

STATE OF NEW HAMPSHIRE
BEFORE THE
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

DOCKET NO. DE 10-195

DIRECT TESTIMONY OF
GEORGE E. SAN SOUCY, P.E.

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2

ON BEHALF OF

3

THE CITY OF BERLIN

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Request for Approval of Power Purchase Agreement

6

Between

7

Public Service Company of New Hampshire

8

And

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Laidlaw Berlin BioPower, LLC

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11

1 **INTRODUCTION AND PURPOSE**

2 **Q. Please state your name, position and business address.**

3 A. My name is George E. Sansoucy. My business address is 32 Nimble Hill Road,
4 Newington, New Hampshire 03801. I am the owner/member of George E. Sansoucy,
5 P.E., LLC.

6
7 **Q. Have you testified before the NH PUC before?**

8 A. Yes, on several occasions.

9
10 **Q. What is the purpose of your testimony in this case?**

11 A. My testimony is to support the advocacy of the City of Berlin to urge the PUC to
12 approve the PPA entered into between Public Service of New Hampshire and Laidlaw
13 Berlin BioPower, LLC for the construction and operation of a 65 MW wood fired
14 power plant in the City of Berlin.

15
16 **Q. Please briefly describe the nature of your testimony.**

17 A. The nature of my testimony relates to the economic benefits of this proposal to the
18 City of Berlin and the North Country as well as the State, to support decisions and
19 proposals made by PSNH regarding this contract, and to urge the Commission to
20 view this contract in the long term based on the projected benefits to the City, the
21 North Country, the rate payers, and the State as a whole.

1 **Q. Please describe specific ranges of economic benefits you believe will accrue to the**
2 **City of Berlin and the North Country from this PPA.**

3

4 A. More specific economic benefits that relate to Dr. Shapiro's testimony directly
5 relates to the composition of local expenses incurred by the power plant after
6 construction is completed. The total composition of expenses are the following: fuel,
7 labor for operations and maintenance, taxes, water, sewer, materials, and supplies.
8 The approximate percentages of annual gross revenue that these costs represent are:

Fuel	\$26,430,000	43%
O&M	\$10,000,000	16%
City Taxes, Sewer and Water	\$3,000,000	5%
Total	\$39,430,000	64%

9

10 The operation of this wood fired power plant through approval of the PPA returns
11 significant economic benefit to the North Country, the community, and the region. A
12 detailed look at each of the primary categories of revenue indicates the following: the
13 cost of wood for fuel provides land owner payments, equipment purchases,
14 equipment maintenance, various road use and local taxes for trucking, diesel fuel
15 sales, and labor, all of which is returned to the regional and local economy, due to the
16 fact that most of the regional loggers purchase their equipment locally.

17

18 Operational and maintenance labor is a direct injection into the local and regional
19 economy. The region is an excellent source of high quality skilled labor necessary to

1 run the power plant, being trained in the paper industry, and is available due to the
2 closure of the paper industry. The labor pool is capable of being cross-trained, and
3 committed to living and working in the North Country exhibiting a low transience.

4

5 Taxes to the City of Berlin, the school systems, and the County, including the various
6 use, timber, and vehicle registration taxes, directly benefit the City of Berlin and the
7 North Country through Coos County taxes collected.

8

9 **Q. What will be the projected impact in today's dollars of this project for the City's**
10 **finances?**

11 A. The economic revenue from the power plant and economic input to the region is
12 undiluted and directly benefits all parties in the region. It is anticipated that the
13 power plant will reduce the overall tax burden in the City of Berlin from an
14 approximate current tax rate of \$31.70 to an approximate tax rate of \$26.25, or a 17%
15 reduction. This reduction in taxes is substantial and immediately lifts the value of all
16 property in the community. It provides a direct benefit to the residents and property
17 owners of the City of Berlin, and in an indirect and positive way, benefits all of the
18 taxpayers in Coos County through increasing County taxes paid by the City of Berlin.
19 Furthermore, it is expected that the purchase of water and use of the sewer system by
20 the power plant will substantially reduce the water and sewer bills to the balance of
21 residents within the City, here again, a direct economic benefit to the citizens of the
22 City of Berlin and an increase of value for all properties in the communities using
23 sewer and water. The increase in value of property within the community directly

1 benefits the County through additional County taxes apportioned and paid by the City
2 of Berlin as a whole.

3

4 **Q. What do you believe will be the impact on and economic benefit of material and
5 supplies purchasing by Laidlaw as a result of this PPA?**

6

7 A. Materials and supplies will be purchased from a wide variety of sources, both locally
8 and on a national basis. Due to the regions competitiveness over the years and ability
9 to supply industrial facilities as it has for decades, vendors in the North Country
10 region will be equally as capable of competing for material and supply needs to the
11 power plant as other vendors throughout the United States.

