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COUNCIL OF THE CITY OF PHILADELPHIA SPECIAL COMMITTEE ON ENERGY OPPORTUNITIES

Room 400, City Hall Philadelphia, Pennsylvania Friday, March 13, 2015 10:25 a.m.

PRESENT:

COUNCILWOMAN MARIAN B. TASCO, CO-CHAIR
COUNCILMAN BOBBY HENON, CO-CHAIR
COUNCILMAN KENYATTA JOHNSON
COUNCILMAN CURTIS JONES, JR.
COUNCILMAN ED NEILSON
COUNCILMAN DAVID OH

RESOLUTION 150072 - Resolution authorizing the creation of a "Special Committee on Energy Opportunities for Philadelphia," to continue to investigate the potential to establish the City of Philadelphia and the region as an energy hub.

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Special Committee on Energy Opportunities March 13, 2015

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2	COUNCILWOMAN TASCO: Good	
3	morning. This hearing on the Council's	
4	Special Committee on Energy Opportunities	
5	will come to order. I will recognize	
6	that we have a quorum of the Committee.	
7	There are five members. Councilman Oh,	
8	Councilman Neilson. And Councilman	
9	Kenyatta Johnson will soon join us, as	
10	well as Councilman Henon. And let me	
11	recognize Councilman Curtis Jones, the	
12	Majority Leader, who has joined us in the	
13	Chambers.	
14	Let me ask the Clerk to please	
15	read the bill the resolution.	
16	THE CLERK: Resolution No.	
17	150072, authorizing the creation of a	
18	"Special Committee on Energy	
19	Opportunities for Philadelphia," to	
20	continue to investigate the potential to	
21	establish the City of Philadelphia and	
22	the region as an energy hub.	
23	COUNCILWOMAN TASCO: Thank you	
24	very much.	
25	We now call on our first	

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2	witnesses. We have Mr. Craig White, CEO	
3	of Philadelphia Gas Works; Scott Rubin,	
4	Public Utility Consultant; and we'll	
5	have after they testify, Mr. Rinaldi,	
6	we'll call on you to come up. You'll be	
7	next.	
8	(Witnesses approached witness	
9	table.)	
10	COUNCILWOMAN TASCO: And before	
11	we start, I don't want to keep you here	
12	all day. I do have some remarks that	
13	we'd like to present.	
14	Some of us here on November the	
15	13th, 2014 we were here on November	
16	the 13th, 2014 when City Council's	
17	Committee of the Whole began two days of	
18	hearings to publicly discuss the	
19	Philadelphia region's potential as an	
20	energy hub and how the Philadelphia Gas	
21	Works could be an active participant in	
22	potential energy and economic development	
23	opportunities.	
24	Our discussions then took place	
25	in the shadow of the Nutter	

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2	Administration's efforts to sell PGW to	
3	UIL Holdings Corporation. In early	
4	December, UIL terminated its asset	
5	purchase agreement with the City. Less	
6	than three months later, UIL was acquired	
7	by a much larger utility company.	
8	One of the many reasons my	
9	Council colleagues and I were opposed to	
10	the proposed sale was that the sale	
11	agreement did not protect the City and	
12	PGW's customers and employees from this	
13	very possibility. The Inquirer, the	
14	Daily News, the Committee of Seventy, and	
15	other pundits purposefully ignored this	
16	and all of our other well-founded	
17	concerns. Instead, in their zeal to	
18	protect the Administration's flawed,	
19	shortsighted agenda, they kept up an	
20	attack on this Council.	
21	For some reason, they didn't	
22	appreciate our commitment to take a	
23	careful look at the specifics of the deal	
24	and asking the tough questions. For some	
25	reason, they didn't share our commitment	

Page 5 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. to protecting customers and employees of PGW while making sure that this deal was 3 in the best long-term interest of the 4 citizens of Philadelphia. 5 As a result, I was shocked when 6 7 the Daily News ran a very strong editorial on February 27th criticizing 8 9 the republican leadership in Harrisburg for not wanting to solve the state's 10 11 financial problems with a one-shot 12 infusion of cash from privatizing liquor 13 stores. Here is what they wrote: 14 much revenue as it may raise, an asset sale is one and done. You can't sell the 15 16 asset twice. 17 Sounds familiar? Yet, when 18 Council raised this same objection to the Mayor's proposed sale of PGW, they had 19 20 blinders on. I've got news for you, my 21 friends: We on Council did our homework, 22 and we passed with flying colors. 23 made clear in November, Council's process will include all stakeholders and explore 2.4 25 all possibilities.

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2	Today, we begin a more in-depth	
3	look at where we go from here. We will	
4	learn more about public-private and	
5	public-public partnerships that have been	
6	used in other cities, states, and other	
7	countries to finance or jump-start	
8	infrastructure, utility, and economic	
9	development projects.	
10	Through these hearings, we hope	
11	to learn more about best practices and	
12	lessons learned, which approaches have	
13	worked and which ones have not. Armed	
14	with this information, we will be able to	
15	make smart decisions about which energy	
16	opportunities Philadelphia should pursue,	
17	how we should do so, and within that	
18	context what direction should PGW take.	
19	As the sale process showed, PGW	
20	is a very valuable asset and it is now	
21	positioned to achieve its untapped	
22	potential as a major part of the region's	
23	energy economy.	
24	There is no question that these	
25	are complex issues. They demand that we	
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2	pay the same attention to detail we gave	
3	to the City-UIL sale agreement so that	
4	whatever the outcome once again, this	
5	Council will get it right. And I want to	
б	thank you.	
7	I ask my colleagues if they	
8	have questions or comments they'd like to	
9	make at this time.	
10	(No response.)	
11	COUNCILWOMAN TASCO: Thank you	
12	very much.	
13	We will now begin with our	
14	first witness, Mr. White.	
15	MR. WHITE: Thank you. Good	
16	morning, Chairwoman Tasco and members of	
17	the Committee. My name is Craig White.	
18	I am the President and Chief Executive	
19	Officer of the Philadelphia Gas Works and	
20	I have been asked here today to testify	
21	regarding Resolution No. 150072.	
22	First of all, I want to thank	
23	you for the opportunity to address the	
24	Committee and acknowledge the interest	
25	you have expressed with respect to	

Page 8 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. assisting PGW to grow into an even stronger enterprise. As members of the 3 Committee have publicly stated in the 4 5 past, there is no question that PGW has made measurably great strides as a 6 municipally owned utility in recent years. PGW desires to capitalize on this 8 9 achievement and become a more resilient operation for the benefit of the City and 10 11 its customers. 12 As you know, PGW is a gas distribution operation with the ultimate 13 14 charge of providing safe and reliable service to the citizens and businesses of 15 16 Philadelphia. PGW accomplishes this task 17 with over 1,600 employees who, among other tasks, maintain and operate a 6,000 18 mile distribution system that consists of 19 over 3,000 miles of gas mains and 3,000 20 miles of service lines. In addition to 21 this extensive pipeline network, PGW's 22 23 gas workers, both union and non-union alike, operate one of the largest 2.4 25 liquefied natural gas plants in the

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2 country. It is estimated that PGW's LNG	
3 assets have saved PGW customers over \$2	
4 billion since the facilities went online	
5 in 1972.	
6 In addition to pipeline and	
7 plant operations, PGW operates five	
8 neighborhood Customer Service Centers for	
9 the benefit of its customers, provides	
10 emergency response, answers over two	
11 million customer phone calls per year,	
12 provides programs for those in need, and	
13 conducts a myriad of other activities	
14 critical to the operation of a gas	
15 distribution operation. These critical	
operations demand focused performance,	
and I believe that PGW employees work	
18 hard every day to provide first-rate	
19 operations and service to ratepayers.	
Now, you will hear a lot of	
21 witnesses after myself that will have to	
establish their bona fides. I want to	
23 make mention of the fact that in our	
field operations, we have over 4,000	
25 collective years of experience on the PGW	

Page 10 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. So if the Committee leaves here system. 3 with anything today, I want them to be assured that the folks back at PGW not 4 5 only have the expertise but the experience to do the job that they've 6 7 been doing for many, many years. Given the backdrop of PGW's 8 9 improved operating framework, it is our good fortune, therefore, that we are 10 11 currently living in the most optimistic 12 and dynamic gas and energy environment in U.S. history. Prices are stable, 13 14 fluctuating only within limited range, 15 and supply is available in multiples from 16 just a few years prior. Pennsylvania, 17 due to its location near the Marcellus Shale, has begun to reap tremendous 18 advantages from the gas industry in terms 19 20 of jobs, technology advances, business 21 opportunities, et cetera. I would say, 22 therefore, that Philadelphia and PGW are 23 well-positioned to benefit from the boom in the natural gas business and energy 2.4 25 sectors, but only if we are able to seize

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2	the moment and leverage opportunities.	
3	Effectively, I'm referring to speed to	
4	market.	
5	PGW's future ability to	
б	maintain safe and adequate service at	
7	reasonable rates as well as to grow as a	
8	regional energy business, bringing more	
9	business opportunities and jobs to	
10	Philadelphia depends on developing new	
11	business strategies and approaches and	
12	implementing them quickly.	
13	An energy company that wishes	
14	to survive and excel in the current	
15	environment must have the financial and	
16	operational flexibility to react quickly	
17	to changes in regulatory policy and	
18	economic conditions. To add some	
19	context, PGW's current urgency to	
20	consider and develop new revenue	
21	opportunities and structures is based on	
22	the significant advancements in gas	
23	technology over the last decade. PGW's	
24	residential, small commercial, and	
25	industrial customers have used less	

Page 12 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. natural gas annually than just a decade ago. As a matter of fact, when I began 3 my career with PGW in 1980, the typical 4 residential customer utilized 45 percent 5 6 more natural gas annually than a PGW customer does today. That is the direct result of conservation and equipment 8 9 efficiency. We haven't lost customers. 10 We just have customers that operate much 11 more efficiently. 12 To offset this significant loss of business, PGW has had to significantly 13 14 cut costs, including lowering staff 15 levels significantly over the years --16 and when I started at PGW, we had 2,825 17 employees; today we have about 1,630 -and raise rates. It hurts to say that, 18 but that's one of the realities of what 19 20 we've had to do. But the one mitigating factor to raising rates is to constantly 21 strive to identify and acquire new 22 23 revenue opportunities. 2.4 PGW is currently considering a 25 number of opportunities and is weighing

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2	what is possible to achieve using PGW's	
3	own resources and market reach.	
4	Specifically, at this time PGW is	
5	actively considering three primary	
б	opportunities to grow top-line revenues,	
7	and I would like to talk about them	
8	briefly now.	
9	Liquefied natural gas, LNG. To	
10	provide some background, PGW has	
11	maintained and operated LNG facilities	
12	since 1972. Our operations include an	
13	LNG liquefaction plant, three LNG storage	
14	tanks, LNG vaporization, and LNG	
15	truck-loading facilities. PGW has	
16	extensive experience and expertise in the	
17	purchase, transportation, liquefaction,	
18	storage, and loading of LNG. This is	
19	truly our sweet spot. These assets are	
20	operated to provide uninterrupted service	
21	to our residential, commercial,	
22	industrial customers in the coldest of	
23	winters. However, the reduction in	
24	customer usage over recent decades has	
25	resulted in PGW having certain	

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2 underutilized	or excess LNG capability.
3 This capabilit	cy is in the form of excess
4 storage or spa	ace in our LNG storage
5 tanks. We do	not have excess
6 liquefaction o	capabilities. Or said
7 another way, w	ve have room to store LNG.
8 We do not have	e the ability to produce
9 more LNG than	we currently make today.
10 With	the above as a backdrop,
11 along comes a	significant national move
12 to fuel long-h	naul trucking, high
13 horsepower equ	aipment, and marine vessels
14 with LNG, and	there is also interest in
15 LNG exportation	on. Although PGW only has
16 liquefaction o	capability to liquify enough
17 natural gas to	meet customer requirements
18 in the coldest	of winters, PGW has
19 benefited from	the moderate to warm
20 winters of the	e recent past and has been
21 able to stock	pile LNG inventory.
22 Therefore, dur	ring this warm period and
23 prior to this	current winter, PGW amassed
24 significant ir	nventory levels in its LNG
25 storage tanks	well beyond the needs of

Page 15 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. its core customers, meaning well beyond the needs of our customers if the coldest 3 winter occurs. We always have to have 4 5 enough LNG that if that very cold winter 6 occurs, our customers will have 7 uninterrupted supply. PGW quickly took advantage of 8 9 market opportunities to sell LNG at PGW's truck-loading rack with this excess LNG. 10 11 Over the past 20 months, PGW has 12 commercially sold 2,000 truckloads of Each truck holds 10,000 gallons, or 13 LNG. 14 approximately 800 Mcf of LNG per truck 15 load. The total margin generated from 16 these new sales has eclipsed \$8 million. But this current heating 17 18 season, we experienced severe winter temperatures and we had to stop truck 19 sales to ensure that we had sufficient 20 21 LNG inventory in our storage tanks to meet core customer demand for the 22 remainder of this winter. As I said a 23 2.4 moment ago, we always have to have enough 25 storage, enough LNG in our tanks that if

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2	the weather goes extremely cold, we can	
3	meet the customers' requirements. So	
4	that's what we've done this year. We've	
5	had to shut down our interruptible truck	
6	deliveries because we needed that	
7	inventory to service our residential,	
8	commercial, and industrial customers.	
9	The key point here is that PGW	
10	has extensive underutilized space, but it	
11	does not have excess LNG capability.	
12	Therefore, in order to continue to	
13	capitalize on the truck-loading business,	
14	PGW must have greater liquefaction	
15	capability.	
16	This all said, I would like you	
17	to leave here today with the	
18	understanding that liquefying, storing,	
19	and loading LNG is an expertise of PGW.	
20	I mentioned it a moment ago, it's our	
21	sweet spot. It truly is. We know how to	
22	do it. We do it better than anyone in	
23	the country. There's no other utility or	
24	no other facility in the country that	
25	does all of those aspects. You hear	

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2	about Cove Point. They're not trucking	
3	LNG. They're delivering LNG through a	
4	pipeline network. So you'll hear about	
5	many LNG facilities, but nobody does what	
6	we do, which is very unique.	
7	This all said, I would like	
8	I'm sorry. Today we capture 100 percent	
9	of the margin from LNG truck sales	
10	because 100 percent of the assets are	
11	bought and paid for by our customers. We	
12	will shortly be presenting a Business	
13	Case to our Board of Directors to support	
14	expanding our LNG liquefaction capability	
15	to enable PGW to expand the LNG sales.	
16	If our Board approves our request, we	
17	will be filing the same as quickly	
18	thereafter with the Philadelphia Gas	
19	Commission. Once the Philadelphia Gas	
20	Commission has reviewed our proposal, a	
21	potential recommendation will be	
22	submitted to Council for their review and	
23	potential approval.	
24	Another top-line revenue	
25	opportunity is combined heat and power.	

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2	Gas-fired combined heat and power, or	
3	another way of saying it, cogeneration,	
4	involves the simultaneous generation of	
5	electricity and thermal energy from gas	
6	for both heating and cooling. So why	
7	CHP? Why combined heat and power? It	
8	offers tremendous economies to customers	
9	who have CHP equipment since it is over	
10	80 percent efficient, whereas the	
11	separate generation of electricity in the	
12	U.S. centralized grid system averages	
13	about 34 percent.	
14	So for purposes of example, if	
15	you're generating electricity at some	
16	faraway plant and you're using natural	
17	gas to generate that electricity, you're	
18	getting 34 percent of the value of that	
19	natural gas when you plug in your	
20	electric dryer at your home.	
21	Alternatively, if you have combined heat	
22	and power, the value you get out of that	
23	same Btu of natural gas is at an 80	
24	percent level. So it's highly efficient.	
25	The other significant benefit	

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2	to CHP is the fact that there's a	
3	tremendous security of supply, and I'll	
4	get into that in a minute.	
5	CHP offers greater energy	
6	efficiency, lower greenhouse gases, and	
7	much greater security of supply, with no	
8	interruption for heavy winds, ice storms	
9	or delayed fuel deliveries.	
10	Equally important, CHP allows a	
11	building operator to use only one fuel	
12	source, natural gas, which has both	
13	stable pricing and almost unlimited	
14	availability to generate electricity and	
15	thermal energy. The alternative or	
16	traditional approach of purchasing	
17	electricity off the grid, relying on	
18	delivered oil or utilizing other	
19	high-priced forms of energy, leaves the	
20	building operator susceptible to price	
21	swings and mother nature.	
22	There are currently 10 large	
23	facilities in the City utilizing CHP with	
24	a net margin to PGW of some 400,000	
25	annually. PGW considers this market as	

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2	being in its infancy, with hundreds of	
3	buildings as prime candidates for this	
4	technology. The obvious best	
5	applications are hotels, hospitals,	
6	universities, museums, and even prisons.	
7	The major challenge in this market is	
8	first cost. PGW has programs to	
9	partially address this aspect and is in	
10	search of additional resources to support	
11	potential CHP customers.	
12	Third, compressed natural gas.	
13	PGW has laid the groundwork for local	
14	fleet operators to adopt compressed	
15	natural gas, or CNG, as a source of fuel.	
16	This groundwork includes increasing the	
17	number of CNG vehicles in PGW's fleet,	
18	training PGW mechanics and technicians to	
19	service our CNG vehicles, and	
20	constructing a PGW CNG fueling station.	
21	These steps will help develop a local	
22	market, because PGW is using its CNG	
23	operations to show other fleet operators	
24	how they can convert their fleet to CNG.	
25	Additionally, PGW is supporting	

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2	local CNG station owners like VNG and	
3	Temple University by offering a rate	
4	which makes it economically viable to	
5	operate a public or private CNG station.	
6	We consider this a start-up rate or a	
7	rate in which we can stimulate this	
8	market. PGW is committed to developing	
9	this market in Philadelphia because	
10	cities like Pittsburgh have been	
11	extremely successful in promoting CNG as	
12	a source of fuel, because CNG is cleaner,	
13	provides long-term price stability,	
14	reduces the reliance on foreign oil, and	
15	creates statewide jobs.	
16	As the foregoing suggests,	
17	there are attractive business	
18	opportunities in the market for LNG,	
19	combined heat and power, and CNG that PGW	
20	should and must explore quickly if it is	
21	to remain a strong business. Some of	
22	these initiatives may be suitable for	
23	considering some form of public-private	
24	partnership in either delivering,	
25	managing or financing the project.	
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2	Others may better lend themselves to	
3	public-private partnerships; for example,	
4	teaming up with the City of Philadelphia	
5	or SEPTA in expanding our CNG-powered	
6	fleets. In each case, it will be	
7	necessary for PGW to evaluate the	
8	financial, legal, and policy implications	
9	of pursuing the new opportunity on our	
10	own versus partnering with another	
11	entity. Our door remains open to	
12	considering with our stakeholders any new	
13	business that will benefit both our	
14	customers and the Gas Works.	
15	PGW is hoping that Council can	
16	continue to be of assistance in this	
17	regard. PGW's ratepayers stand to	
18	benefit tremendously if these	
19	opportunities are successful, and we are	
20	eager to explore all avenues to make	
21	these opportunities a reality for	
22	Philadelphia's consumers. As you know,	
23	because PGW is entirely ratepayer funded,	
24	any increased revenues ultimately benefit	
25	our ratepayers.	
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2	That concludes my testimony,	
3	and I'm happy to answer any questions	
4	that you may have regarding the	
5	foregoing. PGW thanks you for this time.	
6	COUNCILWOMAN TASCO: Thank you	
7	very much for your testimony.	
8	Let me recognize Councilman	
9	Kenyatta Johnson and also let me add that	
10	Councilman Curtis Jones sits on the Gas	
11	Commission.	
12	You have questions?	
13	COUNCILMAN NEILSON: Good	
14	morning. Thank you for coming to	
15	testify.	
16	COUNCILWOMAN TASCO: Councilman	
17	Neilson.	
18	COUNCILMAN NEILSON: Some of	
19	the purposes of our hearing today is to	
20	explore how we can expand Philadelphia to	
21	be an energy hub here, and in your	
22	testimony we talked about gas mains. We	
23	hear about that up in Harrisburg a lot,	
24	that they're worried about your gas main	
25	replacement. The Mayor touted and some	
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2	people touted that if we go private,	
3	these gas mains and the safety factor	
4	there.	
5	If you can, Craig, can you talk	
6	about the gas main problem, the gas main	
7	issues, what you're doing to solve those	
8	issues. Can you touch base on that a	
9	little bit.	
10	MR. WHITE: Certainly.	
11	COUNCILMAN NEILSON: Because I	
12	know you do a whole lot of stuff, but I	
13	just hear the rumblings around the state	
14	that they want to hold hearings and tell	
15	us we're not doing our job protecting.	
16	Is there a major concern that	
17	we should have on the timeline and stuff?	
18	MR. WHITE: Well, as an	
19	operator, if I'm given the opportunity to	
20	replace more cast iron, I'm going to take	
21	advantage of that fact. But what we have	
22	to do as Philadelphia Gas Works, we have	
23	to balance safety and our ability to	
24	afford the replacement program.	
25	We have had a safe program for	

Page 25 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. many years. As a matter of fact, not more than 18 months ago the Public 3 Utility Commission approved our long-term 4 5 infrastructure plan, which specifically 6 identified that we would replace about 25 7 miles a year. Last year we replaced 28 miles of cast iron. 8 9 Now, I think the real notion here is, how does that tie to the issue 10 11 of an energy hub, and I think you have to 12 take a step even outside of Philadelphia and, that is, interstate pipeline is a 13 14 critical component to developing an 15 energy hub. Unless an interstate 16 pipeline is actually built to bring more 17 gas to Philadelphia, you're not going to see an energy hub. It's just not going 18 19 to happen. So when we talk about 20 21 Philadelphia Gas Works' infrastructure, 22 Philadelphia Gas Works' infrastructure 23 has been maintained for many years in a safe and reliable manner. We don't have 2.4 25 any more incidents than anyone else.

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2	do things in a very efficient and	
3	expedited manner. We respond to 98	
4	percent of our leaks in less than an	
5	hour. So the fact of the matter is,	
6	safety is not the issue that's related to	
7	the energy hub. The energy hub safety	
8	is an extremely important issue to me,	
9	but with respect to the energy hub,	
10	what's most important is, there has to be	
11	a pipeline connection to Philadelphia.	
12	If that pipeline gets here, that gas will	
13	get distributed. There's not a dearth of	
14	pipeline capacity inside the City of	
15	Philadelphia. It's getting that pipeline	
16	to pass to Philadelphia.	
17	COUNCILMAN NEILSON: Thank you.	
18	You spoke about the LNG assets.	
19	Through your capital budget, PGW has	
20	proposed installing a second LNG	
21	liquefaction unit and preliminary costs	
22	ranging from about 60 to 100 million.	
23	You had an "open season" seeking	
24	proposals from customers interested in	
25	that. Can you tell us the results and	
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Page 27 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. how that's working out. MR. WHITE: Well, as I 3 mentioned, we're going to be forwarding a 4 5 Business Case to the Board, but just to 6 give you a little bit of a heads-up on that, the response we received to our 7 8 open season was very strong, far in 9 excess of what we're selling today. We had designs on moving about 1.5 Bcf 10 11 through the program we have today, and 12 the responses we received were over 6 billion cubic feet. 13 14 So we believe that's a pretty 15 strong response. We're very hopeful that 16 this market will expand into the marine 17 business. I think you'll hear testimony from other parties today. In my quick 18 scan of other witnesses' testimony, I 19 know that there will be some discussion 20 21 about the marine business. We believe that that's a real fertile market for the 22 23 LNG usage in the future. 2.4 So, yes, we have preliminarily 25 put a number in our capital budget, but,

Page 28 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. of course, we need to back that up with an appropriate Business Case to justify 3 any expenditures. 4 5 COUNCILMAN NEILSON: If you do 6 build a liquefier, how long will it take PGW to realize a return? I mean, what kind of net revenue would that bring in 8 9 for PGW? Today you can build 10 MR. WHITE: 11 these a lot quicker than you used to, 12 because they're actually brought in in 13 component parts. We can be up and 14 running, once we have approval, in 18 15 months. At that point, we would look for 16 binding contracts and we would provide 17 what we call firm service, which means 18 quaranteed service. The reason we can quarantee the service, unlike today where 19 20 we have to reserve this capacity or 21 reserve the amount of liquefaction we have for our firm customers in the 22 coldest of winter, if we build another 23 facility, it will strictly be used for 2.4 25 this merchant opportunity.

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2	Now, obviously if we had a	
3	force majeure situation where our other	
4	facility broke down, we would account for	
5	that in the contracting with these	
6	parties. But this additional facility	
7	would be to make money, to offset	
8	borrowing, to offset customers' future	
9	rate increases. The net margins that	
10	we'd be looking at, probably in the 12 to	
11	20 million range, and that's pretty	
12	preliminary, but	
13	COUNCILMAN NEILSON: Annually.	
14	And that could also help with the gas	
15	main replacement program?	
16	MR. WHITE: Well, when we	
17	replace mains, we either internally	
18	generate funds or we borrow money. So	
19	that's the two uses. So obviously any	
20	dollars that come in could be earmarked	
21	for that.	
22	COUNCILMAN NEILSON: I guess in	
23	some of the future testimony we're going	
24	to hear about public-private partnerships	
25	and along that way and see which way	
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2	is PGW looking to do any of this,	
3	public-private partnerships? Have you	
4	looked at it in the past to see the	
5	viability?	
6	MR. WHITE: We certainly will	
7	look for any opportunity that could	
8	expand our ability to replace pipe at a	
9	cost that our customers can afford. As I	
10	said before, we believe the system is	
11	exceedingly safe right now. We've	
12	increased our 18-mile program, which this	
13	18-mile program is not something that we	
14	just develop out of thin air. We've done	
15	a lot of benchmarking. We bring in	
16	experts in the area of determining risk.	
17	And we had an 18-mile program that we	
18	felt was extremely sufficient or very	
19	sufficient. We then last year expanded	
20	it to 23 miles and then this year 28	
21	miles. So we've already taken our	
22	program up 10 miles over the last two	
23	years.	
24	COUNCILMAN NEILSON: All right.	
25	Well, I have no further questions at this	
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2	time, Madam Chair.	
3	Thank you, Craig.	
4	COUNCILWOMAN TASCO: Thank you	
5	very much.	
6	Let me just add, I didn't tell	
7	him not to ask a question. It's a	
8	process here.	
9	Let me ask a couple of	
10	questions. In your testimony you talked	
11	about the CNG. Has there been any effort	
12	between PGW and the City to get the City	
13	to use CNG gas?	
14	MR. WHITE: The devil is always	
15	in the details. We've had many	
16	discussions with Transportation over at	
17	the City, but you have expenditures above	
18	and beyond just purchasing a vehicle, and	
19	those are some of the things that the	
20	City has to consider. You have to	
21	make your garage facilities have to be	
22	able to accommodate it. But I certainly	
23	believe it's the wave of the future, and	
24	I fully expect that fleets in the future	
25	will largely utilize LNG.	
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2	If you look at a fleet like	
3	UPS, they have no gasoline or diesel in	
4	Utah or in California. It's all natural	
5	gas. If you look at a UPS truck here, it	
6	will say hybrid. It's not using natural	
7	gas. That's because the availability of	
8	fueling stations is not what it needs to	
9	be.	
10	So CNG has always been a	
11	chicken and egg type of issue. We'll buy	
12	the vehicles if the stations are there.	
13	We'll build the stations if you buy the	
14	vehicles. So that's the type of dilemma	
15	that we find ourselves in. But as the	
16	cost of the equipment, as the cost of	
17	building the fueling stations, and as the	
18	cost of the vehicles themselves start to	
19	fall, as they have, you're going to see	
20	more people move into this direction.	
21	But, yes, Chairwoman, we have had	
22	numerous conversations with the City and	
23	with SEPTA.	
24	COUNCILWOMAN TASCO: Has there	
25	been any financial analysis that you know	

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2	of that could be helpful in determining	
3	if it's worthwhile, if it will benefit	
4	the City and PGW in terms of cost that	
5	the City could move towards using natural	
6	gas?	
7	MR. WHITE: To my knowledge,	
8	I'm not sure a cost-benefit analysis has	
9	been done, but obviously when you look at	
10	these things, you're looking at costs and	
11	you're looking at what type of savings	
12	and what your payback is on your added	
13	cost. So if you're spending 25 percent	
14	more for one of these vehicles, you want	
15	to make sure that you drive it enough	
16	miles that the differential between the	
17	cost of gasoline and the cost of natural	
18	gas gives you a sufficient payback. So	
19	those are the types of things we look at	
20	when we evaluate projects.	
21	COUNCILWOMAN TASCO: So maybe	
22	that's something we could pursue,	
23	because	
24	COUNCILMAN NEILSON: The	
25	difference between burning gasoline and	

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2	natural gas, cleaner for the City?	
3	MR. WHITE: Much cleaner.	
4	COUNCILMAN NEILSON: For the	
5	environment?	
6	MR. WHITE: Much cleaner.	
7	COUNCILMAN NEILSON: Can you	
8	jump into that a little bit, because we	
9	have people with that kind of concern in	
10	our audience today.	
11	MR. WHITE: I wish I could	
12	throw some statistics at you off the top	
13	of my head. I didn't come prepared with	
14	that, but certainly when you're using	
15	natural gas to generate electricity, you	
16	take tons of harmful emissions out of the	
17	air. Likewise with vehicles, you remove	
18	a tremendous amount of harmful emissions	
19	when you use natural gas, because it's	
20	such a clean-burning fuel. But we can	
21	certainly provide the Committee with	
22	additional information regarding that.	
23	COUNCILMAN NEILSON: Thank you.	
24	COUNCILWOMAN TASCO: Thank you.	
25	Concentric concluded that both	

Page 35 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. liquefied natural gas, LNG, exports and 3 natural gas liquid sales were outside of possible opportunities PGW can take 4 advantage of. Do you agree with these 5 6 conclusions? If so, why? If not, why 7 not? MR. WHITE: I think certain 8 9 projects with respect to LNG are heavier lifts than others. And what I mean by 10 11 that, whenever you start looking at these 12 projects, they start out with a percentage of probability of coming to 13 14 fruition. Some projects have more 15 hurdles to leap over than others, but I 16 wouldn't say that I don't think that 17 these projects are doable. I mean, 18 obviously we were able to accomplish something with LNG that a number of folks 19 20 would not have anticipated PGW doing, and 21 the reason we did that was certainly 22 because we were able to get to the market 23 very quickly because we had the assets. 2.4 They were all -- everything was approved. 25 There were no regulatory approvals

Page 36 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. necessary. We just took advantage of a market opportunity. 3 So I would say that any of 4 5 these LNG opportunities have to be looked 6 We have a supply of natural gas in 7 the state that's almost -- I mean, every time you turn around, you hear that the 8 9 current level that we're using natural gas in this country, if you talk to 10 11 experts five years ago, they would have 12 said we have natural gas for 50 years. Now the numbers are 150 years, 175 years. 13 14 And the technological advances in 15 horizontal drilling have just advanced 16 the ability to extract natural gas from heretofore locations that they never 17 18 could have extracted it. So I think that the low-cost 19 20 supply and the stability of that supply 21 and the level of inventory, people can't 22 help but look at natural gas. just -- it's here to stay, and it's going 23 to be used in vehicles, it's going to be 2.4 25 used in the combined heat and power

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2	space, and it's certainly going to be	
3	used for high horsepower equipment. It's	
4	going to be used in the shipping	
5	business. Think about it. A tugboat	
6	uses 225,000 gallons of diesel a year.	
7	That's their biggest operating expense.	
8	If you can take 225,000 gallons and	
9	reduce that by a dollar, you've just	
10	almost saved yourself a quarter of a	
11	million dollars in operating expenses,	
12	and that's one small operator of a	
13	tugboat.	
14	So there's very persuasive	
15	arguments for why natural gas is here to	
16	stay.	
17	COUNCILWOMAN TASCO: The	
18	purpose of this hearing is to talk about	
19	public-private partnership. What does	
20	that mean to you and PGW, and is that	
21	something that you think that is possible	
22	in this region?	
23	MR. WHITE: Well, I think the	
24	attorneys would have to weigh in heavily	
25	here. I'm sure anything is possible.	

Page 38 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. And I believe that if there's a way to infuse -- have an infusion of capital 3 that will enable us to do things that we 4 5 couldn't otherwise do that's in the 6 public's best interest, that won't cost 7 the public an inordinate amount of money, I think it's something we should 8 9 certainly look at. And PGW is poised, our legal staff and our team are poised 10 11 to look at any opportunity, and we have 12 been looking at it. 13 You know, in the past, we've 14 done arrangements with entities, but I'm 15 not sure you'd call them public-private 16 partnerships, but we've done some 17 significant work with privately owned or 18 investor-owned organizations. Veolia. They have a very large 19 distribution line that we worked on with 20 21 them in such a way that they actually paid for the line and we own it. 22 So the 23 City owns the actual asset in the ground, but it was paid for by the Grays Ferry 2.4 25 Partnership.

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2	So I'm certain there are ways	
3	to do public-private partnerships. As I	
4	understand it, there is about a thousand	
5	different definitions for public-private	
6	partnerships. So, as I said, we stand	
7	poised ready to listen to any	
8	alternatives that may be in our	
9	customers' best interest.	
10	COUNCILWOMAN TASCO: Are there	
11	other questions?	
12	Councilman Oh.	
13	And let me recognize Councilman	
14	Henon.	
15	COUNCILMAN OH: Thank you very	
16	much, Madam Chair.	
17	So there are 17 members of	
18	Council, and we don't all think alike,	
19	but we all did come up with the same	
20	conclusion, that we were not supporting	
21	the UIL Holdings sale as the specific	
22	terms and conditions that were put	
23	forward.	
24	I will state very clearly that	
25	I am a big believer in the potential of	

Page 40 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. natural gas to lift this city, and I 3 think it is very important that we as a city look at it thoroughly and explore 4 5 its capacity fully. It seems to me that we would 6 have to do that first in order to provide 7 the citizens of this city with an ability 8 9 to understand what their options are, but there's probably, in my opinion, no 10 11 bigger opportunity for Philadelphia than 12 LNG exports. So with that, I would say that 13 14 I was quite uninterested in UIL, which 15 had no money, no interest, no capital for 16 expanding or developing LNG exports or furthering the capacity of PGW's LNG 17 In addition to which I 18 capabilities. didn't see that they had the capital to 19 20 replace pipe in the manner that they 21 described, nor was that in the contract. With that, I want to go into an 22 23 exploration with you of just some questions I have about PGW and LNG 2.4 25 specifically.

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2	You did talk about LNG in terms	
3	of selling excess LNG by the truckload.	
4	And there's already a limited capacity	
5	for PGW, and it is currently that when we	
6	reach a certain level of capacity, we	
7	sell off some excess, we hold some for	
8	emergency situations in the winter; is	
9	that correct?	
10	MR. WHITE: Yes. That's	
11	correct.	
12	COUNCILMAN OH: And	
13	realistically with the existing	
14	infrastructure that we have for	
15	liquification, what would be our capacity	
16	if we were to get an investment in to	
17	increase our capacity, what would be our	
18	capacity in terms of liquification?	
19	MR. WHITE: Well, we have a	
20	couple of different scenarios, but	
21	COUNCILMAN OH: Give me your	
22	best scenario.	
23	MR. WHITE: We believe the	
24	best-case scenario is a plan	
25	COUNCILWOMAN TASCO: Could you	
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2	speak into the mike.	
3	MR. WHITE: We believe the	
4	best-case scenario that fits the	
5	marketplace for us is somewhere around	
6	21,000 dekatherms a day. The existing	
7	plant we have there today is about 15,000	
8	to 16,000 dekatherms a day. And based	
9	upon the number of days out of the year	
10	that we can run that plant, it	
11	produces if we were starting from a	
12	completely empty tank, it produces enough	
13	natural gas for our customers to be	
14	secure in the coldest of winters.	
15	COUNCILMAN OH: Okay. And if	
16	you were to sell off the greatest amount	
17	of capacity of your storage, how long	
18	would that take before you were to fill	
19	it, to reach capacity again?	
20	MR. WHITE: If we had the	
21	second liquefaction plant?	
22	COUNCILMAN OH: Yes.	
23	MR. WHITE: The second	
24	liquefaction plant would allow us to	
25	completely fill our storage within one	
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2	operating season and actually go beyond	
3	that. So we believe that if the market	
4	were, say, 6 Bcf, we would have	
5	sufficient capability. I mean, just take	
6	21,000 a day and multiply it by the	
7	number of days in a year. Now, of	
8	course, we're down certain days for	
9	maintenance purposes, but you approach	
10	that 6 billion cubic feet. And the	
11	margins, just to give you an idea, the	
12	margins in this marketplace are the	
13	second best margin we have other than	
14	firm supply to residential, commercial,	
15	and industrial.	
16	COUNCILMAN OH: So basically 1	
17	Bcf or 1 billion cubic feet basically in	
18	terms of Btu's is about 1 trillion Btu's;	
19	is that correct?	
20	MR. WHITE: I'll go with your	
21	math on that. I think you're correct.	
22	COUNCILMAN OH: Well, I looked	
23	it up, so it is accurate.	
24	MR. WHITE: I kind of thought	
25	you did.	

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2	COUNCILMAN OH: But that's a	
3	lot of energy.	
4	So one of the things that I	
5	will say publicly is, when I met with the	
б	CEO and the leadership of UIL Holdings,	
7	we talked about LNG export, and I	
8	mentioned to them during our discussions,	
9	which they did not apparently know, was	
10	that the City of Philadelphia does not	
11	have an export license. We never applied	
12	for an export license. This body	
13	actually did a resolution urging the	
14	Mayor to pursue an export license in	
15	2013. We had been discussing an export	
16	license. That is simply to begin the	
17	process of seeing if we could apply for	
18	an export license.	
19	As of today, has the City of	
20	Philadelphia, PGW, has anyone applied for	
21	an export license or began to put that	
22	process together?	
23	MR. WHITE: We are not in the	
24	federal queue.	
25	COUNCILMAN OH: Okay. So that	

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2	means no and, therefore, we are not in	
3	the lineup of cities or facilities that	
4	have applied for an approval, and there	
5	is a limited number of facilities that	
6	are going to be approved, because once we	
7	have enough export facilities, there just	
8	is no more need for export locations; is	
9	that correct?	
10	MR. WHITE: That's the common	
11	wisdom. I wouldn't say any cities are	
12	applying for export terminal	
13	authorization, but certainly there are	
14	entities out there that are	
15	COUNCILMAN OH: Entities	
16	located in or around cities, but for my	
17	purpose, there's no application coming	
18	from Philadelphia, from any private	
19	entity or public entity in and around	
20	Philadelphia; is that correct?	
21	MR. WHITE: No. That's	
22	correct.	
23	COUNCILMAN OH: Are you	
24	familiar with a company called KEPCO,	
25	Korea Electric Power Co gas?	

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2	MR. WHITE: Yes.	
3	COUNCILMAN OH: Would you	
4	understand them to be one of the largest	
5	investment entities and developers of	
6	natural gas facilities on a global basis?	
7	MR. WHITE: I understand that	
8	they're huge, yes.	
9	COUNCILMAN OH: So I will say	
10	that I met with them or, more	
11	importantly, they met with me back in	
12	2012, and I have had a very extensive	
13	discussion with them since that time	
14	about Philadelphia and its capability in	
15	terms of being an export location. And	
16	they felt, the people that I spoke with,	
17	that Philadelphia has an ability to be an	
18	export location, and we have gone through	
19	some of the numbers of what the	
20	investment, the technology and other	
21	things would be.	
22	I will also say that in	
23	September of last year, 2014, when I did	
24	a trade mission visit to Korea I will	
25	say at my own expense, no City dollars	

Page 47 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. involved here -- that I did meet with the former Vice Minister of Trade, Industry 3 and Energy, and we discussed Philadelphia 4 and other projects around the world and 5 6 things like that. All of which is to say that from those types of persons at that level of investment and expertise, they 8 9 see Philadelphia as a very good location 10 for possible investment into PGW and its 11 LNG technology. 12 Has there been any 13 conversations or agreements or anything 14 between PGW and any other investment 15 entity or developer of liquid natural 16 qas? 17 MR. WHITE: One of your witnesses today, Franc James from Penn 18 America, I think you'll hear quite a bit 19 20 of the discussion regarding that. 21 actually contacted us prior to the sale discussion, and then, of course, when the 22 sale process began, he stepped away. 23 2.4 he has been back to talk to us quite a 25 bit.

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2	COUNCILMAN OH: When did he	
3	first contact you, what year?	
4	MR. WHITE: I would say	
5	probably around 2010 or '11.	
6	COUNCILMAN OH: 2010 or '11 he	
7	came to talk to you about a private	
8	investment of monies to invest in PGW,	
9	not purchase PGW, invest in PGW, to	
10	develop its export technology and its	
11	capacity; is that correct?	
12	MR. WHITE: Yeah. Yes. That's	
13	correct.	
14	COUNCILMAN OH: And I was	
15	elected in 2011. I didn't take office	
16	until 2012. So prior to my coming to	
17	Council, he had already approached PGW.	
18	What happened to that discussion? Why	
19	didn't that go forward?	
20	MR. WHITE: That didn't go	
21	forward because of the fact that the	
22	company was in a sale process.	
23	COUNCILMAN OH: UIL Holdings,	
24	something?	
25	MR. WHITE: Well, it was the	

Page 49 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. whole process. So, in other words, UIL didn't surface until they became the 3 winning bidder. But prior to that, you 4 5 were in a process. I mean, there were other things that we didn't move forward 6 at that time as well because of the fact that we were in a sale process. 8 9 COUNCILMAN OH: Okay. So I'm 10 going to summarize it this way, which is 11 my understanding, but you can correct me 12 if I'm wrong. The direction that the City went in, which is the direction of 13 14 the Administration of the City, which 15 ultimately is your boss kind of, was that 16 it was looking to sell the assets of PGW 17 to a company that would continue to deliver gas to residences and businesses 18 and to get a purchase price, an excess 19 20 amount of which would go to fund a 21 portion of the Pension Fund in 22 Philadelphia, which turns out to be about 23 \$242 million at the end of the day with 2.4 UIL Holdings. Is that about correct? 25 It's not exactly correct.

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2	MR. WHITE: I would agree with	
3	everything you said except for the 242.	
4	My personal belief is the number was at	
5	least double that.	
6	COUNCILMAN OH: So 480?	
7	MR. WHITE: But that's just me.	
8	COUNCILMAN OH: Okay. I'm not	
9	putting words in your mouth. So	
10	everything is true except the end result	
11	of the City might have been about a	
12	little south of \$500 million?	
13	MR. WHITE: Yeah.	
14	COUNCILMAN OH: Okay. And if	
15	the liquification so, in other words,	
16	once the Administration had decided that	
17	it was going to simply do a sale of the	
18	assets to get some money to put into the	
19	Pension Fund, there was no more	
20	discussions about investment into LNG	
21	capabilities and all the positive impact	
22	that that would have done?	
23	MR. WHITE: That's correct.	
24	There was no authorized expenditure while	
25	the sale process was going on.	

