more maintenance. These default provisions do not cause me to schedule more
10 training, I am already on one-person operation. I spend what is necessary, and I have a
11 good track record with my facility, even in low-water years.

12 Q. In your opinion do the default provisions protect utility ratepayers from harm
13 should your facility be unable to produce for some periods of time?

14 A. No. I do not see how customers are protected by putting my operation at risk. My
15 operations's output is small in overall utility terms that PGE does not have to "schedule"
16 my output nor have I had to tell them when I am "off line." Thus for the past quarter-
17 century ratepayers have not suffered, nor do they seem likely to suffer consequences if
18 from disturbances in my output. As I testified to last year, my operation arose from and
19 responded to the social policy of encouraging diverse production and innovation at the
20 small-scale level. That policy is undermined if default provisions force me out of
21 business.

1 Q. Any other provisions you find to impede the operation of a small facility such as
2 yours?

3 A. Yes. The proceeding thus far has been time consuming and expensive and has
4 caused uncertainty. I still do not have a standard contract which matches the simplicity of
5 earlier contracts and which I need and must rely upon in dealing with the utility.

6 I do not have the staff to assist in negotiations, nor the funds to hire consultants.
7 Even the utility with the smallest Oregon territory, Idaho Power, has over 1750
8 employees, although it has a relatively small Oregon territory in 3 eastern counties. It has
9 earnings of about \$80 million a year, and its Oregon gross revenues alone are in excess of
10 \$25 million per annum. PacifiCorp has more than 6650 employees and earnings in excess
11 of a quarter of a billion dollars. Its gross Oregon revenues are about \$50 million.

12 Minikahda Hydro, Canyon Creek Hydro, Roush Hydro and Fery Hydro are run by
13 single owner-operators. None of us makes a living wage from the hydro projects. Small,
14 dispersed generators have no bargaining power. Given this lack of bargaining power, it is
15 particularly important for government to assist with equitable conditions for the smallest
16 power producers. Unlike large corporate owners, individuals such as myself, cannot
17 spread expenses across a number of installations. Individual owners face a particular
18 management burden because they are not primarily engaged in either the hydroelectric or
19 generating business, both of which are complicated regulatory and marketing environments.
20 They are now facing an uncertain future in the deregulated marketplace. Small plants have
21 no economies of scale per unit of output, and comparatively major operating expenses to

1 the individual owner such as labor, parts, insurance, regulatory compliance/licensing and
2 contract administration

3 This concludes my testimony.

CERTIFICATE OF SERVICE

I hereby certify that I filed the foregoing TESTIMONY OF DOUG PEGAR this date to the Oregon Public Utility Commission, followed by mailing the original and 5 copies by placing same into the U.S. Mail, first class postage prepaid, addressed to the Filing Center of the Commission, and I further certify that I hand delivered and/or served a true and correct copy thereof by e-mail as such addresses appear on the service list, and further, placed in a sealed envelope and deposited in the U.S. Postal Service at Portland, Oregon, with first class postage prepaid, to the parties in UM 1129, by mailing same first class postage paid to the service list as it appears on the service list as appended hereto.

December 9, 2005

Linda Williams

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**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 1129

**In the matter of:
Investigation Related to Electric Utility
Purchases from Qualifying Facilities**

DIRECT TESTIMONY OF STEVE SANDERS

ON BEHALF OF

**MINIKAHDA HYDROPOWER CO. LLC, AND THE FAIR RATE
COALITION**

PHASE I

December 9, 2005

1 Q. What is your name?

2 A. My name is Steve Sanders.

3 Q. What is the purpose of your testimony?

4 The purpose of my testimony is to provide information about the
5 production of renewable hydro power in Oregon since the 1980s; the
6 relationship of the smaller facilities to their communities, the utilities they sell
7 power to; the regulations and scrutiny to which they are subject; and the
8 economics of such small power production. I believe that with a fuller
9 understanding of the economics of the operation of a small facility, the
10 Commission will understand why standard contract terms that may be relevant
11 to larger qualifying facilities, can actually impair the 100 kW ones.

