

COUNCIL OF THE CITY OF PHILADELPHIA
COMMITTEE OF THE WHOLE

Room 400, City Hall
Philadelphia, Pennsylvania
Thursday, November 13, 2014
2:30 p.m.

PRESENT:

COUNCIL PRESIDENT DARRELL L. CLARKE
COUNCILWOMAN JANNIE BLACKWELL
COUNCILMAN W. WILSON GOODE, JR.
COUNCILMAN WILLIAM K. GREENLEE
COUNCILMAN BOBBY HENON
COUNCILMAN KENYATTA JOHNSON
COUNCILMAN CURTIS JONES, JR.
COUNCILMAN JAMES KENNEY
COUNCILMAN ED NEILSON
COUNCILMAN DENNIS O'BRIEN
COUNCILMAN DAVID OH
COUNCILMAN BRIAN J. O'NEILL
COUNCILWOMAN MARIA D. QUINONES-SANCHEZ
COUNCILWOMAN BLONDELL REYNOLDS BROWN
COUNCILMAN MARK SQUILLA
COUNCILWOMAN MARIAN B. TASCO

RESOLUTION 140869 - Resolution authorizing
City Council's Committee of the Whole to hold
hearings to fully explore opportunities to
further establish the Philadelphia region as
an energy hub.

- - -

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

COUNCIL PRESIDENT CLARKE: Good afternoon. Good afternoon, everyone. We're going to start. Thank you. Good afternoon, everyone.

(Good afternoon.)

COUNCIL PRESIDENT CLARKE:
Thank you for being here, and let me start by saying, first, I'm happy that everyone has come down today for this very important conversation. I want to thank everyone.

Now, let me give you the downside of -- the second part of that conversation is that because of the fact that so many people came down today, everybody will not be able to testify today. We anticipated a relatively significant turnout, so we scheduled two days. So we would like to make sure that we accommodate everybody's opportunity to have input on this very important issue, but we will have some of the dialogue today based on the number of people that responded and then we will follow up with

1 11/13/14 - WHOLE - RES. 140869
2 tomorrow's testimony, which will pretty
3 much be the entire day. We had a City
4 Council session today, which we're
5 required to do every Thursday, so as a
6 result of that, we only have a half a day
7 today.

8 So I just wanted to let you
9 know that. I know some people have been
10 trying to get bumped up on the witness
11 list, but we've been listing people as
12 they've indicated their willingness or
13 interest in testifying today. So we want
14 to make sure we accommodate everybody.
15 Thank you very much.

16 We will formally start. The
17 hearing is called to order. Members here
18 today, I'd like to recognize -- I want to
19 acknowledge Councilmen Kenney, O'Brien,
20 Goode, Greenlee, Johnson, and Neilson. I
21 saw a couple other members pop in and
22 out.

23 This is a public hearing on the
24 Committee of the Whole. The purpose of
25 this public hearing is to hear testimony

1 11/13/14 - WHOLE - RES. 140869

2 on Resolution 140869.

3 Will the Clerk please read the
4 title of the resolution.

5 MS. LEWIS: Resolution No.
6 140869, entitled "Resolution authorizing
7 City Council's Committee of the Whole to
8 hold hearings to fully explore
9 opportunities to further establish the
10 Philadelphia region as an energy hub.

11 COUNCIL PRESIDENT CLARKE:
12 Thank you very much.

13 I'll say a couple of words and
14 then I'll turn it over to Councilwoman
15 Tasco and then we'll start with our first
16 witness.

17 As I said earlier, I really
18 appreciate all of you coming down to talk
19 about this very important initiative. We
20 believe -- and I think the one thing that
21 everybody is on the same page, regardless
22 be it the Administration, members of
23 Council, stakeholders, a person walking
24 down the street or anybody that turns on
25 their gas or some other utility, is that

1 11/13/14 - WHOLE - RES. 140869

2 there exists an opportunity in the City
3 of Philadelphia to strengthen what we
4 believe to be a significantly positioned
5 energy opportunity given the strategic
6 location of the City, given the
7 infrastructure associated with the
8 perimeter of our current facility,
9 Philadelphia Gas Works, and all of the
10 people that are engaged in this process.
11 We've had some recent additions to our
12 energy opportunities in the City, and we
13 really appreciate those folks showing an
14 interest in our city, but at the end of
15 the day, we have to take advantage of
16 this very important opportunity.

17 So at some point, we all have
18 to get on the same page and we all have
19 to aggressively move towards expanding
20 this opportunity in a very aggressive way
21 to create the type of hub that most of us
22 believe that we should and, at the end of
23 the day, creating low-cost energy
24 opportunities for employment and continue
25 to grow our region.

1 11/13/14 - WHOLE - RES. 140869

2 So I want to thank you very
3 much, and I will turn it over to
4 Councilwoman Tasco and then we'll start
5 right after that.

6 COUNCILWOMAN TASCO: Thank you,
7 Mr. President.

8 Good afternoon, everyone. I'm
9 very happy that this day is here. At
10 last, we are starting a public
11 conversation about the future direction
12 of PGW and all of the options available
13 to us that includes City Council and key
14 stakeholders.

15 The Mayor decided to skip this
16 conversation and pick the most extreme
17 alternative to permanently divest
18 ourselves of a very valuable City asset.
19 The Mayor continues to pretend that he
20 involved Council in this process, but
21 actions speak louder than words.

22 Yes, he invited Councilmembers
23 and others to a couple of meetings in
24 which he told us what he was going to do,
25 but that is not what fair-minded people

1 11/13/14 - WHOLE - RES. 140869

2 think of as a collaborative process. No.
3 A true collaboration involves doing the
4 hard work to engage all of the
5 stakeholders to arrive at a consensus on
6 the best steps for moving forward. The
7 Mayor skipped this process too even
8 though his own consultants told him that
9 this is what he needed to do to have a
10 successful outcome.

11 My Council colleagues will all
12 remember we asked repeatedly to see all
13 of the sale agreement documents, not just
14 the City, and UIL's Asset Purchase
15 Agreement, but the Administration
16 consistently refused to provide them.
17 What did they tell us? They're
18 confidential and you can't see them.

19 Is that the way to work with
20 fellow elected officials and the public
21 if you are real about having a
22 participatory process? Again, actions
23 speak louder than words.

24 Council's independent
25 consultant, Concentric Energy Advisors,

1 11/13/14 - WHOLE - RES. 140869

2 did confirm that the price offered by UIL
3 was reasonable, but this is not only
4 about money. Concentric also confirmed
5 that the sale agreement entered into by
6 the Mayor left out many details that are
7 very important to Councilmembers and our
8 constituents. They outline the many
9 supposed commitments made by UIL, which
10 either are not in the contract or only
11 there in a limited way. That is why the
12 proposed deal is simply not good enough
13 to gain Council's approval. It is not a
14 slam dunk for the citizens or our city.

15 The Mayor insists that Council
16 can still make changes to the proposed
17 deal, but that is not what he and the Law
18 Department told Councilmembers in April.
19 No. They told us that Council has the
20 authority to approve or disapprove the
21 sale agreement. In other words, vote it
22 up or down. And that if Council wanted
23 to make, quote/unquote, "modest changes"
24 as a condition of approval, the City and
25 UIL will have to agree to those. But

1 11/13/14 - WHOLE - RES. 140869
2 they could only agree to small changes
3 and only to the limited degree allowed by
4 the City's competitive bidding laws and
5 rules. So where did that leave us?
6 Pretty much with "take it or leave it"
7 situation in my book.

8 So let us move on to the
9 broader issues that are before us. As
10 has often been said by the Council
11 President, this is the people's house.
12 This afternoon and tomorrow we hope to
13 engage with a broad and diverse
14 cross-section of the community on the
15 issues raised by this Council resolution.
16 And I am particularly interested in
17 hearing discussion of Concentric's and
18 other ideas about how PGW can be an
19 active participant in energy and economic
20 development opportunities for the
21 Philadelphia region.

22 I'd also like to say that it
23 would have been very helpful -- and I
24 told the President -- we might have had a
25 conference or a retreat with all of the

1 11/13/14 - WHOLE - RES. 140869
2 interested parties to talk about the
3 highest and best use of PGW and then
4 decide what the plan would be to take
5 that action, but we're here today to
6 start that process, and I thank you all
7 for coming to give us your input.

8 Thank you very much.

9 COUNCIL PRESIDENT CLARKE:

10 Thank you very much, Councilwoman.

11 Our first witness today will be
12 Robert Yardley and Andrew McBride from
13 the Concentric Energy Advisors. This is
14 the consultant that the City Council of
15 Philadelphia commissioned to do the
16 analysis on the proposal and the highest
17 and best use.

18 (Witnesses approached witness
19 table.)

20 COUNCIL PRESIDENT CLARKE: Good
21 afternoon, gentlemen.

22 MR. YARDLEY: Good afternoon.
23 Thank you very much. Is this
24 microphone -- it is on. Okay. First of
25 all, thank you to the City Council.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCIL PRESIDENT CLARKE: Pull
3 it a little closer. It's an old
4 building.

5 MR. YARDLEY: Beautiful
6 building.

7 Thank you to the City Council
8 for placing your trust in us and to the
9 City Council team that we worked with
10 that were quite diligent.

11 The report is an independent
12 report. It's our report. Its flaws and
13 strengths are our responsibility, and
14 we're proud of the report. It was a
15 privilege to work on this particular
16 assignment. It was very challenging for
17 us.

18 As we conducted the assignment,
19 we kept in mind as well the citizens of
20 Philadelphia, what could we do to improve
21 the future outlook for the citizens of
22 Philadelphia. That was what we kept top
23 of mind.

24 The question we asked was, How
25 can PGW contribute to the value creation

1 11/13/14 - WHOLE - RES. 140869

2 for PGW's customers and, more broadly,
3 for the City. We wanted to leverage what
4 was unique about the City -- there are
5 some unique aspects to Philadelphia, and
6 we'll mention those in a few minutes --
7 and come up with an integrated strategy
8 which consists of several opportunities
9 that we'll get to. All of the
10 opportunities derive from, as you'll see,
11 from PGW's core business. There were a
12 couple of opportunities. When we looked
13 at them, we determined that they were
14 either beyond the core business or might
15 threaten in some way PGW's ability to
16 provide safe, reliable, affordable
17 service to the citizens of Philadelphia.
18 And so in that case, we've recommended
19 that PGW not pursue those particular
20 opportunities.

21 I want to note at the outset
22 that PGW is delivering on many of these
23 today. We'll cite that as we go through
24 the opportunities. So they are working
25 on many of these today. So our comments

1 11/13/14 - WHOLE - RES. 140869
2 will be recognizing the contributions
3 that they're making and making some
4 suggestions as to how further value might
5 be extracted from those opportunities.

6 For the most part, the
7 opportunities don't really depend on
8 ownership. There are a couple of
9 implementation details that might depend
10 on the ownership structure, but for the
11 most part, they really don't depend very
12 much on ownership. But they all depend
13 on sound decision-making, commitment, and
14 execution. So it's great to have a
15 PowerPoint, it's great to have plans, but
16 ultimately the ability to realize these
17 opportunities will depend upon the
18 ability to execute.

19 So I probably should have
20 introduced myself. Bob Yardley with
21 Concentric Energy Advisors. I have a
22 background in the energy industry for
23 most of my career on both the regulatory
24 side, technical ratemaking gas supply,
25 both the electric and gas industries, and

1 11/13/14 - WHOLE - RES. 140869
2 for two years I was Chairman of the
3 Massachusetts Department of Public
4 Utilities, which is analogous to the PUC
5 here in Pennsylvania.

6 Andrew McBride is with me.
7 Andrew focuses -- is focusing his career
8 on market-related issues, which includes
9 CNG, LNG, gas supply markets in general,
10 and other products. So I focus a little
11 more on regulation; Andrew does the fun
12 stuff.

13 I'm just going to touch briefly
14 on the -- I'm looking at my slide person.
15 Just go right to the next slide, if you
16 will.

17 We start with -- and I
18 apologize. These slides are available on
19 the City Council website. I can't read
20 them. Those of you that can see better
21 than I might be able to see them.

22 But we start with the
23 definition of "highest and best use,"
24 which is taking advantage of all of PGW's
25 assets. We've listed them and we discuss

1 11/13/14 - WHOLE - RES. 140869

2 them in the report - the pipes, the LNG
3 facilities, obviously the workforce, and
4 customer relationships, with a very large
5 proportion of the customers, the
6 businesses and residences in
7 Philadelphia. Those relationships have
8 value. And PGW can also leverage things
9 that are inherent to the City - its
10 location, its transportation networks,
11 higher education institutions, and its
12 location close to the Marcellus-Utica
13 Shale, and we'll talk about how we see
14 them being able to do that.

15 The next slide is really a
16 critical slide. This is what's unique
17 about Philadelphia. PGW serves only one
18 city. Most LDCs, local distribution
19 companies, serve many cities. PGW serves
20 one city. If PGW does well, the City
21 does well. So it's a one-for-one
22 relationship.

23 The financial health of PGW,
24 which is a critical component of what
25 we're talking about, is integral to the

1 11/13/14 - WHOLE - RES. 140869

2 success of the City. And the
3 opportunities and the big opportunity
4 comes right from that, and I'll just
5 start with a simple example.

6 To the extent that PGW is able
7 to deliver supply -- acquire and deliver
8 supply at lower cost, every single
9 customer of PGW benefits from that. They
10 pay lower rates. They're able to take
11 those savings, invest in their
12 businesses, make up for college savings.
13 There are any number of things that
14 citizens can do with that money. So
15 that's ultimately the place that you
16 start.

17 In the upper right-hand side,
18 they can invest in new programs. They
19 can invest in energy efficiency, and they
20 can do so by taking some of those savings
21 and applying them elsewhere. They can
22 participate with the City to attract new
23 businesses. So there are lots of things
24 that a healthy PGW can do that we want to
25 keep in mind. And they can support the

1 11/13/14 - WHOLE - RES. 140869

2 pipeline replacement program. So all
3 these things are interrelated.

4 To the extent they're able to
5 deliver on these programs, customers
6 save, the economy is better off, and
7 where the loop is closed really is
8 something that's very unique about
9 Philadelphia, which is the degree to
10 which PGW supports customers in need,
11 low-income and other customers that are
12 members, are participants in what's
13 called the Customer Responsibility
14 Program. These customers pay bills based
15 upon income level and size of family and
16 so forth. So it's a tremendous program
17 for these customers. So anything that
18 can be done to improve the economy,
19 provides job opportunities for some of
20 these customers, and ultimately will
21 allow them, if we can invest in energy
22 efficiency, to use less energy. So it
23 all feeds around -- and if we're able to
24 do that, that portion of the total cost
25 of PGW's business, if we can bring that

1 11/13/14 - WHOLE - RES. 140869

2 cost down, that helps PGW. They're able
3 to do more things, and the cycle gets
4 closed. So that's kind of the theme that
5 we've identified and laid out and
6 proposed that you all consider.

7 In terms of PGW today, it's the
8 largest municipally owned gas company. I
9 think most of you are aware of that. It
10 has a very high saturation of natural gas
11 already. There is some incremental
12 opportunity to serve new customers that
13 are already located within the City.
14 Obviously it can contribute to attracting
15 new customers as a part of a broader team
16 that involves other City agencies.

17 I spoke about the social
18 commitments, the Customer Responsibility
19 Program already. It has a broad suite of
20 energy-efficiency programs and is now
21 entering into natural gas vehicles
22 through compressed natural gas and has
23 been marketing a new technology -- not
24 really new technology, but a more
25 economical technology, combined heat and

1 11/13/14 - WHOLE - RES. 140869

2 power, that we'll come back to later in
3 the presentation.

4 The gas supply is sourced from
5 the Gulf Coast, and sales of LNG are
6 already being sold. Surplus LNG that it
7 doesn't need to supply customers on the
8 coldest days of the year, to the extent
9 it has surplus LNG, it's able to and has
10 been selling that to transportation and
11 other new markets for that product,
12 generating profits that then can be used
13 to lower gas bills of customers.

14 It has been benefiting from the
15 Marcellus, both indirectly and directly.
16 We talk about the indirect benefits. The
17 Marcellus and other shale finds
18 throughout the United States have really
19 reduced gas prices across the board.
20 Philadelphia and PGW has benefited from
21 that directly.

22 PGW is also sourcing supplies
23 more recently from the Marcellus and
24 providing some benefits using its
25 long-term pipeline contracts. So that's

1 11/13/14 - WHOLE - RES. 140869

2 a benefit we didn't acknowledge in the
3 report, so we just wanted to correct that
4 today. And there are still more
5 opportunities to do so that Andrew will
6 speak to.

7 And, finally, PGW is, through
8 the PUC program, accelerating its pipe
9 replacement program. It has a ways to
10 go. There are roughly 3,000 miles, just
11 ball park, of pipe in the City of
12 Philadelphia. Fifteen hundred are cast
13 iron. LDCs throughout the country are
14 replacing that cast iron as quickly as
15 they can, subject to cost implications,
16 and replacing cast iron is very
17 disruptive. Replacing any pipe means
18 opening the City and disrupting the lives
19 of residential customers and businesses
20 that rely on traffic to come to their
21 particular business. So that is quite a
22 challenge for the City that it's
23 pursuing.

24 At this point, I'm going to
25 turn it over to Andrew, who is going to

1 11/13/14 - WHOLE - RES. 140869

2 lay the groundwork for some of the gas
3 supply-related and LNG-related
4 opportunities.

5 MR. McBRIDE: Thank you, Bob.

6 Good afternoon, everyone. So
7 this next slide touches mostly on natural
8 gas prices, the changing environment
9 there, as well as the relationship of
10 natural gas prices to other energy
11 commodity prices and some of the
12 opportunities that that's providing for
13 PGW.

14 For starters, advances in
15 drilling technologies over the past
16 decade have made it possible and
17 economical to extract vast amounts of
18 natural gas from shale resources across
19 North America. The resulting flood of
20 natural gas that has been produced as a
21 result of these technologies has
22 dramatically lowered the cost of natural
23 gas across North America again, and most
24 forecasts have this lower cost natural
25 gas price environment lasting for decades

1 11/13/14 - WHOLE - RES. 140869

2 to come.

3 The low cost of natural gas and
4 that low cost environment currently
5 benefits all existing users of natural
6 gas, whether or not they're directly
7 sourcing gas from these shale resources,
8 as Bob alluded to, but it's also
9 producing a number of new opportunities
10 for natural gas.

11 U.S. prices for natural gas are
12 currently considerably lower than most
13 international gas prices, and that is
14 generating a lot of interest here in the
15 U.S. to construct LNG export terminals
16 and ship the domestic gas to these
17 international markets to capture these
18 higher prices. There are a number of
19 development projects already underway
20 here in the U.S. as well as across the
21 globe.

22 Domestically, natural gas
23 prices are now at a historic price
24 differential, a discount to oil prices as
25 well as refined products or petroleum

1 11/13/14 - WHOLE - RES. 140869

2 products like diesel that come from crude
3 oil. And, again, you can see on the
4 graphic on the left here, this graphic is
5 specific to the relationship between
6 natural gas and distillate fuel oil or
7 diesel, but you can see in this forecast
8 the price differential is substantial and
9 is projected to remain that way out
10 through 2040, and that's a fairly
11 consensus opinion.

12 The price differential
13 currently between natural gas
14 domestically and these other refined
15 products is creating -- is basically
16 right now supporting the conversion
17 costs, are basically incenting users of
18 equipment that currently run on diesel to
19 make changes to allow this equipment to
20 instead run on natural gas, with the
21 anticipated fuel savings from these
22 conversions covering the necessary
23 up-front costs over a reasonable period
24 of time. And this type of conversion
25 opportunity is creating a number of

1 11/13/14 - WHOLE - RES. 140869

2 opportunities in turn for PGW. They have
3 the ability to -- and they're obviously
4 already -- Bob mentioned it's a fairly
5 saturated market, but there is additional
6 conversions among the residential,
7 commercial, and industrial customers
8 that's possible, switching them from fuel
9 oil to natural gas; greater penetration
10 of combined heat and power; and then
11 something I'll touch on in more detail in
12 a bit, entry into these new markets to
13 become a potential fuel supplier of
14 certain forms of natural gas to new
15 markets, such as transportation and
16 industrial purposes.

17 Within transportation, you're
18 seeing compressed natural gas making
19 inroads and in terms of becoming an
20 alternative to gasoline for light-duty
21 vehicles, and then for LNG you're seeing
22 that becoming a viable alternative now to
23 a number of transportation methods,
24 heavy-duty trucking, marine vessels and,
25 to some extent, freight rail as well.

1 11/13/14 - WHOLE - RES. 140869

2 And then on the industrial side, it is
3 also a currently attractive and viable
4 alternative to diesel for drilling and
5 fracking operations, which, again, are a
6 big part of what's going on out in the
7 Marcellus in the western part of the
8 state.

9 So if we can go to the next
10 slide, this slide here gets at sort of
11 the changing gas supply picture and
12 provides a little more context there.
13 Prior to the advent of shale gas in the
14 last decade, all or certainly most of the
15 LDCs, local distribution companies or gas
16 utilities, in the Northeast were reliant
17 on distant supplies, typically from the
18 Gulf Coast and southwest or from Western
19 Canada, and these supplies were delivered
20 to their service territories using
21 long-haul pipelines.

22 As Bob had noted, PGW has begun
23 to source some of their gas from the
24 Marcellus, but they still get the
25 majority of their gas from the Gulf

1 11/13/14 - WHOLE - RES. 140869

2 Coast. The majority is sourced in the
3 Gulf Coast, and that is not unusual.
4 Most of the LDCs in the Northeast still
5 do rely on Gulf Coast contracts and are
6 now also turning to the Marcellus as a
7 way to serve load growth and also looking
8 at it as a potential cost-savings
9 mechanism and a way to diversify supply.

10 The Marcellus in the graphic on
11 the slide is the area shaded green. You
12 can see it's a very large basin, covering
13 large portions of New York, Pennsylvania,
14 Ohio, and West Virginia, and the
15 production from the Marcellus has been
16 prolific. It continues to exceed
17 forecasts and expectations, and currently
18 although it's less than ten years old,
19 the Marcellus basin now accounts for 20
20 percent or one-fifth of all U.S. domestic
21 gas production.

22 The rate of growth in
23 production in the Marcellus has been such
24 that it has outpaced the associated
25 necessary development of pipeline

1 11/13/14 - WHOLE - RES. 140869
2 infrastructure to provide takeaway
3 capacity to bring this gas to markets
4 and, as a result, prices in the Marcellus
5 basin have been depressed and are among
6 the lowest, if not the lowest, in the
7 United States and North America.

8 There are a slate of projects
9 in development that will provide
10 additional takeaway capacity for
11 Marcellus gas and partially alleviate
12 this constraint. However, even taking
13 that into account, it is expected and the
14 markets are currently showing that
15 Marcellus gas prices will remain among
16 the least expensive in all of North
17 America for the foreseeable future,
18 trading at a significant discount to
19 benchmark Gulf Coast prices.

20 Another important note about
21 Marcellus supplies is that some of the
22 gas in the Marcellus, particularly the
23 gas found in Southwestern Pennsylvania as
24 well as parts of Ohio and West Virginia,
25 is what's known as wet gas, implying that

1 11/13/14 - WHOLE - RES. 140869
2 this gas not only contains the methane
3 that is put into pipelines and delivered
4 to customers like PGW's customers, it
5 also contains other natural gas liquids.
6 These would be ethane, propane, butane,
7 and natural gasoline, and these products
8 need to be removed from the gas stream
9 before it is put into pipelines. But
10 it's important to note that these
11 products themselves are very valuable
12 commodities; in fact, more valuable than
13 the natural gas right now. And while, as
14 we note in our report, we think it's
15 outside of PGW's core strength to attempt
16 to become a transporter or supplier of
17 these natural gas liquids, it's important
18 to note that the availability of these
19 products just a few hundred miles away
20 from Philadelphia presents a number of
21 opportunities for the City in terms of
22 helping to revitalize refining operations
23 in and around the City as well as the
24 potential -- these products are typically
25 used as feedstocks in manufacturing

1 11/13/14 - WHOLE - RES. 140869

2 processes and other industrial processes.
3 And so for businesses looking to come to
4 Philadelphia or potentially deciding
5 whether or not to stay in Philadelphia,
6 the access to these low-cost and highly
7 valuable natural gas liquids is another
8 important opportunity.

9 If we can go to the next slide,
10 this slide here provides a little more
11 background on PGW's LNG assets. PGW
12 currently has two LNG storage facilities.
13 That's the Richmond and Passyunk plants.
14 These two plants have a combined storage
15 capacity of over 4 billion cubic feet.
16 And the graphic on the left here is
17 what's known as a load duration curve.
18 This is a tool used by gas utilities
19 commonly to help them to better
20 understand how best to plan for and meet
21 their system demand with the various
22 supply resources at their disposal.

23 Demand on this graphic is
24 represented by the blue declining line.
25 It's organized with the highest-use days

1 11/13/14 - WHOLE - RES. 140869

2 on the left and the lowest-use days on
3 the right, spanning an entire year, and
4 then the shaded boxes are the various
5 supply resources that PGW uses to meet
6 this demand.

7 You can see they have access to
8 pipeline capacity. That's the
9 green-shaded box on the bottom up to --
10 for all 365 days in a year to serve
11 base-load needs. They have access to
12 seasonal pipeline capacity as well as
13 storage capacity from anywhere from 60 to
14 120 days, typically used in the winter to
15 serve incremental heating demand. And
16 then, finally, the top box there on the
17 left is their LNG storage inventory,
18 which they use for that final increment
19 of demand on the absolute 10 or 15
20 coldest days of the year. They're
21 serving that demand out of their LNG
22 tanks.

23 Looking at this graphic
24 together, the area of each of these
25 shaded supply resource boxes above and to

1 11/13/14 - WHOLE - RES. 140869

2 the right of the demand curve is excess
3 capacity, meaning across the board PGW
4 appears to have some capacity to increase
5 load without needing to acquire
6 additional supply resources. But I want
7 to focus here on the top brown box, the
8 LNG. You can see a good portion of that
9 box and that supply resource is not
10 utilized to meet demand. For planning
11 purposes, PGW's sort of winter need from
12 LNG is around 2 BCF, or 2 billion cubic
13 feet, which is half roughly of their
14 storage capacity, meaning there's another
15 2 billion cubic feet that could be
16 utilized to pursue some of these new and
17 emerging markets for natural gas, in
18 particular LNG that I referenced
19 previously.

20 At present, PGW is hindered in
21 their ability to utilize this other sort
22 of unused capacity by their liquefaction
23 capabilities, both the technology and the
24 capacity. That said and despite those
25 limitations, PGW has acknowledged these

1 11/13/14 - WHOLE - RES. 140869

2 markets are there. They see the
3 opportunity, and they have in fact begun
4 making sales, albeit on a temporary
5 basis, into some of these markets, the
6 drilling and fracking markets, heavy-duty
7 vehicles, and also deliveries to other
8 gas utilities.

9 This, as I said, is a temporary
10 program basically meant to sell off
11 surplus LNG that was amassed over recent
12 more mild winter, and it's important to
13 note that in the long term, any kind of
14 sustained presence in an LNG off-system
15 sales market, they would need to be
16 investing in additional LNG production
17 capabilities. PGW knows this, and PGW is
18 interested in this. So, again, they are
19 certainly aware of these opportunities
20 and moving forward on many of them.

21 And I think with that, I will
22 turn it back to Bob.

23 MR. YARDLEY: I should have
24 mentioned that Andrew grew up in
25 Philadelphia. So he's a Phillies

1 11/13/14 - WHOLE - RES. 140869

2 fanatic, not the Philly Fanatic, as far
3 as I know.

4 MR. McBRIDE: Hard to be a
5 Phillies fan right now.

6 MR. YARDLEY: We're going to
7 wrap up by talking about some of the
8 specific opportunities. We have what we
9 call an integrated strategy. It's about
10 reducing costs, optimizing the LNG
11 assets, increasing sales. The gas
12 business is a very high fixed-cost
13 business. Any time you can increase the
14 amount of throughput through the system
15 by serving new customers, that will
16 spread those costs over more volumes.
17 The denominator goes up; prices to
18 individual customers would go down. I
19 think more recently the opposite has been
20 happening, so we want to turn that
21 around, to the extent possible, and
22 increase throughput on the system. And
23 obviously helping customers consume gas
24 more efficiently helps those customers
25 directly, contributes to Philadelphia's

1 11/13/14 - WHOLE - RES. 140869
2 green goals as well. So that's -- of all
3 the things in terms of when you look out
4 in today's market, energy efficiency,
5 it's called the "first fuel" more
6 frequently in today's world. It makes
7 sense under any scenario.

8 So by doing this, we hope to
9 benefit PGW's customers, make
10 Philadelphia more affordable and more
11 attractive to businesses to move in, and
12 create a stronger PGW.

13 Now, PGW, as you're all aware,
14 is much stronger today through the
15 efforts of the last several years than it
16 was several years ago. So having
17 experienced what it was like when PGW was
18 not financially strong, we wouldn't want
19 to do anything that would cause a
20 regression in that progress. If
21 anything, we want PGW to be stronger.

22 PGW is already engaged.
23 There's six opportunities we're going to
24 discuss. PGW is already engaged in at
25 least five of them, as we mentioned, and

1 11/13/14 - WHOLE - RES. 140869

2 we'll give our interpretation and angle
3 on what might be done to improve those or
4 to support initiatives that PGW is
5 currently considering.

6 So we've got six opportunities.
7 I'm going to hand it back to Andrew.
8 We've got six opportunities that we think
9 make a lot of sense, and we've got two
10 that we don't think make sense, but we
11 want to address them because they've
12 received a lot of attention in the press
13 and in the general discourse within the
14 City.

15 So Andrew is going to take the
16 first two.

17 MR. McBRIDE: Thanks, Bob.

18 Sure. So starting off, number
19 one, diversification of the gas supply
20 portfolio. We think this is a clear and
21 large opportunity for PGW and the City.
22 As mentioned, they have already taken
23 some steps to try and find and obtain
24 lower cost gas from the Marcellus using
25 their existing transportation contracts.

1 11/13/14 - WHOLE - RES. 140869

2 We think there's possibly room for -- it
3 should certainly be examined if there's
4 room for further steps in that direction
5 using these existing transport assets.

6 But we also think there's a big
7 opportunity here in terms of bringing new
8 pipeline capacity into the Philadelphia
9 region, which benefits both sales
10 customers and transport customers in the
11 form of more gas and lower prices for all
12 involved.

13 We tried to -- we estimated a
14 sort of order-of-magnitude value for this
15 opportunity and believe it's certainly
16 attainable for PGW to attain cost savings
17 through shifts in their gas supply of
18 somewhere in the range of \$17 million on
19 an annual basis.

20 To that end, we think PGW can,
21 should, and it sounds like is already
22 looking at some of these things in terms
23 of how much more can they do in terms of
24 utilizing these existing transport
25 contracts and reducing costs by shifting

1 11/13/14 - WHOLE - RES. 140869

2 the supply from the Gulf up to the
3 Marcellus region. And then also they
4 have integrated models with pricing and
5 flows that they can run to try and best
6 understand in terms of new pipeline
7 capacity what the optimal amount would
8 be, what the appropriate timing it would
9 be, as well as sort of where on the
10 system that would be most beneficial,
11 where the connection should be. All of
12 that likely is happening and certainly
13 should be happening.

14 And I would say they also can
15 be out there in the market again. It
16 sounds like they're doing this and have
17 their finger on the pulse of this, but
18 they should be out there speaking with
19 pipeline companies expressing their
20 interest in bringing new capacity into
21 the region. Philadelphia -- or PGW is a
22 large enough customer and has sufficient
23 load to, depending on how much of that
24 load it's looking to shift to the
25 Marcellus in terms of contracting for new

1 11/13/14 - WHOLE - RES. 140869

2 pipeline capacity, to drive an expansion
3 or a new pipeline build on their own.
4 But that said, they should also be out
5 talking to other potential large users of
6 gas in the region, large industrials to
7 try and coordinate the timing and the
8 interest here to make this more
9 attractive and a better incentive to
10 these pipeline companies to try and find
11 critical mass and get a project built
12 into the region. But we think that's a
13 great opportunity.

14 The second opportunity here is
15 the optimization of the LNG assets, which
16 I mentioned the four BCF of storage
17 capacity is going right now about half
18 unutilized or underutilized, and we think
19 there's a great opportunity here for,
20 through an investment in additional LNG
21 production capacity, to sort of use this
22 existing LNG storage capacity, which is
23 currently oversized compared to the
24 system needs, and take that investment
25 and then go and pursue some of these new

1 11/13/14 - WHOLE - RES. 140869

2 LNG markets that we discussed, whether it
3 be in the transport sector or the
4 industrial sector. And the fact that
5 they can use this existing storage
6 capacity while only needing to make the
7 investment in the liquefaction or LNG
8 production capacity puts them on a pretty
9 good and solid competitive footing
10 relative to competitors, who would likely
11 have to be investing in both liquefaction
12 and storage in this region, at least
13 initially.

14 Again, here we estimated an
15 order-of-magnitude value for this
16 opportunity and, based on some
17 assumptions regarding the size and cost
18 of the added LNG production capability as
19 well as the margin earned, found that it
20 would be reasonable for PGW to assume
21 that they could earn anywhere from \$8 to
22 \$10 million in net margin on an annual
23 basis.

24 To this end, I think the
25 important steps to be taken here to

1 11/13/14 - WHOLE - RES. 140869

2 advance this goal would be, number one,
3 having a thorough engineering study
4 conducted. I know PGW has taken initial
5 steps certainly to evaluate what kind of
6 investments need to be made to look at
7 these markets, but a really thorough
8 engineering study that would get at the
9 limitations of the current system as well
10 as really firming up the cost estimate
11 for what kind of investment would be
12 necessary here.

13 Also, it would be important to
14 conduct a sort of deeper dive market
15 study to really validate and understand
16 the actual size and viability of these
17 markets within the region that they'd be
18 pursuing.

19 And then, finally, to
20 understand the risks involved here. This
21 is a competitive market that they'd be
22 entering, which is different than their
23 current operations as a gas distributor
24 to their customers. These risks --
25 there's no guarantee that this demand

1 11/13/14 - WHOLE - RES. 140869

2 will materialize, will remain. The
3 competitiveness of the market is
4 uncertain. There are a lot of new risks
5 here that would be a different type of
6 risk for PGW, and in order to mitigate
7 that, they might consider some kind of
8 joint venture or public-private
9 partnership. And so another step would
10 be to really iron out and understand and
11 get a good understanding of any of the
12 legal hurdles and questions that linger
13 about the ability to do that.

14 And with that, I'll turn it
15 back to Bob for the remaining
16 opportunities.

17 MR. YARDLEY: Thank you,
18 Andrew.

19 I just want to follow up just
20 briefly on the risk question. So there's
21 been a lot of discussion about
22 public-private partnerships, can the City
23 do them, can they not. And we're not
24 attorneys, so we won't -- we've read the
25 Solicitor's opinion as reasonably

1 11/13/14 - WHOLE - RES. 140869

2 intelligent non-attorneys, but we won't
3 be providing any legal opinions. But it
4 all begins with the business case.

5 No matter who pursues this
6 opportunity, it begins with the business
7 case. You look at the investment. You
8 look at the market and the potential
9 margins, potential competitors coming in.
10 You look at it as if it's your own money,
11 and the City Council will be asked to
12 approve likely a fairly significant
13 investment -- Andrew mentioned \$50
14 million. That's not inconsequential --
15 and determine what its assessment of the
16 market might be, and as Andrew suggested,
17 that needs to be looked at.

18 So that will not be an easy
19 decision, but we believe the market is
20 certainly showing signs of strength and
21 appears to be growing. So we do believe
22 that it's an opportunity that should be
23 seriously considered by the City. No
24 question about it.

25 Now, a private owner would

1 11/13/14 - WHOLE - RES. 140869
2 have -- and I'm going to put my regulator
3 hat on for a second. The first question
4 is with respect to a private owner, do
5 they intend to do this through the
6 regulated utility or are they going to do
7 this through a subsidiary that's
8 unregulated? And so the regulator will
9 care a lot about that question.

10 If they're going to do it
11 through the regulated utility, they'll
12 want to make sure that if customers are
13 in any way providing support for this,
14 that if they're taking risk, they're
15 compensated for that risk. So it's a
16 fairly basic question.

17 If the entity decides, no,
18 we're going to play in this market on an
19 unregulated basis, which they're able to
20 do, they would go to their Board and
21 present the business case and raise the
22 funds and pursue the opportunity, and
23 that's -- they have the right to do that.
24 The regulator is less concerned at that
25 point. They'll want to make sure they're

1 11/13/14 - WHOLE - RES. 140869
2 insulated from there being a problem, but
3 they'll also be insulating and not
4 benefiting if it turns out to be a great
5 business.

6 So that's kind of the
7 discussion that would take place. We're
8 going to come back to that a little bit
9 later with respect to the non-viable
10 opportunities.

11 In terms of the next
12 opportunity, the NGV market, this is one
13 where we're trying to increase throughput
14 on the system. PGW will be selling more
15 gas to refueling stations. So they're
16 using the distribution network, dividing
17 by the larger throughput, and lowering
18 rates as a result, spreading those fixed
19 costs over more volumes by doing so.

20 So, clearly, when you look at
21 opportunities in the marketplace, if the
22 CNG market and NGV market takes off in
23 Philadelphia, this creates a very good
24 opportunity for PGW, particularly since
25 it already has high saturation in its

1 11/13/14 - WHOLE - RES. 140869

2 other markets.

3 So PGW has already converted --
4 acquired 24 sedans. There may be other
5 City fleets that are candidates. When
6 those vehicles need to be replaced for
7 CNG, the City will want to look at that.
8 And there are other operators, private
9 companies within the City that operate
10 fleets. CNG is great for fleets that
11 don't travel that far. So that's another
12 opportunity as well. PGW has a
13 consultant that's already engaged in
14 this.

15 The fourth opportunity we
16 looked at was pursuing combined heat and
17 power, helping businesses grow, and
18 converting customers. Again, this is all
19 about increasing throughput on the
20 system.

21 We're particularly excited, and
22 we know that PGW is, because they've been
23 already selling combined heat and power
24 units. These are on-site generation
25 fueled by natural gas. They allow the

1 11/13/14 - WHOLE - RES. 140869
2 customer to avoid electric bills, save
3 money on electricity. They generate a
4 heat source that the Four Seasons Hotel,
5 for example, one of the customers, can
6 use to do laundry. So they have --
7 they're very high efficiency units, and
8 PGW is pursuing that aggressively.

9 We would want to -- in those
10 circumstances when you're in a business
11 like this, you need to be able to provide
12 incentives to the marketing team. So it
13 might change the way that PGW operates.
14 We would all want PGW to provide
15 incentives to its employees to pursue
16 these as aggressively as possible and be
17 rewarded for doing so.

18 The fifth opportunity is
19 training workers, and this would be
20 training Philadelphia residents to serve
21 in this broader energy hub market. PGW
22 will need new workers at some point to
23 replace its retirees as they retire. If
24 Philadelphia is successful in attracting
25 other natural gas businesses, they will

1 11/13/14 - WHOLE - RES. 140869

2 need workers. So there's an opportunity
3 to train Philadelphia residents in
4 coordination with other businesses and
5 educational institutions. So market for
6 the educational institutions as well.

7 Investing in energy efficiency,
8 the sixth opportunity. This one is
9 something that has been particularly
10 challenging for PGW. We've read through
11 the reports. You can see just how hard
12 PGW has been working on lowering the gas
13 use of its Customer Responsibility
14 Program customers. They have a higher
15 gas use than the average customer.

16 We would say here there's an
17 opportunity to look at sort of some
18 breakthrough innovation, really something
19 unique that sort of breaks that -- breaks
20 the way that use -- breaks the way they
21 look at their homes. Every customer has
22 an interest in making significant
23 progress in this area.

24 I won't go into much more
25 detail, other than to observe that there

1 11/13/14 - WHOLE - RES. 140869

2 are some entities that are doing this in
3 other cities, involving community
4 organizations to work directly with this
5 particular group of customers in ways
6 that they haven't been interacted with
7 before.