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2	COUNCILMAN OH: Okay. So when	
3	I came into office, based on my meetings,	
4	I had said many times to the	
5	Administration that I was not interested	
6	in looking at these type of sales, the	
7	UIL Holdings sale, without knowing that	
8	we had put it on a global marketplace,	
9	that we have gone to the biggest	
10	investors, that we were ensured that we	
11	were providing the citizens of	
12	Philadelphia with the opportunity to not	
13	only own PGW but get investments that	
14	would develop jobs and secure public	
15	revenues for our schools and for our	
16	cities beyond raising taxes at a rate	
17	that seems to be significant with an	
18	investment, a private investment, into	
19	the LNG capability. And that's just for	
20	your information.	
21	So could you tell me that if we	
22	were to export LNG, we were to get	
23	private dollars in to bring a pipe into	
24	Philadelphia, we were to maximize our	
25	second liquification facility, we were to	
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2	put that at a terminal, we were going to	
3	ship it out, what is the range of money	
4	to the City that we would benefit from?	
5	MR. WHITE: If I may, PGW would	
6	participate in a project like that from	
7	the standpoint of our storage	
8	capabilities. We wouldn't necessarily be	
9	involved in the development or costs	
10	associated with the pipeline connection,	
11	and that would be incidentally, that	
12	would be a tremendous benefit to the	
13	development of an energy hub in	
14	Philadelphia, because certainly if you're	
15	bringing an interstate pipeline that	
16	provides 700,000 dekatherms a day, you	
17	might want to enlarge that to a million a	
18	day and support other major industrial	
19	initiatives in the City.	
20	So from that standpoint,	
21	obviously the development of an LNG	
22	terminal would be very important. That	
23	aspect of it would be part of that	
24	investor group's responsibility. The	
25	other piece that we would not necessarily	
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2	participate in is obviously the	
3	coordination with a foreign country, east	
4	Europe or wherever we'd be delivering	
5	the partner would be delivering their	
6	supply. So we'd probably keep our	
7	component of it inside the fence line.	
8	And if you look at the size of this	
9	facility that could be built here, it's	
10	probably a one-train facility, which	
11	would be about 600,000 to 700,000	
12	dekatherms of liquefaction per day, that	
13	would bring a 135 cubic meter ship in	
14	here about once a week, and you could	
15	look at maybe anywhere from \$100 to \$200	
16	million in net revenues to Philadelphia	
17	Gas Works.	
18	COUNCILMAN OH: So that is \$100	
19	to \$200 million in net revenues to the	
20	City of Philadelphia per year?	
21	MR. WHITE: That's correct.	
22	COUNCILMAN OH: And so in five	
23	years, you're looking at \$500 million to	
24	a billion dollars versus the one-time	
25	sale and benefit of a number less than	

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2	500 million if and that's a big if	
3	if we found a private investor to invest	
4	in the development, do all this stuff,	
5	which cost the taxpayers of Philadelphia	
6	no money, we continue to own PGW and keep	
7	it a public facility to ensure that	
8	public interest is the primary interest	
9	of PGW, but the development and the	
10	commercial aspects of exporting is done	
11	through a private company; is that	
12	correct?	
13	MR. WHITE: That would be	
14	correct.	
15	COUNCILMAN OH: What is the	
16	typical length of year or term of year of	
17	a contract between a private exporter and	
18	a company overseas? Is that an annual	
19	contract, a ten-year contract, a 20-year	
20	contract? What kind of contract is that?	
21	MR. WHITE: I would suspect	
22	with the type of capital that would have	
23	to be invested in a project like this, it	
24	would have to be a long-term contract in	
25	the neighborhood of 20 years.	

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2	COUNCILMAN OH: So we would	
3	lock in \$100 to \$200 million per year for	
4	the next 20 years if this all worked out?	
5	MR. WHITE: Probably, yes.	
6	COUNCILMAN OH: Okay. So I	
7	have a great interest that we at least	
8	explore this and put this on the table to	
9	the voters before we talk about selling	
10	it to a company that doesn't have enough	
11	capital, which had previously purchased	
12	three small facilities from Iberdrola,	
13	and now years later is purchased by that	
14	same company as regulations and taxes in	
15	Spain has changed. So they know each	
16	other and they paid \$3 billion for UIL	
17	Holdings, which is smaller in its	
18	combined state than PGW, and PGW has a	
19	tremendous asset, which is its	
20	liquification capabilities.	
21	That's all the questions I	
22	have. Thank you very much.	
23	COUNCILWOMAN TASCO: Thank you.	
24	Councilman Henon.	
25	COUNCILMAN HENON: Thank you,	

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2	Madam Chair.	
3	Good morning.	
4	MR. WHITE: Good morning.	
5	COUNCILMAN HENON: I apologize	
6	if this question is redundant. I want to	
7	ask quickly about the main replacement	
8	plan, PGW's main replacement plan, and if	
9	the plan is certain and what the	
10	timelines are.	
11	MR. WHITE: Well, as I said a	
12	little earlier, we had an 18-mile	
13	program. We availed ourselves of the new	
14	legislative tool known as the DSIC, which	
15	is a distribution improvement service	
16	charge. I have that wrong, but it's	
17	close. Anyway, that's a mechanism that	
18	we used to expand our program, and this	
19	past year we did 28 miles of pipe	
20	replacement. At a 28-mile clip, we're	
21	somewhere in the high 70's years of	
22	replacement just to replace our cast	
23	iron. That would be about 1,400-and-some	
24	miles of cast iron replaced in that	
25	timeframe.	
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2	We have intentions and we will	
3	be amending our capital budget rather	
4	soon to ramp that up in '16 using another	
5	\$8 million and then leveling out in '17	
6	at about \$11 million a year going	
7	forward. That's our game plan now. We	
8	have not yet presented that to the	
9	Philadelphia Gas Commission, but we will	
10	shortly. Our Board has seen it and	
11	approved that, and we should be amending	
12	our budget. So in that regard, we	
13	probably will be in the 50-year range of	
14	removal of our cast iron inventory.	
15	COUNCILMAN HENON: And in the	
16	capital budget for PGW, you propose a	
17	second LNG unit over the next couple	
18	years. Preliminary costs range from \$60	
19	to \$100 million. In the five-year plan,	
20	the forecast, there's about \$20 million a	
21	year in revenues could be as a result of	
22	this liquification capital improvement.	
23	And you recently had an open session with	
24	seeking proposals for customers	
25	interested in expansion of PGW's LNG.	
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2	What were the results of that and what	
3	impact would that have on PGW and the	
4	customers?	
5	MR. WHITE: The results were	
6	very good. We received non-binding	
7	requests for about 6.3 Bcf, billion cubic	
8	feet. Now, our storage tanks hold about	
9	3.9. So it gives you an idea that we'd	
10	actually be filling the tanks and	
11	distributing the natural gas currently by	
12	truck-loading racks. In the future,	
13	maybe rail cars. But nevertheless, we'd	
14	be cycling the facility and getting a	
15	little bit more value out of that storage	
16	space that we have. That storage space	
17	is a very critical component. It's	
18	already sited. It's in operating	
19	condition, and we have a real asset	
20	there.	
21	COUNCILMAN HENON: How long	
22	will it take PGW to realize the return on	
23	the cost of the installation of the new	
24	liquification unit?	
25	MR. WHITE: If it's approved,	

Page 59 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. we would probably be -- we're likely going to file an amendment. It will be 3 before Council in October. It's about 18 4 5 months from that point where we would be 6 online. So, you know, within a two-year 7 period. COUNCILMAN HENON: As far as 8 9 the investment in the capital improvement of that LNG, what would be the return on 10 11 that investment, like when would you start to see some of PGW's additional 12 13 revenues forecasted in your assumptions? 14 MR. WHITE: Well, we would --15 as the facility was approved, we would 16 immediately go out and look for binding 17 commitments. The fact that we interrupted customers this year and were 18 only providing interruptible service is 19 20 pretty tough to get binding commitments. 21 Once we have authorization, if we get 22 authorization to build a facility, we 23 will then at that point be able to get those binding commitments. And when the 2.4 25 facility comes online, we'll be making

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2	money immediately.	
3	COUNCILMAN HENON: And how much	
4	revenue would you project?	
5	MR. WHITE: In the neighborhood	
6	of 12 to 20.	
7	COUNCILMAN HENON: 12 to 20 per	
8	year?	
9	MR. WHITE: Yes. It's an	
10	entirely different scale than what	
11	Councilman Oh was referring to.	
12	COUNCILMAN HENON: I was just	
13	informed that these are repetitive	
14	questions.	
15	MR. WHITE: I did better this	
16	time because I practiced.	
17	COUNCILMAN HENON: So I don't	
18	know if this question has been asked,	
19	and, again, I apologize. The length of	
20	some of these open for business and	
21	expression of interest, what would be the	
22	length of the terms that they are	
23	expressing interest in? Were they one	
24	year? Are they multiple years? Are they	
25	ten years, 15 years, 20 years?	

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2	MR. WHITE: We would love them	
3	to be 10 or 15 or 20 years, but I think	
4	it will be whatever the prevailing market	
5	conditions are at that time. If they	
6	believe that their market is going to get	
7	stronger over time, they're obviously	
8	going to commit for a lot of liquid for a	
9	long period of time, and I think that's	
10	going to be the case. I think the market	
11	is going to go in it's going to	
12	continue to rise, particularly since this	
13	market is long-haul trucking, high	
14	horsepower equipment, and marine vessels.	
15	So I think the answer to your	
16	question is, I don't know, but the	
17	variables that I'd consider would lead me	
18	to the conclusion that it would be a	
19	longer term contract.	
20	COUNCILMAN HENON: Is there	
21	anything prohibiting long-term contracts	
22	right now, either through its government	
23	structure or the way we are structured?	
24	MR. WHITE: Well, we have	
25	the	
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2	COUNCILMAN HENON: I mean,	
3	there's obviously a lot of talk regarding	
4	whether we need to be an authority or	
5	whether you have the ability through its	
6	current governance structure to enter in	
7	long-term agreements, because I know you	
8	have in the past entered into	
9	public-private arrangements. In	
10	particular, I don't think you can	
11	answer this. I'm not sure if they ever	
12	came to fruition, but you had the Hess	
13	possibility, and that was in the that	
14	was around 2001, and in the late '90s you	
15	had, what was it, QST, if I recall, on	
16	electricity?	
17	MR. WHITE: Grays Ferry	
18	Partnership. So we did a 20-year deal	
19	with the Grays Ferry Partnership. It may	
20	have even been 25, but we did it through	
21	PAID, because most of these large	
22	projects are project financed and they	
23	won't they won't be able to borrow the	
24	money if they don't have a committed	
25	contractual situation. PGW can sign a	
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Page 63 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. long-term contract, but it can be null and void after four years by virtue of 3 the four-year rule. 4 5 COUNCILMAN HENON: So is it. 6 easier to enter into a P3 opportunity regardless of whether you have the 8 ability to do long-term agreements now as 9 is or is it better to enter into a P3 agreement with an authority for capital 10 11 reasons, as you just stated? 12 MR. WHITE: I'm not sure I'm 13 going to give you the right answer for 14 that. I will say that the mechanisms we have or the limitations we have with 15 16 procurement have a chilling effect when 17 you're bringing in a third party who is 18 used to doing business directly with the entity that they're contracting with and 19 20 then you throw in front of them that they 21 have to do a contract with PAID, who in turn does a back-to-back contract with 22 23 Philadelphia Gas Works. So that's an unusual mechanism and it's not uncommon 2.4 25 for entities to say, I have scarce

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2	capital, why should I go through this	
3	here in Philadelphia when I can take it	
4	elsewhere.	
5	I don't have good examples of	
6	that, but I can tell you that in verbal	
7	conversations with people who have been	
8	interested in working with us, it's a	
9	heavy lift. And I will say during the	
10	Hess negotiations, which was for	
11	importing of LNG, it did not come to	
12	fruition. And I may preempt the	
13	question, but that was due to not only	
14	the procurement but also the transit up	
15	the river at that time was considered a	
16	heavy lift.	
17	COUNCILMAN HENON: So currently	
18	the way things are structured, whether	
19	it's governance and the procurement or	
20	the ability to go to market on capital,	
21	is it a challenge to reach our full	
22	potential as PGW exists?	
23	MR. WHITE: It's a huge	
24	challenge, because in this business, you	
25	have to react quickly, and whether it's a	
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2	regulatory change that opens up an	
3	opportunity or whether it's a business	
4	opportunity. Five years ago we didn't	
5	anticipate having four times the amount	
6	of natural gas in this country. We	
7	didn't anticipate stable pricing for	
8	decades, which is what we're looking at	
9	right now. I mean, obviously I don't	
10	have a crystal ball, but I think all the	
11	variables indicate that you have more gas	
12	than you know what to do with.	
13	So, yeah, I think it's very	
14	important that we if we're going to	
15	have a utility in the City of	
16	Philadelphia and we want to flourish, we	
17	have to be quick to market.	
18	COUNCILMAN HENON: Okay. Thank	
19	you.	
20	COUNCILWOMAN TASCO: Thank you	
21	very much.	
22	The Committee as well as	
23	Councilmembers will have an opportunity	
24	to further discuss the capital budget for	
25	PGW and also come up with probably some	

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2	recommendations of how we could possibly	
3	make it easier for you to do business.	
4	MR. WHITE: Thank you.	
5	COUNCILWOMAN TASCO: Any other	
6	questions?	
7	Thank you very much.	
8	Oh, I'm sorry, Councilman	
9	Jones. You're sitting over there in the	
10	wilderness. I'm sorry.	
11	COUNCILMAN JONES: It's all	
12	right. Thank you so much, Madam Chair,	
13	and I just want to say thank you for your	
14	attention to detail to this issue, not	
15	just in your capacity here but as	
16	Chairwoman of the Philadelphia Gas Works.	
17	Thank you publicly for staying keenly on	
18	top of this, and we look forward to you	
19	continuing to do so from whatever	
20	capacity.	
21	I wanted to ask a couple of	
22	questions, if I could, and a couple of	
23	them are just clarification questions.	
24	You said there are many	
25	definitions of what an energy hub is. Do	

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2	me a favor, take a stab at what you think	
3	an energy hub like Philadelphia could be.	
4	MR. WHITE: Well, I actually	
5	said there are many definitions for a P3,	
6	as I understand it. But with respect to	
7	the energy hub, I think that in	
8	Philadelphia we have significant refinery	
9	capability. We have a workforce, both	
10	educated workforce and a blue-collar	
11	workforce, that is underutilized. And I	
12	think if we can bring industry to	
13	Philadelphia, obviously the energy	
14	industry will be needed to support that.	
15	You're not going to get an	
16	interstate pipeline here if you don't	
17	have demand, if you don't have someone	
18	willing to pay for it. Interstate	
19	pipelines are willing to think more	
20	creatively than they did in the past. In	
21	the past they didn't have binding	
22	commitments. For every dekatherm of	
23	capacity, they wouldn't build it.	
24	I think you're going to find	
25	that there's some more creative thinking	

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2	coming out of interstate pipelines, and	
3	when they get an anchor tenant, they	
4	might be willing to spend a little bit of	
5	their own capital. But this is not a	
6	group that's typically I mean, they're	
7	a risk averse operation, so they're going	
8	to be a little fearful how they spend	
9	their money. But I do think we have all	
10	the makings here of using a lot of	
11	energy, and I'm a big proponent of you	
12	bring industry, you increase tax dollars;	
13	you increase tax dollars, you start to	
14	support schools and City services. So	
15	that's what I think we all need to do.	
16	COUNCILMAN JONES: So do you	
17	believe that demand that you mentioned is	
18	internal by developing clients within the	
19	City's boundaries or more external export	
20	or both?	
21	MR. WHITE: We've lost most of	
22	the industry in Philadelphia. We have to	
23	bring it back. And to answer your	
24	question then, it's external. I think we	
25	need to bring industry into this	
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2	environment, and we have to be creative	
3	about how we do it, but one of the ways	
4	to ensure that you'll have an energy hub	
5	in the future is to attract that industry	
6	and attract that interstate pipeline.	
7	COUNCILMAN JONES: So I guess I	
8	should rephrase it differently. If there	
9	was a two-pronged strategy, one we need	
10	to develop industrial clients within the	
11	borders of City of Philadelphia. Twenty	
12	years ago we had Acme Bakery on Upland	
13	Way in my district. Used to bake bread.	
14	You could get fat walking a block around	
15	there just smelling the bread. They've	
16	left, and one of the reasons was high	
17	cost of energy.	
18	If we could convert that back	
19	and maybe provide them an affordable gas,	
20	could we attract industry like that?	
21	Then part two of that is, any	
22	surplus, who's the customers out there	
23	that would want to buy it from us, not in	
24	Philadelphia?	
25	MR. WHITE: Well, much of the	

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2	pipeline capacity that we're talking	
3	about with regard to an energy hub would	
4	not necessarily be PGW capacity. There	
5	may be direct links to refineries. There	
6	may be a direct link from an interstate	
7	pipeline to an electric-generating	
8	facility. These facilities are huge	
9	natural gas users.	
10	Certainly if industry sites	
11	within Philadelphia's boundaries, the Gas	
12	Works distribution system will likely be	
13	a part of that mix. But, as I said, it's	
14	going to be a combination of natural gas	
15	entering the City of Philadelphia and	
16	going straight to the industry location.	
17	Mr. Rinaldi is here today. I think maybe	
18	he could amplify on that. If there's	
19	some things he wants to do down there, he	
20	may have direct feeds from the interstate	
21	pipeline.	
22	Similarly, you could	
23	reestablish industry in neighborhoods in	
24	the City of Philadelphia, and that	
25	natural gas would be distributed through	

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2	PGW's network.	
3	COUNCILMAN JONES: So based on	
4	liquification you used a really cool	
5	term. Let me see if I wrote it down.	
6	Liquefaction, I think it might have been.	
7	Did I mispronounce it?	
8	MR. WHITE: No. That's one	
9	aspect of what we do.	
10	COUNCILMAN JONES: So who is	
11	the market for that particular product?	
12	MR. WHITE: That market pretty	
13	much at this time is outside of	
14	Philadelphia.	
15	COUNCILMAN JONES: So who are	
16	they?	
17	MR. WHITE: It's wholesale	
18	operations that distribute liquefied	
19	natural gas for the use in long-haul	
20	truckers. So if you see a	
21	tractor-trailer with a fuel tank on the	
22	side that looks a little larger than what	
23	you're used to seeing, that's probably an	
24	LNG truck. And the LNG is being taken to	
25	locales where they could load the LNG on	

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2	these vehicles. And they have the same	
3	cruising range as a diesel vehicle.	
4	COUNCILMAN JONES: How big is	
5	that market?	
6	MR. WHITE: That market is	
7	you know, I don't have an exact feel for	
8	how big it can get, but just the entities	
9	that we reached out to with our open	
10	season came back with about 6 billion	
11	cubic feet, and that's primarily the	
12	long-haul trucking market and, to a	
13	lesser degree, high horsepower equipment	
14	at drilling sites out in Western	
15	Pennsylvania and Central Pennsylvania.	
16	But the main market is the long-haul	
17	trucking market.	
18	COUNCILMAN JONES: Right now	
19	currently we get our molecules from do	
20	we get it from Western Pennsylvania or	
21	from Texas?	
22	MR. WHITE: We get about 45	
23	percent from Marcellus, Western	
24	Pennsylvania, and the other remaining	
25	molecules are South Texas, Louisiana.	
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2	COUNCILMAN JONES: How are they	
3	delivered to you?	
4	MR. WHITE: They're delivered	
5	on interstate pipelines in which we have	
6	contracts.	
7	COUNCILMAN JONES: Those	
8	contracts' terms are how typically	
9	let me go where I'm going. The typical	
10	term of bringing that pipeline capacity,	
11	we lease space on that pipeline?	
12	MR. WHITE: That's correct.	
13	COUNCILMAN JONES: And those	
14	terms are usually 12 years?	
15	MR. WHITE: They can range, but	
16	historically they've been as long as 20	
17	years, 20-year contracts.	
18	COUNCILMAN JONES: And	
19	currently for what reason what are our	
20	current terms of those?	
21	MR. WHITE: Many of those	
22	contracts are in what you call an	
23	evergreen status and some are in probably	
24	five- to ten-year structures. But this	
25	is capacity that we need for Philadelphia	
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2	citizens. So this is capacity that we're	
3	not giving up.	
4	COUNCILMAN JONES: So currently	
5	of the leased capacity within those	
6	pipelines, how much do we actually	
7	utilize?	
8	MR. WHITE: In the coldest of	
9	winters	
10	COUNCILMAN JONES: On average.	
11	MR. WHITE: Well, on average	
12	we're probably using, I'd say, 85 percent	
13	a year.	
14	COUNCILMAN JONES: On average?	
15	So over the last three years, we've used	
16	85 percent of that capacity?	
17	MR. WHITE: That's not a number	
18	that I typically think about. What I	
19	need to do is, I need to make sure I have	
20	enough capacity so that when the weather	
21	gets extreme like it did this winter,	
22	there are days that we're using every bit	
23	of capacity that we have, plus we're	
24	running our LNG and vaporizing hundreds	
25	of thousands of dekatherms of LNG.	

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2	COUNCILMAN JONES: So my	
3	question is how much more capacity, if we	
4	tilt full throttle, could we run through	
5	that pipeline?	
6	MR. WHITE: Oh, okay. I get	
7	the question. We have physical	
8	constraints. They're called gate	
9	stations. Under contract we have about	
10	480,000 a day. We physically believe	
11	that we could get about 525,000	
12	dekatherms through our gate stations.	
13	Just to give you an idea, on	
14	the coldest day, PGW uses close to	
15	700,000. So we cannot get it from a gate	
16	station. That's why that LNG facility is	
17	so critical, and if you	
18	COUNCILMAN JONES: That's where	
19	I was going.	
20	MR. WHITE: Right. And if you	
21	want to expand industry, you're going to	
22	need to bring more capacity into	
23	Philadelphia.	
24	COUNCILMAN JONES: All right.	
25	So we have if you were to say between	

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2	1 and 100, we use about 85 percent of	
3	that capacity. What does that 15 percent	
4	expansion mean by way of dollars?	
5	MR. WHITE: Well, it's not that	
6	it's excess. It's just that you asked me	
7	on average how I use it.	
8	COUNCILMAN JONES: Correct.	
9	MR. WHITE: If we had a	
10	designed winter condition, we would use	
11	it every day, but in the summer, we don't	
12	need it.	
13	COUNCILMAN JONES: So that's	
14	where the opportunity to freeze it comes	
15	in, right?	
16	MR. WHITE: Right.	
17	COUNCILMAN JONES: One last	
18	question. Storage capacity, how much do	
19	we have?	
20	MR. WHITE: In our LNG	
21	facility?	
22	COUNCILMAN JONES: Yes.	
23	MR. WHITE: A little over 4	
24	million.	
25	COUNCILMAN JONES: And you're	
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2	planning to expand that?	
3	MR. WHITE: No. We're not	
4	planning to expand the storage. We're	
5	planning to expand the machine that	
6	actually takes the gas from a vapor state	
7	into a liquid state, and it's called a	
8	liquefaction plant. And there are a	
9	variety of different technologies you can	
10	use to do that, but you actually take the	
11	natural gas down to about 250 degrees	
12	below Fahrenheit.	
13	COUNCILMAN JONES: Final	
14	question is, if there was a city that was	
15	the perfect energy hub, other than us,	
16	what city would we look to?	
17	MR. WHITE: Well, I don't think	
18	anyone has the assets we have. Now,	
19	having said that, you know, we have a	
20	population and we have surrounding	
21	communities that make it a little bit	
22	more difficult to expand the energy hub	
23	concept as opposed to places in Louisiana	
24	and Texas where a stripping plant is	
25	enhancing the appearance of the	
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2	neighborhood.	
3	So, you know, I think there are	
4	areas there are cities, but I	
5	should say there are geographic areas	
6	that are probably better than	
7	Philadelphia, but there aren't cities	
8	that are better than Philadelphia.	
9	COUNCILMAN JONES: Thank you,	
10	Madam Chair.	
11	COUNCILWOMAN TASCO: Thank you	
12	very much.	
13	Are there any other questions?	
14	(No response.)	
15	COUNCILWOMAN TASCO: Thank you.	
16	He's going to ask you a short question,	
17	because we have other people who have	
18	been waiting.	
19	COUNCILMAN HENON: And I	
20	apologize to everybody. I will be caught	
21	up to speed very shortly.	
22	So City Council's consultant	
23	during the process over the last year,	
24	Concentric, concluded that both the	
25	liquification, natural gas, exports and	
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	the NGL sales were outside the	
3	possibilities of PGW to take advantage	
4	of. Do you agree with these conclusions?	
5	MR. WHITE: Well, we were	
6	already taking advantage of it when that	
7	study came out. So we were already	
8	selling liquid by truckload in the	
9	commercial market space. So maybe we're	
10	talking past each other, meaning	
11	Concentric and myself, but we certainly	
12	believe that it's not beyond the	
13	capabilities of the Gas Works.	
14	COUNCILMAN HENON: Well, that's	
15	good to know. Miscommunications there or	
16	oversight.	
17	And a general broader question	
18	when it comes to the buzz word. In DC it	
19	was the fiscal cliff and all these other	
20	words. Here we have the energy hub,	
21	which is actually real.	
22	What role do you see PGW	
23	playing in the broader context of an	
24	energy hub in this region?	
25	MR. WHITE: I think we are an	

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2	absolute critical role to an energy hub.	
3	Our distribution system is a vital	
4	component to the development of industry	
5	and new business in the City of	
6	Philadelphia. So, you know, you can talk	
7	all around this energy hub, but PGW is	
8	squarely in the middle of it, and the	
9	critical component to the development of	
10	an energy hub is the expansion of an	
11	interstate pipeline, expansion of assets	
12	into Philadelphia.	
13	COUNCILMAN HENON: And, lastly,	
14	the employees, you work real close with	
15	the employees. We employ so many	
16	Philadelphia residents. To me that makes	
17	our asset that much more valuable in	
18	their knowledge. Can you talk about a	
19	little on the employees and how important	
20	it is in any succession plan or	
21	acceleration plan for pipe replacements	
22	and delivering the product economically	
23	and in a safe manner.	
24	MR. WHITE: Well, let me just	
25	say this, that Keith Holmes, the union	

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2	President, and myself have negotiated	
3	four or five labor agreements over the	
4	last 15 years. You have seen the	
5	direction the company has taken over this	
6	15 years. It's not due exclusively to	
7	that. There's been support, rate support	
8	and other things. But I will tell you	
9	right now, if there wasn't a working	
10	relationship between management and the	
11	union, we would not have gotten off the	
12	dime. So how we work with our 1,200	
13	unionized employees and our 499	
14	non-unionized employees is critical to	
15	the success of the company. And we have	
16	a labor agreement. We abide by that	
17	labor agreement. But I will tell you	
18	that it has been the order of the day	
19	that our union has looked for ways to not	
20	only support their membership but support	
21	their membership by making the company a	
22	better place and a better company,	
23	stronger company.	
24	COUNCILMAN HENON: Thank you.	
25	COUNCILWOMAN TASCO: Thank you,	

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2	Craig. Come prepared when we have the	
3	capital budget hearing to probably answer	
4	these same questions.	
5	MR. WHITE: Thank you.	
6	COUNCILWOMAN TASCO: Thank you.	
7	We'll go now to our second	
8	because we have a lot of people here who	
9	are waiting to testify and a lot of that	
10	is for the record, but we'll be on the	
11	record again in the spring. We're really	
12	here to talk about public-private	
13	partnerships, but also it's important to	
14	discuss PGW's would-be role and the	
15	ability to move forward.	
16	Would you please state your	
17	name for the record.	
18	MR. RUBIN: Scott Rubin,	
19	R-U-B-I-N.	
20	COUNCILWOMAN TASCO: Would you	
21	please proceed with your testimony.	
22	MR. RUBIN: Thank you, Madam	
23	Chair and members of the Committee, and	
24	thank you for inviting me to appear	
25	before you today. By way of brief	

Page 83 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. background, I am a Pennsylvania attorney who works exclusively on issues related 3 to the public utility industries as both 4 5 an attorney and consultant throughout the 6 United States and Canada. I've been doing this type of work for more than 30 years, back to when I started as a staff 8 9 attorney with the Pennsylvania Consumer 10 Advocate. 11 I have been asked to provide 12 some background information concerning the legal structure and economic 13 14 regulation of PGW and some possible 15 options for that moving forward. 16 Madam Chair, you properly 17 called PGW a very valuable asset this morning. Let me flesh that out a little 18 19 to give us some perspective. 20 As you know, PGW is the largest 2.1 government-owned natural gas distribution 22 utility in the United States. According 23 to PGW's annual report for their most recent fiscal year, which ended August 2.4 25 31st, PGW had total assets in excess of

Page 84 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. \$1.7 billion, of which the net value of 3 PGW's utility plant was almost \$1.2 billion. Those assets are supported by 4 5 about \$980 million in long-term debt. On a net basis, the City's investment in 6 PGW, what we can think of as equity in the business, was more than \$400 million 8 9 as of August 31st. In that most recent fiscal year, PGW paid a distribution to 10 the City General Fund of \$18 million, 11 12 generated positive cash flow of \$166 million, and had net income of almost \$50 13 14 million. 15 So it is indeed a very valuable 16 asset, and I understand that the City may 17 be interested in exploring options to unlock the value of that investment, 18 enable PGW to capitalize on some of its 19 valuable assets that are underutilized 20 21 today, enhance PGW's independence from 22 City government or generate additional 23 sources of revenue that could help further improve PGW's financial condition 2.4 25 while investing in the replacement of

Page 85 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. aging infrastructure. The City may be interested in pursuing some or all of 3 these types of opportunities while 4 5 retaining government ownership and ultimate control over one of the City's most valuable assets. 7 As you know, cities in 8 9 Pennsylvania have the ability to establish municipal authorities for 10 certain purposes. The Municipality 11 12 Authorities Act sets out the specific 13 purposes for which an authority can be 14 established, as well as the powers and 15 duties of an authority. Creating an 16 authority to own or operate the assets of 17 PGW is a method the City may want to explore to provide greater flexibility to 18 both the City and PGW while retaining 19 20 City ownership of the asset. The Authorities Act itself does 2.1 22 not mention natural gas distribution as 23 an enterprise in which an authority can engage, but in 1999 the Pennsylvania 2.4 25 General Assembly enacted the Natural Gas

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2	Choice and Competition Act that	
3	specifically authorizes the City to form	
4	an authority to provide gas service, but	
5	with certain restrictions, which I'll	
6	discuss briefly in a moment.	
7	Under the Authorities Act, an	
8	authority has broad powers to act	
9	independently. A municipality creates an	
10	authority by filing articles of	
11	incorporation and following certain legal	
12	and notice requirements.	
13	Once created, an authority has	
14	general corporate powers, including the	
15	power to sue and be sued, acquire and	
16	dispose of property, make investments,	
17	borrow money, enter into contracts, use	
18	the power of eminent domain, and	
19	determine the fees it levies on	
20	customers.	
21	In addition, even though a	
22	single municipality can create an	
23	authority, the authority is allowed to do	
24	business anywhere in the Commonwealth	
25	and, in certain circumstances, to	
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2	participate in projects in adjoining	
3	states. When an authority owns real	
4	property outside the boundaries of the	
5	city that created it, it must either	
6	receive permission from the other	
7	municipality or agree to make payments in	
8	lieu of taxes equivalent to property	
9	taxes and other assessments in that	
10	municipality.	
11	Authorities are subject to	
12	certain limitations. I'll mention a few.	
13	An authority's corporate existence is	
14	limited to 50 years, renewable for	
15	additional terms of up to 50 years each.	
16	An authority cannot issue bonds with a	
17	term of more than 40 years, and an	
18	authority cannot be created which	
19	duplicates or competes with an existing	
20	business.	
21	In addition to these general	
22	restrictions, the Gas Choice Act changes	
23	some of these requirements and imposes	
24	additional conditions and limits on PGW.	
25	Now, as you know, the Gas	
23 24	some of these requirements and imposes additional conditions and limits on PGW.	

Page 88 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. Choice Act gave the Public Utility Commission jurisdiction over the rates 3 and service of PGW. That jurisdiction 4 would not end if the City formed an 5 6 authority to own or operate PGW. If the City decided to transfer the ownership or operation of PGW to an 8 9 authority, the PUC would have limited ability to review the financial aspects 10 11 of that transaction, the specific 12 creation of the authority, unless the financing were limited only to the amount 13 14 needed to repay existing PGW debt. 15 Finally, if the City creates an 16 authority for PGW, the authority would 17 retain the power of eminent domain within the City limits, but unlike other 18 authorities, it would not have that power 19 20 in other municipalities. 21 Transferring PGW's assets or 22 operations to an authority should not 23 result in significant changes in PGW's utility operations other than providing 2.4 25 PGW with more flexibility to engage in

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2	activities outside the City's borders.	
3	Of particular importance, the following	
4	would not change under authority	
5	ownership or operation:	
6	PGW's limitations on liability	
7	from tort actions would remain governed	
8	by the municipal tort claims law;	
9	The PUC's role regarding PGW's	
10	rates and service would not be changed;	
11	PGW would retain the ability to	
12	place liens on real property for unpaid	
13	gas bills;	
14	And the rights of PGW's	
15	employees, including pension rights and	
16	collective bargaining agreements, should	
17	not be affected.	
18	Finally, while transferring	
19	PGW's assets or operations to an	
20	authority would be a large transaction,	
21	it would not be unprecedented. In the	
22	past two years, there have been two	
23	significant transactions in Pennsylvania	
24	involving the long-term lease of	
25	municipal assets to an authority. Now,	
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Page 90 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 given our limited time today, I'll 2. provide just a very brief description of 3 each of those transactions. 4 5 First, in December 2013, the 6 City of Harrisburg leased its parking assets to an authority for a 40-year period. The up-front lease payment to 8 9 the city was about \$267 million. city did not retain any right to revenue 10 11 or transfer payments during the lease 12 term, but it retains ownership and some responsibility for making capital 13 14 improvements during the lease term. The second transaction is the 15 16 City of Allentown's lease of its water 17 and wastewater operations. I see that 18 you have Mayor Pawlowski here today, so I won't say too much in detail about his 19 deal. But briefly, in August 2013, 20 Allentown leased its water and wastewater 2.1 22 operations to Lehigh County Authority, an 23 existing water and wastewater utility operating in the Allentown suburbs and 2.4 25 neighboring areas.

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2	That was a 50-year lease that	
3	gives the authority the right and	
4	obligation to operate, use, maintain,	
5	repair, and replace the water and	
6	wastewater systems and to charge the	
7	rates necessary to recover its costs.	
8	It gave Allentown an up-front	
9	lease payment of about \$211 million, plus	
10	an annual concession fee, plus various	
11	requirements for reserved funds that had	
12	to be funded at the outset of the	
13	transaction to make sure capital	
14	replacements could be made as needed.	
15	Now, obviously the Harrisburg	
16	and Allentown transactions are	
17	considerably smaller than a potential PGW	
18	transaction. Those deals were on the	
19	order of \$300 million each, while PGW's	
20	assets are valued at several times that	
21	amount.	
22	These transactions are useful,	
23	however, of examples of how existing City	
24	assets can be monetized while allowing	
25	the City to retain ownership and ultimate	

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2	control of the assets over an extended	
3	period of time.	
4	The primary limitations on	
5	lease transactions with an authority are	
6	the maximum terms of 50 years for the	
7	lease and 40 years for bonds issued by	
8	the authority. Within those restrictions	
9	as well as requirements imposed by the	
10	Gas Choice Act, a lease concession type	
11	of transaction may be one option to	
12	provide the City with substantial	
13	financial and operational flexibility	
14	while retaining ownership of the PGW	
15	assets.	
16	Thank you again for asking me	
17	to be with you today. I would be happy	
18	to try to answer any questions you may	
19	have.	
20	COUNCILWOMAN TASCO: Thank you	
21	very much.	
22	Are there any questions?	
23	(No response.)	
24	COUNCILWOMAN TASCO: Thank you	
25	for your testimony. You might want to	

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2	stay around, if you can, for a little	
3	bit, because we might want to come back	
4	to you after we hear the other	
5	testimonies.	
6	MR. RUBIN: I'd be happy to.	
7	COUNCILWOMAN TASCO: Thank you.	
8	(Witness approached witness	
9	table.)	
10	COUNCILWOMAN TASCO: Still good	
11	morning for about five minutes. Good	
12	morning. Would you please state your	
13	name for the record, please.	
14	MR. RINALDI: Good morning. My	
15	name is Philip Rinaldi.	
16	COUNCILWOMAN TASCO: Would you	
17	please proceed. Thank you for coming.	
18	We appreciate it.	
19	MR. RINALDI: Thank you. Good	
20	morning or good afternoon, ladies and	
21	gentlemen. Council President Clarke,	
22	Special Committee on Energy Opportunities	
23	for Philadelphia, Co-Chairs Henon and	
24	Tasco, and members of the City Council	
25	and the Committee, I offer my thanks and	

Page 94 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 my appreciation for this opportunity to 2. provide testimony in support of the 3 Committee's investigation into the 4 potential of establishing our region as 5 the energy hub for the northeastern 6 7 portion of the United States. This Committee has provided 8 9 guidance regarding today's testimony, requesting that witnesses particularly 10 11 comment on matters pertaining to the use 12 of public-private partnerships and to the business opportunities relating to 13 14 Philadelphia Gas Works. I hope that my 15 testimony will provide some issue insight 16 to the Committee. 17 I would be pleased to answer 18 any questions that you might have after I complete reading this prepared statement 19 into the record. 20 2.1 My credentials and limitations on the testimony, although many of you 22 23 know me, I'm going to introduce myself for the record. I'm the Chief Executive 2.4 25 Officer of Philadelphia Energy Solutions,

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2	the company that owns and operates the	
3	Point Breeze and Girard Point refineries	
4	located on the former Sunoco Refinery	
5	complex in South Philadelphia. Among	
6	PES's business goals is the development	
7	of a world-class energy port at the site	
8	generally known as Southport, motivated	
9	in part to take advantage of the	
10	opportunities that would arise should the	
11	northeast energy hub initiative come to	
12	fruition.	
13	I am also Chairman of the	
14	Greater Philadelphia Energy Action Team,	
15	a coalition of more than 80 key energy	
16	industry executives operating in	
17	collaboration under the auspices of the	
18	Chamber of Commerce, the CEO Council for	
19	Growth, and Select Greater Philadelphia.	
20	GPEAT's mission is to prepare the	
21	commercial, economic, and political	
22	foundation that will stimulate	
23	development of a major new project to	
24	bring dry Marcellus Shale gas to the City	
25	in a pipe or series of pipes adequately	

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2	sized to meet both present and future	
3	industrial needs.	
4	My testimony today,	
5	particularly as it relates to the future	
6	business activities anticipated at	
7	Philadelphia Energy Solutions, will be	
8	circumscribed by the so-called "Quiet	
9	Period" restrictions that are imposed on	
10	the company by the Security and Exchange	
11	Commission pursuant to the process	
12	currently underway as we take the company	
13	public.	
14	A northeastern energy hub, why	
15	Philadelphia? Philadelphia Energy	
16	Solutions is presently two and a half	
17	years old, and the Greater Philadelphia	
18	Energy Action Team is just a bit younger.	
19	During this time, I have been struck by	
20	just how enthusiastically many of the	
21	energy-centric ideas with which I'm	
22	involved have been supported by	
23	government at the local, state, and	
24	national levels by many segments of	
25	organized labor and by the regional	
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2	business community at large. This	
3	extraordinarily deep regional support is	
4	one of the foundational pillars on which	
5	the prospective creation of an energy hub	
6	rests.	
7	I frequently and passionately	
8	advocate for the development of	
9	Philadelphia's energy infrastructure to	
10	take advantage of the proximity of	
11	Pennsylvania's abundant Marcellus Shale	
12	natural gas reserves. I will do so again	
13	today because it is a matter of	
14	importance and it is a matter of urgency.	
15	Why is this important?	
16	Locating a regional energy hub in	
17	Philadelphia is important because that	
18	would create an opportunity to redevelop	
19	a meaningful manufacturing base in the	
20	Philadelphia economy for the first time	
21	in decades. And creation of a	
22	manufacturing base is important because	
23	the economic malaise that afflicts	
24	Philadelphia casts a deep shadow over all	
25	the amazingly unique and sensational	
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2	attributes that Philadelphia has to		
3	offer.		
4	The economic stimulation that		
5	follows a manufacturing rebirth is truly		
6	transformational. Manufacturing creates		
7	an extraordinary variety of jobs, jobs		
8	that have rich content, jobs that pay		
9	very well, and jobs that last for years		
10	and years. Manufacturing creates jobs		
11	that support strong family lifestyles.		
12	Robust manufacturing is truly the		
13	backbone of a thriving middle class. And		
14	keep in mind that modern manufacturing is		
15	far different from the factories of a		
16	century ago that left some appalling		
17	environmental scars. Modern		
18	manufacturing is done by responsible		
19	businesses that invest enormous amounts		
20	of capital and commit themselves to		
21	operating in community responsible ways.		
22	And why is this urgent? The		
23	opportunity to create an energy hub in		
24	Philadelphia exists because the natural		
25	gas reserve life in the Marcellus is		

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2	measured in centuries, not years. The	
3	value of that gas will remain trapped in	
4	the shale unless and until new consumers	
5	compel additional production. And major	
6	new consumers cannot come to fruition	
7	unless the resource comes to where it is	
8	needed. The economic drivers to take	
9	advantage of the abundance of Marcellus	
10	gas are so strong that there are many	
11	smart and well-capitalized companies	
12	throughout the country working on	
13	figuring out how to take advantage.	
14	There is a proverbial window of	
15	opportunity to make that location	
16	Philadelphia, but make no mistake,	
17	competition from gas short regions in New	
18	England, from chemical production centers	
19	like Houston, and from industrial centers	
20	in Ohio, and export centers in Maryland	
21	are causing that window to close. It is	
22	a race. Let's win it for the home team.	
23	I applaud the continued	
24	interest that City Council has shown with	
25	regard to developing the energy base in	

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2	Philadelphia, and acknowledge your	
3	essential role in ensuring that the	
4	interests of the City broadly considered	
5	are carefully weighed. Carefully, but	
6	with an eye on that closing window of	
7	opportunity.	
8	The potential to have	
9	Philadelphia serve as the natural gas	
10	energy hub for the northeastern portion	
11	of the country rests on three critical	
12	elements:	
13	One, Philadelphia's close	
14	proximity to the reserves of Marcellus	
15	gas that could be easily valorized by	
16	creation of new demand;	
17	Two, the already highly	
18	developed regional infrastructure to	
19	support a manufacturing-based economy,	
20	including a strong base of energy and	
21	chemical companies such as Philadelphia	
22	Energy Solutions, Monroe Energy, PBF	
23	Energy, Braskem, Honeywell, Sunoco	
24	Logistics, PECO, and many others; access	
25	to the sea and the rich export markets	

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2	that gives access to; phenomenal rail	
3	infrastructure; proximity to the greatest	
4	consumer market in the world; industrial	
5	building sites well suited to	
6	manufacturing; and a regional history	
7	steeped in manufacturing culture,	
8	including human resources having all the	
9	necessary job and professional skills;	
10	And, three, the political will	
11	to make it happen. At least that's the	
12	state of affairs that we would like to be	
13	true, but worry that maybe it isn't.	
14	As this Council well knows, the	
15	recent track record regarding the attempt	
16	to privatize Philadelphia Gas Works has	
17	cast doubt on the ability to get a major	
18	deal done. That doubt is compounded in	
19	some quarters by the perceived present	
20	tensions in Harrisburg over energy	
21	development matters.	
22	Personally I am confident that	
23	the Wolf Administration will ultimately	
24	be an enabling force to stimulate the	
25	kind of development needed to create a	

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2	regional energy hub in Philadelphia. So	
3	I applaud the Council's courageous	
4	willingness to take on the issue of PGW	
5	once again at this time. It is no	
6	exaggeration to say that the eyes of the	
7	business community are watching keenly	
8	and hopefully.	
9	Why is an energy hub important	
10	to Philadelphia Energy Solutions? Once	
11	Marcellus gas is abundantly available in	
12	the Greater Philadelphia region,	
13	industries that depend on natural gas	
14	either for its energy content or for its	
15	utility as a chemical feedstock will take	
16	root and grow, creating an intense level	
17	of new economic activity that will	
18	benefit PES as well as the rest of the	
19	region.	
20	But on a more particular basis,	
21	PES has identified several high-quality	
22	projects that can add great economic	
23	value to natural gas.	
24	First, the steam system at our	
25	refineries is costly to maintain and	

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2	requires considerable redundancy to	
3	ensure that the refineries' steam demands	
4	are continuously met. It would be	
5	beneficial to replace the old fired	
6	boilers with state-of-the-art combined	
7	heat and power generation equipment.	
8	That would be a large-scale project, 120	
9	megawatts if just our own needs are met,	
10	larger if we add some merchant power	
11	capability to serve neighboring	
12	industries.	
13	Next, the methane can be	
14	converted to hydrogen and that hydrogen	
15	used to materially upgrade the quality,	
16	marketability, and profitability of some	
17	of our products. The steam/methane	
18	reformer and the hydrocracker projects	
19	would be world scale in scope.	
20	Once we have the capability to	
21	generate Marcellus gas-based hydrogen, we	
22	could convert the hydrogen to	
23	agricultural chemical products, such as	
24	anhydrous ammonia, urea ammonium nitrate,	
25	and granular urea.	
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Page 104 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. The hydrogen could also be converted to methanol and the methanol 3 sold as a merchant product or further 4 converted to forms of synthetic 5 6 transportation fuels. This substantial increase in PES's productive capabilities ties in 8 9 directly with our interest in creating a world scale energy port at the Southport 10 11 property managed by the Philadelphia 12 Regional Port Authority. This site, up to 273 acres in size depending on parcel 13 14 division, would be a material asset to 15 PES as a place where petroleum could be 16 received by ship or moved to export 17 markets by ship. The property is just a few miles from the PES refinery complex 18 and is easily connected by pipelines that 19 20 would run through industrial property. 21 The highly refined products 22 that would be made possible by the 23 hydrogen production noted a few moments ago would fetch a premium in European 2.4 25 markets, so it becomes a great export

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2	addition. Granular urea is a dry bulk	
3	commodity that is shipped to markets	
4	around the world, expanding export	
5	capabilities for value-added product, not	
6	just for raw materials.	
7	And, of course, once there is	
8	abundant natural gas availability in	
9	Philadelphia, a vigorous LNG business can	
10	be conceived. And LNG businesses are	
11	natural to be located at an energy port.	
12	Large-scale LNG exports are not very	
13	practical from Philadelphia for a variety	
14	of reasons, including the fact that the	
15	deepened river will not be deep enough	
16	nor the bridges high enough to allow	
17	passage of international class LNG ships.	
18	Nevertheless, there can be a coastal	
19	trade in LNG supplying the short New	
20	England market. There are novel	
21	containment systems that would allow	
22	transport of LNG in container ships to	
23	supply boutique markets. There will be a	
24	growing business to supply LNG to fuel	
25	ships as they phase out of burning bunker	

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2	fuel in the coastal zone. It is possible	
3	to think about local fueling options like	
4	fueling fleet vehicles or creating retail	
5	LNG or CNG fueling stations.	
6	So why is PGW important to	
7	energy hub development? Basically for	
8	two reasons. First, how resolution of	
9	PGW's situation is handled will send	
10	strong signals to the investment	
11	community as to whether or not there is	
12	the political will to progress energy	
13	business in Philadelphia. Thankfully,	
14	this Special Committee is breathing new	
15	life into this opportunity.	
16	Second, and more tangibly,	
17	there are certain assets in PGW like its	
18	LNG plant, LNG storage facilities, and	
19	pipeline interconnections that could play	
20	a central role in Philadelphia's energy	
21	future. Whatever form the future takes	
22	for PGW, those assets will need to be	
23	available for development, free from the	
24	historic restrictions inherent in PGW's	
25	current ownership structure as a	
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2	municipally owned utility.	
3	PGW and the private-public	
4	partnership. I have often expressed both	
5	privately and publicly that the	
6	development of Philadelphia's energy	
7	future does not depend on whether PGW's	
8	regulated residential gas business	
9	becomes privately owned or remains	
10	municipally owned. The important issue	
11	here is how to best get the developable	
12	assets of PGW into constructive	
13	ownership.	
14	There is an illustrative	
15	example of why PGW cannot compete in the	
16	commercial world operating as a	
17	quasi-governmental entity. Two years ago	
18	as PES began to develop our North Yard	
19	Rail Terminal, it looked like we would	
20	need a 20-foot right-of-way along a PGW	
21	fence line in order to run a large	
22	diameter crude oil pipeline. The	
23	property in question was unused, had not	
24	been used for many years, and there were	
25	no plans for its use. Nevertheless, PGW	
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Page 108 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. advised that it would take probably six months to get all the necessary 3 approvals, first from its management, 4 5 then from its Board, then from the City's governing board, followed perhaps by 6 7 review of the City Council at large. Needless to say, that's not a very 8 Whew! 9 commercial path and we found another way. As a footnote, we also discovered that 10 11 the property for which we were trying to 12 obtain a right-of-way was actually owned by PES. The PGW fence line was built on 13 14 PES property. 15 So where would an energy hub be 16 located? One possibility is that certain 17 property presently owned by PGW has great proximity to a primary new gas customer, 18 Philadelphia Energy Solutions, and that 19 20 property is already crossed with many 21 pipelines to support distribution from the hub. That is not the only site that 22 23 could host the hub. Southport Energy 2.4 Port would be another great candidate, 25 but the PGW site has many advantages that

Page 109 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. cannot be tapped under present structure. PGW's existing gas liquefaction 3 plant and LNG storage tanks are the other 4 assets with great commercial potential. 5 6 Once hub gas is available, PGW 7 would be in an excellent position to be the gas supplier to the industrial 8 9 customers, greatly expanding its revenue 10 potential. 11 A public-private partnership 12 would be an effective structure to get those assets into the commercial form 13 14 that would be capable of developing them while still keeping the City involved 15 16 economically so that it can have a stake 17 in future success. I can think of no conceptual 18 reason why a P3 could not be made to work 19 20 for the regulated side of PGW's business; 21 that is, the supply and distribution of residential gas. But it is difficult to 22 23 see how there could be enough profit and profit growth potential in that part of 2.4 25 the business to attract private capital.