12 Q. What relevant experience do you have?

13 I described my experience in the testimony I filed on August 2, 2004, in
14 this proceeding, sponsored by the Fair Rates Coalition, which I incorporate by
15 reference herein. I will briefly summarize: I am co-owner and manager of the
16 Minikahda Hydropower Company LLC, a 100 kW facility, which was begun in
17 1982 by my parents. I have managed the company since 1996, first informally,
18 then as conservator, and finally as an owner, after my father passed away in
19 August, 2000. Prior to my hands-on operation, I witnessed the effort,
20 determination, and perseverance it took to construct and operate this plant; and

1 the vision, foresight, and courage it took to conceive and bring it to fruition.

2 Q. Why are the 100 kW QFs in need of such consideration?

3
4 In the earlier filed testimony sponsored by FRC, we each (Roush, Fery,
5 Pegar and myself) tried to show that the needs of the smallest producers are
6 distinct from those of larger producers. Standard terms ignore the small profit
7 margins and limited resources of small producers. I understand that some
8 topics, such as default and dispute resolution, are being dealt with by the entire
9 group of participants in negotiations, but FRC wishes to bring its unique
10 perspectives to the table, to explain how terms which might be economically
11 reasonable for a larger producer may be inapplicable or administratively
12 burdensome and inconsistent with 18 CFR § 292.304(c) as to the smallest
13 producers.

14 Q. Can you further explain?

15 Yes. 18 CFR 292.304(c)(1), requires a "standard contract" for facilities
16 of 100 kW or less, which was a long-recognized "tipping point" at which
17 transaction costs can impede entry to the market and make negotiations difficult
18 for the smallest facilities. While the regulator can require standard contracts for
19 larger producers, PURPA requires particular interest in standard contracts for
20 this economically vulnerable group of smallest QFs, which in this proceeding

1 are the FRC members.

2 Q. What terms of the standard contract have unintended consequences which
3 hinder your planning and operation?

4 A. First, I will discuss the default provisions (§ 10.2). These are potentially
5 devastating to my operation, or that of any small producer.

6 Q. Do you believe that penalties for default by a small QF are necessary?

7 A. No. In the months before the expiration of our current contract on
8 October 31, 2003, I was in negotiation with PGE over the terms and rate of a
9 new agreement. At no time did the utility mention any "default" provisions.
10 No such provision has ever been in place in the 25 years of my involvement
11 with the utility.

12 Q. Why are default provisions particularly unworkable for the operation of a
13 small producer?

14 A. The small producer is in a difficult position to produce and sell power.
15 Any penalties imposed immediately threaten the survival of the operation.

16 Q. Can you give an example?

17 A. In February, 2001, the Pelton wheel of our large (75kw) turbine broke
18 down during a snow storm. As I have testified previously, (August 2, 2004)
19 Minikahda is in a remote watershed. Repair required hiking into the plant,
20 dismantling the equipment and hiking out. Since there are no local suppliers of

1 hydro equipment nor knowledgeable personnel available, I researched our files
2 and contacted an engineer, now retired, who had worked on our plant in the
3 1980s. Luckily, Canyon Industries in Deming, Washington had a single cast
4 bronze manganese wheel identical to our steel wheel in stock. I purchased it for
5 \$3700. Several weeks later it was installed and we were running again, with a
6 total expense of \$10,000, plus lost production revenue. If the Pelton wheel had
7 not been in stock we could have been out of operation for months. If I had to
8 pay penalties, I could not have afforded to resume my operation. The effect of
9 the penalty, over time, would be to eliminate the small producer with a modest
10 profit-margin.

11 Q. How did this incident and repair affect your operation?

12 Since I have been in charge of operating the hydro plant (1996), until the
13 severe cut in rates paid to us commencing in 2003, we had been able to
14 accumulate a \$5,000 yearly reserve. We built up reserves by (1) by frugal
15 management and (2) delaying certain equipment modernization until absolutely
16 necessary. That \$10,000 bill canceled the profit for 2 years. If we were
17 penalized in subsequent years, the survival of the plant would be threatened.

18 Q. Why are repairs and maintenance of small hydros difficult?

19 As recognized by the PUC staff an issue for investigation is the lack of
20 development of small hydro our hydro-rich resource state. Presently, there a

1 few scattered plants in northwest Oregon. With so small a universe of
2 producers, none of the resources available in the 1980s are still in business.
3 Like any other entity, the survival of small hydro is threatened when the species
4 is depleted.

5 Q. Why is production assurance from a 100 kW producer unnecessary?

6 First, for over 20 years this has never been an issue, and the utility has
7 never requested such assurance. During contract negotiations in 2003, the issue
8 was never raised by the utility. This tends to suggest that the issue was not of
9 significance to the utility on behalf of its customers.