12

13 **Q. Do you believe there may be additional economic benefit to the region through
14 expansion of this site in the future?**

15 A. Yes. The PPA is silent on the ability of Laidlaw to expand the facility. The current
16 infrastructure, namely the road system, the water and sewer infrastructure, the
17 electrical infrastructure, and the staffing and labor capabilities of the North Country
18 will enable Laidlaw to expand the facilities or supplement the generation on the site,
19 and continue to support the electrical requirements of the region, to advance and
20 make more cost effective the total utilization of the property. The land area, at more
21 than 60 acres, is sufficient to support the current proposal plus additional
22 construction, pollution control devices which may or may not be required in the
23 future, alternate types of generation utilizing natural gas in the region, the potential to

1 use wood gasification, pellet manufacturing facilities, and/or site industrial co-
2 locational development on the property utilizing waste heat and steam, or to provide
3 heat, hot water, and steam potentially to the Cascade Mill in Gorham, NH. All of
4 these are unique, credible, and positive aspects of the PPA which may not be found in
5 other locations in the state, and certainly not found on a number of existing wood
6 fired generation plants in the state and are part of the reason to approve this PPA.

7

8 **Q. What are some of the benefits that Laidlaw and Public Service gain from**
9 **locating this facility in the City of Berlin?**

10 A. The City of Berlin and the North Country region are highly experienced in the forest
11 products industry and have been for over 150 years. The City supports the PPA, and
12 its assumptions, calculations, and projections provided by Laidlaw and Public
13 Service. This PPA is positive to the City and to the North Country in that it produces
14 highly reliable, stable, clean, renewable electricity for both the region and the state
15 directly through the efforts and abilities of the local workforce, the community and its
16 employees, the City's infrastructure that it maintains for local suppliers and the
17 region's distribution base for materials, supplies, and disposables. The region
18 maintains a labor force which operates, maintains, and keeps running the forestry
19 equipment, trucks and handling equipment to deliver fuel, and a labor force which
20 ultimately can maintain, manage, and operate the power plant. This is a highly
21 trained work force with a proven track record of delivering more than 3,000 ton/day
22 of forest products into the economy on an annual basis for decades. This PPA should
23 be supported because the plant is correctly sited in the proper location to provide the

1 most cost effective benefits to the rate payers and capitalize on the ability of the
2 region to provide infrastructure and labor for this asset.

3

4 **Q. There has been significant concern regarding the size of this facility. What is**
5 **your opinion for the City based on your experience regarding this matter?**

6 A. The City of Berlin believes that Public Service Company of New Hampshire is
7 correctly proposing and supporting, through its PPA, a centralized wood fired electric
8 facility in the City of Berlin totaling 65 MW rather than purchasing Class 1 RECs
9 from more decentralized smaller new wood fired facilities which would have to be
10 built. The City agrees with this approach and hopes the PUC will too. The City, its
11 employees and the regional business economy have long known that scale and
12 efficiency rules the capitalistic system. This has been painfully true for the North
13 Country region through the gradual decline of the paper industry, as more modern and
14 efficient paper facilities have been built on a worldwide basis squeezing out the
15 industry of Berlin, as evidenced by the demolition of the Burgess Pulp Mill, to which
16 this boiler was attached. The City recognizes and expects to maintain its obligation to
17 assure the success of the Laidlaw facility by maintaining significant sewer and water
18 infrastructure, road systems into the site, and support the necessary construction to
19 provide electrical infrastructure into the site. The City believes this scale is beneficial
20 to the City, the region, and the State, and is ultimately made possible through the
21 approval of the PPA.

22

1 **Q. There are unique features of this PPA. Are these a benefit to the City and the**
2 **region in your opinion?**

3 A. Yes. The City of Berlin considers the cumulative reduction factor, the right of first
4 refusal and the purchase option to be the unique features of the PPA and of
5 substantial benefit to the City of Berlin and the North Country. The City of Berlin is
6 familiar with and experienced in the negative impacts that can be created by property
7 owners. The bankruptcy of American Tissue and the bankruptcy of Crown Vantage
8 for the paper mills in the North Country region had a serious negative impact on the
9 entire region. The City of Berlin believes it is beneficial to the North Country, and to
10 the State as a whole that the PPA provide a wall between Laidlaw and the outright
11 sale of this plant, namely, Public Service's ability to vet the sale and step in as the
12 purchaser. Public Service Company of New Hampshire has operated in the North
13 Country for its entire life as a company, operates hydroelectric facilities, the
14 distribution and transmission system, major substations, and is the regional electric
15 supplier. It continues to be an excellent corporate citizen providing laudable service
16 to the North Country over the years and at times going above and beyond its call of
17 duty in both business and physical stamina.