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2	This is especially true since the	
3	residential gas supply portion of PGW's	
4	business fulfills worthwhile but	
5	non-remunerative social goals that	
6	reduces cash flow, and there is a	
7	significant latent capital expenditure	
8	burden to bring its pipe network up to	
9	current standards that further reduces	
10	net cash flow.	
11	Thank you for hearing my views.	
12	I'll be pleased to answer any questions	
13	that you might have.	
14	COUNCILWOMAN TASCO: Thank you	
15	very much.	
16	Would you just kind of describe	
17	for me what is a hub. What is a hub? I	
18	keep hearing this word. What does that	
19	mean in layman's terms so I can explain	
20	it to our constituents here in the City?	
21	MR. RINALDI: I'm not surprised	
22	to hear that question, because I get that	
23	question a great deal. So by an energy	
24	hub, what we're really talking about is a	
25	place where very large supplies of	

Page 111 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. Marcellus gas are brought down and then redistributed from that hub. So it is as 3 if it were the hub on a wheel and it had 4 a single feeder coming in from the 5 6 Marcellus and then many outlets going to serve industries that will develop different companies and those businesses. 8 9 So it's in that sense that it's a place to aggregate and then redistribute that 10 11 it becomes a hub. That's in one sense. 12 The other sense of it being a hub is that by taking this Marcellus gas, 13 14 which is constricted from the market 15 right now -- basically the market is 16 already satisfied, so if they try to 17 produce more of those reserves, the only way they can do that is by reducing price 18 further and trying to drive some other 19 molecule out of the market. That's not 20 21 very good. But if you can create new 22 demand and you do that from a center and 23 that center becomes that hub, the place 2.4 where people look. So natural gas right 25 now in this country is priced off of

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2	Henry Hub on the Gulf Coast. And so	
3	we're using the term "hub" to really kind	
4	of hark back to that Henry Hub place,	
5	because we think this could become the	
6	pricing point for natural gas along the	
7	eastern portion of the country rather	
8	than looking at Henry Hub and the	
9	translocational differences in those	
10	prices. You have it priced right here	
11	and this becomes the place from which	
12	energy is priced and then redistributed.	
13	COUNCILWOMAN TASCO: And just	
14	for my clarification, how does and you	
15	kind of stated it, but I want it in	
16	layman's term. What is the role of PGW	
17	in the energy hub?	
18	MR. RINALDI: So I think	
19	COUNCILWOMAN TASCO: Can the	
20	energy hub take place without PGW? What	
21	if we didn't have a PGW?	
22	MR. RINALDI: Yes, I think an	
23	energy hub could take place without PGW.	
24	I think that would be a shame for	
25	Philadelphia and I think we would be	

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2	leaving assets on the table that help	
3	make the place unique, but, yes, I think	
4	it could.	
5	COUNCILWOMAN TASCO: No. That	
6	question is not to talk about the value	
7	of the hub, but it's been so much	
8	pressure or talk about PGW being	
9	essential to the hub, and my question is,	
10	if we didn't have PGW, could you still	
11	have the hub given all the other entities	
12	that are involved, and what you need is	
13	the pipeline, right?	
14	MR. RINALDI: Yeah. Absolutely	
15	you need the pipeline. So that's number	
16	one. You need the pipeline. Number two,	
17	you need a terminal point for that	
18	pipeline. And, in fact, that terminal	
19	point, because the scale is going to be	
20	so large, that terminal point is going to	
21	have to be new. So whether that's new	
22	built in PGW or new built in some other	
23	entity. It could be either. And then	
24	you're going to have to redistribute out,	
25	because that's the other the final	

Page 114 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. function of the hub, is to act as a redistributor. And that's a place where 3 PGW has a very unique standing to be able 4 5 to participate. It already owns and 6 controls and operates a very impressive redistribution network. So it's more effective if you have PGW involved in 8 9 that portion of the business. Secondly, a lot of the activity 10 11 that would benefit from it is LNG and LNG-based businesses. And since PGW 12 already has a substantial head start in 13 14 those businesses, it's a great way to be 15 able to get in without having all that 16 kind of new capital. You'd have assets 17 in place. And then I think the third 18 thing that's important for this Committee 19 to feel is that if this all becomes 20 successful, if there is an energy hub 21 here and it really does stimulate the 22 23 kind of manufacturing rebirth and now you have all this industrial demand, who is 2.4 25 in a better position to be the supplier

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2	of that industrial gas than PGW? And now	
3	you've taken the kind of revenue stream	
4	of old PGW and you've moved it	
5	substantially up to a higher platform.	
6	COUNCILWOMAN TASCO: Okay. So	
7	during our discussion of the possible	
8	sale of PGW let me think about my	
9	question first. I got to think about	
10	this question.	
11	Go ahead. Councilman Henon.	
12	COUNCILMAN HENON: Thank you,	
13	Madam Chair, and, Mr. Rinaldi, thank you	
14	for coming in as always. You've been	
15	here many times.	
16	You know, I have several	
17	questions, and it's always good to ask	
18	them again even though they're answered	
19	in your testimony. But it was	
20	interesting you had talked about the	
21	energy hub as being a distribution point,	
22	and we heard from Craig White earlier of	
23	PGW talking about we receive 40 percent	
24	of its correct me if I'm wrong LNG	
25	from or its natural gas from shale?	
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2	MR. RINALDI: I believe he said	
3	it's 45 percent of the natural gas coming	
4	from Western Pennsylvania and 55 percent	
5	from the Gulf Coast.	
6	COUNCILMAN HENON: Coming from	
7	the Gulf Coast. If we were a	
8	distribution point, would we still need	
9	to go elsewhere to bring natural gas into	
10	the City of Philadelphia and in this	
11	region?	
12	MR. RINALDI: So it would be	
13	Phil Rinaldi's personal hope that you	
14	bring in Marcellus gas and back out Gulf	
15	Coast gas and keep the revenue and keep	
16	the dollars here in the state.	
17	COUNCILMAN HENON: It doesn't	
18	seem very complicated. I mean, there are	
19	other complicated things that we need to	
20	discuss, like whether we should have P3s	
21	or P3s open up to other opportunities,	
22	things like that, but to me it seems very	
23	simple. Let's liquify, let's expand the	
24	pipe, and let's distribute from here as	
25	opposed to I mean, there must be a	

Page 117 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. tremendous amount of costs involved with receiving natural gas, 45 percent of what 3 we need, and then it being diverted to 4 5 Texas, only to come back to the City of 6 Philadelphia and the region for distribution. I mean, that has to be a tremendous amount of transportation 8 9 costs. There's certainly 10 MR. RINALDI: 11 tremendous amounts of transportation 12 costs on the big interstate pipeline that 13 you have to pay. You're running an extra 14 thousand miles or 1,500 miles, but the 15 more cross-sticking point is that you're 16 not taking the molecules out of the 17 ground here in state. And Governor Wolf is very committed to creating an 18 extraction tax of some sort. Isn't it 19 20 better to be increasing the volume of the 21 things which you can levy a tax against? It helps keep the rate of the tax down 22 23 while expanding the dollar volume of that 2.4 It seems really simple arithmetic gas. 25 to me.

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2	COUNCILMAN HENON: And it does,	
3	and I'm glad we're talking about this in	
4	as simplistic form as possible. Let's	
5	keep our local resources and revenues	
б	here and put it back into the communities	
7	where we live when we have budget	
8	shortfalls, not only throughout the	
9	Commonwealth but right here in	
10	Philadelphia. I mean, the Superintendent	
11	just asked the Mayor and City Council for	
12	another \$110 million for our schools. If	
13	we could defray some of those costs or	
14	have some sort of arrangement with the	
15	Commonwealth, which I believe Governor	
16	Wolf is looking to do, maybe we could	
17	receive more resources for basic	
18	education for the City of Philadelphia	
19	and create jobs. And I would imagine	
20	that by having a pipeline, a bigger	
21	pipeline, to transport molecules here to	
22	distribute will create and spur economic	
23	development and create hundreds, if	
24	not hundreds upon hundreds of new	
25	jobs, which will be going right back to	
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Page 119 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 1 our communities. 2. MR. RINALDI: The economic 3 impact is really quite substantial. 4 5 don't have ready to present today, but I'll tell you one of the work products 6 that the Greater Philadelphia Energy Action Team is working on right now is, 8 9 we're kind of creating a study which talks about the impacts of this pipeline 10 11 and the impacts of the energy hub, and we'll discuss what kind of disturbances 12 are likely to have by running a pipeline 13 14 so that we can address those issues and 15 people understand them a little bit and 16 the economic benefits that you'll have 17 during the construction in collateral 18 businesses. Part of the issue becomes one 19 20 of how do you deal with the economic 21 consequences. People in the Marcellus in 22 Northeastern Pennsylvania where most of 23 this dry gas is, they kind of get it, you 2.4 If they can get new markets and a 25 new opportunity, that means more

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2	drilling, more production, more business.	
3	They get it. I think here in	
4	Philadelphia, the business community	
5	certainly gets it. You have that	
6	resource to work on. You're building new	
7	enterprise. That's creating construction	
8	jobs. It's creating permanent jobs.	
9	It's creating economic vitality.	
10	But then the piece that's in	
11	between is not quite so apparent. What	
12	about all the good people who live	
13	between the place where it's being	
14	drilled and the place where it's being	
15	used and they're dealing with that	
16	disturbance. So we're trying to create a	
17	document which is going to demonstrate	
18	because we believe this is good for the	
19	population of the entire State of	
20	Pennsylvania. Maybe disproportionately	
21	beneficial here in Philadelphia, but I	
22	think there's a lot of wealth to be	
23	spread around.	
24	COUNCILMAN HENON: Mr. Rinaldi,	
25	you are the Chair of the Greater	

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2	Philadelphia Energy Action Team and you	
3	had just stated that you're forming an	
4	impact study on this conversation and	
5	possibilities. You just had a summit at	
6	the end of last year. Can you explain to	
7	me what the overall sense of enthusiasm	
8	in Philadelphia becoming an energy hub	
9	and how much participation was at that	
10	summit and how much, again, enthusiasm	
11	are they looking for to come to the City	
12	of Philadelphia and, more importantly,	
13	investing their financial resources.	
14	MR. RINALDI: Thank you. Yeah.	
15	It's quite true. On December 5th, we	
16	hosted something called an Energy Summit.	
17	It was hosted at Drexel University, and	
18	they had some facilities and we used	
19	they had really very, very nice	
20	facilities, but the Fire Marshal	
21	prevailed. We had a 200-person	
22	limitation on the space, and the Fire	
23	Marshal told us 200 means 200, not 201.	
24	And that allowed us to have an absolutely	
25	sold-out there was no charge, but an	
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Page 122 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. absolutely sold-out kind of conference. And, in fact, there were many people who 3 would have benefited from hearing that 4 could not be invited just because there 5 6 was not enough room, and that includes many political people where we have some followup to do and many people in the 8 9 media as well. 10 But that was extremely well 11 received, very enthusiastic. It was a full-day event. Our target for that was 12 to bring in decision-makers from 13 14 companies primarily in Western Europe, 15 but in general in places where natural 16 gas was high in cost and perhaps 17 politically unstable, and we wanted to show them why maybe they want to come and 18 commit here where you can have low cost, 19 20 politically stable, stably priced 21 resource. We had 20 people, 20 entities 22 23 in that category who were the main 2.4 quarry, if you will, of the event. 25 had their attention for a full day.

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2	That's a lot of talking. And we held	
3	their attention and they stayed	
4	throughout.	
5	The response was tremendous,	
6	and Select Greater Philadelphia and Matt	
7	Cabrey and his team are doing the	
8	follow-up work as they kind of continue	
9	to cultivate those resources. We thought	
10	that was an extremely successful event.	
11	COUNCILMAN HENON: I'm going to	
12	yield some of my time and questions after	
13	some of the other members on Council has	
14	an opportunity. Thank you for your time.	
15	MR. RINALDI: Thank you.	
16	COUNCILMAN NEILSON: Thank you	
17	for coming, Mr. Rinaldi. I want to go	
18	back to the pipeline a little bit, if we	
19	could. Last time we all got together on	
20	this issue we talked about capacity and	
21	how there's no more capacity in the	
22	pipeline. Is that currently being	
23	addressed? Because we can't become this	
24	hub unless that pipeline gets to where it	
25	needs to be, and the capacity is an	

Page 124 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. important part of that and PGW has a major share in that. Is that such the 3 interest of some of the energy companies, 4 getting that capacity in that pipe? 5 MR. RINALDI: So it's the 7 understanding of that pipeline capacity which is at the heart of the issue, and 8 9 Craig White was addressing this a little The big interstate pipelines that 10 11 are moving from the Gulf Coast and 12 ultimately up into New York and New England, they move an awful lot of gas 13 14 and there's, frankly, a lot of room in 15 those pipes to move gas. 16 Inside Philadelphia, I think I 17 heard the testimony that the pipes are perfectly adequate, but there is that 18 interconnection, that interconnection 19 20 into the kind of Philadelphia gate where 21 the bottleneck exists and you get limited 22 on gas, and we've seen that manifestation 23 now in two successive winters, last winter and this winter. 2.4 25 But the price of natural gas,

Page 125 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. not to the consumer because that's always a levelized kind of a pricing, but for 3 industrial consumers where you're much 4 5 more spotty in a gas market and you're 6 absolutely spotty in terms of access 7 through that gate, January a year ago, that last week in January where you 8 9 recall it got really, really frigid and the price of natural gas in Henry Hub had 10 11 spiked from \$4 to \$6 because it was cold 12 throughout the country, the price of Marcellus gas started to tweak up. It 13 14 was 3.50 at the time. It started to 15 tweak up. But here in Philadelphia 16 because you had to pay that premium 17 transmission to get through the gate, the prices actually got to \$120, \$120, not 18 It was only for a 19 \$3, \$120. Insane. 20 couple of days, but those days are really 21 important. 22 Fast forward another year, we 23 have another pretty cold winter, not quite as spiky, but we had substantial 2.4 25 periods of time this winter where that

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2	spot price for the transmission in	
3	through the Philadelphia gate was costing	
4	\$30 to get through. You're buying a	
5	commodity for 3 bucks and then you got to	
6	pay \$30 of shipping and handling. You	
7	know, this	
8	COUNCILMAN NEILSON: Where does	
9	that go to? I'm sorry.	
10	MR. RINALDI: So that's the	
11	pipeline	
12	COUNCILMAN NEILSON: Who gets	
13	that \$30?	
14	MR. RINALDI: So what happens	
15	is, you're bidding for capacity, and the	
16	price gets set by the it's a	
17	commodity, that capacity, and the price	
18	gets set by the neediest consumers. So	
19	when gas is really when the demand is	
20	high, the pipe is now full and choking,	
21	the users think about hospitals. They	
22	can't afford to allow the hospitals to go	
23	cold. So they're going to pay whatever	
24	they have to pay in order to keep that	
25	up, and that's what begins to set the	
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2	price. It's that most difficult portion	
3	of the curve. That's because there's a	
4	capacity constraint.	
5	So the energy hub is the	
6	idea is to do a completely prog over	
7	that. It's not only to get rid of the	
8	bottleneck, but it's to ensure that at	
9	least for the foreseeable future you have	
10	pipelines that are big enough that you	
11	have zero opportunity to have a capacity	
12	bottleneck.	
13	COUNCILMAN NEILSON: Is that	
14	bottleneck owned by PGW currently? The	
15	pipeline that comes in, you say it's	
16	choked off at Philadelphia. Is that	
17	choke-off point owned by PGW	
18	MR. RINALDI: No.	
19	COUNCILMAN NEILSON: or	
20	another entity?	
21	MR. RINALDI: No. It's owned	
22	by the pipeline companies, pipelines that	
23	come in.	
24	COUNCILMAN NEILSON: Do you	
25	know the name of that company that owns	
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2	that?	
3	MR. RINALDI: Just because I	
4	don't want to be wrong, I'm reluctant to	
5	say. I don't think it's a company. I	
6	think it's multiple companies.	
7	COUNCILMAN NEILSON: Okay.	
8	Thank you, sir.	
9	I have no further questions,	
10	Madam Chair.	
11	COUNCILMAN OH: Good afternoon.	
12	MR. RINALDI: Councilman Oh.	
13	COUNCILMAN OH: So let me just	
14	look at the three issues that were	
15	discussed, and the first is that you said	
16	we are in a race. And I would like you	
17	to just briefly explain to the public why	
18	are we in a race and what's our time	
19	period.	
20	MR. RINALDI: So the idea of	
21	why is there a race, this all starts with	
22	the producers of natural gas in the	
23	Marcellus region. At the moment, there	
24	is insufficient market to take away all	
25	of the gas that they can produce from	
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Page 129 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. existing drilling, let alone the gas that could be produced from new drilling, 3 which is the lifeblood of that business. 4 And because that's the case, there's a 5 6 high degree of incentive on the part -incentive for those producers to support 8 a system to deliver more gas when you can 9 offer substantially more market. 10 Once they become satisfied, 11 once that is flowing at some normal kind 12 of rate, all of the sudden they're not 13 particularly incentivized. Now you're 14 just another player in the market. 15 the opportunity to get the kind of 16 concessions that you need in order to 17 establish a hub disappear. And so where are those other places? What can happen? 18 So what can happen is in the U.S. Gulf 19 20 Coast where, frankly, the petrochemical 21 industry was born, but then that 22 petrochemical industry kind of went 23 through -- it's not down. It's still 2.4 important, but definitely a slump, 25 because it grew in other areas, in Saudi

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2	Arabia, in the Far East where gas was	
3	abundant and the markets were okay. But	
4	if you start building more new chemical	
5	plants there in Houston, they're going to	
6	dry up that capacity of the Marcellus	
7	gas, and who else is looking at that kind	
8	of gas? The NGLs which drive the	
9	plastics businesses that are trying to	
10	come into Western Pennsylvania, Ohio,	
11	they do that. Gas to go out in massive	
12	LNG exports through Cove Point are going	
13	to put pressure that way. And pipelines	
14	just simply to take the resource out of	
15	the Marcellus and move it up to be burned	
16	in New England are another race.	
17	So the idea that this race is	
18	really about being the entity that can	
19	give to those producers the carrot that	
20	they're looking for and that helps	
21	support the development of this hub.	
22	COUNCILMAN OH: Okay. Thank	
23	you.	
24	I'd like to ask you, are you	
25	familiar with Cheniere Energy?	
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2	MR. RINALDI: I know who they	
3	are.	
4	COUNCILMAN OH: Okay. And so	
5	at the Louisiana Sabine Pass project,	
6	they invested \$12 billion into the first	
7	phase, 12 billion, and I understand that	
8	in Freeport, the Freeport LNG export	
9	terminal in Texas, it's somewhere around	
10	20 billion at this point in time, and	
11	they're coming to Philadelphia. They're	
12	coming to Philadelphia because they're	
13	interested in Philadelphia as an export	
14	location.	
15	Blackstone is also a well-known	
16	investment company, around \$28 billion, I	
17	think; is that correct?	
18	MR. RINALDI: Blackstone is	
19	very large.	
20	COUNCILMAN OH: Okay. So they	
21	also are coming to Philadelphia in April.	
22	They're both coming to Philadelphia	
23	because they're interested in	
24	Philadelphia as an LNG export location.	
25	The reason I say that is	

Page 132 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. because the issue has come up as to whether or not the kind of money and 3 investment and expertise is really 4 interested in Philadelphia and available 5 such that we should look at it. And then, finally, I'd like to just make a statement. It's not a 8 9 question. Because you raised the issue about the business community and having 10 some doubts, and I understand that, 11 12 doubts about the will of City Council regarding natural gas energy hub because 13 14 the UIL Holdings deal in its specific terms and conditions was not moved 15 16 forward, and particularly I've heard from 17 people who said you should have had a 18 hearing at least. And I'd like to point out that we are elected not to hold 19 20 hearings so that people can hear the 21 things and then tell us what they want us to do. We're elected to review for 22 23 months and months volumes of paperwork, meet with consultants, meet with the 2.4 25 representatives, and be able to come to

Page 133 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 the first line, which is, does anyone 2. support the terms and condition of the 3 sale. And if even one person on City 4 5 Council does, we shall now have a 6 hearing, because someone introduced the 7 bill. I will not introduce the bill 8 9 because I don't support the sale on those terms and conditions, and I thought it 10 11 was a risky, bad deal. But I want to put into context that I will not be 12 introducing the bill to increase the 13 14 property taxes 9.3 percent. Somebody 15 else can do that if they believe that will work. And I'm not saying we 16 17 shouldn't have that discussion. All I'm saying is, I won't be the one putting 18 that forward. If nobody puts that 19 20 forward, we will not be talking about a 21 9.3 percent real estate increase in the 22 City. But if someone puts that forward, 23 it's because they believe in it and 2.4 they're going to advocate for it and they believe -- and I'm fine with that, but 25

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2	that's how that works.	
3	In the situation that we dealt	
4	with, it was not for the lack of an	
5	interest in looking for the best	
6	situation for Philadelphia. It was	
7	because the first line, the first litmus	
8	test of whether or not we even went in	
9	that direction was not passed by the	
10	people who reviewed and went through that	
11	material. And I will guarantee that I	
12	have read all the material. I've gone to	
13	every meeting, every briefing. I've met	
14	with UIL on numerous occasions any time	
15	they wanted to meet with me and their	
16	lobbyists and everyone else. I do not	
17	support, did not support those terms and	
18	conditions and, therefore, I would not	
19	introduce the bill.	
20	And that is how that works.	
21	But anyone can ask me why not. I'll be	
22	happy to tell anybody what I reviewed,	
23	what I saw, but I want to ensure the	
24	business community, because I've spoken	
25	to business people, that that is not a	
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Page 135 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. reflection of a lack of support for the energy hub that you're talking about. 3 And certainly if we get to that level, we 4 5 can have that discussion and people can 6 raise the issues that some people are raising today about the climate and about the dangers and all that. We can do that 8 9 at that point in time. But first we wanted to ensure that we put good deals 10 11 and realistic deals in front of the 12 people of Philadelphia. 13 But thank you very much. 14 MR. RINALDI: Thank you. 15 Councilman Oh, also just to allay 16 interest, we certainly understood in that 17 process that there were genuine objections to the deal. It was not about 18 that. And because that was the case, the 19 20 Energy Action Team spent a long time 21 expressing to people that there were issues inside here, but there was real 22 23 support. Council President Clarke went through the effort of coming and 2.4 25 attending the Energy Summit to show

Page 136 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. tangible support from the City Council. 3 Mayor Nutter has stepped up and shown tangible support as well, and we're 4 5 getting that kind of support at the 6 government level. So we have no issue 7 about where the things are. Optics are one thing. 8 9 I would like to comment about Cheniere and Blackstone and \$12 billion 10 and \$20 billion and export LNG business. 11 12 This is a very personal opinion, but you will never ever hear me advocate for that 13 14 business. I think that's a crazy 15 I have to tell you just in business. 16 general. It's very expensive to liquify, 17 to store, to transport, then to regasify and then redistribute. And so the 18 driving force in the market for that is 19 20 someone wanting to get lower price gas 21 and they're chasing lower price gas 22 through an extremely expensive route. 23 think there are a couple of pockets in the world where that makes some sense. 2.4 25 don't believe for a moment that 15 would

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2	work. But from a technical point of	
3	view, frankly, I can't see how that works	
4	in Philadelphia, 45 foot channel. A	
5	world scale LNG vessel can't go in a 45	
6	foot channel. It needs a deeper channel,	
7	and it can't fit underneath the bridges	
8	that are here. So I really don't get it,	
9	unless you're going to take these	
10	facilities much further down the river	
11	than in Philadelphia.	
12	But I can tell you also for \$20	
13	billion, you would have built here many,	
14	many factories making all sorts of things	
15	out of natural gas that will stimulate	
16	much more business for Philadelphia.	
17	COUNCILMAN OH: I appreciate	
18	your opinion, and I think the good thing	
19	is, we will have the people explain that,	
20	and I'm sure we're reaching out to you	
21	right now to get your opinion at that	
22	time.	
23	Thank you.	
24	COUNCILWOMAN TASCO: You heard	
25	Craig White talk about some of the	
		

Page 138 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. obstacles that PGW has in terms of 3 probably moving in another direction, regulatory issues. And, of course, I 4 5 think UIL would have had the same 6 problem. What can the business community do to create a political will to lobby 8 9 for changes in some of the regulations that give PGW the ability to certainly 10 11 enter into other markets or things of 12 that nature? That's a terrific 13 MR. RINALDI: 14 question and, you know, certainly we 15 would be supportive of trying to do those 16 things. We think that definitely PGW 17 that has the ability to act much more commercially is a healthy thing. I don't 18 see any downside to that, and I'm sure 19 20 the business community would help. I 21 think the Chamber has provided some testimony with some very specific kind of 22 23 legislative concepts in it, and I think there would be broad, broad support in 2.4 25 the business community.

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2	COUNCILWOMAN TASCO: Have you	
3	talked to PGW at all about the idea of an	
4	energy hub?	
5	MR. RINALDI: Yes.	
6	COUNCILWOMAN TASCO: You've met	
7	with the did you meet with Craig	
8	White?	
9	MR. RINALDI: Yeah. So, you	
10	know, for full disclosure, Craig is an	
11	old friend and	
12	COUNCILWOMAN TASCO: What about	
13	the Board, PGW Board?	
14	MR. RINALDI: I have not ever	
15	addressed the PGW Board in any formal	
16	capacity. I think I had met the Chairman	
17	just in a casual setting.	
18	COUNCILWOMAN TASCO: So what it	
19	would take would be collaboration. And	
20	you're going to have a new Administration	
21	next year. I don't know who that will	
22	be, but certainly that discussion has to	
23	take place with not only who will be	
24	Mayor but who will be on City Council.	
25	So we may not take any action right now	
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Page 140 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. because you have this change coming up. You'll probably know in May what's going 3 to happen. But those discussions have to 4 5 take place, because selling PGW to some 6 other entity that would have to go through the same rigorous applications, in my mind, would be not the best thing 8 9 to do. I think enhancing what we have, a valuable asset that we have, to work with 10 11 whatever we decide to do in this region, 12 energy hub and how they would fit into that, would be better to -- how do we 13 14 change the way we do business is 15 important. If we're looking towards the 16 future, then we can't have the same rules 17 governing what has governed PGW and 18 utilities forever. Certainly you have to 19 approach the government about that as 20 well as the state, and I think those are 21 steps that have to be taken before we even entertain PGW's involvement to the 22 23 degree that you might need. And I'm not an expert in this stuff, but just my 2.4 25 sense is that there's got to be more

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2	political input into this.	
3	MR. RINALDI: So when I first	
4	arrived here on the scene and began to	
5	as we were putting the Philadelphia	
6	Energy Solutions transaction together and	
7	I started to meet with Mayor Nutter, with	
8	Council President Clarke and some larger	
9	field, the very first things that I said	
10	at those moments is that there are really	
11	important assets in PGW; namely, that LNG	
12	and some of that stuff, that really	
13	should be in a commercial way. They	
14	said, Well, we can't do that here because	
15	it's a municipally owned utility. So, of	
16	course, I had the benefit of being	
17	ignorant. I said, Well, let's just	
18	change the rules, you know. Well, it's	
19	not that easy, it was pointed out to me,	
20	to do that.	
21	But I have to tell you here	
22	some three years later, I still say let's	
23	change the rules, you know. I mean, we	
24	make rules in order to make our lives	
25	work better, and it really looks like	
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2	it's so much better to have a commercial	
3	strong leg at PGW, I think it's perfectly	
4	legitimate to want to try to change those	
5	rules.	
6	COUNCILWOMAN TASCO: Councilman	
7	Johnson.	
8	COUNCILMAN JOHNSON: Thank you,	
9	Madam Chair.	
10	Thank you, Mr. Rinaldi, for	
11	taking time out of your schedule being	
12	here today and giving your expert	
13	testimony on the City of Philadelphia	
14	becoming an energy hub. But I also thank	
15	you and your staff for keeping open the	
16	lines of communication and working with	
17	my office to address whatever issues of	
18	concerns or misconceptions or even ideas	
19	on how we could improve your operations	
20	with the local communities that I	
21	represent, being that you're a part of	
22	the 2nd Councilmanic District. So I do	
23	want to thank you publicly for that and	
24	also you and your team stepping up to the	
25	plate and working with various elected	

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2	officials and saving some jobs of some	
3	constituents in which I represent out at	
4	the former Sunoco refinery.	
5	Just three things I just wanted	
6	to ask. One, under the Energy Action	
7	Team which you chair, if you could just	
8	make sure as y'all create the economic	
9	impact study available to myself as	
10	Chairman of Public Utilities and	
11	Transportation, that would be very	
12	helpful as well.	
13	Two, will there be, for better	
14	or worse, an environmental component that	
15	will be a part of that study for the long	
16	term just to take a look at anything that	
17	we may want to look at in terms of	
18	improving, enhancing, paying attention to	
19	as we grow toward becoming an	
20	environmental hub in the City of	
21	Philadelphia, something to take into	
22	consideration of? Because obviously I	
23	will have constituents who will I like	
24	to separate fact from fiction, and	
25	obviously even based upon my resolution	

Page 144 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. yesterday, I'm always looking at our 3 relationship with CSX, because that's pretty much where the entity I've held 4 5 accountable, because that's my primary 6 concern from a public safety standpoint, 7 and I always will be very public on where I stand on the issues. But if you could 8 9 take a look at those two impact studies 10 and provide me some information in their 11 future. 12 And the last thing most 13 importantly is the customer, the 14 consumer. Talk about this energy hub in 15 the future when you talk about liquid 16 natural gas and Marcellus Shale energy 17 coming to our region. How does that impact the consumer, just from your 18 19 perspective? 20 Okay. Councilman MR. RINALDI: 21 Johnson, that's a long question. can assure you this, that this little 22 23 book, study, whatever it is that we're putting together, is definitely going to 2.4 25 touch at a high level environmental

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2	impacts of a pipeline and a hub and what	
3	does it mean. It's not to be confused	
4	with a literal environmental impact	
5	statement. That's way premature to do.	
6	It's not going to have that kind of	
7	detail. But from a conceptual level,	
8	we're going to have some frank discussion	
9	about what happens and what does it look	
10	like, so that you just can see what are	
11	the ways, what's the benefit, what's the	
12	cost. You know, that's kind of what	
13	we're going to do, and certainly those	
14	will be made available to everybody that	
15	it needs to be made available to.	
16	On the now I've forgotten	
17	that third question.	
18	COUNCILMAN JOHNSON: Consumer.	
19	MR. RINALDI: On the consumer.	
20	So now that's a little difficult. So	
21	from the natural gas consumer, I don't	
22	know. That's interworkings of PGW, for	
23	which I'm really not very privy. I've	
24	got to believe that if you have enormous	
25	quantities of gas here, that's got to	
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Page 146 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. make the gas acquisition cost for PGW 3 better than it has been. Whether that is a tiny impact or a modest impact or a 4 5 nice impact, I don't know. I can't size 6 it up. But you're going to have gas in that kind of quantity around. How that passes through the consumer, I don't 8 9 know. But the more that you have other people bearing the cost of these 10 11 distribution networks -- and that's 12 what's going to happen in here, because industries are going to support the kind 13 14 of cost of these pipelines, because if 15 they're going to be the primary user of 16 that amount of gas, I think there's a 17 benefit that happens there. Then, secondly, what else 18 happens for the consumer, the whole 19 20 general economy ought to be able to 21 inflate pretty nicely because of the amount of business activity. I know 22 23 that's not exactly what you meant by the question, but that consumer I think is 2.4 25 going to benefit by having more jobs in

Page 147 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. the neighborhood, more workers working, more people that need to eat pizza and 3 need to get their hair cut and do all of 4 5 those kind of collateral things. COUNCILMAN JOHNSON: When you 7 talk about the P3 -- and I know you are very direct regarding the former proposal 8 9 regarding PGW in the past and what the City of Philadelphia could have benefited 10 11 from it. Nevertheless, we as members of 12 Council did our due diligence and decided to go in a different direction, but 13 14 decided to move forward at least for the 15 discussion on where do we go in the 16 future in terms of still evaluating our 17 options with PGW. Just be clear from 18 your perspective what a P3 looks like. Two, I'm also -- and I don't 19 20 know if you will be the individual to 21 actually answer this question. I'm also concerned about how we -- if we talk 22 23 about energy hub, we include minority 2.4 participation in terms of companies who 25 also have an opportunity to participate

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2	in this dialogue in terms of	
3	manufacturing jobs, building the	
4	pipeline. I know PES has a program of	
5	young people, correct, where they're	
6	learning the industry from an engineering	
7	standpoint, specifically urban school. I	
8	want to point that out to be quite clear,	
9	because oftentimes that's not put out	
10	there on the table about African American	
11	young children or minorities just in	
12	general from the inner City learning a	
13	particular trade where they'll be able to	
14	raise themselves up out of poverty by	
15	having a good-paying more than	
16	good-paying job and so forth.	
17	So can you just elaborate from	
18	the P3 standpoint. You may be able to	
19	touch on the minority participation	
20	component or not, but those are some	
21	things that have been on my mind, not	
22	even on this discussion but even during	
23	the last evaluation of the PGW proposal,	
24	but it wasn't always put out there, to be	
25	quite frank with you, only with some	
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2	certain individuals.	
3	MR. RINALDI: You know, I think	
4	one of the	
5	COUNCILMAN JOHNSON: And one	
6	other last thing. The other proposal	
7	that talked about PGW had a significant	
8	dollar amount attached to it. I think it	
9	was like one point something billion, if	
10	I'm correct. Do you lose money well,	
11	I'm not going to say lose money. Give me	
12	your idea of projected or what a	
13	hypothetical P3 revenue-generating	
14	proposal looks like from that aspect as	
15	opposed to just getting one major sum by	
16	selling off an asset.	
17	MR. RINALDI: I'll	
18	COUNCILMAN JOHNSON: If that's	
19	clear.	
20	MR. RINALDI: Your question is	
21	clear. How I'm going to answer it is	
22	less clear. So, first of all, the P3, I	
23	think Craig White really alluded to the	
24	issue. While it's a little bit difficult	
25	to talk about what is an energy hub, it's	

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2	even more difficult to say what is a P3,	
3	because I don't think there is one thing	
4	that's a P3. That's the beauty of it.	
5	It's a public-private partnership, and I	
6	think virtually every one is different.	
7	There's not a cookie cutter. You don't	
8	go in and just adopt the P3 mold. It's	
9	the private guy and the public guy	
10	sitting and negotiating what's right for	
11	them in that circumstance. And,	
12	Councilman Johnson, I got to think that	
13	kind of minority participation in the	
14	business, in the construction of the	
15	business, in the operation of the	
16	business is certainly an extremely	
17	legitimate thing to discuss as one forms	
18	a P3. I know of no reason why there	
19	should be an impediment.	
20	Again, I think a P3 is an	
21	entirely voluntary structure. So you	
22	make out of it what you can.	
23	One of the benefits for the	
24	City of that kind of thing you know, I	
25	live in a world of mergers and	

Page 151 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. acquisitions and we have a slightly rude saying sometimes for a kind of thing. 3 talk about -- let's see here, how am I 4 5 going to make this sound right -- idiot 6 insurance or something like that. 7 sometimes when you're dealing with someone who is selling a property and 8 9 they're really not quite sure of the value, you know, you arrange to have kind 10 11 of a continuing economic interest, and 12 this helps prevent for the seller having that they wake up and say, Oh, my God, 13 14 look what the buyer did. He made 18 qabillion dollars out of it and I walked 15 16 away with nothing. So they have some 17 continuing interest, and that kind of helps align the interests of the parties 18 at the table. 19 20 My PES transaction has a very 21 large component of that. Sunoco was 22 given a large retained interest in here, 23 so they never had to confront what maybe an economic value was at the moment of 2.4 25 the transaction. They're getting to

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2	harvest that value at a much better point	
3	in time, and I think that's one of the	
4	things that becomes an advantage if you	
5	do a public-private partnership. You	
6	kind of get out of part of the you	
7	capitalize you valorize part of the	
8	business, but you retain an interest so	
9	you have some kind of ongoing	
10	participation. I think that's a	
11	beneficial thing, but I don't think it's	
12	the only way to do it and I don't think	
13	it's necessary.	
14	COUNCILMAN JOHNSON: Did you	
15	call it idiot insurance?	
16	MR. RINALDI: Well, when we're	
17	not on the microphone, I'll tell you the	
18	real world. It starts with an S and it's	
19	got a Yiddish component.	
20	COUNCILMAN JOHNSON: Thank you	
21	very much.	
22	COUNCILWOMAN TASCO:	
23	Mr. Rinaldi, in your testimony you talked	
24	about the City under the Natural Gas Act,	
25	it authorizes the City to form a	

Page 153 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. municipal authority to provide natural gas supply and/or distribution services. 3 You also spoke about the potentiality of 4 5 transferring PGW's assets or operations 6 to that authority. Transferred is a broad term, especially if you're talking about transferring assets. 8 9 Would the new municipal 10 authority have to issue revenue bonds in 11 order to pay off PGW's existing debt at 12 the time of transfer? If so, would it pay any different interest rate than PGW 13 14 does as a tax-exempt municipal entity? MR. RINALDI: I'm afraid I'm 15 16 just not familiar enough with the 17 particulars of that. I can't give -- I mean, I can give you my personal guess, 18 19 but I can't give you a learned answer to 20 that. 21 COUNCILWOMAN TASCO: Okav. Councilman Henon. 22 23 COUNCILMAN HENON: Thank you, Madam Chair. And this is more of a 2.4 25 statement, because I loved what I heard

Page 154 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. from you, aside from your testimony and some of the questions. Change the rules. 3 And it is simple as -- and I'm really 4 5 trying to keep this from a pragmatic If we can -- if there's rules 6 approach. that need to be changed, we change the rules around here all the time. 8 9 change the Charter all the time, and sometimes it sets us back. 10 11 backwards. We need to see and know what 12 the big vision is. When we can change 13 the rules to put people back to work, to 14 create more PGW jobs, to create new jobs 15 and new opportunities for smaller 16 contractors or folks who need a second chance to create jobs from our public 17 schools to work kind of programs, we have 18 the chance right here to change the rules 19 20 so we could be responsible with our 21 environment and we can change the rules 22 so we can generate new revenue 23 opportunities to deal with our unfunded 2.4 liability in our pension system and our 25 underfunded schools.