8 In terms of the non-viable
9 opportunities, we discussed it in terms
10 of -- and these are the ones that people
11 mentioned in terms of Philadelphia
12 becoming an energy hub, and we just want
13 to be clear on what that might mean for
14 PGW. We've really focused on PGW and its
15 core businesses.

16 The non-viable opportunities --
17 and we addressed two. One is
18 participating in the natural gas liquids
19 market. That could be building their own
20 pipeline and really getting in and
21 marketing natural gas liquids. We view
22 that as clearly beyond PGW's core
23 competencies. It's not clear that they
24 would even be able to acquire or afford
25 to acquire the competencies they need to

1 11/13/14 - WHOLE - RES. 140869

2 participate in that market. And when you
3 look at the entities that are in that
4 market, they have multi-billion dollar
5 balance sheets, because it is a risky
6 business, and we believe PGW has no --
7 should not be in that business and we
8 would question even other entities,
9 private entities. They would need to
10 approach this business very carefully.
11 They would need significant size and
12 probably already be in this business to
13 enter this market.

14 The same goes for LNG. Andrew
15 talked about the interest in LNG exports.
16 In this case, we're talking about the
17 only viable opportunity is the Richmond
18 facility. It's not clear -- there's been
19 a study done by a professional firm
20 that's looked at this opportunity, CH-IV.
21 It's a consultancy. They identified
22 several fatal flaws. There's not enough
23 land. You'd have to have LNG ships going
24 up and down the Delaware River, raising
25 all kinds of security concerns.

1 11/13/14 - WHOLE - RES. 140869

2 If you were to go after this
3 opportunity, you might spend tens of
4 millions of dollars and the answer might
5 be you can't do it. So if you have tens
6 of millions of dollars to throw after
7 this market, I suppose you could do it,
8 but it just does not seem viable from our
9 perspective for PGW.

10 And with that, I'll close. I
11 know we took a long time, but we do get
12 excited from time to time about natural
13 gas.

14 COUNCIL PRESIDENT CLARKE:

15 Thank you so much. I'm not going to --
16 I'm going to ask you like one question.
17 It's a multi-faceted question.

18 Basically in conversations and
19 to some degree in the summary, you
20 referenced the potential to generate
21 additional dollars utilizing some aspects
22 of what you've talked about today, and I
23 think it could be upwards of around \$30
24 million, correct me if I'm wrong, the
25 things that we can actually do as a

1 11/13/14 - WHOLE - RES. 140869

2 company. Is that a real number? And how
3 difficult would it be to get to that
4 number?

5 Just the short version of -- if
6 people decided tomorrow we're going to
7 take the existing company and we're going
8 to do these things so we can generate \$30
9 million annually, upwards of that, and
10 with respect to our ability to pay the
11 debt service, say, for instance, on
12 capital construction to expand our
13 opportunities, be it LNG or whatever, is
14 that realistic?

15 MR. YARDLEY: We believe it's a
16 realistic number. I mean, there's some
17 band around it. There's a higher band
18 and a lower band. It will take time.
19 Many of the opportunities would take two
20 or three years at the earliest before you
21 could reconfigure the gas supply
22 portfolio. You might be able to use your
23 existing gas supply assets and achieve
24 some incremental savings in the near
25 term, but PGW would be able to really

1 11/13/14 - WHOLE - RES. 140869

2 address that question.

3 But developing the LNG facility
4 would take a number of years. It's a
5 major construction project. So it's not
6 a one-year project. It's probably three
7 years, and --

8 MR. McBRIDE: I would add, so
9 the first two opportunities here, the
10 shifts in gas supply from the Gulf to the
11 Marcellus as well as the optimization of
12 the LNG assets, drive that number that
13 you referenced. Out of the approximately
14 \$30 million a year, those two, in our
15 analysis, make up the majority of that.

16 It's important to note those
17 are order-of-magnitude values. In the
18 case of gas supply, potential cost
19 reductions. In the case of the LNG
20 assets, potential new margins for the
21 company.

22 They're very real numbers. As
23 Bob mentioned, there is certainly a range
24 around them due to uncertainty. A whole
25 host of factors would come into play in

1 11/13/14 - WHOLE - RES. 140869

2 terms of just how much you could save by
3 shifting supplies, what happens with
4 natural gas prices, the differential
5 between the two pieces, the cost of a
6 pipeline if something is eventually
7 built. And even that has a number of
8 factors going into it, but they're very
9 real numbers in that we believe -- I'm
10 speaking for Bob here, but I think it's
11 fair -- we believe those are both very
12 real opportunities. The numbers may not
13 be 17 million and 8 to 10 million, but if
14 these opportunities are pursued, there is
15 absolutely value in both of them and it
16 is substantial. It could be
17 significantly higher. It could be a
18 little lower. That is uncertain, but
19 they are real numbers.

20 COUNCIL PRESIDENT CLARKE:

21 Okay.

22 MR. YARDLEY: And the energy
23 efficiency we didn't value at all. We
24 have a zero in for energy efficiency for
25 the CRP customers.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCIL PRESIDENT CLARKE:

3 Something that needs to happen.

4 MR. YARDLEY: And that does not
5 require major investment. It may be more
6 of a behavioral response. So that could
7 provide benefits, and that's real dollars
8 that would come out of the bills that are
9 paid by other customers.

10 COUNCIL PRESIDENT CLARKE:

11 Right.

12 MR. YARDLEY: So that's another
13 reason to look at that carefully.

14 COUNCIL PRESIDENT CLARKE:

15 Right. Okay. Thank you.

16 Councilman Goode, you were teed
17 up. This may have been when we were
18 testing. You are teed up? Okay.

19 Councilman Goode.

20 COUNCILMAN GOODE: Thank you,
21 Mr. President.

22 Good afternoon. In terms of
23 the highest and best use of the asset
24 with regard to maximizing opportunity,
25 Mr. Yardley, is it your testimony that it

1 11/13/14 - WHOLE - RES. 140869
2 doesn't make a difference who the asset
3 is owned by, the City or UIL or some
4 other entity, that it's more about
5 execution with regard to maximizing
6 opportunities?

7 MR. YARDLEY: It's about
8 execution, no matter who owns the
9 opportunity. It's decision-making,
10 commitment, execution.

11 We would expect a private owner
12 to pursue many of these as well. The one
13 that seems to be a little bit different
14 is the LNG one because it requires this
15 \$50 million capital investment. So the
16 actual implementation may be different,
17 but we believe that PGW can pursue that.
18 We certainly understand that a private
19 owner could pursue that one as well.

20 COUNCILMAN GOODE: Okay. If we
21 sell the asset, what do we get other than
22 one-time cash?

23 MR. YARDLEY: That's --

24 COUNCILMAN GOODE: That's a
25 lead-in question.

1 11/13/14 - WHOLE - RES. 140869

2 MR. YARDLEY: It is, yeah. And
3 I'm the HBU guy, so I could take a crack
4 at it, if you want, but it is --

5 COUNCILMAN GOODE: Let me go to
6 the next question.

7 So we don't control the
8 longtime economic opportunities beyond
9 that. When we give up the asset, we give
10 up our control in terms of long-term
11 economic opportunities.

12 MR. YARDLEY: You might give up
13 some control. I don't believe that, if
14 you had an interest in pursuing
15 opportunities that would also benefit
16 your then supplier, that they would
17 certainly be willing to work with you.
18 I'm having a hard time believing that.

19 COUNCILMAN GOODE: Like, for
20 instance, what is UIL's commitment in
21 terms of diversity in terms of ownership,
22 in terms of business contracting, in
23 terms of workforce?

24 MR. YARDLEY: Those are in the
25 contract, so I'm not familiar with the

1 11/13/14 - WHOLE - RES. 140869

2 contract.

3 COUNCILMAN GOODE: In terms of
4 the Asset Purchase Agreement, what does
5 it say in terms of diversity in terms of
6 ownership, in terms of business
7 contracting opportunities, in terms of
8 workforce diversity? What is the
9 commitment of UIL?

10 MS. QUILICI: Hi. I'm Lisa
11 Quilici. I'm with Concentric Energy
12 Advisors and I was part of the financial
13 advisory team, and that question is
14 better directed to the report addressing
15 the proposed sale of PGW to UIL.

16 With regard to a number of the
17 factors that you referenced, as I
18 understand the contractual commitment
19 between UIL and the Administration, UIL
20 is committed to providing an EOP, an
21 Economic Opportunity Plan, after the
22 closing of the transaction, which would
23 address issues surrounding diversity and
24 things of that nature.

25 COUNCILMAN GOODE: So there is

1 11/13/14 - WHOLE - RES. 140869

2 no Economic Opportunity Plan and there is
3 no commitment right now to diversity?

4 MS. QUILICI: Correct. There's
5 nothing in the contract that identifies
6 how that EOP would look or that specifies
7 what the EOP is, yes.

8 COUNCILMAN GOODE: Thank you,
9 Mr. President.

10 COUNCIL PRESIDENT CLARKE:
11 Thank you, Councilman.

12 Councilman Oh.

13 COUNCILMAN OH: Thank you very
14 much, Council President.

15 So while we're in this room
16 with a lot of people who have a lot of
17 expertise, we're also being televised to
18 a lot of citizens out there that have a
19 great interest in the topic. So I'm
20 going to kind of go through a couple
21 questions that I think are important.

22 You or your company and your
23 team had the opportunity to review the
24 paperwork and documents and data that was
25 involved in the establishment of this

1 11/13/14 - WHOLE - RES. 140869
2 request for qualifications and for the
3 Asset Purchase Agreement; is that
4 correct?

5 MR. YARDLEY: I'm going to
6 invite Lisa up.

7 I could answer that.

8 MS. QUILICI: So in our
9 engagement, we had the opportunity to
10 review a plethora of information that was
11 made available through the solicitation
12 process. Your question asked about the
13 documentation leading up to that, and
14 we've certainly accessed certain
15 information leading up to the decision to
16 initiate a competitive solicitation; in
17 particular, two reports that were
18 commissioned on behalf of the
19 Administration by an outside advisor that
20 they retained.

21 The majority of our due
22 diligence materials access information
23 was the same type of information that was
24 made available to the participants in the
25 competitive solicitation.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCILMAN OH: Okay. So I
3 have a report that says Privileged and
4 Confidential, Concentric Energy Advisors,
5 and it lists by date what material you
6 reviewed and what meetings you had,
7 including 6,000 documents and other
8 confidential material, and then going
9 through meetings with the Mayor's
10 Administration, with legal services, with
11 the union, with JP Morgan Securities,
12 Loop Capital Markets, Ballard Spahr, so
13 forth and so on, PGW. Is that correct?

14 MS. QUILICI: Yes, sir, it is.

15 COUNCILMAN OH: Okay. So as
16 you have reviewed that material, did you
17 form an opinion as to what was the nature
18 of this offering, what it was based on,
19 what its goals were?

20 MS. QUILICI: The mandate for
21 our review of the transaction or the
22 solicitation was to provide information
23 to the Council with regard to the nature
24 of the contract, the nature of the
25 proposed transaction. In so doing, we

1 11/13/14 - WHOLE - RES. 140869

2 did an assessment of the value of the
3 contractual terms vis-a-vis what I would
4 call market norms as well as vis-a-vis
5 certain other public policy, social,
6 workforce, and other considerations that
7 we heard articulated to us by various
8 Councilmembers and through various
9 Councilmembers' staff. So that was the
10 nature of our assessment.

11 COUNCILMAN OH: And in doing
12 that, in going through that process,
13 there were options provided in the
14 original Lazard report; is that correct?

15 MS. QUILICI: Yes. I think
16 you're referring to the original
17 strategic assessment that Lazard
18 conducted on behalf of the Administration
19 with regard to the various options,
20 strategic options, that could be pursued
21 for PGW.

22 COUNCILMAN OH: About how many
23 options were there?

24 MS. QUILICI: I believe there
25 were five.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCILMAN OH: And did they
3 rank the options in terms of most
4 profitable for the City, best use for the
5 City or did they just provide five
6 general options?

7 MS. QUILICI: I will answer to
8 the best of my ability, recognizing I'm
9 not the author of that report and my
10 review of the report was -- it was -- I
11 wouldn't say cursory, but it was simply a
12 review.

13 As I recall the report, what
14 they did was, they provided some level of
15 assessment of each of the five
16 opportunities or alternatives as they
17 pertained to the ability to maximize
18 proceeds to the City as well as to
19 mitigate risks. In so doing, they
20 identified their belief that the sale was
21 the most viable alternative to satisfy
22 those particular objectives.

23 COUNCILMAN OH: In particular,
24 was it a desire to obtain a certain
25 amount of cash or maximize a cash value

1 11/13/14 - WHOLE - RES. 140869
2 of the asset, PGW, as opposed to getting
3 the most amount of investment or the
4 greatest amount of development?

5 MS. QUILICI: Again, as I
6 understand the report, there was a
7 valuation performed that established a
8 range of value, and the expectation of
9 Lazard was that a sales process would
10 fall within that range of value. I don't
11 recall there being specific consideration
12 of the value to the City of economic
13 development or investment or other
14 factors which have been raised by
15 Councilmembers.

16 COUNCILMAN OH: And I raised
17 some of those questions as to why was the
18 offer limited to particular constraints
19 as opposed to other larger opportunities.
20 Why was it decided to pursue a very
21 specific agenda for the sale of PGW?

22 MS. QUILICI: And I'm not the
23 best person to answer that question. I'm
24 not certain why the decision was reached
25 to pursue a solicitation that looked

1 11/13/14 - WHOLE - RES. 140869

2 simply at securing proposals to sell as
3 opposed to securing proposals to sell and
4 other alternatives. I'm not privy to
5 those discussions.

6 COUNCILMAN OH: Were you in
7 your review of material, including press
8 releases and public statements, did it
9 come across your attention or your team's
10 attention at any point in time that the
11 Administration was primarily interested
12 in obtaining a certain amount of cash to
13 put into the pension fund?

14 MS. QUILICI: My review, my
15 team's review was largely focused on the
16 transaction itself, the contractual terms
17 and the materials that were exchanged.
18 While we have looked at certain of the
19 press and other public statements, we did
20 not conduct an exhaustive review of that
21 material, so I'm not really sure I can
22 answer that question.

23 COUNCILMAN OH: Okay. Did you
24 come across any materials that indicated
25 that the offer had in mind the sale of

1 11/13/14 - WHOLE - RES. 140869

2 PGW with the idea that it would take a
3 certain amount of money to invest into
4 the pension fund to address a shortfall
5 in the pension fund, and at the same
6 time, did it indicate to you from your
7 review that there was a desire to not
8 have greater investment in fracking,
9 natural gas liquids, liquid natural gas
10 exports, and other things like that?

11 MS. QUILICI: So I am aware
12 that -- and in our report, which I can't
13 put my fingers on the exact page
14 immediately, we refer to what has been
15 published by the Administration as to the
16 use of proceeds if the sale were
17 approved, which includes the funding of
18 pension program shortfalls. Beyond that,
19 again, I'm not really the best person to
20 answer the question as to other
21 prohibitions.

22 COUNCILMAN OH: So I had raised
23 the question that it appeared to me that
24 there were three general perceptions of
25 the purpose of the sale of the asset.

1 11/13/14 - WHOLE - RES. 140869

2 The first being because there was a
3 shortfall or an emergency, a limitation;
4 in other words, there was not enough
5 money to replace pipe which was dangerous
6 and problematic. The second would be
7 that there is a desire to get a certain
8 amount of funds to put into the pension
9 fund, and the entire purpose of the sale
10 was to get a certain amount of money to
11 balance out the pension fund. And the
12 third would have been to sell the asset
13 to develop Philadelphia's energy capacity
14 in the highest manner possible. Those
15 three possibilities. And did you or your
16 team have any opinion as to which of the
17 three or other options were the goal of
18 this sale?

19 MS. QUILICI: If you give me a
20 moment, I'm going to provide you with a
21 reference.

22 Starting on Page 28 and
23 continuing on Page 29, we identify the
24 objectives of the Administration as
25 articulated through the various

1 11/13/14 - WHOLE - RES. 140869

2 transaction materials for the sale.

3 Those objectives do not address these

4 particular three considerations that you

5 raised. They do talk about maximizing

6 proceeds and financial capacity of an

7 acquirer, but they do not really get into

8 this concept of pipe replacement of a

9 certain amount of money. There was no

10 dollar amount per se specified or of

11 positioning PGW in any particular way.

12 COUNCILMAN OH: In the contract

13 what is the replacement of pipe?

14 MS. QUILICI: The replacement

15 of pipe is not addressed in the contract

16 per se.

17 COUNCILMAN OH: In the news

18 media I have read that the buyer stated

19 that they would reduce the replacement of

20 pipe by half the time, from approximately

21 90 years to 50 years. Is that in the

22 contract?

23 MS. QUILICI: That is not in

24 the contract.

25 COUNCILMAN OH: Is there any

1 11/13/14 - WHOLE - RES. 140869
2 report that would indicate that any study
3 was done, there was any objective
4 criteria in order to reduce time from 90
5 years to 50 years?

6 MS. QUILICI: I'm not aware of
7 a specific study that's been made
8 available by UIL with regard to their
9 ability or plans to do that.

10 COUNCILMAN OH: In terms of the
11 testimony previously that natural gas
12 liquids and liquid natural gas exports
13 were in both cases too big and in one
14 case too risky or too late, was it your
15 understanding at any time that the buyer
16 had expressed a plan to do NGLs and LNG
17 exports?

18 MR. YARDLEY: We have not seen
19 that, that I recall. I do think they may
20 have discussed potential looking at the
21 LNG assets and doing more with those, but
22 I don't recall.

23 MR. McBRIDE: Specifically to
24 your points of NGL, some kind of presence
25 in the natural gas liquid market or LNG

1 11/13/14 - WHOLE - RES. 140869

2 export specifically, I don't recall
3 anything either.

4 COUNCILMAN OH: Am I taking up
5 too much time, Council President? I
6 guess so. Head shaking.

7 COUNCIL PRESIDENT CLARKE:
8 Councilman, I don't know what happened,
9 why that clock went off. I didn't think
10 we had a time limit. It just went off.

11 COUNCILMAN OH: I could come
12 back later.

13 COUNCIL PRESIDENT CLARKE: All
14 right. I'm sorry, Councilman. But we
15 have -- because we have two days, we got
16 a lot of people. We do need to --

17 COUNCILMAN OH: I will stop
18 asking questions.

19 COUNCIL PRESIDENT CLARKE:
20 That's okay. We don't want to limit any.
21 We just want to -- because we do have a
22 number of people. We'll come back.

23 COUNCILMAN OH: Yes. Thank you
24 very much.

25 COUNCIL PRESIDENT CLARKE:

1 11/13/14 - WHOLE - RES. 140869

2 Thank you, my friend.

3 The Chair recognizes Councilman
4 Henon.

5 COUNCILMAN HENON: Thank you,
6 Council President.

7 Good afternoon. I'm going to
8 start off with a simple question and one
9 of the reasons why we're here. There's a
10 lot of questions that we could ask,
11 whether we should privatize PGW or not
12 privatize PGW, what are our options,
13 whether there's P3 opportunities and new
14 businesses. But my question to start off
15 is, can you explain what a regional
16 energy hub is.

17 MR. YARDLEY: We actually had
18 the same question at one point because
19 there's so much -- it's a term that just
20 seems to have been thrown around, but
21 clearly the location close to the
22 Marcellus and the ability to bring NGLs
23 as Sunoco. The type of activity that
24 Sunoco is pursuing creates or could
25 create, particularly if other clusters of

1 11/13/14 - WHOLE - RES. 140869
2 similar businesses that either benefit,
3 use NGLs were to come into this area
4 because a workforce starts to be
5 developed, then you can create a
6 situation where a cluster of related
7 businesses related to NGLs, related to
8 gas more traditionally, taking advantage
9 of the transportation infrastructure in
10 the Philadelphia area, the port and so
11 forth, then you could get a situation
12 where you would say Philadelphia is a
13 viable energy hub.

14 COUNCILMAN HENON: Do you think
15 we have those infrastructures, those
16 resources, those companies? I mean, I
17 see some of the energy industry here, and
18 I'm looking forward to hearing some of
19 their expertise, and we certainly have
20 the workforce, which has made PGW as
21 valuable as it is because they are
22 part of the infrastructure. But at any
23 given time, we can employ 1,500 people at
24 one of our petrochemical facilities and
25 supplying a highly trained workforce.

1 11/13/14 - WHOLE - RES. 140869

2 So do you think, as you
3 described, that we are in a position to
4 become or are we already are positioned
5 to be a regional energy hub?

6 MR. YARDLEY: I can give a
7 personal opinion, I guess, as much as
8 anything. I don't know if it's really an
9 expert opinion. But whenever a region
10 has an opportunity to take advantage to
11 leverage existing assets or in this case
12 proximity to the natural resources and
13 has ports that they can just take those
14 resources and reach export markets where
15 a lot of the opportunities seem to be for
16 NGLs, that that region has an obligation
17 to look at that opportunity and see what
18 government can do to contribute to the
19 success of those ventures.

20 COUNCILMAN HENON: And I
21 think --

22 MR. YARDLEY: And PGW can do.

23 COUNCILMAN HENON: I think the
24 government here certainly is willing to
25 look at that to take advantage of those

1 11/13/14 - WHOLE - RES. 140869

2 opportunities.

3 So we have the port. We have
4 the dredging of the river. We have land
5 preservation for industrial land in
6 anticipation of hopefully new business.
7 We have -- so that would be our
8 waterways. We have a vibrant and active
9 rail system, and our transportation hubs
10 and our roads are certainly
11 interchangeable and a connector to the
12 East Coast.

13 With that being said, again, we
14 are in a very good position to become a
15 regional energy hub.

16 MR. YARDLEY: That's correct.
17 And the opportunity for PGW might be to
18 provide natural gas service to some of
19 these companies that come in and to help
20 coordinate with them to train workers and
21 to help those new companies use
22 technology so that they're using natural
23 gas as efficiently as possible. So there
24 are many things that might come together.

25 COUNCILMAN HENON: Absolutely.

1 11/13/14 - WHOLE - RES. 140869

2 And in your colleague's testimony, you
3 talk about wet gas and the new business
4 opportunities and shale being a rich
5 natural resource. Instead of coming from
6 the West Coast, we have the opportunities
7 here. There was talks about a pipe,
8 whether PGW can build a pipeline or have
9 another private entity build a pipeline.

10 With all of that that has been
11 said, in your research and due
12 diligence -- thank you, by the way -- of
13 new business opportunities for PGW, do
14 you see that in its future?

15 MR. McBRIDE: I see a lot of
16 potential. And back to your original
17 question on sort of does Philadelphia
18 have what it takes to become an energy
19 hub, I think it has many of the important
20 building blocks. An energy hub is a
21 fairly vague term. Energy encompasses
22 quite a few things. But I would agree
23 with the infrastructure in terms of
24 transport, ports, rail, highways. That's
25 all there.

1 11/13/14 - WHOLE - RES. 140869

2 I'd say with the universities,
3 the potential for training, specific
4 training, for these types of industries
5 has a lot of potential. And then I would
6 give another example here or an analogy.
7 Houston is often referred to as an energy
8 hub and sort of the Gulf Coast in
9 general, coastal Louisiana, Houston. A
10 lot of that has to do with the fact that
11 originally gas and oil production was
12 occurring in that general region. So
13 because of that, there was interest from
14 manufacturers, petrochemical plants to
15 site there in that location where
16 resources were available nearby on a
17 low-cost basis and there are pipelines,
18 rail lines, canals running, resources
19 from all parts of North America to
20 Houston because of that original point.
21 There is now the ability to terminal
22 things there, process products there,
23 refine products there, as well as now, as
24 we sort of become a producer again,
25 export products.

1 11/13/14 - WHOLE - RES. 140869

2 The development of the
3 Marcellus and Utica Shale, in some cases
4 100 miles from Philadelphia, in some
5 cases three, depending on where in the
6 region you're looking at, folks like
7 Sunoco are looking at that and saying,
8 These products don't need to be sent all
9 the way to Houston at a higher cost of
10 longer pipelines to those facilities;
11 there's the potential, especially because
12 of many of these markets, export and
13 domestic, are right here in the Northeast
14 or across the Atlantic in Europe, to
15 terminal, store, and process and export
16 these products right here in the
17 Mid-Atlantic and with the building blocks
18 I discussed, the port facilities, a
19 fairly established and somewhat newly
20 revitalized refining operations within
21 the City and the local area.

22 I think there is some potential
23 for certainly increased energy activity
24 that could have a snowball effect and
25 draw additional interest from other

1 11/13/14 - WHOLE - RES. 140869

2 industrial users looking at using these
3 products, whether it's gas to run their
4 operations or natural gas liquids as
5 feedstocks for industrial or refining
6 purposes. I think there's a lot of
7 potential there.

8 COUNCILMAN HENON: So you cited
9 Houston as another example --

10 COUNCIL PRESIDENT CLARKE:
11 Councilman, we're on a timer now.

12 COUNCILMAN HENON: I didn't see
13 anybody's lights on. My apology.

14 COUNCIL PRESIDENT CLARKE:
15 That's no problem. We got a pretty long
16 board. We'll come back.

17 The Chair recognizes
18 Councilwoman Brown.

19 COUNCILWOMAN BROWN: Thank you
20 very much, Mr. Chairman.

21 Good afternoon. I want to
22 revisit and circle back to questions
23 raised by my colleague Councilman W.
24 Wilson Goode around the OEO plan for the
25 record.

1 11/13/14 - WHOLE - RES. 140869

2 Was there any discussion, text
3 given to need for, possibility for an OEO
4 plan in your discussions, meetings or
5 documents?

6 MS. QUILICI: So the contract,
7 the purchase contract, refers to a
8 commitment or requirement to file that
9 plan within a timeframe after closing.

10 COUNCILWOMAN BROWN: And there
11 was no specific timeframe, range given
12 around until after closing?

13 MS. QUILICI: I'll need to
14 double-check. I don't recall off the top
15 of my head if there was a specific number
16 of days certain for that.

17 COUNCILWOMAN BROWN: Given the
18 wealth of experience at the table, in
19 what areas could an MBE/WBE/DBE be
20 offered opportunity to be a part of this
21 major type of enterprise? What are some
22 of the skill areas or industry areas?
23 What type of contracts could MBE/WBE --
24 just for our own record here.

25 MS. QUILICI: I will be honest,

1 11/13/14 - WHOLE - RES. 140869

2 that's not something we really
3 considered. It's outside of the
4 transaction that was proposed, so we
5 really didn't go beyond the scope of the
6 specific proposal.

7 COUNCILWOMAN BROWN: But what
8 does your experience tell you?

9 MR. YARDLEY: I can take --
10 certainly many of the utilities that we
11 work for and other entities, government
12 entities --

13 COUNCILWOMAN BROWN: Speak
14 louder into the mic, please.

15 MR. YARDLEY: I'm sorry. Many
16 of the firms that we seek to work for,
17 both public and private utilities, will
18 request that we bring that type of team
19 to the engagement. So it is something
20 that's becoming more prevalent in the
21 private sector. It is very common with
22 state and public entities that we work
23 for.

24 COUNCILWOMAN BROWN: But my
25 question is more narrow. Specific

1 11/13/14 - WHOLE - RES. 140869

2 examples of skill set areas or industry
3 areas or contract areas where one might
4 engage in an MBE/WBE/DBE.

5 MR. YARDLEY: Well, everything
6 that we do. Our consulting services is
7 certainly a candidate for that. I mean,
8 that's the type of request that we get.

9 COUNCILMAN GOODE: Point of
10 information.

11 MR. YARDLEY: Maybe I'm
12 misunderstanding the question. I'm
13 sorry.

14 COUNCIL PRESIDENT CLARKE:
15 Councilman Goode.

16 COUNCILMAN GOODE: For example,
17 infrastructure replacement, that would be
18 an area where there would be
19 opportunities?

20 MR. YARDLEY: That would
21 certainly be an area where there would be
22 opportunities.

23 COUNCILMAN GOODE: Thank you.

24 MR. YARDLEY: I mean, there's
25 no -- I don't know that there's a

1 11/13/14 - WHOLE - RES. 140869

2 particular category that's excluded or
3 included. I mean, it would be across the
4 whole spectrum of outside services.

5 (Councilman O'Neill talking
6 without microphone.)

7 MR. YARDLEY: I can't
8 imagine --

9 COUNCIL PRESIDENT CLARKE:
10 Folks.

11 COUNCILMAN O'NEILL: Are there
12 any areas that would be excluded from
13 Councilwoman Brown's question as opposed
14 to included? Is there any that would be
15 excluded in your experience or reading?

16 MR. YARDLEY: I've never seen
17 any excluded. I would be surprised if
18 there were any. But that's just based on
19 our experience responding to
20 solicitations.

21 COUNCILWOMAN BROWN: So then
22 there are opportunities for MBE/WBE/DBEs
23 across the board from A to Z; is that
24 what you're saying?

25 MR. YARDLEY: I would imagine

1 11/13/14 - WHOLE - RES. 140869

2 that there would be. I don't know why
3 there wouldn't be.

4 COUNCILWOMAN BROWN: That's
5 essentially what I want to hear on the
6 record.

7 My two minutes up?

8 COUNCIL PRESIDENT CLARKE: Some
9 people took some of your time,
10 Councilwoman. I think it would only be
11 appropriate to extend your opportunity.

12 COUNCILWOMAN BROWN: Okay.

13 So workforce training programs.
14 If we're serious about wanting to grow
15 jobs, it's important to have persons who
16 come with the skill set. What is the --
17 just speak to that, and was that
18 discussed at all, a part of what you
19 read, the homework that you read,
20 whatever?

21 MR. YARDLEY: Yeah. We looked
22 at workforce training programs as an
23 opportunity to take Philadelphia
24 residents that may be young and
25 unemployed -- so it's not necessarily

1 11/13/14 - WHOLE - RES. 140869
2 people that have decades of skill yet --
3 and get them enrolled in training
4 programs that PGW and other businesses
5 and the City and the educational
6 institutions in Philadelphia would help
7 design. PGW might provide some people
8 that can help teach some of the courses,
9 as other businesses would. So that would
10 be a community effort, everybody on the
11 same page providing opportunities for
12 people that are either entering the
13 workforce for the first time or need to
14 change jobs, right? And the sort of
15 concept would be that you wouldn't just
16 be educated and then thrown out into the
17 market, but that the programs could have
18 internships designed to provide people
19 with that first opportunity to
20 demonstrate to an employer that they are
21 willing to do and can do the job and will
22 work hard to demonstrate that they can do
23 it so that the employer is more
24 interested in providing them with
25 full-time employment.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCILWOMAN BROWN: And so you
3 have a template already or would this be
4 an entirely new paradigm that you would
5 be creating for Philadelphia? Is there
6 an existing template in some other parts
7 of the country that you know work in the
8 way you just described?

9 MR. YARDLEY: We have not done
10 that research. I would hope that there
11 are, but that wouldn't stop us -- not us,
12 but I don't think we'd recommend our firm
13 to design the template, but it wouldn't
14 hold us back at all. We would find one
15 or we would -- we imagine that there are
16 other firms that could do a much better
17 job at that than we would, and we would
18 advise you to hire them and put them on
19 the case.

20 COUNCILWOMAN BROWN: Thank you,
21 Mr. President. Thank you very much.
22 Thank you.

23 COUNCIL PRESIDENT CLARKE:

24 Thank you, Councilwoman.

25 The Chair recognizes Councilman

1 11/13/14 - WHOLE - RES. 140869

2 Neilson.

3 COUNCILMAN NEILSON: I don't
4 need a timer. I was at the House of
5 Reps. We had timers all the time. So
6 we're good.

7 Mr. Yardley, in your testimony
8 you mentioned many things, might, if,
9 may, maybe, can, will, maybe, could.
10 They're like some of the key words that
11 you used throughout your testimony. PGW
12 could be the best, could be this, could
13 sell this, could do this. Is there
14 anything that is stopping PGW from doing
15 that, anything that is impeding their
16 ability to do this? I know you said some
17 of the things they were pursuing, but
18 maybe not as fast as we could. But is
19 there anything there that us as a
20 government body is stopping them or
21 prohibiting them from pursuing?

22 MR. YARDLEY: Okay.

23 COUNCILMAN NEILSON: His answer
24 don't go on my time, Mr. President,
25 because it may be or if, right?

1 11/13/14 - WHOLE - RES. 140869

2 MR. YARDLEY: I would say where
3 there's commitment, they should be able
4 to execute. There are certain things
5 that may require -- and I'll just use an
6 example, is incentives, for example. So,
7 I mean, I think as a general proposition,
8 people will pursue opportunities more
9 aggressively if they have an incentive,
10 either a financial incentive or an
11 advancement incentive. Those things can
12 be more difficult to implement in the
13 public sector than they can be in the
14 private sector. I'm speaking from
15 personal experience in the public sector.

16 So I don't want to say as a
17 blanket proposition that PGW is
18 unfettered today from pursuing some
19 marketing and other opportunities as
20 aggressively as they might like to. It
21 might be a better question for PGW than
22 for us, but that would be my general
23 impression.

24 COUNCILMAN NEILSON: So it's in
25 your personal opinion that there's

1 11/13/14 - WHOLE - RES. 140869

2 nothing in government stopping us from
3 doing it? Because what I'm trying to see
4 is, we saw PGW go from losing millions
5 and millions of dollars a year to being
6 profitable today, and yet part of your
7 testimony was -- I'm led to believe and
8 read into it that PGW management isn't
9 doing their job if this millions and
10 millions of dollars has been left on the
11 table for this long a period of time.

12 MR. YARDLEY: I definitely did
13 not intend to create that impression. My
14 impression is that PGW has been able to
15 accomplish as much as it has because it
16 has been very creative, pursuing things
17 diligently. There may still be
18 opportunities on the table, but my sense
19 is that that is just because of that's
20 where the market is taking those
21 opportunities. There may be
22 opportunities today that didn't exist ten
23 years ago.

24 I mean, I would not be -- my
25 impression is that PGW has done a very

1 11/13/14 - WHOLE - RES. 140869
2 good job over the last decade, and that's
3 why the system is in better shape today
4 than it was at that time. That's why
5 it's in a position now to take advantage
6 of some of these new opportunities. If
7 it hadn't improved, it wouldn't even be
8 able to consider these opportunities.

9 So I hope I didn't create the
10 impression that they're where they are
11 today, either that it's not in a good
12 place or that it's because they haven't
13 been doing a good job over the last few
14 years.

15 COUNCILMAN NEILSON: Also, if I
16 can, on Page 2 -- and I'll make it
17 quick -- about how PGW can use leverage
18 on outstanding higher education
19 institutions. Can you explain that a
20 little more on how the outside higher
21 education institutions would help the
22 consumers with lower gas prices and PGW
23 to be more successful than they already
24 are today?

25 MR. YARDLEY: Yeah. That

1 11/13/14 - WHOLE - RES. 140869

2 refers most directly to the workforce
3 training programs, where that's a market
4 for educational institutions, and we all
5 know that educational institutions are
6 interested in new markets. So it applies
7 most directly there.

8 To the extent you have a better
9 trained workforce in general, it helps
10 all businesses that are interested in
11 relocating to Philadelphia. And if you
12 look at the economic literature,
13 businesses don't locate because they get
14 a short-term discount or they get some
15 tax break for three to five years. Any
16 business that requires a trained
17 workforce is most interested and most
18 attracted to whether that workforce
19 exists in the place they're considering
20 locating to.

21 COUNCILMAN NEILSON: In
22 closing, Mr. President, I'd just like to
23 state about the workforce since you
24 brought it up. I happen to live in a
25 community where many PGW employees live,

1 11/13/14 - WHOLE - RES. 140869

2 and I believe they are the best trained
3 workforce -- and many of them are in the
4 room today -- in the gas industry.

5 Thank you, Mr. President.

6 COUNCIL PRESIDENT CLARKE:

7 Thank you, Councilman.

8 (Applause.)

9 COUNCIL PRESIDENT CLARKE: If
10 it's okay with the members, we have a
11 slight challenge because of the timing.
12 There are some folks here from
13 Jacksonville where there's a
14 public-private partnership and they have
15 a flight, I understand, at 6:30. I wish
16 them luck, but I don't -- I would like to
17 actually try to accommodate them. Our
18 consultant will be here tomorrow or later
19 obviously today, so we can continue that
20 conversation, because I see that we do
21 have a number of members teed up, but I'm
22 a little concerned about individuals
23 coming from Florida.

24 And the other thing I wanted to
25 do, I see my friend over here,

1 11/13/14 - WHOLE - RES. 140869

2 Mr. Rinaldi. I know he needed to -- if
3 we can do this -- we got an hour before
4 the attempt to get down I-95 to the
5 airport, and, again, I wish them luck.
6 If we can -- Mr. Rinaldi, I know you
7 have -- we actually had you teed up next,
8 along with Craig. And Craig works here,
9 the City of Philadelphia, Mr. White. I
10 know he'll be around.

11 Can we suspend this
12 conversation with Concentric for now,
13 maybe come back a little later today?

14 COUNCILMAN HENON: Second.

15 COUNCIL PRESIDENT CLARKE:

16 Second that motion?

17 COUNCILMAN NEILSON: Aye.

18 COUNCIL PRESIDENT CLARKE: Aye.

19 Thank you.

20 And ask, Mr. Rinaldi, your
21 testimony is relatively brief.

22 MR. RINALDI: Yes, sir. I
23 think about ten minutes.

24 COUNCIL PRESIDENT CLARKE: And
25 then we have to figure out a way to limit

1 11/13/14 - WHOLE - RES. 140869
2 questions. And then get Jacksonville up.

3 Mr. Rinaldi, can you come up
4 and just -- and then we will get
5 Jacksonville up. There's three people
6 from the City of Jacksonville.

7 (Witness approached witness
8 table.)

9 COUNCIL PRESIDENT CLARKE:
10 Thank you.

11 MR. RINALDI: Thank you. Are
12 you ready?

13 COUNCIL PRESIDENT CLARKE: Yes,
14 sir.

15 MR. RINALDI: Good afternoon,
16 ladies and gentlemen. Council President
17 Clarke and members of the City Council, I
18 offer my thanks and my appreciation for
19 this opportunity to provide testimony
20 regarding some of the issues, the
21 opportunities, and the pitfalls
22 associated with the potential of
23 establishing Philadelphia as a regional
24 energy hub.

25 I would like to read this

1 11/13/14 - WHOLE - RES. 140869
2 prepared statement into the record, after
3 which I'd be pleased to answer any
4 questions that you might have. The
5 testimony will cover energy hub
6 considerations per se and will include
7 some references to the present
8 Philadelphia Gas Works situation with
9 respect to the purchase of PGW as
10 proposed by UIL, as well as a few
11 thoughts about a P3 or a public-private
12 partnership alternative that I believe
13 might be under consideration.

14 Many of you know me. I am the
15 Chief Executive Officer of Philadelphia
16 Energy Solutions, the company that owns
17 and operates the former Sunoco refinery
18 complex in South Philadelphia. I am also
19 Chairman of the Greater Philadelphia
20 Energy Action Team, a group of more than
21 40 key energy industry executives
22 operating in collaboration under the
23 auspices of the Chamber of Commerce.
24 GPEAT is dedicated to fostering the
25 development of energy infrastructure in

1 11/13/14 - WHOLE - RES. 140869
2 the Greater Philadelphia area,
3 particularly a major new pipeline to
4 bring Marcellus Shale gas to the City,
5 adequately sized to meet the both present
6 and future needs. Should this come to
7 fruition, it will stimulate a rebirth of
8 a low-cost energy-based manufacturing
9 economy.

10 In the two plus years that I
11 have been immersed in the Philadelphia
12 economy, I have been struck by just how
13 enthusiastically many of the
14 energy-centric ideas with which I am
15 involved have been supported by members
16 of this City Council, the Mayor's Office,
17 the Governor's Office, our regional
18 congressional representatives in
19 Washington, organized labor, and the
20 business community at large. This
21 extraordinarily deep regional support is
22 one of the foundational pillars on which
23 the perspective creation of an energy hub
24 rests.