10 Second, the total production of small producers is only a tiny component
11 of the tens of millions of megawatts in a utility's system. If anything, the
12 distributed generation of a thriving small producer system would be a reliable
13 asset for a utility and a hedge against fossil fuel generation shut-downs.

14 Q. Will these contract terms give you an incentive to avoid default or
15 operate differently?

16 A. No. I have been the hands-on manager of our hydro plant since 1996. I
17 have every incentive to keep this family business going, but I cannot hire more
18 employees or do more maintenance. I am already doing everything that I can
19 afford to do.

20 I know of the costs since I have been manager. Since I have operated the plant,

1 I have gotten ahead about \$5,000/year. With such a small profit margin, having
2 a Pelton wheel breakdown during a winter storm several winters ago, as
3 described about, led to a \$10,000 expenditure. I have had to adopt a
4 conservative, careful management style.

5
6 Q. How does the default provision affect your modernization plans?

7 A. The default provision complicates my long-term planning by adding great
8 uncertainty and risk, with no countervailing benefit to ratepayers. In the
9 mid-90s, I began to install a new computer system estimated to cost \$50,000. I
10 could not afford to complete that proces, so my operation is less automated than
11 optimal. This would be important for our plant, which maximizes production
12 from a fluctuating water flow. I have, after long search, recently been in
13 contact with a firm out of Seattle that is active in the hydro field. I have a
14 rough estimate to modernize our plant for around \$50,000: \$10,000 for the
15 computer program and \$40,000 for equipment. With a slim profit margin for
16 the plant, this would consume projected income for 10 years. As a business
17 operator, I am willing to modernize in the hope that increased efficiency and
18 reduced maintenance would justify the risk. The possibility of a reduced rate
19 for circumstances beyond my control is not acceptable.

20 Q. What other terms in the proposed contract do you find so burdensome

1 that you may not be able to operate?

2 A. There are the price options in § 5. The fixed price option for the next
3 few years seems realistic, but for 10 years after that, a small producer would
4 have difficulty making ends meet. The gas price options are too difficult and
5 sophisticated for a small business to make an informed opinion without hiring
6 consultants. The Mid-C price, as far as I have been able to discover, is
7 proprietary information to the utilities.

8 Q. What about the "operation and control" section?

9 The phrase that, "If the facility ceases operation for unscheduled
10 maintenance, Seller immediately shall notify PGE," presents a problem. The
11 *first* thing a small producer will do is to tackle and fix the problem. Does a
12 utility need "immediate" notice? Is this to be interpreted literally?

13 Q. What about "Section 8: Metering"?

14 A. The past practice was for the producer to provide the meter base and for
15 the utility to provide their metering equipment and this has worked in the past.

16 Q. Are there other sections which are potential problems?

17 A. Yes. The contract has many provisions which assume an equal bargaining
18 power between a utility and a single owner operator such as myself. I do not
19 have a staff to assist me and the terms favor the party with bargaining power.

20 For one example, "Section 9.2" states, "In the event of a default

1 hereunder, PGE may immediately terminate this Agreement at its sole
2 discretion" believe this is an example of a "hair trigger" provision which is
3 heavily skewed in favor of the utility throughout the proposed contract.

4 Another example is the contract term regarding the LPE. A small
5 producer will work with an LPE to set up a production facility; requiring
6 additional that such an LPE be "acceptable to PGE" is not reasonable, when
7 licensing and credentialing are objective criteria, and may present a financial
8 hardship.

9 This concludes my testimony.
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3 **CERTIFICATE OF SERVICE**

4 I hereby certify that I filed the foregoing TESTIMONY OF STEVE
5 SANDERS this date to the Oregon Public Utility Commission, followed by
6 mailing the original and 5 copies by placing same into the U.S. Mail, first class
7 postage prepaid, addressed to the Filing Center of the Commission, and I further
8 certify that I hand delivered and/or served a true and correct copy thereof by e-
9 mail as such addresses appear on the service list, and further, placed in a sealed
10 envelope and deposited in the U.S. Postal Service at Portland, Oregon, with first
11 class postage prepaid, to the parties in UM 1129, by mailing same first class
12 postage paid to the service list as it appears on the service list as appended
13 hereto.
14

15 December 9, 2005

16 _____
17 Linda Williams
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