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2	So I am in full support of your	
3	knowledge and everyone else's here who	
4	has prospect opportunities and creative	
5	and innovative ideas to generate revenue	
6	and put Philadelphians back to work so we	
7	can go forward instead of backward. So	
8	sometimes changing the rules is just that	
9	simple.	
10	MR. RINALDI: Thank you.	
11	Councilman Henon, I want to point out,	
12	though, there is one thing that the City	
13	is not changing. There's three light	
14	bulbs up here. The same three were out	
15	last time I was here.	
16	COUNCILWOMAN TASCO: We see	
17	them every Thursday.	
18	COUNCILMAN HENON: Well, I got	
19	out of the electrical business, so that	
20	will not be me.	
21	COUNCILWOMAN TASCO: I think	
22	that it's not a simple effort, but it	
23	could and should probably have the	
24	discussion about how it all works,	
25	because not only do we need permission	

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2	from the state, we also have to go to the	
3	feds. So what I would have liked to have	
4	seen was the dialogue about how we do	
5	this rather than let's just sell it.	
б	Because we have a very valuable asset	
7	here.	
8	MR. RINALDI: Yes, you do.	
9	COUNCILWOMAN TASCO: And so why	
10	give it away, and then next week you see	
11	that it's going off to Spain some place.	
12	So we are all open to a	
13	discussion so please don't	
14	misunderstand me about what we can do	
15	to move and be progressive and move into	
16	the next level. So that's what I want to	
17	say about trying to create an energy hub.	
18	And if PGW is to be a part of that	
19	discussion, I think that not only the	
20	Council, the Mayor, and the Board of PGW	
21	have to all be a part of that discussion	
22	so that we come out with maybe one	
23	recommendation for how we move forward.	
24	And so I hope that you will appreciate	
25	our actions here in terms of having that	

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2	discussion, which I believe personally	
3	should have taken place before we moved	
4	to sell a valuable asset like that.	
5	MR. RINALDI: I absolutely do,	
6	Madam Chair. I meant what I said in my	
7	prepared testimony. I applaud this	
8	Committee for taking on this issue right	
9	now, and I think it's timely and I think	
10	it's important and, you know, we want to	
11	be able to help with that.	
12	COUNCILWOMAN TASCO:	
13	Councilman, do you have a question?	
14	COUNCILMAN OH: No. Thank you	
15	very much.	
16	COUNCILWOMAN TASCO: Thank you	
17	very much. We appreciate it. I'm sure	
18	we'll be seeing you again as we move	
19	forward.	
20	We have our Mayor of Allentown	
21	who is here, and knowing his schedule,	
22	we'd like to call him up. And then the	
23	next person will be Mr. Douglas Wheeler.	
24	Where is he? Okay. All right. After	
25	the Mayor. And then we have four others	

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2	that are on the schedule. Now, there may	
3	be other people who want to testify.	
4	(Witness approached witness	
5	table.)	
6	COUNCILWOMAN TASCO: Good	
7	afternoon, Mr. Mayor.	
8	MAYOR PAWLOWSKI: Good	
9	afternoon, Councilwoman. Thank you for	
10	allowing me to come and speak to you this	
11	afternoon. I appreciate it.	
12	COUNCILWOMAN TASCO: Thank you.	
13	Would identify yourself for the record,	
14	please, and you may proceed.	
15	MAYOR PAWLOWSKI: Mayor	
16	Pawlowski of the City of Allentown.	
17	COUNCILWOMAN TASCO: Would you	
18	like to proceed with just talking about	
19	how you in your city	
20	MAYOR PAWLOWSKI: Sure. What I	
21	wanted to really do today is give you	
22	sort of an overview of what we were able	
23	to accomplish in Allentown.	
24	Allentown, just to give you a	
25	sense, we're the third largest city in	
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2	the state. We had the same problems,	
3	just on a smaller scale, that you're	
4	grappling with here. We had a pension	
5	problem that was really overshadowing	
6	everything else in the city's finances	
7	and eating up the vast majority of our	
8	general fund revenue on a yearly basis,	
9	and we had a crisis. And when you look	
10	at the crisis that we had, we were trying	
11	to address significant legacy costs. We	
12	had long-term labor contracts when I	
13	first came in to the Mayor's Office. We	
14	had crippling pension costs due to early	
15	retirement. Two-thirds of my entire	
16	police force retired the day that I	
17	stepped into office. Over 50 percent of	
18	my Fire Department retired. Many of them	
19	retired at about 35 to 40 years of age,	
20	getting anywhere from 90,000 to 100,000	
21	for the rest of their life, with full	
22	healthcare benefits and the ability to	
23	pass it on to their surviving spouse.	
24	Needless to say, that shot up	
25	our pension costs dramatically. We went	

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Page 160 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. from a fund that was about 90 percent funded to a fund that was about 45 percent funded in a very short period of 4 5 time. You combine that with the 6 recession that hit us all in 2008, increased healthcare costs, decreasing revenues, a stock market plunge that 8 9 resulted in less revenues, and you had a very difficult scenario regarding our 10 11 pensions, just like you have here in 12 Philadelphia. In fact, when you look at our 13 14 pension costs, if I had done nothing by this year, 2015, over 30 percent, 30 15 percent of our entire city revenue would 16 17 have been just dedicated to our MMO, our 18 minimum municipal obligation. Now, as you all know, that's like the minimal 19 20 payment on a credit card. That doesn't 21 address the unfunded pension liability. It doesn't really lower our MMO in any 22 23 way, shape or form. It was just paying off our minimum payment on our pension 2.4 25 fund.

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2	We have been down to about 48	
3	percent funded. As you know, just like	
4	Philadelphia, we were legally required to	
5	pay that MMO annually, and on top of	
6	that, we had an additional amount of	
7	pension bonds that were taken out back in	
8	the '90s that were we've had	
9	refinanced, but was adding another 2.4	
10	million additionally onto the cost of our	
11	MMO.	
12	We needed a dramatic increase	
13	in revenue to fill that pension gap, and	
14	I was looking at a couple different	
15	scenarios. I was looking at bankruptcy,	
16	because if you took all of our property	
17	tax revenue, it would not even equal the	
18	amount that was needed to pay the MMO,	
19	the 30 percent, just our property tax	
20	revenue on it. That's not counting all	
21	the other - earned income tax, the	
22	business privilege tax. But it would	
23	have ate up all our property taxes in the	
24	City of Allentown.	
25	I would have had to raise taxes	

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2	probably close to 150 to 170 percent just	
3	to make the minimal municipal obligation	
4	payment. That would have driven pretty	
5	much every business and every homeowner,	
6	middle-class homeowner, out of the City	
7	of Allentown and would have put us on a	
8	downward economic spiral that I don't	
9	think we would have been able to come out	
10	of. So we needed to look for other	
11	options, and we needed to close that	
12	pension gap, and we approached it really	
13	in two ways.	
14	First, I had to stop the	
15	hemorrhaging that was happening with our	
16	funds. And so we did that by	
17	renegotiating our major components in the	
18	Fire and Police contract, which was	
19	successfully completed. So things that	
20	were causing us we had strange	
21	provisions in our collective bargaining	
22	agreements, like any 30-day period they	
23	can use 100 percent of their overtime and	
24	it would go into the basis of their	
25	pension. So you had folks and, of	

Page 163 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. course, the most senior folks got first crack at the overtime, so you had folks 3 there were working like dogs for 30 days 4 and obviously they'd shoot up their 5 6 pension costs dramatically and retire with astronomical pension benefits. In fact, the majority, as I said, were 8 9 retiring anywhere between \$80,000 and \$120,000 a year in pensions and at the 10 11 age of about anywhere from 35 to 42 years 12 of age. I used to tell my folks that that's even better than winning the 13 14 Pennsylvania Win for Life Lottery, 15 because you only get \$50,000 a year for 16 that. We were giving out close to 17 \$100,000 a year to our retired fire and 18 police and it was just unsustainable. 19 So we successfully negotiated 20 those aspects out of the contract and we 21 stopped the hemorrhage, but then we had to address the tumor, and we were in the 22 same position that you are. How do we 23 lower this unfunded pension liability. 2.4 25 How do we get at that huge, huge number

Page 164 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. to really lower our MMO on a yearly basis and thus put more money back into the 3 general fund. And so we looked at a 4 5 number of different scenarios. We looked 6 at raising property taxes, which I said was significant for us, and would have been close to anywhere between 100 to 170 8 9 percent to basically pay for that MMO; issuing more pension bonds, which was not 10 11 the best scenario by any stretch of the 12 imagination because we were exchanging 13 one debt for another debt; you know, 14 leasing our parking, leasing assets like 15 our golf course or leasing out our water 16 and sewer utilities. And so we actually 17 ended up looking at each of these options and determined that the best course of 18 action for us was to try to monetize our 19 20 assets. 21 Now, we were in the same 22 position that you folks were. We looked 23 at the asset that we had, and it was a 2.4 significant asset. It was generating a 25 significant amount of revenue, because we

Page 165 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. had the water and sewer infrastructure for the entire region in the Lehigh 3 Valley, which is about a million folks, 4 and we were generating some significant 5 6 income, but because of the way that the state law was structured, we couldn't use any of that revenue to affect the one 8 9 thing that was killing us, which was our 10 pension costs. That's what was eating up 11 most of that money in the general fund, 12 but according to state law, we could not utilize those dollars to address that 13 14 particular issue. 15 So we looked at ways to do 16 this, and we determined that the best way to structure this was a modernization of 17 the asset. And we came to the same 18 conclusion that you did. You were just 19 20 talking about it and the last gentleman 21 that was giving testimony, that we didn't really want to sell the asset. 22 I'm not a 23 believer in just selling off city assets when we don't have to. 2.4 25 And so we looked at a number of

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2	models across the country. And we looked	
3	at Chicago and we looked at what happened	
4	in Pittsburgh and we looked at some	
5	cities on the West Coast, and what they	
6	were doing was their assets and how they	
7	structured and a number of projects	
8	that happened in New Jersey, and we hired	
9	some of the best consultants that were	
10	around to really sort of analyze these.	
11	And we looked at what was the positive	
12	about those deals and those transactions,	
13	what were the negatives. And in some	
14	cases like Chicago and leasing of the	
15	parking, there were significant	
16	negatives. I mean, it pushed up the cost	
17	of parking dramatically. It actually	
18	started driving business out of their	
19	downtown. And even though they got a	
20	huge up-front payment from leasing their	
21	parking assets, it became a detriment	
22	overall, where now you have the new Mayor	
23	trying to actually buy that asset back	
24	and/or get out of the lease that they	
25	have.	
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2	So we wanted to learn from the	
3	cities that were out there, and we	
4	learned a couple of unique things that we	
5	tried to build into our lease concession.	
6	Now, to my knowledge, we are	
7	the only city in the State of	
8	Pennsylvania that has structured a	
9	successful P3. And we did that because	
10	we came about it, I think, in a different	
11	way than most folks have approached this	
12	process. We looked at it as we had an	
13	asset, we wanted to keep that asset. Our	
14	particular asset didn't have a lot of	
15	deferred maintenance, so it was a	
16	valuable asset in that respect. But we	
17	had this issue of our pension payments	
18	that had to be solved and had to be	
19	resolved or it was going to kill us	
20	financially as a city, and then it	
21	wouldn't matter how many assets we had at	
22	that point if we weren't able to pay our	
23	bills. It would have detrimentally	
24	affected us financially. And so we	
25	approached it from that aspect, that we	

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2	wanted to keep the asset.	
3	We wanted to be able to retain	
4	the jobs, because there were significant	
5	jobs that were associated with that	
6	aspect. We had significant concerns	
7	about labor and labor agreements that	
8	were associated with that particular	
9	asset, and all that had to be addressed.	
10	So we went about this I'll back up to	
11	that.	
12	We went about this in a way	
13	that was literally unique. Most of the	
14	cities in fact, all the cities that we	
15	looked at across the country came from a	
16	perspective of here's the asset, this is	
17	what our end goal wants to be, we want to	
18	get dollars, right, to pay for either	
19	replacing or rebuilding the deferred	
20	maintenance on the infrastructure or in	
21	the case of Allentown, the case of	
22	Philadelphia, looking at ways to solve	
23	our pension crisis.	
24	And so we're going to put it	
25	out for bid and we're going to then take	
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2	that highest bidder and then work with	
3	that bidder to work on putting a P3	
4	concession together. And from everything	
5	that we looked at, that was not the way	
6	to approach this scenario. Every city	
7	that we looked at across the country lost	
8	in that particular if they approached	
9	that transaction in that particular way.	
10	So we looked at it from a different	
11	vantage point, and our vantage point was	
12	this: We decided and we spent a long	
13	time, almost a year, putting together the	
14	lease. We crafted the lease first. We	
15	said we don't want to sell it. We know	
16	it's going to be a long-term lease if	
17	we're going to get the amount of dollars	
18	that we want. And instead of paying us a	
19	year-to-year lease payment, we want them	
20	to pay us one big up-front payment with	
21	smaller payments on a yearly basis, an	
22	up-front payment that would have been big	
23	enough to actually reduce our overall	
24	unfunded pension liability and	
25	dramatically drop that MMO payment on a	

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2	yearly basis.	
3	And so we did things like	
4	there was no transfer of title of the	
5	asset. We weren't going to sell it off.	
6	We didn't want it to even look like we	
7	were selling it off to any particular	
8	entity. We were going to lease it for a	
9	longer period of time. We ended up	
10	settling on a 50-year lease of this	
11	particular asset. The city would always	
12	maintain ownership of the water supply	
13	and sources, and that was critical for	
14	us, similar to what you were just talking	
15	about. We wanted to make sure that we	
16	had this great asset, we were supplying	
17	that asset to the municipalities around	
18	us. And the Lehigh Valley in particular	
19	has become a huge hub of a lot of balers.	
20	Nestle has a million square foot plant up	
21	there, same with Ocean Spray, same with	
22	Coors and others, and Sam Adams has huge	
23	facilities up in the Lehigh Valley and	
24	they were using a lot of water. They	
25	were using our water. And so we wanted	

Page 171 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. to make sure that any future sales, we would still have the benefit of reaping 3 some of those profits from the future 4 sales and it wouldn't just go to the 5 6 company that was leasing our particular asset. So we built that in. 7 The lease was approximately 50 8 9 We anticipate all the existing 10 labor agreements would be maintained and 11 remain in force. No one lost a job to 12 this transaction in any way, shape or The workforce would have to be 13 form. 14 assumed by the lessee. The city would 15 not be liable for any future operating or 16 capital costs. The city would retire 17 approximately \$30 million of water and sewer debt. So we had additional debt 18 that we had taken out through the water 19 and sewer bonds. We had to retire that 20 21 debt if we were actually going to do a P3 transaction. So that retirement of debt 22 23 had to be taken into account. The city's revenue share with the lessee on any new 2.4 25 water or sewer service agreements, the

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2	net proceeds would go to substantially	
3	reduce the MMO.	
4	And we approached it then in a	
5	very different way. We first put out a	
6	request for qualifications. And I	
7	brought Council in from the very get-go	
8	on this process. We had several	
9	Councilmembers that worked with us all	
10	along the way in crafting the lease and	
11	working with our consultants in crafting	
12	that lease. We then put out an RFQ	
13	process, but before we did that, I took	
14	that lease, the general parameters of the	
15	lease, to City Council, and we got almost	
16	a unanimous vote. It was six to one. We	
17	have seven folks on our City Council. So	
18	it became six to one in that respect.	
19	But that helped us in the long run,	
20	because what it did, it showed all the	
21	potential bidders that were going to look	
22	at this lease transaction that we had the	
23	political will to go through to the end	
24	with this deal.	
25	We then did an RFQ process	

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2	before we even put out the lease, and we	
3	looked for qualified bidders. And we	
4	ended up with about 30 folks, 30	
5	different companies from across the	
6	country and, quite honestly, across the	
7	globe that then looked at put in	
8	requests for qualifications. We looked	
9	for certain things - did they have the	
10	ability obviously to enter into this	
11	agreement, did they have operations that	
12	were the same size, what were their	
13	operating experience in handling the	
14	system of our size, and also did they	
15	have the money, did they have the	
16	resources to provide the overall end	
17	lease payment that we were looking to	
18	achieve.	
19	We narrowed that down from	
20	about 30 to nine. We asked all nine to	
21	come back. And, again, it was a joint	
22	committee between the Administration and	
23	Council that we and our consultants	
24	that we interviewed all these nine	
25	groups, and we let them go back and	

Page 174 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. This took almost eight months, where they would give us suggestions 3 based on the lease document that they had 4 5 in front of them, and we would give our 6 comments back to them. So in some cases, they had good comments. In some cases, their comments were outrageous of what 8 9 they wanted us as far as liability that 10 they wanted us to assume. At the end of 11 the day, we took about 5 percent of their 12 comments that we thought were decent comments that wouldn't really affect the 13 14 deal in any substantive way and 15 incorporated them into the lease 16 document, into the transaction. At the same time while we were 17 18 doing this, we also did an operation procedures policy that was being 19 conducted at the same time. So we 20 actually codified how we want the system 21 to be managed, from everything, how they 22 23 manage the staff, how the water is being managed, the type of quality that we were 2.4 25 currently getting versus we wanted to

Page 175 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. make sure that our quality and our operation didn't diminish in any way, 3 shape or form. In fact, we wanted it to 4 5 improve. So we put forth a manual, a 6 document, an operations document that was an attachment, if you will, to the lease document itself, so that the potential 8 9 bidder knew exactly what we expected. There were fines and penalties 10 associated if they didn't live up to the 11 12 parameters of the agreement and to our operational standards that we had put 13 14 forth, and all that was outlined. 15 there was no surprises to the potential 16 bidder of what they were going to expect 17 once this arrangement was put forth. 18 We put it out for bid after we had brought it to City Council and gotten 19 20 their approval of the general parameters 21 of that contract. We then put it out for 22 bid. And I had no idea if anyone was 23 going to bid. I mean, we had a lot of 2.4 requirements in there. We had a 25 requirement they had to assume our

Page 176 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 workforce. They had a requirement they 2. had to assume our collective bargaining 3 agreements. We had PLA requirements put 4 on for any major projects that were over 5 a certain amount of dollar range, major construction projects associated, as we had in the past with the city. 8 9 So I had no clue who was going 10 to bid on this particular asset. I did 11 know it was worth a specific amount based on all the consultation I received from 12 our consultants and the fact that I 13 looked at other types of deals of this 14 15 size and magnitude across the country. 16 knew that there was worth built up in the transaction, but based on the parameters 17 that we had outlined in the contract, I 18 wasn't sure who was going to bid. 19 20 Long and behold, out of those 21 nine, we actually had five companies that 22 bid, four national companies and one was 23 the county. 2.4 Now, before I became Mayor, I 25 actually was the Director of Community

Page 177 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. and Economic Development for the city for several years, and I remember meeting 3 with the county over a decade ago, and 4 5 they wanted to regionalize our water and 6 sewer operation, and at that point, they 7 wanted to give us about \$10 million for the system. I said, Well, guys, I'm 8 9 Polish, that doesn't make me dumb. know it's worth more than \$10 million. 10 11 It turned out to be worth a lot more than 12 \$10 million. At the end of the day, we had a 13 14 process that was put into place, that we 15 went through this RFQ process, we went 16 through the lease process, we accepted 17 their comments, we put it out for bid, we got these five bidders that bid 18 competitively, and we also had a BAFO 19 20 process also built into the contract that 21 if any of the two bidders got within a 10 percent range of the bid, they would then 22 23 go to best and final offer concept, where it would be based primarily just on 2.4 25 price, what they were giving, nothing

Page 178 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. else. Because we've already cleared them at this point. They've already been 3 cleared of their capacity to run the 4 5 operation and they knew what we were 6 expecting of them. We ended up with a BAFO process between American Water and the county, 8 9 believe it or not. The county bid. And we ended up getting an additional \$28 10 11 million as a result of that BAFO process. The overall bid was \$220 million. 12 were able to pay off all 150 million of 13 14 our unfunded pension liability. Now, 15 ours is just as significant as yours. 16 Your numbers -- you just have a few more 17 zeros put into your scenario, but you also have a much bigger asset to get a 18 few more zeros. 19 20 We were able to pay off our 21 unfunded pension liability to the tune of now we're close to 98 percent funded. 22 23 Our MMO went basically down almost 95 percent. We went from about \$22 million 2.4 25 a year in our MMO to 2. We were able to

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1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2 pick all that money back up into the 3 general fund, and we didn't lose a single 4 job as a result of it. And it's now been 5 a year since that process has taken 6 place, and, of course, everyone was 7 claiming that Armageddon was going to 8 befall the City of Allentown. You know, 9 the toilets weren't going to work and 10 they weren't going to flush and the water 11 wasn't going to come out of the tap. And 12 none of that has happened. In fact, 13 consumer satisfaction has been as high as 14 ever. In fact, we won a national award
general fund, and we didn't lose a single job as a result of it. And it's now been a year since that process has taken place, and, of course, everyone was claiming that Armageddon was going to befall the City of Allentown. You know, the toilets weren't going to work and they weren't going to flush and the water wasn't going to come out of the tap. And none of that has happened. In fact, consumer satisfaction has been as high as
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12 none of that has happened. In fact, 13 consumer satisfaction has been as high as
13 consumer satisfaction has been as high as
14 ever. In fact, we won a national award
15 from Bond Buyer Magazine for the best
16 deal in the Northeast last year for this
17 particular transaction. And when the
18 reporter from Bond Buyer came by and he
19 said, Well, how does the transaction
20 work, I took him to the bathroom in my
office and I said, See, the toilet still
flushes, the water still flows. Nothing
23 has changed. What has changed is, we
24 have solved our pension problem.
25 We're one of the few

Page 180 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. municipalities in the state now with an almost fully funded pension. 3 dramatically reduced our MMO. 4 That extra 5 amount in our general fund has allowed us 6 to provide more services as a result of that to our residents. Our bond rating went up. We had an unprecedented -- we 8 9 had our first bond review by Standard and 10 Poor's, an unprecedented three grade 11 upgrade. We went from B plus to a AA 12 plus by Standard and Poor's. I can't remember the last time I've ever seen a 13 14 municipality go three grades in one 15 review, but we did in the City of 16 Allentown and it was a tremendous, 17 tremendous transaction for us, and it's a transaction model that I believe could be 18 followed here. 19 20 We put together a great project 21 In fact, some of the folks came team. 22 from right here in Philadelphia. 23 consultants, our lead consultants who helped us craft this deal, are right 2.4 25 across the street in Dilworth Plaza,

Page 181 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. Dilworth Paxson. We had PFM, Public Financial Management, was our FA on this. 3 We hired some special consultants from 4 Chicago, Katten Muchin, who did a 5 6 tremendous job in bringing us that information that we needed from across 7 the country in analyzing those different 8 9 proposals that existed out in the 10 marketplace. And at the end of the day, 11 we ended up leasing it to Lehigh County. That wasn't -- we had no clue 12 13 who we were going to lease it to. It was 14 a transaction. It wasn't structured as a 15 transaction between a public and public 16 entity. It happened to work out that way 17 because they bid the most. 18 So the way the lease is structured, they paid us a huge up-front 19 20 payment. We paid down our unfunded pension liability. We get a smaller 21 22 payment each year. We share 50 percent 23 of any new revenues that they have and 2.4 any new water and sewer connections as 25 the rest of the region builds out, and

Page 182 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. overall we have a scenario where our rates have not gone up and they will not 3 go up for three years. In fact, they're 4 5 projecting that our rates, when that 6 provision of the contract ends, will probably actually stay the same or go down as a result of this particular 8 9 transaction. So it was good for our 10 11 consumers. It was good for the city. 12 was good for our pensioners, and it overall was good for the Commonwealth, 13 14 because it took one city that had a 15 severe pension deficit and took it from a 16 negative to a positive. 17 In summary, it addressed a huge 18 financial issue that was affecting the City of Allentown. They had 19 20 public-private sector interest and expertise in managing the water and 21 wastewater systems, provided an immediate 22 23 financial relief and long-term enhancements to the city through ongoing 2.4 25 investments in water and sewer

Page 183 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. infrastructure. We eliminated our unfunded pension liability. We 3 stabilized and reduced our debt. 4 5 fact, our debt went down overall because 6 we were able to get rid of all that water and sewer debt as well. Our overall debt went down 30 percent overall in the city. 8 9 So we reduced our debt, we eliminated our unfunded pension liability, and we 10 11 stabilized our tax rate for years. 12 fact, because of that and because of some of the other things we were able to 13 14 accomplish, Allentown has not raised 15 property taxes in ten years. 16 So it has been a positive 17 transaction for us, but it took time. Ιt was something that took us almost a year 18 and a half to two years to actually 19 20 implement, really working hand in hand 21 with our consultants and City Council to 22 craft this to come to something that we 23 were all in agreement about that we all had the political will to actually 2.4 25 execute at the end, which I want to point

Page 184 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 1 out is critical. 2. No one is going to -- you're 3 not going to get the serious bidders that 4 you need and that you want on this 5 6 transaction unless they see that you as Council as well have the political will at the end of the day to execute this 8 9 transaction. Nobody, especially in the case of PGW, is going to spend hundreds 10 11 of millions in your case -- it was tens 12 of millions for us, but hundreds of millions for you -- to do the due 13 14 diligence that's going to be needed to 15 really give you a solid bid unless they 16 know that you have the political 17 wherewithal and political will at the end of the day to execute on that agreement. 18 So I think what you're doing in 19 trying to figure out how you craft that 20 21 early on is a good move. I think you all need to come to a resolution with whoever 22 23 the next Mayor may be and the next Administration and figure out how you 2.4 25 take this asset, monetize it, utilize it

Page 185 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. for the best benefit of the workforce that's there and the residents that you 3 serve and solve this problem, because 4 5 it's only going to get bigger, as you 6 know, the pension problem. It's only going to continue to eat up more and more of your resources, and it's going to 8 9 allow you to do a lot less for the citizens and the community unless you 10 11 solve this problem. 12 I think you got a huge 13 opportunity. You got a tremendous asset. 14 I think if you structure it the right 15 way, you can also be the second 16 successful P3. We've always been first. 17 Second successful P3 in the State of 18 Pennsylvania. 19 I'll take any questions. 20 COUNCILWOMAN TASCO: Thank you 21 so much for taking the time to come down and share that story. You know, it's 22 23 been all over the place in terms of the discussion, and we applaud you for your 2.4 25 leadership in Allentown and also the

Page 186 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. support and leadership of your Council to come to a resolution that ended up 3 benefiting your community. And it does 4 5 take time. It's not a fly-by-night kind 6 of discussion. So I applaud you for your 7 success. MAYOR PAWLOWSKI: 8 And I 9 understand all of your concerns. concerned about the workforce that works 10 11 there and you're concerned about the 12 residents who are paying the bills and 13 you're concerned about how this is going 14 to affect the community, and you don't 15 want to just give up an asset that may be 16 producing dollars in the future. 17 are all legitimate concerns. question is, how do you get those 18 concerns addressed and put them into a 19 document that will reflect all of your 20 concerns and all of the diverse concerns 21 22 that you all have on City Council and get 23 an outcome that will benefit the City. I think the way to do that is 2.4 25 by doing that lease first, structuring

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2	the lease and even voting on the lease	
3	before you even put it out for bid so	
4	that everybody is on the same page.	
5	There's no and from my	
6	experience, the bidders appreciated that.	
7	They may not they didn't say that at	
8	the beginning of the process, but at the	
9	end of the process they did, because they	
10	knew what to expect. It wasn't a	
11	surprise. We weren't playing games at	
12	the end after they already put in bids	
13	trying to rework something that then	
14	worked out into addressing the needs and	
15	the concerns that different	
16	constituencies had. We tried to address	
17	as many of those up front before we even	
18	got to the process where they were	
19	bidding, and my sense is they appreciated	
20	that process immensely. And we got	
21	better bids. We got higher amounts,	
22	unprecedented amounts for the asset that	
23	we have.	
24	COUNCILWOMAN TASCO: Thank you	
25	very much.	
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2	The Chair recognizes Councilman	
3	Henon.	
4	COUNCILMAN HENON: Thank you,	
5	Madam Chair.	
6	Mayor, I appreciate you	
7	trekking down here to the City of	
8	Philadelphia, as you are no stranger to	
9	this city and region. Quite impressive.	
10	I'm sitting here. You're not reading	
11	testimony or anything like that. I mean,	
12	you're sharing your experience and	
13	results of something creative and new.	
14	A few simple questions. First,	
15	you recognized that there was a severe	
16	problem with the unfunded pension	
17	liability that you had within Allentown,	
18	and now as a result of your efforts with	
19	a whole lot of partners, 95 percent of	
20	you were saying the pension bills are	
21	MAYOR PAWLOWSKI: Unfunded	
22	pension liability, the MMO was reduced by	
23	about that.	
24	COUNCILMAN HENON: You reduced	
25	the MMO by 95 percent. That's	

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2	significant, and I'm sure the dollars	
3	that have been freed up in the general	
4	fund as a result of that for economic	
5	development maybe in every area, creating	
6	jobs	
7	MAYOR PAWLOWSKI: Everything	
8	from police services to it's allowing us	
9	to actually borrow. For the first time	
10	in a long time we've been able to borrow.	
11	We reduced our debt by 30 percent, but	
12	we're also borrowing to fix long-term	
13	infrastructure needs and equipment needs	
14	that we haven't just we really have	
15	not had the dollars in the past to	
16	address.	
17	And so it's given us the	
18	financial flexibility that we need to	
19	really operate as a city the way and the	
20	level that we want to operate, providing	
21	additional police services, fixing our	
22	infrastructure, providing resources,	
23	everything from replacing our pools in	
24	our neighborhoods to fixing bridges.	
25	So, I mean, it's given us the	

Page 190 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. flexibility that we didn't have before to be able to embark on some major 3 infrastructure projects and real capital 4 projects that we just didn't have the 5 6 resources to even think about embarking 7 on in the past. COUNCILMAN HENON: 8 T was 9 looking at your summary there, and you're 10 talking about the P3 opportunities. 11 did you begin to think like this is the 12 direction we should go in when it comes 13 to a P3? 14 MAYOR PAWLOWSKI: Well, I mean, 15 we looked at a lot of different models, 16 as I said. We examined -- I realized 17 that we were not going to be able to solve it through traditional means. 18 couldn't tax our way out of this problem. 19 20 We couldn't borrow our way out of this 21 problem. There was no help. There was 22 no knight in shining armor coming from 23 Harrisburg. No one was going to help us 2.4 solve this problem. And it was a looming 25 problem that was approaching us like a

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2	freight train rather quickly. By 2015,	
3	as I said, if I didn't solve this	
4	problem we started back in 2011. If I	
5	didn't solve this problem in a few years,	
6	that freight train would have hit us and	
7	we would have had a real financial	
8	disaster. In fact, you would have been	
9	reading about Allentown not in a positive	
10	vein, but that we were following the same	
11	track as Detroit, because that was our	
12	only alternative at that point.	
13	And so we had to really try to	
14	look at it from a creative way, how do we	
15	utilize our assets. And we looked at all	
16	the assets that we had and, you know,	
17	I'll be very honest, the first thing I	
18	looked at was selling things off. I did	
19	not like that idea. It didn't fit well	
20	with me. It didn't it wasn't	
21	stomached real well by a lot of the folks	
22	in City Council, but I didn't know what	
23	else to do. But as I started researching	
24	out and as we started bringing folks in	
25	and expanding our consultant base and	

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2	really sort of bringing that expertise to	
3	the table, I realized that if we monetize	
4	the asset, if we leased it and we were	
5	able to monetize that asset, take the	
6	value of the asset out, utilize it for	
7	the one thing that was killing us, which	
8	was the pensions, we didn't have to sell	
9	it. We could create a scenario that	
10	really was a win-win scenario. It had	
11	never been done before in the State of	
12	Pennsylvania. And the last gentleman	
13	said, Well, we just have to rework the	
14	rules, and we tried that too, you know.	
15	It's not very easy to rework the rules,	
16	and I came to the conclusion very quickly	
17	very early on in that process that	
18	Harrisburg was not going to rework the	
19	rules for us. What we did is, we looked	
20	at the rules that existed and tried to	
21	figure out a framework that would address	
22	the problem that we had while remaining	
23	in the context of the rubric of rules	
24	that were placed on us by Harrisburg, and	
25	the lease concession option fit that	
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2	mold. It fit the build in that respect.	
3	It allowed us to still stay within the	
4	framework and the rubric of the rules	
5	that were placed upon us, with at the	
6	same time being able to monetize that	
7	asset and pull out the dollars that we	
8	needed to really address this problem.	
9	And it worked. You know, it worked, as	
10	you can see.	
11	A year later our bond rating	
12	has gone up. Our MMO has gone down. Our	
13	workforce is still there. No one lost a	
14	job. Our people are happy. No one is	
15	complaining about their water and sewer	
16	service. Our rates have stabilized, and	
17	we were able to really avert a	
18	catastrophe.	
19	COUNCILMAN HENON: Good job.	
20	Congratulations on all your efforts.	
21	COUNCILWOMAN TASCO: Councilman	
22	Henon I mean	
23	COUNCILMAN NEILSON: She got me	
24	last time.	
25	Neilson.	

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2	She was calling me Bobby last	
3	time.	
4	Good afternoon, Mayor. Thank	
5	you so much for sharing your story and	
6	coming down and making the trek down to	
7	Philadelphia and trying to share with us	
8	your experiences, as you have done	
9	before. I had your testimony up in	
10	Harrisburg a few times, educating the	
11	trek you make around the state to try and	
12	share the experiences with all of us so	
13	we can do better things for our	
14	constituents.	
15	I was curious when you talked	
16	about how the rates didn't go up, because	
17	a lot of people when you sell the asset	
18	like this and do a little partnership,	
19	they automatically think my rates are	
20	going to double. It's somewhat of a	
21	scare tactic that's used, say, Hey, your	
22	rates are going to go up, your rates are	
23	going to go up, but you said you had	
24	three years no	
25	MAYOR PAWLOWSKI: So what we	

Page 195 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. did is, we built the rate regime into the 3 lease agreement itself. So our rate regime -- we looked at it over the last 4 50 years, what our rates were in our 5 6 water and sewer, and, you know, like this 7 city and any other city, some years it was zero, some five, one year 20, 15, 10. 8 9 They were all over the place. Every year was different, right, depending on what 10 11 City Council approved that particular 12 year. 13 But when we averaged it out 14 over a 50-year period, it came out to 15 about 5.8 percent increase on an annual basis, is what we were experiencing as 16 17 far as a rate increase. And so we structured into the lease that the 18 lessee, the concessionaire, can only 19 20 raise the rates at an annual rate of 2 21 percent, plus the year with CPI, which 22 over the last couple years was only at 23 the very most 2.5 percent. In fact, the 2.4 last couple years it's been zero, it's a 25 negative. But over the last 10 to 15

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2	years, the highest it was was about 2.5	
3	percent. So we figured even at the	
4	worst-case scenario, the ratepayer would	
5	only be paying about 4.5 percent, which	
6	is actually less than what they were	
7	paying on an average. So we structured	
8	the rates into the lease itself.	
9	We also had for any major	
10	construction projects over a certain	
11	dollar amount, they have to come back to	
12	the city and City Council for approval.	
13	They can't just go out and spend money,	
14	because obviously it would be tied any	
15	additional costs for any significant	
16	infrastructure improvement would	
17	obviously affect that cost. We would	
18	have to approve that. The city would	
19	have to approve that first.	
20	And so we built that rate	
21	regime into the lease agreement itself.	
22	In fact, we even built in so going out	
23	of that 2 percent, it actually drops to	
24	1.5 percent, and then 0.5 percent goes	
25	into a sinking fund that then accumulates	
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2	over the course of the later years,	
3	because obviously there's going to be	
4	capital costs as you go further out in	
5	time, right? And that money actually	
6	then pays for those capital costs as the	
7	system ages and gets older, and then any	
8	money left at the end of the day would	
9	revert back to the city at the end of the	
10	lease, and the lease the contract	
11	itself says they have to give us the	
12	asset back in as good a shape or better	
13	than what we gave it to them.	
14	So we spent a long time	
15	quantifying the asset that we were then	
16	giving to the lessee. So we get it back.	
17	Now, in 50 years I'll be really old or	
18	dead, but, you know, my kids can if	
19	they're involved in city government, they	
20	can do it all over again.	
21	COUNCILMAN NEILSON: They won't	
22	have to drink brown water. The water	
23	still will be there.	
24	MAYOR PAWLOWSKI: They can	
25	re-lease the whole thing again if they	

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2	wanted to. But it gave us a way to then	
3	structure the rates so that we had	
4	still we had control of the rate	
5	structure.	
6	Now, it was a structure that	
7	still allowed the concessionaire to make	
8	a profit. It just wasn't a profit that	
9	was on the backs of the ratepayers.	
10	COUNCILMAN NEILSON: I'm sure	
11	like your city, like ours, we have some	
12	programs for those in need.	
13	MAYOR PAWLOWSKI: Right.	
14	COUNCILMAN NEILSON: Do you	
15	have any such programs?	
16	MAYOR PAWLOWSKI: Sure.	
17	COUNCILMAN NEILSON: And how	
18	did this deal affect	
19	MAYOR PAWLOWSKI: They were all	
20	built into the lease.	
21	COUNCILMAN NEILSON: All built	
22	into the lease.	
23	MAYOR PAWLOWSKI: They were all	
24	built into the lease. So they knew going	
25	in what they were expecting, and they	

Page 199 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. priced it knowing that they had these commitments that they had to address. 3 So we have senior citizen discounts just 4 5 like you do and, you know, other types of 6 programs that over the years have evolved. Some of them, you know, we just -- no one was utilizing, but some of 8 9 them they were being utilized quite aggressively, and we built those into the 10 11 lease. 12 But doing the lease first and 13 structuring it the way we structured 14 it -- and, again, I'm talking about water 15 and sewer, but this can be done for gas, 16 it could be done for parking, it could be 17 done for whatever asset the City wants to lease out. The bidder knew what they 18 were bidding on going into this. So when 19 20 they priced it, when they were able to do 21 their own pro formas, they knew that they had some set-asides, some special 22 23 programs, some discounts that the city 2.4 had in place and it wasn't a surprise. 25 It wasn't like we came to the table and

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2	said, Oh, by the way, we want the senior	
3	citizen discount too, and they would then	
4	sit back and say, Well, then we're going	
5	to have to lower our price. No. They	
6	knew exactly what was in it from the	
7	get-go. All that was outlined in the	
8	lease. Now, you can imagine, the lease	
9	document is a pretty lengthy document.	
10	COUNCILMAN NEILSON: Oh, no	
11	doubt.	
12	MAYOR PAWLOWSKI: It took us a	
13	year to basically make that document, but	
14	by doing it that way, it took any	
15	surprises out from the potential bidders.	
16	We have in our agreement that	
17	there's PLAs for any projects that are	
18	over, I think it's, \$5 million. So	
19	any maybe it's 3. I think we actually	
20	went a little bit lower. I think it's \$3	
21	million. So any major construction	
22	projects, infrastructure projects that	
23	are done that are over \$3 million, we had	
24	a PLA agreement that was attached right	
25	to the lease.	

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2	Now, this wasn't a surprise for	
3	the potential bidders. They knew this,	
4	and they priced it accordingly, based on	
5	knowing that once they got over that	
6	dollar amount, they were going to do a	
7	major infrastructure project that	
8	whatever cost I don't believe there	
9	was that much cost attached to a PLA, but	
10	whatever cost they would presume, they	
11	knew that going into the deal and they	
12	priced their deal accordingly.	
13	Now, with all those provisions,	
14	as I said, I had a very sleepless night	
15	when we put this thing out for bid. I	
16	could have had real egg on my face	
17	sitting here, and then I wouldn't be	
18	sitting here talking to you. No one	
19	could have bid, right? I mean, there	
20	could have been no potential bidders. In	
21	fact, it was interesting because some of	
22	the bidders remember, we had the RFQ	
23	process first and we had about 30	
24	companies and we narrowed it down to	
25	nine, and then we kept going back and	

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2	forth with those nine looking at the	
3	lease and getting their input. Many of	
4	them, almost all of them, said, Oh, you	
5	know what, these provisions no one is	
6	ever going to bid on this. Well, long	
7	and behold, they still bid. They still	
8	bid on it.	
9	COUNCILMAN NEILSON: Do you	
10	have	
11	MAYOR PAWLOWSKI: And they bid	
12	quite aggressively, to the point where we	
13	had a BAFO process where two of them got	
14	within a competitive amount and bid an	
15	additional \$28 million, and in that	
16	transaction, it was 220 million. That	
17	was a pretty significant amount that we	
18	were so it was a pretty competitive	
19	bidding process even at the end.	
20	So I think using the structure	
21	that we utilized is a good way to address	
22	your needs and your concerns up front,	
23	provide stability to the potential bidder	
24	that there's no surprises, they know	
25	exactly what you're expecting of them, so	

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2	that they don't get to a hearing where	
3	City Council is voting and say, Well, we	
4	want this, and they're like, Well, hey,	
5	we never built that into our pro forma.	
6	No. They knew exactly what we wanted	
7	from the get-go. Everybody had agreed on	
8	that, and they also knew that at the end	
9	of the day, we were going to execute that	
10	agreement if they came in with a decent	
11	price and they followed the parameters	
12	that we outlined in that lease.	
13	COUNCILMAN NEILSON: So it took	
14	eight months for you, the Mayor, and City	
15	Council to come up with a proposal that	
16	was put in front of City Council?	
17	MAYOR PAWLOWSKI: Yes.	
18	COUNCILMAN NEILSON: It wasn't	
19	something just introduce it today, vote	
20	tomorrow.	
21	MAYOR PAWLOWSKI: No. We	
22	worked on that for it actually	
23	probably took longer than that, because	
24	we started the process when I started in	
25	my office and then we brought our	
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2	consultants together, and then as	
3	Councilman Henon was asking me, I then	
4	came to the conclusion that this was the	
5	way I wanted to go. So we probably took	
6	an additional six months on top of that	
7	before we even brought the concept to	
8	City Council and said, This is where we	
9	want to go, this is how we want to	
10	structure it.	
11	We then we brought	
12	everybody in. The Controller was at the	
13	table with us. Everybody was there.	
14	Everybody had to be on board. We wanted	
15	to make sure that there was that	
16	everybody's needs for their constituents	
17	were addressed, because the last thing we	
18	wanted to do is bring something to the	
19	table and then say, Well, hey, you know	
20	what, you never thought about this, this	
21	is a huge need for my constituents and I	
22	don't want to go through with this	
23	because it doesn't really address this	
24	aspect. I didn't want that to happen. I	
25	saw it over and over again as I	

Page 205 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. researched out and looked at other municipalities, that at the end of the 3 day that was the biggest achilles heel 4 5 that they had, that there just wasn't 6 that political buy-in, and the only way 7 we were going to get that political buy-in was if everybody was really 8 9 involved. 10 Now, not every Councilperson 11 was involved. There's some that were involved more than others. Out of my 12 13 seven, there were two that were actively 14 involved, and the Controller was there 15 pretty much the whole time, but they had 16 the ability to be involved as much or as 17 little as they wanted and we shared with them every aspect along the way. 18 COUNCILMAN NEILSON: Did --19 20 MAYOR PAWLOWSKI: Every month 2.1 or so we would then meet with as many Council folks as wanted to meet and we 22 23 would update and say, Okay, this is where 2.4 we're at, this is what we've done so far, 25 this is where we're at, and by the way,

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2	if you have any other questions, also	
3	talk to your colleagues because they've	
4	also been involved in the more detailed	
5	process, the folks who had the time to	
6	give to that process.	
7	COUNCILMAN NEILSON: How about	
8	public input, Mr. Mayor? Did you have	
9	public hearings on all this to state it	
10	to the public?	
11	MAYOR PAWLOWSKI: What we did,	
12	we voted on it twice. We did the RFQ	
13	process. We drafted that lease, as I	
14	talked about. We brought it to City	
15	Council. We had them vote on it before	
16	we put it out for an RFP, but before we	
17	put it out had them vote on it for an	
18	RFP, we also then took it to the public.	
19	So I had literally probably 30 or 40	
20	public meetings. I mean, listen, we had	
21	public meetings everywhere, from	
22	community groups to rotary clubs to Boy	
23	Scouts. I mean, anybody that wanted a	
24	public meeting, we had a public meeting	
25	for them.	