25 I frequently and passionately

1 11/13/14 - WHOLE - RES. 140869
2 advocate for the development of
3 Philadelphia's energy infrastructure to
4 take advantage of the proximity of
5 Pennsylvania's abundant Marcellus Shale
6 natural gas reserves. I will do so again
7 today because it is a matter of
8 importance and it's a matter of urgency.

9 Why is this important? It's
10 important because there's an opportunity
11 to create a meaningful manufacturing base
12 in the Philadelphia economy for the first
13 time in decades. Manufacturing creates
14 an extraordinary variety of jobs, jobs
15 that have rich content, jobs that pay
16 very well, and jobs that last for years
17 and years; in other words, jobs that
18 support strong family lifestyles. Robust
19 manufacturing is truly the backbone of a
20 thriving middle class.

21 And why is this matter urgent?
22 This is a particularly important question
23 with regard to the deliberations that
24 this Council is going through right now.
25 The opportunity to create an energy hub

1 11/13/14 - WHOLE - RES. 140869
2 in Philadelphia exists because the
3 natural gas reserve life in the Marcellus
4 at present production rates is measured
5 in centuries, not years. The value of
6 that gas will remain trapped in the shale
7 unless and until new consumers compel
8 additional production. The opportunity
9 is driven by the incredible difference in
10 energy value between the wellhead value
11 of methane (natural gas), presently about
12 \$4 per million BTUs of energy, while the
13 market value of liquids like gasoline and
14 diesel fuel trade in the range of \$25 per
15 million BTUs, more than five times
16 higher. These economic drivers are so
17 strong that there are many smart,
18 well-capitalized people throughout the
19 country working on figuring out how to
20 take advantage of this spread. There is
21 a famous window of opportunity to make
22 that location Philadelphia, but make no
23 mistake, competition is closing that
24 window. The first region that gets in
25 manages to get the gold. We're in a race

1 11/13/14 - WHOLE - RES. 140869
2 with Houston, with Eastern Ohio, with
3 Maryland and others. Let us win that
4 race.

5 I applaud the continued
6 interest that City Council has shown with
7 regard to developing the energy base in
8 Philadelphia and acknowledge your
9 essential role in ensuring that the
10 interests of the City, broadly
11 considered, are carefully weighed.
12 Carefully, but please with an eye on that
13 closing window of opportunity.

14 The potential to have
15 Philadelphia serve as the natural gas
16 energy hub for the eastern portion of the
17 country rests on three critical elements.

18 One, Philadelphia's close
19 proximity to the reserves of Marcellus
20 gas that could be easily valorized by
21 creation of new demand.

22 Two, the already highly
23 developed regional infrastructure to
24 support a manufacturing-based economy,
25 including a strong base of energy and

1 11/13/14 - WHOLE - RES. 140869

2 chemical companies such as Philadelphia
3 Energy Solutions, Monroe Energy, PBF
4 Energy, Braskem, Honeywell, Sunoco
5 Logistics, PECO, and many others; access
6 to the sea and rich export markets;
7 phenomenal rail infrastructure; proximity
8 to the greatest consumer market in the
9 world; industrial building sites
10 well-suited to manufacturing; and a
11 regional history steeped in manufacturing
12 culture, including human resources with
13 all the necessary job and professional
14 skills.

15 And, three, the political will
16 to make that happen.

17 The first and second
18 foundational points are matters of fact
19 and are essentially unassailable. The
20 third, the existence of political will,
21 will be viewed subjectively and will be
22 greatly influenced by the actions of this
23 City Council in the coming days and
24 weeks. Prospective manufacturers are
25 focused on the City Council through a

1 11/13/14 - WHOLE - RES. 140869

2 lens that measures whether the Council's
3 actions foster or impede the development
4 of an energy-centric economy, with all
5 its attendant job and wealth creation
6 potential.

7 I believe wholeheartedly that
8 Mayor Nutter has had nothing but the best
9 intentions for Philadelphia, and I also
10 believe that this City Council has
11 nothing but the best intentions for this
12 city. But Philadelphia cannot look
13 itself in the mirror and say that the
14 process surrounding the prospective sale
15 of Philadelphia Gas Works showcases
16 political will. I don't think I need to
17 describe what has gone wrong in the
18 process, but suffice it to say that
19 rectification is needed. I implore the
20 City Council to make crisp and timely
21 decisions about PGW's future in order to
22 restore faith in the political will to
23 make an energy-centric future a reality.
24 The status quo at PGW is not a healthy
25 place.

1 11/13/14 - WHOLE - RES. 140869

2 PGW is important to the energy
3 hub discussion for two reasons. First,
4 how resolution of PGW's situation is
5 handled will send strong signals to the
6 investment community as to whether or not
7 there is the political will to progress
8 energy business in Philadelphia.

9 Second, and more tangibly,
10 there are certain assets in PGW like its
11 LNG plant, LNG storage facilities, and
12 pipeline interconnections that will play
13 a central role in Philadelphia's energy
14 future. Whatever form the future takes
15 for PGW, those assets will need to be
16 available for development, free from the
17 historic restrictions inherent in PGW's
18 current ownership structure as a
19 municipally owned utility.

20 One option immediately
21 available to the City Council is to
22 proceed with the sale of PGW to UIL but,
23 in my opinion, only after adequate
24 further review and negotiated change to
25 address the concerns raised by City

1 11/13/14 - WHOLE - RES. 140869

2 Council and other stakeholders. UIL has
3 expressed willingness to proceed in this
4 manner, and I have spoken in recent weeks
5 with many well-placed and deeply
6 concerned business and labor leaders who
7 have also expressed their willingness to
8 work together to find a way forward for
9 the PGW transaction. What is needed now
10 is an open debate and process to bring
11 these stakeholders together in a
12 constructive environment. City Council
13 can and should provide that leadership.

14 I am not privy to all the
15 details of the UIL proposal and would not
16 presume to recommend a result. However,
17 I would observe that there is much to
18 admire in the UIL proposal. UIL, because
19 of its enhanced access to capital, would
20 reduce by half the time needed to replace
21 the ancient and suspect cast iron and
22 unprotected steel pipes that run
23 throughout our city. The sale would
24 bring \$1.86 billion to the City to retire
25 debt and to make substantial

1 11/13/14 - WHOLE - RES. 140869
2 contributions to the woefully underfunded
3 pension plans. Private ownership would
4 enhance the future development of key PGW
5 infrastructure like their LNG facilities
6 and their hub infrastructure, again,
7 because of access to private capital.

8 Naturally, there are many more
9 elements to the proposal that need to be
10 thoroughly vetted. Replacement of unsafe
11 pipe, retirement of debt, and windfall
12 infusions for the underfunded pension
13 plans are City issues for which I have no
14 opinion other than that of any ordinary
15 citizen.

16 But the impact that privatizing
17 PGW would have on future energy
18 development is a different matter. In
19 that regard, I have often expressed both
20 privately and publicly that the
21 development of Philadelphia's energy
22 future does not depend on whether PGW's
23 regulated residential gas business
24 becomes privately owned or remains
25 municipally owned. The important issue

1 11/13/14 - WHOLE - RES. 140869

2 here is how to best get the developable
3 assets of PGW into constructive
4 ownership.

5 A sale to UIL is indeed one way
6 to accomplish that goal. There could be
7 other ways as well.

8 I understand that the City
9 Council might abandon the sale process
10 altogether and instead try to attract a
11 public-private partnership in order to
12 keep the residential gas business wholly
13 under continued control of the City,
14 while bringing a private partner to
15 develop those developable assets.

16 This will be a very difficult
17 undertaking for the City Council, at
18 best, and certainly not something that I
19 fear could be done in a timely manner.

20 P3's are good when a new
21 revenue stream can be generated to give
22 private capital an opportunity to earn
23 the vigorous rates of return necessary.
24 On the other hand, P3's are not very good
25 at having private money come into a

1 11/13/14 - WHOLE - RES. 140869
2 municipal situation to provide capital to
3 fund old obligations like paying off
4 debts, funding underfunded pension
5 obligations, and replacing dangerous old
6 pipe.

7 But even if a partner could
8 eventually be attracted, it will likely
9 take a daunting length of time to put
10 together a credible municipal
11 solicitation process to search for a
12 candidate, let alone to negotiate the
13 complex agreements that would be needed
14 to come to closure.

15 If this course was set a year
16 ago, that might have produced an
17 interesting option to evaluate, but now I
18 fear that the closing window of
19 opportunity will slam shut before that
20 effort ever comes to fruition. And think
21 what would happen if the City Council
22 embarks on trying to find a suitable P3
23 deal, and maybe six or seven or eight
24 months go by during which time Houston
25 snares that incremental Marcellus gas.

1 11/13/14 - WHOLE - RES. 140869

2 No energy hub would get built here, and
3 there would be no realistic opportunity
4 to go back to the market to try to find
5 another buyer willing to bid another
6 \$1.86 billion for PGW. That seems like
7 taking a very big political risk, a risk
8 without much hope for gain.

9 There is one additional element
10 important to establishing Philadelphia as
11 a preeminent energy center on the eastern
12 seaboard, a 273-acre, three-parcel
13 property on the Delaware River owned by
14 the Pennsylvania Regional -- the
15 Philadelphia Regional Port Authority
16 generally known as Piers 122 and 124,
17 Southport and Southport West. As some of
18 you may know, my company is proposing to
19 create a master development plan aimed at
20 converting Southport parcels into a
21 world-scale energy port that would handle
22 the import and export of energy and
23 energy-related products. A Southport
24 energy port would be the envy of the East
25 Coast and really put Philadelphia on the

1 11/13/14 - WHOLE - RES. 140869

2 international energy map. It is my hope
3 that the City Council will be supportive
4 as we move forward with this process.

5 Thank you for hearing my views.
6 I'll be pleased to answer any questions
7 that you might have.

8 COUNCIL PRESIDENT CLARKE:

9 Thank you, Mr. Rinaldi. Thank you again
10 for your continued balanced approach to
11 the conversation, even though -- I mean,
12 you've indicated that you would like to
13 see a sale, but you do it in a way that
14 you feel that you look at all aspects of
15 the proposed sale and the various
16 stakeholders.

17 There are a couple of things
18 that I do want to say on the record with
19 respect to -- and you're probably the
20 most knowledgeable person in the room as
21 it relates to energy in general, and I
22 commend you. It was a pleasure to meet
23 you a couple of years ago to have that
24 very fruitful conversation that started
25 our relationship.

1 11/13/14 - WHOLE - RES. 140869

2 There are a couple of things
3 with respect to the private nature of the
4 proposal, and I don't -- as we continue
5 to have conversations with -- and I do
6 talk to UIL, as other members do. I
7 talked to Torgerson yesterday, because I
8 do think you need to continue to have
9 conversations, not about any specific
10 deals or how we move ahead, but it's good
11 to have conversation.

12 But there are a couple of
13 fundamental issues -- and this is my
14 personal perspective -- is that when I
15 look at the City of Philadelphia, this
16 is -- and I don't want to get into
17 politics, but it is a deeply suited state
18 in terms of City of Philadelphia as it
19 relates to a democratic base. And I hate
20 to get into the politics. But just
21 generally, we've been a city that
22 supports and I see pretty much at every
23 election we support government, for lack
24 of a better term. When there's
25 discussions about privatizing government

1 11/13/14 - WHOLE - RES. 140869

2 by various politicians on the national
3 level, on the state level, they tend not
4 to get a lot of votes out of the City of
5 Philadelphia, because people don't run
6 from government here. They view
7 government as an entity that actually
8 protects people and ensures that people
9 have opportunities.

10 I don't run from the fact that
11 I'm an elected official from the City of
12 Philadelphia and I look out for the
13 citizens of the City of Philadelphia, as
14 all my colleagues do. I don't run from
15 that. The notion that in the most recent
16 conversation we were very aggressive in
17 terms of trying to save and support
18 public employees, I didn't run from that.
19 Some people don't care about that. I do.
20 There's a simpler reality as it relates
21 to the public nature, as it relates to
22 the ownership of PGW. And I may be off
23 on the numbers, but there's 1,600 people
24 that work at that company in various
25 capacities, and they are required by

1 11/13/14 - WHOLE - RES. 140869

2 law -- and some people may not even like
3 that, maybe some people who work there --
4 to be Philadelphians. Nowhere else in
5 these conversations as we talk about all
6 the private-sector development -- and
7 we're very aggressive in supporting
8 that -- can we ensure that we create and
9 maintain job opportunities for people who
10 live in the City. Because given the
11 unemployment rate and the challenges
12 associated with us being able to maintain
13 jobs in the City, good-paying jobs,
14 that's a problem when you just talk about
15 privatizing 1,600 public-sector jobs. In
16 most places that would be viewed as
17 somewhat of an extremely conservative
18 approach. That's important to me,
19 because the reality is, I represent
20 people and everybody in this room
21 represents people who have these
22 good-paying jobs.

23 So that's a part of the
24 conversation that brings us to the point
25 about public-private partnership, and

1 11/13/14 - WHOLE - RES. 140869
2 we'll have testimony a little later on
3 about public-private partnerships in
4 Jacksonville and in Memphis and in San
5 Diego where early on -- and I understand
6 you referenced the sense of urgency and
7 the window is closing, but had we had
8 this conversation a lot earlier, we may
9 not be in this place. We may be
10 somewhere concluding a deal. And I,
11 frankly, don't think that was our fault.
12 And I'm not trying to cast blame, but
13 because you sometimes have a process and
14 the timing is getting to a point where
15 there's this level of nervousness that we
16 have to make a decision, what you can't
17 do is make a bad decision. You can't
18 make a bad decision because you believe
19 the clock is ticking and the window is
20 closing, because I've been there, done
21 that. I'm not going to talk about my
22 first couple of years here where we made
23 a couple of decisions about a couple of
24 big buildings down in South Philly, and
25 some people are still saying we didn't

1 11/13/14 - WHOLE - RES. 140869

2 necessarily get a good deal, because it
3 was like you had to do it now, you had to
4 do it right away. And we're like looking
5 in retrospect. We didn't really get the
6 best deal.

7 So I understand your concern.
8 I've said to you personally, privately
9 that whatever needed to be done as it
10 relates to myself -- and I'm sure my
11 colleagues feel the same way -- that the
12 appropriate signal gets sent, we'll send
13 it. I mean, December 5th I know I plan
14 on being there. I'm sure a number of
15 other members, at the summit, to talk
16 about the need to get this done, and
17 throughout this conversation, we've
18 always expressed, as you indicated and
19 acknowledged, the need and the
20 willingness to get this done.

21 I understand some of the
22 challenges associated with public
23 government, which is why one of our
24 points -- and some people may not like
25 that -- that we put in that language,

1 11/13/14 - WHOLE - RES. 140869

2 there has to be a change in governance
3 structure in PGW if it's going to
4 continue to be consistent in terms of
5 being a viable alternative to a
6 private-sector operation. You can't have
7 six levels of government that have to
8 approve everything, and we happen to be
9 one of those levels. In the case of
10 Councilwoman Tasco and Councilman Jones,
11 two of those levels. I understand that.
12 That's why we talked about that.

13 So I just want to thank you for
14 your continued support and your advice on
15 how we need to get this done, because you
16 obviously will be an integral part of
17 this process, but there are
18 considerations beyond this deal that a
19 lot of us have concerns about, beyond
20 uncertainty of the proposal, but there
21 are a lot of issues.

22 This is a very difficult
23 decision. We're prepared to make it, and
24 I think having this level of conversation
25 is very important, unlike the prior

1 11/13/14 - WHOLE - RES. 140869

2 process. So I want to thank you so much.

3 We got a couple of members that
4 want to throw a couple questions at you.

5 Councilman Jones.

6 COUNCILMAN JONES: Thank you,
7 Mr. President.

8 And thank you for taking the
9 time to address this energy issue with
10 City Council. As a gas commissioner, I
11 hear a lot of information, and sometimes
12 you have to take into consideration the
13 source, but I feel privileged to be able
14 to ask these direct questions to you.

15 Currently, you're aware that
16 most of our molecules come from Texas and
17 that the discovery of Marcellus Shale is
18 important. Do you know what capacity
19 within our leased pipe structure now that
20 we as an entity utilize?

21 MR. RINALDI: I believe we are
22 using all of that capacity within --
23 Councilman Jones, I will tell you of a
24 direct opportunity. Just a week ago, we
25 have a project at Philadelphia Energy

1 11/13/14 - WHOLE - RES. 140869

2 Solutions to build a wonderful new
3 combined heat and power modern
4 cogeneration plant and went to PGW and
5 said, I need to know how much excess gas,
6 additional gas, I can actually buy to
7 help balance that fuel, and Craig White,
8 who is a friend, not only a good business
9 leader but a friend, said, Phil, we have
10 none. We have no additional gas. We are
11 at our limit.

12 COUNCILMAN JONES: Well, it's
13 my --

14 MR. WHITE: That's correct.

15 COUNCILMAN JONES: So we lease
16 pipe capacity, and it was my
17 understanding based on information I read
18 that we only utilize 50 percent of that
19 capacity. Is that --

20 MR. WHITE: That's not correct.
21 There are times of the year that --

22 COUNCILMAN JONES: They can't
23 hear you.

24 MR. RINALDI: Because if we get
25 that gas, I could use it.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCILMAN JONES: Okay. So
3 for those who might not kind of
4 understand this, we lease through pipe
5 capacity, and if you could explain that
6 process a little bit for the record, that
7 would be helpful.

8 MR. WHITE: Certainly. When
9 PGW --

10 COUNCILMAN JONES: State your
11 name.

12 MR. WHITE: Craig White. I'm
13 the President and CEO of the Gas Works.
14 I've been in that position for the last
15 four years and I've been with the company
16 for 35. Most of that time was spent in
17 the gas supply and marketing and tariff
18 area of the business. So this is an area
19 that I would call in my sweet spot and
20 look forward to speaking on it.

21 We have two direct connections
22 to the interstate pipeline grid. One is
23 with Williams Energy, formerly
24 Transcontinental Pipeline. We have
25 165,000 dekatherms a day that we deliver

1 11/13/14 - WHOLE - RES. 140869
2 to Philadelphia. And then we have
3 another pipeline, Texas Eastern. It's
4 now called Spectra, and that pipeline, we
5 have about 134,822 dekatherms a day. So
6 the combination of those two pipelines
7 bring our firm supply, in combination
8 with underground storage fields, which we
9 have about nine under contract in
10 different parts of the country, and an
11 LNG facility of about four BCF. The only
12 thing that has changed in Philadelphia
13 over the last 20 years is that as our
14 load drops, the demand for that LNG
15 during the peak winter period has dropped
16 and we have excess capacity in that LNG.

17 As far as the interstate
18 pipeline capacity is concerned, there are
19 times of the year that we do not need 100
20 percent of it, and I think that's what
21 you're referring to, Councilman, but on
22 the peak day or in what we call
23 worst-case winter conditions, we need
24 every bit of that capacity. So when Phil
25 called me, he needs that capacity for

1 11/13/14 - WHOLE - RES. 140869

2 more days than I can give it to him.

3 In addition to that, as you
4 heard earlier from Concentric, we're
5 doing a lot of creative things with LNG
6 right now, and the way we do that is, we
7 bring it up on whatever capacity we're
8 not using for our firm customers on a
9 particular day and we use that capacity
10 to bring natural gas either from
11 Marcellus or from the Gulf Coast region
12 and we bring it up, we super cool it to
13 260 degrees below Fahrenheit, below zero,
14 and we turn it into a liquid and we put
15 it in that tank, and then what we do at a
16 later date is sell it.

17 So hopefully I answered your
18 question, probably more.

19 COUNCILMAN JONES: Probably
20 more. But let me get -- less is more.
21 So hold up. What I'm asking you is,
22 there are days when we don't use our
23 capacity to its fullest because there is
24 no demand?

25 MR. WHITE: That's correct.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCILMAN JONES: So if we had
3 a second facility where we could liquify
4 or freeze, whatever the term is, to
5 export, we could actually run that year
6 round and store it and then export?

7 MR. WHITE: Well, when you use
8 the term "export," it typically refers to
9 exporting by ship, and I just want to be
10 clear. The way we're exporting it is
11 through trucks at this point. But, of
12 course, on days when we don't need that
13 capacity, if we had another liquefier, we
14 could liquify and put additional volume
15 in the tank, and we believe that the
16 market is out there for some more liquid,
17 some additional liquid.

18 COUNCILMAN JONES: So my point
19 I was going to say, Mr. Chairman --
20 Ms. Chairman, is that we have yet to
21 totally max out on what our year-round
22 capacity to produce and export at this
23 current time because of demand and also
24 the need for a second facility to liquify
25 the gas; is that correct?

1 11/13/14 - WHOLE - RES. 140869

2 MR. WHITE: Partially. When
3 you say "max out," we are maxed out to
4 meet our customers' requirements on those
5 coldest days.

6 COUNCILMAN JONES: But there's
7 a wider audience somewhere that probably
8 could use gas to produce it.

9 MR. RINALDI: One of the issues
10 that maybe is not so apparent to a
11 layperson, for industrial use you need to
12 have access to the molecule 24 hours a
13 day, 365 days a year, and that's the kind
14 of incremental consumption that will
15 drive a manufacturing base to -- it's
16 that uninterruptible kind of supply of
17 natural gas, and it's that aspect of gas
18 delivery which is at a maximum.

19 COUNCILMAN JONES: All right.

20 MR. RINALDI: There are those
21 peaks where you have access.

22 COUNCILMAN JONES: So 365 days
23 a year we do not use our pipeline
24 capacity to its maximum leased capacity.

25 MR. WHITE: To its maximum

1 11/13/14 - WHOLE - RES. 140869

2 capacity, that's correct.

3 COUNCILMAN JONES: Thank you,
4 Madam Chair.

5 COUNCILWOMAN TASCO: Thank you.

6 To Mr. Rinaldi, I have one
7 question. Does your Energy Solutions
8 company plan to develop a natural gas
9 pipeline to Philadelphia as opposed to
10 the natural gas liquid pipeline already
11 in the works?

12 MR. RINALDI: Yes. That's a
13 terrific question, because there's a lot
14 of confusion in the marketplace. Sunoco
15 Logistics is developing through what they
16 call their Mariner East 1 and Mariner
17 East 2 projects, bringing the natural gas
18 liquids, NGLs. I know that gets a little
19 confusing with LNG and NGL. But those
20 natural gas liquids - ethane, propane
21 butane - are coming down, and they'll go
22 down to the Marcus Hook site, and that's
23 where those are going to be
24 commercialized. And what we're trying to
25 develop here both as my company and as,

1 11/13/14 - WHOLE - RES. 140869

2 more importantly, as the Energy Action
3 Team is a pipeline bringing the dry gas,
4 not the Western Pennsylvania gas which
5 someone called wet gas or rich gas, but
6 the dry gas that's up in the northeastern
7 part of the state. That's burner
8 quality, just like the stuff that's in
9 your stove or in your furnace. We're
10 trying to bring that into Philadelphia,
11 because that's the engine that drives
12 manufacturing.

13 COUNCILWOMAN TASCO: Okay.
14 Thank you very much.

15 You talked about manufacturing.
16 You know Philadelphia was a manufacturing
17 hub for many, many years and then, of
18 course, all the companies went offshore
19 and a lot went down south and then
20 offshore.

21 What are you thinking about in
22 terms of the manufacturing coming back to
23 Philadelphia and how realistic is that?

24 MR. RINALDI: I think it's
25 extremely realistic. I mean,

1 11/13/14 - WHOLE - RES. 140869
2 manufacturing clearly went to decline.
3 One of the great features about
4 Philadelphia was its terrific
5 manufacturing history, not just the brief
6 history but, you know, I guess all the
7 way back into colonial times. But what's
8 driving it right now is that this is a
9 place where you can have continued,
10 virtually guaranteed access to very
11 low-cost energy, and that doesn't exist
12 in my places in the world. And what
13 characterizes -- so not all manufacturing
14 takes advantage of that, but
15 energy-intensive manufacturing does,
16 things that burn a lot of fuel, because
17 they need a lot of heat. Like if you
18 were in steel processing, metals working
19 kind of businesses, those would benefit
20 by that. Or chemical companies that want
21 to use the molecule, because that's the
22 other characteristic of methane. You
23 take that methane and it's a very easy
24 process to begin to convert the carbon to
25 a hydrogen, and then you take that

1 11/13/14 - WHOLE - RES. 140869

2 hydrogen and have building blocks and you
3 make lots of different chemicals -
4 methanol, ammonia, urea, urea ammonium
5 nitrate, synthetic gasoline, synthetic
6 diesel fuel. So those are the kind of
7 manufacturers that would benefit greatly
8 by this.

9 COUNCILWOMAN TASC0: Thank you
10 very much.

11 COUNCIL PRESIDENT CLARKE: We
12 got Councilman Oh and Henon. Are there
13 questions for Mr. Rinaldi?

14 COUNCILMAN HENON: Short.

15 COUNCIL PRESIDENT CLARKE:
16 Because Mr. White was actually -- we're
17 not going to have him up until after we
18 got the people from Jacksonville here so
19 they can get out of here.

20 COUNCILMAN HENON: Just real
21 brief.

22 COUNCIL PRESIDENT CLARKE: That
23 plane thing, I hate to be responsible for
24 that.

25 COUNCILMAN HENON: Thank you,

1 11/13/14 - WHOLE - RES. 140869

2 Council President.

3 Mr. Rinaldi, thank you for
4 coming in, and I think this Council body
5 from the Council President on down
6 respects your business acumen and your
7 vision for energy here and in saving
8 thousands of jobs in the petrochemical
9 business and in industry. So I do want
10 to thank you for that.

11 One of the things real quick
12 about the hub and your -- and Council
13 President put it very well. I mean, your
14 delicate approach in your testimony was
15 well taken, and I could tell you my one
16 question to you is about -- we talk about
17 timing and opportunity for an energy hub.
18 So a twofold question. What is the
19 timing? What are we missing, and are we
20 prepared to be an energy hub such as if
21 it's not Philadelphia, are they going to
22 go to New York or are they going to go to
23 Baltimore?

24 MR. RINALDI: So who are the
25 alternatives? Where is the race? I

1 11/13/14 - WHOLE - RES. 140869

2 don't think it's New York. I think
3 politically New York has already decided
4 it is not on the side of fostering
5 energy. But certainly Maryland is a
6 candidate, Eastern Ohio is a candidate,
7 and certainly the big dog in the fight is
8 in Houston where you already have a great
9 chemical infrastructure and an ability to
10 draw in here.

11 So what's the time? What's the
12 timing? This story is a hot story, but
13 if you don't get a pipeline moving --
14 now, it's going to take a long time to
15 build a pipeline. I mean, that's the
16 key. You have to get the pipeline. You
17 got to move the gas down into
18 Philadelphia. That's a project that
19 takes a while. So if you can't get
20 started in that thing within the next,
21 you know, I don't know, one year or 18
22 months or something in that timeframe, I
23 think we're going to be lost in the race,
24 and manufacturers are going to say this
25 is not really the place where we're going

1 11/13/14 - WHOLE - RES. 140869

2 to go. We're going to build yet another
3 plant on the Gulf Coast, because that's
4 the safe option for them.

5 COUNCILMAN HENON: This country
6 and this city has a renewed resurgence of
7 manufacturing. We just put out a report
8 with members of this body and other
9 co-chairs of private industry. You were
10 a member of the task force as a report,
11 and the report, with all its studies,
12 show that 85 percent of what we
13 manufacture in this region is in the
14 chemical and gas and by-product industry.

15 What are the barriers that are
16 going to prevent us from making that
17 happen?

18 MR. RINALDI: So I think we
19 have two barriers in here. One is the
20 vision. In order to -- if you just want
21 to build a gas pipeline, it's one thing.
22 The federal government regulates it. A
23 PERC-regulated pipeline has its own kind
24 of characteristics. It's built to meet
25 the extant demand. But if you do that,

1 11/13/14 - WHOLE - RES. 140869

2 you haven't really created something that
3 allows industry to grow, and the way you
4 have to do that is to have a pipe that
5 has enough spare capacity in it so that
6 when new businesses come, they don't have
7 to go through this extremely difficult
8 process of arranging for new pipeline
9 transportation, because let's face the
10 reality, that's about as difficult of a
11 political thing that you can try to do
12 across the state. So the idea here is
13 you do it once and you have an adequate
14 supply and then you have it.

15 So what's the key in here? So
16 the key is to try to get enough
17 prospective manufacturers to look
18 important enough and credible enough that
19 they will be parties that will kind of
20 agree to underwrite excess space on the
21 basis that they'll eventually be able to
22 sell that space. That's step number one.
23 And once you get through step one, step
24 number two is very easy, because there
25 are a lot of companies who are actually

1 11/13/14 - WHOLE - RES. 140869
2 willing and happy to build that pipeline.
3 Pipeline is kind of a \$1 billion, \$2
4 billion size investment. And so then
5 step three is actually creating the
6 rights-of-way and the path for that
7 pipeline to get through, and that's
8 another difficult issue.

9 The state had Act 13, which had
10 some provisions that helped streamline
11 it. It lost those provisions in Supreme
12 Court ruling. My personal hope here is
13 that with the new Governor, who has a
14 strong commitment to increasing the tax
15 in the Marcellus on an extraction basis,
16 that hopefully a tax increase will
17 somehow get married with some kind of
18 legislation that makes it easier to site
19 those pipelines in order to be able to
20 exploit the assets.

21 COUNCILMAN HENON: Thank you.

22 COUNCIL PRESIDENT CLARKE:

23 Thank you.

24 We have Councilman Oh and
25 Councilman Neilson. I'm really trying to

1 11/13/14 - WHOLE - RES. 140869

2 help these people get on this plane, but
3 we keep teeing up.

4 Mr. Rinaldi, are you still
5 around? Are you going to be around?

6 MR. RINALDI: I'm here at your
7 service.

8 COUNCIL PRESIDENT CLARKE: All
9 right.

10 MR. RINALDI: So am I being
11 gently kicked back to the --

12 COUNCIL PRESIDENT CLARKE: And
13 the problem is, Mr. White took your time.

14 MR. WHITE: I tried to speak
15 quickly.

16 MR. RINALDI: He's done that
17 time and time again.

18 COUNCIL PRESIDENT CLARKE:
19 Excuse me, ma'am.

20 All right. Can we ask William
21 Kemp, Todd Allmendinger, and Alan Mosley.
22 This is the Jacksonville contingent.

23 (Witnesses approached witness
24 table.)

25 COUNCIL PRESIDENT CLARKE:

1 11/13/14 - WHOLE - RES. 140869

2 We're actually going to ask the Chairman
3 of Transportation, Councilman Johnson, to
4 call the Airport, tell them to hold that
5 up for you. He has a lot of influence
6 right about now with the Airport.

7 MR. KEMP: We appreciate your
8 consideration.

9 COUNCIL PRESIDENT CLARKE:
10 Thank you. Please proceed. Just state
11 your name for the record.

12 MR. KEMP: Yes. My name is
13 William Kemp. I'm founding partner for
14 Enovation Partners LLC.

15 MR. MOSLEY: Alan Mosley, JAX
16 Chamber.

17 MR. FARAG: Alicia Farag, Gas
18 Technology Institute.

19 MR. KEMP: As you can see,
20 Council President, Todd Allmendinger got
21 considerably more attractive. We have
22 Alicia Farag here to present some
23 interesting information I think for the
24 Council based on some programs that PGW
25 has actually supported with the Gas

1 11/13/14 - WHOLE - RES. 140869

2 Technology Institute.

3 Well, thank you for the
4 opportunity to speak before you today,
5 and we hope to present some useful
6 information to you, more from the
7 perspective of people with some
8 considerable industry experience and
9 other context basically that might have
10 some useful lessons for Philadelphia.

11 If it pleases the Council,
12 given time constraints and so forth, we
13 will go very briefly through our prepared
14 remarks. I'll pretend I'm the college
15 professor that I warned my high school
16 son about that assumes you've read the
17 material before you come to class and
18 dives right into discussion.

19 So we'll go through our written
20 material very quickly. It is available,
21 of course, both soft copy and hard copy
22 for Councilmembers' consideration in more
23 detail later on, and then I'll leave time
24 for questions, which we assume there will
25 be a few from Council. Will that be

1 11/13/14 - WHOLE - RES. 140869

2 okay?

3 COUNCIL PRESIDENT CLARKE: Yes,
4 please.

5 MR. KEMP: So just by way of
6 introduction, I'm, again, William Kemp,
7 founding partner for Enovation Partners.
8 I've been a management consultant and
9 strategy advisor to the energy industry
10 for about 25 years, cut my teeth in the
11 Carter White House on energy policy. I
12 have worked for utilities and power
13 companies and gas companies and energy
14 players around the world for 25 years.
15 So I've got some gray hair there.

16 Alan, you want to state a
17 little bit about your background.

18 MR. MOSLEY: Alan Mosley. I'm
19 a native of Jacksonville, spent 30 years
20 in city government. The last four years
21 I was the Chief Administrative Officer
22 under Mayor John Peyton, had two years
23 recently as the Secretary for District 2
24 for Florida DOT District 2, and am now at
25 Jacksonville Chamber in the

1 11/13/14 - WHOLE - RES. 140869
2 transportation, energy, and
3 sustainability space trying to leverage
4 the energy renaissance to the good of
5 Jacksonville and Northeast Florida.

6 MR. FARAG: Again, my name is
7 Alicia Farag with GTI, the Gas Technology
8 Institute, a not-for-profit R&D
9 organization that PGW has been a part of
10 for a long time. I've been there for
11 about ten years, and things that I've
12 focused on has been the development and
13 implementation of technologies related to
14 main replacement programs and operational
15 efficiencies.

16 MR. KEMP: Okay. With that, we
17 have an overview of my consulting firm
18 just in case you're wondering about
19 qualifications. It's one of the witness
20 exhibits. I won't go into that
21 commercial, but suffice it to say, we
22 were a group of very senior energy
23 strategy consultants that have come out
24 of some of the top-tier strategy
25 consulting firms that you would -- whose

1 11/13/14 - WHOLE - RES. 140869
2 names you would well recognize to form a
3 new company, because we saw a lot of
4 opportunities for both public and private
5 enterprise and especially in the natural
6 gas space with all the changes that are
7 going on. So that's where we're really
8 focusing. But we're very much more about
9 producing results and not necessarily
10 studies, although we can do those too, of
11 course, but really producing results,
12 working with public and private firms to
13 develop growth strategies and execute on
14 those growth strategies. That's, by the
15 way, the reason that Todd Allmendinger
16 could not be here today. He's working on
17 a major transaction, due diligence for an
18 international player that wants to put
19 quite a bit of money into the gas space
20 in the United States. And I will be,
21 another example, accompanying a large
22 municipal client to a partnering meeting
23 with a couple major private firms on a
24 matter that could result in significant
25 economic development for the city where

1 11/13/14 - WHOLE - RES. 140869

2 that public utility is on Monday.

3 To answer -- Chairman Clarke,
4 you asked a question I think earlier on
5 about the \$20 million number, was that
6 realistic or not. Just to put a little
7 perspective on some of the opportunities
8 out there, a small-scale LNG production
9 plant to serve LNG fuel uses, if it was
10 to be built as an expansion or a separate
11 plant in the PGW service territory, say,
12 on the order of 500,000 gallons a day,
13 which is kind of a medium-sized
14 small-scale LNG production plant and it
15 was reasonably well subscribed, that
16 would be expected to produce net income
17 of in the \$20 to \$30 million a year
18 range. So there are opportunities out
19 there that are in that size basically,
20 but you have to execute on them.

21 My prepared testimony really
22 addressed four major areas. One was what
23 is the experience in Jacksonville and
24 with JEA, the municipal utility serving
25 Jacksonville, was trying to grow a

1 11/13/14 - WHOLE - RES. 140869
2 natural gas business and grow the
3 regional economy using gas as a leverage
4 point for encouraging to open new
5 industries. So I'll address a little bit
6 about JEA's experience, and then Alan
7 will step in, I think, to provide a
8 broader perspective on how the regional
9 players are addressing that.

10 And then I'll talk a little bit
11 about combined heat and power, LNG, and
12 CNG as other opportunities that could be
13 relevant for PGW. But, again, I think
14 Concentric addressed those to a large
15 degree, so I'll just provide some color
16 on that.

17 I think Council staff had said
18 you were interested in talking about the
19 governance structure for JEA and in
20 Jacksonville, how are they set up and so
21 forth, how has that allowed them or not
22 allowed them to do things, and I have a
23 couple brief points we can make about
24 that.

25 And, finally, in the area of

1 11/13/14 - WHOLE - RES. 140869

2 operational efficiencies, we have a few
3 things we can say about that, and Alicia
4 has some interesting information about
5 some of the things that can be done to
6 both reduce cost and increase safety and
7 reliability as opposed to thinking it's
8 all about cutting costs.

9 So getting over to JEA, JEA is
10 the municipal utility serving
11 Jacksonville, Florida. Jacksonville is
12 the fourth largest metropolitan area in
13 Florida, about 1.4 million people all
14 together. JEA is the eighth largest
15 public power utility in the country. It
16 also provides water and sewer service. I
17 think that's about all I need to say
18 about that.

19 JEA did go through a new
20 strategic planning process. That was one
21 of the things I did with them over the
22 past couple years, and really tried to
23 broaden their mission and vision just
24 from beyond providing commodity service
25 to its customers to providing -- the

1 11/13/14 - WHOLE - RES. 140869

2 mission says, energizing our community
3 through high-value energy and water
4 solutions. So it could have involved
5 more than just supplying electricity and
6 water. It could involve supplying other
7 types of gas, other services or
8 partnering with customers to do things on
9 their premises as long as that was the
10 best solution for the partner, for the
11 customer.

12 The vision is all around being
13 a valued asset for the community and a
14 valued partner in advancing the
15 community. So, again, they're trying to
16 take a broader vision to their role in
17 the community. And I don't think that's
18 substantially different from PGW, but
19 they did want to get everybody aligned
20 around that mission and vision as they
21 went forward with the new strategic plan.

22 As far as what drove JEA to
23 become interested in the natural gas
24 business, it is authorized to provide
25 natural gas, but has not historically

1 11/13/14 - WHOLE - RES. 140869
2 done that on a retail basis in
3 Jacksonville. There's another company, a
4 private gas local distribution company,
5 that's owned by PECO Energy out of Tampa
6 that has the local gas distribution
7 system in Jacksonville. However, JEA's
8 Charter allows it to go into gas and
9 telecom too if it chooses to.

10 From the community viewpoint, I
11 think JEA saw growing a natural gas
12 business as enabling them to provide more
13 efficient energy solutions for its
14 customers. There's already some combined
15 heat and power projects in the region,
16 and they wanted to increase that. They
17 wanted to enhance regional economic
18 development compared to the coal plants
19 they were generating most of their power
20 with that certainly would result in
21 reduced greenhouse gas emissions, and
22 growing more throughput in gas would
23 allow them to better utilize some of
24 their assets.

25 They are a major holder of gas

1 11/13/14 - WHOLE - RES. 140869

2 transmission capacity into the
3 Jacksonville metro area, and they have
4 some good brownfield sites around the
5 port that could be converted to new
6 businesses to host industrial customers
7 around gas. So that was a community
8 motivation for them getting into natural
9 gas.

10 And from the financial
11 viewpoint, it was really driven by the
12 fact that their electricity sales and
13 their water sales had been declining
14 significantly over the past five years.
15 Their electric sales are down by 8
16 percent from 2008, still have not
17 recovered. Their water sales are down 16
18 percent since 2008. So when their
19 costs -- they have rising cost pressures,
20 as all utilities do, due to pension
21 costs, due to rising healthcare costs and
22 so forth. When you have falling sales,
23 that does create some financial pressure.

24 So there was certainly a
25 strategic intent to try to grow new

1 11/13/14 - WHOLE - RES. 140869

2 revenue sources where they could more
3 efficiently use their assets, contribute
4 some margin to allow them to avoid
5 raising their rates for their core
6 services to their customers.