18

19 **Q. Will the City support the construction of this plant and the use of its public**
20 **rights of way?**

21 A. Yes. The City anticipates and supports through the PPA, electrical infrastructure
22 upgrades for this power plant by way of upgrading to the 115 KV transmission

1 system in and out of the City, the Gobar Street substation, and incoming station
2 service, all with benefits to the City of Berlin and the North Country.

3

4 **Q. While the current marketplace for electrical services is significantly depressed**
5 **due to the unprecedented recession in modern times, what is your opinion**
6 **regarding the long term goals of this PPA and the City's support thereof?**

7 A. The City of Berlin agrees with PSNH and finds it is in the North Country and State's
8 best interest that the Commission view the long term goals of the PPA as being in the
9 public interest. Specifically, short term market gyrations, REC prices gyrations,
10 power quotes, and capacity quotes do not determine a valid basis for whether or not
11 the 20 year PPA is in the public interest and subsequently in the interest of the City of
12 Berlin and the North Country. More specifically, there are long term scenarios and
13 long term potential occurrences for which this PPA would provide significant risk
14 mitigation and benefits to the rate payers of the state of New Hampshire, to the North
15 Country, and to the City of Berlin which could very easily occur based on various
16 high gas price scenarios, high capacity price scenarios, and/or carbon cap and trade.
17 More specifically, under a carbon constrained, high capacity cost market in the future,
18 this plant could save the rate payers of NH up to \$300,000,000 over 20 years, should
19 this PPA be approved, and the plant built.

1 **Q. What additional benefits for the City and the North Country are a result of**
2 **the approval of this PPA and the construction of this plant?**

3 A. Additional benefits from approval of the PPA to the City of Berlin and the North
4 Country include matching leveraged loan funds to the community of approximately
5 \$4.5 million for assistance to business, specifically the wood industry, \$250,000 in
6 job grants, \$500,000 to the City of Berlin for targeted economic development
7 funding, financial recovery zone facility bond financing, direct lending and loan fund
8 to the utilization and operation of local logging companies, development of a river
9 walk, snowmobile trail, new landscaping, local and regional social sponsorship and
10 activities, promotion and education of alternative energy within the regional school
11 systems, potential low cost thermal energy to the Cascade Mill in Gorham or other
12 co-locating businesses, a community parking facility, and a student intern program on
13 the development of alternative energy. In addition to the construction phase, these
14 long term development opportunities and benefits to the City of Berlin and the North
15 Country are only made possible through the approval of the proposed PPA.

16

17 **Q. Since the closure of the Burgess Mill, wood prices have gyrated in the region.**
18 **What is your opinion regarding the benefit of this PPA to the North Country**
19 **and the region related to fuel?**

20 A. The City believes the PPA provides a positive benefit to the North Country and the
21 region while recognizing a reasonable, predictable, and sustainable price for wood
22 fuel which provides revenue to the land owner for land management and tax
23 payments, provides a reasonable return to the logger to operate with sustainable

1 wages, operation and repair of equipment, vendor payments and a profit. These
2 economic benefits to the region and the City of Berlin cannot be realized without the
3 approval of the PPA and the construction of the plant.

4
5 **Q. Do you think this PPA may exhibit good foresight by PSNH and should be**
6 **approved by the PUC?**

7 A. Yes. The City of Berlin's public officials and its citizens, and the North Country in
8 general, have been, and continue to be, active participants in the regional energy
9 markets. The region hosts significant hydroelectric plants, wood fired generation
10 plants, the hydroelectric plants on the Connecticut River, the situs of the Hydro
11 Quebec link to New England through Hydro Quebec One and Hydro Quebec Two,
12 situs of the major New England Power Company 230 volt transmission line
13 transmitting the electricity from the upper Connecticut River hydroelectric plants to
14 the state of Massachusetts, and the situs of the natural gas major transmission line
15 from Canada to Boston.. It has and continues to understand the integration of energy
16 into the regional economy and its positive and negative effects on industry. As such,
17 the City knows that a new high capacity, efficient, wood fired power plant can
18 provide significant capacity, energy, and renewable fuel benefits to PSNH, the City,
19 the region and the state. A number of existing power plants throughout the region are
20 aging, and becoming obsolete. While the market may be stressed in the short term,
21 the City believes approval of this PPA and the ultimate construction of this power
22 plant may prove to be significant foresight for the future as a number of power plants
23 in New England may potentially close over the next ten years. For example, the

1 current discussion to close Vermont Yankee will reduce the company's (PSNH)
2 capacity entitlement by 20.8 MW in the winter, and the potential closure of the
3 Wyman 4 oil fired unit in Maine could potentially reduce Public Service's entitlement
4 by another 19.2 MW for a total of 40 MW lost in 2 units. These capacity related
5 energy facilities can easily be offset by the construction of the Laidlaw power plant
6 while adding the positive benefit of providing Class 1 REC's to the company,
7 meeting part of its legal requirements under NH law.

8

9 **Q. Does that conclude your testimony?**

10 A. Yes it does.