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2	COUNCILMAN NEILSON: Got it.	
3	MAYOR PAWLOWSKI: Of course, I	
4	like a PowerPoint, as you can see, so I	
5	took our show on the road. We had all	
6	our consultants with us. We had multiple	
7	venues where they could give us input.	
8	We heavily promoted on social media, and	
9	I personally answered every question that	
10	people posed to me. Sometimes I felt	
11	like I was answering the same question	
12	50,000 times. I probably was answering	
13	the same question 50,000 times. But we	
14	tried to address everybody's concerns.	
15	Now, at the end of the day,	
16	there was still a group of folks that	
17	just they didn't want to see anything	
18	done, but they also didn't have any	
19	solutions. I continually asked at the	
20	end of the process, that last vote, that	
21	second vote, Okay, you don't like it,	
22	then what is your plan? Tell me. You	
23	know, you got a better idea, please put	
24	it forth, because this is the best	
25	concept that we have been able	
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2	collectively to come up with.	
3	But because we addressed so	
4	many of the issues that folks had, the	
5	issue for us because it's water and	
6	sewer. People get very passionate about	
7	their water, right? So water quality was	
8	a big issue for us. Because we	
9	simultaneously with the lease put	
10	together this operations manual on how	
11	they had to operate the facility, you	
12	know, some of those issues went away.	
13	Because we incorporated the	
14	collective bargaining agreement into the	
15	lease itself and they were going to	
16	basically assume the entire workforce at	
17	their current salaries and benefits, that	
18	issue went away.	
19	So, I mean, we tried to	
20	basically look and systematically take	
21	those issues that everybody had one by	
22	one and try to figure out ways to address	
23	it. I think there was only a couple	
24	issues that we just couldn't you know,	
25	we just couldn't solve. We couldn't make	
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Page 209 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. everybody happy, but I would say that probably 95 percent of the issues that 3 folks had, whether they were on Council 4 or in the general public or workforce, we 5 6 were able to address those issues. So that process -- not only did 8 we do a public process, you know, I did 9 several meetings with our workforce where we allowed them to ask questions, because 10 11 obviously they were anxious. They didn't 12 know what was going to happen. They had 13 no clue what was going to happen to their 14 iobs. They didn't know how it was going 15 to affect their families. They needed to be clear that they weren't going to lose 16 17 the benefits that they had accumulated over the years, and we wanted to make 18 sure that they didn't. We didn't want --19 20 my goal wasn't to negatively affect 21 anybody's life. My goal was to solve a 22 problem and move the city forward. 23 So over the course of crafting 2.4 that, we tried to address all those. 25 then we sold it. I was out there selling

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2	it, and some of the Council folks were	
3	out there selling it as well. And then	
4	we, of course, had a very long I think	
5	the Council meeting for the last vote	
6	lasted, I don't know, ten hours or so,	
7	where we just allowed anybody who wanted	
8	to talk, they got up, they gave their	
9	three minutes and they were the line	
10	was a mile long. The line was a mile	
11	long, where we listened to everybody, and	
12	we then tried to answer their questions.	
13	And all I can say is, it took us a long	
14	time to get through that process, but it	
15	worked. It worked. No one can say that	
16	they were not heard.	
17	COUNCILMAN NEILSON: Well,	
18	again, thank you	
19	MAYOR PAWLOWSKI: They may say	
20	it, but they were heard in the process.	
21	I also just want to say, you	
22	know, I head up because we had a major	
23	gas explosion in Allentown a few years	
24	back, killed six folks, I actually chair	
25	a national council on pipeline safety,	

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2	and we are going to have a conference	
3	here in Philadelphia in May at the	
4	Constitution Center, the first one, the	
5	first national conference on pipeline	
6	safety.	
7	So I've been involved with the	
8	gas industry as well, only because of	
9	necessity, because of the amount of cast	
10	iron pipe that's under my city. Unlike	
11	you, we don't own the utility. It's a	
12	privately owned utility. But it has been	
13	a real issue for us, and I know it's an	
14	issue for you as well here in	
15	Philadelphia.	
16	So I invite you all to come out	
17	to that conference. It's going to be the	
18	14th and 15th of May here at the	
19	Constitution Center.	
20	COUNCILMAN NEILSON: Thank you,	
21	Mr. Mayor, and thanks again for coming	
22	down and sharing your story with us	
23	today.	
24	MAYOR PAWLOWSKI: My pleasure.	
25	COUNCILWOMAN TASCO: Thank you	

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2	so much, Mr. Mayor. We appreciate your	
3	coming and sharing with us, and thank you	
4	for the PowerPoint.	
5	MAYOR PAWLOWSKI: I did leave	
6	you some articles just on the process.	
7	COUNCILWOMAN TASCO: Oh, good.	
8	We have them. Thank you very much.	
9	To our guests, when we have	
10	hearings, it takes some time. We give	
11	everybody their due, but we also have to	
12	give our stenographer her due. She needs	
13	a break for about five minutes. And so	
14	we'll come back shortly. Thank you.	
15	(Short recess.)	
16	COUNCILMAN NEILSON: We are	
17	going to get ready to get started again,	
18	so if everybody can get back to their	
19	seats.	
20	Doug Wheeler and Franc James.	
21	(Witnesses approached witness	
22	table.)	
23	MR. WHEELER: Doug Wheeler and	
24	Adrian Pellen.	
25	COUNCILMAN NEILSON: Okay. If	

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2	you're wondering why we're going off the	
3	agenda a little bit, it's because some	
4	people have flights and we're trying to	
5	change it around a little bit.	
6	Please state your name for the	
7	record and begin your testimony.	
8	MR. WHEELER: Great. Thank	
9	you. Madam Chair and the members of City	
10	Council, good afternoon. On behalf of	
11	Aon, thank you for letting us testify	
12	today to you on public-private	
13	partnerships. I'm Doug Wheeler. I'm	
14	joined with Adrian Pellen, and we're	
15	going to speak on P3s and be available to	
16	answer questions.	
17	Very quickly, I'm the Regional	
18	Managing Director of Construction	
19	Services Group for Aon here in	
20	Philadelphia, serving construction and	
21	energy projects. Briefly, we provide	
22	advisory and brokerage services for risk	
23	and performance security matters, heavily	
24	involved with the public-private	
25	partnership model.	

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2	I'm going to pass over to	
3	Adrian now to introduce himself and then	
4	collectively we'll discuss just at a high	
5	level P3s.	
6	MR. PELLEN: Thank you again	
7	for the opportunity to speak with you	
8	today.	
9	COUNCILWOMAN TASCO: Speak into	
10	the mike.	
11	MR. PELLEN: Thank you again	
12	for the opportunity to speak with you	
13	today. Again, my name is Adrian Pellen.	
14	COUNCILMAN NEILSON: You just	
15	pushed the microphone away from you	
16	again. If you could say your name also	
17	for the record. So pull the microphones	
18	close, because we can't hear, please.	
19	Thank you.	
20	MR. PELLEN: My name is Adrian	
21	Pellen. Is that better?	
22	COUNCILMAN NEILSON: Yes.	
23	MR. PELLEN: Great. So I work	
24	at Aon Infrastructure Solutions. We're a	
25	risk advisory firm, as Doug mentioned. I	

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2	spend my entire time focusing on	
3	public-private partnerships across	
4	various industry segments, particularly	
5	in the civil infrastructure space in both	
6	Canada and U.S. I've been doing this for	
7	seven years. I've lived through a number	
8	of cities, and currently I'm in Chicago	
9	and have most recently worked on a number	
10	of projects in the East Coast. There was	
11	a project in Pennsylvania that was	
12	commissioned by PennDOT for the rapid	
13	bridge replacement. That was a P3 model.	
14	So what we wanted to chat about	
15	today is, we wanted to be very brief, but	
16	just provide a summary of kind of the P3	
17	world as how we see them essentially, and	
18	obviously I think it's best to kind of	
19	describe a P3 just to a very brief	
20	extent. I know we've had the Mayor	
21	previously commented on their recent	
22	transaction. We also wanted to talk	
23	about various responsibilities between	
24	the public sector and private sector in	
25	P3s, how do we mitigate risk, and	

1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2 essentially what does the market 3 currently look like to some degree. 4 So just looking at the next 5 slide, we talked about privatization a 6 little bit earlier. Obviously a 7 public-private partnership at its core is 8 not privatization. There are many 9 different levels of a P3. When we think 10 about construction, we think 11 traditionally about design-bid-build. 12 There are various mechanisms in between 13 there, delivery methods in between, 14 design-bid-build and privatization. I 15 think the most common concept when we 16 think about a public-private partnership 17 is one in which there's 18 design-build-financing as well as
3 currently look like to some degree. 4 So just looking at the next 5 slide, we talked about privatization a 6 little bit earlier. Obviously a 7 public-private partnership at its core is 8 not privatization. There are many 9 different levels of a P3. When we think 10 about construction, we think 11 traditionally about design-bid-build. 12 There are various mechanisms in between 13 there, delivery methods in between, 14 design-bid-build and privatization. I 15 think the most common concept when we 16 think about a public-private partnership 17 is one in which there's
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16 think about a public-private partnership 17 is one in which there's
17 is one in which there's
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19 operation and maintenance of a public
20 asset that is performed by the private
21 sector.
22 So this is really just a
23 comparison of the existing delivery
24 methods. Again, looking at the left-hand
25 side, we have a traditional procurement,

Page 217 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. one in which the government retains an engineer to design a project. Then we'll 3 outsource the design and construction to 4 5 They'll generally a contractor. 6 obviously secure their own debt to pay for the construction, and often either we'll outsource the operations and 8 9 maintenance of the asset or have city employees. They also retain a lot of the 10 11 risk for that performance. 12 Looking at traditional P3 when 13 we talk about design-build-finance-14 operation-maintenance, we have our 15 government entity as a procuring sponsor 16 initiating the project and basically 17 outsourcing the responsibilities, as I highlighted, to the concessionaire, who 18 then arranges for debt and partners with 19 20 equity to finance the construction, and 21 whether or not they have their own firm 22 to actually build the asset -- often 23 these concessionaire entities do -- they will build it and then maintain it for 25 2.4 25 to 50 years.

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2	I just wanted to pass it over	
3	to Doug just to comment on this issue.	
4	MR. WHEELER: As we heard	
5	earlier today in previous testimony, P3s	
6	take various type of forms. So some you	
7	will have availability payments for	
8	tolling, as it's often referred to,	
9	payments which might be similar to	
10	utility charges. This is an example of	
11	an energy savings program whereby savings	
12	is actually the compensation for the	
13	government agency. So you would partner	
14	with them to develop energy savings.	
15	This has been widely accepted by the	
16	Department of Energy and sponsored, and	
17	it just offers a different type of model	
18	for alternative project delivery,	
19	suggesting that as people come to the	
20	city, there are different mechanisms to	
21	develop this type of a structure.	
22	MR. PELLEN: So, again, talking	
23	about the financing of P3s, which we	
24	obviously think are quite important, this	
25	is typically a structure of how a	
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Page 219 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. concessionaire entity would finance the project. Ten to 40 percent and typically 3 10 percent in North America of their own 4 5 equity is used, and obviously the rest would be commissioned through debt. 6 Obviously I think when we think about P3s, I think one of the biggest 8 9 challenges that we continue to discuss at least commercially is, the cost of 10 capital is really the deciding factor in 11 12 determining whether or not we move forward with the P3. Governments 13 14 obviously can procure capital using 15 tax-exempt debt. It's not always the 16 case with the private sector, and 17 obviously that becomes an important role in determining whether or not to proceed 18 with the project. 19 20 So this is where we often get 21 very much involved, not necessarily doing the analysis but when it comes down to 22 risk allocation, we're risk advisors. 23 And the ultimate study that is usually 2.4 25 commissioned on behalf of a procuring

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2	authority to evaluate whether or not to	
3	proceed with a public-private	
4	partnership, whether it's a design-build	
5	or design-build-operate and maintain or	
б	including the financing, is to commence a	
7	study called the Value for Money	
8	Assessment or Value for Money Study.	
9	This is often the case for most projects	
10	and is a tool that's actively used	
11	currently in the state by the PennDOT.	
12	For example, on the left-hand	
13	side, we look at a traditional delivery	
14	method where the government or sponsoring	
15	authority who's maintaining a public	
16	asset, building an asset, has a number of	
17	various risks. So obviously there's	
18	financing risks. They're retaining	
19	various other risks where we get very	
20	much involved in. We talk about	
21	environmental risk. We talk about	
22	construction risk, operation and	
23	maintenance force majeure risk, et	
24	cetera. The comparison in these studies	
25	really comes down to comparing a	
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2	traditional procurement method and trying	
3	to quantify the various risks associated	
4	with that traditional procurement method	
5	versus some form of public-private	
6	partnership.	
7	So on the right-hand side, you	
8	look at the alternative procurement	
9	method, which would be a design-build-	
10	finance-operate and maintain, and	
11	basically a lot of the risk that the	
12	public sector would normally retain under	
13	a normal project or delivery method is	
14	passed to the private sector. So it	
15	reduces the overall cost of risk to the	
16	project. Obviously the financing cost is	
17	generally higher in the private sector,	
18	as I highlighted earlier, but this is	
19	really a mechanism which is used to	
20	compare whether or not to proceed with	
21	one procurement method or the other.	
22	MR. WHEELER: And this is	
23	specifically referring to a typical civil	
24	project, a specific project in civil	
25	infrastructure, but it has application,	

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2	again, the Value for Money, looking at		
3	other things that might come up from a		
4	utility standpoint or other type of		
5	concession agreements.		
6	MR. PELLEN: There are no hard		
7	and fast rules on risk allocation and		
8	what risks are borne by the private		
9	sector or retained or shared. Very much		
10	we get involved with the commercial		
11	negotiation of those risks and how		
12	they're allocated. Insurance is usually		
13	an integral tool to manage or transfer		
14	those risks to third parties thereafter.		
15	But, again, looking at it from a much		
16	more high level perspective, the		
17	left-hand side of this slide compares the		
18	traditional risks in a normal procurement		
19	that will be maintained by the owner or		
20	sponsoring entity.		
21	We talked about design.		
22	Obviously designers typically have very		
23	low limits on their limitation of		
24	liability. There's financing exposure,		
25	facility management, et cetera.		

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2	Looking at alternative	
3	procurement methods such as P3, usually	
4	the owner sets the performance	
5	specifications, but pushes to the private	
6	entity the financing, design risk,	
7	construction risk. So if there are any	
8	errors or cost overruns resulting out of	
9	those issues, obviously it's borne by the	
10	private sector. And there's lifecycle	
11	costs. So they obviously are responsible	
12	for maintaining the asset. So if there	
13	are routine maintenance costs, capital	
14	expenditures, they will be responsible	
15	for those in the long term over the	
16	course of 20 to 50 years depending on the	
17	project.	
18	Just to kind of cap off, I'm	
19	obviously being very sensitive to time,	
20	but there are a number of challenges I	
21	think it's important to highlight. I	
22	think fundamentally we talk about	
23	public-private partnership and it is	
24	really a matter of risk allocation and an	
25	equitable balance of risk. There's not	
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Page 224 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. one tool or a hard and fast rule for this risk allocation methodology depending on 3 where the project is located. 4 5 Environmental issues are obviously very 6 important depending on where you are. could be natural weather perils, et So there are a number of risks 8 cetera. 9 that I think need to be considered. If there's an equitable risk 10 11 transfer, the project is most likely to 12 get off the rails. Principally we've dealt with a lot of projects where 13 14 there's been inaccurate forecasts around 15 traffic, for example, and we've seen 16 bankruptcy of various tolling entities. 17 So there are a lot of aspects 18 to it that have had some challenges. mean, this has resulted in renegotiated 19 20 deals or partners walking away. And we, on very few occasions, have actually seen 21 public assets falling into disrepair, but 22 23 it's obviously something to consider. That is really the end of our 2.4 We left some additional 25 discussion.

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2	slides for you just for your own review	
3	on the current state of the market and	
4	P3s in the U.S., the size of the market	
5	globally, and obviously are available for	
6	any questions that you may have.	
7	Thank you.	
8	That happens in the insurance	
9	industry.	
10	COUNCILMAN HENON: Madam Chair,	
11	if I may.	
12	COUNCILWOMAN TASCO: Yes.	
13	COUNCILMAN HENON: I mean, this	
14	is a lot to digest, at least it is for	
15	me, just paging through this, but do you	
16	see just from a general perspective a	
17	good opportunity here in the City of	
18	Philadelphia for a P3 opportunity?	
19	MR. WHEELER: Clearly	
20	COUNCILMAN HENON: And to what	
21	level would you think that opportunity is	
22	available to us?	
23	MR. WHEELER: Clearly it's	
24	worth investigating. When you listen to	
25	the Mayor speak before about solving	
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2	pension issues and the increase in the	
3	credit rating of the city has a very	
4	substantial impact on total debt cost.	
5	So it's not just monetizing the asset and	
6	looking at what your other limitations	
7	are. You're compounding that by a	
8	potential increase in the credit rating	
9	of the City if that were to occur.	
10	So the monetization aspect is	
11	not just the impact of that asset, but	
12	the overall impact of debt for the City.	
13	So we have seen the P3 process has	
14	developed a maturity of risk management,	
15	and that's contractual risk, performance	
16	security, the performance of the project,	
17	and lifecycle quality. So much more so	
18	today people are looking at the	
19	integrity, whether it be pipelines or	
20	concrete and infrastructure quality, and	
21	the P3 has some accountability on that.	
22	They're building with operations and	
23	maintenance costs in mind as well.	
24	COUNCILMAN HENON: And there's	
25	a tremendous amount of risk, I would	
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2	imagine, if there were to be a P3	
3	negotiated, and then I guess that will	
4	all take place in your design management	
5	trying to structure the deal.	
6	Now, would the City so in	
7	the P3 opportunity specifically with PGW,	
8	would the private entity assume all the	
9	risk or is that negotiated?	
10	MR. WHEELER: Typically	
11	negotiated.	
12	MR. PELLEN: It's negotiated.	
13	I mean, I think early on in the process	
14	you would probably retain outside	
15	advisors, who would obviously be industry	
16	experts on obviously the gas industry in	
17	particular on P3s, to help put out a	
18	request for qualifications from various	
19	parties interested in participating in	
20	the project. Usually in that study there	
21	would be an outline of the various risk	
22	allocation methodologies in there. So	
23	normally what I would expect to see is on	
24	almost a checklist basis various types of	
25	risks that would be retained by the City	

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2	and then the other risks that would	
3	expect to be transferred or some that are	
4	shared. And sometimes we've seen	
5	sharing can be very beneficial where you	
6	have a certain layer up to a threshold	
7	that the City would retain a risk and	
8	then beyond that point it would be the	
9	private sector. So it's very much a	
10	commercial discussion.	
11	I think usually what happens	
12	is, the initial point comes across, goes	
13	out to the private sector, and then the	
14	bidder would negotiate with the	
15	sponsoring entity thereafter to ensure	
16	that there was a commercial agreement on	
17	what the appropriate risk allocation	
18	would be.	
19	COUNCILMAN HENON: Man, you	
20	talk fast.	
21	Can you talk about the risk in	
22	the debt aspect in your pyramid slide	
23	that you have there. I mean, that seems	
24	like a lot of risk. How would you see	
25	that is that standard when it comes to	
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2	structuring a P3?	
3	MR. WHEELER: I'll take that,	
4	sure. It is common to have an equity	
5	piece where someone is putting in their	
6	personal investment and then using	
7	lenders to come forward. We have found	
8	through many of the public-private	
9	partnerships that we consider the debt to	
10	be more cautious, because they are	
11	putting in a less secured position than	
12	the typical asset holder. So they're	
13	looking for certainty around insurance	
14	items. There are lender technical	
15	advisors making sure that the project is	
16	constructible if it's a new type of	
17	construction or that the deal is	
18	feasible, so they can understand whether	
19	it be tolling or tariffs or the inbound	
20	revenue from, let's say, even the gas	
21	clientele. They're looking at all those	
22	measurables to make sure that there is	
23	some certainty around that.	
24	So debt is common. The	
25	insurance industry also has performance	

Page 230 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. security options that can be in the form of a surety bond. Sometimes a letter of 3 credit can be utilized, and that works as 4 5 a base to meet certain core requirements 6 to make sure that there's financial 7 adequacy to protect the City to make sure that the asset or the investment doesn't 8 9 fall into disrepair. COUNCILMAN HENON: Are there 10 11 I mean, you see the range from 10 to 40 percent in equity. Are there --12 13 I guess you set that as a part of the 14 structured deal, but are there regulated 15 limits for the amount of equity that they 16 can invest in in a P3? 17 MR. WHEELER: Not that I'm 18 aware of. That would be the proposing team and how they come forward to make 19 20 the proposal and then how they make the 21 financial package viable. And often the 22 debt, though, is rated by the rating 23 agencies and there needs to be sufficient 2.4 quality in that to make sure that the 25 debt is priced in a manner that's

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2	sufficient to be competitive.	
3	COUNCILMAN HENON: Okay. I	
4	have no further questions.	
5	COUNCILWOMAN TASCO: Councilman	
6	Oh.	
7	COUNCILMAN OH: Thank you very	
8	much, Chairwoman.	
9	I just wanted to clarify that I	
10	appreciated the Mayor's success and his	
11	success in the P3. I did want to,	
12	however, clarify for the public that we	
13	don't have an asset that we could sell or	
14	lease to resolve the financial debts of	
15	this city that we're facing. 242 million	
16	or 400 million, that does not come near,	
17	anywhere near, the financial issues that	
18	we face. Up until 2003, our pension	
19	payments were about \$200 million, and	
20	last year and in the foreseeable future,	
21	they're around \$600 million. So from	
22	\$200 million to \$600 million. So there's	
23	a \$400 million increase that we're	
24	dealing with because of the MMO and some	
25	other things that have to be dealt with.	
1		

Page 232 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. And because of the school debt and other things, even though that's not our 3 responsibility as a city, you see the 4 5 cigarette tax, the property tax proposal, 6 and other things. So I'm only saying that because I think the public has to understand when 8 9 they're looking at how they prioritize and what the issues are that they want us 10 11 to resolve, that we don't have something 12 to sell, lease, cut expenses, increase taxes on. We really -- if we have an 13 14 asset or an opportunity to create new 15 revenues, we would be very interested if they were able to produce a certain 16 17 amount of money for us to move forward on that. However, we don't have the funds 18 to finance it, and what you're talking 19 20 about the P3 opportunity is something 21 that we would be very interested in exploring and putting together so that 22 23 not using public funds but private funds and, as you said, bearing the risk, we 2.4 25 could get new dollars in that could be

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2	applied to the issues that we have to be	
3	responsible for in providing public	
4	services.	
5	So thank you very much.	
6	MR. WHEELER: Thank you.	
7	MR. PELLEN: Thank you.	
8	COUNCILWOMAN TASCO: The Mayor	
9	created lease arrangements with the	
10	county. Does this apply to a deal such	
11	as what he did with Allentown?	
12	MR. PELLEN: I would agree	
13	that I'm not familiar intimately with	
14	that transaction, but from what he's	
15	described, the Mayor described, I would	
16	say, yes, it's very similar to the	
17	process we've described here today.	
18	COUNCILWOMAN TASCO: So tell me	
19	what would the plan look like going with	
20	PGW if PGW were to be involved in a deal,	
21	since that's sort of like the asset that	
22	folks want to get rid of.	
23	MR. PELLEN: I mean, I think	
24	ultimately and I'm certainly not the	
25	expert in this space as it relates to	

Page 234 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. PGW, but what I would suggest is that a 3 feasibility study be commissioned to evaluate the various procurement 4 5 methodologies such as P3, for example, 6 and I think that would be an important way to really flesh out the various issues and I think to determine whether 8 9 or not it would be eligible for a P3, 10 frankly. 11 You know, I think when we think about this P3 model, there are various 12 methods in which it can work. 13 One, as 14 Doug had highlighted, was an availability 15 payment. So that's essentially just a 16 payment for making the asset available, 17 which is traditionally used in other industry segments such as water and other 18 assets like highways, bridges, et cetera. 19 20 I think when it comes to obviously a gas utility, it's a little bit different. 21 22 It's probably tied to throughput. certainly not an energy expert, but I 23 would imagine there would have to be some 2.4 25 level of revenue sharing.

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2	So I think ultimately you would	
3	need a feasibility study to basically	
4	determine the validity of using this type	
5	of model.	
6	COUNCILWOMAN TASCO: So what	
7	would a company like yours bring to the	
8	table in all of this discussion?	
9	MR. PELLEN: I mean, today	
10	obviously we came as advisors in P3. For	
11	me personally, my area of expertise is in	
12	risk advisory. So really evaluating the	
13	various risks. That's our I most	
14	often represent concessionaire entities.	
15	I have colleagues who work with	
16	government agencies in particular. So	
17	they're involved much earlier on in the	
18	process. But I'm involved from the	
19	get-go on once a document is released,	
20	such as an RFP, we evaluate the risk	
21	allocation, help them negotiate on things	
22	that they believe not to be commercially	
23	available. We evaluate whether or not	
24	they are commercial and then determine	
25	where can we transfer those risks to	

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2	third parties, whether it's an insurance	
3	company or some other contractual	
4	methodology to transfer the risks that	
5	are assumed, to the extent those aren't	
6	business risks, so weather risk, et	
7	cetera.	
8	MR. WHEELER: Perhaps I can add	
9	just quickly, some states allow for	
10	unsolicited proposals where you could	
11	have a party come to you and make a	
12	recommendation that this might be a	
13	valuable option to look at the asset that	
14	you hold. Other times the government	
15	agency will specifically develop the RFP	
16	process and outline their own	
17	specifications, this is exactly what	
18	we're looking for, to have measurable	
19	bids submitted. So there's two different	
20	approaches there. And then as far as	
21	Aon's interactions, we said at times we	
22	work with government agencies helping to,	
23	in the early stages, develop risk	
24	mitigation RFP-type measurements. Other	
25	times we're working with the	

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2	concessionaires to help them purchase and	
3	sell that risk into the insurance capital	
4	marketplace and provide performance	
5	security to make sure there's certainty	
6	in the delivery of the contractual	
7	obligations.	
8	So our typical business is core	
9	to insurable risk and performance	
10	security, working with the P3 marketplace	
11	both for the concessionaires and the	
12	government agencies, helping them	
13	articulate what's necessary and how to	
14	best allocate those items.	
15	COUNCILWOMAN TASCO: Thank you	
16	very much.	
17	MR. WHEELER: Thank you.	
18	COUNCILWOMAN TASCO: Thank you	
19	very much.	
20	Okay. Now we have next	
21	Mr. Franc James and Mr. Franc James.	
22	(Witnesses approached witness	
23	table.)	
24	COUNCILWOMAN TASCO: Good	
25	afternoon.	
1		!

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2	MR. JAMES: Good afternoon.	
3	How are you? I'm Franc James. I	
4	represent Penn America Energy Group. And	
5	I just wanted to do something that's	
6	slightly irregular, if I may. My partner	
7	sitting to the left here, Mr. Sam	
8	Hammons, flew in from Oklahoma. He	
9	represents our firm there in Oklahoma and	
10	heads that office. Unfortunately, he has	
11	a flight to catch at 4:50. So I would	
12	like to give Sam a moment to make an	
13	introduction, if I may, because he will	
14	have to excuse himself in a few minutes.	
15	COUNCILWOMAN TASCO: Sure. Go	
16	ahead, please.	
17	MR. HAMMONS: I apologize, but	
18	it is indeed a pleasure to be here.	
19	COUNCILWOMAN TASCO: Next time	
20	you come to Philadelphia for a hearing,	
21	take the whole day.	
22	MR. HAMMONS: I will definitely	
23	do that.	
24	Franc wanted me to share a	
25	little of my background and tell you what	

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2	my component of this proposed project is.	
3	I started in government as	
4	well, was Administrative Assistant for	
5	Energy and Natural Resources	
6	COUNCILWOMAN TASCO: Tell us	
7	who you are.	
8	MR. HAMMONS: Sam Hammons,	
9	H-A-M-M-O-N-S. Worked for Governor David	
10	Boren, later U.S. Senator. Some of you	
11	may have known him. And did his energy	
12	and natural resources work on his staff;	
13	then the subsequent Governor, the	
14	Governor that followed him, Governor	
15	George Nigh, same position; then Director	
16	of the Oklahoma Department of Energy and	
17	later Secretary of Energy for Oklahoma,	
18	and, of course, that's a critical	
19	industry in our state, the energy	
20	industry; left there and headed the	
21	Natural Gas Contracts Division of	
22	Resource Analysis and Management Group,	
23	an energy consulting firm; left there,	
24	started Clinton Gas Transmission, which	
25	was a natural gas marketing company, and	

Page 240 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. we did the first natural gas marketing transactions, open access, free market 3 transaction in the U.S.; then sold that 4 5 company, practiced energy law for several 6 years, retired a few years ago, now work 7 on various energy-related projects here 8 and internationally. 9 I've joined Penn American. Му 10 component of this is to get gas from 11 where it is produced to Richmond gate 12 here in Philadelphia for use, and you'll hear more from them about the use of that 13 14 gas in liquification. But as you know, there are a lot of variables involved in 15 16 buying gas, buying it on a spot basis, 17 seeing if we can lock in financeable contracts, possible prepayment of 18 volumetric production in the future. 19 there are a lot of variables. So you've 20 21 got a well head cost, then you got the 22 cost of transporting the gas. 23 As you know, the space getting 2.4 into Philadelphia right now is full. It's reserved. 25 If we're able to move

		
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2	quickly enough on this idea, then we can	
3	maybe take some space on some proposed	
4	new additions. As you know, Transco has	
5	proposed Atlantic Sunrise Loop, which	
6	will bring more Marcellus gas in. There	
7	will still need to be some facility	
8	infrastructure there, and those are quite	
9	expensive and there are a lot of	
10	regulatory hurdles one must cross. So	
11	dealing with buying the gas and	
12	transporting the gas will be my part of	
13	this proposed project.	
14	And so I'll be happy to take	
15	any questions, even though it's probably	
16	a little premature because you haven't	
17	heard about the whole project yet, but	
18	that's my role, that's who I am, that's	
19	my background. I'll be glad to appear at	
20	another time or take questions now.	
21	COUNCILWOMAN TASCO: Councilman	
22	Oh.	
23	COUNCILMAN OH: Thank you,	
24	Chairwoman.	
25	How does the gas come into	

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2	Philadelphia? Is there only one option	
3	or more than one option to get the pipe	
4	in?	
5	MR. HAMMONS: No. There are	
6	more than one option right now.	
7	Basically you're talking about Spectra or	
8	Transco. Transco is owned by Williams	
9	Companies of Tulsa, Oklahoma, and I'm	
10	very familiar with those folks. And so	
11	to do any sort of an energy hub project,	
12	you're just going to have to increase	
13	that capacity to get it into the City.	
14	COUNCILMAN OH: Could you give	
15	us examples, because you're also being	
16	televised to the public, so that they	
17	could understand what are the	
18	opportunities to actually get the gas	
19	into Philadelphia physically. How would	
20	it come in?	
21	MR. HAMMONS: Well, we're	
22	looking at basically a couple of options.	
23	On the Transco option, we would be	
24	negotiating for space for this particular	
25	project on Transco's line. If we feel	

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certainly the merits of the project are there, but if we felt like the City was interested in going forward with this group, then we would commence serious negotiations about the additional
there, but if we felt like the City was interested in going forward with this group, then we would commence serious negotiations about the additional
5 interested in going forward with this 6 group, then we would commence serious 7 negotiations about the additional
6 group, then we would commence serious 7 negotiations about the additional
7 negotiations about the additional
8 pipeline space which we would need, which
9 as Franc will point out will be about 700
10 Mmcf per day. But if you've got a line,
if you've got a right-of-way and you've
12 already, for example, come under the
13 Delaware River, as Transco has, then you
14 already have a pathway and you solve a
15 lot of problems that would be inherent in
16 trying to go through neighborhoods and
17 laying a whole new pipeline.
18 MR. JAMES: If I could add to
19 that.
20 COUNCILWOMAN TASCO: State your
21 name for the record.
22 MR. JAMES: Franc James.
23 The Spectra line is, from what
we understand, there would be a 30-mile
extension into the gate station at PGW,

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2	the Richmond plant. The work that we've	
3	done preliminarily with Williams is, it's	
4	about a six-mile extension from their	
5	Trenton-Woodbury lateral. So from our	
6	perspective, it presents an extraordinary	
7	value proposition.	
8	MR. HAMMONS: But we're	
9	negotiating, so we don't want to say	
10	we're settled on anything in particular	
11	at this point.	
12	COUNCILMAN OH: Right. Well, I	
13	appreciate that. I just wanted to make	
14	it clear that it's not simply going	
15	through neighborhoods. There's at least	
16	one other or some other options of	
17	getting the pipe into Philadelphia.	
18	Thank you very much.	
19	MR. HAMMONS: Thank you for	
20	your time. I'm sorry to have to run.	
21	COUNCILWOMAN TASCO: Go ahead.	
22	MR. HAMMONS: I will be back,	
23	and I'll spend more money next time I	
24	come back.	
25	COUNCILWOMAN TASCO: Okay.	

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2	Thank you.		
3	MR. JAMES: Again, my		
4	apologies Franc James.		
5	My apologies for the		
б	irregularity.		
7	Give you a little idea as to		
8	who we are and the genesis of this		
9	project. I myself, my background is in		
10	iron ore mining. I've been a partner in		
11	an iron ore mining operation in India.		
12	I've lived there for a number of years		
13	and developed close relationships with		
14	the former administration headed by Prime		
15	Minister Manmohan Singh, and those		
16	relationships extended to a specific		
17	cabinet post.		
18	As most of the world is aware		
19	of the extraordinary energy boom that we		
20	are experiencing here in the United		
21	States, it was brought to my attention		
22	that specifically the Republic of India		
23	was looking to procure additional gas.		
24	We worked very closely with the Gas		
25	Authority of India Limited, which is		

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2	GAIL, which currently has two SPA	
3	agreements, one with Cheniere, Sabine	
4	Pass project, and one with the Dominion	
5	Resources project. But that really was	
6	the seed that was planted for our company	
7	about three years ago.	
8	We were created actually from	
9	inception to be a single-purpose entity.	
10	We were dedicated ultimately to realizing	
11	this opportunity. And the opportunity	
12	that we're trying to develop with the	
13	City of Philadelphia is expanding PGW's	
14	liquefaction capability and building a	
15	Pennsylvania-based, Philadelphia-based	
16	LNG world-class export terminal. That's	
17	our goal.	
18	So in doing that, there's as	
19	you can imagine, it's an extraordinary	
20	feat. There are many variables to	
21	consider, many stakeholders to pull	
22	together, but it was important that from	
23	the very beginning, being a	
24	single-purpose entity, that we assemble a	
25	leadership team that has the diverse	
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2	capability to enable us to hopefully	
3	successfully build out this project.	
4	Our executive leadership	
5	committee is myself. I was the Managing	
6	Director of Indo America Energy Group.	
7	That was the namesake. That was the	
8	company that was specific to the trade	
9	that we were approaching the City of	
10	Philadelphia about three years ago. That	
11	company was, again, focused solely on a	
12	transaction, a sovereign-based contract	
13	between the Republic of India, a	
14	state-owned entity, GAIL, and a structure	
15	that we had not identified but we'll	
16	refer to it as a Philadelphia-based	
17	entity, whether it was PGW or a P3. We	
18	weren't able to flush out the appropriate	
19	structure.	
20	I was also head of I was the	
21	CEO of United Group Holdings, which I	
22	mentioned was an iron ore mining	
23	operation. We also have an asset in	
24	Mexico, which is a copper mine, a copper	
25	processing plant, very small. And to	

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2	round out the executive team, it was very	
3	important for us to bring on a firm,	
4	specifically Ridge Global, founded and	
5	headed by former Governor Tom Ridge.	
6	That firm and that leadership brings	
7	extraordinary capability and competence	
8	for us from the planning perspective,	
9	from the strategic perspective and	
10	working with the diverse government	
11	agencies that we have to work with.	
12	I would like to pass to James	
13	Seif, who is a partner with Ridge Global,	
14	and have him make an introduction.	
15	MR. SEIF: I'm Jim Seif,	
16	S-E-I-F, head of the Energy and	
17	Environmental Practice Group with Ridge	
18	Global. I started as a prosecutor in	
19	Pittsburgh with Dick Thornburgh way back	
20	when. I have held the post of Regional	
21	Administrator of the Environmental	
22	Protection Agency here in Philadelphia,	
23	six-state region, and also under Governor	
24	Ridge, the Environmental Secretary	
25	position.	

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2	COUNCILMAN HENON: James, can	
3	you bring the microphone a little closer.	
4	Thank you.	
5	MR. SEIF: My current practice	
6	includes natural gas clients, startups	
7	and so on.	
8	My interest today is to address	
9	any of your questions about regulatory	
10	and other issues that may be involved	
11	here. The guts of the proposal and the	
12	guts of what I would have to say is just	
13	this, that sometimes a person gets smart	
14	and sometimes they get lucky.	
15	Philadelphia is now coming up on being	
16	both. Smart means that you have a PGW	
17	and, as Craig says, 4,000 years of worth	
18	of experience. You have a port that you	
19	know how to use and it's been in use	
20	since Stephen Girard sailed it. You have	
21	iron in the ground, which means the	
22	facility at in this case PGW. You have	
23	excess capacity of Pennsylvania gas, and	
24	you know that you have it, and that's	
25	smart.	

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2	Luck is that the Marcellus vein	
3	will run for another hundred years. It	
4	will change the energy complexion of the	
5	entire planet, whether you live in Poland	
6	or Canonsburg, PA, the need in Europe,	
7	the need for us all to fight global	
8	warming, as the President and Governor	
9	Wolf pointed out, the need to develop new	
10	technology now available for the safe	
11	production of gas and the safe transport	
12	of it I mean pipelines, not rail	
13	and all of the new technologies that call	
14	for the use of gas, 18-wheelers and	
15	tugboats and so on.	
16	What we have to do is not	
17	realize that we're lucky and smart and be	
18	proud of ourselves, but seize the moment.	
19	I don't think we have time for the kind	
20	of exercise that Mayor Pawlowski had to	
21	involve. I think with his blazing the	
22	trail, we sort of know how to do it and	
23	could do it faster.	
24	And now here I must	
25	respectfully disagree with Phil Rinaldi,	

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2	who knows more about this than I do, but	
3	I do think that turning the assets that	
4	we are lucky enough to have and smart	
5	enough to recognize; namely, the export	
б	capacity at Port Richmond, ought to be	
7	done. It may be that you can't get the	
8	very biggest ships under a bridge or over	
9	the bottom of the Delaware at this	
10	moment, but you could very productively	
11	and very profitably use that facility	
12	for, as we heard already, weekly	
13	shipments of Marcellus gas to Europe that	
14	desperately needs it. If that could be	
15	put together and if the tolling	
16	arrangement proposed here could be	
17	effectuated, you would have the kind of	
18	assets that you need on an ongoing basis	
19	to do a great job. If you want to talk	
20	about safety and experience elsewhere and	
21	so on, I'd be happy to do that too.	
22	MR. JAMES: Thank you.	
23	Sam obviously has given his	
24	introduction. A gentleman Francis Casale	
25	is part of our team.	

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2	This is Franc James now. I'll	
3	get used to that.	
4	Francis actually is one of our	
5	lead bankers. Francis is already he's	
6	done extraordinary work. He's one of the	
7	managing partners of a firm NRDC with	
8	Chuck Baker. They were very successful	
9	in raising about \$8 billion in the last	
10	five years for the acquisitions of Saks	
11	Fifth Avenue, Hudson Bay in Canada, Lord	
12	and Taylor, and he's truly an expert on	
13	structure, building the model. And he's	
14	done extraordinary work with us and he	
15	holds a very important position with our	
16	firm and has reached out to a number of	
17	potential financial funders for this	
18	project. So unfortunately Francis could	
19	not be here for today.	
20	Our Advisory Board actually has	
21	been dimensionalized by a gentleman John	
22	Imle. John is an oil and gas expert.	
23	John has held positions with	
24	International Oil and Gas Technology,	
25	Nations Petroleum, and he brings a great	
1		

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2	deal of expertise to our team.	
3	Sitting to my left is Steven	
4	Spence, and I will allow Steven to make	
5	his introduction.	
6	MR. SPENCE: My name is Steven	
7	Spence. I am on the Advisory Board to	
8	Penn American. I've been in the	
9	financial industry for over 30 years,	
10	various capacities, both in the United	
11	States and abroad. I've worked for	
12	Merrill Lynch for 17 years where I set up	
13	a number of operations for them	
14	throughout Europe in the Asian markets,	
15	both on the derivative side and financing	
16	businesses. I've managed globally their	
17	derivative operations before ending my	
18	career at Merrill as the COO for their	
19	international financing businesses, at	
20	which time I left in 2003, and since that	
21	time I've been working as an advisor and	
22	consultant to various businesses	
23	throughout the United States and the	
24	world, developing integrated plantations	
25	throughout emerging markets. Most	
I		

Page 254 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 recently I joined Dominick and Dickerman 2. based in New York City, an investment 3 banking and merchant banking operation 4 where we focus on, in a broad sense, as 5 generalists helping middle market firms grow and take them to the next level. have been working with Franc on this 8 9 particular project almost since its conception, for over three years now, and 10 11 do look at it very much the way we look at our clients that I work with on a 12 day-to-day basis, which is being able to 13 14 take a company that is very strong, with 15 fantastic attributes, and finding the 16 right investments and pieces that help 17 that entity grow to something that they never could have achieved on their own. 18 19 MR. JAMES: Great. 20 Our offices, we're located in 21 New York, 40 Wall Street. We also are 22 represented at the Ridge Global offices 23 in Washington, DC, and Sam actually handles our Oklahoma operations. 2.4 25 role in the organization and based in

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2	Oklahoma is really upstream, working with	
3	the midstream energy companies and the	
4	energy companies at source.	
5	As you obviously understand,	
6	what we want to do as what we believe is	
7	really unleash the true value proposition	
8	of Philadelphia Gas Works. As I	
9	mentioned earlier in the presentation,	
10	the impetus, the inspiration for this	
11	project was to identify an opportunity	
12	here in the U.S. that we could develop	
13	quickly. That's a term which is a loaded	
14	term. I'll explain quickly. But that we	
15	could develop some sort of traction and	
16	momentum for the development and	
17	production of LNG for export.	
18	So what we tried to do is	
19	really look at the global market,	
20	understand the appetite, and also look at	
21	pricing globally. Looking at this	
22	project three years ago, we were intent	
23	on exporting LNG to the Republic of	
24	India. We had interest from two Japanese	
25	trading groups, early interest, that is,	

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2	from Marubeni and Mitsubishi. We had	
3	some interest from SK. But the challenge	
4	obviously that is inherent to this	
5	project is, it's not a public company	
6	like a Cheniere who decides they want to	
7	build out an LNG project. What we had	
8	identified obviously is a unique	
9	opportunity with a municipally owned	
10	asset. So there are different challenges	
11	obviously that are inherent to the	
12	project, and the process is different.	
13	So, again, getting back to what	
14	I was originally saying, my apologies,	
15	is, we were looking at Asia, South Asia	
16	from the prospect of they are paying more	
17	for gas. It's probably the economics	
18	represent a better opportunity, but	
19	really Europe, from our perspective,	
20	represents an even better option just	
21	based on logistics, where PGW is	
22	positioned on the Mid-Atlantic, the	
23	opportunity to load a vessel and have it	
24	sail to Europe in four-plus days versus	
25	30-plus days, having an LNG vessel loaded	
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Page 257 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 here in the Mid-Atlantic and sailing for 2. South Asia or Asia. 3 There's so much counterparty 4 5 risk inherent to that. So many 6 conditions can change, logistics -issues related to logistics, fuel costs, a number of variables that could 8 9 certainly interrupt a 20-year contract where an off-taker will declare a force 10 majeure and interrupt that contract. 11 12 So there are other issues also 13 that have emerged recently in Europe; for 14 example, what has happened with Russia 15 and the Ukraine and the national security 16 concerns and interests of much of North 17 and South Europe. So that also changed the optics of this project for us, and 18 based on logistics and also based on the 19 20 national security interests of the United 21 States and our allies in Europe, it 22 really forced us to look at the project 23 differently. 2.4 In place today in Europe spread 25 throughout Europe are anywhere between 25

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2	to 28 regasification terminals. There is	
3	one liquefaction terminal in place in	
4	Norway, and there's a plan right now in	
5	place to build an additional ten	
6	regasification terminals in Europe. And	
7	obviously the intention is to, for most	
8	of these North and Southeastern European	
9	nations, is to diversity their risk,	
10	because it's a national security concern.	
11	If you look at what has happened with the	
12	Ukraine and the national security	
13	concerns that they have because energy	
14	is obviously a key component. It has	
15	certainly been well documented within the	
16	media that the foreign ministers of both	
17	Poland and Germany have visited here in	
18	the United States. They've reached out	
19	to the State Department, and the goal is	
20	to see how Europe can take advantage of	
21	this extraordinary opportunity that we're	
22	living through here in the U.S.	
23	Our main objective, as I	
24	mentioned, is PGW, and what we're trying	
25	to do is something extremely simple,	
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Page 259 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. simple from the perspective of structure, that is. Penn America desires to be a 3 long-time customer of Philadelphia Gas 4 5 Works and purchase the annual equivalent 6 of 100 billion cubic feet a year of natural gas processed in the form of LNG. So we're looking at it actually quite 8 9 simply, and what we say is, if PGW today has 500,000 customers, what we hope to be 10 11 is the 500,001 customer. The only difference is, our goal is to purchase 12 150 billion cubic feet of gas. Certainly 13 14 a big proposition. 15 So looking at the asset, we're 16 very excited three years ago when, 17 through Governor Ridge's efforts and the team in Washington, had identified this 18 extraordinary jewel that had yet to be 19 20 untapped and, that is, PGW. PGW has two 21 25 million gallon LNG storage tanks that 22 are FERC approved. That's not to say there won't be challenges in terms of 23 2.4 FERC applications, because based on 25 today's regulatory requirements for those

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2	tanks, they are just a smidgeon too close	
3	together actually.	
4	The other opportunity that we	
5	see is that PGW has demonstrated	
6	extraordinary expertise and capabilities	
7	over the last 40-plus years in producing	
8	LNG without any incident. We have what I	
9	understand to be a very perfect safety	
10	record. And I actually applaud Council	
11	for ensuring that you held on to that	
12	asset, because it's an extraordinary	
13	asset, and it will be a game-changer here	
14	in Philadelphia.	
15	So what we're hoping to do is	
16	the following: Our goal is to bring	
17	is to contract with PGW, is to fund and	
18	manage the expansion of the existing	
19	Philadelphia Gas Works Richmond LNG plant	
20	into a world-class LNG export terminal,	
21	as I mentioned. The following functions	
22	Penn America will provide:	
23	One is, we will work on the	
24	permitting. We've identified a law firm	
25	in Washington, DC that will handle the	

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2	permitting component. That is Hogan	
3	Lovells. Hogan Lovells was successful in	
4	getting the Dominion Resources project	
5	permitted with FERC and the Department of	
6	Energy. We are very fortunate in that	
7	the woman who heads that practice, the	
8	energy practice for them, Mary Anne	
9	Sullivan, was former general counsel for	
10	the Department of Energy. And why we	
11	selected Hogan is primarily because of	
12	the obstacles that Dominion was faced in	
13	bringing their project forward. They had	
14	issues regarding environmental,	
15	litigation, and many, many, many	
16	challenges and concerns, and they were	
17	able to successfully navigate around	
18	those obstacles.	
19	We will handle the engineering,	
20	procurement, and construction, known as	
21	the EPC. We've identified two potential	
22	EPCs, one being Bechtel, who actually was	
23	the EPC for the Sabine Pass-Cheniere	
24	project. We've given them complete	
25	visibility to the project, as well as	
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2	many of the challenges that were	
3	enumerated in a feasibility study that	
4	was contracted by PGW with CH4, and they	
5	know the plant actually quite well. From	
6	what I understand, they were involved in,	
7	I guess PGW would actually give you	
8	more visibility, but they had shared with	
9	me that that initial cascade unit that	
10	was built out about 40 years ago, that	
11	was their project. Anyway, nonetheless,	
12	don't hold me to that, but they know the	
13	asset, they know the plant very well, if	
14	I may.	
15	Our goal is to bring also a	
16	20-year SPA agreement with a qualified	
17	counterparty. That is obviously a	
18	contract, as well as a 20-year source of	
19	fee gas, which Sam had commented is 700	
20	million cubic feet a day. So that would	
21	be our responsibility, and certainly the	
22	structure and manage the commercial	
23	transaction and provide the financial	
24	instrument to require not only to fund	
25	the transaction in terms of the	

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2	transaction with the off-taker, but also	
3	bring the funding to fund the LNG	
4	terminal, the expansion of PGW's LNG	
5	terminal.	
6	If you look at this image, it	
7	basically demonstrates the asset, how we	
8	look at it, and what is critical to the	
9	success of this project is that	
10	underutilized Tioga terminal that is	
11	adjacent to the PGW facility. That is a	
12	key component to the success of this	
13	project. Without that terminal, this	
14	project will not be able to move forward.	
15	So that's a key component. As I	
16	mentioned earlier, the tanks, FERC	
17	approved, and obviously experience of	
18	PGW.	
19	Looking at an overhead view of	
20	the site analysis, the feasibility study	
21	that CH4 had constructed enumerated a	
22	number challenges. One I mentioned	
23	already, and, that is, issues related to	
24	the positioning of the tanks and are they	
25	compliant with FERC rules or could they	
1		

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2	be grandfathered in. Another issue was	
3	the proximity of the tanks to the port,	
4	and then other issues inherent here are	
5	private property issues.	
6	What you can see highlighted in	
7	yellow on the screen is PGW property.	
8	What is highlighted in red, which I guess	
9	looks maroon, is government property,	
10	Philadelphia-owned property, as we	
11	understand, and what's highlighted in	
12	blue is private property.	
13	It is our understanding that	
14	the private property that is present	
15	there is not a major obstacle in that	
16	there are solutions there. However, I do	
17	have to point out that there are a few	
18	street closures that would have to happen	
19	if indeed the project were to go forward.	
20	Most notably, I believe it's Delaware	
21	Avenue, which is the street that	
22	separates PGW and the Tioga terminal, and	
23	another one is Castor Avenue, which	
24	separates the 54-acre site that is	
25	adjacent to the existing terminal or PGW	
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2	liquefaction plant. That site is	
3	important because that's the footprint	
4	where we propose to expand and build out	
5	a new liquefier.	
6	Another issue which is a major	
7	issue was and I mentioned it	
8	earlier the hazardous exclusionary	
9	zone, and how I mentioned it was that	
10	there would be some modifications	
11	required to the Tioga terminal. If we	
12	were to berth a vessel right along the	
13	bulkhead of the Tioga terminal today	
14	and you can see a vessel tied up the	
15	hazardous exclusionary zone, the radiuses	
16	would extend too far and really come	
17	very, very, very close to residential	
18	areas. So the solution that CH4 has	
19	provided in their study and I've also	
20	been working with them to date as well,	
21	but they've proposed evacuating and	
22	excavating some of the landfill so that	
23	we can move a vessel closer to the tanks,	
24	as a result decreasing the radius of the	
25	hazardous exclusionary zone.	