7 So what has been happening with
8 Jacksonville. There really is a push
9 into small-scale LNG production.
10 Jacksonville is a home port for two major
11 shipping lines that serve Puerto Rico and
12 the Caribbean out of the Jacksonville
13 port. Those ships are U.S. flagships
14 because they're going to Puerto Rico for
15 most of their route, so they are under
16 U.S. EPA regulation, and there is a
17 ratcheting up in 2016 of the emissions
18 controls for U.S. flagships, which would
19 mean that if they kept burning fuel oil,
20 they would have to spend quite a bit of
21 money to retrofit their ships and to come
22 into compliance with EPA's new regs. So
23 that was one motivator for the shipping
24 lines in Jacksonville to become
25 interested in converting to LNG as a fuel

1 11/13/14 - WHOLE - RES. 140869

2 for their ships. The other one is
3 obviously the cost advantage for LNG that
4 was referenced earlier by Mr. Rinaldi.

5 Jacksonville is an attractive
6 site for LNG production because it has
7 those shipping lines. It's got
8 brownfield sites available and greenfield
9 sites along the port that could be easily
10 accessed. It's got substantial gas
11 pipeline capacity coming in. It's not
12 currently that constrained, so there
13 would be room for adding some new LNG
14 production capacity within existing
15 pipeline system.

16 So as a consequence, three LNG
17 project developers approached JEA, the
18 municipal utility, in the early 2013 kind
19 of timeframe and started asking
20 questions, asking to partner up with the
21 local utility. I was advising JEA about
22 who is the best match for them, and we
23 entered negotiations with a couple of
24 those parties. Those are still currently
25 being pursued.

1 11/13/14 - WHOLE - RES. 140869

2 Really the key decision on
3 who -- there's three competing LNG
4 project developers in Jacksonville. When
5 I say "LNG production," keep in mind
6 these are small plants. These are not
7 the huge international export plants.
8 These are much smaller plants that are on
9 the order of \$300 to \$500 million
10 investment. They're not \$7 or \$8 billion
11 investment like the big plants down in
12 the Gulf Coast.

13 There's probably room for one
14 or two of those plants in Jacksonville.
15 The question is who will be successful on
16 developing those, and it really depends
17 on who signs up to the shipping
18 companies, who will be anchor tenants
19 basically. So if you get them and you
20 have a credit-worthy counterparty and you
21 can afford to make the investment -- and
22 we're hoping JEA will be one of those,
23 but that's still subject to competition
24 and it is a P3 competition. I mean, JEA
25 is partnering up with international

1 11/13/14 - WHOLE - RES. 140869

2 companies to build those plants, and some
3 of the other proposals are purely private
4 that don't involve JEA. So it would be a
5 competition there between P3 alliances
6 and purely private developers.

7 And with that, I think that's
8 kind of the background there, and Alan
9 can give you a little bit of flavor about
10 how the regional government players have
11 addressed it.

12 MR. MOSLEY: So regional is a
13 seven-county region in Northeast Florida.
14 We formed JAX Alliance, which is a
15 subsidiary of JAX Chamber, and with our
16 seven-county partners are seeing how we
17 can best leverage the renaissance, the
18 energy renaissance that's occurring in
19 this country.

20 We began to look at it from a
21 CNG side as we had some large -- our
22 large bus fleet was converting to CNG, so
23 we were looking at that area, but the
24 real game changer for Jacksonville has
25 been the LNG activity, liquefied natural

1 11/13/14 - WHOLE - RES. 140869
2 gas activity that Bill was speaking
3 about.

4 Sea Star is one of the shipping
5 lines, and they have awarded to the team
6 of WesPac and Pivotal, and they are in
7 the process of building the first train,
8 LNG treatment train, to produce the
9 marine fuel necessary to fill a Sea Star
10 container vessel. We understand it will
11 be the first container vessel in the
12 world filled with -- fueled with LNG, and
13 it is scheduled to -- about one year from
14 now for that to occur. So that's a big
15 moment.

16 We also have a second line that
17 Bill mentioned, and they have not made a
18 decision on who they intend to use. And,
19 again, both these lines have extensive
20 relationships in the Caribbean, so it has
21 opened up a demand for export there that
22 I know both -- I know the industry is
23 focused and looking at. Again, it would
24 be mid to small range.

25 It's an exciting time. We have

1 11/13/14 - WHOLE - RES. 140869

2 been -- had the industry kind of descend
3 upon us, and we've been able to leverage
4 their skills and knowledge. We've pulled
5 them together on a committee. The
6 Alliance is really just a private -- a
7 group of private-sector business people.
8 The thought was to bring the industry and
9 the area's businesses together and work
10 on a plan, continue to kind of leverage
11 and perpetuate this good work that's
12 going on.

13 Again, on the CNG side and our
14 urban fleets, we're seeing private
15 industry. We have Champion Distributors,
16 private industry trucking, and they're
17 opening -- they're working with a company
18 called Trillium. I think they're out of
19 Ohio and -- Chicago. And they are
20 building a CNG facility up there. We've
21 got CNG facilities coming up right now
22 that are publicly accessible. That's a
23 key part of the strategy. A lot of the
24 companies, private companies, will build
25 their CNG facility, but they'll keep it

1 11/13/14 - WHOLE - RES. 140869

2 kind of behind the fences, and for it to
3 really be a catalytic piece -- a
4 catalyst, infrastructure, it needs to be
5 outside and accessible to other fleets.

6 And so we're starting to see
7 that happen. It's very exciting. The
8 LNG work is very exciting as well.

9 Again, we're kind of moving towards about
10 this time next year the container vessel
11 being ready and shipped over and filled.

12 And we also -- right now there are LNG
13 exports leaving our port and going into
14 the Caribbean for industrial -- kind of
15 isolated demand in industrial demands
16 that are happening now. Those LNG --
17 that LNG is coming from a plant up in
18 Georgia, run -- I think Macon, run by
19 Atlanta Gas and Light.

20 That's really kind of on the
21 natural gas side the activity that's
22 cooking. And, again, the Chamber's role
23 is private sector, just trying to make
24 sure the questions are answered and the
25 community, the business community, is

1 11/13/14 - WHOLE - RES. 140869

2 informed. I'd call it informed
3 collaboration. So, again, a lot of
4 exciting times. Look for kind of a
5 cascading impact of this activity.

6 COUNCIL PRESIDENT CLARKE:

7 Right.

8 MR. KEMP: So that's a little
9 bit about the natural gas story in
10 Jacksonville. There are some discussions
11 too about -- similar to what was talked
12 about here. I don't think Jacksonville
13 envisions itself as a large-scale energy
14 hub like Philadelphia would, but there
15 are opportunities to be proactive about
16 pursuing European manufacturers, for
17 example, that have energy-intensive
18 processes that we might be attracted to
19 locating in Jacksonville, probably
20 Philadelphia too for that matter,
21 depending on what skill set was required
22 and the labor force and what they were
23 making. I think that is an opportunity
24 to think more broadly about what it means
25 to be an energy hub, to do some

1 11/13/14 - WHOLE - RES. 140869

2 added-value manufacturing as well as the
3 petrochemical and more strictly energy
4 things.

5 Turning into the -- I provided
6 some slides -- and I won't go into it
7 because I think the economics are fairly
8 straightforward -- about combined heat
9 and power. There is also some written
10 material on the word version of our
11 testimony from Mr. Allmendinger about the
12 LNG and CNG markets, especially in the
13 Philadelphia region. And the basic
14 message from all that is that there's a
15 large growing market for conversion to
16 gas for fuel based on the economics that
17 was mentioned by several of the speakers
18 already that are priced for natural gas
19 here in the U.S. There's about one-fifth
20 on the energy content basis of the price
21 of oil. Even if oil is down at \$80 a
22 barrel and stays there, it's still going
23 to be 30 or 50 percent cheaper to burn
24 CNG or LNG for fuel than it would be to
25 burn diesel or bunker fuel. So the

1 11/13/14 - WHOLE - RES. 140869

2 market is responding to that basically,
3 as you would expect, and I think people
4 have enough confidence that gas prices
5 will be, in the long run, still
6 relatively inexpensive in North America
7 that they're making some longer term
8 investment decisions to take advantage of
9 that price differential, lower costs,
10 lower emissions, and there's definitely
11 room for a private-public partnership in
12 that, I think. It's just a question of
13 how you structure it and what PGW's role
14 would be in that case, or when I was
15 advising Jacksonville, what role do you
16 want to take with your counterparty. You
17 can contribute the brownfield assets
18 obviously. You can contribute some of
19 the gas pipeline capacity, what skill
20 sets do you have in your labor force that
21 you might be able to pull into the crews
22 that will be used to operate and
23 distribute these kinds of LNG products
24 and so forth.

25 I would say just to put it in

1 11/13/14 - WHOLE - RES. 140869

2 context, I'm a frequent participant in
3 some of the industry group meetings, and
4 the private gas LDC utilities are very
5 aggressively going into both CNG and LNG
6 and CHP, combined heat and power, all of
7 those. I see those as opportunities to
8 grow sort of primary energy market share
9 for natural gas given its relative cost
10 advantage. And about -- I would say
11 about a third of privately investor-owned
12 gas LDCs have announced combined heat and
13 power programs as growth initiatives for
14 their companies.

15 So when you think about what
16 fits for PGW, I think the market is
17 definitely there. It's just a question
18 of -- then it becomes -- you know you
19 want to play there. How do you win?
20 What are the skill sets you need to
21 field? Who do you need to partner with
22 in order to be a successful competitor in
23 that market?

24 Again, if you have questions
25 about that, we can come back to it, but

1 11/13/14 - WHOLE - RES. 140869
2 in the interest of time, I'll assume that
3 you can kind of breeze through
4 Mr. Allmendinger's written testimony and
5 my PowerPoint slides on that.

6 As far as the JEA governance,
7 JEA is an independent authority owned by
8 the City of Jacksonville. So not much
9 different from PGW here. It started out
10 as electric only, and then water and
11 sewer was added in the late '90s. So it
12 went from Jacksonville Electric
13 Authority, the JEA, because they were now
14 doing water too.

15 As far as the governance, the
16 Mayor appoints all the seven Board
17 members. They are confirmed by the City
18 Council. They have rotating two-year
19 terms with one possible renewal. So I
20 don't know how exactly that compares with
21 the governance of PGW, but it's a
22 balance. And really the appointment by
23 the Mayor is the only direct governance
24 input that the Mayor has. City Council
25 approves JEA's budget. The Board of

1 11/13/14 - WHOLE - RES. 140869

2 Directors hires the CEO, provides general
3 oversight, as you might expect, rules on
4 rate change requests, rules on financings
5 and so forth and approves all the major
6 policies, as you would think like a
7 normal Board would.

8 The CEO selects the top-tier
9 management, has general management
10 authority. So has a fair amount of
11 autonomy to run the utility on a
12 commercial base.

13 JEA does contribute a
14 negotiated percentage of its revenue to
15 the city treasury of Jacksonville.
16 Currently, that amounts to about 22
17 percent of the total city budget. So
18 it's a pretty sizable contribution.

19 It's not -- as a publicly owned
20 utility, it's not subject to much
21 regulation by the state Public Service
22 Commission. There's a few things like
23 siting up new power plants and rate
24 structure as opposed to rate levels that
25 the state PSC does regulate, but it's

1 11/13/14 - WHOLE - RES. 140869

2 fairly light.

3 So that's kind of the
4 governance structure. Now, I think there
5 was some dialogue earlier today about
6 PGW. It kind of moved fast enough and so
7 forth. I would say by nature, all
8 utilities, whether they're public or
9 private, have been designed for
10 reliability and stability. That was
11 their mission and their job number one.
12 So you think about that. It made sense
13 given what they were trying to do and
14 what the nature of their market was.

15 Well, things are changing
16 pretty quickly. There's new
17 opportunities and so forth. So it's not
18 just public utilities. Private utilities
19 too are trying to become more nimble.
20 They all recognize there's a need to move
21 more quickly to capitalize on the
22 opportunities that are there and to meet
23 some of the challenges, competitive
24 challenges, that they're facing.

25 JEA's Charter, as I mentioned,

1 11/13/14 - WHOLE - RES. 140869
2 does allow them -- it's pretty broad. It
3 allows them to provide pretty much any
4 kind of utility services, and there's no
5 monopoly franchise for the private gas
6 utility there. But JEA and PECO, Peoples
7 Gas, have worked collaboratively
8 generally over the years.

9 I might be sticking my toe in
10 the water here, but I'll throw out a
11 little bit of an editorial. I've worked
12 as a consultant around the world for many
13 energy companies. I was based in Sydney,
14 Australia for several years, and some of
15 the best run energy companies that I've
16 worked for have been publicly owned
17 companies. Most of those were in the --
18 more of the UK style of a corporatized
19 utility. So New Zealand -- Electricity
20 Corporation in New Zealand or Eskom, the
21 national utility for South Africa. By
22 the way, it's still one of the best run
23 utilities in the world, in my opinion,
24 and its senior management looks quite a
25 bit different than it did 20 years ago.

1 11/13/14 - WHOLE - RES. 140869

2 So that's another -- what
3 corporatized structure means is that
4 every year there's a process of defining
5 what the social contribution will be of
6 the enterprise. Once that's set,
7 dividends and whatever else you want to
8 put out there as far as workforce goals
9 and things like that, but once that's
10 set, then it's run as a private
11 enterprise to maximize profit basically.
12 So it's run pretty efficiently. So just
13 something to think about.

14 As far as operational
15 improvements, that's another area that
16 staff said you might want us to touch on
17 briefly. I have some slides in there
18 that talk about what JEA did as far as
19 defining a new strategic plan and
20 focusing down on two or three major
21 initiatives where they could really get
22 some traction and make some major
23 headway, and then they'll wind up all top
24 four layers of management around that
25 plan, get everybody on the same boat and

1 11/13/14 - WHOLE - RES. 140869

2 going in the same direction. They got
3 bottom-up input too from the front line
4 organizations on that, and then they
5 engaged the whole organization
6 effectively by cascading personal
7 commitments to the strategic initiatives
8 all the way down to the organization.

9 And I'm only saying that because it's
10 sometimes said you can't get fast change
11 done successfully in a public-sector
12 utility, and that's not true. JEA,
13 customer satisfaction was its top
14 priority because they were in the bottom
15 quartile. They were like 96 percentile
16 in customer satisfaction in late 2012.
17 They went to the top quartile in one year
18 and their business customer ratings with
19 J.D. Powers, and within 20 months they
20 went to the top quartile for customer
21 too. So that was all the JEA team
22 working together on a focused set of
23 initiatives.

24 COUNCIL PRESIDENT CLARKE:

25 Right.

1 11/13/14 - WHOLE - RES. 140869

2 MR. KEMP: They also had some
3 important initiatives about growing
4 revenues, which I talked about, and
5 improving operational efficiency, and
6 they did successfully hold their rates
7 flat in the face of rising rate pressure.
8 And so they did that successfully too.

9 With that, I'll turn it over to
10 Alicia to talk about a couple of things
11 that might be of interest in the
12 operational efficiency area.

13 MS. FARAG: I'll just touch
14 briefly on a couple of operational
15 efficiency areas as they relate to the
16 core gas distribution business.

17 PGW, like any utility company
18 with an aging infrastructure that has a
19 significant main replacement program in
20 the works, has a real opportunity to put
21 in place a new system that is not only
22 safer, not only more environmentally
23 friendly, but is also more efficient to
24 run. There's new materials out there,
25 there's new sensors, there's new remote

1 11/13/14 - WHOLE - RES. 140869
2 monitoring, and there's new construction
3 techniques that can be used to create
4 really significant operational
5 efficiencies and really reduce the cost
6 of not only installing the new
7 infrastructure but as well as operating
8 it.

9 One specific type of technology
10 is information technology-related
11 applications. There's a lot of
12 redundancies that can be eliminated and
13 there's a lot of non-value-added
14 activities that are currently being
15 performed at any utility company, not
16 just PGW, but in terms of manual data
17 collection and manual data management.
18 And there's a lot of IT technologies out
19 there that can provide significant
20 improvements in this area.

21 And we're not just talking
22 about cutting costs and we're certainly
23 not talking about cutting jobs, because
24 what you're doing is, you're freeing up
25 these resources from manual back-office

1 11/13/14 - WHOLE - RES. 140869

2 processes that are not adding value and
3 allowing these resources to focus on the
4 engineering and design of these main
5 replacement programs to help accelerate
6 them even further.

7 I would like to acknowledge
8 that PGW has been a funder of GTI and a
9 lot of the technologies like these that
10 we have been developing as part of the
11 APGA Research Foundation, and there's
12 some of these technologies that they are
13 actively looking at putting in place.

14 Thank you.

15 COUNCIL PRESIDENT CLARKE:

16 Thank you.

17 A couple of quick questions and
18 then we're actually going to have to take
19 a break for the stenographer. I just
20 wanted to say that in this
21 conversation -- first, thank you for
22 coming up to participate in this process.
23 And this is probably, again I say, the
24 conversation we should have had early on
25 in the process about public-private

1 11/13/14 - WHOLE - RES. 140869

2 partnerships, and it's clear that you're
3 showing that that in fact can be done.

4 One of the things we wanted to
5 do at this hearing is have a balanced
6 conversation, pro sale, not necessarily
7 pro sale. Some people in here don't want
8 to see anything happen. There will be a
9 lively debate on that. But the notion
10 that somehow that the private sector
11 cannot participate in a business
12 operation, particularly here in the City
13 of Philadelphia where we've actually run
14 a utility -- how many years, Derek? 170
15 years. Some good years, some bad years.
16 I mean, we're now A plus rating. I mean,
17 I think we're kind of doing okay. And
18 I'll talk to Mr. White a little later
19 about this issue about us not moving
20 quickly enough and taking advantage of
21 the opportunity that presents us and the
22 decision-making process during the last
23 several years when -- I was not a Board
24 member. I don't think maybe anybody in
25 this room was a Board member of PFMC, but

1 11/13/14 - WHOLE - RES. 140869
2 somewhere along the line, if this
3 opportunity presented itself, there
4 should have been some forward-thinking in
5 terms of positioning us to actually be in
6 the process of taking an opportunity that
7 presents us now. We should be prepared
8 to do that, but I'll talk about that a
9 little later on in the conversation.

10 But the notion that you have
11 shown in a municipality -- I actually
12 didn't know that the customer base of
13 Jacksonville was 1.4. That actually puts
14 you all on par with the City of
15 Philadelphia, because we were led to
16 believe that during the course of the
17 conversation, we were the only
18 municipally owned facility of this size,
19 and when we --

20 MR. KEMP: It's 1.4 million
21 population in the metro area. I think
22 they have 400,000, 420,000 electric
23 customers, about 330,000 water customers.
24 So it is --

25 COUNCIL PRESIDENT CLARKE: I'm

1 11/13/14 - WHOLE - RES. 140869

2 saying -- I understand that. But you
3 have a 1.4 customer base.

4 MR. KEMP: No; 430,000
5 customers.

6 COUNCIL PRESIDENT CLARKE: What
7 was the 1.4?

8 MR. KEMP: That's the metro
9 population.

10 COUNCIL PRESIDENT CLARKE: So
11 they don't access that?

12 MR. KEMP: No. It's just the
13 number of people.

14 COUNCIL PRESIDENT CLARKE: You
15 just threw that in there.

16 MR. KEMP: You got about three
17 people per customer.

18 COUNCIL PRESIDENT CLARKE:
19 That's fine. Four hundred is a pretty
20 decent size.

21 So I guess the conversation --
22 and we'll probably have some followup --
23 is the ability to create an environment
24 where a municipally owned or any company
25 is nimble enough to take advantage of the

1 11/13/14 - WHOLE - RES. 140869

2 market and the opportunities, and I'd
3 like to talk to you more about
4 governments at another time, because that
5 is one of the points that we actually put
6 in our document. It can't continue to be
7 like it is. Some people might like the
8 myriad levels of authorization. And I'm
9 just speaking for myself. Maybe City
10 Council shouldn't be in the loop as it
11 relates to authorizing capital
12 expenditures. I mean, again, I'm just
13 speaking for myself. But there needs to
14 be a change in structure of governance.
15 There really needs to be a change in
16 structure of governance. So that's one
17 of the very, very aggressive stances that
18 we take to make sure that we can do this
19 thing in a way that makes some sense, if
20 in fact we choose to go that direction.

21 MR. KEMP: One of the things I
22 often tell my clients to reenforce your
23 point, especially when you're rapidly
24 changing industry, if the rate of change
25 inside is not as fast as the rate of

1 11/13/14 - WHOLE - RES. 140869

2 change outside, it's not long before
3 you're dead or you're irrelevant
4 basically.

5 COUNCIL PRESIDENT CLARKE:

6 Right. I mean, we actually maybe three
7 years ago, when the deregulation went
8 into effect in the state and there was
9 just real concern about what would happen
10 with some of the utilities in terms of
11 rates and we were promised that we're
12 going to be okay, the rates aren't going
13 to go up. I'm not going to get into
14 specifics of what companies actually
15 raised the rates. We actually created an
16 Energy Authority, this Council. I
17 believe it was a Charter change to allow
18 us to create an Energy Authority to be in
19 a position to actually do what you're
20 talking about doing, to get outside the
21 bounds of some of the limitations of the
22 existing government structure.

23 So we wanted to do this in
24 terms of being more flexible, in terms of
25 having, as you reference in your

1 11/13/14 - WHOLE - RES. 140869

2 particular case where the Mayor appoints
3 and Council authorizes and gets the heck
4 out of the way, we actually have an
5 Energy Authority that is actually
6 positioned that way. The Mayor
7 appointed; we authorized. That Energy
8 Authority exists for the sole purpose of
9 taking advantage of these energy
10 opportunities.

11 But I just want to thank you
12 for coming up, and I anticipate we'll
13 have some more conversation about the
14 model that you all -- we actually since
15 found out that, I believe, in San Antonio
16 and also Memphis, they have a similar
17 model. So there is in fact a number of
18 public-private partnerships across the
19 country.

20 MR. KEMP: We've also been
21 involved in Brownsville, which is a
22 little bit smaller, but that's a very
23 interesting case study of a
24 public-private partnership on a massive
25 scale in electricity, gas, and even space

1 11/13/14 - WHOLE - RES. 140869

2 export down there.

3 COUNCIL PRESIDENT CLARKE:

4 Okay. Thank you.

5 Councilman Squilla.

6 COUNCILMAN SQUILLA: Thank you,

7 Mr. President.

8 My question is, when it's a
9 public-private partnership -- and Council
10 President alluded to it -- the access of
11 turnaround time or quick response as far
12 as getting new equipment, new
13 technologies and things like that, do you
14 see that there's a lag because of that
15 partnership, that you have to jump
16 through extra hoops?

17 MR. MOSLEY: You know, I
18 reference back to DOT contracts with the
19 state and where you up front very clearly
20 prescribe each other's responsibilities
21 and do try to make it more of a
22 performance-based relationship. That is
23 one thing that has worked as far as kind
24 of streamlining the process.

25 MR. KEMP: As Alan said, if

1 11/13/14 - WHOLE - RES. 140869

2 you're going to have a successful
3 public-private partnership, you need to
4 have an internal governance that's
5 nimble. You have to have clearly defined
6 roles, maybe have one that's more of an
7 operating partner, makes the quick
8 day-to-day decisions, you have another
9 partner that might be contributing
10 significant assets or financial support
11 which would have a different role of
12 periodic review of performance and things
13 like that. That's how you try to avoid,
14 as you're saying, too many iterations in
15 the decision process so that you can move
16 forward.

17 MS. FARAG: One of the models
18 that I'm familiar with, it's not
19 necessarily a public-private partnership,
20 but it's something referred to as a
21 strategic alliance where there's a
22 long-term relationship between the
23 utility and a service provider. And some
24 of the companies that have used this
25 model have said one of the specific

1 11/13/14 - WHOLE - RES. 140869

2 benefits is their ability to quickly get
3 in place new technologies, because they
4 set in place incentives that reward both
5 the service provider and the utility for
6 the implementation of best practices and
7 new technologies, and they specifically
8 structure the relationship in a way that
9 encourages both organizations to support
10 that.

11 COUNCILMAN SQUILLA: So,
12 therefore, does it have to be written in
13 the initial agreement between the parties
14 how that would work or does it have to be
15 done through legislation to allow that
16 process to move forward?

17 MR. KEMP: It depends on how
18 your governance structure is for the
19 public enterprise, but in JEA's case, it
20 would not require legislation. It
21 required Board approval, which would be
22 for any private company, that would be
23 the same thing.

24 To answer your question more
25 specifically, when you get to the

1 11/13/14 - WHOLE - RES. 140869
2 operating agreement, you need to be
3 pretty explicit about that. There's a
4 joint development agreement where you're
5 trying to development the business and go
6 forward where you can be a little bit
7 looser about that and figure out what you
8 each want to do on an operating basis
9 once you get closer to getting into
10 operations.

11 COUNCILMAN SQUILLA: So each
12 one that you've been involved with I
13 guess is structured differently depending
14 on -- or are they structured similarly
15 throughout the different -- you're in
16 Jacksonville, right?

17 MR. MOSLEY: Yes.

18 COUNCILMAN SQUILLA: So do you
19 think that's structured similarly to the
20 other ones throughout the country?

21 MR. MOSLEY: I would say they
22 probably are unique. It's still an
23 evolving -- delivery methods is an
24 evolving and iterative process, and I
25 would say it's probably unique and

1 11/13/14 - WHOLE - RES. 140869

2 building upon the successes and learning
3 from the failures of previous ones.

4 COUNCILMAN SQUILLA: Okay.

5 Thank you.

6 COUNCIL PRESIDENT CLARKE:

7 Thank you, Councilman.

8 Thank you very much. I'm sure
9 we will reach out and have a little
10 further discussion, but right now you
11 need to figure out a way to get to the
12 airport.

13 MR. MOSLEY: Mr. President, is
14 there an Amtrak?

15 COUNCIL PRESIDENT CLARKE:

16 There's actually a train that can take
17 you to the airport.

18 MR. MOSLEY: Thank you.

19 COUNCIL PRESIDENT CLARKE:

20 Thank you so much.

21 MR. KEMP: Thank you for the
22 opportunity. We look forward to
23 continuing the conversation.

24 COUNCIL PRESIDENT CLARKE:

25 Absolutely. Thank you so much.

1 11/13/14 - WHOLE - RES. 140869

2 We're going to try to move this
3 around a little bit. Can we have the
4 PGW's Local 686 and then we'll have -- I
5 guess we can bring you, Mr. White, back
6 up after or you got enough in?

7 MR. WHITE: Whenever you want
8 me.

9 COUNCIL PRESIDENT CLARKE:
10 Thank you.

11 (Susan Edwards talking without
12 microphone.)

13 COUNCIL PRESIDENT CLARKE:
14 Ma'am, I said earlier -- thank you for
15 being here -- that given the level of
16 response to this particular hearing, we
17 scheduled it for two days because we knew
18 there would be no way that we would be
19 able to get everybody on the first day,
20 particularly since we only had a half a
21 day. We're trying to accommodate as many
22 people as possible on the first day, but
23 we're just not going to be able to do
24 that.

25 (Susan Edwards talking without

1 11/13/14 - WHOLE - RES. 140869

2 microphone.)

3 COUNCIL PRESIDENT CLARKE: It's
4 up to the members of the body. I'm
5 assuming there will be continued
6 conversation. In what format I'm not
7 really sure. It could be on a
8 continuation of this or it could be on a
9 bill. It's a very important issue and
10 everybody is concerned, and we're just
11 trying to --

12 (Susan Edwards talking without
13 microphone.)

14 (Witnesses approached witness
15 table.)

16 COUNCIL PRESIDENT CLARKE:
17 Guys, we're going to take a break, a
18 stenographer break.

19 (Short recess.)

20 COUNCIL PRESIDENT CLARKE:
21 Thank you. We're going to start back up.

22 Can I have your attention,
23 please.

24 We're going to start. Folks,
25 hello, hello, hello. We're going to

1 11/13/14 - WHOLE - RES. 140869

2 start.

3 Thank you, Deputy. Got to get
4 you some desk gloves.

5 Thank you. Good evening,
6 gentlemen.

7 MR. HOLMES: Good evening.

8 COUNCIL PRESIDENT CLARKE: Just
9 state your name for the record and please
10 proceed.

11 MR. HOLMES: Yes. First of
12 all, I'd just like to say -- I'm Keith
13 Holmes. I'm President of Gas Workers
14 Local 686, represent 1,140 employees at
15 PGW. Next to me on my right is Jim
16 Runkle. He's the union attorney. To my
17 left here is Mike Waller. He's the
18 Financial Secretary of the union, and
19 behind me is Jim Lennox. He is the
20 Treasurer of the union.

21 I'd just like to start by
22 saying thanks for having the union be
23 part of this process. As everybody
24 knows, when the Administration announced
25 the sale or a potential sale of PGW, they

1 11/13/14 - WHOLE - RES. 140869

2 basically shut the union out of the whole
3 process, and it's refreshing to know that
4 there are people in City government that
5 actually care about what the workers
6 think and how it would affect the
7 workers. So I want to thank Council.

8 I agree with your decision not
9 to support a sale of PGW to UIL. Over
10 the last 11 years -- I just want to give
11 a little history of things since I've
12 been President.

13 Over the last 11 years, this
14 union has made big sacrifices to try and
15 help PGW become the success it is today.
16 2003 I took over as President of the
17 union, and one of the first calls I made
18 was to Craig White and I said, Look,
19 Craig, things aren't going good the way
20 it is. The relations with management,
21 the union were terrible. The union was
22 trustee prior to that. And I said, Look,
23 I'd like to do things different. I'd
24 like to try and move the company forward
25 and make it a successful thing instead of

1 11/13/14 - WHOLE - RES. 140869

2 a potential drain on the City. And at
3 that time, we entered into some things
4 called interest-based negotiations, so we
5 both understood each other's interests.
6 And, you know, most union leaders
7 wouldn't take that risk, because it's
8 easier just to say no and not be part of
9 the solution than it is to actually step
10 up and be part of a solution. And to
11 Craig's credit, him and Tom Knudsen at
12 the time agreed to do it.

13 And we brought some people in,
14 and the leadership of the company and the
15 leadership of the union went through some
16 formal training, and we started to
17 understand that we can't move forward
18 unless we're both there together and
19 we're partners.

20 But with that comes some pain
21 for the union. And over that period of
22 time, the union, we redid our job
23 descriptions. We put standards in play
24 for our call center. The contract at the
25 time, we were only collecting 86 cents on

1 11/13/14 - WHOLE - RES. 140869
2 the dollar. We took zero raises for a
3 few years so our benefits and our pension
4 can stay intact, and over time -- the
5 other thing the union did is, we went to
6 Harrisburg, and we were the only union in
7 the state to testify for the collection
8 effort for the company. We were the only
9 one to step forward for PGW. And we knew
10 how important the collection effort was
11 to turn it around, and as everybody
12 knows, the collection went from 86 cents
13 to 98 cents on the dollar. And, you
14 know, our call center, that's improved,
15 you know, twofold. It's been
16 unbelievable, the improvements. And one
17 thing people don't understand, the
18 commitment. I had to stand in front of
19 my members, 10 to 15 people at a time,
20 and tell them why we were going to change
21 the job description and why we're
22 changing the work standards in there,
23 because, look, if we continue the path
24 we're down, we won't have jobs. So, you
25 know, for me to stand there and say,

1 11/13/14 - WHOLE - RES. 140869

2 Look, we need to improve, you need to
3 have less downtime, you need to answer so
4 many calls an hour.

5 We went with the company to
6 PSE&G up in Central Jersey and we looked
7 at their call center, and we brought some
8 people in from our national union and we
9 were able to make these changes.

10 But the point I want to bring
11 up is, after the union members, not Keith
12 Holmes, the union members made these
13 sacrifices and we tried to make this
14 company a better place, our reward 11
15 years down the road is, we're going to
16 sell the company and we don't really care
17 if you're protected. We don't care.

18 There's no protections in the
19 Asset -- well, there's minimal
20 protections in the Asset Purchase
21 Agreement. I am so tired of hearing our
22 pensions are protected. I challenge
23 anyone to show me in the Asset Purchase
24 Agreement where a PGW pension is
25 protected. It's protected to May 15 at

1 11/13/14 - WHOLE - RES. 140869

2 '15. So a guy that worked his whole
3 career, after this May, could lose 35 to
4 40 percent of his pension, and we're
5 supposed to be in favor of a sale.
6 That's just not acceptable. There's no
7 third-party rights in the Asset Purchase
8 Agreement. That's not acceptable.

9 Our contract is up May 15 of
10 '15. So the first thing I have to do is
11 negotiate a contract with somebody I've
12 been arguing with over the last year, and
13 the only reason why we've been arguing is
14 because they don't want to meet with us.
15 They'll meet with everybody else, except
16 the leadership of Local 686, because
17 they're doing everything possible to try
18 and sell this company on the back of my
19 workers, and that's not going to happen.
20 And thank God we have City Council to
21 stand up and protect the union people.

22 Over time we've really worked
23 hard and, you know, we've taken less. We
24 make 6 bucks an hour on the average less
25 than what a private-sector gas worker

1 11/13/14 - WHOLE - RES. 140869

2 makes. So at the end of the day, did
3 anybody give me my pension and
4 healthcare? No. I paid for it over that
5 30 years by taking less. And the reward
6 we get is, we're going to sell you.

7 So, look, you know, we can sit
8 here and we can discuss it and we'll
9 entertain any questions Council would
10 have, but I urge Council, don't change.

11 Let me tell you something, it's
12 very popular in the City of Philadelphia
13 that PGW is not being sold. The only
14 people who want this sold are the people
15 who are going to personally benefit from
16 it. Big business wants it sold. What's
17 that going to do for the poor? What's it
18 going to do for the seniors and what's it
19 going to do for the workers at PGW?

20 If you look in the Asset
21 Purchase Agreement, they said, Well, we
22 can't lay you off for three years, but
23 they could cut our workforce from 1,600
24 to 1,350 employees. And it's already
25 been publicly stated by them they're

1 11/13/14 - WHOLE - RES. 140869

2 going to eliminate back-office functions.

3 They're going to eliminate HR, legal.

4 They're going to do finance.

5 Everyone is talking about how
6 profitable this sale is, but no one sits
7 down with the union of Local 686 and
8 tells us how it's going to benefit my
9 employees. I haven't heard anything
10 about job growth in Local 686, you know.
11 We have 1,600 employees, 1,140 are union.
12 Ninety-five percent of them live in the
13 City, vote in the City, pay taxes in the
14 City and are PGW customers.

15 So, again, I just want to thank
16 Council, and I hope and pray that, you
17 know, at the end of the day you hold
18 strong and don't let anyone convince you
19 that a sale of PGW is a good thing,
20 because it's not for the workers and it's
21 not for the customers.

22 MR. RUNKLE: I just wanted to
23 add one thing.

24 COUNCIL PRESIDENT CLARKE:

25 State your name for the record.

1 11/13/14 - WHOLE - RES. 140869

2 MR. RUNKLE: Yes. James Runkle
3 and I'm counsel to UWA, Local 686.

4 I just wanted to say one thing,
5 because sometimes this gets a little
6 muddled. Some people say, Oh, well, they
7 haven't offered you the right deal yet,
8 that's a shame. Why don't they just
9 offer you the right deal?

10 The point is, there isn't a
11 right deal. It's about privatizing
12 municipal jobs. It's not about, oh, give
13 a two-year extension to your contract or
14 a three-year extension of your contract
15 and then you can get slaughtered in two
16 or three years. It's not about some
17 temporary reprieve. This is about
18 privatizing 1,140 union jobs, and once
19 they're gone, they're not going to come
20 back.

21 This is an industry -- my law
22 firm represents a number of unions in the
23 oil, in the utility industry, and when I
24 go in and prep a case, I have to ask them
25 who the employer is now, because I can't

1 11/13/14 - WHOLE - RES. 140869

2 remember because it churns so much in the
3 industry. There is a takeover, a merger,
4 an affiliation, a disaffiliation every
5 couple years. And so even if there were
6 some temporary reprieve, if UIL is
7 bought -- and they've been listed as
8 recently as June as a major takeover
9 target in the utility industry --
10 nobody -- an Exelon or someone that buys
11 them isn't going to honor whatever they
12 honored for those two years.

13 Moreover, they've made clear
14 that they have a different set of
15 benefits, a different set of obligations
16 everywhere else in their company that
17 they're not willing to change here.

18 So there's no way they could
19 satisfy Local 686. We're opposed to
20 privatization, period. The laws are
21 different. You've had labor peace here
22 because of this partnership for 20 years
23 in the gas industry. If anybody
24 remembers back, I know Councilwoman Tasco
25 does and others, to the late '80s, it was

1 11/13/14 - WHOLE - RES. 140869
2 strike after strike after strike. PARA
3 prohibits that for public-sector workers
4 since 1993. You haven't had that now.
5 God forbid, this is an industry where we
6 don't want labor strike. This is an
7 industry that is safety sensitive, that
8 we don't need any interruption in quality
9 gas service and supply.

10 So there are myriad reasons why
11 privatization is just bad.

12 So I just wanted to reiterate
13 what Keith said. This isn't about the
14 right deal. The right deal is keeping
15 this municipal, period.

16 COUNCIL PRESIDENT CLARKE:
17 Thank you. Thank you for your testimony.

18 The Chair recognizes
19 Councilwoman Reynolds Brown.

20 COUNCILWOMAN BROWN: Thank you.

21 Good evening, gentlemen.
22 President Clarke and members of Council
23 had multiple reasons why we thought it
24 appropriate to have this discussion in
25 this way, and so to one of the purposes,

1 11/13/14 - WHOLE - RES. 140869
2 which is to explore this concept called
3 energy hub, we know that Philadelphia has
4 the opportunity to develop an energy hub
5 to strengthen access to lower priced
6 gases, supplies, and promote
7 sustainability.

8 What role -- and to follow up
9 on your legitimate concern and interest
10 to ensure jobs going forward, what role
11 might Local 686 play in supporting
12 programs to develop Philadelphia's energy
13 workforce going forward for both PGW
14 and --

15 MR. RUNKLE: We've spent a lot
16 of time on that, and those kind of
17 arrangements are certainly possible, so
18 long as all of the jobs remain municipal.
19 Your energy hub, I think it needs to be
20 fleshed out of what it is and how it
21 would work. But we're not opposed to it,
22 so long as all the jobs remain municipal.

23 I mean, look, we've had
24 conversations, he and I, with the
25 President of the AFL-CIO, Richard Trumka,

1 11/13/14 - WHOLE - RES. 140869

2 in Washington to talk about that. They
3 and their investors, Ullico, their sort
4 of investment arm, is very into making
5 investments in repairing and expanding
6 infrastructure like this. So labor
7 actually just like the union has been a
8 partner turning PGW around, labor could
9 be a partner in expanding that base, but
10 only -- and Mr. Trumka said this -- only
11 if the local is satisfied, the jobs
12 remain municipal.

13 COUNCILWOMAN BROWN: Speak to
14 the type of training that currently
15 exists within your organization to get
16 young people in particular in the
17 pipeline for opportunities at PGW.

18 MR. HOLMES: Well, first of
19 all, PGW has a state-of-the-art training
20 facility down in the Passyunk plant, and,
21 you know, unfortunately the union doesn't
22 train the employees, PGW does. But I
23 would say, you know, over time they go
24 down to the facility. They go through a
25 few-week course in training, and then

1 11/13/14 - WHOLE - RES. 140869

2 usually what they do is, when they go
3 out, they'll also receive additional
4 training out in the street with whatever
5 foreman or whatever, they're in that
6 gang.

7 COUNCILWOMAN BROWN: And you
8 say that's administered by PGW?

9 MR. HOLMES: Through PGW, yes.

10 COUNCILWOMAN BROWN: Well, then
11 the follow-up questions would be more
12 appropriate for PGW.

13 The last question is, one of
14 the ideas talked about in the Concentric
15 report for PGW's future is a possible
16 public-private partnership or some other
17 arrangement, and I've heard your view,
18 but to this question, what is 686's view
19 on PGW entering, on that idea, entering
20 into a joint venture to further promote
21 business and/or opportunity going
22 forward?

23 MR. RUNKLE: I think that so
24 long as the jobs are municipal. I mean,
25 look, we'd like to not lose jobs. We're

1 11/13/14 - WHOLE - RES. 140869

2 going to lose jobs if the UIL sale goes
3 through, period. They've said that. So
4 we'd like to gain jobs. So if there's a
5 way to gain jobs, remain municipal, I
6 think we're all in favor of it.