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2	As we mentioned earlier,	
3	pipeline capacity is key. There were two	
4	options that we were considering. One	
5	was the Spectra line, which is roughly,	
6	as we understand, about 31 miles away	
7	from the PGW gate station. And I'm only	
8	referring to the Richmond plant. We've	
9	experienced, through our research, a	
10	little bit of a negative headwind with	
11	that because of the three districts that	
12	that pipe would have to follow. Although	
13	there are there is a right-of-way in	
14	place because there is existing pipeline	
15	in place. We thought that we should look	
16	at another opportunity, and that is an	
17	opportunity that Sam had mentioned with	
18	Williams, and that is the	
19	Trenton-Woodbury lateral that I mentioned	
20	earlier today.	
21	So there is a great deal of	
22	work, but what was exciting to us is	
23	there is a six-mile stretch of pipe	
24	that's a 16-inch pipe that comes into the	
25	Richmond plant. That certainly will not	
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Page 267 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. give us the quantity of gas that we would require on a daily basis, but it pointed 3 us what we believe is in the right 4 direction and in the best interest of the 5 6 residents of Philadelphia. An overhead view of this 8 project, you can see the two tanks in the 9 middle of the screen. That is the PGW plant. Adjacent to the right or south is 10 11 the Kinder Morgan terminal. 12 terminal discharges ethanol and stores ethanol there at that terminal, and from 13 14 what I understand, that terminal -- that 15 storage facility may be expanded. 16 is what I understand. But why that's 17 important from our perspective is, there have been concerns about the type of 18 cargo we're working with, which is LNG, 19 20 and that type of cargo navigating the 21 waterway, and what we've done is through the work of our partners in Washington, 22 23 we've reached out about two-plus years 2.4 ago to the Coast Guard and tried to 25 really understand the reality of one

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2	135,000 cubic meter LNG vessel a week		
3	moving and navigating up the river. And		
4	what we were told is that keep in		
5	mind, Philadelphia through the Sunoco		
6	plants has been an energy hub, if you		
7	will, in terms of that type of product		
8	for probably close to a hundred years.		
9	So there have been volatile materials		
10	moving up and down the Delaware River on		
11	a routine basis.		
12	Adjacent to this facility, as I		
13	mentioned, is an ethanol plant, and the		
14	work that we've done in trying to		
15	calibrate the volatility of ethanol		
16	compared to LNG, they're both volatile		
17	products. Their characteristics are		
18	different, but nonetheless, they present		
19	the same challenges. So the issue		
20	obviously is what are the security		
21	measures in place and also the type of		
22	vessels that are carrying those products		
23	up and down the river.		
24	Another issue that we had to be		
25	cognizant of are, there are four bridges.		

Page 269 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. There's the Ben Franklin Bridge, which is a gating factor, which I'll discuss in a 3 few minutes. There's the Walt Whitman 4 5 Bridge. There's the Commodore Barry 6 Bridge, and there's the Delaware Memorial Bridge. So it was very important for us knowing the access to the Atlantic Ocean 8 9 what the challenges would be downstream 10 and could we benchmark any programs or 11 any transit, if you will, of LNG in the 12 United States today, are there any other 13 platforms in place, and we identified 14 This demonstrates the path to the one. Atlantic Ocean. 15 16 Important benchmarks for 17 consideration, one is in Boston, there is a Distrigas LNG regasification terminal 18 that has been operating successfully 19 20 since 1971 without any incident. And why 21 is that an important benchmark? Well, 22 the City of Boston is there. There are 23 three bridges that LNG vessels have to 2.4 navigate under. There's Logan Airport. 25 There's a deep water channel that runs

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2	extremely close to the shoreline, and	
3	compared to the Philadelphia shoreline,	
4	it's a much more grand and built-up	
5	shoreline with commercial and residential	
6	property.	
7	I mentioned the Kinder Morgan	
8	discharge terminal, which has been	
9	operating successfully without any issue	
10	adjacent to the existing plant, and as I	
11	mentioned earlier, the extraordinary	
12	history that Philadelphia has with	
13	refining and the transport of other	
14	materials.	
15	So here we are. This is a	
16	picture taken on a beautiful sunny day	
17	that I hope we see here in Philadelphia	
18	soon of a vessel, one that travels on a	
19	weekly basis and has been doing so	
20	successfully since 1971. We think	
21	there's a direct correlation between that	
22	and what we are proposing here in	
23	Philadelphia.	
24	The routes that they take,	
25	although are not as long to the mouth of	

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2	the Atlantic Ocean, but you'll see	
3	similarities in the slides that I'm going	
4	to show you. That happens to be the	
5	loading arms and cryogenic lines that	
6	when LNG is discharged, that's where it's	
7	placed. That's where the berthing is.	
8	Just to move you forward, you	
9	can see the City of Boston, Logan Airport	
10	to the right of your screen and the	
11	pathway that a vessel will take to leave	
12	the city.	
13	This is the Kinder Morgan	
14	discharge and storage terminal that I	
15	mentioned earlier.	
16	So this is the value	
17	proposition, the value proposition for	
18	the City of Philadelphia. The project	
19	that we are proposing, Philadelphia Gas	
20	Works will remain a public asset. There	
21	will be no capital investment from the	
22	City of Philadelphia, and based on the	
23	structure of the transaction, which will	
24	be based upon a tolling agreement, we are	
25	estimating that it will bring to the City	

Page 272 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. about \$150 million a year in -- excuse me; it will bring to PGW \$150 million a 3 year in revenue through a 20-year SPA 4 agreement with an off-taker, with a 5 rollover provision. That, we think, is 6 7 an extraordinary proposition. I want to just talk through and 8 9 bring us back to some of the questions that you've asked in relationship to a P3 10 11 structure and how that structure relates to our project, and I think it's 12 13 important to note. A public-private 14 partnership structure is not the desired 15 structure due to the following 16 considerations for our proposal: 17 A P3 structure will transfer 18 public assets into a private entity. A P3 structure will privatize public job 19 20 opportunities. We worked through this 21 with a law firm here in Philadelphia headed by Bill Sasso, Stradley Ronon, and 22 23 we've discussed different options that we 2.4 should consider. Three years ago when we 25 approached PGW, that happened to be the

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2	structure that has been discussed,	
3	variations of a P3. And based on the	
4	nature and context of what we are	
5	offering the City, for us it represents	
6	something that's suboptimal. There's a	
7	lot of change in governance that we	
8	believe will have to happen, and for us	
9	it's a longer road. Timing for us is	
10	critical.	
11	So what is our goal? Our	
12	collective goal should be to establish	
13	the appropriate platform, and we're	
14	referring to it as a public and private	
15	collaboration. And we believe that	
16	there's more work that needs to be done	
17	with the City Solicitor as well as	
18	counsel for PGW and with Stradley Ronon's	
19	team and really trying to come up with	
20	the best structure.	
21	As I mentioned, Penn America	
22	will fund the expansion of the existing	
23	PGW Richmond plant with an established	
24	with an estimated capital cost of \$2.1	
25	billion. Penn America Energy will own	

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2	the asset, meaning we will own the plant,	
3	the actual physical apparatus, the steel	
4	and iron. The actual plant, the ground,	
5	will be owned by the City or owned by	
6	PGW. The only reason why we're proposing	
7	this structure is to get this project	
8	funded, we need to be able to position	
9	the depreciation with our bankers. The	
10	City cannot write off that depreciation,	
11	but our investors can write off that	
12	depreciation.	
13	What our proposal is is to	
14	build out a 4.5 MTPA, which is million	
15	tons per annum, liquefier. That happens	
16	to be, as Bechtel refers to this, as an	
17	off-the-shelf design. That happens to be	
18	the liquefier designed that they are	
19	building in the Gulf. That is the design	
20	for the Cheniere-Sabine Pass project.	
21	It's a 4.5 MTPA liquefier. They are	
22	building out six liquefiers. We are	
23	looking to build out one.	
24	Philadelphia Gas Works will not	
25	be privatized and it will remain an	

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2	independent public utility. A land lease	
3	agreement between the lessor,	
4	Philadelphia Gas Works, and the lessee,	
5	Penn America Energy, will be the	
6	structure that we're looking to put in	
7	place. And my belief, there was a	
8	gentleman who testified earlier, Mr.	
9	Rubin, if my memory is correct, and	
10	benchmarked is it Mr. Rubin? I'm	
11	sorry. Yeah. He had disclosed some	
12	other projects that were in place whereby	
13	the utility would be able to lease to	
14	Penn America. So the land, that 54-acre	
15	plot that's adjacent to the existing	
16	plant, is the site that we're proposing	
17	for this project.	
18	So PGW and the City of	
19	Philadelphia will continue to own the	
20	land. It will remain a public asset.	
21	What we're proposing is through a service	
22	contract between the seller, Philadelphia	
23	Gas Works, and the buyer, Penn America	
24	Energy LP, the buyer will pay the seller	
25	a tolling fee for liquefaction and	

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2	stevedoring services. All we've done is	
3	benchmark the project that Dominion	
4	Resources has, and Dominion Resources is	
5	paid a fee per million Btu's to process	
6	LNG and to load it through a stevedoring	
7	process onto an LNG vessel. So we're	
8	ultimately looking to benchmark that same	
9	service, that same structure. So PGW	
10		
	will ultimately be the operator of the	
11	facility, PGW will produce the LNG, and	
12	PGW will load the vessel.	
13	COUNCILWOMAN TASCO: And you	
14	will own the tank?	
15	MR. JAMES: No, ma'am. PGW	
16	owns the tank.	
17	COUNCILWOMAN TASCO: I thought	
18	you said earlier that you would own the	
19	tank.	
20	MR. JAMES: No, ma'am. What we	
21	will do is, we will own the actual plant,	
22	the steel, the actual plant itself, not	
23	the ground, because what's important to	
24	the financing of this project is, the	
25	depreciation is a key component to this,	

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2	and a municipality cannot write off that	
3	depreciation, but an investor can write	
4	off that depreciation. So that's a very	
5	important component to funding this	
6	project.	
7	MR. SEIF: The tanks are	
8	different from the plant. The plant	
9	turns gas that comes from the pipelines	
10	we've discussed into liquid. Liquid is	
11	then stored with the priority use for	
12	Philadelphia customers on the cold of	
13	winter, is then stored to tanks, which we	
14	would not propose to own. City already	
15	does. They've been there 40 years and	
16	they're working fine. So that only	
17	and would not own the land on which the	
18	liquefying equipment is placed, that	
19	54-acre plot.	
20	MR. JAMES: Our intention is	
21	not to privatize anything. If I misspoke	
22	or I confused you, I do apologize. It's	
23	the actual liquefier when I refer to the	
24	plant.	
25	COUNCILWOMAN TASCO: Just tell	

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2	me, because I'm a little slow right now,	
3	it's something to 3:00, what is it you	
4	would own? The tank?	
5	MR. JAMES: No, ma'am. The	
6	tanks will continue to be owned by PGW	
7	and the City of Philadelphia.	
8	COUNCILWOMAN TASCO: What would	
9	you own?	
10	MR. JAMES: We will build a	
11	liquefier, the actual apparatus, the	
12	structure, the actual machine, if you	
13	will.	
14	So, as I mentioned earlier, the	
15	structure that we're proposing is a	
16	tolling fee. It's a fee to be paid to	
17	PGW for the process of liquefying natural	
18	gas into LNG. So the yes, ma'am.	
19	COUNCILWOMAN TASCO: So if you	
20	own the liquefier and you and your	
21	investors decide to pull out, what	
22	happens?	
23	MR. JAMES: It would be secured	
24	by contract with the City actually,	
25	ma'am.	
1		

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2	COUNCILWOMAN TASCO: For how	
3	long?	
4	MR. JAMES: Well, the benefit	
5	of this project well, the term that	
6	we're looking at is a 20-year term, with	
7	a rollover provision for another ten or	
8	another 20 years. It's such an	
9	extraordinary opportunity for the	
10	investors. To pull out would not be in	
11	their best interest actually. The return	
12	on investment will be extraordinary over	
13	20 years. It would be foolish for an	
14	investor to pull out of this project	
15	early. It's going to take us anywhere	
16	between, I'd say, three to five years to	
17	build out the project. So there's a	
18	great deal of capital that will be	
19	invested in this project in the early	
20	going.	
21	Did you want	
22	MR. SPENCE: I just wanted to	
23	interject. The commitment to the project	
24	in the investor's perspective is twofold.	
25	There is the contractual agreement with	
1		

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2	PGW, with the City on a 20-year basis,	
3	but in order to finance this development,	
4	there is going to be commitments and	
5	obligations to banks, institutions who	
6	are funding it from a debt structure, and	
7	they'll be bound into the agreement on at	
8	least 20 years as well from that	
9	perspective as well. So it will be	
10	virtually impossible for the investors to	
11	back out of this once that commitment is	
12	made.	
13	MR. JAMES: How the \$150	
14	million	
15	COUNCILWOMAN TASCO: You're	
16	going to have to kind of sum up, because	
17	we have another set of people to testify.	
18	Because we're not negotiating the deal	
19	here today. We're just listening to the	
20	whole idea of what it brings.	
21	MR. JAMES: Yes, ma'am. I'm	
22	going to articulate then just what we	
23	believe the key value proposition is.	
24	Philadelphia Gas Works remains	
25	a public asset. There would be no	
I		

Page 281 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. capital investment from the City of Philadelphia. It's an estimated \$150 3 million per year in additional revenues 4 5 generated by PGW through a 20-year 6 contract. If you just look at that number, what we believe is, it provides an extraordinary solution to the City 8 9 regarding aging infrastructure. As we understand, just an investment on PGW's 10 11 part of \$25 to \$50 million per year could 12 collapse the 80-year or 60-year timelines to replace existing cast iron aging pipe 13 14 in the system. From also what we 15 understand, just a \$50 million investment 16 will reduce the calculated gas rate for 17 the citizens of the City. 18 Certainly you will be expert in analyzing the dividend, but our belief is 19 20 is that if the dividend is changed, it 21 will address City pension funds, as well as schools, as well as neighborhood and 22 23 communities, and also it will assist in 2.4 the infrastructure development required 25 here in the City to bring additional pipe

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2	into the City.	
3	Public jobs will not be	
4	privatized. Certainly there will be jobs	
5	created in building out an LNG terminal.	
6	Those are not long-term jobs; they're	
7	short-term. There will be jobs created	
8	for plant operations, but we believe the	
9	greatest value is the jobs created to	
10	replace 1,800 miles of aging pipe in the	
11	system, as well as the trickle-down	
12	economic benefits.	
13	There's one thing that I want	
14	to leave you with that is very, very	
15	important, and, that is, this is a	
16	municipal project. Compared and	
17	contrasted to the Cheniere project or the	
18	Dominion project, these are projects that	
19	are pioneered by publicly traded	
20	companies. This is a municipal project.	
21	The true shareholders we believe in this	
22	project are the citizens of Philadelphia.	
23	They are not who purchase the stock. The	
24	benefits, the direct beneficiaries of	
25	this project are the citizens. So I	
l		

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2	think that's very important.		
3	Another important point for you		
4	to really consider is geopolitically		
5	what's happening here in the United		
6	States and what's happening in Europe.		
7	There's a firm that we're working with in		
8	Washington, DLA Piper. There's a		
9	representative who is sitting here with		
10	us today from their New York office.		
11	We've been working very closely with them		
12	in trying to identify, from a national		
13	security perspective, does this municipal		
14	project in Philadelphia further the		
15	national security interests of the United		
16	States and our allies in Europe, and it		
17	does. And it does. So it's an		
18	extraordinary opportunity and what we		
19	believe is a game-changer here in		
20	Philadelphia.		
21	So we seek your support, and		
22	we're excited to come back to		
23	Philadelphia. We've been away.		
24	Actually, we reengaged this project in		
25	December of 2014. We have an		

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2	extraordinary legal team in place. We	
3	have been working very closely with CH4.	
4	They will be our lead in terms of project	
5	management for this project. This is	
6	right in their wheelhouse and they know	
7	this. They know Philadelphia. They know	
8	PGW extremely well. We work with their	
9	office in Baltimore. And there are	
10	certainly hurdles, but we're prepared and	
11	we think there are solutions for every	
12	hurdle.	
13	Thank you very, very much for	
14	your time.	
15	MR. SEIF: Thank you.	
16	COUNCILWOMAN TASCO: I just	
17	have two questions. Your project would	
18	involve an LNG vessel coming up and down	
19	the Delaware River to the Richmond site	
20	once a week. Would it be correct that	
21	all other traffic on the river would be	
22	shut down during this period?	
23	MR. JAMES: No, ma'am. We've	
24	benchmarked the project in Boston, as you	
25	saw from the slide that I showed you.	

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2	There are security measures in place.		
3	There are marine police. There's Coast		
4	Guard both in the water and in the air.		
5	Measures they've taken is, they've closed		
6	the bridge there for ten minutes until		
7	the vessel passes underneath the bridge.		
8	So there are certainly provisions in		
9	place that have been benchmarked and that		
10	have not been that disruptive.		
11	COUNCILWOMAN TASCO: Your plan		
12	requires obtaining the use of the Tioga		
13	Marine Terminal. How would you go about		
14	getting the use of this terminal, and		
15	what existing commercial uses of this		
16	terminal would have to end to permit your		
17	project to go forward?		
18	MR. JAMES: I can't speak to		
19	the business functions of that terminal		
20	today. What I understand is that it's an		
21	underutilized terminal, but I can't speak		
22	accurately as to the amount of cargo that		
23	move through that terminal on a weekly		
24	basis. That I cannot tell you.		
25	There was another question. I		

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2	apologize. Can you repeat it, ma'am.	
3	COUNCILWOMAN TASCO: I think	
4	that was it. You answered it.	
5	MR. JAMES: Oh, you asked me	
6	about who we I guess we would speak to	
7	the Delaware River or the Philadelphia	
8	Regional Port Authority about that	
9	terminal specifically. Am I correct,	
10	Councilman Henon? I think we talked	
11	no?	
12	COUNCILWOMAN TASCO: No.	
13	MR. JAMES: No? Okay.	
14	COUNCILWOMAN TASCO: Thank you	
15	very much.	
16	MR. JAMES: Thank you very much	
17	for your time.	
18	COUNCILMAN HENON: Excuse me,	
19	fellas.	
20	MR. JAMES: I'm sorry?	
21	COUNCILMAN HENON: I do have	
22	I just want to just another question.	
23	So on the line of government approvals,	
24	what would you need from the city, state	
25	or federal government to make your	
I		

1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2 project a reality? 3 MR. JAMES: Well, certainly a 4 key trigger for us is to establish an 5 exclusivity period for this project. We 6 need to move quickly. That seems to be 7 the trigger for us today, not only with 8 our banks but also with our off-takers. 9 We've been working with Vital, Glencore, 10 Trafigura. These are potential 11 off-takers, and they're clients of mine 12 today actually, Glencore and Trafi. And 13 what everyone has been concerned about, 14 honestly speaking, if I may, is the 15 history here in Philadelphia regarding 16 the sale of PGW and what has transpired.
3 MR. JAMES: Well, certainly a 4 key trigger for us is to establish an 5 exclusivity period for this project. We 6 need to move quickly. That seems to be 7 the trigger for us today, not only with 8 our banks but also with our off-takers. 9 We've been working with Vital, Glencore, 10 Trafigura. These are potential 11 off-takers, and they're clients of mine 12 today actually, Glencore and Trafi. And 13 what everyone has been concerned about, 14 honestly speaking, if I may, is the 15 history here in Philadelphia regarding
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16 the sale of PGW and what has transpired.
17 It's something that is certainly not
18 going to cast a negative shadow, but it's
19 very clear that we need to demonstrate
20 that the City of Philadelphia,
21 specifically Council and the Mayor, are
22 prepared to move this project forward
23 based on the merits that I've
24 articulated.
25 There's a lot that needs to get

Page 288 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 This is, as I said, a \$2.1 billion 2. project. It involves 75 percent debt; 25 3 percent of it will be equity. We have 4 5 some investors already interested in the 6 project in terms of the equity component. We've had conversations with Citibank and Credit Suisse, cities interested in being 8 9 the lead bank and putting together the syndicate for this project. But 10 11 everyone, whether it's banker, law firms 12 that we're working with, counterparties, are looking at the first hurdle, and the 13 14 first hurdle here is how can we get 15 aligned with the City of Philadelphia on 16 this project. 17 So certainly we would want to 18 enumerate within that exclusivity period certain milestones that have to be met 19 20 from our part to ensure the duration of 21 that period. But that will give us the credibility to move forward with the 22 23 bank, to move forward with the government of Portugal or the government of Spain. 2.4 25 And you may say, Well, why are you

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2	referring to government? That's our	
3	strategy. Our strategy is a top-down	
4	diplomatic strategy, considering the	
5	national security concerns of Europe	
6	today. Their goal is to diversify their	
7	risk from Gazprom and Russian, what they	
8	term, as aggression in Europe. So that's	
9	a key component, and based on our	
10	conversations with DLA Piper, the law	
11	firm who will handle government affairs	
12	for us on this project, they said	
13	actually that's the key component that	
14	will make this project a success and get	
15	the Obama Administration to embrace this	
16	project, because of the national security	
17	interest and that it's our nation's only	
18	municipal project.	
19	COUNCILWOMAN TASCO: Let me	
20	just say this and you may leave. The	
21	gentleman who had to take the plane	
22	talked about the regulatory hurdles that	
23	we have to overcome.	
24	MR. JAMES: Yes, ma'am.	
25	COUNCILWOMAN TASCO: So we have	

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2	to take that into mind.	
3	MR. JAMES: Absolutely.	
4	COUNCILWOMAN TASCO: Thank you	
5	very much.	
6	MR. JAMES: Thank you for your	
7	time. Have a wonderful weekend.	
8	COUNCILWOMAN TASCO: Thank you.	
9	Now we have the I'm so	
10	sorry. Liberty Energy Trust.	
11	(Witnesses approached witness	
12	table.)	
13	COUNCILWOMAN TASCO: Good	
14	afternoon. Thank you for waiting and	
15	being so patient.	
16	MR. RYAN: Thank you for having	
17	the time to listen.	
18	COUNCILWOMAN TASCO: You know	
19	how these hearings run, and we appreciate	
20	your patience.	
21	MR. RYAN: Well, we want to	
22	thank you, Madam Chairwoman and Chairman	
23	Henon, the other members of Council, for	
24	giving us a chance to talk to you today	
25	about Philadelphia's energy strategy. My	
ì		

Page 291 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. name is Charlie Ryan. This is Boris Brevnov. We hope that today we can 3 propose some ideas to address concerns 4 5 presented by PGW's aging infrastructure, 6 the urgent need to lower costs for the City's residents and what they pay for their gas, and the need to increase the 8 9 availability of gas for City residents, businesses, and we also want to talk 10 11 about some strategies to mobilize private 12 capital and private initiative to partner with the City in your vision for 13 14 developing an energy hub. 15 We do believe that the best way 16 to approach these objectives is to create 17 a public-private partnership, including The essential idea behind our 18 proposal is to stop thinking about PGW as 19 20 a liability to be managed, but rather 21 start thinking about it as a key part of the energy hub and an engine of economic 22 23 development. The idea would be to use it 2.4 to get the gas here for businesses and 25 customers so it's readily available and

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2	inexpensive.	
3	In a few months since Council	
4	began this process of conducting	
5	hearings, we've continued to refine our	
6	understanding of the opportunity, and	
7	we're really grateful for the chance to	
8	come back today and tell you what we've	
9	learned and make some suggestions and	
10	answer some questions.	
11	So as I said, I'm Charlie.	
12	This is Boris. I grew up here, and for	
13	the last 25 years, I've worked around the	
14	globe on various energy and	
15	infrastructure issues. I've helped	
16	governments, utilities to modernize and	
17	expand their capacities, and I'm also	
18	directly involved today in the energy	
19	business. I serve on the boards of some	
20	companies. One company actually is one	
21	of the larger shippers of LNG on the	
22	planet, and also some not-for-profits	
23	that work in this space.	
24	Boris spent his entire career	
25	in energy and finance. His most relevant	

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2	experience that we mentioned at the last	
3	hearing had to do with Peoples Energy	
4	Corporation in Chicago. It's a company	
5	that, as we talked about, has some of the	
6	exact same challenges and opportunities	
7	that are present at PGW, including	
8	crucially the cast iron replacement	
9	program. So Peoples Gas has already	
10	begun its program in 2011. Thus far,	
11	they have replaced 35,000 service pipes	
12	and they have retired 245 miles of cast	
13	iron conductor. This company, Peoples	
14	Gas, continues to proceed with this	
15	program. They plan to replace about	
16	2,000 miles of cast iron mains and	
17	300,000 service pipes and meters in the	
18	next 20 years. So definitely a lot	
19	shorter than the plan we have going on	
20	today here in Philly.	
21	Last November, we testified	
22	before Council in support of a	
23	public-private approach to developing	
24	Philadelphia into a next generation	
25	energy hub, and we discussed some	
4		l l

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2	concrete opportunities, and I'm glad to	
3	report we made progress on them. I hope	
4	we can explain a bit more today what we	
5	found and what we would suggest.	
6	So a few weeks after that	
7	testimony in November, we participated in	
8	the "Greater Philadelphia: The Next	
9	Energy Hub" conference that was sponsored	
10	by the CEO Council for Growth, part of	
11	the Philadelphia Chamber of Commerce.	
12	And there was an event that united	
13	business, labor leaders under this vision	
14	of how to leverage the City's unique	
15	potential. Today more than ever, I think	
16	we got an opportunity and a	
17	responsibility to combine public and	
18	private effort in positioning	
19	Philadelphia as this new energy hub.	
20	A key focus of the conference	
21	was on infrastructure improvements to	
22	address safety, bring less expensive and	
23	cleaner energy to existing new customers,	
24	lower customers' bills, and create jobs.	
25	There are three, not just one, but three	
1		

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2	critical bottlenecks today that exist.		
3	The first is this intrastate transport		
4	pipeline. This is these big pipes that		
5	people are talking about to get the gas		
6	to the City.		
7	However, I think probably not		
8	as much attention but a lot of additional		
9	attention should be paid to the second		
10	bottleneck, which are the lateral		
11	pipelines, the regional pipeline network.		
12	And then clearly the final bottleneck is		
13	the local distribution network, the PGW		
14	network.		
15	I think we need to be clear		
16	that as we look at how to improve the		
17	situation and how we look to solve some		
18	of the problems, we have to think about a		
19	comprehensive approach to looking at		
20	solving these three separate bottlenecks.		
21	So we continue to believe, as		
22	we mentioned in our prior testimony, in a		
23	stakeholder approach, combining		
24	communities; local and global capital;		
25	labor expertise; business;		

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2	not-for-profits and combine this in a	
3	citywide effort to build and grow	
4	Philadelphia the Philadelphia energy	
5	hub and provide a platform for success.	
6	Liberty brings together a bunch of these	
7	stakeholders - local investors and	
8	businesses; the AFL-CIO providing a	
9	partnership of labor and labor capital;	
10	Philadelphia-based endowments and	
11	foundations putting up capital; and	
12	industry expertise that's complementary	
13	to the outstanding expertise that today	
14	exists at PGW.	
15	We believe a logical next step	
16	would be for a platform like ours to	
17	engage directly with the City and PGW and	
18	see how we could translate a common	
19	vision into actual project blueprints and	
20	form a framework for a partnership.	
21	Private participation in PGW's	
22	future, we feel, is essential to	
23	improving this aging infrastructure and	
24	providing this economic growth. We think	
25	it would unlock true economic development	

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2	potential in the City. PGW's management	
3	team has done a remarkable job in keeping	
4	the system operating smoothly and safely,	
5	with a prudent annual maintenance budget,	
6	all the while, however, working within	
7	existing financial and organizational	
8	constraints. And as has been correctly	
9	reported, the schedule to fix the	
10	infrastructure is not acceptable to	
11	anyone. Seventy years is way too long.	
12	PGW has hazardous leak rates that are	
13	high compared to national average. The	
14	Philadelphia Office of Sustainability	
15	estimates that the City's leaks in the	
16	City's network contribute about 120,000	
17	cars worth of emissions to the	
18	atmosphere. Duke and Boston University	
19	researchers say that these gas leaks from	
20	U.S. gas utilities are the country's	
21	largest human-caused source of methane,	
22	contributing some \$3 billion of	
23	accounting for \$3 billion of natural gas	
24	that's lost every year. So there's an	
25	environmental component as well to	

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2	improving the third bottleneck, the local	
3	distribution system.	
4	So without fresh capital,	
5	flexible financing; streamlined,	
6	business-minded decision-making	
7	processes; innovation and	
8	entrepreneurship, we feel it will be	
9	difficult to achieve the goals that many	
10	have expressed today and I hope we all	
11	have in mind. And we think there's	
12	unique opportunity today to rethink and	
13	redesign how the City approaches these	
14	challenges, and we think that's through a	
15	public-private partnership.	
16	The good news is, we don't have	
17	to reinvent the wheel here. We can	
18	successfully build and improve on	
19	existing best practices and leverage	
20	Philly's competitive advantages. Other	
21	cities are doing very similar things	
22	today. Gas utilities in the country	
23	spend about \$19 billion a year annually	
24	to upgrade their systems and improve	
25	safety. In the introduction, I mentioned	
4		

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2	Chicago, which is planning on doing their		
3	upgrade in 20 years. In New York,		
4	National Grid is currently in the program		
5	to replace 1,900 miles of mains and		
б	25,000 services over the next 25 years.		
7	Philadelphia's distribution network needs		
8	to be upgraded more rapidly too. And,		
9	again, we think it should be also not		
10	just upgraded, but re-imagined as an		
11	economic development opportunity, and		
12	that's what gets us excited.		
13	I think there's a lot of ways		
14	people might ship gas around the world,		
15	but truth of the matter is, we feel that		
16	the key path to getting jobs created in		
17	the City is to figure out a way to		
18	improve and increase the availability of		
19	gas for people to build businesses here,		
20	and we and I'll come to it in a		
21	moment. If we could increase the load in		
22	the system going to corporate and		
23	industrial customers, it also, experience		
24	proves, would help to reduce rates for		
25	residential customers.		

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2	So when utilities are	
3	establishing these major replacement	
4	programs like some of the ones that I had	
5	mentioned, they'll obviously investigate	
6	the possibility of upgrading the service	
7	territory from low pressure to medium	
8	pressure in advance of sizing the	
9	diameter of the replacement mains.	
10	Higher pressure systems not only make the	
11	system more robust, but it also allows	
12	for smaller diameter pipes to be used in	
13	the replacement. And what this means	
14	then is, you can insert these smaller	
15	mains into the existing cast iron mains	
16	to it allows you to speed up the	
17	process and for there to be there's	
18	some discussion, but less disruption.	
19	This has not only been commonplace in	
20	Chicago, but it's just what National Grid	
21	is doing in New York and other utilities	
22	are doing around the country.	
23	So initially city gas	
24	distribution networks were created for	
25	two simple purposes - for street lights,	
1		

Page 301 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. the old-fashioned street lights, and to heat buildings. In the U.S., the load 3 represented by this original purpose of 4 5 heating people's houses is really only about a third of the current demand for natural gas. The rest of it, as you can see from this chart, is for new things -8 9 industrial uses, generating electric power, Phil Rinaldi talked about CHP 10 11 units that could be put in place, and for 12 commercial. And you can see vehicles are quite small, but we feel that some of 13 14 those CNG opportunities and LNG 15 opportunities that Craig and others spoke 16 about are only going to increase and we 17 think increase pretty dramatically. So these modern networks are 18 specifically designed to handle some of 19 20 these new applications, including 21 combined heat and power, gas fuel cells, as I mentioned, CNG. And having this 22 23 higher pressure network would allow PGW 2.4 to expand the customer base and increase 25 volumes that not only would help pay for

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2	the upgrade, but also, as I mentioned		
3	previously, drive down costs for the		
4	community. So every industrial		
5	resolution is driven by, we feel, an		
6	energy revolution.		
7	PGW has one of the lowest		
8	shares of commercial and industrial		
9	customers today among U.S. gas utilities,		
10	and we think that if we rethink how we're		
11	going to replace the cast iron by		
12	thinking about also upgrading the		
13	pressure potential within the system, we		
14	could not only do something to drive		
15	economic development, but also do		
16	something for the City's residents.		
17	COUNCILWOMAN TASCO: Just to		
18	interrupt you, I think that's partly our		
19	fault for not insisting that new		
20	businesses coming into the City use gas.		
21	MR. RYAN: I like that idea.		
22	And it is interesting today when you look		
23	around at who is using electricity. You		
24	know, think about that bakery that		
25	Councilman Jones was talking about		

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2	earlier. There are a lot of businesses	
3	today that simply can't operate in the	
4	modern economy if they have to run on	
5	electricity, and certainly if we could	
6	increase not only the price it's	
7	really the availability of gas today	
8	that's a problem, and that's why we think	
9	that in addition to replacing the cast	
10	iron for safety purposes, we would	
11	recommend looking at improving or	
12	increasing the pressure that can be	
13	handled in the system to permit larger	
14	volume of gas to get into the City.	
15	So in addition to cast iron,	
16	though, there's also another issue, which	
17	is that PGW has about 500 miles of	
18	cathodically non-protected steel lines,	
19	so these also have to be replaced. And	
20	at this point, PGW, we understand, is	
21	putting together a plan for replacing	
22	these cathodically unprotected steel	
23	lines, and they need to be, because like	
24	cast iron, they have another safety	
25	issue. They can rust in unpredictable	

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locations to the point where they don't	
perform.	
Currently, only about one mile	
a year of these steel lines are being	
replaced, and certainly it's clear that	
the plan isn't to take a 500-year	
approach to replacing that part of the	
network. As I said, we understand the	
company is putting together plans to	
replace these mains, but if you put that	
on top of the cast iron program, you	
start talking about a timeframe where the	
process of replacing these is simply not	
acceptable in terms of timeframe.	
We looked at other programs at	
other utilities in the country. Dominion	
East Ohio and Columbia Gas of Ohio both	
have programs that they describe as	
25-year programs to replace their mains.	
Columbia Gas of Ohio actually exceeded	
that in 2012. Their programs are	
considered to represent best practice.	
Bay State Gas and Niagara Mohawk are also	
conducting accelerated replacement	
	locations to the point where they don't perform. Currently, only about one mile a year of these steel lines are being replaced, and certainly it's clear that the plan isn't to take a 500-year approach to replacing that part of the network. As I said, we understand the company is putting together plans to replace these mains, but if you put that on top of the cast iron program, you start talking about a timeframe where the process of replacing these is simply not acceptable in terms of timeframe. We looked at other programs at other utilities in the country. Dominion East Ohio and Columbia Gas of Ohio both have programs that they describe as 25-year programs to replace their mains. Columbia Gas of Ohio actually exceeded that in 2012. Their programs are considered to represent best practice. Bay State Gas and Niagara Mohawk are also

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2	programs. Boston Gas has recently said	
3	they're going to increase their rate of	
4	replacement of cast iron and	
5	non-cathodically protected steel from 150	
6	miles per year in 2013 to 190 miles per	
7	year beginning in '16.	
8	Basically the message here is	
9	that Philadelphia needs a similar kind of	
10	program to keep pace with these other	
11	cities and these other regions.	
12	If we continue existing	
13	continue under the existing constraints;	
14	that is, relying exclusively on debt	
15	financing and an incremental approach,	
16	we'll spend about \$45 million a year	
17	replacing pipe. We won't finish it for	
18	70 years, and when we're done, the	
19	network will end up with in 70 years,	
20	after all that time and investment, still	
21	won't be able to support modern	
22	applications and businesses. That's why	
23	we have to rethink the cast iron program	
24	through the frame of economic development	
25	and being able to increase the amount of	

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2	gas we deliver to new and existing	
3	customers.	
4	So we feel that an alternative	
5	approach to this would be to design a	
6	modern energy delivery platform capable	
7	of providing gas to these new	
8	applications, and execute it within a	
9	25-year timeframe, and do this on an	
10	integrated basis, with an upgrade of the	
11	lateral transportation pipelines that are	
12	essential to support growth in the City.	
13	Then the project is not simply driven by	
14	liability management, but it's an	
15	exciting, well-engineered and	
16	thought-through multi-billion-dollar	
17	investment program that, in addition to	
18	the jobs associated directly with the	
19	program, could create a lot of jobs for	
20	the businesses that could make use of	
21	that cheap and more readily available	
22	energy.	
23	We're very confident that PGW's	
24	experienced engineering and planning	
25	groups would be a leader in this effort.	

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2	Is there really another program of the	
3	same magnitude, public or private, that's	
4	currently available to the City that	
5	could have this kind of multiplier	
6	effect? We really feel that this is a	
7	big opportunity that we need to take	
8	advantage of and look at building a	
9	consensus among the various stakeholders	
10	to try and do it right away.	
11	So a public-private partnership	
12	is how we think the City could remove	
13	some of these constraints that are	
14	currently the underlying causes of the	
15	basic requirement to have this	
16	incremental approach; namely, financial	
17	and organizational constraints. We think	
18	that this new programmatic approach under	
19	a public-private partnership would allow	
20	the City to deploy the best technologies,	
21	practices, reduce the cost of investment,	
22	and create attractive and sustainable	
23	jobs.	
24	One of the truisms that we're	
25	basing our analysis on is that a	

Page 308 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. billion-dollar infrastructure investment would create about 18,000 jobs, and for 3 every dollar that you spend on these 4 5 sorts of infrastructure investments, you 6 get about a \$1.44 plowed back into the economy. So there's a real multiplier effect to this sort of investment. 8 9 So I wanted to spend a couple 10 moments on the Concentric report and deal 11 with some of the concerns that they 12 raised about an outright sale and how a P3 would do a better job of addressing 13 14 some of these concerns that Concentric 15 brought up, how it would mitigate them. 16 So the first concern had to do 17 with employees, specifically related to the collective bargaining agreement and 18 retaining employees. Well, certainly if 19 20 we're talking about a multi-billion-dollar transition from a 21 22 70-year program to 25 years, replacing 23 the cast iron, on top of that replacing the non-cathodically protected steel, and 2.4 25 converting the system from low pressure

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2	to medium or high pressure, we're	
3	certainly not worried about being able to	
4	maintain the employment that's currently	
5	involved with PGW, and obviously it was	
6	always part of and clearly as the	
7	Mayor said earlier, inside of a P3, if it	
8	was done under a lease, it could be done	
9	in a spoke way that would clearly protect	
10	the collective bargaining agreement.	
11	Certainly rate-related	
12	commitments, including social programs,	
13	in the same way that we heard the Mayor	
14	this morning talking about how they wrote	
15	in to their lease arrangement protections	
16	for things that were important to them.	
17	One of the nice things about a P3 is that	
18	it gives you the opportunity to create a	
19	bespoke program that is sensitive to the	
20	things that matter to the City and give	
21	the City an opportunity to retain their	
22	voice on the things that they feel they	
23	have to, while at the same time	
24	permitting private capital initiative to	
25	come in to the areas of the program where	
1		

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2	perhaps they would offer something new	
3	that would allow us to expedite this.	
4	Economic and growth-related	
5	questions were raised by Concentric, an	
6	Economic Opportunity Plan, a commitment	
7	on headquarters and a local presence.	
8	Well, at least maybe as a plug for	
9	Liberty. We're a locally based group,	
10	representing local investors. We haven't	
11	gone anywhere. We're not going anywhere.	
12	We're going to be here, and we hope we're	
13	going to be a part of what you choose to	
14	do in proceeding.	
15	Clearly, local government	
16	oversight is a somewhat obvious one. And	
17	then the last point from Concentric was	
18	to think of a way to accelerate the cast	
19	iron program. That's really what we've	
20	been talking about.	
21	So in summary, on	
22	public-private partnerships as it relates	
23	to upgrading the distribution network,	
24	this third bottleneck of the current	
25	infrastructure, we feel that it could	

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2	implement a best practice, accelerated	
3	replacement program, modernize the system	
4	in 25 years. It will require an	
5	additional \$90 to \$100 million a year of	
6	funding. Private investors are ready to	
7	provide that funding and, at the same	
8	time, if done under a P3, provide that	
9	funding in a way that's coordinated with	
10	the City and with the community, so their	
11	voices are heard in creating an optimal	
12	investment schedule and design of the	
13	program.	
14	The additional capital spending	
15	would be partially recovered through	
16	higher sales volumes and savings on	
17	operational and maintenance expenses due	
18	to reduced leakage and repair. These	
19	potential savings shouldn't be	
20	underestimated. Atlanta Gas and Light	
21	through its integrated program cut pipe	
22	replacement costs by 40 percent and its	
23	annual gas leak repair costs have	
24	declined by 80 percent as they've	
25	implemented their program, and they	

Page 312 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. embarked on a 15-year program to replace 2,700 miles of pipeline, a program that 3 included extension of the network to 4 5 serve new customers and, again, 6 integrated into the replacement program a thought around how to create economic 8 opportunities to spur growth. 9 A public-private partnership would also allow Philadelphia to attract 10 11 much-needed capital and expertise for 12 system improvement, while preserving the City's right to participate in overseeing 13 14 PGW's important social programs. 15 There are different ways you 16 can structure the P3 to meet the City's 17 goals. Liberty is ready to engage with the City to assist in designing a P3 18 framework to finance a network 19 20 modernization program. It would also 21 allow the City to significantly reduce -to receive a significant up-front payment 22 23 to reduce the pension deficit, which would equal or exceed the net proceeds of 2.4 25 an outright sale and potentially allow

Page 313 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. the City to continue to receive its annual dividend. 3 The point here is that if we're 4 going to structure a lease like the Mayor 5 6 was describing earlier today, their focus was around maximizing this up-front payment. That would have to be something 8 9 that the City would determine that they 10 wanted to do. What we're saying is that 11 under the -- with the analysis that we've 12 conducted, we actually think that even 13 while preserving the City's prerogatives 14 related to social programs and protecting 15 labor, we think that the kind of cast 16 iron program we're talking about, this 17 shift to a higher pressure network that would allow then more customers to come 18 into the system, we think that could 19 20 permit a larger up-front payment to the 21 City than even it would have gotten under an outright sale, while retaining 22 23 ownership of the asset. And clearly the goal of the P3 2.4 25 would be to assure a continued protection

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2	of consumers, vulnerable customers and,	
3	through economic development, increase	
4	rather than reduce the number of critical	
5	employees and jobs.	
6	So this P3 platform is suitable	
7	not only for the gas distribution	
8	business, so just real briefly and I	
9	know you've been here a long time I	
10	wanted to talk about how a P3 could be	
11	also connected to the LNG business.	
12	The LNG market is very	
13	promising economically and	
14	environmentally, and it is largely	
15	untapped thus far in Philadelphia.	
16	Certainly the leader thus far has been	
17	the work that Craig and his team has done	
18	to use that excess LNG capacity at port	
19	Richmond. Liberty Energy is currently	
20	working with a consortium of local,	
21	national, international partners to	
22	develop Delaware Valley as a leader in	
23	LNG infrastructure.	
24	We're seeking to expand the LNG	
25	Marcellus liquefaction platform in the	

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develop liquefaction and a multi-nodal hub. The project is meant to lay the groundwork for Philadelphia to serve as a provider of marine LNG as a marine fuel, complementary to existing port operations. We're also planning to expand the market for Philadelphia LNG by	
hub. The project is meant to lay the groundwork for Philadelphia to serve as a provider of marine LNG as a marine fuel, complementary to existing port operations. We're also planning to expand the market for Philadelphia LNG by	
5 groundwork for Philadelphia to serve as a 6 provider of marine LNG as a marine 7 fuel, complementary to existing port 8 operations. We're also planning to 9 expand the market for Philadelphia LNG by	
provider of marine LNG as a marine fuel, complementary to existing port operations. We're also planning to expand the market for Philadelphia LNG by	
fuel, complementary to existing port 8 operations. We're also planning to 9 expand the market for Philadelphia LNG by	
8 operations. We're also planning to 9 expand the market for Philadelphia LNG by	
9 expand the market for Philadelphia LNG by	
10 dolivoring to gustomore in TCO	
10 Gelivering to Customers In 150	
11 containers. These are just a few	
12 examples of how LNG can act as a catalyst	
13 for economic development in the	
14 Philadelphia region. And if only a 10	
15 percent share of the target market were	
16 to be achieved, annual economic savings	
17 could be more than \$200 million. The	
18 project brings public and private	
19 participants from Pennsylvania, New	
20 Jersey, and Delaware in order to	
21 facilitate LNG development with marine,	
22 bunkering, and fleet vehicle fueling as a	
23 critical first step.	
Our proximity to Marcellus and	
25 Utica Shale and their abundant reserves	

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2	of gas and natural gas by-products,	
3	coupled with the navigable shipping	
4	channel on the Delaware River, ready	
5	access to road and rail commerce, allow	
6	for an ideal scenario for innovative	
7	energy projects to emerge.	
8	But it's important to act now.	
9	We want Philadelphia to take a leadership	
10	position in modernizing energy	
11	infrastructure, pursuing economic growth	
12	opportunities with natural gas. We owe	
13	Philadelphia customers the delivery of a	
14	low-cost, reliable, and safe energy	
15	product. As we said earlier,	
16	Philadelphia is uniquely positioned. We	
17	don't have a monopoly on the	
18	opportunities arising from Marcellus, and	
19	it's clear that others recognize	
20	Marcellus's potential and there's a rapid	
21	acceleration of investment and	
22	development around the region.	
23	Philadelphia should take its spot as a	
24	leader in this.	
25	We strongly believe that	

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2	Philadelphia can add value to this gas	
3	and do it in a socially and	
4	environmentally sustainable way. Liberty	
5	would like to join in the effort to unite	
6	the community with capital, labor,	
7	entrepreneurial initiative, experience	
8	and with PGW. We feel the best way to do	
9	this is unite stakeholders under a	
10	public-private partnership.	
11	And thank you very much once	
12	again for being patient with us and	
13	listening to our ideas.	
14	COUNCILWOMAN TASCO: Thank you	
15	for being patient with us.	
16	Do you have questions?	
17	COUNCILMAN NEILSON: Yes.	
18	COUNCILWOMAN TASCO: Are you	
19	going to testify, Boris?	
20	MR. BREVNOV: Just joining.	
21	Thank you.	
22	COUNCILMAN NEILSON: Thanks for	
23	coming. Thanks for your help today and	
24	thanks for your patience.	
25	You were talking about the	

Page 318 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. different programs that we have here in the City. Every year something comes up 3 different. Under a public-private 4 5 partnership, under the P3, say we came up 6 with a new program. Would that be something that you could come up and I mean, is that something we can 8 talk? 9 Because every year we see a 10 different program come up and different changes in our economy and stuff like 11 that. How would that address if 12 13 something came up that we thought we 14 needed to address? Have you seen 15 anything like that in the past? I mean, 16 you've been part of these. 17 MR. RYAN: Well, I think the 18 way I would answer it -- and jump in and interrupt me if I'm off on the wrong path 19 20 here. But if I listened earlier today to 21 the Mayor and he talked about the lease having a mechanism in it where they had 22 23 to go back and inform City Council in Allentown and then get -- they had a 2.4 25 voice in discussing the cap-ex program, I

Page 319 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. think an analogy for like how I could see that working here would be that -- and 3 clearly part and parcel of what we're 4 5 describing here is creating sort of 6 islands inside the network where you 7 could have high pressure. So, for example, you know, two 8 9 examples of this would be if you look at Center City, Avenue of the Arts. 10 11 end you've got the Museum of Art that 12 today has relatively high energy costs 13 because they don't have access to gas. 14 On the other end across Broad you've got 15 the Convention Center. They're running 16 on two diesel generators. You could 17 create an island there and if Council said, you know, We want Avenue of the 18 Arts to have gas, that's a place we'd 19 20 like to prioritize some of the early 21 cap-ex in upgrading the network to make 22 that a place where you could have high 23 pressure. 2.4 Equally, someone could say, We 25 have all this sort of brown field

Page 320 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. development opportunity down on the riverbank. What we'd like to see is, 3 we'd like to see the cap-ex program to 4 5 focus on -- and this could be the new 6 So this could be down the road as 7 the P3 is coming back and informing Council of what it's up to, and clearly 8 9 Council would have and the City would 10 have a voice anyway as a partner in the 11 project. If the new idea was to create 12 an area of high pressure that would be able to deliver lots of gas to a segment 13 14 of these sort of brown field sites on the 15 river, then that could be a change, a new 16 initiative that then would get integrated 17 in the cap-ex budget, the public-private partnership, and basically put forward as 18 a priority for the next round of cap-ex 19 20 that was going to upgrading the system. 21 COUNCILMAN NEILSON: So a lot 22 of the things that we heard today about 23 capacity, you can put these high pressure 2.4 and increase the capacity along the route 25 is what you're saying?

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2	MR. BREVNOV: Correct. And	
3	that's exactly what	
4	COUNCILMAN NEILSON: That's	
5	choked that everybody has been talking	
6	about. This releases those chokes.	
7	MR. BREVNOV: Right. We are	
8	talking about an integrated approach.	
9	Exactly right. And that's why we talk	
10	about three bottlenecks. We talk about	
11	transportation, lateral pipelines, but	
12	the most important from a City Council	
13	point of view is obviously the last mile	
14	that takes it to the customer, right?	
15	Because primary responsibility of the	
16	Council, primary responsibility of the	
17	PGW is customer, Philadelphia customer.	
18	So addressing this last mile bottleneck	
19	is important and the approach, to your	
20	point, how to think about programs.	
21	The program of cast iron	
22	replacement, all in one way or the other,	
23	is about 3.5 billion. It's a sizable	
24	investment that the City is going to make	
25	one way or another way. Question is, if	
۷.	one way or another way. Question is, if	

Page 322 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. you're going to spend 3.5 billion and if you believe that it's a worthwhile 3 program, do we need to wait 88 years to 4 5 see the results of this or do we want to do it sooner, think through this program, 6 and to really mobilize all the resources and execute on this program, bringing 8 9 private and public efforts together. 10 COUNCILMAN NEILSON: Thank you. 11 I have no further questions. Thank you 12 very much. 13 COUNCILMAN HENON: Just quick 14 questions here. Hopefully the answers 15 are quick. But three. One, you talk 16 about pressure and the gas pressure that 17 we have here existing in the City of Philadelphia. I think you said it was 18 low pressure, and in order to get five --19 20 or in order to get moderate to high 21 pressure gas throughout the City, how would you do that? What is your economic 22 23 plan, economic development plan on 2.4 delivering mid to high pressure to the 25 end users and how would that be

Page 323 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. accomplished? Because I'm intrigued by your pipe replacement without digging up 3 our rights-of-way. 4 5 MR. BREVNOV: Most of such 6 replacements are done with a step up in pressure. I mean, we talk a little bit about Chicago. In Chicago, the pressure 8 9 pipes have been increased by a factor of hundred or thousand times. That's a 10 11 sizable change in throughput. 12 allows the change that they have. frankly, that also allows the change 13 14 sensitive to money thrown in and 15 observation of the network, because then 16 if you have any breaks, if you have any 17 leakage, you can see changes in pressure. 18 So it's a different modern energy delivery platform. It does require 19 20 comprehensive analysis. In all other 21 cities you also have to fulfill 22 requirements of Public Utility Commission 23 and take all the gas meters outside of the houses, outside of the homes, and 2.4 25 bring them on the street. In all of the

Page 324 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. cities, it has been done. Really one of 3 the most impressive efforts was done in (unintelligible). Similar efforts are 4 5 happening in Boston, Washington across 6 the nation, and I think as Philadelphia 7 we can really take advantage of this. I try to follow up on your 8 9 question regarding economics, because if you take into account only safety, if 10 11 you're swapping one pipeline for another pipeline and then obviously new pipeline 12 88 years down the road will become an old 13 14 pipeline. So we can start over. 15 And, second, obviously this new 16 pipeline does not really change the 17 economics. If you can move to high pressure pipes, if you can increase 18 deliverability by a factor of ten or 19 20 hundred, you can serve more customers. 21 You have more voidance. The same type 22 will be applied for a bigger base, and 23 that creates opportunities for combined 2.4 heat and power. That creates 25 opportunities for CNG. I mean, let's ask

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2	why do we have only one CNG station in	
3	Philadelphia? Frankly, because we don't	
4	have high pressure gas with us. That	
5	amounts for reasons obviously, but that's	
6	one underlying pressure one underlying	
7	issue.	
8	So this plant does allow to	
9	implement best engineering solutions and	
10	it also allows to create additional	
11	economics for this. Think about this.	
12	Not only residential customers pay for an	
13	upgrade, but also commercial and	
14	industrial customers pay for an upgrade	
15	and takes advantage of some of this	
16	upgrade.	
17	So this design to bring	
18	residential customers, citizens, and the	
19	businesses together not only to consume	
20	but also finance a build, that feels like	
21	a private-public partnership.	
22	COUNCILWOMAN TASCO:	
23	Councilman.	
24	COUNCILMAN OH: Thank you very	
25	much, Chairwoman.	

Page 326 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. So I just want to make sure I understand. So there's a cast iron pipe. 3 You're not replacing the pipe. You're 4 inserting a high pressure pipeline into 5 6 the existing pipe? 7 MR. BREVNOV: In a general 8 case, yes. In some cases it still has to 9 be replaced, but in most of the cases, 10 yes. 11 COUNCILMAN OH: So that would 12 reduce the cost of the change or is that 13 less important than the fact that you 14 have increased the capacity through a more technologically advanced delivery 15 16 system? 17 MR. RYAN: I think that's where you got it right, which is the idea is 18 that the engineering plan would approach 19 20 it from the perspective of we need to 21 create a modern network, a modern network 22 that could support all these economic 23 development opportunities, CHP, CNG, et 2.4 cetera, and then you get down to a much 25 more sort of granular level of in this

Page 327 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. particular street the pipe is in okay 3 shape, this one we can do by running a plastic high pressure pipe inside the 4 5 existing pipe. At another location the 6 analysis might prove that the pipe is not really something you want to still have sticking around under the streets and you 8 9 have to rip that one out. So it's not like one could 10 11 guarantee that it would be consistently 12 the same everywhere, but it certainly 13 presents an opportunity to, over a 14 material portion of the replacement 15 project, to do it in this way, which is 16 simply sleeving the new pipe inside the 17 old. 18 COUNCILMAN OH: So when the 19 pressure is increased a hundred, a 20 thousand times, there is the delivery of 21 the gas, and the existing equipment in the homes and the businesses can handle 22 23 that increased pressure? MR. BREVNOV: You will have 2.4 25 additional valves that would be built in.

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2	You will have step down in pressure, same	
3	as an electric network. So you move from	
4	high voltage to medium voltage to low	
5	voltage.	
6	COUNCILMAN OH: Okay. Just	
7	real quick. So I like the idea, but let	
8	me just ask you. So if I own a home and	
9	there is a new high pressure system	
10	coming in, how do I get the high pressure	
11	gas into my house? Do I need to hire	
12	someone to make some adjustments? Is	
13	that done in the street? How does	
14	that	
15	MR. BREVNOV: It will be done	
16	by PGW. So they will handle it all the	
17	way to the customer. So you will not	
18	have to do anything specific. But in	
19	this case, let's say, for example, if	
20	it's your home and, for example, you can	
21	have also an opportunity to refuel your	
22	CNG car at home, that would be	
23	possibility. You would be able to run	
24	small cogen unit at your home. That	
25	would be, as Craig said, twice more	

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2	efficient. So you have additional	
3	applications or you might switch to a gas	
4	fuel cell. So you'll have more efficient	
5	applications, more modern applications	
6	that this network would be able to	
7	support, but it would be the same way	
8	handled by PGW.	
9	And we want to be clear too, we	
10	are not really trying to teach PGW how to	
11	do the business. They know engineering.	
12	They have best engineers on staff. They	
13	know the network. What we want to be	
14	sure that we help them to unlock	
15	financing opportunities, opportunities	
16	based on programmatic approach,	
17	opportunities based to take advantage of	
18	best practices. Because it's a big step	
19	up. That's why we call it private-public	
20	partnership. Step up, which is also	
21	comprehensive in some cases. In most of	
22	the cases, we would want to coordinate	
23	this effort with Comcast, with water	
24	utilities. If you doing such major	
25	energy delivery platform upgrade, you	

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2	want to perhaps upgrade some other	
3	networks. So that would be efficient way	
4	to proceed with the City, and that's why	
5	you cannot do it just on the private side	
6	of the business. It does require	
7	extensive permitting. It does require	
8	extensive regulatory involvement, and you	
9	want to address a lot of utilities when	
10	you're doing this approach.	
11	COUNCILMAN OH: Thank you very	
12	much.	
13	Thank you.	
14	COUNCILWOMAN TASCO: Thank you.	
15	I must announce that I've been	
16	told by our Chief Clerk that we have to	
17	be out of here by 5 o'clock. So I think	
18	I have a couple more people and then we	
19	have some public testimony. So we will	
20	ask that you we're not here today to	
21	make any decisions. Today is to gather	
22	information, and certainly there will	
23	be we will not adjourn, we will	
24	recess, because we may need to come back	
25	and I'm sure we need to come back,	

Page 331 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. because there are a lot of questions that have to be asked. I just have one right 3 4 quick. 5 What is your inclusion strategy 6 for MBE/WBE/DBE enterprises? Do you have 7 any of these enterprises as part of your P3 team? What is your minority 8 9 participation? MR. RYAN: You know, when we 10 11 put together the original investment 12 consortium that participated in the prior 13 process, we put together on the investor 14 side certainly a very, very diverse group 15 of local investors, and what has 16 interested us so far has been that for a lot of those folks, the attractiveness to 17 the project always wasn't just because it 18 could generate a good return, but also 19 because it looked like to them an 20 exciting way to do something they thought 21 22 would generate economic development in 23 the City. 2.4 So if you go -- if you were to 25 look at that group of investors that we

Page 332 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 had put together previously, it does 2. reflect and look like the people in our 3 community. 4 5 In terms of partners, we have a 6 longstanding relationship with Chariot, who is going to testify subsequently, and to be honest, we have always assumed that 8 9 in terms of moving from -- we'd like to offer suggestions for you then to tell us 10 11 what you intend to do. Certainly we 12 already have had lots of conversations with various local suppliers, 13 14 contractors, players, investors, et 15 cetera, who, again, include participants 16 in our consortium that certainly would 17 meet any good standard and the kind of standards that you demand for diversity 18 and for minority participation, and we 19 can provide you with some of these names 20 of the folks that were involved 21 originally in our project and have told 22 23 us that they're willing to continue with But to be frank, until we know what 2.4 25 you want to do, we're a little bit

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2	reluctant to say exactly who we're going	
3	to be working with, only because we're	
4	not certain what the project is we're	
5	working on.	
6	So that's kind of maybe a	
7	somewhat funny answer, but the answer I	
8	hope is that in the same way that we were	
9	committed to maintaining and achieving	
10	the highest standards on that in the bid	
11	we put together in the prior process, it	
12	would be the same if you decided to	
13	initiate a new one.	
14	COUNCILWOMAN TASCO: So we have	
15	a staff of two right now?	
16	COUNCILMAN NEILSON: If I can	
17	follow up.	
18	No matter which way we go, it	
19	looks like there's some infrastructure,	
20	no matter what direction we go, and City	
21	Council has a long history to make	
22	certain that we use local contractors and	
23	we have as part of the procurement	
24	process, we make certain that our	
25	minority businesses are well represented	
1		

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2	within. Isn't that something we would	
3	put in the partnership agreement so that	
4	you would have to adhere to on an annual	
5	basis? I mean, like come back and report	
6	and say, Hey, look, we did a million	
7	dollars of work this year, we've given	
8	XYZ. I mean, because that's moving	
9	forward. There's a lot of jobs that come	
10	out of there, and we want to make sure	
11	that those jobs do look like our city if	
12	that happens. But that's something we	
13	would put in the partnership agreement,	
14	correct?	
15	MR. BREVNOV: It's somewhat	
16	already even in the partnership	
17	agreement, in our partnership agreement,	
18	because one of our investors is Union	
19	Life Labor Insurance Company. They have	
20	very similar high standards requirements	
21	related to diversity, related to	
22	involvement of labor union and unionized	
23	labor in this effort. So to some extent,	
24	you already have some of the segments	
25	built into a partnership, but as Charlie	
I		

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2	say, you'll be looking for	
3	COUNCILMAN NEILSON: We look	
4	for a little more here at City Council.	
5	We want to make certain that	
6	MR. RYAN: I think, Councilman,	
7	you're absolutely right. This is exactly	
8	a place where, again, you get to decide	
9	because you had a seat at the table in	
10	creating the public-private partnership.	
11	And even if you want to tweak the	
12	standards that you want to see applied in	
13	this particular program, you do it by	
14	putting it in the lease agreement.	
15	COUNCILMAN NEILSON: Right	
16	inside the lease agreement. Thank you	
17	very much.	
18	COUNCILWOMAN TASCO: Councilman	
19	Henon.	
20	COUNCILMAN HENON: And for the	
21	record, for any interested party and	
22	certainly everybody here today is	
23	extremely credible and has the experience	
24	of putting together a great team or you	
25	wouldn't be here today. Some you'll see	
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2	will be 100 percent minority-owned	
3	business enterprise, but we as a city	
4	take it very serious, and in any plan	
5	moving forward, in any type of	
6	public-private partnership or arrangement	
7	will have a very lofty goal to reflect	
8	the City of Philadelphia and the	
9	opportunities that we deserve as we	
10	deliver a high-quality service to the end	
11	users.	
12	So thank you.	
13	COUNCILWOMAN TASCO: Any other	
14	questions?	
15	(No response.)	
16	COUNCILWOMAN TASCO: Thank you	
17	very much for your testimony.	
18	MR. BREVNOV: Just one last	
19	question related, because we talk a lot	
20	today about LNG and we discussed what	
21	would be the most exciting opportunity	
22	related to LNG in this room, and I want	
23	to really briefly in a few sentence to	
24	share our vision, because obviously LNG	
25	gas from the United States going in Asia,	
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Page 337 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. going into Europe, going in Latin America and, frankly, replacing oil or replacing 3 LNG in this oil in a lot of these places. 4 5 But the most exciting opportunity is, 6 frankly, at home, because the biggest consumer in the world is United States of So we are consuming the most of the 8 oil. 9 oil in the world, and oil is the biggest polluter in the United States. So we 10 11 have a unique opportunity to kill two birds with one stone in this case. 12 We don't want to exclude the 13 14 strategy to catch up with 37 other 15 terminals that are underway to ship U.S. 16 gas overseas, but we can continue to 17 build on the leadership when we are bringing in LNG gas for U.S. 18 applications, U.S. transportation, 19 20 marine, rail or other stuff, because, 21 frankly, this is the biggest market. 22 is our competitive advantage. 23 uniquely positioned to do it, and we should be building on this competitive 2.4 25 advantage and advancing it to the

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2	neighboring regions.	
3	COUNCILMAN HENON: I think you	
4	make a great point on the way out. Not	
5	just exports, but domestic use and reuse.	
6	And the petrochemical industry has been a	
7	critical and vital employment and	
8	opportunities for people to work here,	
9	and it's been an economic engine for our	
10	region and we want to continue to support	
11	their capital improvement in delivering	
12	the products that they do safely and with	
13	the highly trained workforce that they	
14	have. And I want to let everybody know	
15	as well we as a city are ready to train	
16	people and put people to work. So	
17	whatever opportunities we could do to	
18	enhance that and prepare for what is in	
19	front of us, we're ready to go.	
20	COUNCILWOMAN TASCO: Thank you.	
21	MR. BREVNOV: Thank you.	
22	COUNCILWOMAN TASCO: Now, have	
23	all of the public-private partnership	
24	groups spoken yet?	
25	Come on up, please. I'm sorry.	
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2	I have the name here	
3	MS. SAX: You got three	
4	minutes. How about three minutes for	
5	these guys, please. Thank you.	
6	COUNCILWOMAN TASCO:	
7	Mr. Vasquez.	
8	MR. VASQUEZ: Yes.	
9	COUNCILWOMAN TASCO: Yes. I'm	
10	sorry.	
11	(Witness approached witness	
12	table.)	
13	MR. VASQUEZ: Let me start by	
14	thanking you for the invitation.	
15	COUNCILWOMAN TASCO: Thank you	
16	for coming and thank you for being	
17	patient, and we hope that you can sort of	
18	like summarize, because this is not the	
19	only discussion. I mean, you know, we're	
20	not here to make any decisions today	
21	about anything.	
22	MR. VASQUEZ: I'm happy to	
23	return. I flew up yesterday from Puerto	
24	Rico, and I'll fly back any time you want	
25	me.	

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2	So my company specializes in	
3	the energy area. Our specialty is in	
4	program management, valuation, and	
5	funding advisory services.	
6	Just a little background on	
7	myself. I've spent about a third of my	
8	career in the government sector. I	
9	started out in strategic planning for the	
10	largest utility in the United States many	
11	years ago. I worked in worldwide	
12	strategic planning for probably the	
13	number one oil and gas company in the	
14	world. Later in my career, I ended up as	
15	a Senior Managing Director, which was a	
16	partner level at Bear Stearns. I've	
17	probably been the lead banker in many,	
18	many, many, many billions of dollars of	
19	energy financings and been part of the	
20	senior management team in multiples of	
21	that.	
22	In my career I've been the lead	
23	advisor in many projects. Many years ago	
24	I did some things down here in Chester	
25	with the shipyard with Sun Oil Company or	

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2	Helios, which is owned by Sun. But I was	
3	the advisor in an LNG terminal. I was an	
4	advisor, the lead advisor, in a 500	
5	megawatt gas-fired combined cycle plant,	
6	500 450 megawatt coal-fired plant, and	
7	I had the opportunity to develop some	
8	ideas that I have come across in my P3	
9	experience. And I proposed, developed,	
10	and 100 percent financed a telecom	
11	company with the utility in Puerto Rico,	
12	and what was interesting about that was	
13	that my concept and my proposal to them	
14	was in many of these initiatives, you	
15	have intrinsic and intangible values that	
16	are worth a lot of money, and they	
17	allowed me and a non-for-profit to put	
18	together a telecom company without a dime	
19	of equity, without any guarantees from	
20	them. We financed it totally with debt.	
21	We hired all the contractors. We built	
22	it. We put it together. That company is	
23	worth many hundreds of millions of	
24	dollars today. It's expanded throughout	
25	the United States, through Europe,	

Page 342 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. through part of the Middle East, and it will be worth a lot more money in the 3 future. 4 5 The underlying concept is, in a 6 lot of these P3s -- you know, we tend an evaluation basis to look at what is the most obvious thing. The most obvious 8 9 thing is how much cash flow does the 10 company generate and what are the 11 possibilities and what are the synergisms 12 that you get from that, but there are other values which very often tend to be 13 14 overlooked. 15 I couldn't help this morning --16 this is the first time I met your CEO, 17 but I've looked at PGW and, you know, you have a management team -- I think he had 18 30 years of experience. You have an 19 infrastructure. You have a whole set of 20 values there that you don't get when you 21 22 sell a company like that. You don't get 23 the value for that. What you get the value for is from the cash flow and 2.4 25 what's projected within their own

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2	framework.	
3	I am proposing to you that	
4	before you do P3s, because P3s or	
5	privatizations are going to be important	
6	for you to optimize the value of PGW, but	
7	before you do that, you pre-position PGW	
8	in a very careful transition to a	
9	for-profit entity and you use or	
10	entities. It may end up being more than	
11	one entity, because you have different	
12	profit centers in there, and that you use	
13	as a basis for what you're doing is the	
14	public market, in an IPO.	
15	For instance, if you were to go	
16	out and do a 20 percent IPO for whatever,	
17	after you've done your strategic planning	
18	on this, you then get to negotiate with	
19	the P3 counterparty or your joint venture	
20	by separating management, technology, and	
21	capital. If you sit down at the table	
22	and you're the one without the capital	
23	and your counterparty has all the	
24	capital, you start off at a dramatic	
25	disadvantage. In the structure that I'm	

Page 344 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. proposing, look at the alternatives that you have. 3 Let's suppose that you did --4 5 let's suppose just for the moment that 6 it's an integrated entity, one entity, 7 and you sold 20 percent in the public market. You get to hold the other 80 8 9 percent and hold that as an asset. get to issue the remaining 80 percent in 10 11 the public market or you get to sit down 12 with your P3 counterpart and negotiate a 13 merger or a joint venture or whatever 14 else that you want to put together. You 15 have now done two really important 16 things. One is, you've converted this 17 entity into a securitization that you -when I say "you," I mean the City of 18 Philadelphia -- gets to manage the 19 20 securities, but you have freed up your 21 experts here to go and get the most value 22 for this company. 23 For instance, I'm not as good 2.4 as your CEO in the diplomacy of words, 25 but one of the things he was suggesting

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2	is many opportunities here, but I'm	
3	working inside a government structure	
4	that has all of this time delays and RFP	
5	requirements and blah, blah, blah,	
6	blah, et cetera, but you know what, in a	
7	public company, he would have different	
8	pressures. In a public company, he would	
9	be able to and he's your expert and	
10	his team are your experts. They'd be	
11	able to make decisions a lot more	
12	quickly.	
13	Let me just do a couple of	
14	numeric exercises here. I think you have	
15	my paper. I listed a number of companies	
16	in the downstream gas market, downstream	
17	we call regulated gas market, and what	
18	you see is that most of them have a price	
19	earnings ratio somewhere in the 20's,	
20	which is by the way, the buyer, the	
21	potential buyer of your entity, UIL	
22	Holdings, has a P/E ratio of 21. A lot	
23	of these companies do more than just gas,	
24	but they're in the regulated industry.	
25	Usually a company like PGW would be	

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2	valued based on its cash flow, not based	
3	on a P/E, but just to, if you forgive me	
4	for a moment, to make the jump on that,	
5	we were talking this morning about \$50,	
6	\$60 million bottom line. Your management	
7	in the Concentric report was suggesting	
8	that there are a number of	
9	straightforward initiatives to generate	
10	another 30. So you're talking about a	
11	company with a potential of maybe \$90	
12	million, P/E ratio of 20, 21. One point	
13	eight billion makes sense for a local	
14	distribution company operating in the	
15	downstream gas market.	
16	But now let's take a step back	
17	and take a look at the midstream market.	
18	The midstream market has midstream	
19	meaning liquefaction and pipeline	
20	distribution, et cetera have P/E	
21	ratios of between 74 and 111. That's	
22	from an NYU database. They had 85	
23	companies. I took a quick look at them.	
24	They're all in that kind of midstream.	
25	Three to five times the value of the	

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2	local distribution company. There's	
3	clearly opportunities here and there's	
4	challenges.	
5	I mean, it's clear that on the	
6	liquefaction side, you have aging, you	
7	have logistics problems, you have all	
8	kinds of problems. What I'm suggesting	
9	is, as a venue, that you think seriously	
10	about creating there's many venues	
11	that could be used with this model, but	
12	I'm suggesting you think seriously about	
13	creating a trust or a fund very similar	
14	to what New York state did in the Public	
15	Asset Fund, which I happen to have been	
16	one of the five members on the Board,	
17	unstaffed, by the way, and what their	
18	responsibility was to convert	
19	non-for-profits into for-profit entities.	
20	And on the first assignment, New York	
21	state expected to earn something like	
22	\$500 million. It was Empire Health. And	
23	when I left now, I wasn't there for	
24	the whole thing, but I was there for a	
25	number of years. When I left, the asset	

Page 348 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. value was 5 billion through a series of moves similar to what I put here. 3 What I'm suggesting is that you 4 5 think seriously about this fund, and it begins freeing him up -- it puts a lot of 6 7 pressure on him too. Remember, when you trade in the public market, suddenly you 8 9 get effectively a step out -- a step up in, I'll use the word, value of your 10 11 entity. Why? Because it's now liquid. 12 Okay? If you have a private company over 13 here, it's not that easy to sell. 14 not that easy to deal with it. But you 15 get a step up because of liquidity. You 16 get a second step because of your access 17 to the market. But in a public entity, you have disclosure and you have some 18 other benefits in the implementation of 19 20 this that you could really add 21 significant additional value at the 22 underwriting stage of this thing. 23 So I'm not saying you would do 2.4 What I'm saying is that I'm a big 25 believer in processes and I'm a big

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2	believer in clarity. I think you start	
3	off with a clear set of objectives. You	
4	identify all of your stakeholders	
5	involved in this, and then you perform a	
6	situation analysis, and you make sure in	
7	that situation analysis that you look at	
8	the profit centers jointly and	
9	separately, so you get an idea of whether	
10	this company is worth more as an	
11	integrated unit or if it's worth more	
12	broken up, and you include in that	
13	assessment a situation analysis, a risk	
14	analysis, and a labor analysis, which in	
15	everything I've ever done has always been	
16	a critical component. That situation	
17	analysis leased with strategic plan and	
18	then to implementation.	
19	So that's kind of it. I was	
20	trying to be fast because I know you're	
21	running out of time, and I think I've	
22	covered the main point.	
23	COUNCILWOMAN TASCO: Well, you	
24	let me just say and we didn't expect	
25	it to go this long and we have a time	

Page 350 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. schedule for our stenographer. This is not the only discussion 3 about this issue. It's very complicated, 4 5 a lot of pieces to it, and we wanted to 6 get a flavor of what people think a P3 would look like. 7 8 So we appreciate your coming, 9 and we have your testimony, which we will share with our colleagues and --10 11 MR. VASQUEZ: I'd be happy to come back any time. You know, what I've 12 13 said to my other clients -- and they're 14 not all cities, but the equivalent of what I said to all of them, in terms of 15 16 these initiatives, start thinking of yourself as a nation city. Okay? And 17 what's the value of this asset outside 18 the borders of this town? 19 20 The energy hub, the advantage 21 of the energy hub is regional. It's not 22 specific. You have to decide if you're 23 going to participate. What's the advantage of this hub is that you have 2.4 25 almost 20 percent of the population in

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2	the United States within 200 miles of	
3	here and you're right across the Atlantic	
4	Ocean from the west coast of Europe. So	
5	that's a major advantage.	
6	But the other advantage you	
7	have is this infrastructure that's built.	
8	You are one of the largest public gas	
9	distribution companies in the United	
10	States, but you're a fairly modest-sized	
11	company if you look at the private	
12	sector. Why can't and I'm not making	
13	recommendations here. I'm just kind of	
14	pointing out some things.	
15	Why can't the expertise of this	
16	company begin doing what many people have	
17	been presenting here today in other	
18	cities, in other regions of the United	
19	States? Why can't this be a major gas	
20	distribution you have the expertise.	
21	You have the infrastructure. They can do	
22	things throughout the U.S., right? So	
23	let's think forgive me for saying it	
24	this way, but let's think about	
25	ourselves. We're a city nation. Outside	

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2	these borders we're going to figure out	
3	how to exploit the expertise that we	
4	have.	
5	So that's it. That's my	
6	COUNCILWOMAN TASCO: Thank you	
7	very much. We do have a great company	
8	and we do have great expertise, and we do	
9	need to really realize that. Thank you	
10	for coming, and certainly we will	
11	probably call you back.	
12	MR. VASQUEZ: I'd be happy to	
13	come any time.	
14	COUNCILWOMAN TASCO: Thank you.	
15	I have another company,	
16	Chariot. And is Penn Energy here?	
17	COUNCILMAN OH: We did Penn.	
18	COUNCILWOMAN TASCO: We did	
19	Penn Energy. I'm sorry.	
20	(Witnesses approached witness	
21	table.)	
22	MR. HENRY: Good evening.	
23	We'll try to be as fast as possible.	
24	COUNCILWOMAN TASCO: Please.	
25	MR. HENRY: Since we're on the	

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2	clock.	
3	My name is John Henry. I'm the	
4	Chairman, Founder, and CEO of Chariot	
5	Companies. I have with me to my right	
6	Dr. Cecilia Cardesa-Lusardi. She is our	
7	Chief Strategy Officer.	
8	Before I get into the	
9	testimony, I kind of wanted to summarize,	
10	since we're last, what we've heard today.	
11	We've heard from a lot of smart folks,	
12	and the City of Philadelphia is in a very	
13	blessed and in an enviable situation.	
14	You have a whole lot of sophisticated	
15	people with deep pockets chasing after	
16	you talking about P3s, public-private	
17	partnerships, but the one thing in a	
18	public-private partnership, in our view,	
19	is process, people, and place. And one	
20	thing that no one has talked about today	
21	is people. People is driving all these	
22	decisions. The why we're here is the	
23	people.	
24	The Lazard report spells it out	
25	in 2012. It identified certain social	

Page 354 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. The Concentric report does the same thing. 3 All these people today have 4 5 talked about the technical stuff, and all 6 that stuff is great. We can talk about 7 it too. We got money too. But I want to focus on the people, because if everyone 8 9 that testified before me put the effort in to solving the social cost of the City 10 of Philadelphia, they would be done. 11 solutions would be there. 12 13 I'm a very small company, very 14 lean staff. We put together a model that 15 the City of Philadelphia can utilize to solve the problems. Instead of looking 16 17 at it as a transaction and economics first, solve the social last, we switched 18 the game up. We said here's a certain 19 20 set of conditions in the City of 21 Philadelphia. We need to solve these 22 problems. And to the extent we can solve 23 these problems, there's going to be benefits to PGW. Solve the social costs 2.4 25 first.

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2	So I ask you before I get into	
3	my written speech, ask where's the beef?	
4	We're different from everybody else. We	
5	have all that technical stuff, but we	
6	actually have solutions around the	
7	people, and at the end of the day, that's	
8	what all this stuff, this testimony,	
9	these hearings, that's what it's about.	
10	Thank you. Now I'm going to	
11	start my written testimony.	
12	It is very rare in this life to	
13	work with not one but a few of your	
14	heroes. Ernie Green is one of my heroes.	
15	On September 25th, 1957, Ernie Green was	
16	the sole senior among a group of	
17	courageous children, the Little Rock	
18	Nine, who risked his life to attend	
19	Central High School.	
20	Now, I'd have to imagine that	
21	when a young Ernie Green woke up that	
22	morning in 1957 and made his way to	
23	Central High, confronted by hostile	
24	crowds and escorted by the Screaming	
25	Eagles of the 101st Airborne, heroics	
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2	were not on his mind. See, this conflict	
3	wasn't a clash of armies, but it was	
4	rather a clash of wills, a contest to	
5	determine that which lies at the core of	
6	America. The 1954 Brown versus Board of	
7	Education decision eliminated racial	
8	discrimination in public schools, but	
9	Ernie's courage tested the strength of	
10	that decision. No matter how much doubt,	
11	fear or anticipation was in the air,	
12	nothing was going to prevent him from	
13	gaining equal access to opportunities,	
14	not even enduring daily harassment and	
15	violence.	
16	And because of people like	
17	Ernie Green, the principle of a just and	
18	fair America and an inclusive America,	
19	that ideal ultimately triumphed. His	
20	actions not only mobilized Americans to	
21	ensuring that access to a quality	
22	education was granted to all, but they	
23	helped define the Civil Rights Movement.	
24	Ernie's decision in 1957 led	
25	African Americans and other civil rights	

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2	leaders on a mission to change America.	
3	Ernie's legacy and work continues today	
4	by serving on my Board of Directors of	
5	the Chariot Companies, and I'm very proud	
6	of that. He embodies the spirit that the	
7	plain and humble people, the forgotten,	
8	the downtrodden and overlooked, we can	
9	shape history. He's living proof.	
10	Members of the Energy	
11	Committee, I invite you to channel that	
12	sort of humble and plain spirit today,	
13	become history-makers like Ernie. Define	
14	the Philadelphia Energy Hub movement by	
15	reshaping the socioeconomic landscape of	
16	Philadelphia for generations to come.	
17	City Council must ensure that our youth,	
18	especially children of color, are	
19	equipped with the knowledge and skills	
20	they need to become future leaders and	
21	participate in Philadelphia's emerging	
22	new energy economy.	
23	A movement is indeed afoot in	
24	Philadelphia. Forged in the crucible of	
25	social equality and economic opportunity,	

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2	Chariot stands on the shoulders of giants	
3	like Ernie and others by seeking to	
4	transform Philadelphia Gas Works through	
5	a P3.	
6	Anticipating the Philadelphia	
7	Energy Hub, we began our journey in 2011,	
8	seeking to address Philadelphia's	
9	systemic challenges generally, and more	
10	particularly, those facing PGW. The new	
11	PGW P3, if in the hands of the right	
12	visionaries, can indeed make Philadelphia	
13	a jobs juggernaut. I believe that	
14	Chariot is the right visionary, and	
15	here's why:	
16	Companies have often overlooked	
17	opportunities to meet societal needs and	
18	misunderstood how societal harms and	
19	weaknesses affect value chains. The	
20	field of vision has simply been too	
21	narrow. What has been missed is the	
22	profound effect that people, place, and	
23	process can have on the productivity and	
24	innovation.	
25	Councilmembers and the Special	

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2	Committee, there are places and moments		
3	in Philadelphia's history that have		
4	shaped America's destiny, but perhaps		
5	none greater than the decision you		
6	consider today, whether to support		
7	Philadelphia as an energy hub, and to the		
8	extent that you do, what P3 opportunities		
9	exist with PGW that can maximize		
10	operational efficiencies, generate new		
11	revenues, provide strategic visioning for		
12	an energy hub and, importantly, bake in		
13	economic and social benefits to all		
14	Philadelphians.		
15	With such an effort, we can		
16	make sure our new energy economic system		
17	serves all and not just some. Together,		
18	we can raise the level of economic		
19	prosperity in the region for all		
20	Philadelphians. Together, we can address		
21	unfair and oftentimes unequal workforce		
22	opportunities through Chariot Labs and		
23	STEAM-based education.		
24	For the record, we've submitted		
25	that energy action plan, and Dr. Lusardi		

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2	will be discussing that here momentarily.	
3	Together, we can reduce poverty	
4	rates in Philadelphia and demolish	
5	barriers to opportunity by making sure	
б	that every Philadelphian willing to work	
7	in this new energy economy has access to	
8	pathways for targeted energy industry	
9	education, workforce development, life	
10	skills training, and wraparound services.	
11	These pathways lead to careers, generous	
12	wages, and sturdier rungs on the ladder	
13	into the middle class.	
14	There are many opportunities	
15	both to leverage a PGW P3 to use the	
16	natural resources and infrastructure of	
17	Philadelphia to create an economic	
18	vehicle that will impact all sectors of	
19	the Philadelphia economy and social	
20	fabric. A true energy hub creates value	
21	by connecting things in ways that make	
22	them worth more than the sum of their	
23	parts.	
24	In our P3 effort, each party	
25	brings different skills and resources to	

Page 361 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. bear, and they're more powerful than any program that either party by themselves 3 individually could come up and develop. 4 5 Our shared value creation model powers 6 change, not just at the level of an organization or an industry, but we go through the whole value chain and diverse 8 9 ecosystems. We dig deep and go far. There are five conditions of 10 collective impact that must guide any 11 12 potential P3: common agenda; shared measurement; mutually reinforcing 13 14 activities; continuous communication; and 15 backbone support. A Chariot P3 could deliver 16 avenues for creating shared value that 17 are mutually reinforcing. For example, 18 building a world-scale LNG expansion 19 20 project at the port terminal and 21 promoting fully developed and integrated downstream supply chains to monetize dry 22 23 gas through storage, commercial sales, and other outlets. 2.4 25 PGW can expand its liquefaction

Page 362 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. capacity. Opportunities like the leasing or the potential P3 of -- or the sale of 3 LNG involve competitive markets, and 4 5 execution risks are very different than I believe the ones that PGW are currently 6 7 comfortable with taking. Consequently, Chariot brings the capital and marketing 8 9 competencies to a P3 and is willing to assume these risks. 10 11 The potential to lower the cost of gas to PGW customers could result in 12 lower customer gas bills, especially for 13 14 those struggling to pay their bills. PGW will benefit from lower customer 15 16 responsibility program costs and a 17 reduction in bad debt expense through our 18 Utility Trust Fund. 19 For example, PGW has 70,000 low-income residential customers enrolled 20 21 in the CRP and nearly 23,000 customers in its senior citizen discount program at an 22 annual cost of \$80 million. These same 23 2.4 program participants must use -- well, a 25 Chariot P3 will ensure that the PGW

Page 363 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 efforts to reduce CRP customers' usage 2. since their bills are based on their 3 income level rather than on the amount of 4 5 natural gas they use, we are uniquely 6 qualified and possess the expertise to 7 design and implement programs that target these qualifying customers. 8 9 For example, \$80 million, if we saved 20 percent, that's \$16 million a 10 11 year in savings to the CRP program. 12 essentially equates to about nine or ten miles of additional pipeline replacement 13 14 each year. How do we do that? 15 introduced -- and actually I just met 16 yesterday with Governor Wolf's staff I met with them about the 17 about this. Utility Trust Fund and a host of other 18 19 things. 20 How you do it is, you have to 21 expand LIHEAP. Right now the 70,000 22 people that are participating in CRP, 23 they have to apply for LIHEAP. But we have to dig deeper. There's no LIHEAP 2.4 25 money there. Pennsylvania's allocation