7 Just one other point as sort of
8 an aside. I'm sorry, but it's related to
9 your question on training. This is not
10 some cookie-cutter training thing. This
11 is working on live gas. So this isn't,
12 I'm going to send you to a course for
13 eight weeks and now you're going to go
14 work on live gas throughout the City of
15 Philadelphia.

16 This is especially critical
17 now. Because of the uncertainty of the
18 sale, you have 250 operating department
19 employees poised to retire without
20 penalty. They're eligible to retire.
21 They've chosen to stay so far. There is
22 the uncertainty with the sale --

23 COUNCILWOMAN BROWN: So let me
24 follow these numbers. X number are
25 slated to retire before May of '15?

1 11/13/14 - WHOLE - RES. 140869

2 MR. RUNKLE: They're eligible
3 to retire right now and they -- by the
4 end of this year. And a large percentage
5 of them have indicated they might because
6 of the uncertainties with sale.

7 This -- you can't replace a
8 30-year distribution foreman with
9 somebody who just got trained for a
10 matter of weeks or months or, frankly,
11 years. You will never be able to replace
12 that experience, and that is the single
13 most critical factor to keeping
14 Philadelphia safe from gas explosions.
15 And there are this many senior people
16 ready to roll and if this process goes on
17 with uncertainty past the end of the
18 year, there may be no way to get them
19 back. So it's important to finish this
20 sooner rather than later so that those
21 skilled employees stay employees and can
22 ensure the safe delivery of gas in the
23 city.

24 MR. HOLMES: There's 400 total
25 right now that can retire, and 260 are in

1 11/13/14 - WHOLE - RES. 140869

2 the operating departments, 250, and I
3 believe 105 already signed their papers
4 that they're going to leave at the end of
5 the day.

6 MR. RUNKLE: But they can still
7 pull their papers.

8 MR. HOLMES: They can still
9 pull them back. They have about a
10 two-week period. So that's why it's so
11 important that the process ends, because,
12 like I said, people work their whole life
13 and they're afraid they're going to lose
14 everything at the tail end, so people are
15 running out the door. They might be 50,
16 51 years old. They don't want to go, but
17 it's the safest thing for them.

18 COUNCILWOMAN BROWN: Sure.

19 I heard the bell ring, didn't
20 I? Thank you.

21 Thank you, Mr. President.

22 COUNCIL PRESIDENT CLARKE: If
23 you have additional.

24 COUNCILWOMAN BROWN: A quick
25 followup.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCIL PRESIDENT CLARKE: Go
3 ahead.

4 COUNCILWOMAN BROWN: So hearing
5 those numbers, I can only imagine it's
6 quite scary being 51 and forced to make a
7 decision when just in terms of your own
8 personal circumstances may not be
9 prepared to deal with that decision. So
10 given the prospect -- first of all, is it
11 fair to say this is unprecedented? I
12 mean, what you're experiencing in terms
13 of the number of retirees looking to
14 transition, is it unprecedented?

15 MR. HOLMES: Yeah, I would say
16 it is. And it's all being done based on
17 the sale process. I mean, I'm 50 years
18 old with 31 years and, you know, I'll be
19 honest, if I wasn't President of the
20 union, I'd be retiring because, you know,
21 there's just too much uncertainty. But
22 obviously in the position I'm in, you
23 know, that option doesn't exist for me,
24 but it exists for -- and people ask me,
25 and I say, Look, you know, people, they

1 11/13/14 - WHOLE - RES. 140869

2 need to know, and it's getting so
3 close -- you got to give 30 days' notice,
4 I believe it is, to pull your papers. So
5 if you sign your papers and you hit that
6 date, you're done.

7 But it is unprecedented. It's
8 a shame, because there's a lot of good
9 talent. And we're not talking about
10 people that, you know, work 40 years and
11 they're 65 years old and it's time to
12 move on. You're talking a lot of people
13 in their young 50's that still have a lot
14 of good years of service left that are
15 being forced out the door.

16 COUNCILWOMAN BROWN: So my last
17 question is, given that reality in the
18 way you just framed it, have you had time
19 to think about building a bench? Is
20 building a bench even a possibility of
21 young people who are trained and ready
22 to -- I'm being totally unfamiliar with
23 the way it operates in the organization.

24 MR. HOLMES: Then again, I
25 think the sale process kind of dictates

1 11/13/14 - WHOLE - RES. 140869

2 that because UIL might have some say in,
3 you know, things going forward because of
4 the Asset Purchase Agreement. So you
5 can't make major changes. So I don't
6 know. I mean, that's a question for
7 Craig White. Could he just hire --
8 anticipating 250 employees leaving, could
9 he go out and start to hire. I know they
10 have been hiring a lot of young people,
11 you know, over the last year or two and
12 they have been building the force up,
13 trying to replace people, but like you
14 said, you know, it's tough on a guy or a
15 woman that comes in and you work a couple
16 years and you're being pushed into
17 positions that you might not have got
18 there for ten years, you're getting there
19 in five years based on the amount of
20 people retiring.

21 MR. RUNKLE: I think the
22 company has expressed concern about the
23 number of people leaving. They're not
24 hiding that. They're not disagreeing
25 with us about that. But you just can't

1 11/13/14 - WHOLE - RES. 140869

2 replace 30 years of experience with
3 someone who is just going through the
4 training. You can't have a distribution
5 worker do the job of an experienced
6 foreman or operator.

7 COUNCILWOMAN BROWN: Agreed.
8 You can't do that in any profession.

9 Thank you very, very, very much
10 for your testimony, gentlemen.

11 Thank you, Mr. President.

12 COUNCIL PRESIDENT CLARKE:
13 Thank you, Councilwoman.

14 The Chair recognizes Councilman
15 Oh.

16 COUNCILMAN OH: Thank you,
17 Mr. President.

18 I just have more a statement,
19 but I'd certainly welcome your reaction.

20 So I'm sorry to say, but I've
21 heard two different things that I don't
22 think are true, me personally. One is
23 that a sale could only be good. We
24 should sell it because there's nothing,
25 but it could only be good.

1 11/13/14 - WHOLE - RES. 140869

2 On the other hand, I don't
3 believe that a sale could only be bad. I
4 think it depends on what the sale is. I
5 would say, for example, that when the
6 Sunoco refinery closed, PES came in. I
7 think those are very good jobs. There's
8 just 2.5 billion to Sunoco Logistics.

9 Are you saying that regardless
10 of the sale, no matter what the
11 investment, no matter the investment into
12 energy growth and whatnot that would
13 bring the money to develop and create new
14 jobs, that you would not be for that deal
15 because you must have municipal workers
16 rather than union jobs at a private
17 facility?

18 MR. RUNKLE: I think that the
19 answer is yes to that, because, see, the
20 sales you're talking about are private to
21 private. They're not municipal to
22 private. So there's no change in the
23 law. Municipal law and employer can't
24 unilaterally implement. There can't be
25 the labor strife unless the union strikes

1 11/13/14 - WHOLE - RES. 140869

2 out. There, there can be by unilateral
3 implementation. So the law is far less
4 favorable. If I'm already private
5 sector, there's no change. It's one
6 private-sector employer to another. Here
7 I'm losing a couple really important
8 things. I'm losing the protections that
9 state law gives me that private-sector
10 federal labor law doesn't give me. I'm
11 losing a body like this to determine
12 whether my pension is going to change or
13 whether it should be sold and I'm
14 replacing that with a Board of Directors.

15 I'm not criticizing private
16 capital generally here, but they're out
17 to make a profit. It's shareholder
18 value. That's just the way capitalism
19 is, right? So they aren't -- and history
20 would demonstrate in the private sector
21 when Exelon takes over UIL, for example,
22 if they ever do or some scenario like
23 that happens, they're not looking at
24 pensions. They're not looking at current
25 obligations. They're looking at can we

1 11/13/14 - WHOLE - RES. 140869

2 maximize our ROE in the utility industry
3 by virtue of this sale.

4 So I think it's apples to
5 oranges actually, because this is
6 public-sector municipal jobs going
7 private, and you'll never get that kind
8 of oversight back, you'll never get that
9 kind of control, you'll never get that
10 kind of protection for citizens who need
11 it or for workers who need it. So I
12 think it's very different. It's very
13 difficult. I mean, we never got to that
14 point here because there was never an
15 offer to deal with us, but we weren't in
16 favor of privatization no matter what
17 because of everything that's lost. You
18 don't have that when Sunoco buys some
19 other company.

20 Like I said, I've got private
21 utilities buying private utilities,
22 buying private utilities. I can't even
23 keep track of who the current employer
24 is. You don't have these same interests
25 at stake there that you do here.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCILMAN OH: Okay. Thank
3 you for your answer.

4 COUNCIL PRESIDENT CLARKE:
5 Thank you, Councilman.

6 Other questions for these
7 witnesses?

8 (No response.)

9 COUNCIL PRESIDENT CLARKE:
10 Gentlemen, thank you very much.

11 (Thank you.)

12 COUNCIL PRESIDENT CLARKE: Next
13 we will have Rob Wonderling.

14 Mr. White, do you have
15 testimony?

16 MR. WHITE: Yes, sir.

17 COUNCIL PRESIDENT CLARKE: Or
18 are you just available to kind of --

19 MR. WHITE: No. I have
20 testimony.

21 COUNCIL PRESIDENT CLARKE: Why
22 don't you come up.

23 (Witnesses approached witness
24 table.)

25 COUNCIL PRESIDENT CLARKE: Good

1 11/13/14 - WHOLE - RES. 140869

2 evening. Just state your name for the
3 record.

4 MR. WONDERLING: Sure. My name
5 is Rob Wonderling and I have the honor
6 and privilege to serve as the President
7 and CEO of the Greater Philadelphia
8 Chamber of Commerce, and I must say
9 sitting through this hearing to date, I
10 am energized, and I think for the members
11 of this august legislative body,
12 individually as Councilmembers and as a
13 whole -- and this is a Committee of the
14 Whole -- this is an exhilarating time of
15 opportunity, and I'm extremely impressed.

16 (Bell rung.)

17 MR. WONDERLING: Please don't
18 cut me off when I'm throwing a verbal
19 bouquet.

20 COUNCIL PRESIDENT CLARKE:
21 Mr. Wonderling, did you have a flashback
22 to your Senate days?

23 MR. WONDERLING: In all
24 seriousness, having been in your shoes,
25 to take the time and to go through due

1 11/13/14 - WHOLE - RES. 140869

2 diligence and to really examine all the
3 possibilities, you should be commended.

4 I also want to thank this body
5 and the Council President because in many
6 respects, this hearing is about the
7 opportunities for jobs and for growth,
8 and individually and collectively you
9 folks have been a great partner with our
10 Roadmap for Growth, and in fact, to date
11 we've had six listening sessions in
12 partnership with members of this body,
13 another one scheduled this evening. It's
14 just been absolutely outstanding, because
15 the coin of the realm is a job, and I
16 think that is where there's common ground
17 and why, Council President Clarke, we're
18 glad that you've called this hearing
19 today.

20 A couple of key data points to
21 start, and the first data point, the
22 first indicator is 1.3 percent, and that
23 is really the total amount of employment
24 that has declined, 1.3 percent in
25 Pennsylvania, since 2007 and 2012, the

1 11/13/14 - WHOLE - RES. 140869

2 Great Recession, a decline of 1.3
3 percent.

4 Another key in the leading
5 indicator is 259 percent, and that is how
6 much employment in the oil and natural
7 gas industry has increased in our
8 Commonwealth over that same period of
9 time. That's 15,000 new jobs.

10 Now, obviously the majority of
11 these jobs have occurred in the Marcellus
12 Shale portion of our Commonwealth in
13 Southwestern Pennsylvania and the
14 northern tier, but the American Petroleum
15 Institute reports that between now and
16 2020 approximately 100,000 jobs in
17 Pennsylvania will grow to 220,000 jobs.
18 We fully intend to work in partnership
19 with this body, this government to grab
20 every single one of those jobs to the
21 City of Philadelphia and the Greater
22 Philadelphia region. We have to. Doing
23 nothing is not an option.

24 In the last several decades,
25 eight out of ten major industry sectors

1 11/13/14 - WHOLE - RES. 140869

2 in this city have lost jobs. During the
3 past decade, we have seen a trend where
4 thousands of Philadelphians have lost
5 their jobs as our economy has transformed
6 from one that's broad-based on
7 manufacturing to one that's moved,
8 appropriately so in some instances, to
9 higher education, healthcare, leisure,
10 and tourism.

11 So really the question before
12 us today and I think the tone of the
13 Council President and having the
14 Committee of the Whole in this resolution
15 is just not the spirit, but the question
16 that we all need to answer is how can we
17 all work together - government, labor,
18 the business sector - to reverse these
19 local trends, to grab some of those
20 predicted hundred thousand new jobs for
21 Pennsylvania, for this city, and for this
22 region. How do we work to bring them
23 back to Philadelphia. We think there's
24 opportunity in energy manufacturing. You
25 do as well.

1 11/13/14 - WHOLE - RES. 140869

2 This Council participated in
3 the Mayor's Manufacturers Task Force,
4 which really was a partnership with the
5 business community, with
6 quasi-governmental entities, with City
7 Council, and there are a number of good
8 works that have come out of that.

9 So in the spirit of having
10 brief testimony and knowing that this
11 legislative body likes definitive and
12 precise steps of action, let me suggest
13 five action steps for City Council to
14 consider over the next three years to
15 establish an energy hub for this city and
16 this region.

17 Action Step No. 1, let's expand
18 the City's existing job creation tax
19 credit program to incent manufacturing
20 and energy companies to locate and create
21 jobs in Philadelphia. The City offers
22 employers in Philadelphia job creation
23 tax credits, thanks to Councilman Goode,
24 in addition to the Pennsylvania
25 Commonwealth's own tax credit program.

1 11/13/14 - WHOLE - RES. 140869

2 These two programs offer a specified
3 amount of tax credits off the City's
4 business income and receipts tax as a
5 company creates new jobs. Action Item
6 No. 1, and we're recommending that you
7 consider expanding this tax credit for
8 further manufacturing, energy sector, and
9 downstream economic opportunities. This
10 will be an incentive to attract companies
11 to this city as well as to entice and
12 encourage existing companies to grow and
13 expand here.

14 Action Step No. 2, partner with
15 the local energy industry -- we've heard
16 a bit about that throughout the testimony
17 today -- to promote the expansion of
18 existing pipeline capacity to bring that
19 shale gas from the Marcellus region to
20 this city. You heard from Phil Rinaldi,
21 who chairs our Energy Action Team,
22 earlier today, and we're working hard to
23 break down the policy barriers and the
24 political barriers to bring natural gas
25 pipelines to the City of Philadelphia,

1 11/13/14 - WHOLE - RES. 140869

2 and we think this legislative body, this
3 City Council, has the authority both
4 legislatively and on a moral basis to
5 convene stakeholders, convene those that
6 want to be proper stewards of the
7 environment, convene citizens, convene
8 organized labor, convene the business
9 community and work through, as
10 Councilwoman Tasco mentioned earlier,
11 perhaps in a retreat format, on how we
12 can bring a pipeline to bring this
13 natural resource to Philadelphia. That's
14 an action item, and as our Chairman of
15 the Energy Action Committee, Phil
16 Rinaldi, testified earlier, an action
17 item that has to start now because it
18 takes two to three years to bring a
19 pipeline to this city.

20 Action Item No. 3, we really
21 encourage City Council to bring a careful
22 approach when you evaluate zoning.
23 There's a large amount of residential and
24 commercial development happening across
25 this city, and that's a tremendously

1 11/13/14 - WHOLE - RES. 140869

2 positive outcome, but we need to preserve
3 large-scale industrial zoning. It's
4 particularly important to do so along the
5 lower Schuylkill River and portions of
6 our Delaware River waterfront. Those are
7 the locations that are closest to the
8 needed infrastructure like rail lines,
9 ports, and highways. These large-scale
10 tracks are vital. It's a vital component
11 for us to attract new companies to this
12 region.

13 We commend one of your
14 colleagues, Councilman Henon, who had the
15 leadership to raise this issue during the
16 Mayor's Manufacturing Task Force and,
17 again, this Council can grab this as an
18 action-oriented agenda item to make sure
19 it happens now.

20 Action Item No. 4 -- and our
21 friends of organized labor just touched
22 on this in their last testimony -- a
23 collaboration that would set a local
24 ordinance and state law that will provide
25 steps for the Philadelphia School

1 11/13/14 - WHOLE - RES. 140869

2 District to implement more vocational and
3 technical training programs for citizens
4 in the City of Philadelphia. The School
5 District has just begun to seek
6 partnerships that are defined to bring
7 industry in the energy and manufacturing
8 space, bring their curriculum in an
9 applied learning environment to our young
10 Philadelphians. City Council can play a
11 significant role in making that so, not
12 just in the School District but with the
13 Community College of Philadelphia as
14 well.

15 I had the distinct honor to
16 represent the business and civic
17 community on the search process that
18 brought us Dr. Guy Generals, our new
19 President of the Community College of
20 Philadelphia, and he's all about stacking
21 credentials. He's all about finding a
22 way in working with industry and
23 particularly the energy and manufacturing
24 sector to create pathways short of a two-
25 and four-year degree that would have a

1 11/13/14 - WHOLE - RES. 140869

2 Philadelphia employable in this growing
3 energy and manufacturing economy now, and
4 this City Council can clearly take that
5 action step.

6 And then finally, Action Step
7 No. 5, and that truly is to engage in
8 further public discussions with UIL
9 concerning PGW.

10 Now, look, we really respect
11 the role that this body has on all
12 matters that come before you, and it's
13 not the role of the Greater Philadelphia
14 Chamber of Commerce or the Energy Action
15 Team or virtually anybody else to weigh
16 in on the specifics of this transaction,
17 but we do think that by continuing a
18 public process, to have the corporation
19 in question come here and answer or at
20 least be called to answer many of the
21 same questions that members of this body
22 have been asking all afternoon I think is
23 a strong public process that strengthens
24 the bonds of the democratic process for
25 all the citizens of Philadelphia and,

1 11/13/14 - WHOLE - RES. 140869

2 most importantly, during this critical
3 time as we work to move private capital
4 into the Greater Philadelphia region, it
5 sends a strong and clarion signal to
6 investors not in this region that clearly
7 this legislative body takes this work
8 very seriously. Again, not for us to
9 impose that, but to gently suggest in a
10 highly diplomatic way that a public
11 process that brings closure to the matter
12 we think is warranted.

13 We have every reason to believe
14 that we can become an energy hub. An
15 energy hub isn't just a confederation of
16 economic actors growing an economy and
17 providing 10,000 jobs. An energy hub
18 truly sets the price of natural gas in
19 the marketplace. Philadelphia could do
20 this. We have no doubt that we can do
21 this, and we look forward to working with
22 members of this Council individually,
23 with our Council President, and City
24 Council to make it so.

25 Thank you.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCIL PRESIDENT CLARKE:

3 Thank you very much for your testimony.

4 And it's been a pleasure working with

5 you. Not that you're going anywhere, nor

6 am I, but over these several years that

7 you've been here, it's really a pleasure

8 working with you on the School District

9 issue and look forward to a continued

10 working relationship with you and the

11 Chamber. Thank you.

12 MR. WONDERLING: Thank you.

13 COUNCIL PRESIDENT CLARKE:

14 Mr. White.

15 MR. WHITE: Council President,

16 thank you very much for inviting PGW here

17 today. I have submitted -- my name is

18 Craig White. I'm the President and Chief

19 Executive Officer of the Philadelphia Gas

20 Works.

21 I've submitted written

22 testimony. I will summarize it today,

23 and I am certainly here to take any

24 questions you may have.

25 Joining me here is also our

1 11/13/14 - WHOLE - RES. 140869

2 Board Chairman, David Seltzer, and David
3 has also similar -- or he has comments as
4 well, and I'm sure he'll take your
5 questions as well.

6 However, I'm going to start.
7 Even though my Board Chair is here, I'm
8 going to lead off. And I want to first
9 again say thank you to this body, because
10 without this type of discussion, many of
11 the issues facing PGW would not be
12 highlighted as they will today and in the
13 coming days and weeks.

14 With respect to the focus of
15 this hearing, PGW's ability to support
16 the energy hub, I'm going to focus on
17 that, but before I get there, I want to
18 give a little background on PGW where the
19 past, present, and future will take us.

20 I would like to preface that I
21 do agree that the Philadelphia region is
22 an ideal location for an energy hub, and
23 not the least of which is the fact that
24 we are in close proximity to the
25 Marcellus Shale region. We have 60

1 11/13/14 - WHOLE - RES. 140869
2 percent of the country's population
3 within an hour's drive, and certainly
4 this region needs the critical demand
5 that an energy hub brings.

6 Philadelphia Gas Works and the
7 City of Philadelphia obviously will both
8 benefit handsomely if energy demand is
9 brought here, because it brings industry
10 and certainly brings jobs, and I'll talk
11 about that in a little bit.

12 I too, like Phil Rinaldi, I am
13 part of the Energy Action Team, and no
14 one has really mentioned some of the
15 members of the Energy Action Team. They
16 include such entities as Quaker Chemical,
17 Dow Chemical, Aqua America, Sunoco
18 Logistics, Holt Logistics, PSEG, Braskem,
19 Exelon, Philadelphia Energy Solutions,
20 UGI, PGW and others. So there's quite a
21 cross-section of energy and folks that I
22 didn't mention in the financial world and
23 so forth that are part of the Energy
24 Action Team.

25 Taking a moment to look at

1 11/13/14 - WHOLE - RES. 140869

2 where PGW has been, I'm going back to
3 where I started with the company because
4 that's where my statistics begin. But in
5 1981, we moved about 74 billion cubic
6 feet of natural gas, and the typical
7 residential customers used 129 MCF a
8 year. Those statistics today pale in
9 comparison. We're down about 35 percent.
10 In 2013, we had 49 BCF of gas, and the
11 typical residential heating customer is
12 now only using 83 MCF a year. So the
13 issue there is, obviously as usage drops
14 off, we have less units to spread our
15 costs over and, therefore, what has
16 happened over time, our rates have gone
17 up.

18 Now, what have we done to
19 militate against that? Certainly we've
20 looked at cost controls. And just to
21 give you a bit of an idea on that, our
22 payroll expense has been relatively flat,
23 if not flat, for most of the last ten
24 years. We're at about \$10 million a year
25 for our 1,650 people.

1 11/13/14 - WHOLE - RES. 140869

2 As far as our employees, in
3 2004 we had 1,760 employees. Today we
4 have 16 -- at the end of 2013, we had
5 1,658. When I started with the company,
6 we had 2,825 employees. So there's been
7 a lot of cost cutting. This isn't
8 something new at PGW. We have been doing
9 things that have cut costs. We have
10 never gone the route of laying people
11 off. What we have done is, we have
12 shrunk through attrition and -- I stand
13 corrected. There was probably one
14 instance back when we had a turnaround
15 firm operating the company that I believe
16 15 people were laid off, but in my 35
17 years, I can't recall any other instance
18 where anyone was laid off at PGW. We've
19 shrunk through attrition, and as I've
20 said, we've reduced that number down to
21 1,658, and today we are doing more cast
22 iron main replacement than ever in the
23 history of the company. I'll get into
24 that momentarily.

25 Our bad debt in 2003 was 11

1 11/13/14 - WHOLE - RES. 140869

2 percent. It's about half of that now at
3 5.9 percent. Healthcare costs in 2004
4 were only \$33 million. They're now \$43
5 million in 2013. And fortunately for us,
6 we went to self-insurance, and in the
7 last three years, our healthcare costs
8 have only gone up by 3 percent a year.
9 Talk to anyone in the healthcare world.
10 Three percent is outstanding. So we have
11 been able to cut costs in that regard.

12 Our capital spending in the
13 period 2004 to 2012 has been \$622
14 million. That's primarily replacing pipe
15 and maintaining our gas plants for the
16 future.

17 Our total debt payments over
18 that same period, \$954 million of
19 interest and principal. Hence, we've
20 reduced a situation where we were about
21 close to 85 percent leveraged - 85
22 percent debt, 15 percent equity. We're
23 now down to about 75 percent debt, 25
24 percent equity, in round numbers, and we
25 are moving in the right direction, and

1 11/13/14 - WHOLE - RES. 140869

2 hence, once of the things that we did
3 receive very favorably recently -- and I
4 think you mentioned it, Council
5 President -- is that our bond rating fell
6 to -- or increased, not fell, but
7 increased to A minus. So that's real
8 good news. That reduces our cost of
9 borrowing and, of course, you know that
10 borrowing becomes part of our rates when
11 we go in for rate relief.

12 We do have the highest rates in
13 the state, and that is not something that
14 doesn't escape me as President of the
15 company. We have the highest rates, and
16 over the ten-year period ending 2010, we
17 have received \$170 million in rate relief
18 from the Public Utility Commission. In
19 addition to that, we anticipate a \$40
20 million rate request in 2018. Now, the
21 only thing that reduces that request in
22 2018 is either further cost cutting or
23 revenue enhancements; in other words,
24 increased sale of natural gas.

25 With all this said, we're very

1 11/13/14 - WHOLE - RES. 140869
2 interested in the Philadelphia energy
3 hub, because energy hub to me means
4 business, it means industry, it means
5 jobs and, more importantly, for
6 ratepayers and for Philadelphia Gas
7 Works' financial stability, it certainly
8 is important that business be brought
9 into the region.

10 We obviously have constraints
11 on PGW that hamper our ability to always
12 participate in business opportunities,
13 and we've discussed these constraints not
14 only with Council from time to time over
15 the years but the Solicitor's Office, the
16 Gas Commission and, of course, others
17 within the Administration.

18 Council's resolution lays out a
19 method or a way in which PGW can attract
20 new customers, and as I said, that energy
21 hub is very important to us. And I'm
22 going to list the same six items that
23 were listed by Concentric, and quite
24 frankly, I'm happy to report we're not
25 only dipping our toe, we're aggressively

1 11/13/14 - WHOLE - RES. 140869

2 in every one of these six categories,
3 aggressively today in every one of these
4 categories, and I'd like to take a few
5 minutes to talk about them.

6 With respect to more Marcellus
7 gas, you may recall it wasn't that long
8 ago that there was discussion of PGW not
9 purchasing Marcellus gas, but of course,
10 as the article in the paper read today,
11 accurately it was pointed out that we
12 have a least-cost procurement requirement
13 from the PUC that we buy the least-cost
14 gas that we can get our hands on. And
15 I'm happy to report over the last two
16 years, we have saved customers
17 approximately \$35 million in gas costs by
18 accessing Marcellus supply. Now, that
19 does not represent a large percentage of
20 our supply, but nonetheless, the cheaper
21 gas supply in Marcellus, when we are able
22 to get it, we do save money. And when I
23 say "we are able to get it," we have to
24 be able to get it within existing
25 pipeline contracts or in some instances

1 11/13/14 - WHOLE - RES. 140869

2 we get it on what they call interruptible
3 capacity on interstate pipelines,
4 capacity that's not necessarily under
5 contract with anyone.

6 One of the things that I will
7 say is that we look every day at
8 opportunities to maybe reconfigure or
9 unwind capacity that we have today in the
10 Gulf and we'd like to move it into the
11 Marcellus. But we have a counterparty.
12 It's an interstate pipeline. Interstate
13 pipelines say we like that contract. We
14 don't necessarily want you, PGW, to
15 unwind that contract, because we won't
16 make money from that. However, the world
17 is changing. Exporting is going to
18 happen out of the Gulf, and some of that
19 capacity, that exporting of LNG, that
20 capacity may become much more valuable
21 for that exportation. We don't need that
22 capacity for that purpose. We need more
23 Marcellus gas. So we're going to be
24 looking to reconfigure in the future to
25 give ourselves greater access to the

1 11/13/14 - WHOLE - RES. 140869

2 Marcellus supply. It's certainly not
3 going to be done through PGW building
4 another pipeline, because we do not have
5 the \$2 billion it will take to do that
6 type of endeavor.

7 The next item on the list was
8 expanding the LNG, and it wasn't all that
9 many years ago that we replaced a very
10 antiquated modified cascade system with a
11 new expander liquefier. The expander
12 liquefier uses less than a percent of
13 fuel, and what that means is, when you
14 liquify natural gas, you typically have
15 to run reciprocating engines that require
16 a lot of energy, in most cases natural
17 gas, to proceed through that process. We
18 have a very efficient turbine, and when
19 we liquify, we liquify at a very low cost
20 to the customer. The one fallback to
21 that particular piece of equipment is the
22 fact that we do not have the ability to
23 use it year round. At some times in the
24 year we cannot use that capacity.

25 So what we're looking to do is,

1 11/13/14 - WHOLE - RES. 140869
2 we're looking to expand that program or
3 expand our capability to liquefy. And
4 you ask yourself, Well, why would you do
5 that all the sudden. Well, first of all,
6 back in 1981 we needed every bit of the
7 capacity in our LNG tanks, every bit of
8 the space in the two tanks in Richmond.
9 There's 25 million gallons in each tank.
10 We needed every bit of it. Today we only
11 need half of that. We need 25 million
12 gallons basically. That other space,
13 we've been filling that space and
14 trucking it through existing facilities
15 we have for the purpose of long-haul
16 trucking and for use in frack water
17 pumps, fresh water pumps at drilling
18 sites. That's what it's being taken out
19 for. Our job, we're just selling it.
20 We're selling it freight on board at
21 Philadelphia's Richmond plant and, of
22 course, the buyer is then taking that to
23 the marketplace. But I'm just sharing
24 that's my understanding of the market.
25 What we believe is, we believe

1 11/13/14 - WHOLE - RES. 140869

2 that market could rise, could double.

3 And when I say "double," right now in

4 this past year we sold a little over one

5 BCF. We believe that market can go two,

6 maybe three, maybe even four BCF.

7 Now, let me put that in

8 perspective for the energy hub. First of

9 all, every bit of that liquefaction that

10 we can put in that tank we can probably

11 do within our existing capacity today.

12 So our demand for LNG is not going to be

13 much of a driver to build the interstate

14 pipeline capacity that Rob just spoke of.

15 The driver for that interstate pipeline

16 capacity will be industry and new

17 business.

18 Now, you say, Okay, what else

19 are you doing, PGW? Well, we're involved

20 in combined heat and power. We're

21 looking to add new customers. We're 83

22 percent saturated in the City of

23 Philadelphia on residential heating

24 customers. That other 17 is an

25 opportunity. But the fact of the matter

1 11/13/14 - WHOLE - RES. 140869

2 is, this huge drop-off in our usage over
3 the years, the drop-off that I talked
4 about early in my testimony, early in my
5 remarks, we're just on an annual basis
6 replacing what we're losing. We're not
7 gaining on it. We're replacing what
8 we're losing. However, the fundamentals
9 are here today for change, and the
10 fundamentals are obviously low-cost
11 Marcellus gas. But people have to be
12 willing to site in Philadelphia to really
13 bring that natural gas to the
14 marketplace. Interstate pipelines will
15 not build capacity unless they have a
16 market. They don't build it on spec.
17 Talk to any one of them. Call them in
18 here. Put them on the stand. They'd be
19 happy to talk to us, but they will not
20 build a pipeline on spec. They'll build
21 it if you're going to pay for it, and
22 you've got to make binding commitments
23 for that capacity.

24 So we're doing things on the
25 LNG front, but it's not going to really

1 11/13/14 - WHOLE - RES. 140869

2 move the needle for the energy hub. In
3 order to move the needle, we need greater
4 demands for natural gas.

5 The next item was to facilitate
6 the development of the natural gas
7 vehicle market, and I think Concentric
8 accurately pointed out that there's
9 financial risks in doing that. As a
10 matter of fact, this year alone we've
11 added over 20 vehicles to our fleet. We
12 had original plans to add many more than
13 that, but there wasn't a business case
14 that supported it because, quite frankly,
15 we've done a good job of reducing the
16 amount of driving we do by tightening up
17 to our serviceman's routes and,
18 therefore, the amount of vehicle
19 transportation isn't as great as it was
20 in the past and, therefore, there's not
21 as much savings as there was in the past.

22 But the point is, natural gas
23 vehicles is a market that could very well
24 take off with a cheaper supply of natural
25 gas. It's an ideal application for

1 11/13/14 - WHOLE - RES. 140869

2 fleets, and we believe it's something
3 worth pursuing, but it brings, as
4 everything else, it brings financial risk
5 to the company.

6 Collaboration on the workforce.
7 I know that's been a discussion quite a
8 bit today, and there's quite a few things
9 we have done just as PGW. We are
10 involved in not only the Philadelphia
11 Youth Network, but in helping develop
12 curriculum at the Philadelphia Community
13 College and Temple and the Philadelphia
14 Academies. So we're already working on
15 this, but we look to expand that. We
16 look for opportunities, because the
17 workers of the future have to be trained.
18 They have to see that there's
19 opportunity. So these are things that
20 we're already delving into and have been
21 for quite a few years.

22 As far as promoting energy
23 efficiency, we have the largest program
24 in the State of Pennsylvania. It's about
25 \$11 million. And we have no

1 11/13/14 - WHOLE - RES. 140869

2 shareholders, so it's coming from our
3 ratepayers. And the reason they're
4 investing that 11 million is because
5 we're able to reduce usage. And much of
6 that \$11 million goes to your low income.
7 We're able to reduce usage that they
8 themselves are paying for. And what it's
9 doing to PGW is, it's reducing our
10 revenue streams, but nevertheless, we're
11 doing it. And this is something that
12 we're looking at very closely, but it's
13 something that we are invested in and
14 we're working very hard to keep on the --
15 as part of the PGW offerings.

16 PGW's future role, we stand
17 ready, obviously. We think that we have
18 the workforce. And much of what was
19 discussed earlier today about succession
20 planning and being prepared, we've
21 actually staffed up over the last six
22 months preparing for potential
23 retirement.

24 In 2001, we had a significant
25 giveback contract, and everyone in the

1 11/13/14 - WHOLE - RES. 140869
2 company knew what was coming. We had 143
3 people eligible to retire and 105 left.
4 Today we have 400 eligible to retire and
5 we have 105 that have indicated that
6 they're leaving. Of that 105, 86 are
7 union and 23 or 24, whatever the number
8 is, are non-union jobs.

9 So we stand prepared for that
10 change that could occur. But as it
11 stands, we have 105 and we have a lot of
12 folks, as Keith said, they don't have a
13 lot of years and PGW is a pretty good
14 place to work. So I think a lot of these
15 folks are considering hanging in with the
16 company.

17 We have no shareholders. We
18 have no deep pockets to pick, and the
19 reason we have the governance that we
20 have is by necessity, and I'm the first
21 one to say that. We have it by
22 necessity. There's no doubt that
23 governance has to protect --

24 COUNCIL PRESIDENT CLARKE:
25 Aren't we shareholders?

1 11/13/14 - WHOLE - RES. 140869

2 MR. WHITE: You are the one
3 shareholder, sir. You are the one
4 shareholder, yes. You can say that we
5 have one shareholder, and that's all of
6 our ratepayers. But we have -- and
7 that's an excellent point, because if we
8 do something that brings risk into the
9 mix, the only people that pay for that
10 are our shareholders if we make the wrong
11 decision. If we make the right decision,
12 the only people that benefit from that
13 are our ratepayers. So if we save money
14 on natural gas, it goes right back to our
15 ratepayers.

16 COUNCIL PRESIDENT CLARKE: It's
17 called incentive to make the right
18 decisions.

19 MR. WHITE: Incentive to make
20 the right decision, yes.

21 But certainly we fully
22 understand that responsibility to the
23 customer and we fully appreciate the fact
24 that we have governance designed to
25 protect the customer. And that

1 11/13/14 - WHOLE - RES. 140869

2 governance obviously has an acceptable
3 level of tolerance, and we operate with
4 that acceptable level of tolerance.

5 So I can see where we're going
6 here. I want to close up. What I will
7 say in closing is the fact that PGW
8 stands ready to support, but we have to
9 do it within the current municipal
10 governance. If there's future
11 discussions about where that can go, PGW
12 stands ready to assist in that process.

13 COUNCIL PRESIDENT CLARKE:

14 Thank you.

15 MR. WHITE: That ends my
16 comments. I'll be happy to take any
17 questions.

18 COUNCIL PRESIDENT CLARKE: And
19 thank you for doing a good job. I
20 remember, because I've been here for a
21 while -- some might say too long, but I
22 can remember times when there were some
23 very challenging times at PGW and folks
24 were struggling to pay the bills, and you
25 guys have done a great turnaround. So I

1 11/13/14 - WHOLE - RES. 140869

2 want to commend you for that great work,
3 and we'll look to take it to the next
4 level.

5 MR. WHITE: I appreciate that.

6 COUNCIL PRESIDENT CLARKE:

7 Thank you.

8 The Chair recognizes
9 Councilwoman Tasco.

10 COUNCILWOMAN TASCO: I have a
11 couple of questions. We talked about the
12 energy hub, but we have a lot of new
13 construction going on in Philadelphia.
14 How much of that new construction uses
15 gas?

16 MR. WHITE: The vast majority.

17 COUNCILWOMAN TASCO: The vast
18 majority?

19 MR. WHITE: Yes.

20 COUNCILWOMAN TASCO: What do
21 you do to encourage as you hear that a
22 new building is going -- new company is
23 coming in, a new building is going up and
24 new houses are going up, what is the
25 action of PGW to see that you get that

1 11/13/14 - WHOLE - RES. 140869

2 market?

3 MR. WHITE: Well, we have a
4 very experienced and trained marketing
5 department, and one of the things that we
6 knew we had to do a number of years ago
7 was turn that customer experience to a
8 much quicker and much more expedited
9 experience, and we had to do it for
10 contractors and commercial developers.
11 So we've gone to great lengths to build
12 relationships to enable folks to install
13 gas service in an efficient manner.

14 Unfortunately, in a lot of
15 cases, old housing stock gets removed and
16 it gets replaced by new housing stock
17 with much more efficient furnaces, much
18 better insulation and so forth. So in
19 many instances, a lot of the growth you
20 see; for instance, in Northern Liberties,
21 a lot of houses are being raised and then
22 more efficient units are being replaced
23 with -- replacing the older inefficient
24 units.

25 We do have gas-to-oil

1 11/13/14 - WHOLE - RES. 140869

2 conversion incentives and things of that
3 nature to encourage folks to move from
4 other fuels. But certainly the
5 marketplace right now is driving the
6 natural gas decision, because natural gas
7 is plentiful, it's cheap, and it's
8 perceived by the public and by commercial
9 developers to be in that status for many
10 years to come.

11 COUNCILWOMAN TASCO: So we're
12 getting our fair share from the
13 commercial developers?

14 MR. WHITE: We get a number of
15 commercial developments, but obviously
16 the Center City area is a difficult lift
17 for us. We have a Center City steam
18 loop, and many of your large office
19 buildings are on the Center City steam
20 loop. Now, we do talk to them on an
21 ongoing basis to consider combined heat
22 and power, and we have had some
23 conversions, but certainly not every
24 applicable conversion in the City has
25 made that move. The challenge for us is,

1 11/13/14 - WHOLE - RES. 140869

2 in most cases, there's a big first cost
3 and we have to help contribute to that
4 first cost. We're in a position to --
5 not in a position to loan money, but we
6 are in a position to do certain things
7 within our municipal governance to assist
8 in that conversion, and we've worked on
9 some very large projects over time. In
10 addition to that, we rely on the Act 129
11 contributions as well.

12 So we're doing a lot of things
13 within PGW to help commercial businesses
14 find money to help support their
15 investments.

16 COUNCILWOMAN TASC0: One other
17 question. You said earlier that PGW has
18 the highest rates in the state, and let's
19 break this down. Your costs for gas
20 supply are very consistent with your
21 peers in the state, but your Customer
22 Responsibility Program is one of the
23 largest, if not the largest, in the
24 state. So aren't PGW's relatively higher
25 rates due in large part to the fact that

1 11/13/14 - WHOLE - RES. 140869

2 we have a lot of poor people in
3 Philadelphia and we do provide them with
4 needed assistance in keeping gas service
5 in their homes?

6 MR. WHITE: I would agree with
7 that I think in the large part. I think
8 it's \$183 on average per customer that is
9 part of that universal service charge,
10 it's the CRP, it's the senior citizen
11 discount.