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2	of LIHEAP is \$16 million from the feds.	
3	It's a Block Grant. The average	
4	allocation cash Emergency Assistance	
5	Grant per DHS is about \$230 per family.	
6	That's about 70,000 families right now.	
7	If you look at the numbers, PGW, my	
8	understanding, has about 150,000	
9	customers, of which about 100,000 are in	
10	these programs, the CRP. So there's an	
11	opportunity. We're missing 50,000 people	
12	that are falling through the cracks	
13	somewhere.	
14	Secondly, to the extent that	
15	they're in these programs, the CRP	
16	programs and the like, we need to have a	
17	Utility Trust Fund, because right now,	
18	rate-paying customers are subsidizing the	
19	low-wealth communities, and that's a big	
20	number, a very big number. It's	
21	achievable. We're doing it at scale. It	
22	saves money. It helps build up the	
23	middle class. These are all things that	
24	Philadelphians need.	
25	I want to switch up now to	

Page 365 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 describe and talk a little about who we 2. 3 are. We testified back in November. 4 5 We've been at this for a long time here 6 in Philadelphia. I was raised in Mount Airy. All my family is from Philadelphia. 8 9 So passion is the currency of 10 creation. The energy that comes with 11 diverse stakeholders collaborating to address specific community issues can be 12 13 a powerful force for change. That's why 14 we advocate with so much passion and conviction, because we know our efforts 15 16 matter. Time is of the essence. 17 Chariot's managed by a seasoned team of energy, infrastructure, real 18 estate, and investment professionals who 19 20 average more than 30 years of experience 21 in each discipline. We bring a wealth of 22 diverse world-class experience, insight, 23 and agility, entrepreneurial spirit and shared value creation to any PGW P3. 2.4 25 follow are a few highlights of our team:

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2	We have the first African	
3	American Chairman of the Pennsylvania	
4	Public Utility Commission on our team.	
5	And these are all of our Board members.	
6	Former Executive Deputy of the New York	
7	State Public Service Commission; one of	
8	the "75 Most Powerful Blacks on Wall	
9	Street from Black Enterprise Magazine;	
10	Executive Committee of the Congressional	
11	Black Caucus; the Congressional Gold	
12	Medal, the highest honor ever given to a	
13	U.S. citizen; White House Task Force on	
14	Minority Business Enterprises;	
15	presidential appointment as Assistant	
16	Secretary of Labor under Carter;	
17	presidential appointment as Assistant	
18	Secretary of Education under Clinton;	
19	Presidential appointment as Associate	
20	Director of Outreach for White House	
21	Office of Faith-Based Initiatives, GW	
22	Bush.	
23	We have reach, but the reach	
24	that we have is not just energy reach.	
25	It's educational reach. It's labor and	
I		

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2	employment reach. These people led our	
3	nation. These are on our team. That's	
4	why we distinguish ourselves from	
5	everyone else that went before us today,	
6	because we have the social community, the	
7	people component that no one else can	
8	deliver, in my humble opinion.	
9	Now I want to transition to	
10	Dr. Ceci Lusardi, Chariot's Chief	
11	Strategy Officer. She will share our	
12	STEAM-based energy action plan that	
13	reconnects working-class families to	
14	Philadelphia's economic renaissance.	
15	Thank you.	
16	DR. LUSARDI: Thank you, John.	
17	Good afternoon. My name is Dr.	
18	Ceci Cardesa-Lusardi. I serve as	
19	Chariot's Chief Strategy Officer, and I	
20	want to walk you briefly through the	
21	Summer Energy Academy, which is a	
22	pipeline for workforce development	
23	readiness and training in Philadelphia's	
24	energy hub.	
25	COUNCILWOMAN TASCO: You have	

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2	to speak into the mike. I can't	
3	understand a thing you say.	
4	DR. LUSARDI: Can you hear me	
5	now?	
6	COUNCILWOMAN TASCO: Yes. A	
7	little closer.	
8	DR. LUSARDI: Closer?	
9	COUNCILWOMAN TASCO: And could	
10	you kind of summarize this, because I'm	
11	trying to figure out how does the social	
12	part fit in with and how do you make	
13	that work for PGW. You know, we have the	
14	testimony here.	
15	MR. HENRY: Okay.	
16	COUNCILWOMAN TASCO: So how	
17	does all this come together to help the	
18	financial condition of PGW?	
19	MR. HENRY: Well, I mean, there	
20	are a host of reasons. In the context of	
21	a P3, we believe that we're the only	
22	entity that really has the best interest	
23	of Philadelphians from a private-sector	
24	perspective, because we're a certified	
25	community development entity, and that's,	
21 22 23 24	a P3, we believe that we're the only entity that really has the best interest of Philadelphians from a private-sector perspective, because we're a certified	

Page 369 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. by definition, what we do. That's why we created the Utility Trust Fund. 3 modeled it after the Housing Trust Fund. 4 We needed that innovation. How does that 5 6 translate? Basically it translates through a contractual arrangement. Like I said earlier, everyone here that has 8 9 testified has the requisite skill set. In fact, Councilman Henon even suggested 10 11 everyone here has the threshold limit or test, met the standard to have this 12 13 discussion with you and potentially 14 participate in this transaction. 15 From our standpoint, the social 16 costs are very important - the Utility 17 Trust Fund, creating jobs, energizing the community through education and 18 STEAM-based education. Ceci can talk 19 20 about some statistics now through STEAM, 21 but, frankly, there is a dearth of qualified candidates, frankly, as 22 23 identified by the American Petroleum Institute and other trade groups based on 2.4 25 a host of issues, one of which is the

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2	educational problems incidental to our	
3	country but, more importantly, the aging	
4	demographic, the aging populations, the	
5	whole lot of challenges. In fact, Ceci	
6	can get into that right now.	
7	DR. LUSARDI: And we talk a lot	
8	about job creation and what that will	
9	mean, but for us as a minority-owned	
10	organization from a Latino perspective,	
11	we're saying, Well, how are we going to	
12	fulfill those jobs? Where are they	
13	coming from? And are we ready? And it's	
14	a self-audit to look at our energy hub in	
15	light of STEM/STEAM-based education,	
16	preparing the workforce to supply those	
17	jobs. And we feel that through the	
18	Summer Energy Academy, through our	
19	individual work, again, to John's point,	
20	this is not a "one of" transaction. It's	
21	not what we do. It's about sharing	
22	opportunities for community	
23	transformation, whether it is John has	
24	created a pool of history-makers, and we	
25	are making history ourselves. We come	

from a human rights perspective, a women's equality perspective, a youth development perspective. If we look at the social aspect of it, we want to make of the P3, we want to make sure that not only are we part of a P3 with City Council and making history together, but are we also considering different aspects of the population from a social perspective, from a Latino perspective, African American perspective, gender perspective. Are we going as wide and thoughtfully as we can be? And for us, it's an opportunity to be at that table and reference that interest that are not only going to move the needle forward, but we think that the transparency of who Chariot Companies is as an organization brings so much value through our partnerships, through not just what we do, but what we achieve together, whether it is at Stadium Village, providing internship opportunities, working with			Page 371
women's equality perspective, a youth development perspective. If we look at the social aspect of it, we want to make of the P3, we want to make sure that not only are we part of a P3 with City Council and making history together, but are we also considering different aspects of the population from a social perspective, from a Latino perspective, African American perspective, gender perspective. Are we going as wide and thoughtfully as we can be? And for us, it's an opportunity to be at that table and reference that interest that are not only going to move the needle forward, but we think that the transparency of who Chariot Companies is as an organization brings so much value through our partnerships, through not just what we do, but what we achieve together, whether it is at Stadium Village, providing internship opportunities, working with	1	3/13/15 - ENERGY OPPORTUNITIES - RES. 150072	
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that not only are we part of a P3 with City Council and making history together, but are we also considering different aspects of the population from a social perspective, from a Latino perspective, African American perspective, gender perspective. Are we going as wide and thoughtfully as we can be? And for us, it's an opportunity to be at that table and reference that interest that are not only going to move the needle forward, but we think that the transparency of who Chariot Companies is as an organization brings so much value through our partnerships, through not just what we do, but what we achieve together, whether it is at Stadium Village, providing internship opportunities, working with	5	the social aspect of it, we want to	
City Council and making history together, but are we also considering different aspects of the population from a social perspective, from a Latino perspective, African American perspective, gender perspective. Are we going as wide and thoughtfully as we can be? And for us, it's an opportunity to be at that table and reference that interest that are not only going to move the needle forward, but we think that the transparency of who Chariot Companies is as an organization brings so much value through our partnerships, through not just what we do, but what we achieve together, whether it is at Stadium Village, providing internship opportunities, working with	б	make of the P3, we want to make sure	
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11 perspective, from a Latino perspective, 12 African American perspective, gender 13 perspective. Are we going as wide and 14 thoughtfully as we can be? And for us, 15 it's an opportunity to be at that table 16 and reference that interest that are not 17 only going to move the needle forward, 18 but we think that the transparency of who 19 Chariot Companies is as an organization 20 brings so much value through our 21 partnerships, through not just what we 22 do, but what we achieve together, whether 23 it is at Stadium Village, providing 24 internship opportunities, working with	9	but are we also considering different	
African American perspective, gender perspective. Are we going as wide and thoughtfully as we can be? And for us, it's an opportunity to be at that table and reference that interest that are not only going to move the needle forward, but we think that the transparency of who Chariot Companies is as an organization brings so much value through our partnerships, through not just what we do, but what we achieve together, whether it is at Stadium Village, providing internship opportunities, working with	10	aspects of the population from a social	
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it's an opportunity to be at that table and reference that interest that are not only going to move the needle forward, but we think that the transparency of who Chariot Companies is as an organization brings so much value through our partnerships, through not just what we do, but what we achieve together, whether it is at Stadium Village, providing internship opportunities, working with	13	perspective. Are we going as wide and	
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only going to move the needle forward, but we think that the transparency of who Chariot Companies is as an organization brings so much value through our partnerships, through not just what we do, but what we achieve together, whether it is at Stadium Village, providing internship opportunities, working with	15	it's an opportunity to be at that table	
but we think that the transparency of who Chariot Companies is as an organization brings so much value through our partnerships, through not just what we do, but what we achieve together, whether it is at Stadium Village, providing internship opportunities, working with	16	and reference that interest that are not	
19 Chariot Companies is as an organization 20 brings so much value through our 21 partnerships, through not just what we 22 do, but what we achieve together, whether 23 it is at Stadium Village, providing 24 internship opportunities, working with	17	only going to move the needle forward,	
brings so much value through our partnerships, through not just what we do, but what we achieve together, whether it is at Stadium Village, providing internship opportunities, working with	18	but we think that the transparency of who	
partnerships, through not just what we do, but what we achieve together, whether it is at Stadium Village, providing internship opportunities, working with	19	Chariot Companies is as an organization	
do, but what we achieve together, whether it is at Stadium Village, providing internship opportunities, working with	20	brings so much value through our	
23 it is at Stadium Village, providing 24 internship opportunities, working with	21	partnerships, through not just what we	
24 internship opportunities, working with	22	do, but what we achieve together, whether	
	23	it is at Stadium Village, providing	
25 the Climate Center at Penn through an	24	internship opportunities, working with	
	25	the Climate Center at Penn through an	

Page 372 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. internship program to evaluate the work that we're doing, working in partnership 3 with the Department of Energy to 4 cultivate what this model could look like 5 6 as an action plan. And so I go back to we love Philly. We love being from this area, 8 9 living here, working here, and we want to walk down the street with the same level 10 11 of respect when I was teaching GED 12 classes in Kensington that I can also walk into a fortune 50 board with that 13 14 same level of credibility to say, We are 15 representing the whole amalgam of issues 16 related to a PGW P3 that -- it's been a 17 long day. PGW P3. My apologies. what we're here, to widen and deepen that 18 conversation. I know the City is looking 19 20 also at people, places, and processes, 21 and we wanted to be a Venn diagram, an interconnected conversation so we can 22 23 together look at what PGW means, what a P3 can look like, what that impact can 2.4 25 have in the community long term and not

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2	forgetting where we come from.	
3	There is thoughtfulness. There	
4	is intentionality about everything that	
5	we do, but there's also a period and	
6	element of bridge building, and we can	
7	have this business acumen and	
8	sophistication to look at operations,	
9	cost reduction programs and, you know,	
10	complex financial operation can be, but	
11	at the same time, we can go into the	
12	community and talk to children whose	
13	parents are incarcerated and they have	
14	they're living with grandparents, and	
15	through the Summer Energy Academy, we can	
16	talk with them about careers in energy.	
17	Sometimes, and I know from my	
18	perspective, as a Latino and immigrant,	
19	we're not as used to math and science,	
20	and our role is to say science can be fun	
21	and look at the real-world applications	
22	in energy. You don't have to go to Penn	
23	or MIT to make \$85,000. You can be a	
24	pipe fitter. You can work in the gas	
25	industry and provide for your family.	

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2	And so we work again, we	
3	want to our premise is to make sure	
4	that the left hand talks to the right	
5	hand. It is time that we not only make	
6	history together, but we invite you to	
7	consider walking with us far and wide so	
8	that all of the aspects of this beautiful	
9	interconnectivity is looked at with a	
10	level of respect it deserves for all	
11	involved. We can make a lot of profit	
12	and we can make a lot of good, and that's	
13	our proposition to you.	
14	COUNCILWOMAN TASCO: Well,	
15	thank you very much. We certainly have	
16	your testimony, and as we are in a	
17	discussion, certainly your perspective is	
18	worthwhile and it does reach out to the	
19	community, and we just have to figure out	
20	how all this comes together.	
21	MR. HENRY: Thank you.	
22	DR. LUSARDI: Thank you very	
23	much.	
24	COUNCILWOMAN TASCO: Thank you	
25	very much.	

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2	MR. HENRY: Enjoy your weekend.	
3	COUNCILWOMAN TASCO: I hate to	
4	rush you. Next time you're first.	
5	We have some people who want to	
6	testify. I think I've done all the	
7	panels. We have Mr. Matt Walker.	
8	COUNCILMAN NEILSON: He'll call	
9	them.	
10	COUNCILWOMAN TASCO: You'll	
11	call them?	
12	COUNCILMAN NEILSON: Let the	
13	Clerk call them.	
14	COUNCILWOMAN TASCO: All right.	
15	I'm sorry. Yes, sir.	
16	(Witness approached witness	
17	table.)	
18	MR. WALKER: Hi. My name is	
19	Matt Walker and I'm the Community	
20	Outreach Director with Clean Air Council.	
21	We're an environmental health	
22	organization dedicated to protecting	
23	everyone's right to breathe clean air,	
24	and we've been working on that mission	
25	since 1967. Thanks for letting me speak	
1		

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1	3/13/15 - ENERGY OPPORTUNITIES - RES. 150072	
2	here today.	
3	The Council and its members are	
4	seriously concerned about the proposal to	
5	transform Philadelphia into a fossil fuel	
6	energy hub. The Philadelphia economy is	
7	driven by its tourism, medical services,	
8	and higher education. It's a progressive	
9	city that leads the rest of Pennsylvania.	
10	Everyone in this room knows	
11	full well the devastating global and	
12	local environmental and public health	
13	impacts that are associated with the	
14	continued use of fossil fuels.	
15	Philadelphia today is at a crossroads.	
16	Is its future one that promotes fossil	
17	fuels or is it one that embraces the	
18	energy and jobs of the 21st century such	
19	as energy efficiency, solar, and public	
20	transportation and others? Hopefully	
21	Philadelphia will choose to be a leader	
22	and prioritize public health, safety, and	
23	welfare and the environment.	
24	Philadelphians are exposed to	
25	chronic elevated levels of air pollution.	
1		

Page 377 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. The region is not in attainment of the federal standards for ozone, smog, and 3 particulates. A fossil fuel energy hub 4 5 as it's currently being considered will 6 include expanding refineries, LNG, and gas liquid pipelines, and petrochemical manufacturing. Increasing the number of 8 9 such facilities would reverse the progress the City has made in cleaning up 10 11 its air by reinvigorating and ramping up 12 many of the same types of pollutant sources as those largely responsible for 13 14 Philadelphia's history of poor air 15 quality. 16 New or expanded infrastructure 17 such as the expanded PES and Marcus Hook refineries and others would significantly 18 increase harmful air pollution in the 19 20 region. A fossil fuel energy hub would 21 also increase the potential risk to public welfare should an accident occur. 22 23 Center City residents are already uneasy about the rail cars carrying oil that 2.4 25 crisscross the City. Two derailments in

Page 378 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. Philadelphia in a year is not reassuring. The proposed fossil fuel hub 3 would hinder the chance our city has to 4 5 excel in an environmentally sustainable 6 economy that could provide many more good-paying and long-lasting jobs while promoting clean air and water and curbing 8 9 climate change. It is shortsighted to base 10 11 Philadelphia's future economy on natural 12 gas and related products. The price of Marcellus Shale gas is volatile and is 13 14 projected to increase. While there are 15 varying opinions about how much gas could 16 be extracted, newer projections about 17 supplies are substantially smaller than initial optimistic estimates. City 18 Council must avoid financially risky 19 20 business partnerships and should not 21 allow large corporate interests to 22 control Philadelphia's future. 23 It is financially risky for PGW 2.4 to consider acting as an anchor customer 25 of natural gas so that pipeline companies

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1	3/13/15 - ENERGY OPPORTUNITIES - RES. 150072	
2	can build this proposed pipe dream	
3	pipeline from Northeast Pennsylvania to	
4	Philadelphia and expand additional	
5	infrastructure from it.	
6	There are a growing number of	
7	pipeline explosions and leakages	
8	occurring across the country. A	
9	private-public partnership to invest in a	
10	natural gas pipeline would substantially	
11	add to the City's risk since this	
12	infrastructure is inherently dangerous	
13	and could result in negative public	
14	health and environmental impacts. A	
15	private-public partnership would also	
16	transfer investment risk in pipeline	
17	companies to the City. City Council	
18	should be extremely cautious of entering	
19	into agreements with limited liability	
20	corporations like PES and Liberty Energy	
21	Trust, both of which have a limited track	
22	record.	
23	Clean Air Council rejects the	
24	idea that City Council can pursue both a	
25	fossil fuel energy hub as well as promote	
4		

Page 380 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. a green economy and continue to strive to be the most sustainable city in America. 3 If Councilmembers took action to truly 4 5 promote Philadelphia's green economy, they would be leading the charge on 6 promoting the expansion of sectors like solar efficiency and public transit. 8 9 Instead, concrete advancements on these sectors get moved to the bottom of the 10 11 priority list. 12 What the purpose and agenda of this public hearing today appears like 13 14 City Council has already made up its mind 15 clearly about pursuing a fossil fuel 16 energy hub, a decision that will lock 17 Philadelphia into years of pollution and 18 health impacts. It seems like the real purpose of these hearings is to smooth 19 20 away for a fossil fuel energy hub. 21 Councilmembers have so far done a poor job of asking for and acting on community 22 23 input or concerns, and that has got to change. How much effort has City Council 2.4 25 put into reaching out to businesses that

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2	have a vision for developing Philadelphia	
3	as a sustainable energy hub?	
4	While companies and elected	
5	officials see the present gas glut as an	
6	opportunity to make use of the	
7	gas-related products, it is shortsighted	
8	to base our city's economic future on	
9	such a volatile commodity like natural	
10	gas. Gas is a non-renewable resource,	
11	and projections about the supplies have	
12	plummeted from initial estimates.	
13	City Council should actively be	
14	pursuing a sustainable economy that would	
15	provide long-term liveable-wage jobs and	
16	revenue to the City without the negative	
17	environmental or economic impacts.	
18	The Council's concern that the	
19	fossil fuel energy hub concept will	
20	result in mostly short-term jobs that	
21	aren't guaranteed for Philadelphia	
22	workers while leaving the City with	
23	environmental and economic costs for	
24	decades to come. There are easily over	
25	10,000 living-wage job opportunities in	

Page 382 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. sectors like expanding public transit, energy efficiency, and renewable energy 3 in the next ten years. The American 4 5 Council for an Energy Efficient Economy 6 completed a study in 2009 that found with 7 the right policies, energy efficiency and solar could spur the growth of at least 8 9 9,000 jobs in Philadelphia by 2025 in installing energy efficiency and solar 10 11 measures. Based on National Renewable 12 Energy Laboratory data, the Council estimates that in Philadelphia 13 14 cost-effective rooftop solar could 15 produce over 20 percent of the City's 16 energy, electricity needs; provide more than 4,000 well-paid jobs; and increase 17 18 grid reliability. 19 There are many more jobs in 20 these green sectors than the short-term 21 construction jobs or even the limited amount of long-term jobs being touted at 22 refineries. Hundreds and hundreds I 23 heard earlier today. And you don't even 2.4 25 have to change the rules, as some were

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1	3/13/15 - ENERGY OPPORTUNITIES - RES. 150072	
2	suggesting earlier today.	
3	In addition, avoiding the	
4	fossil fuel energy hub would ensure that	
5	major job sectors in the City like	
6	healthcare, the arts, hospitality, and	
7	education are not threatened.	
8	People decide to stay or move	
9	to a city because of quality of life	
10	issues. Increases in toxic air pollution	
11	from energy hub infrastructure may cause	
12	some people to move away, may cause	
13	parents to think twice about sending	
14	their children to our colleges and	
15	universities, and may hurt the sectors	
16	that currently provide a lot of jobs and	
17	revenue to the City.	
18	The Philadelphia region has the	
19	potential for 8,700 megawatts of rooftop	
20	solar, equivalent to about 25 percent of	
21	the region's energy usage. Over 20	
22	years, this equates to \$1.3 billion in	
23	direct economic activity annually for the	
24	Philadelphia area. The indirect economic	
25	benefits the annual economic activity	

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2	would increase the number to \$1.95		
3	billion to the region annually, and		
4	Philadelphia could potentially get about		
5	5 percent of this in the form of		
6	property, sales, wage taxes. It would		
7	equate to about 97.5 million, about the		
8	same as earlier today. I think someone		
9	asked the question about LNG, how much		
10	would that bring in. It's about the same		
11	amount.		
12	It does not make economic sense		
13	to make such a substantial capital		
14	investment in expanding fossil fuel		
15	infrastructure when there's so many other		
16	more fruitful options and healthy and		
17	safe options. Clean Air Council urges		
18	City Council to reject the plan to turn		
19	Philadelphia into a gas energy hub and to		
20	embrace an economy for Philadelphia based		
21	on public health, education, and the		
22	environment.		
23	Thank you.		
24	COUNCILMAN NEILSON: Thank you		
25	for your testimony. I just want to,		

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	2.42.42	Page 385
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2	before you leave the table, let you know	
3	that the goals of these hearings is to	
4	examine all different parts, and none of	
5	us have made up our mind. We made up our	
6	mind not to sell PGW, which ended up to	
7	be a good choice. Okay? But we have to	
8	move forward and we have to see what's	
9	best for the City. So we are doing this	
10	and this Committee was formed for the	
11	best interest of the City and the people.	
12	We are being very cautious,	
13	thus the hearings. We were blind-sided	
14	last time without having the education.	
15	And Mayor Pawlowski came and spoke about	
16	Allentown. If you noticed, a lot of us	
17	focused on him having hearings throughout	
18	the city, the 30, 40 hearings and all.	
19	So we want to make certain that we take	
20	the correct steps here.	
21	So we are being very cautious.	
22	I'm glad you want us to be cautious,	
23	because that's exactly what we're doing.	
24	Thank you again for your	
25	testimony and have a great weekend.	

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2	MR. WALKER: Thanks. You too.	
3	COUNCILWOMAN TASCO: Thank you.	
4	COUNCILMAN NEILSON: Will the	
5	Clerk call the next witness, please.	
6	THE CLERK: Giving limited	
7	time. I apologize, but the remainder of	
8	the guests are going to have to abide by	
9	a three-minute rule.	
10	Sam Bernhardt.	
11	(Witness approached witness	
12	table.)	
13	MR. BERNHARDT: Good afternoon,	
14	evening, afternoon. One of those.	
15	COUNCILMAN NEILSON: Good day,	
16	Sam. How is that?	
17	MR. BERNHARDT: My name is Sam	
18	Bernhardt. I'm the Senior Pennsylvania	
19	Organizer for Food and Water Watch.	
20	We're a national advocacy organization	
21	working to champion healthy food and	
22	clean water for all.	
23	To that end, we are extremely	
24	concerned regarding the plan being put	
25	forward by the oil and gas industry to	
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2	scale up fossil fuel infrastructure in	
3	and around our city for several reasons,	
4	but the reason I'm here today is to voice	
5	concern that this plan threatens	
6	Philadelphia's fiscal health through its	
7	reliance on public-private partnerships	
8	that are risky for this city.	
9	Food and Water Watch has	
10	expertise on the issue of public-private	
11	partnerships I'll just refer to them	
12	as P3s through our work on water	
13	privatization, which increasingly	
14	presents itself in the form of P3s.	
15	P3s are intrinsically risky for	
16	municipalities, as they	
17	disproportionately expose the public side	
18	of these deals to risk. Limited	
19	liability corporations can shield	
20	themselves from the fallout of financial,	
21	environmental or public safety	
22	catastrophes. Academic reviews of P3s	
23	have found that many U.S. P3s are a means	
24	of transferring investment risk from the	
25	private sector to the public sector. And	

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2	that's a quote. In addition to the	
3	uncontrollable market forces or accidents	
4	or catastrophes, complexity and	
5	uncertainty involved in P3s leaves	
6	municipalities at an inherent	
7	disadvantage.	
8	P3s involving fossil fuels and	
9	energy infrastructure represent an	
10	increased level of risk due to their	
11	potential for accidents, with large	
12	environmental or public health impacts.	
13	Gas pipelines leak. LNG being	
14	transported on trucks leaks. Explosions	
15	happen. This is one of the reasons why	
16	energy ventures are frequently moved	
17	forward using special purpose vehicles,	
18	so these LLCs.	
19	We don't need to look very far	
20	to see what this looks like. Harrisburg	
21	has been crippled by debt resulting from	
22	a badly planned deal intended to increase	
23	the city's revenues by making upgrades to	
24	its incinerator, making upgrades to	
25	energy infrastructure. Does that sound	
i		· ·

		Dage 390
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2	familiar? Harrisburg's P3 around the	
3	incinerator was meant to create a cash	
4	cow for the city. Instead, it dragged	
5	the city into receivership. Now	
6	proponents of Philadelphia's oil and gas	
7	industry are presenting Council with P3s	
8	that could flood the City's coffers with	
9	new revenues from environmentally sound	
10	projects. This sounds eerily similar.	
11	It's important to remember that	
12	these advocates for the oil and gas	
13	industry or really anyone who spoke	
14	before myself and Mr. Walker here today	
15	are motivated by one thing, and it's	
16	their own bottom line. They're not	
17	motivated by the interest of the people	
18	of Philadelphia.	
19	My third quick thing to touch	
20	on is that more specifically to energy	
21	being risky is that the people who spoke	
22	before me here in this room are	
23	inherently risky. Mr. Rinaldi has a very	
24	limited track record with PES. Two years	
25	is not a lot for the City of Philadelphia	
	-	

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2	to bank its future on.	
3	One last thing I'd like to say	
4	is, Mr. Pawlowski, Mayor Pawlowski	
5	COUNCILMAN NEILSON: Hold on,	
6	hold on, hold on. Your three minutes are	
7	up. Before we start going into speaking	
8	badly about a Mayor or something else,	
9	I'd rather you not. Thank you for your	
10	testimony here today, Sam. We appreciate	
11	it.	
12	MR. BERNHARDT: Thank you.	
13	THE CLERK: Chris Hoeppner.	
14	(No response.)	
15	THE CLERK: Zein Nakhoda.	
16	(Witness approached witness	
17	table.)	
18	COUNCILMAN NEILSON: Hi, Zein.	
19	Can you pull the mike close to you and	
20	say your name for the record before you	
21	start your testimony.	
22	MR. NAKHODA: Yes. My name is	
23	Zein Nakhoda, Z-E-I-N, N-A-K-H-O-D-A, and	
24	I appreciate the chance to speak today.	
25	And it's made me very curious about the	
1		

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2	procedure for today, because I really	
3	appreciate the chance to speak and the	
4	space that these hearings create, but I	
5	know there are many folks in my	
6	constituency who couldn't afford to stay	
7	all day to testify. And I appreciate it	
8	a lot, and I just wish that I'm	
9	furious why there isn't more time and	
10	public voice isn't more of a priority in	
11	these hearings. I've been waiting very	
12	patiently today.	
13	COUNCILWOMAN TASCO: It's	
14	called the ability to endure 18 hours.	
15	MR. NAKHODA: But I will move	
16	quickly to my testimony.	
17	COUNCILMAN NEILSON: We'll be	
18	able to come back at a future date if	
19	you'd like to leave your written	
20	testimony. We'll put in the record, and	
21	we can have you back here for the next	
22	one, because today, as the Chairwoman	
23	spoke, this is not over yet and there's	
24	no decisions being made here today, just	
25	so everybody knows. So, please, whatever	
1		

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2	you choose.	
3	MR. NAKHODA: Great. Thank	
4	you.	
5	So my name is Zein Nakohoda and	
6	I'm speaking on behalf of the 215	
7	People's Alliance and the Maypop	
8	Collective for Climate and Economic	
9	Justice. 215 People's Alliance is an	
10	emerging coalition focused on building a	
11	progressive vision for working people	
12	across Philadelphia, and we believe	
13	Philadelphia's energy future and the	
14	adaptations to changing environmental	
15	conditions is increasingly important to	
16	working families' health, safety, and	
17	economic security over the long term.	
18	For this reason, we support	
19	Council defending municipal ownership of	
20	PGW and we uphold public ownership in	
21	local governance as paramount to the	
22	democratic energy future we need.	
23	The acquisition of UIL Holdings	
24	validates Council's concerns around	
25	selling PGW. Consumers and workers	

Page 393 1 3/13/15 - ENERGY OPPORTUNITIES - RES. 150072 2. should not be without a say or knowledge about decision-making of our utility 3 services. And the proposed sale of UIL 4 put good jobs, protections for seniors 5 and low-income customers at risk with inadequate protections for Philadelphia's workforce. 8 9 As a publicly owned utility, 10 PGW is obligated to protect the rights of 11 low-income residents and working 12 families. Philadelphians can keep PGW accountable through our elected officials 13 14 in the case of increased rates, poor services, and in shaping the direction of 15 16 our energy economy. 17 While we applaud efforts to retain municipal ownership of PGW, we're 18 concerned about proposals to have PGW 19 20 grow a fossil fuel energy hub in our 21 city. Philadelphia must engage broader 22 challenges of energy transition to 23 protect against economic and environmental threats associated with 2.4 25 fossil fuel extraction and transport and

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1	3/13/15 - ENERGY OPPORTUNITIES - RES. 150072	
2	resulting climate change.	
3	Proposed fossil fuel	
4	infrastructure, including pipeline	
5	networks, oil by rail, gas liquefaction,	
6	and compressing stations, pose	
7	significant health and safety risks to	
8	Philadelphia residents and workers, with	
9	questionable economic return to	
10	Philadelphians.	
11	Climate change, a product of	
12	decades of fossil fuel use, increasingly	
13	threatens Philadelphia's financial	
14	security and infrastructure. The	
15	frequency and magnitude of super storms	
16	is increasing, along with the frequency	
17	of severe floods.	
18	THE CLERK: Thank you.	
19	MR. NAKHODA: I'm sorry?	
20	COUNCILMAN NEILSON: Your three	
21	minutes are up, Zein.	
22	MR. NAKHODA: Thanks for the	
23	opportunity.	
24	COUNCILMAN NEILSON: Zein,	
25	would you give us that testimony so we	

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2	can put it completely on the record for	
3	us for the other members so we can have	
4	that?	
5	MR. NAKHODA: Sure. Is there a	
6	place I can e-mail another copy? This	
7	one is marked up pretty heavily.	
8	COUNCILWOMAN TASCO: Sure. You	
9	can e-mail it to	
10	COUNCILMAN NEILSON: To me,	
11	Ed.Neilson@phila.gov.	
12	MR. NAKHODA: Thanks so much.	
13	COUNCILWOMAN TASCO: It's	
14	online.	
15	THE CLERK: Steve Masters.	
16	(No response.)	
17	COUNCILWOMAN TASCO: Meenal	
18	Raval.	
19	(Witness approached witness	
20	table.)	
21	COUNCILMAN NEILSON: Thank you	
22	for coming and thank you for your	
23	patience. I know you've been here	
24	COUNCILWOMAN TASCO: All day.	
25	COUNCILMAN NEILSON: all	

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2	day.		
3	MS. RAVAL: Yup. Thank you		
4	all. I didn't know you all put such long		
5	days in. I'm impressed.		
6	I'm Meenal Raval. I'm honored		
7	to be here today. Firstly, Councilman		
8	Johnson is not here, but I'd like to		
9	thank him and all of you, I guess, for		
10	acknowledging the risks of oil trains and		
11	the resolution you all passed yesterday.		
12	I represent a strong coalition		
13	of groups, groups that you may have heard		
14	of such as the Clean Air Council, which		
15	was founded in '67; Clean Water Action		
16	founded in '72; the Delaware Riverkeeper		
17	Network in '88; Food and Water Watch in		
18	'05; and the Pennsylvania Interfaith		
19	Power and Light representing 43 member		
20	congregations; a group called Protecting		
21	Our Waters in '09; and Physicians for		
22	Social Responsibility. It goes on and		
23	on. And some groups you may not have		
24	known of, which is the Moms Clean Air		
25	Force and their Naptime Activism; the		

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2	Maypop Collective for Climate and	
3	Economic Justice; the Philadelphia Jewish	
4	Climate Action Network; and EDGE,	
5	Encouraging Development of a Green	
6	Economy.	
7	As you can see, we're quite a	
8	diverse group of Philadelphia residents.	
9	Like most of America, we look to you, our	
10	elected officials, as well as ourselves	
11	to step up to the challenge of our times.	
12	The challenge we speak of, our changing	
13	climate and the need for carbon	
14	reduction. There's even a PennFuture	
15	poll amongst Pennsylvanians which shows	
16	that 82 percent want to cut carbon, 93	
17	want help with energy efficiency, and	
18	over 60 percent believe switching to	
19	clean renewable energy will create jobs.	
20	So we're concerned about	
21	building on to the fossil fuel-based	
22	economy that people talked about today,	
23	one that emits additional greenhouse	
24	gases, that contaminates our rivers, our	
25	drinking water by fracking for gas, and	

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1	3/13/15 - ENERGY OPPORTUNITIES - RES. 150072	
2	the overall polluting and unsafe	
3	infrastructure around this economy. In	
4	our vision, a moral vision we like to	
5	think, for a vibrant, healthy future,	
6	fossil fuels have been left in the last	
7	century. We see us as building a green	
8	economy based on energy efficiency,	
9	conservation, and clean renewable energy	
10	sources.	
11	When there's a solar spill,	
12	people simply say it's a nice day. I	
13	like that.	
14	So with the Greenworks' goal of	
15	making Philadelphia the greenest city in	
16	the country, what are we waiting for? We	
17	have a low carbon transition economy to	
18	build.	
19	Thank you.	
20	COUNCILWOMAN TASCO: Thank you	
21	very much.	
22	COUNCILMAN NEILSON: Thank you	
23	very much for your testimony today.	
24	THE CLERK: Tamara Clements.	
25	(No response.)	

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2	THE CLERK: Susan Saxe.	
3	(Witness approached witness	
4	table.)	
5	COUNCILMAN NEILSON: Good	
6	evening, Susan.	
7	MS. SAXE: Thanks for putting	
8	up with me. My name is Susan Saxe. I'm	
9	a member of many of the groups that	
10	Meenal just mentioned, probably some	
11	more. I'm here to speak about something	
12	you may not have heard of, which is how	
13	the same systemic racism that uses urban	
14	as a code for black and brown and guts	
15	our schools so that the rich and powerful	
16	don't have to pay their fair share of	
17	taxes also fuels the plan to sacrifice	
18	the health, safety, and future of our	
19	city so that a dying industry can grab	
20	the last drop of profit in its race to	
21	the bottom.	
22	Nobody says it better than	
23	investigative reporter and climate	
24	activist Naomi Klein. So I want to share	
25	a few excerpts from an article of hers	

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2	that I'll leave for you to read in full	
3	later.	
4	On the second day of the	
5	now-infamous United Nations climate	
6	summit in Copenhagen, a document was	
7	leaked showing that governments were on	
8	the verge of a target that would cap	
9	global temperature rise at 2 degrees	
10	Celsius, not enough to save some	
11	low-lying small island states from	
12	annihilation. And in Africa, the target	
13	would translate into a full-scale	
14	humanitarian disaster.	
15	But African delegates weren't	
16	standing for it. You think holding up a	
17	sign is something? When the text was	
18	leaked, the sterile hallways of the	
19	conference center came alive with shouts	
20	of, "We will not die quietly" and "2	
21	degrees is suicide."	
22	The highly racialized	
23	discounting of certain lives does not	
24	play out just between countries but also,	
25	unfailingly, within them - perhaps most	

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2	dramatically within the United States.	
3	During Katrina, it was	
4	overwhelmingly New Orleans's black	
5	residents who were abandoned on the	
6	rooftops and in the Superdome, who were	
7	labeled refugees in their own country and	
8	who were shot on the streets of their	
9	city.	
10	When Superstorm Sandy hit New	
11	York City, a similar combination of	
12	forces showed its brutal face.	
13	Racism is what has allowed the	
14	worst health impact of digging up,	
15	processing, and burning fossil fuels,	
16	from cancer clusters to asthma, to be	
17	systematically dumped on the	
18	neighborhoods where people of color live,	
19	work, and play.	
20	If we committed ourselves to	
21	responding to the climate crisis on the	
22	basis that black lives matter, it would	
23	mean unprecedented economic and	
24	technological investments in some of the	
25	most neglected parts of the world, from	
1		

		Page 402
1	3/13/15 - ENERGY OPPORTUNITIES - RES. 150072	
2	Kenya to Ferguson to Pine Ridge and, dare	
3	I add, many parts of Philadelphia,	
4	bringing greatly improved services,	
5	increased democracy and	
6	self-determination, real food security,	
7	and countless good jobs.	
8	In Copenhagen 2009, African	
9	governments argued that if black lives	
10	matter, then 2 degrees of warming was too	
11	high. By disregarding this basic	
12	humanistic logic, the biggest polluters	
13	were making a crude cost-benefit	
14	analysis. They were calculating that the	
15	loss of life, livelihood, and culture for	
16	some of the poorest people on the planet	
17	was an acceptable price to pay to protect	
18	the economies of some of the richest	
19	people on the planet. That, my friends,	
20	is the twisted logic of the Phil Rinaldis	
21	of the world. The question is, will	
22	Philadelphia City Council side with the	
23	brutal calculus of corporate looters or	
24	with the people of our great city?	
25	Thank you. And here are copies	

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1	3/13/15 - ENERGY OPPORTUNITIES - RES. 150072	
2	of the full articles for your	
3	consideration.	
4	COUNCILMAN NEILSON: If you	
5	hand it to the Sergeant-of-Arms, he will	
6	grab that off of you. Thank you, Susan,	
7	for your testimony. Thank you for your	
8	patience.	
9	MS. SAXE: While he's here,	
10	Moon Smith had to leave and wanted to	
11	submit her testimony as a nurse and	
12	midwife on the impact of chemical and	
13	fossil fuel pollution on babies and	
14	families.	
15	COUNCILMAN NEILSON: Thank you,	
16	and we will put that into the record for	
17	her as well.	
18	MS. SAXE: Thank you.	
19	COUNCILMAN NEILSON: Thank you.	
20	THE CLERK: Peter Winslow.	
21	COUNCILMAN NEILSON: So for the	
22	record, we're going to put Moon Smith's	
23	testimony into the record.	
24	(Witness approached witness	
25	table.)	

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1	3/13/15 - ENERGY OPPORTUNITIES - RES. 150072		
2	COUNCILWOMAN TASCO: Good		
3	afternoon. I'm sorry. Please proceed.		
4	MR. WINSLOW: Chairwoman Tasco,		
5	Councilman Neilson, Councilman Oh, I		
6	appreciate the opportunity to participate		
7	in this conversation. The hour is late.		
8	I'll be brief.		
9	My name is Peter Winslow. I'm		
10	the President of the Evolve Foundation.		
11	Evolve was founded by Rob Stuart, who is		
12	a public citizen and known to many		
13	members of the Council, and I carry out		
14	his legacy. I'm also here as a member of		
15	the Board of the Philadelphia and the		
16	Pennsylvania Interfaith Power and Light.		
17	Evolve has been the fiscal sponsor for		
18	some of the organizations that have been		
19	mentioned previously, specifically		
20	Protecting our Waters.		
21	As we reflect on as you		
22	reflect on much of what has been heard		
23	today, I'd like to share some		
24	observations that I have in reaction to		
25	what I heard. I was impressed very much		

		Page 405
1	3/13/15 - ENERGY OPPORTUNITIES - RES. 150072	
2	by Mr. White and the position that he	
3	took as a fiduciary responsible for	
4	assuring that the citizens of	
5	Philadelphia have adequate heat and other	
6	resources that are supplied by PGW. He	
7	seems like a very good CEO for the	
8	Council to be entrusting that aspect of	
9	its operations in the City's assets, and	
10	I applaud the activity of the Council and	
11	not giving away such a valuable asset as	
12	PGW in a deal that was not a good one.	
13	He did, however, say that the	
14	problem of his infrastructure was under	
15	control, and that was refuted by people	
16	who spoke later on. And I think I would	
17	agree with those who spoke later that the	
18	state of the infrastructure of PGW is not	
19	good. From the standpoint of direct	
20	public safety, of accidents, and loss of	
21	life through explosions and such, it's a	
22	moderate risk, but the ongoing	
23	detrimental effects of the atmosphere	
24	from leakages, many leakages, from a very	
25	substandard system is really quite	

		Page 406
1	3/13/15 - ENERGY OPPORTUNITIES - RES. 150072	
2	serious. And one of the things that I	
3	understand is on the mind of the Council	
4	is finding a way to have sufficient	
5	resources, financial resources, to solve	
6	this problem, and I appreciate the	
7	efforts that are being put into finding	
8	that kind of a solution.	
9	The other reaction I'd like to	
10	make is to what Mr. Rinaldi had put	
11	forth, and this seems to me to be relying	
12	on a field of dreams approach. If you	
13	build it, they will come, asserting facts	
14	that are not in evidence that	
15	manufacturing would flow from the	
16	availability of energy. I think that's	
17	really putting the horse before the cart	
18	and if in fact	
19	THE CLERK: Thank you, sir.	
20	COUNCILMAN NEILSON: Those are	
21	your three minutes.	
22	MR. WINSLOW: It goes by fast.	
23	COUNCILMAN NEILSON: It does.	
24	It goes fast.	
25	MR. WINSLOW: Thank you so	

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1	3/13/15 - ENERGY OPPORTUNITIES - RES. 150072	
2	much. Have a good weekend.	
3	COUNCILMAN NEILSON: Thank you	
4	for your testimony. Thank you for being	
5	patient today.	
6	MR. WINSLOW: My pleasure.	
7	COUNCILMAN NEILSON: You can	
8	leave your testimony here.	
9	MR. WINSLOW: These are not	
10	prepared marks.	
11	COUNCILMAN NEILSON: Okay.	
12	Thank you.	
13	THE CLERK: The final speaker	
14	is Coryn Wolk.	
15	(No response.)	
16	COUNCILMAN NEILSON: Is there	
17	anyone else here to testify before us	
18	today on the public comment?	
19	(No response.)	
20	COUNCILMAN NEILSON: If not,	
21	this Committee is in recess until the	
22	call of the Chairs. That's it. Have a	
23	great weekend, everybody.	
24	(Special Committee on Energy	
25	Opportunities concluded at 5:30 p.m.)	

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1		
2	CERTIFICATE	
3	I HEREBY CERTIFY that the	
4	proceedings, evidence and objections are	
5	contained fully and accurately in the	
6	stenographic notes taken by me upon the	
7	foregoing matter, and that this is a true and	
8	correct transcript of same.	
9		
10		
11		
12		
13		
14	MICHELE L. MURPHY	
15	RPR-Notary Public	
16		
17		
18		
19	(The foregoing certification of this	
20	transcript does not apply to any reproduction	
21	of the same by any means, unless under the	
22	direct control and/or supervision of the	
23	certifying reporter.)	
24		
25		

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