12 I also would point out that due
13 to our older system, our proximity to our
14 front foundation walls, we're the closest
15 in the country on average to the front
16 foundation wall. So we spend more money
17 obviously to maintain our system, which
18 is imbedded in our rates. So the entire
19 delta or the entire difference between
20 other companies' distribution charges and
21 PGW's is not necessarily all made up by
22 that \$183, but that is a large part of
23 it.

24 COUNCILWOMAN TASC0: Concentric
25 states in its report that although not

1 11/13/14 - WHOLE - RES. 140869

2 necessary, a public-private partnership
3 would allow PGW and a private partner to
4 share some of the risks associated with
5 participating in competitive energy
6 markets such as expanded LNG sales. Is
7 that a direction PGW was planning to go
8 in and, if so, why or why not?

9 MR. WHITE: Well, we would look
10 to take whatever margins we can gain and
11 shift those to our customers, and that's
12 what we do. We have no shareholders, so
13 it's not going out as dividends to anyone
14 other than our City payment. So if you
15 bring a public-private partnership in who
16 invests their capital, they're going to
17 want to take the lion's share or a good
18 portion of the profit. We believe that
19 PGW should build that facility, as we
20 have in the past. We built two
21 facilities now. The latest facilities
22 that are out there are modular. We can
23 buy them and basically have them
24 assembled on site, and the investment
25 that we would make would enable us to

1 11/13/14 - WHOLE - RES. 140869

2 generate additional LNG revenues, which
3 we currently drop directly to our bottom
4 line. And just to give you more
5 specifics, we dropped \$4 million to our
6 bottom line and we contributed \$2 million
7 to the GCR with the expanded LNG program
8 of a little over a BCF last year.

9 COUNCILWOMAN TASCO: All right.
10 Thank you very much.

11 MR. WHITE: Thank you.

12 COUNCIL PRESIDENT CLARKE:
13 Thank you.

14 The Chair recognizes Councilman
15 Oh.

16 COUNCILMAN OH: Thank you very
17 much, Mr. President.

18 Mr. White, the two criticisms
19 or concerns that I've heard is that under
20 its current structure, PGW has two
21 important limitations. One is that you
22 cannot access capital, the nature of
23 being a public utility, and second is
24 that the nature of your governance
25 structure means that your reaction time

1 11/13/14 - WHOLE - RES. 140869

2 is slow. Could you answer those two
3 issues?

4 MR. WHITE: I'd be happy to.
5 As I said, we're 70 percent leveraged
6 right now. So we have about a billion
7 dollars in debt. And if the company was
8 sold, that's one of the discussion points
9 that they talk about having to defease
10 that 1 billion -- did I say 1 million? I
11 meant to say 1 billion.

12 COUNCILMAN OH: You said
13 billion with a B. I heard a B.

14 MR. WHITE: Okay. Very good.

15 And obviously today, with the
16 efficiencies of the company, we're
17 basically generating about \$35 million a
18 year for our capital program with
19 internally generated funds, but we have
20 to borrow the rest of the funds that we
21 use in our capital budget. Our capital
22 budget is somewhere around \$80 million.
23 Then, of course, we have this DSIC
24 mechanism that throws another \$22 million
25 in there for infrastructure replacement.

1 11/13/14 - WHOLE - RES. 140869

2 So as far as borrowing is
3 concerned, we have to be very careful.
4 If we start to borrow indiscriminately
5 like we did in the past, we'll be right
6 back in the soup we were in not that long
7 ago, which was one step above junk bond
8 status, making a phone call to the City
9 Administration asking to forgive the 18
10 million, which is what I participated in
11 about eight years ago, eight or ten years
12 ago, whenever it was.

13 So, yes, we have to be a little
14 careful how we borrow. Do we have the
15 ability to borrow? Absolutely. We have
16 the ability to go to the capital market
17 and borrow, and probably what we would do
18 is borrow 150 million every three years
19 to expand programs and use about 50
20 million a year. But you can see very
21 quickly, you start to move that 70
22 percent back up to 75, 80 and so forth.
23 That's what we're trying to avoid. We're
24 trying to get this company down to about
25 a 60/40 debt to equity, which would bring

1 11/13/14 - WHOLE - RES. 140869

2 our interest costs down.

3 Your second point about the
4 governance is -- and I've said this many
5 times -- the governance in a municipal
6 environment has to be risk averse.
7 There's no shareholders to take a hit.
8 So we have the management agreement, we
9 have the Home Rule Charter, we have rules
10 that have been -- or orders that have
11 been promulgated by the Philadelphia Gas
12 Commission, and we even have the State
13 Constitution, which limits our ability to
14 partner, joint venture, lend our credit
15 or even in some instances -- and there's
16 some speculation as to whether we can do
17 this -- we may not be able to use
18 municipal employees in a commercial
19 venture. So, in other words, a municipal
20 employee at our LNG plant may not be able
21 to be used in a commercial venture at our
22 LNG plant. And this was an issue that
23 came up when we were negotiating with
24 Hess for an import terminal about ten
25 years ago.

1 11/13/14 - WHOLE - RES. 140869

2 So there are definite
3 legitimate reasons why we have all the
4 governance we have, but does it make us
5 nimble? No, it doesn't. We spend a lot
6 of resources internally addressing
7 oversight, and the oversight is
8 extensive. We have a Board of Directors
9 we go to before we file our capital and
10 operating budget, before we file a rate
11 proceeding with the Public Utility
12 Commission. We have operating and
13 capital budget proceedings with the Gas
14 Commission. We have capital budget
15 oversight at City Council. We have a
16 plethora of items, and it does hamper our
17 ability, there's no doubt. But let me
18 reiterate, it's there for a reason in a
19 municipal environment.

20 COUNCILMAN OH: Okay. My
21 concern has been throughout this process
22 that I'm not interested in seeing PGW
23 sold to basically operate as PGW. I
24 would see no reason to do that. But the
25 idea that PGW would be able to pick up a

1 11/13/14 - WHOLE - RES. 140869

2 lot of capital investment to be used to
3 improving the infrastructure to develop
4 its ability as an energy hub is
5 attractive to me, and the issue with UIL
6 unfortunately is that we have not really
7 fleshed out because there's a time
8 limitation in this contract and a
9 constraint -- at least I understand and
10 they understand that there's a constraint
11 that we cannot negotiate past -- is that
12 we began to ask some questions, and
13 they're not here unfortunately, but the
14 ability for us to go forward and see
15 their ability to be flexible, to amend,
16 to provide some new offers I think is
17 important.

18 I'm sorry, Council President.
19 Can I continue? If you tell me no, I'll
20 stop.

21 COUNCIL PRESIDENT CLARKE: You
22 put me on the spot, sir.

23 COUNCILMAN OH: All right.

24 COUNCIL PRESIDENT CLARKE: You
25 were wrapping up?

1 11/13/14 - WHOLE - RES. 140869

2 COUNCILMAN OH: I'm wrapping
3 up. I'll wrap up with a story. Sorry.

4 COUNCIL PRESIDENT CLARKE:
5 You're no longer a freshman.

6 COUNCILMAN OH: Two and a half
7 years ago I got a visit from KEPCO, Korea
8 Electric Power Company. It's \$154
9 billion in assets. They were coming from
10 State College interested in PGW,
11 interested in Philadelphia, interested in
12 an energy hub. And I had extensive
13 conversations with them, and when I was
14 in Korea a month ago I met with the Vice
15 Minister of Trade Industry and Energy for
16 their global energy operations, and
17 therefore, I come out of this with a very
18 different perspective on the opportunity
19 for Philadelphia as an energy hub. And
20 there's different experts and they have
21 different opinions, but my concern has
22 been around the fact that I would like to
23 see that in the conversation with UIL,
24 they have a long-term plan, a smart plan,
25 the wherewithal, and the commitment to

1 11/13/14 - WHOLE - RES. 140869
2 that plan to develop Philadelphia to its
3 fullest capability, and to that regard,
4 if they cannot do that or they don't have
5 the footprints of evidence that they
6 intend to do that, I am going to be
7 concerned not to have a deal and forego
8 other opportunities.

9 So that's more like a
10 statement, but I wanted to share that.
11 So thank you very much.

12 COUNCIL PRESIDENT CLARKE:
13 Thank you, Councilman.

14 I'm going to have -- to the
15 members, I have a meeting that I'm
16 co-hosting that started at 6 o'clock. So
17 needless to say, I'm a little late. I'm
18 going to have to, if it's okay with the
19 members, allow the succession in terms of
20 sitting at the table along with the Chair
21 of the Commission I asked to come up, but
22 I do want to get a couple of quick ones
23 in before I leave. They were actually a
24 couple of things touched on.

25 I do want to say that the

1 11/13/14 - WHOLE - RES. 140869

2 Energy Action Team, which I've recently
3 become a member of -- and thank you for
4 those that asked me to be a part of that
5 process -- I think it's probably because
6 it's primarily business people, but I
7 think it's a little too pro-sale. I
8 don't think there's enough balance there
9 to give the conversation a little --
10 maybe I'm wrong, because I've only been
11 in a couple of --

12 MR. WONDERLING: So organized
13 labor as well as other elected officials
14 are members of the Energy Action Team.
15 The Action Team doesn't set policy.

16 COUNCIL PRESIDENT CLARKE: I
17 understand that.

18 MR. WONDERLING: I presented
19 testimony today on behalf of the Chamber
20 of Commerce. What the Energy Action Team
21 has been doing for the last two and a
22 half years is marketing to about 2,000
23 companies from around the world to come
24 to Philadelphia to set up shop in energy
25 and manufacturing-related activities.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCIL PRESIDENT CLARKE: But
3 you referenced it in your testimony, so
4 that's why I bring it up. So when you
5 put something in your testimony, you're
6 representing a particular entity, and you
7 reference this in your last question
8 about the potential sale. That's just an
9 observation as a person that's attended a
10 couple of meetings.

11 MR. WONDERLING: Right.

12 COUNCIL PRESIDENT CLARKE: So
13 if you're going to get in the game with
14 respect to -- and it's not a criticism.
15 I'm just making a simple observation. As
16 a member of the Action Team, if there's
17 going to be a discussion about sale
18 versus sale, we have a little more
19 balance on the actual -- because I think
20 generally it would be a lot better.

21 I'm new to the game. You don't
22 tell me how to do my business; I
23 shouldn't be trying to attempting to tell
24 you how to do yours.

25 The issue about the customer

1 11/13/14 - WHOLE - RES. 140869
2 decline -- and unfortunately across the
3 City we not only decline in the customer
4 base in terms of the lack of -- decline
5 of the industry and companies and
6 particularly residential, but right now
7 we're actually seeing a small uptick in
8 the number of customer base as it relates
9 to residential. As you know, across the
10 City we're experiencing very -- well, at
11 least around the collar of Center City,
12 we're experiencing a significant increase
13 in new housing starts by virtue of -- we
14 know that by virtue of our increase in
15 transfer tax. If that trend continues,
16 will it make a measurable increase in
17 your customer base? And I ask that
18 because we had a similar conversation
19 when the Water Department was looking at
20 raising rates and they talked a direct
21 correlation in the fact that they have an
22 infrastructure that has to accommodate
23 the entire City, but there's so many
24 disconnected laterals in that particular
25 case where there's literally an

1 11/13/14 - WHOLE - RES. 140869
2 infrastructure that's required, and there
3 might be two properties on the block, but
4 you still have the cost of
5 infrastructure. So I'm assuming it's
6 similar to PGW.

7 If there was an aggressive push
8 and a continued aggressive push in terms
9 of bringing on new customers,
10 particularly on the residential aspect,
11 would that enhance measurably your
12 opportunity to be a more viable company?

13 MR. WHITE: I think from our
14 standpoint, I mean, new customers are
15 certainly vital to the future of the
16 company. I mean, we would be in a death
17 spiral otherwise if we didn't add new
18 customers. The problem for us is that if
19 you assume a heater lasts 20 years, when
20 people take out a 20-year-old heater,
21 that technology was probably 80 percent
22 efficient and by the time it's 20 years
23 old, it's probably 50 percent efficient.
24 They put a new one in today, it's 90
25 percent efficient.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCIL PRESIDENT CLARKE:

3 That's part two, because that's what
4 happened to us with the Water Department.
5 It being more efficient, they promoted it
6 and it's less money coming in.

7 MR. WHITE: We've lost a lot of
8 firm load and we're trying to replace
9 that with other more creative types of
10 load, like natural gas vehicles, like
11 combined heat and power, and certainly
12 the LNG trucking business. So we're
13 trying to replace what we've already lost
14 with other revenue streams to reduce the
15 rate burden. And there was a lot of talk
16 today about PGW generating dollars in
17 different ways. Any dollars we generate
18 go right back to the ratepayers. They
19 don't go to the City's General Fund.
20 They go to the ratepayers.

21 COUNCIL PRESIDENT CLARKE:

22 Right. Correct. But it comes out of the
23 same pocket, the residents.

24 MR. WHITE: Instead of paying
25 taxes, they pay the gas bill.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCIL PRESIDENT CLARKE:

3 Either paying utilities or taxes, so it's
4 the same thing.

5 All right. Thank you. Thank
6 you very much.

7 The Chair recognizes Councilman
8 Neilson.

9 COUNCILMAN NEILSON: Thank you,
10 Mr. President.

11 Mr. White, we've heard a lot
12 today and we've seen a lot of commercials
13 leading up to today on TV, and it has a
14 concern of the citizens within the City
15 about the main replacement. Can you talk
16 about the main replacement. Why does
17 PGW's main replacement program take
18 longer than what UIL is proposing on TV?
19 They ran a commercial to make everybody
20 think they're in grave danger, and they
21 said they can fix it without raising our
22 gas rates. Can you explain that to us,
23 please?

24 MR. WHITE: Well, I can attempt
25 to answer the second part. Let me start

1 11/13/14 - WHOLE - RES. 140869

2 with the first part.

3 We've been doing approximately
4 18 miles a year of the 1,500 mile
5 inventory that we have of cast iron. We
6 also have about 400 miles of unprotected
7 steel, which means not cathodically
8 protected, so it's subject to corrosion.

9 Of the 18 miles, what we do is,
10 we prioritize what we call the highest
11 risk main in the City of Philadelphia and
12 we remove that 18 miles. With the
13 legislation of a few years ago, we were
14 able to supplement that program with what
15 we call our DSIC mechanism. It's a
16 distribution system improvement charge,
17 and in Philadelphia, we charge dollar for
18 dollar to the customer. We spend 22
19 million this year, the customer gets
20 charged 22 million.

21 Now, here's the second part of
22 your question. When a UIL does the same
23 type of thing or an investor-owned --
24 let's use just a generic
25 investor-owned -- they amortize that \$22

1 11/13/14 - WHOLE - RES. 140869

2 million over an extended period of time.

3 So you may only pay 10 percent as the

4 DSIC mechanism. You may only pay \$2.2

5 million in that first year, where for PGW

6 you're spending 22 million. In the

7 second year, you're at 4.4 million. In

8 the third year, you're at 6.6.

9 Eventually there's a crossover. It's

10 like buying a house. If you buy it cash,

11 you pay 80,000 for it. You buy it with a

12 30-year loan, you'll pay 200,000. But

13 you don't necessarily have the \$80,000 to

14 lay down, so you buy it with a mortgage.

15 So what you have with an

16 investor-owned, you have almost a

17 mortgage concept where those dollars are

18 impacting you over an extended period of

19 time, and then eventually there will be a

20 crossover where it will be more

21 expensive, but at that time, you would

22 expect that company to have cost-cutting

23 measures in place or synergies.

24 One of the things I think Keith

25 Holmes is very concerned about and not

1 11/13/14 - WHOLE - RES. 140869

2 necessarily something that I believe is
3 necessarily going to hit our field
4 forces, but when you're taken over or
5 you're combined with another company,
6 there's synergies, and the synergies are
7 another word for saying you can combine
8 computer systems, you can -- why do you
9 need two people buying natural gas when
10 you can have one person buying natural
11 gas or why do you need two accountants
12 when you can have one. You still need
13 your distribution workers, you still need
14 your field service workers, and you still
15 need your gas plant operators.

16 But the long and short of it
17 is, we certainly have a different
18 business model for a municipal than you
19 have for an investor-owned.

20 COUNCILMAN NEILSON: Earlier we
21 had testimony from Mr. Rinaldi and he was
22 speaking about capacity issues in our
23 lines. What role can PGW play to help
24 Mr. Rinaldi getting more gas and getting
25 his issue solved?

1 11/13/14 - WHOLE - RES. 140869

2 MR. WHITE: Well, the role we
3 can play as a municipal is, we do what we
4 do today and, that is, try to add
5 customers to our system. If a large
6 manufacturer was interested in siting in
7 Philadelphia and they wanted to -- in
8 most cases, these large entities will buy
9 natural gas from a third party and
10 they'll just transport it across our
11 system. So they won't necessarily buy
12 the gas supply from us, which is fine
13 with PGW and its customers because the
14 cost of gas is a passthrough in rates.
15 We charge nothing for it other than what
16 we pay for it.

17 So if a large entity comes into
18 Philadelphia and we can help encourage
19 that, we certainly will participate in
20 that way. What we don't have is, we
21 don't have a lot of seed dollars to help
22 that, to assist that. We don't have the
23 capital to necessarily put on the table
24 to facilitate large capital investments.
25 An investor-owned may have that, a

1 11/13/14 - WHOLE - RES. 140869
2 company with capitalization that's
3 significant.

4 COUNCILMAN NEILSON: So a
5 company like Mr. Rinaldi's would need
6 five or six companies just like his to
7 partner up, because PGW doesn't have the
8 capital or the capability to put that
9 kind of money for it?

10 MR. WHITE: I think that's a
11 reasonable way to look at it. I think
12 you're going to have to see many big
13 entities stepping up committing to
14 natural gas. And the only way a 36-inch
15 pipeline will get built from an
16 interstate pipeline is if there's about a
17 million -- one BCF a day of usage. Now,
18 just give you an idea, we're only using
19 50 BCF a year in Philadelphia, PGW.
20 We're using 50 BCF a year. A 36-inch
21 high-pressure pipeline can bring about
22 1,150 MCF of gas to the City of
23 Philadelphia every day. That's what you
24 run fertilizer plants with. That's what
25 you run gas-to-liquids plants with.

1 11/13/14 - WHOLE - RES. 140869

2 That's what you run electric-generating
3 facilities with. That's what you run
4 chemical plants with and so on and so
5 forth.

6 So those entities have to step
7 up, have to be sited here, and that's the
8 reason for the summit. The summit is to
9 attempt to attract that type of interest
10 into Philadelphia, which has a great
11 workforce. We have great people here.
12 We have a blue-collar workforce. We have
13 tremendous educational facilities. So we
14 really believe at the Chamber and in the
15 Energy Action Team that we've got all the
16 components here to make it happen. How
17 PGW participates in that as a municipal,
18 we have to do it within our governance
19 and within our financial constraints.

20 COUNCILMAN NEILSON: Last
21 question --

22 COUNCILMAN GREENLEE:
23 Councilman, I got three people lined up
24 here.

25 COUNCILMAN NEILSON: Well, I

1 11/13/14 - WHOLE - RES. 140869

2 just want to be like everybody else and
3 get that last one in.

4 COUNCILMAN GREENLEE: Okay.
5 Well, wait.

6 COUNCILMAN NEILSON: He
7 mentioned training. It came up like five
8 times. If he could just tell how he
9 trains. He's got a state-of-the-art
10 training facility. And I snuck that
11 right in under you, Bill. Thank you.

12 COUNCILMAN GREENLEE: I noticed
13 that.

14 COUNCILMAN NEILSON: I'm okay.
15 I'll get him later.

16 COUNCILMAN GREENLEE: Thank
17 you, Councilman.

18 Councilman O'Neill.

19 COUNCILMAN O'NEILL: This is a
20 follow-up question, Craig, from what
21 Councilman Neilson said, a little more
22 focused on the DSIC program itself,
23 because during the briefings that I
24 attended in the process of analyzing the
25 sale agreement, the one thing that stood

1 11/13/14 - WHOLE - RES. 140869
2 out immediately for me was the pipe, the
3 replacement. First I was told by the
4 company that they would replace the pipe
5 at twice the rate of PGW. Then I learned
6 that while they were -- now went from
7 telling people like myself, they were
8 doing ads on the air, because it's a
9 safety issue. I mean, everybody would
10 like to replace all the pipe overnight if
11 they could. But then I learned that the
12 agreement, which everybody admits is
13 somewhere around that thick, the sale
14 agreement, does not mention pipe
15 replacement as a requirement to
16 accelerate anything. It just doesn't
17 mention it at all. That really struck
18 me, because this is something that was
19 sort of the prominent point that was
20 mentioned to me up front, and now it's
21 all over the news and the ad wires.

22 I never once heard the DSIC
23 program involved in any of the
24 discussions, analysis, the reports I was
25 reading as to why the company would be so

1 11/13/14 - WHOLE - RES. 140869

2 interested in this. I just never heard
3 of the program. It was in the Inquirer's
4 story a few weekends ago and it talked
5 about a pre-approved -- that's why I'm
6 going to ask you exactly what it is,
7 because I really want to know what this
8 is -- a pre-approved rate increase to all
9 utilities, not just Philadelphia, for
10 replacing old pipe or pipe, period,
11 because you're going to replace the old
12 pipe anyway, and that for an
13 investor-owned company, that would be
14 very attractive for return on investment
15 because there's a pre-approved rate
16 increase, is how it was described as I
17 read it.

18 Now, what I still didn't get
19 from your answers to Councilman Neilson
20 about pipe replacement -- you mentioned
21 DSIC. It's the first time I heard it
22 mentioned publicly by anybody -- is, are
23 they even what they contemplated in their
24 promotional materials, their company,
25 UIL, were they given accurate numbers in

1 11/13/14 - WHOLE - RES. 140869

2 terms of the years that you're currently
3 replacing it? I think first I heard 70
4 versus 35 they were going to do.

5 MR. WHITE: The years that have
6 been discussed are embedded in our
7 long-term infrastructure plan that was
8 filed with the Public Utility Commission.
9 That was a prerequisite to getting
10 approval to implement the DSIC mechanism,
11 and that's the facility that we've used
12 to expand from 18 miles up to this year
13 we did 28. So we actually did ten more
14 miles of pipe and we used \$22 million
15 from the customers, a little less than 22
16 million.

17 The DSIC mechanism for a
18 municipal is very -- recognizes that we
19 are fragile financially. So we get a
20 pay-as-you-go DSIC. So whatever we spend
21 in that year, we get recovery.

22 Now, our 5 percent DSIC, which
23 is 5 percent of our non-fuel revenues,
24 that's the 22 million. It's about 22 and
25 a half million, which is 5 percent of our

1 11/13/14 - WHOLE - RES. 140869

2 non-fuel revenues. That's the largest in
3 the state. I believe the next largest is
4 Peoples at about 1.4 percent of their
5 non-fuel.

6 So we're using this DSIC to a
7 pretty great degree, and the impact on
8 the customers is a \$22 million rate
9 increase. That's what happens when we
10 use the DSIC. But the advantage is,
11 we've removed ten miles of additional
12 cast iron pipe, and cast iron pipe,
13 state-of-the-art when it was installed,
14 but it's the hand we're dealt and we have
15 to get it out of the ground.

16 What UIL has said is that they
17 would expedite that process from an
18 88-year process to a 44-year process.
19 Beyond that, I don't have specifics.

20 COUNCILMAN O'NEILL: Is that
21 tied into the DSIC program from a private
22 company standpoint as the attraction
23 would be return on investment?

24 MR. WHITE: I would imagine
25 that -- I mean, I would imagine that they

1 11/13/14 - WHOLE - RES. 140869
2 would want to maintain the 5 percent DSIC
3 that we have, which is about ten miles of
4 pipe right now, but the real issue is
5 it's \$22 million. If their overall spend
6 was 100, they'd have 22 million recovered
7 through the DSIC. Now, unlike a
8 municipal, they only get to recover 10
9 percent of their investment on an annual
10 basis. So they only get that 2.2 that I
11 was explaining to Councilman Neilson.
12 And when they do another 22 million the
13 next year, they get to recover 10 percent
14 on that. So the 10 percent doesn't stop.
15 It keeps overlapping. That's why at some
16 point, with interest and everything else,
17 it is going to cross over the
18 pay-as-you-go that PGW has, but
19 nevertheless, for many years you're going
20 to have customers paying that extra 22
21 million. That's the advantage that I
22 believe UIL was trying to describe, the
23 fact that they are an investor-owned
24 model and they can do it differently.
25 COUNCILMAN O'NEILL: Okay.

1 11/13/14 - WHOLE - RES. 140869

2 Everybody gets at least two. I
3 mean, I'm still on the same subject,
4 Mr. Chairman.

5 The DSIC program then is the
6 reason that they could do it twice as
7 fast?

8 MR. WHITE: No. They would
9 have to invest their own capital to go to
10 that level.

11 COUNCILMAN O'NEILL: So simply
12 put, you're already ahead of what's on
13 public record, your schedule, based on
14 when you applied for the DSIC?

15 MR. WHITE: No. We actually
16 incorporated that 22 million in the
17 88-year. That was down from about 125
18 years. So once we threw in the extra,
19 we've reduced it. And, of course, we
20 would look for ways to reduce it even
21 further in the future, but we're still
22 talking about multiple, multiple decades
23 before we're able to -- now, PECO either
24 announced or will announce they're doing
25 their program in 20 years. So we realize

1 11/13/14 - WHOLE - RES. 140869

2 that there's pressure by virtue of what
3 other utilities have done that surround
4 PGW, but we have no rate headroom to
5 continue to throw these surcharges on
6 customers. We need some of that rate
7 headroom to do some of the things that
8 Council President and I were talking
9 about, like combined heat and power and
10 incentivizing these. So if we use every
11 bit of headroom that we have, we already
12 have the highest non-fuel rates in the
13 state. So we're in a little bit of a
14 tough quandary there.

15 COUNCILMAN O'NEILL: There also
16 is, I understand, a limit, just
17 practically speaking. If you go into a
18 neighborhood, you can't say, Well, boy,
19 we can replace all this pipe around here
20 and be very efficient to do it because it
21 will be in the neighborhood. You'd shut
22 neighborhoods down. You'd shut
23 businesses down. So it isn't quite as
24 easy as it first sounds to just
25 accelerate your pipe. Going from 18 to

1 11/13/14 - WHOLE - RES. 140869

2 28 is a pretty high --

3 MR. WHITE: Right. We went
4 from 18 to 28, and the small diameter
5 portion of that extra ten miles we did in
6 the same manner we did the first 18. We
7 prioritized it as the greatest risk.
8 When you take the number from, say, 28 to
9 50, you then start -- you have to
10 consider commerce in the City of
11 Philadelphia.

12 So I'm sure what we would
13 recommend to whatever investor-owned
14 company were to purchase PGW, we'd
15 recommend a strategy that would replace
16 cast iron in various areas of the City so
17 that we wouldn't overly affect commerce
18 just in the Old City, Bella Vista, in
19 that area, Society Hill, so forth, Queen
20 Village. They're the areas where we have
21 a lot of old pipe.

22 COUNCILMAN O'NEILL: Okay.
23 Well, thank you.

24 COUNCILMAN GREENLEE: Thank
25 you.

1 11/13/14 - WHOLE - RES. 140869

2 Councilman Jones.

3 COUNCILMAN JONES: Thank you,
4 Mr. Chairman.

5 Actually, between you and your
6 answer and my colleague David Oh, you
7 answered a question I would have had. So
8 I'll shift to the retrofitting of older
9 industrial facilities to modernize them
10 to create an attraction. A good example
11 for me in the 4th District would be the
12 old Acme Bakery, where that bakery was
13 about, I'm going to say, 17 acres, and
14 probably one of the larger costs, other
15 than ingredients to the bread and labor,
16 would be energy.

17 How would the private sector be
18 able to retrofit an industrial complex
19 like that to make it more energy
20 efficient and more modern, and why could
21 the private sector do it better than the
22 way we are configured now?

23 MR. WHITE: I can only give you
24 examples of what I've seen in the private
25 sector, and many private-sector companies

1 11/13/14 - WHOLE - RES. 140869
2 set up multiple corporations to do
3 different things. If you look at UGI,
4 for instance, they're not only a gas
5 distribution company, aside from their
6 propane business -- let's just say
7 limited to their gas business -- they
8 have the Horizon Services, which are a
9 subsidiary of theirs. So they have a
10 separate business that does basically
11 parts and labor. They have a separate
12 business that sells natural gas. They
13 have a separate business that does
14 pre-engineering and engineering for large
15 installations. In a lot of cases,
16 companies -- I remember Constellation
17 Energy. They had the ability to design,
18 build, and finance large retrofits like
19 the ones you're describing.

20 So if you're a large entity
21 with an investor-owned operation, you're
22 only going to do so much business within
23 the utility space and then you're going
24 set up these separate corporations that
25 will allow you to invest capital and get

1 11/13/14 - WHOLE - RES. 140869

2 a return. And as we all know, a utility
3 has a regulated return, whereas when you
4 get into the unregulated world and you're
5 willing to take on more risk, you're
6 going to get whatever risk/reward for it.
7 So I think that's where an investor-owned
8 entity starts to look for opportunity.

9 There's a significant
10 undertaking in Philadelphia just to
11 double our cast iron main replacement.
12 That will be a huge undertaking for
13 whatever private entity comes in here,
14 and they will earn a return on that, and
15 appropriately so. From there, they're
16 going to have to look at other
17 opportunities and decide whether they're
18 going to delve into these other
19 businesses. But obviously we think that
20 the Philadelphia marketplace is ripe for
21 combined heat and power, we think it's
22 ripe for LNG, and we think it's ripe for
23 natural gas vehicles. So we hope to
24 encourage anyone who would come in here
25 to consider that.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCILMAN JONES: So if it
3 hasn't been said already, I want to put
4 on the record that we probably would not
5 be here but for the efficiency of your
6 management team, you and your leadership
7 over the stewardship of our asset, and I
8 wanted to thank you publicly. Although
9 we're debating where we should be on this
10 thing, but obviously there wouldn't be no
11 debate if it wasn't operating
12 efficiently, and I want to thank you
13 publicly.

14 MR. WHITE: Well, that thank
15 you goes to the hard-working employees,
16 and I really appreciate that, because as
17 Keith said, if we hadn't developed this
18 partnership with the union, we wouldn't
19 have been able to do the things we did,
20 and we certainly have a very strong group
21 of non-union folks that are really
22 dedicated to the company and, quite
23 frankly, we have a good succession plan
24 for the future. My mantra has always
25 been don't leave the cupboard bare. So

1 11/13/14 - WHOLE - RES. 140869

2 the next person that does your job better
3 be better at doing it than you were. So
4 that's kind of the mantra at PGW.

5 COUNCILMAN JONES: Thank you,
6 Mr. Chairman.

7 COUNCILMAN GREENLEE: Thank
8 you, sir.

9 No further questions?
10 Councilwoman Tasco.

11 COUNCILWOMAN TASCO: I want to
12 say thank you very much for your
13 leadership of PGW. It's been a pleasure
14 working with you through the years, and
15 you've done a great job with turning the
16 company around, and we appreciate your
17 leadership and we also appreciate the
18 support of the unions in working with
19 you. And so the Commission has certainly
20 tried to be cooperative in all matters
21 dealing with PGW. So thank you very
22 much.

23 MR. WHITE: And, Madam
24 Chairwoman, your leadership on the Gas
25 Commission has supported the Gas Works

1 11/13/14 - WHOLE - RES. 140869

2 for all these many years and we very much
3 appreciate that and the fine staff.

4 COUNCILWOMAN TASCO: Thank you.

5 COUNCILMAN GREENLEE: Thank you
6 all. Thank you all very much.

7 Our next group --

8 MR. WHITE: Councilman, we
9 have -- PGW is not quite finished.

10 MR. SELTZER: If I may make a
11 brief statement. I'm David Seltzer,
12 Chair of --

13 COUNCILMAN GREENLEE: Okay.
14 Because we have about six other people.
15 So we want to --

16 MR. SELTZER: This is about a
17 three-minute statement, very brief. Many
18 of the points have been made already, and
19 people on Council look pretty dekathermed
20 out, so I'll be very succinct.

21 I've been the Chair of the PFMC
22 for the last six and a half years. As
23 you know, it's a non-profit corporation
24 that manages and operates PGW. Our
25 fiduciary duty is to achieve the mission

1 11/13/14 - WHOLE - RES. 140869
2 of PGW - safe, reliable service and
3 financial stability.

4 And so briefly from a Board
5 member perspective, what steps could be
6 taken so that PGW can both assist in and
7 benefit from Philadelphia as an energy
8 hub. And this is important not just for
9 the financial health of the company but
10 also for our nearly half a million
11 residential customers. As Craig was
12 saying, we have to grow the business. We
13 have the highest rates in the state,
14 perhaps the country. The only way to
15 whittle that down is to expand our
16 customer base, particularly industrial
17 and institutional. And the gas business
18 is a truly volatile business, and we, in
19 our current status as a municipal
20 utility, lack the financial capacity and
21 the risk tolerance to really optimize,
22 make the most of the energy hub
23 opportunities.

24 So I'm not here to talk about
25 the merits or lack of merits of sale. I

1 11/13/14 - WHOLE - RES. 140869

2 just want to make two points in response
3 to earlier observations.

4 First, if a different platform
5 were used such as an investor-owned
6 utility, it would reduce financial risk
7 to the City General Fund. It was only a
8 dozen years ago or so that we needed that
9 emergency loan from the General Fund to
10 bid PGW over, and there could be a
11 trough again. We're in sort of an upward
12 cycle.

13 The other point I wanted to
14 react to is, I don't understand why it's
15 imperative that the gas service be
16 operated by a municipal utility. I
17 understand the perspective of Keith and
18 the terrific work he's done at Local 686
19 wanting to keep the current arrangement
20 in place, but our peer cities, Boston,
21 Chicago, New York, Pittsburgh, Baltimore,
22 Washington, they all have union employees
23 with investor-owned utilities taking care
24 of low-income families with assistance
25 programs, maintaining reasonable labor

1 11/13/14 - WHOLE - RES. 140869

2 relations. I don't know why it's an
3 imperative that Philadelphia be the
4 outlier and be the only municipal system.

5 So I think in terms of
6 optimizing an energy hub potential, we
7 really need to eliminate the
8 institutional impediments in our legal
9 and governance framework. And it's been
10 pointed out as a municipal utility, we
11 are subject to the State Constitution,
12 other state statutes, City Charter,
13 ordinance and so forth. We really need
14 to streamline our governance, and this
15 was pointed out in the Energizing Our
16 Future brochure that you distributed,
17 Item 7, about simplifying and
18 rationalizing the structure. And I'll
19 admit that PFMC, we're part of the
20 problem. We're one of the hoops Craig
21 has to jump through, gets approvals from
22 PFMC, the Philadelphia Gas Commission,
23 the City Finance Director, the City
24 Council, other matters for the PUC. That
25 is not a best practices for trying to be

1 11/13/14 - WHOLE - RES. 140869

2 nimble and take advantage of the business
3 opportunities that an energy hub might
4 offer.

5 My final observation. I heard
6 quite a few comments and questions today
7 about, Well, what about the Asset
8 Purchase Agreement and UIL this, UIL
9 that. I think many of those questions
10 could be resolved if there were in fact a
11 hearing and you invited UIL to give their
12 perspective on it and get a definitive
13 answer to some of the very good questions
14 you asked.

15 So thank you for your patience
16 and allowing me to speak briefly.

17 COUNCILMAN GREENLEE:

18 Mr. Seltzer, I'm going to recognize
19 Councilwoman Tasco, but just to let you
20 know, anybody could have come here today
21 and spoken. I'll just leave it at that.

22 Councilwoman Tasco.

23 COUNCILWOMAN TASCO: I won't
24 belabor the point. We're not the only
25 municipal utility. There are two others

1 11/13/14 - WHOLE - RES. 140869
2 in the State of Pennsylvania. And just
3 because other cities have investor-owned
4 doesn't mean that we have to be that way.
5 We just have to figure out how the best
6 way to work and develop other
7 alternatives of doing it without a sale.

8 MR. SELTZER: Thank you.

9 COUNCILMAN GREENLEE: Thank
10 you.

11 The next witnesses -- and I ask
12 everybody to try to, because we still
13 have a few more that want to speak, to
14 try to be as brief as possible --
15 Madeline Shikomba and anyone else here
16 from North of Washington Avenue
17 Coalition?

18 (No response.)

19 COUNCILMAN GREENLEE: Next is
20 Robert Ballenger and Phil Lord. So if
21 you can get ready, if you're still with
22 us. Why don't you just come up. Then we
23 can try to move as quickly as possible.

24 (Witnesses approached witness
25 table.)

1 11/13/14 - WHOLE - RES. 140869

2 COUNCILMAN GREENLEE:

3 Ms. Shikomba, go ahead. Just identify
4 yourself and proceed.

5 MS. SHIKOMBA: My name is
6 Madeline Shikomba. I represent North of
7 Washington Avenue Coalition.

8 COUNCILMAN GREENLEE: Maybe a
9 little closer to the microphone.

10 And if I could ask anybody,
11 please, your voices carry in here. So
12 it's hard to hear sometimes.

13 MS. SHIKOMBA: Can you hear me
14 now?

15 COUNCILMAN GREENLEE: I can
16 hear you, yeah. Please.

17 MS. SHIKOMBA: My other
18 individuals, they left because they're
19 grandparents and had to pick up
20 grand-kids.

21 COUNCILMAN GREENLEE: Okay.

22 MS. SHIKOMBA: So that's why
23 they're not here.

24 We are here to ask PGW -- a few
25 months ago we presented to President

1 11/13/14 - WHOLE - RES. 140869

2 Clarke over 3,000 signatures of people of
3 Philadelphia opposing the sale of PGW.
4 More than 1,000 of those signatures were
5 handwritten signatures from people who
6 wrote their names down, who were not
7 gotten over the Internet. That's how
8 people in Philadelphia felt about the
9 sale of PGW. They did not want it sold.

10 We wish to commend City Council
11 for putting citizens' interests first by
12 not selling PGW and keeping it as a
13 public utility. The sale of PGW would
14 have left the citizens of this city with
15 higher gas rates, loss of jobs, less
16 oversight of spending and safety issues,
17 and the reduction or elimination of
18 special programs for seniors, low- and
19 moderate-income people in the City.

20 We wish to acknowledge the fact
21 that PGW has set up various programs to
22 help the low- and moderate-income people
23 and the seniors in the City. Recently,
24 PGW has created a program called
25 EnergySense, a community outreach and

1 11/13/14 - WHOLE - RES. 140869

2 education program to help people reduce
3 their gas bill by showing them ways to
4 reduce their consumption of fossil fuels.

5 Although the program has good
6 features, it will not accomplish its
7 goals unless some modifications are made.
8 The program provides for incentives to
9 those who have money more so than it does
10 to those who don't. They offer
11 construction grants of \$750 to people to
12 install energy-efficient natural gas
13 equipment during new home construction or
14 do gut rehabilitation projects. Most of
15 these people already have money and
16 probably are well aware of the high
17 efficiency energy products that are
18 available.

19 The problem with this program
20 is that the people who need the energy
21 programs are not going to get much help.
22 Why? Because according to the program,
23 the individuals have to pay a \$500 fee,
24 which they have reduced to \$150, for them
25 to have a consultant come out and tell

1 11/13/14 - WHOLE - RES. 140869

2 them where they need to do energy
3 efficiency. People can't afford 150.
4 How are you going to pay \$150 and
5 somebody come out how to make your home
6 efficient when you can't even pay the gas
7 bill?

8 It's my suggestion that somehow
9 PGW provide or make available grants or
10 make something available to these people
11 to make themselves accessible to this
12 program. And then after they have the
13 consultation and they find out they need
14 maybe \$1,000 or \$2,000 worth of work
15 done, some kind of grant or low-cost
16 financing to help them make those
17 repairs. By helping them do this, they
18 can naturally reduce the amount of gas
19 that they are using. Without that taking
20 place, these people will not be able to
21 fully function into this program.

22 We suggest that since they are
23 giving outright grants for new
24 construction, wouldn't it be more
25 practical to offer it to low- and

1 11/13/14 - WHOLE - RES. 140869
2 moderate-income so they can implement
3 changes? Making homes more efficient
4 will reduce the subsidy of \$75 million a
5 year that PGW currently provides to low
6 and moderate and senior citizens, because
7 this will make their home more energy
8 efficient and the program will end up
9 paying for itself.

10 Currently -- I'm also going to
11 finish up by just saying this: I am
12 thinking towards the future. We must now
13 begin to think outside the box. I'm
14 thinking about 2050. I won't be here,
15 but my grand-kids will be. I'm not a
16 fossil fuel person. I don't support it
17 because of the impact it has upon the
18 environment. It has a tremendous impact,
19 causing asthma, various illnesses and so
20 forth. The City must now begin to think
21 about moving away from fossil fuel.

22 I am suggesting that the City
23 use some of this money to conduct some
24 kind of study that will show us how we
25 can move from fossil fuel to more

1 11/13/14 - WHOLE - RES. 140869

2 renewable energy. That's right.

3 Renewable energy, energy that doesn't

4 pollute, energy that doesn't destroy our

5 water systems, our air, the food we eat.

6 Use some of that money now for the

7 future. Look to the future. Look to

8 2050, not to 2014, 2015 or 2016. Look to

9 2050. Do it for our grand-kids and the

10 future generations that we won't be here

11 to see, because we got to get off of

12 fossil fuels and other fuels, burning

13 fuels.

14 So I ask you to do that now.

15 Do a study.

16 COUNCILMAN GREENLEE: Okay.

17 Thank you.

18 MS. SHIKOMBA: I thank you.

19 COUNCILMAN GREENLEE: Thank

20 you, Ms. Shikomba. I appreciate it.

21 Whoever would like --

22 Mr. Ballenger, Mr. Lord, whoever would

23 like to go next.

24 MR. BALLENGER: Good evening.

25 Thank you. My name is Robert Ballenger.

1 11/13/14 - WHOLE - RES. 140869

2 I'm an attorney at Community Legal
3 Services where I specialize in utility
4 matters. One of my primary
5 responsibilities is serving as lead
6 counsel in CLS's role as Public Advocate.
7 In that capacity, I represent all the
8 residential customers in PGW's annual
9 operating and capital budget proceedings
10 before the Philadelphia Gas Commission.
11 I also represent low-income customers and
12 organizations that assist them to try to
13 ensure that Philadelphia families have
14 access to the necessary resources to
15 continue their service.

16 Access to affordable,
17 efficient, and safe utility service is
18 central to public health. Without it,
19 disasters, consequences such as the loss
20 of housing or removal of children from a
21 family home can and do occur.

22 I'd like to start by responding
23 to something I heard on the radio last
24 week. This isn't covered in the
25 testimony I filed.

1 11/13/14 - WHOLE - RES. 140869

2 On Friday, Philadelphia Mayor
3 Michael Nutter questioned why the City of
4 Philadelphia should own and operate a gas
5 utility. I did a little survey of some
6 of the reasons why municipalities espouse
7 city ownership of their utilities, and
8 there are lots of reasons. The American
9 Public Gas Association reports that there
10 are approximately 1,000 public gas
11 systems in the United States. Some
12 communities have recently engaged in
13 efforts to gain ownership of utilities
14 that serve them, including Minneapolis
15 and Boulder, both of which I believe were
16 electric utilities, but nonetheless,
17 energy utilities. So here's some of the
18 basic reasons that I gleaned from the
19 literature that was available. These are
20 things municipalities point to in support
21 of municipal ownership:

22 A utility owned by the city it
23 serves exists to provide a public service
24 to the residents and businesses of the
25 city. Service rather than profit is the

1 11/13/14 - WHOLE - RES. 140869

2 utility's mission.

3 Second, local regulation can be
4 more responsive and accessible than
5 regulation outside of the city.

6 Third, a municipal utility is
7 operated in the public interest for the
8 benefit of residents and businesses of
9 the city and not for the benefit of
10 stockholders who live many miles away and
11 may have no other ties to the community.
12 In private ownership, there's a tension
13 between the interest of ratepayers and
14 the interest of stockholders.

15 Creating a sound local economy
16 through local ownership means energy
17 dollars stay in the community. A utility
18 can serve as an engine for economic
19 development.

20 Operating decisions are vetted
21 locally at open public meetings where the
22 utility is able to respond directly to
23 the community's needs, build on its
24 strengths, and reflect its values.

25 Those were some of the common

1 11/13/14 - WHOLE - RES. 140869

2 themes that I observed, and perhaps those
3 will be useful to keep in mind when
4 considering PGW's future.

5 Now I would like to briefly go
6 over some of the points in my testimony.

7 PGW exists to serve the needs
8 of its customers and to provide
9 affordable, safe, and efficient utility
10 service. In return, PGW counts on and is
11 beholden to the primarily residential
12 customer population which has funded its
13 construction and operations for more than
14 a century. As a result, as Public
15 Advocate, CLS seeks to ensure that the
16 future of PGW is mapped out with a clear
17 directive to promote the long-term best
18 interests of PGW's residential customers,
19 who, as Mr. White pointed out, are truly
20 the stockholders here.

21 These hearings are not
22 necessarily focused on the merits of the
23 proposed sale of PGW, but I think it's
24 appropriate to consider some of the risks
25 those terms presented which we identified

1 11/13/14 - WHOLE - RES. 140869

2 and which have been now confirmed by City
3 Council's independent experts, Concentric
4 Energy Advisors.

5 In order that we properly plan
6 for the future, I think we need to be
7 aware of the kinds of risks that could
8 occur in the future if we don't plan
9 carefully. First I'll address some
10 low-income concerns, then some concerns
11 relating to all customers, and then
12 comment on the future direction of PGW
13 and some of the main replacement efforts.

14 For low-income issues -- and I
15 think this is nothing that Council is not
16 aware of at this point, but the proposed
17 sale's terms provided no assurance or
18 commitment to continue the design
19 features of PGW's core low-income
20 program, features which have made it the
21 strongest and most efficient of its kind
22 in Pennsylvania.

23 There was no commitment in the
24 sale terms to the low-income
25 weatherization program or hardship

1 11/13/14 - WHOLE - RES. 140869

2 program, and both of those programs help
3 PGW's low-income customers.

4 The primary program is costly,
5 and that's because Philadelphia has a
6 large percentage of people in need, and a
7 large amount of lower income housing
8 stock lacks weatherization and is in need
9 of repair.

10 PGW's basic low-income program,
11 its core program, CRP, the Customer
12 Responsibility Program, seeks to ensure
13 that even in those challenging
14 circumstances, low-income customers can
15 heat their homes. It's the only program
16 in Pennsylvania that's subject to a
17 minimum bill requirement, charges
18 customers a fixed percentage of household
19 income, without usage or cost limitation.
20 It's also the only program under PUC
21 regulation that is funded by all
22 customers - residential, commercial, and
23 industrial. All other utilities recover
24 the costs directly from residential
25 only. If that cost-sharing feature were

1 11/13/14 - WHOLE - RES. 140869

2 to change and those costs were to be
3 shifted to residential customers, those
4 customers would face approximately \$20
5 million in additional rates per year.

6 In considering the future of
7 PGW, the City should continue to guard
8 against the reduction of benefits to
9 low-income customers, because the result
10 is that families cannot afford service
11 and PGW loses customers. Neither of
12 those outcomes is positive.

13 In addition, the City should
14 bear in mind the potential changes to
15 program design can impact residential
16 customers by shifting costs directly or
17 indirectly.

18 There's one very clear way CRP
19 program costs can be reduced without
20 raising the cost to non-low-income
21 families or to low-income families, for
22 that matter, and that's by assisting and
23 incentivizing weatherization. The cost
24 of low-income programs depends on what
25 families need to heat their homes. If we

1 11/13/14 - WHOLE - RES. 140869

2 reduce need, we can reduce cost. And
3 weatherization is one of the key
4 components Concentric has identified.
5 There's an outstanding resolution that
6 City Council passed last year that
7 perhaps we should revisit about
8 opportunities for innovative funding of
9 strategies to repair and maintain
10 low-income housing.

11 As you're aware, the terms of
12 the proposed sale would have transferred
13 PGW's liens to a private company with no
14 contractual limitation on enforcement.
15 As City Council recognized, a change in
16 lien policy could set the stage for a
17 crisis among residential customers who
18 cannot afford and may not even be
19 responsible for those obligations.

20 Finally, there was a provision
21 in the sale document aimed at continuing
22 the senior discount. That provision did
23 not address the legal reality that PGW is
24 only permitted to have that program by a
25 special statute that only applies to a

1 11/13/14 - WHOLE - RES. 140869

2 City-owned utility.

3 So turning to some of the
4 issues that affect all residential
5 customers --

6 COUNCILMAN GREENLEE:

7 Mr. Ballenger, if I could ask you to try
8 to wrap it up quickly. Thank you.
9 Please.

10 MR. BALLENGER: I will.

11 The media and some of the
12 proponents of the sale have latched on to
13 and perhaps placed undue focus on the
14 short-term potential that rates could go
15 down. And Concentric says that rates
16 could go down; it doesn't say they would,
17 and there's no guarantee of that. But
18 Concentric emphasizes that over the long
19 term, private ownership would likely
20 ensure higher annual and cumulative costs
21 to PGW's customers. Council is correct
22 to focus on the long-term future of PGW.

23 I won't go into what Concentric
24 explains thoroughly, but it is true and I
25 think it's been spoken about already that

1 11/13/14 - WHOLE - RES. 140869

2 at some point the investment returns,
3 under a private ownership model, cause
4 customers to pay more for main
5 replacement efforts than they would under
6 the current model.

7 Much of the discussion has
8 focused on replacement of cast iron
9 mains, and Mr. White spoke about that
10 program and gave you all of the details.
11 I recognize City Council suggested that
12 PGW could increase the DSIC charge, the
13 distribution system improvement charge,
14 further to increase the accelerated
15 replacement. I believe that idea must be
16 more fully explored. And there's a real
17 issue about whether acceleration is cost
18 beneficial to PGW's customers. Even if
19 it is, there may be opportunities to
20 avoid higher costs, and Concentric has
21 analyzed several opportunities available
22 to PGW which can increase net revenues,
23 stimulate economic development, and
24 position PGW for the future benefit of
25 the customers it serves.

1 11/13/14 - WHOLE - RES. 140869

2 PGW management and stakeholders
3 should focus on those opportunities, and
4 I know Mr. White has said that PGW is
5 focused on it. But basic fairness to
6 customers requires that we assess those
7 options for additional net revenues
8 before we pass on higher rates to
9 customers.

10 The final point I want to make
11 is that any expansion in business of PGW
12 must confer benefit on customers. If
13 there's one thing I think everyone
14 realizes is that this entity has forced
15 and required customers to pay a lot over
16 the years, and we need to be mindful that
17 if we are able to produce future benefits
18 from PGW, that those benefits flow to the
19 customers. We should prioritize efforts
20 in those directions and create reasonable
21 cost beneficial proposals for Gas
22 Commission consideration. It will take
23 more than just PGW and the Gas
24 Commission. The City must view PGW as a
25 full-fledged partner capable of

1 11/13/14 - WHOLE - RES. 140869

2 contributing to efforts which benefit the
3 City and PGW's customers.

4 Private partnerships must
5 guarantee a return to PGW's customers.
6 Incentives to new businesses,
7 developments, commercial or residential
8 or otherwise, must guarantee a meaningful
9 return to PGW's residential customers.

10 I appreciate the opportunity to
11 be here today. Thank you for hanging in
12 there. I know it's getting late. Sorry.
13 I had a lot of ground to cover.

14 COUNCILMAN GREENLEE: No. I
15 understand, and I appreciate you waiting
16 that long. It's been a long day.

17 Mr. Lord, before you go, one
18 second.

19 (Brief pause.)

20 COUNCILMAN GREENLEE: Thank
21 you. Thank you for waiting. Mr. Lord,
22 please.

23 MR. LORD: Thank you. Thank
24 you, Councilman Greenlee and other
25 Councilpersons here. My name is Phil

1 11/13/14 - WHOLE - RES. 140869

2 Lord. I'm the Executive Director of
3 TURN. TURN, along with TAG, as you
4 probably know, has been around servicing
5 and advocating for tenants for the last
6 40 years. We have classes every day. We
7 see a couple thousand tenants a year or
8 more than that, and in that process, we
9 learn about their problems, and that
10 includes utility problems.

11 So we're here just to encourage
12 you to look at the state of the consumer
13 as you look at this energy hub concept
14 and other things that you're working on.

15 Quickly, a couple of the points
16 are that a third of the consumers in
17 Philadelphia are low to federal poverty
18 level, and so they're very much in need
19 of affordability in terms of bills. Over
20 a third of PGW's residential customers
21 are in fact low income. So that makes
22 affordability a key issue.

23 In addition to that, there's
24 been a lot of terminations. PGW may have
25 the highest rates, but it also has the

1 11/13/14 - WHOLE - RES. 140869

2 highest termination rates and it also has
3 the most number of customers who are
4 entering the wintertimes without heat.
5 That's a serious problem. Of course, it
6 causes homelessness. It causes
7 suffering, health problems. That has to
8 be a trend that needs to be reversed.

9 We talked about weatherization
10 already. I don't want to get into that
11 again, but RUBS is an issue that's been
12 on the table for a while. There are a
13 lot of landlords in the City who have one
14 PGW meter and several tenants. We want
15 to make sure those tenants have access to
16 the kind of beneficial programs for
17 paying bills that other tenants have,
18 make sure that their bills are accurate,
19 make sure that their bills are fair and
20 that they're calculated based on rational
21 processes other than just number of
22 people in an apartment. So RUB is an
23 issue you have to keep in mind as we go
24 forward.

25 I think that's about it. I

1 11/13/14 - WHOLE - RES. 140869

2 think really the major concern is simply
3 that part of the development strategy
4 includes consumers, that we make sure
5 consumers are able to do even a better
6 job on whatever program you go forward
7 with.

8 COUNCILMAN GREENLEE: Always
9 have to think about the customers, right?

10 MR. LORD: Exactly. Thank you
11 very much.

12 COUNCILMAN GREENLEE: Thank you
13 both very much. Thank you for all the
14 work you do for the communities.

15 Now, is there someone else here
16 who wants to testify?

17 Sir.

18 (Witness approached witness
19 table.)

20 COUNCILMAN GREENLEE: Thank
21 you. Just identify yourself.

22 MR. DeBOISSIERE: Alex
23 DeBoissiere, Senior Vice President with
24 UIL Holding. I will not make us go any
25 later into the evening than we need to,

1 11/13/14 - WHOLE - RES. 140869

2 but I thought it would be helpful if I
3 just addressed a things that came up
4 today.

5 COUNCILMAN GREENLEE: If I can
6 just interrupt you for a second. Just
7 for the record, so we don't get
8 criticized on this, you had not asked to
9 testify earlier today, right?

10 MR. DeBOISSIERE: Not earlier.

11 COUNCILMAN GREENLEE: You were
12 not on the list. Okay. I don't want to
13 be criticized for having you last.

14 MR. DeBOISSIERE: Is it okay
15 that I --

16 COUNCILMAN GREENLEE: No; go.
17 I just want to get that on the record so
18 we're not -- so somebody doesn't say we
19 kept UIL until last.

20 MR. DeBOISSIERE: Okay. And,
21 again, I don't want to push the
22 generosity, but our preference clearly is
23 to have a hearing with more of our
24 experts, more of our people to get into
25 greater detail about the deal that we

1 11/13/14 - WHOLE - RES. 140869

2 have put on the table.

3 As to issues that were brought
4 up today, UIL does stand ready to modify
5 the arrangement to work with
6 Councilmembers to hear the concerns and
7 how we could make it better, if that's
8 possible.

9 A few issues we've already
10 worked on is the EOP. We've committed,
11 despite the fact we're not taking any
12 public money, and it's not required to.
13 We will put the EOP in at the time
14 Council considers -- if Council considers
15 the sale of PGW.

16 As far as LNG goes, we intend
17 to have the business case that everybody
18 talked about, but at this point, operated
19 as part of the regulated part of our
20 company and share any benefits with our
21 ratepayers under the orders of the State
22 Commission. So this will not be a profit
23 that goes into our pocket.

24 And then going back to the
25 first slide that was put up by the

1 11/13/14 - WHOLE - RES. 140869

2 Concentric folks, we do still believe
3 that we can operate PGW at lower costs
4 than it currently is by PGW, not to say
5 that we're better people or they're not
6 doing things right, but just that we
7 believe that -- and, again, some of the
8 ideas are out that we came in with, that
9 we think that we can operate it at a
10 lower cost.

11 So, again, just very briefly.
12 We've gone over the highlights of the
13 deal. The transaction we believe can cut
14 in half the time to replace the pipe. We
15 think that this will unleash unbelievable
16 economic activity, not just in the
17 Philadelphia energy hub but within
18 Philadelphia with addition to PGW
19 employees and also to crews.

20 We will use our access to
21 capital markets to all of the five or six
22 things that Concentric put up there that
23 PGW admittedly has to come to you and ask
24 for money for. And we will support, to
25 the extent that makes this Council

1 11/13/14 - WHOLE - RES. 140869

2 comfortable, the continuation of all the
3 programs for Philadelphia heating
4 customers that are facing economic
5 hardships or on the senior programs and
6 are on fixed incomes.

7 And there are ways that we may
8 be able to change the arrangement that if
9 what comes out of the obligation put on
10 us by the Pennsylvania Public Utility
11 Commission is not suitable to this
12 Council, then the deal doesn't go
13 through. That's one idea that we're
14 trying to think through.

15 And then we do believe that the
16 most important asset at PGW are the
17 employees, Keith and his people and Craig
18 who, we agree, has done a great job.

19 There's been some conversation
20 about the employee numbers, the no layoff
21 for three years. That's what was in the
22 pro forma of the RFP. So we agree to it.
23 That's not set in stone. We can do that.
24 We can change that.

25 The minimum number of 1,350

1 11/13/14 - WHOLE - RES. 140869

2 employees, we were the highest bidder on
3 that. We accepted the highest obligation
4 to keep that. If that's something we
5 want to talk about. And, again, that's
6 also for three years.

7 We also have since this time --
8 and, again, I'm sorry Keith and the
9 attorney aren't here, but we will talk
10 about ways that we can make this binding,
11 more binding, and maybe part of it is
12 that if it isn't to Council approval at
13 the end, that walk away, but we have
14 agreed to grandfather everybody in who is
15 on the current pension plan. We have
16 agreed that anyone whose healthcare on
17 1/1/2015, if they agree to stay on so
18 there's not this mass exodus, that
19 whatever happens in the future, they'll
20 be held harmless and they can still have
21 that.

22 We have agreed to a one-year
23 extension of the current 686 contract to
24 give everybody a little breathing room.

25 So those are the kind of things

1 11/13/14 - WHOLE - RES. 140869

2 as part of an omnibus, all-inclusive
3 settlement to this that we'd look at.

4 And, again, just some of the other high
5 points of the deal: We will freeze the
6 base rates through 2017. We will lower
7 the DSIC charge for customers from the
8 current identical spending levels. So
9 for every 22 million we spend, we get
10 more pipe than the 22 million because we
11 can leverage the capital over the
12 long-term use of the life of the asset.

13 We will maintain the existing
14 six walk-in customer service centers,
15 maintain all existing call centers, try
16 to work with everybody to increase the
17 sourcing of Marcellus Shale natural gas
18 currently in Connecticut with some of the
19 same people that are in Pennsylvania. We
20 get 75 percent of our gas from the
21 Marcellus Shale.

22 There will be no new use of
23 municipal liens or foreclosures on liens
24 on owner-occupied homes. We will
25 increase the employment and supply of

1 11/13/14 - WHOLE - RES. 140869
2 diversity efforts that I know is
3 important to many members. We will try
4 to find new job pipelines to PGW
5 employment, utilizing some of the great
6 local institutions that have been
7 mentioned as opportunities for good jobs
8 for young Philadelphians; increase
9 economic development initiatives at PGW;
10 establish a Philadelphia charitable
11 foundation; establish a local advisory
12 board, that while it will not replicate
13 the authority that Council has over PGW
14 now, we can talk about oversight that you
15 can have over our ongoing operations and
16 some input into that; adding an
17 additional corporate headquarters, a dual
18 headquarters in Philadelphia; and adding
19 a member from the Philadelphia community
20 corporate board.

21 And, as I said, as far as the
22 Economic Opportunity Plan, we have hired
23 a consultant probably known to some of
24 you, Pat Coulter, former head of the
25 Urban League, and some of the -- we are

1 11/13/14 - WHOLE - RES. 140869

2 ready to share a draft with any member
3 and would welcome suggestions. And some
4 of the ideas that we have is to
5 transparently measure and monitor our
6 progress towards the items identified in
7 the Economic Opportunity Plan. In
8 addition to ensuring that our employees
9 and suppliers represent the diversity of
10 Philadelphia, we would also strive to
11 create education partnerships; create job
12 training programs; implement a wider work
13 reentry program; create an infrastructure
14 reutilization program; establish urban
15 renewal initiatives; focus charitable
16 contributions on those areas of
17 importance to all City stakeholders,
18 including this body; and undertake
19 recruitment outreach to those groups
20 underrepresented in the energy industry.

21 And so I am sorry at this late
22 date to take up the time, and like I
23 said, I hope that we can talk about this
24 further, because I do understand it's
25 a --

1 11/13/14 - WHOLE - RES. 140869

2 COUNCILMAN GREENLEE: I
3 understand, and some members have
4 questions. Let me just ask one real
5 basic one. You talk about some of the
6 things you would do. We have been told
7 many, many times over that this
8 ordinance, this plan was an up or down
9 vote, it couldn't be amended. Now we're
10 starting to hear different things, and
11 I'm trying to understand that.

12 MR. DeBOISSIERE: I will tell
13 you, UIL will speak with anybody in any
14 forum if it would help move this process
15 forward.

16 COUNCILMAN GREENLEE: With all
17 due respect, that's not quite the same
18 thing. We were told that either we
19 approve this contract that was sent to us
20 exactly or not. Is that --

21 MR. DeBOISSIERE: That's not my
22 understanding.

23 COUNCILMAN GREENLEE: That's
24 not your understanding?

25 MR. DeBOISSIERE: No.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCILMAN GREENLEE: It's my
3 understanding that's in the agreement,
4 but okay. I won't belabor that, because
5 I know some other Councilmembers -- and
6 it's late at night.

7 Councilman Neilson, then Jones,
8 then Squilla.

9 COUNCILMAN NEILSON: Thank you,
10 Mr. Chairman.

11 Thanks for coming and
12 testifying today. A couple things.
13 Early testimony, the modified agreement,
14 you just talked about that. We've heard
15 testimony today that you refuse to meet
16 with the workforce and the employees,
17 that you failed to meet with them, your
18 company failed to meet with them through
19 this whole process. Is that a true
20 statement?

21 MR. DeBOISSIERE: I would not
22 view it as a true statement. We signed
23 the agreement on March 2nd at
24 approximately 12:20 in the afternoon. We
25 met with Keith and the attorney at

1 11/13/14 - WHOLE - RES. 140869
2 approximately 4 o'clock on March 2nd that
3 afternoon.

4 COUNCILMAN NEILSON: How about
5 in between like now --

6 MR. DeBOISSIERE: The very next
7 day we had an all-hands meeting with all
8 the employees at PGW. We've had sporadic
9 meetings with 686, candidly, and maybe
10 because it's late and my guard is down, I
11 was wondering why they were going so
12 slow. But if the issue really is that
13 privatization can't be negotiated, then
14 there's really not much we can do. I
15 mean, we can tell them what we can offer
16 them. We can tell them what we offer the
17 six unions we currently have.

18 COUNCILMAN NEILSON: That's
19 something I want to talk to you about,
20 because you put a lot of promises on your
21 records. Do you have your testimony
22 written down?

23 MR. DeBOISSIERE: I don't have
24 testimony because I did not know that I'd
25 be --

1 11/13/14 - WHOLE - RES. 140869

2 COUNCILMAN NEILSON: No
3 problem. It's on the record. We'll get
4 it. But there's a lot of stuff that you
5 talked about, grandfathering, healthcare,
6 harmless. I mean, the report we got from
7 Concentric, none of that was in there.

8 MR. DeBOISSIERE: And it was
9 probably a timing issue. Probably at the
10 time, Concentric did that. These are
11 since then.

12 COUNCILMAN NEILSON: So we
13 continue to talk and, as far as you're
14 concerned, the legislation that was put
15 forth or that the Mayor wants us to put
16 forth, as the Councilman indicated, up or
17 down vote, that can be amended prior to
18 being on this Council floor?

19 MR. DeBOISSIERE: I am clearly
20 not an expert on the procedures of this
21 body. However --

22 COUNCILMAN NEILSON: But we'd
23 have to amend it first, right?

24 MR. DeBOISSIERE: But my
25 understanding is there is no legislation

1 11/13/14 - WHOLE - RES. 140869

2 in front of you right now.

3 COUNCILMAN NEILSON: There is
4 not.

5 MR. DeBOISSIERE: So that
6 legislation can be introduced --

7 COUNCILMAN NEILSON: That's
8 technical. We all know it's coming.

9 MR. DeBOISSIERE: But
10 legislation could be introduced that, for
11 instance --

12 COUNCILMAN NEILSON: With that
13 agreement. If that agreement in place
14 that has to be introduced with a piece of
15 legislation, is that agreement there
16 amendable?

17 MR. DeBOISSIERE: My
18 understanding is that it can be changed.

19 COUNCILMAN NEILSON: Thank you.
20 Nothing further, Mr. Chairman.

21 MR. DeBOISSIERE: And we're
22 talking, and if you have suggestions on
23 any idea that a change might help us --

24 COUNCILMAN NEILSON: The
25 dialogue is important. I think it's very

1 11/13/14 - WHOLE - RES. 140869

2 important that here you are today and you
3 weren't on the list and you sat and hung
4 in. That's why I heard -- but we welcome
5 that. Thank you for coming.

6 MR. DeBOISSIERE: Thank you.

7 COUNCILMAN GREENLEE: Thank
8 you, Councilman.

9 Councilman Jones.

10 COUNCILMAN JONES: What I want
11 to say to you and to UIL is that whatever
12 way this turns out, we want you to
13 know -- and it's not probably consolation
14 at this point -- is that we appreciate
15 the fact that you considered
16 Philadelphia. And there's been a lot of
17 back and forth about how we view your bid
18 to come into Philadelphia and that this
19 body in particular didn't want to give
20 you proper consideration. We want you to
21 know that all of us -- and I can say it
22 for the people who are here and some of
23 the people who aren't here -- is that we
24 took you seriously. We take you
25 seriously. We appreciate the fact that

1 11/13/14 - WHOLE - RES. 140869

2 you're looking at our asset and don't
3 want to send a signal to you or anyone in
4 the private sector that we are not open
5 for business consideration and that we
6 are close-minded to different options and
7 opportunities.

8 What we do want to say to you
9 is, as evidenced by the fact that it's,
10 what, 7:30 and we're still here, is that
11 we take this seriously. You waited, and
12 we appreciate you waiting and hearing out
13 your testimony, and that we are looking
14 at possibilities, but we care about -- at
15 the end of the day, as a great
16 Councilperson said, to act in haste, you
17 will repent in your leisure. And as a
18 freshman, I took that seriously.

19 So we're deliberating and we're
20 looking at what our options are as a
21 municipality as to our asset, because
22 once you do it, you can't call it back.
23 You can't say, Ooh, we need a do-over.

24 So in any way to you personally
25 or to your investors or stakeholders or

1 11/13/14 - WHOLE - RES. 140869

2 stockholders, this is not our intention,
3 and I wanted to say that to you publicly.

4 MR. DeBOISSIERE: Thank you.

5 COUNCILMAN JONES: We
6 appreciate you looking at us, and we take
7 our jobs very seriously about what is in
8 the best interest of taxpayers and
9 ratepayers as well. I say that as a
10 Councilperson. I say that as a gas
11 commissioner. All right?

12 MR. DeBOISSIERE: Thank you.

13 COUNCILMAN JONES: On the
14 record.

15 COUNCILMAN GREENLEE: Thank
16 you. Thank you, Councilman. Appreciate
17 it.

18 Councilman Squilla.

19 COUNCILMAN SQUILLA: Thank you,
20 Mr. Chair.

21 Again, I want to reiterate all
22 my colleagues in thanking you for being
23 here and testifying and spending a long
24 day listening to everybody talk. But my
25 question is -- and everybody asked about

1 11/13/14 - WHOLE - RES. 140869

2 the amendable process, the extension of
3 the contract, everything is willing to --
4 you're willing to look at that and
5 negotiate it. The debate is whether that
6 could really be done or not.

7 But just the infrastructure
8 part, to do it in half the time, which
9 means we'd have to do approximately 50
10 miles a year, would that be done --
11 because we heard earlier where the older
12 pipes are mainly in an area that's pretty
13 heavily concentrated and full of density.
14 So if you're doing it in half the time,
15 would you have to open up more of that
16 street all at the same time, correct?

17 MR. DeBOISSIERE: Hopefully we
18 wouldn't have to. The first thing we'd
19 do would be, with existing PGW management
20 and the institutional mileage, hire an
21 engineering firm, which I think was the
22 recommendation of Concentric, to go out
23 and to really get a good plan that takes
24 into account the interruption of commerce
25 and to getting this done. But we are

1 11/13/14 - WHOLE - RES. 140869

2 committed to putting the money behind
3 this to get this done in half the time.
4 And as you've heard people say, that is
5 the general thought in the industry right
6 now, to get the older pipe out of the
7 ground as soon as you can.

8 COUNCILMAN SQUILLA: So I guess
9 it depends as that goes forward. You may
10 be able to do 50 one year, 30 the next
11 depending on everything that goes on.
12 Because once you hit -- the majority of
13 the pipe is all in one area, the old
14 pipe. Then you're going to have to go do
15 some other areas at that time also to try
16 to keep up with that.

17 MR. DeBOISSIERE: That's what
18 we found in the areas -- the gas
19 companies we've taken over in New England
20 we've also cut in half basically the
21 time, and it was exactly -- we found
22 exactly the same thing, that you just
23 can't go in and shut down a four-block
24 area because it's convenient to do
25 something.

1 11/13/14 - WHOLE - RES. 140869

2 COUNCILMAN SQUILLA: And the
3 commitment also would be added into the
4 contract or is that something that you
5 would agree to?

6 MR. DeBOISSIERE: Again, my
7 understanding is that that is something
8 that will get filed the way PGW's is now
9 with the Public Utility Commission. The
10 way their 88-year is filed now, ours
11 would have to be. And, again, I don't
12 know whether it's something that we can
13 make contingent on you all getting a
14 final look at it and being the last
15 arbiters of it. You know, we're --

16 COUNCILMAN SQUILLA: I don't
17 feel like we know that either.

18 MR. DeBOISSIERE: We're all
19 trying to think of ways to give you a
20 comfort level, because I do understand
21 that once -- your feeling that once it
22 goes, it goes.

23 COUNCILMAN SQUILLA: Thank you.

24 COUNCILMAN GREENLEE: Thank
25 you, Councilman.

1 11/13/14 - WHOLE - RES. 140869

2 Councilman Oh.

3 COUNCILMAN OH: Thank you very
4 much, Mr. Chairman.

5 So I do appreciate you being
6 here and everything, and for me
7 personally I'd love to have a continuing
8 discussion.

9 I will state clearly without a
10 doubt that the deal was presented and
11 negotiated by the Administration, and
12 within those constraints, they set the
13 parameters. It comes to this body for a
14 vote yes or no as an approval, not as an
15 opportunity to renegotiate, set new
16 standards, do anything else. And so it
17 was clearly a yes or no vote, up or down,
18 period, and that was the problem in
19 having these discussions, is that there
20 was some willingness or a lot of
21 willingness, it appeared, on the part of
22 UIL to say, no, we could do this, we
23 could do that. But as far as I
24 understood and everybody in this body --
25 and when we dealt with UIL, the fact that

1 11/13/14 - WHOLE - RES. 140869

2 they were willing to say we could do this
3 or we could do that, none of us could do
4 it under the current situation. I am not
5 sure how we get around that unless there
6 is a new process by the Administration or
7 an interpretation by the City Solicitor
8 that there's some type of latitude.

9 The next thing that occurred is
10 that some of the things that you were
11 saying would sound great and I have heard
12 are not in the contract, and how do we
13 put them in the contract, because it's
14 wonderful that you're saying it, I've
15 heard it before, but it has to be in the
16 contract.

17 MR. DeBOISSIERE: And, again,
18 I'm not sure it has to be in the
19 contract. I'm not sure you can't
20 introduce an ordinance that says this is
21 required, that you are required to put --
22 which we intend to do anyway -- an EOP in
23 at the same time, that you are required
24 to make sure that the PUC accepts your
25 plans for the people facing economic

1 11/13/14 - WHOLE - RES. 140869

2 hardship and --

3 COUNCILMAN OH: I'm willing to
4 be as flexible as it takes to get this
5 done, but what I'm saying is, the legal
6 parameters are probably established by
7 the Mayor's Office and the City
8 Solicitor. We're like a legislative
9 body. We're not going to create laws to
10 put clauses in a contract, but if you can
11 be flexible and present something, I
12 think the proposal would be good, but I
13 don't want to be fanciful or unrealistic
14 that we're going to like start writing
15 ordinances to fill in the blank spots of
16 the contract. The contract, as far as I
17 understand -- and I'm not the City
18 Solicitor -- is that the Mayor has those
19 powers under the Charter. He sets the
20 parameters. We simply can approve or --
21 vote yes or no on the specifics of the
22 terms and conditions of the bill.

23 And so somehow if you can put
24 that into a proposal and some other
25 things -- and then I'll say the other

1 11/13/14 - WHOLE - RES. 140869

2 thing that I've been curious about is --
3 and I still don't understand, and I have
4 met with UIL on a number of occasions --
5 is if you have a long-term commitment to
6 investing in the development of natural
7 gas and getting those capital markets and
8 doing all those things, are you, UIL,
9 going to put that a long-term contract as
10 opposed to a three-year contract?

11 MR. DeBOISSIERE: You mean as
12 far as the no layoffs or as far as the --

13 COUNCILMAN OH: In a strategic
14 plan, a long-term plan, an investment
15 plan, commitments to raising funds --

16 MR. DeBOISSIERE: I think we
17 can come up with something for you. I
18 obviously don't have it with me, and it
19 wouldn't come out of my shop, but, again,
20 in a larger hearing, I think that we
21 could come up with what a ten-year
22 capital spend plan would look like under
23 UIL.

24 COUNCILMAN OH: So I thank you.
25 I will say that I'm only asking questions

1 11/13/14 - WHOLE - RES. 140869

2 and obviously have no authority other
3 than just to ask questions and --

4 MR. DeBOISSIERE: I appreciate
5 the questions.

6 COUNCILMAN OH: -- get your
7 response, but I appreciate the response.

8 Thank you very much.

9 COUNCILMAN GREENLEE: Thank
10 you, Councilman.

11 Before we adjourn, Councilwoman
12 Tasco, you wanted to --

13 COUNCILWOMAN TASCO: Yeah.
14 Thank you, Mr. DeBoissiere.
15 Unfortunately you find yourself in a
16 position where you probably didn't
17 understand the operations of City Council
18 and City government. The Mayor made a
19 decision that he wanted to sell PGW and
20 set up a process to get to the point
21 where we are now. Usually -- and we
22 voted on many, many, many legislative
23 bills here in this Council that have come
24 before us, the Convention Center, the
25 stadiums, the Marriott, pretty much

1 11/13/14 - WHOLE - RES. 140869

2 everything that the Administration wants.

3 But the bill comes to us with the

4 opportunity to discuss and to amend.

5 Okay? We don't have that luxury, and

6 it's nice that you want to make changes,

7 but the City Solicitor has said that you

8 can't. I have a letter here dated April

9 11, 2014 and it says, City Council has

10 the authority to authorize or decline to

11 authorize an agreement negotiated by the

12 parties. The parties could, in theory,

13 agree to modest changes made, a condition

14 of Council's approval, though only to the

15 limited extent permitted under

16 competitive bidding law.

17 So if we get into negotiating

18 the contract, then you got to go back and

19 the City has to go back to all those

20 other people who bid it. So, therefore,

21 the problem that at least I have and I

22 think some of the other Councilmembers

23 share is that we were given a

24 leave-it-or-take-it deal, with no ability

25 to have a discussion to say, Well, could

1 11/13/14 - WHOLE - RES. 140869

2 you do this and we agree that would
3 happen. But it says any changes would
4 have to be made and agreed upon by the
5 seller and the buyer. And so the seller
6 is the Mayor, not us, the City. It
7 doesn't include us, because we're not
8 included in this.

9 So that's what I want to make
10 clear to you. That's why I have my
11 problem with this process. I'm open to
12 and was open to a discussion, although I
13 don't and never have been for a private
14 sale. I made it very clear when the
15 Mayor had his meetings that he talks
16 about, but never was there a discussion
17 of what we wanted to look at in terms of
18 presenting it to City Council.

19 So you have to understand how
20 we are concerned about this whole
21 negotiation. And not only were we not
22 included in the discussion or drafting --
23 we're maybe not supposed to be involved
24 in the drafting, but the discussion, but
25 at least here we are with the limitations

1 11/13/14 - WHOLE - RES. 140869

2 that legally from the City Solicitor we
3 can't do.

4 COUNCILMAN GREENLEE: Thank
5 you, Councilwoman.

6 MR. DeBOISSIERE: Thank you.

7 COUNCILMAN GREENLEE: Thank
8 you, sir. Thank you for hanging in there
9 and being there.

10 Again, I want to make it clear
11 on the record for everybody listening
12 that the gentleman and no one from UIL
13 had asked previously to testify. I want
14 to make sure that's clear that we did
15 not --

16 MR. DeBOISSIERE: But we're
17 always ready, sir.

18 COUNCILMAN GREENLEE: That
19 being the case, this hearing on
20 Resolution No. 140869 will stand in
21 recess until tomorrow, Friday, November
22 14th at 10:00 a.m. where we have a whole
23 lot of other people listed to testify.

24 Thank you.

25 (Committee of the Whole

1 11/13/14 - WHOLE - RES. 140869

2 recessed at 7:55 p.m.)

3 - - -

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

CERTIFICATE

I HEREBY CERTIFY that the
proceedings, evidence and objections are
contained fully and accurately in the
stenographic notes taken by me upon the
foregoing matter, and that this is a true and
correct transcript of same.

MICHELE L. MURPHY
RPR-Notary Public

(The foregoing certification of this
transcript does not apply to any reproduction
of the same by any means, unless under the
direct control and/or supervision of the
certifying reporter.)

A				
abandon 103:9	acceleration	acquired 45:4	304:8	86:11
ability 12:15	291:17	acquirer 67:7	additional 24:5	advances 21:14
13:16,18 24:3	acceptable 179:6	acres 265:13	27:10 31:6	advancing 138:14
31:21 41:13	179:8 229:2,4	act 128:9 233:10	32:16 38:20	advantage 5:15
51:10 62:8,17	accepted 301:3	311:16	50:21 76:25	14:24 71:8
68:9 70:22	accepts 317:24	action 10:5 93:20	96:8 105:9	72:10,25 88:5
75:21 85:16	access 29:6 30:7	121:2 203:12,13	114:6,10 118:14	95:4 96:20
125:9 163:23	30:11 59:22	203:17 204:5,14	118:17 187:3	122:14 142:3
169:2 211:15	98:5 101:19	204:21 205:14	190:23 236:2	150:8 151:10
217:11 220:22	102:7 119:12,21	205:15,16,20	260:11 288:5	161:20 163:25
238:15,16	122:10 163:11	206:20 208:5,6	292:7 303:17	166:9 260:10
239:13 240:17	167:10 185:5	208:14 212:13	additions 5:11	261:21 274:2
241:4,14,15	219:25 236:22	212:15,24	address 35:11	advent 25:13
266:17 321:24	282:14,16	230:25 244:2,14	52:2 57:23 65:4	advice 112:14
able 2:17 14:21	295:15 299:20	244:15,20	67:3 100:25	advise 84:18
15:14 16:6,10	accessed 59:14	245:16 255:15	113:9 136:5	advising 142:21
17:4,23 18:2	142:10	actions 6:21 7:22	286:9 289:23	150:15
19:9 43:19	accessible 146:22	98:22 99:3	addressed 48:17	advisor 59:19
46:11 48:24	147:5 279:11	action-oriented	67:15 135:22	132:9
51:22,25 86:3	284:4	206:18	136:14 144:11	Advisors 7:25
87:14 88:8	accessing 218:18	active 9:19 73:8	297:3	10:13 13:21
109:12 113:13	accommodate	actively 160:13	addressing 57:14	57:12 60:4
127:21 128:19	2:21 3:14 90:17	activities 159:14	136:9 240:6	286:4
146:3 150:21	172:21 246:22	244:25	adequate 100:23	advisory 57:13
172:19,23 178:9	accompanying	activity 70:23	127:13	303:11
189:11 215:11	134:21	76:23 144:25	adequately 94:5	advocate 95:2
218:21,23,24	accomplish 87:15	145:2 147:21	adjourn 320:11	282:6 285:15
226:5,7 239:17	103:6 278:6	148:5 299:16	administered	advocating 294:5
239:20 240:25	account 27:13	actors 209:16	187:8	affect 175:6
250:14 262:23	313:24	actual 40:16	Administration	264:17 290:4
265:18 268:19	accountants	55:16 245:19	4:22 7:15 57:19	affiliation 183:4
279:20 284:22	252:11	acumen 124:6	59:19 60:10	afford 48:24
292:17 296:5	accounts 26:19	ad 257:21	61:18 64:11	143:21 279:3
300:8 314:10	accurate 258:25	add 52:8 181:23	65:15 66:24	288:10 289:18
absolute 30:19	295:18	222:21 224:12	174:24 217:17	affordability
absolutely 53:15	accurately 218:11	247:17 253:4	238:9 316:11	294:19,22
73:25 171:25	224:8 325:5	added 39:18	317:6 321:2	affordable 12:16
200:14 238:15	achieve 51:23	152:11 224:11	Administrative	34:10 282:16
abundant 95:5	270:25	315:3	132:21	285:9
Academies	acknowledge 3:19	added-value	admire 101:18	AFL-CIO 185:25
225:14	20:2 97:8 160:7	149:2	admit 273:19	afraid 190:13
accelerate 160:5	277:20	adding 142:13	admits 257:12	Africa 155:21
257:16 263:25	acknowledged	160:2 303:16,18	admittedly	afternoon 2:3,3,5
accelerated	31:25 111:19	addition 117:3	299:23	2:6 6:8 9:12
291:14	Acme 265:12	203:24 216:19	ads 257:8	10:21,22 21:6
accelerating 20:8	acquire 16:7 31:5	233:10 288:13	advance 40:2	54:22 70:7
	48:24,25	294:23 299:18	advancement	77:21 92:15

208:22 306:24 307:3 agencies 18:16 agenda 63:21 206:18 aggressive 5:20 108:16 109:7 164:17 247:7,8 aggressively 5:19 46:8,16 86:9,20 151:5 217:25 218:3 aging 158:18 ago 34:16 87:23 104:16 106:23 113:24 155:25 165:7 218:8 220:9 231:6 238:7,11,12 239:25 242:7,14 250:13 258:4 272:8 276:25 agree 8:25 9:2 74:22 127:20 175:8 211:21 234:6 300:18,22 301:17 315:5 321:13 322:2 agreed 176:12 194:7 301:14,16 301:22 322:4 agreement 7:13 7:15 8:5,21 57:4 59:3 169:13 170:2,4 178:21 178:24 179:8 180:21 193:4 239:8 256:25 257:12,14 274:8 306:3,13,23 309:13,13,15 321:11 agreements 104:13 ahead 107:10 191:3 262:12 276:3	aimed 105:19 289:21 air 257:8 281:5 airport 91:5 130:4,6 171:12 171:17 Alan 129:21 130:15 132:16 132:18 136:6 144:8 167:25 albeit 32:4 Alex 296:22 Alicia 130:17,22 133:7 137:3 158:10 aligned 138:19 alleviate 27:11 alliance 144:14 146:6 168:21 alliances 144:5 Allmendinger 129:21 130:20 134:15 149:11 Allmendinger's 152:4 allow 17:21 23:19 45:25 139:23 141:4 155:2 165:17 169:15 235:3 243:19 266:25 allowed 9:3 136:21,22 allowing 160:3 274:16 allows 127:3 139:8 155:3 alluded 22:8 167:10 all-hands 307:7 all-inclusive 302:2 alternative 6:17 24:20,22 25:4 62:21 93:12 112:5 alternatives 62:16	64:4 124:25 275:7 altogether 103:10 amassed 32:11 amend 241:15 308:23 321:4 amendable 309:16 313:2 amended 305:9 308:17 America 21:19,23 27:7,17 75:19 150:6 212:17 American 201:14 283:8 ammonia 123:4 ammonium 123:4 amortize 250:25 amount 33:14 37:7 62:25 63:3 63:4 64:12 65:3 66:8,10 67:9,10 153:10 193:19 200:23 204:3 205:23 224:16 224:18 279:18 287:7 amounts 21:17 153:16 Amtrak 171:14 analogous 14:4 analogy 75:6 analysis 10:16 52:15 257:24 analyzed 291:21 analyzing 256:24 anchor 143:18 ancient 101:21 Andrew 10:12 14:6,7,11 20:5 20:25 32:24 35:7,15 41:18 42:13,16 49:14 and/or 187:21 325:22 angle 35:2 announce 262:24	announced 151:12 174:24 262:24 annual 36:19 39:22 223:5 261:9 282:8 290:20 annually 51:9 answer 50:4 59:7 62:7 63:23 64:22 65:20 85:23 93:3 106:6 135:3 169:24 178:3 195:19 198:3 202:16 208:19 208:20 237:2 249:25 265:6 274:13 answered 117:17 147:24 265:7 answers 258:19 anticipate 166:12 216:19 anticipated 2:18 23:21 anticipating 193:8 anticipation 73:6 antiquated 220:10 Antonio 166:15 anybody 4:24 161:24 180:3 183:23 208:15 258:22 274:20 276:10 305:13 anybody's 77:13 anyway 258:12 317:22 apartment 295:22 APGA 160:11 apologize 14:18 apology 77:13 apparent 119:10 appeared 65:23 316:21	appears 31:4 42:21 applaud 97:5 Applause 90:8 apples 197:4 applicable 232:24 application 224:25 applications 159:11 applied 207:9 262:14 applies 89:6 289:25 apply 325:20 applying 16:21 appointed 166:7 appointment 152:22 appoints 152:16 166:2 appreciate 4:18 5:13 130:7 228:23 230:5 268:16 269:16 269:17 270:3 281:20 293:10 293:15 310:14 310:25 311:12 312:6,16 316:5 320:4,7 appreciation 92:18 approach 49:10 106:10 109:18 124:14 205:22 approached 10:18 92:7 129:23 142:17 173:14 198:23 275:24 296:18 appropriate 37:8 82:11 111:12 184:24 187:12 285:24 appropriately 202:8 267:15
---	--	--	---	---

approval 8:13,24 169:21 259:10 301:12 316:14 321:14 approvals 273:21 approve 8:20 42:12 112:8 305:19 318:20 approved 65:17 approves 152:25 153:5 approximately 52:13 67:20 201:16 218:17 250:3 283:10 288:4 306:24 307:2 313:9 April 8:18 321:8 Aqua 212:17 arbiters 315:15 area 26:11 30:24 47:23 71:3,10 76:21 80:18,21 94:2 115:18,18 136:25 137:12 140:3 144:23 156:15 158:12 159:20 162:21 232:16 264:19 313:12 314:13 314:24 areas 78:19,22,22 80:2,3,3 81:12 135:22 158:15 264:16,20 304:16 314:15 314:18 area's 146:9 arguing 179:12 179:13 arm 186:4 arrangement 187:17 272:19 298:5 300:8 arrangements 185:17 arranging 127:8	arrive 7:5 article 218:10 articulated 61:7 66:25 aside 188:8 266:5 asked 7:12 11:24 42:11 59:12 135:4 243:21 244:4 274:14 297:8 312:25 323:13 asking 69:18 117:21 142:19 142:20 208:22 238:9 319:25 aspect 119:17 247:10 aspects 12:5 50:21 106:14 assembled 235:24 assess 292:6 assessment 42:15 61:2,10,17 62:15 asset 6:18 7:14 54:23 55:2,21 56:9 57:4 59:3 63:2 65:25 66:12 138:13 178:19,20,23 179:7 180:20 193:4 268:7 274:7 300:16 302:12 311:2,21 assets 14:25 29:11 33:11 36:5 38:15 51:23 52:12,20 68:21 72:11 100:10,15 103:3,15 128:20 139:24 141:3 150:17 168:10 242:9 assignment 11:16 11:18 assist 229:12 233:7 253:22	271:6 282:12 assistance 234:4 272:24 assisting 288:22 associated 5:7 26:24 92:22 109:12 111:22 235:4 Association 283:9 assume 39:20 131:24 152:2 247:19 assumes 131:16 assuming 173:5 247:5 assumptions 39:17 assurance 286:17 asthma 280:19 Atlanta 147:19 Atlantic 76:14 attain 36:16 attainable 36:16 attempt 28:15 91:4 249:24 255:9 attempting 245:23 attendant 99:5 attended 245:9 256:24 attention 35:12 64:9,10 173:22 attorney 174:16 282:2 301:9 306:25 attorneys 41:24 attract 16:22 103:10 204:10 206:11 217:19 255:9 attracted 89:18 104:8 148:18 attracting 18:14 46:24 attraction 260:22 265:10	attractive 25:3 34:11 38:9 130:21 142:5 241:5 258:14 attrition 214:12 214:19 audience 119:7 august 199:11 auspices 93:23 Australia 155:14 author 62:9 authority 8:20 105:15 152:7,13 153:10 165:16 165:18 166:5,8 205:3 303:13 320:2 321:10 authorization 164:8 authorize 321:10 321:11 authorized 138:24 166:7 authorizes 166:3 authorizing 1:19 4:6 164:11 autonomy 153:11 availability 28:18 available 6:12 14:18 59:11,24 68:8 75:16 100:16,21 131:20 142:8 198:18 278:18 279:9,10 283:19 291:21 Avenue 275:16 276:7 average 47:15 179:24 234:8,15 averse 239:6 avoid 46:2 141:4 168:13 238:23 291:20 awarded 145:5 aware 18:9 32:19 34:13 65:11	68:6 113:15 278:16 286:7,16 289:11 Aye 91:17,18 a.m 323:22
B				
B 1:17 237:13,13 back 19:2 32:22 35:7 41:15 44:8 69:12,22 74:16 77:16,22 84:14 91:13 105:4 121:22 122:7 129:11 151:25 167:18 172:5 173:21 179:18 182:20 183:24 189:19 190:9 197:8 202:23 213:2 214:14 221:6 228:14 238:6,22 248:18 298:24 310:17 311:22 321:18 321:19 backbone 95:19 background 13:22 29:11 132:17 144:8 211:18 back-office 159:25 181:2 bad 110:17,18 161:15 184:11 195:3 214:25 bakery 265:12,12 balance 49:5 66:11 114:7 152:22 244:8 245:19 balanced 106:10 161:5 ball 20:11 Ballard 60:12 Ballenger 275:20 281:22,24,25				

290:7,10 Baltimore 124:23 272:21 band 51:17,17,18 bare 268:25 barrel 149:22 barriers 126:15 126:19 204:23 204:24 base 95:11 97:7 97:25 107:19 119:15 153:12 162:12 163:3 186:9 246:4,8 246:17 271:16 302:6 based 2:24 17:14 39:16 60:18 81:18 114:17 130:24 149:16 155:13 191:16 193:19 262:13 295:20 base-load 30:11 basic 43:16 149:13 283:18 287:10 292:5 305:5 basically 23:15,17 32:10 50:18 131:9 135:19 143:19 150:2 156:11 165:4 175:2 221:12 235:23 237:17 240:23 266:10 314:20 basin 26:12,19 27:5 basis 32:5 36:19 39:23 43:19 75:17 127:21 128:15 139:2 149:20 170:8 205:4 223:5 232:21 261:10 BCF 31:12 38:16	116:11 213:10 222:5,6 236:8 254:17,19,20 bear 288:14 Beautiful 11:5 becoming 24:19 24:22 48:12 79:20 began 144:20 241:12 begins 42:4,6 begun 25:22 32:3 207:5 behalf 59:18 61:18 244:19 behavioral 54:6 beholden 285:11 belabor 274:24 306:4 belief 62:20 believe 4:20 5:4 5:22 36:15 42:19,21 49:6 51:15 53:9,11 55:17 56:13 61:24 87:7 90:2 93:12 99:7,10 110:18 113:21 118:15 162:16 165:17 166:15 190:3 192:4 195:3 209:13 214:15 221:25 221:25 222:5 225:2 235:18 252:2 255:14 260:3 261:22 283:15 291:15 299:2,7,13 300:15 believing 56:18 bell 190:19 199:16 Bella 264:18 bench 192:19,20 benchmark 27:19 beneficial 37:10	291:18 292:21 295:16 benefit 20:2 34:9 56:15 71:2 122:19 123:7 180:15 181:8 212:8 228:12 271:7 284:8,9 291:24 292:12 293:2 benefited 19:20 benefiting 19:14 44:4 benefits 16:9 19:16,24 22:5 36:9 54:7 169:2 177:3 183:15 288:8 292:17,18 298:20 best 7:6 10:3,17 14:23 29:20 37:5 54:23 62:4 62:8 63:23 65:19 85:12 90:2 99:8,11 103:2,18 111:6 138:10 142:22 144:17 155:15 155:22 169:6 273:25 275:5 285:17 312:8 better 14:20 17:6 29:19 38:9 57:14 84:16 86:21 88:3 89:8 107:24 139:23 178:14 231:18 245:20 265:21 269:2,3 296:5 298:7 299:5 beyond 12:14 48:22 56:8 65:18 79:5 112:18,19 137:24 260:19 bid 105:5 310:17 321:20	bidder 301:2 bidding 9:4 321:16 bide 272:10 big 16:3 25:6 36:6 68:13 105:7 110:24 125:7 143:11 145:14 175:14 180:16 233:2 254:12 bill 145:2,17 173:9 248:25 256:11 278:3 279:7 287:17 318:22 321:3 billion 29:15 31:12,15 101:24 105:6 128:3,4 143:10 195:8 213:5 220:5 237:6,10,11,13 242:9 bills 17:14 19:13 46:2 54:8 229:24 294:19 295:17,18,19 320:23 binding 223:22 301:10,11 bit 24:12 44:8 55:13 115:6 116:24 132:17 134:19 136:5,10 141:20 144:9 148:9 155:11,25 166:22 170:6 172:3 204:16 212:11 213:21 221:6,7,10 222:9 225:8 263:11,13 BLACKWELL 1:10 blame 110:12 blank 318:15 blanket 86:17 block 247:3	blocks 74:20 76:17 123:2 BLONDELL 1:16 blue 29:24 blue-collar 255:12 board 19:19 31:3 43:20 77:16 81:23 152:16,25 153:7 161:23,25 169:21 196:14 211:2,7 221:20 240:8 271:4 303:12,20 boat 156:25 Bob 13:20 21:5 22:8 24:4 25:22 32:22 35:17 41:15 52:23 53:10 BOBBY 1:12 body 85:20 124:4 126:8 173:4 196:11 199:11 200:4,12 201:19 203:11 205:2 208:11,21 209:7 211:9 304:18 308:21 310:19 316:13,24 318:9 bond 216:5 238:7 bonds 208:24 book 9:7 borrow 237:20 238:4,14,15,17 238:18 borrowing 216:9 216:10 238:2 Boston 272:20 bottom 30:9 157:14 236:3,6 bottom-up 157:3 bought 183:7 Boulder 283:15 bounds 165:21 bouquet 199:19
---	---	---	---	--

box 30:9,16 31:7 31:9 280:13	209:11 212:5,9 212:10 225:3,4 228:8	building 11:4,6 48:19 74:20 76:17 98:9 123:2 145:7 146:20 171:2 192:19,20 193:12 220:3 230:22,23	266:6,7,10,12 266:13,22 271:12,17,18 274:2 292:11 298:17 311:5	200:18 208:20 228:17 277:24
boxes 30:4,25				calls 175:17 178:4
boy 263:18	broad 9:13 18:19 155:2			Canada 25:19
Braskem 98:4 212:18	broaden 137:23		businesses 15:6	canals 75:18
bread 265:15	broaden 9:9 18:15 46:21 136:8 138:16	buildings 110:24 232:19	16:12,23 20:19 29:3 34:11 45:17 46:25 47:4 48:15 70:14 71:2,7 83:4,9 89:10,13 122:19 127:6 140:6 146:9 233:13 263:23 267:19 283:24 284:8 293:6	candidate 80:7 104:12 125:6,6
break 89:15 160:19 173:17 173:18 204:23 233:19	broadly 12:2 97:10 148:24	built 38:11 53:7 105:2 126:24 135:10 235:20 254:15		candidates 45:5
breaks 47:19,19 47:20	broad-based 202:6			candidly 307:9
breakthrough 47:18	brochure 273:16	bumped 3:10		capabilities 31:23 32:17
breathing 301:24	brought 89:24 176:13 178:7 207:18 212:9 217:8 298:3	bunker 149:25		capability 39:18 221:3 243:3 254:8
breeze 152:3		burden 248:15		capable 292:25
BRIAN 1:15	brown 1:16 31:7 77:18,19 78:10 78:17 79:7,13 79:24 81:21 82:4,12 84:2,20 184:19,20 186:13 187:7,10 188:23 190:18 190:24 191:4 192:16 194:7	burn 122:16 149:23,25	butane 28:6 120:21	capacities 108:25
brief 91:21 122:5 123:21 136:23 203:10 270:11 270:17 275:14 293:19		burner 121:7	buy 114:6 218:13 235:23 251:10 251:11,14 253:8 253:11	capacity 27:3,10 29:15 30:8,12 30:13 31:3,4,14 31:22,24 36:8 37:7,20 38:2,17 38:21,22 39:6,8 66:13 67:6 113:18,22 114:16,19 115:5 116:16,18,24,25 117:7,9,23 118:13,22 119:24,24 120:2 127:5 140:2 142:11,14 150:19 204:18 219:3,4,9,19,20 219:22 220:24 221:7 222:11,14 222:16 223:15 223:23 252:22 271:20 282:7
briefings 256:23	brownfield 140:4 142:8 150:17	business 12:11,14 17:25 20:21 33:12,13 42:4,6 43:21 44:5 46:10 49:6,7,10 49:12 56:22 57:6 73:6 74:3 74:13 89:16 94:20 100:8 101:6 102:23 103:12 114:8 115:18 124:6,9 136:2 138:24 139:12 146:7 147:25 157:18 158:16 161:11 170:5 180:16 187:21 202:18 203:5 204:4 205:8 207:16 217:4,8,12 222:17 224:13 244:6 245:22 248:12 252:18	buyer 67:18 68:15 105:5 221:22 322:5	
briefly 14:13 41:20 131:13 156:17 158:14 271:4 274:16 285:5 299:11			buying 197:21,22 251:10 252:9,10	
bring 17:25 27:3 70:22 79:18 94:4 101:10,24 116:7 117:7,10 117:12 121:10 146:8 172:5 178:10 195:13 202:22 204:18 204:24 205:12 205:12,18,21 207:6,8 223:13 235:15 238:25 245:4 254:21	Brownsville 166:21		buys 183:10 197:18	
bringing 36:7 37:20 103:14 120:17 121:3 247:9	Brown's 81:13		by-product 126:14	
brings 109:24	BTUs 96:12,15		C	
	bucks 179:24		calculated 295:20	
	budget 152:25 153:17 237:21 237:22 240:10 240:13,14 282:9		call 33:9 61:4 115:19 116:22 120:16 130:4 148:2 176:24 177:14 178:7 219:2 223:17 238:8 250:10,15 302:15 311:22	
	build 38:3 74:8,9 114:2 125:15 126:2,21 128:2 144:2 146:24 222:13 223:15 223:16,20,20 231:11 235:19 266:18 284:23		called 3:17 17:13 34:5 116:4,25 121:5 146:18 176:4 185:2	capital 51:12 55:15 60:12 101:19 102:7 103:22 104:2 164:11 196:16 209:3 215:12 235:16 236:22 237:18,21,21 238:16 240:9,13

240:14 241:2 253:23,24 254:8 262:9 266:25 282:9 299:21 302:11 319:7,22 capitalism 196:18 capitalization 254:2 capitalize 154:21 capture 22:17 carbon 122:24 care 43:9 108:19 175:5 178:16,17 272:23 311:14 career 13:23 14:7 179:3 careful 205:21 238:3,14 carefully 49:10 54:13 97:11,12 286:9 Caribbean 141:12 145:20 147:14 carry 276:11 Carter 132:11 cascade 220:10 cascading 148:5 157:6 case 12:18 42:4,7 43:21 49:16 52:18,19 68:14 72:11 84:19 112:9 133:18 150:14 166:2,23 169:19 182:24 224:13 246:25 298:17 323:19 cases 68:13 76:3,5 220:16 231:15 233:2 253:8 266:15 cash 55:22 62:25 62:25 64:12 251:10 cast 20:12,14,16 101:21 110:12	214:21 250:5 260:12,12 264:16 267:11 291:8 catalyst 147:4 catalytic 147:3 categories 218:2,4 category 81:2 cathodically 250:7 cause 34:19 291:3 causes 295:6,6 causing 280:19 center 105:11 176:24 177:14 178:7 232:16,17 232:19 246:11 320:24 centers 302:14,15 central 100:13 178:6 282:18 cents 176:25 177:12,13 centuries 96:5 century 285:14 CEO 115:13 153:2,8 199:7 certain 24:14 59:14 61:5 62:24 63:24 64:12,18 65:3 66:7,10 67:9 78:16 86:4 100:10 233:6 certainly 25:14 32:19 36:3,15 37:12 40:5 42:20 52:23 55:18 56:17 59:14 71:19 72:24 73:10 76:23 79:10 80:7,21 103:18 115:8 125:5,7 139:20 140:24 159:22 185:17 194:19 210:23	212:3,10 213:19 217:7 220:2 228:21 232:4,23 247:15 248:11 252:17 253:19 268:20 269:19 CERTIFICATE 325:2 certification 325:19 CERTIFY 325:3 certifying 325:23 Chair 70:3 77:17 84:25 120:4 184:18 194:14 211:7 230:8 236:14 243:20 249:7 270:12,21 312:20 Chairman 14:2 77:20 93:19 118:19,20 130:2 135:3 205:14 211:2 262:4 265:4 269:6 306:10 309:20 316:4 chairs 204:21 Chairwoman 269:24 challenge 20:22 90:11 178:22 232:25 challenges 109:11 111:22 154:23 154:24 challenging 11:16 47:10 229:23 287:13 Chamber 93:23 130:16 132:25 144:15 199:8 208:14 210:11 244:19 255:14 Chamber's 147:22 Champion 146:15	change 46:13 83:14 100:24 112:2 153:4 157:10 164:14 164:15,24 165:2 165:17 177:20 180:10 183:17 195:22 196:5,12 223:9 227:10 288:2 289:15 300:8,24 309:23 changed 116:12 309:18 changer 144:24 changes 8:16,23 9:2 23:19 134:6 178:9 193:5 280:3 288:14 321:6,13 322:3 changing 21:8 25:11 154:15 164:24 177:22 219:17 characteristic 122:22 characteristics 126:24 characterizes 122:13 charge 234:9 250:16,17 253:15 291:12 291:13 302:7 charged 250:20 charges 234:20 287:17 charitable 303:10 304:15 Charter 139:8 154:25 165:17 239:9 273:12 318:19 cheap 232:7 cheaper 149:23 218:20 224:24 chemical 98:2 122:20 125:9	126:14 212:16 212:17 255:4 chemicals 123:3 Chicago 146:19 272:21 Chief 93:15 132:21 210:18 children 282:20 choose 164:20 chooses 139:9 chosen 188:21 CHP 151:6 churns 183:2 CH-IV 49:20 circle 77:22 circumstances 46:10 191:8 287:14 cite 12:23 cited 77:8 cities 15:19 48:3 272:20 275:3 citizen 102:15 234:10 citizens 8:14 11:19,21 12:17 16:14 58:18 108:13 197:10 205:7 207:3 208:25 249:14 277:11,14 280:6 city 1:2,6,19 3:3 4:7 5:2,6,12,14 6:13,18 7:14 8:14,24 10:14 10:25 11:7,9 12:3,4 14:19 15:9,18,20,20 16:2,22 18:13 18:16 20:11,18 20:22 28:21,23 35:14,21 41:22 42:11,23 45:5,7 45:9 55:3 62:4,5 62:18 63:12 76:21 83:5 91:9 92:6,17 94:4,16
---	---	--	--	--

97:6,10 98:23 98:25 99:10,12 99:20 100:21,25 101:12,23,24 102:13 103:8,13 103:17 104:21 106:3 107:15,18 107:21 108:4,11 108:13 109:10 109:13 113:10 126:6 132:20 134:25 152:8,17 152:24 153:15 153:17 161:12 162:14 164:9 175:4 176:2 179:20 180:12 181:13,13,14 188:14 189:23 201:21 202:2,21 203:6,13,15,21 204:11,20,25 205:3,19,21,25 207:4,10 208:4 209:23 212:7 222:22 232:16 232:17,19,24 235:14 238:8 240:15 246:3,10 246:11,23 249:14 250:11 254:22 264:10 264:16,18 272:7 273:12,23,23 277:10,14,19,23 280:20,22 283:3 283:7,22,25 284:5,9 286:2 288:7,13 289:6 289:15 291:11 292:24 293:3 295:13 304:17 317:7 318:7,17 320:17,18 321:7 321:9,19 322:6 322:18 323:2 City's 9:4 203:18	204:3 248:19 City-owned 290:2 civic 207:16 clarion 209:5 Clarke 1:10 2:2,7 4:11 10:9,20 11:2 50:14 53:20 54:2,10 54:14 58:10 69:7,13,19,25 77:10,14 80:14 81:9 82:8 84:23 90:6,9 91:15,18 91:24 92:9,13 92:17 106:8 123:11,15,22 128:22 129:8,12 129:18,25 130:9 132:3 135:3 148:6 157:24 160:15 162:25 163:6,10,14,18 165:5 167:3 171:6,15,19,24 172:9,13 173:3 173:16,20 174:8 181:24 184:16 184:22 190:22 191:2 194:12 198:4,9,12,17 198:21,25 199:20 200:17 210:2,13 227:24 228:16 229:13 229:18 230:6 236:12 241:21 241:24 242:4 243:12 244:16 245:2,12 248:2 248:21 249:2 277:2 class 95:20 131:17 classes 294:6 clauses 318:10 clear 35:20 48:13 48:23 49:18 118:10 161:2	183:13 285:16 288:18 322:10 322:14 323:10 323:14 clearly 44:20 48:22 70:21 122:2 167:19 168:5 208:4 209:6 297:22 308:19 316:9,17 Clerk 4:3 client 134:22 clients 164:22 clock 69:9 110:19 close 15:12 50:10 70:21 97:18 192:3 211:24 215:21 229:6 closed 17:7 18:4 195:6 closely 226:12 closer 11:3 170:9 276:9 closest 206:7 234:14 close-minded 311:6 closing 57:22 78:9 78:12 89:22 96:23 97:13 104:18 110:7,20 229:7 closure 104:14 209:11 CLS 285:15 CLS's 282:6 cluster 71:6 clusters 70:25 CNG 14:9 44:22 45:7,10 136:12 144:21,22 146:13,20,21,25 149:12,24 151:5 coal 139:18 Coalition 275:17 276:7 Coast 19:5 25:18	26:2,3,5 27:19 73:12 74:6 75:8 105:25 117:11 126:3 143:12 coastal 75:9 cogeneration 114:4 coin 200:15 coldest 19:8 30:20 119:5 collaboration 7:3 93:22 148:3 206:23 225:6 collaborative 7:2 collaboratively 155:7 collar 246:11 colleague 77:23 265:6 colleagues 7:11 108:14 111:11 206:14 312:22 colleague's 74:2 collecting 176:25 collection 159:17 177:7,10,12 collectively 200:8 college 16:12 131:14 207:13 207:19 225:13 242:10 colonial 122:7 color 136:15 combination 116:6,7 combine 252:7 combined 18:25 24:10 29:14 45:16,23 114:3 136:11 139:14 149:8 151:6,12 222:20 232:21 248:11 252:5 263:9 267:21 come 2:10 12:7 19:2 20:20 22:2 23:2 29:3 44:8	52:25 54:8 64:9 64:24 69:11,22 71:3 73:19,24 77:16 82:16 91:13 92:3 94:6 103:25 104:14 113:16 127:6 131:17 133:23 141:21 151:25 182:19 198:22 203:8 208:12,19 232:10 242:17 243:21 244:23 267:24 274:20 275:22 278:25 279:5 299:23 310:18 319:17 319:19,21 320:23 comes 16:4 104:20 176:20 193:15 248:22 253:17 267:13 300:9 316:13 321:3 comfort 315:20 comfortable 300:2 coming 4:18 10:7 42:9 74:5 90:23 98:23 120:21 121:22 124:4 142:11 146:21 147:17 160:22 166:12 211:13 226:2 227:2 230:23 242:9 248:6 306:11 309:8 310:5 commend 106:22 206:13 230:2 277:10 commended 200:3 comment 286:12 comments 12:25 211:3 229:16
--	--	--	--	---

274:6 commerce 93:23 199:8 208:14 244:20 264:10 264:17 313:24 commercial 24:7 133:21 153:12 205:24 231:10 232:8,13,15 233:13 239:18 239:21 249:19 287:22 293:7 commercialized 120:24 commercial 249:12 Commission 153:22 216:18 217:16 239:12 240:12,14 243:21 259:8 269:19,25 273:22 282:10 292:22,24 298:22 300:11 315:9 commissioned 10:15 59:18 commissioner 113:10 312:11 commitment 13:13 55:10 56:20 57:9,18 58:3 78:8 86:3 128:14 177:18 242:25 286:18 286:23 315:3 319:5 commitments 8:9 18:18 157:7 223:22 319:15 committed 57:20 298:10 314:2 committee 1:3,19 3:24 4:7 146:5 199:13 202:14 205:15 323:25	committing 254:13 commodities 28:12 commodity 21:11 137:24 common 79:21 200:16 284:25 commonly 29:19 Commonwealth 201:8,12 Commonwealth's 203:25 communities 283:12 296:14 community 9:14 48:3 83:10 89:25 94:20 100:6 138:2,13 138:15,17 139:10 140:7 147:25,25 203:5 205:9 207:13,17 207:19 225:12 277:25 282:2 284:11,17 303:19 community's 284:23 companies 15:19 25:15 37:19 38:10 45:9 71:16 73:19,21 98:2 121:18 122:20 127:25 132:13,13 143:18 144:2 146:24,24 151:14 155:13 155:15,17 165:14 168:24 203:20 204:10 204:12 206:11 234:20 244:23 246:5 254:6 265:25 266:16 314:19	company 18:8 51:2,7 52:21 58:22 93:16 105:18 108:24 115:15 120:8,25 134:3 139:3,4 146:17 158:17 159:15 163:24 169:22 175:24 176:14 177:8 178:5,14,16 179:18 183:16 193:22 197:19 204:5 213:3 214:5,15,23 216:15 225:5 227:2,16 230:22 237:7,16 238:24 242:8 247:12,16 251:22 252:5 254:2,5 257:4 257:25 258:13 258:24 260:22 264:14 266:5 268:22 269:16 271:9 289:13 298:20 306:18 compared 38:23 139:18 compares 152:20 comparison 213:9 compel 96:7 compensated 43:15 competencies 48:23,25 competing 143:3 competition 96:23 143:23,24 144:5 competitive 9:4 39:9 40:21 59:16,25 154:23 235:5 321:16 competitiveness 41:3 competitor	151:22 competitors 39:10 42:9 complex 93:18 104:13 265:18 compliance 141:22 component 15:24 206:10 components 255:16 289:4 compressed 18:22 24:18 computer 252:8 concentrated 313:13 Concentric 7:25 8:4 10:13 13:21 57:11 60:4 91:12 117:4 136:14 187:14 217:23 224:7 234:24 286:3 289:4 290:15,18 290:23 291:20 299:2,22 308:7 308:10 313:22 Concentric's 9:17 concept 67:8 83:15 185:2 251:17 294:13 concern 111:7 165:9 185:9 193:22 240:21 242:21 249:14 296:2 concerned 43:24 90:22 101:6 116:18 173:10 238:3 243:7 251:25 308:14 322:20 concerning 208:9 concerns 49:25 100:25 112:19 236:19 286:10 286:10 298:6	concluding 110:10 condition 8:24 321:13 conditions 116:23 318:22 conduct 40:14 64:20 280:23 conducted 11:18 40:4 61:18 confederation 209:15 confer 292:12 conference 9:25 confidence 150:4 confidential 7:18 60:4,8 configured 265:22 confirm 8:2 confirmed 8:4 152:17 286:2 confusing 120:19 confusion 120:14 congressional 94:18 Connecticut 302:18 connection 37:11 connections 115:21 connector 73:11 consensus 7:5 23:11 consequence 142:16 consequences 282:19 conservative 109:17 consider 18:6 41:7 88:8 203:14 204:7 232:21 264:10 267:25 285:24 considerable 131:8
---	--	---	--	--

considerably 22:12 130:21	consultant 7:25 10:14 45:13 90:18 132:8 155:12 278:25 303:23	continuing 66:23 171:23 208:17 289:21 316:7	205:7,8	286:19 287:11
consideration 63:11 93:13 113:12 130:8 131:22 292:22 310:20 311:5	consultants 7:8 133:23	contract 8:10 56:25 57:2 58:5 60:24 67:12,15 67:22,24 78:6,7 80:3 116:9 176:24 179:9,11 182:13,14 219:5 219:13,15 226:25 241:8 301:23 305:19 313:3 315:4 317:12,13,16,19 318:10,16,16 319:9,10 321:18	convenient 314:24	corporate 303:17 303:20
considerations 61:6 67:4 93:6 112:18	consultation 279:13	contracting 37:25 56:22 57:7	Convention 320:24	corporation 155:20 208:18 270:23
considered 42:23 79:3 97:11 310:15	consulting 80:6 133:17,25	contractors 231:10	conversation 2:11 2:15 6:11,16 90:20 91:12 106:11,24 107:11 108:16 109:24 110:8 111:17 112:24 160:21,24 161:6 162:9,17 163:21 166:13 171:23 173:6 242:23 244:9 246:18 300:19	corporations 266:2,24
considering 35:5 89:19 227:15 285:4 288:6	consume 33:23	contracts 19:25 26:5 35:25 36:25 78:23 167:18 218:25	conversations 50:18 107:5,9 109:5 185:24 242:13	corporatized 155:18 156:3
considers 298:14 298:14	consumer 98:8 294:12	contractual 57:18 61:3 64:16 289:14	conversion 23:16 23:24 149:15 232:2,24 233:8	correct 20:3 50:24 58:4 59:4 60:13 61:14 73:16 114:14,20 117:25 118:25 120:2 248:22 290:21 313:16 325:8
consistent 112:4 233:20	consumption 119:14 278:4	contracting 37:25 56:22 57:7	conversion 23:16 23:24 149:15 232:2,24 233:8	corrected 214:13
consistently 7:16	contained 325:5	contractors 231:10	conversions 23:22 24:6 232:23	correlation 246:21
consists 12:8	container 145:10 145:11 147:10	contracts 19:25 26:5 35:25 36:25 78:23 167:18 218:25	convert 122:24	corrosion 250:8
consolation 310:13	contains 28:2,5	contractual 57:18 61:3 64:16 289:14	converted 45:3 140:5	cost 16:8 17:24 18:2 20:15 21:22,24 22:3,4 35:24 36:16 39:17 40:10 52:18 53:5 76:9 137:6 140:19 142:3 151:9 159:5 213:20 214:7 216:8,22 220:19 233:2,4 247:4 253:14 287:19 288:20 288:23 289:2 291:17 292:21 299:10
Constellation 266:16	contemplated 258:23	contracts 19:25 26:5 35:25 36:25 78:23 167:18 218:25	converting 45:18 105:20 141:25 144:22	costly 287:4
constituents 8:8	content 95:15 149:20	contracting 37:25 56:22 57:7	convince 181:18	costs 23:17,23 33:10,16 36:25 44:19 137:8 140:19,21,21 150:9 159:22 213:15 214:9 215:3,7,11 218:17 233:19
Constitution 239:13 273:11	context 25:12 131:9 151:2	contributed 236:6	converted 45:3 140:5	
constrained 142:12	contingent 129:22 315:13	contributes 33:25	convince 181:18	
constraint 27:12 241:9,10	continuation 173:8 300:2	contributing 168:9 293:2	cookie-cutter 188:10	
constraints 63:18 131:12 217:10 217:13 255:19 316:12	continue 5:24 90:19 107:4,8 112:4 146:10 164:6 177:23 241:19 263:5 282:15 286:18 288:7 308:13	contribution 153:18 156:5	cooking 147:22	
construct 22:15	continued 97:5 103:13 106:10 112:14 122:9 173:5 210:9 247:8	contributions 13:2 102:2 233:11 304:16	cool 117:12	
construction 51:12 52:5 159:2 230:13,14 278:11,13 279:24 285:13	continues 6:19 26:16 246:15	control 56:7,10 56:13 103:13 197:9 325:22	cooperative 269:20	
constructive 101:12 103:3		controls 141:18 213:20	coordinate 38:7 73:20	
consultancy 49:21		convene 205:5,5,7	coordination 47:4 copy 131:21,21 core 12:11,14 28:15 48:15,22 141:5 158:16	

239:2 265:14	172:9,13 173:3	69:14,17,23	307:18 308:2,12	321:14
287:24 288:2,16	173:16,20 174:8	70:3,5 71:14	308:16,22 309:3	counsel 182:3
288:19 290:20	175:7 179:20	72:20,23 73:25	309:7,12,19,24	282:6
291:20 299:3	180:9,10 181:16	77:8,11,12,23	310:7,8,9,10	counterparty
cost-cutting	181:24 184:16	80:9,15,16,23	312:5,13,15,16	143:20 150:16
251:22	184:22 190:22	81:5,11 84:25	312:18,19 314:8	219:11
cost-savings 26:8	191:2 194:12	85:3,23 86:24	315:2,16,23,24	country 20:13
cost-sharing	198:4,9,12,17	88:15 89:21	315:25 316:2,3	84:7 96:19
287:25	198:21,25	90:7 91:14,17	318:3 319:13,24	97:17 116:10
Coulter 303:24	199:20 200:5,17	112:10 113:5,6	320:6,9,10	126:5 137:15
Council 1:2,10	202:13 203:2,7	113:23 114:12	323:4,7,18	144:19 166:19
2:2,7 3:4 4:11	203:13 205:3,21	114:15,22 115:2	Councilmembers	170:20 234:15
4:23 6:13,20	206:17 207:10	115:10 116:21	6:22 8:7,18 61:8	271:14
7:11 8:15,19,22	208:4 209:22,23	117:19 118:2,18	61:9 63:15	country's 212:2
9:10,15 10:9,14	209:24 210:2,13	119:6,19,22	131:22 199:12	counts 285:10
10:20,25 11:2,7	210:15 216:4	120:3 123:12,14	298:6 306:5	couple 3:21 4:13
11:9 14:19	217:14 227:24	123:20,25 126:5	321:22	6:23 12:12 13:8
42:11 50:14	228:16 229:13	128:21,24,25	Councilmen 3:19	58:20 106:17,23
53:20 54:2,10	229:18 230:6	130:3 167:5,6	Councilperson	107:2,12 110:22
54:14 58:10,14	236:12 240:15	169:11 170:11	311:16 312:10	110:23,23 113:3
60:23 69:5,7,13	241:18,21,24	170:18 171:4,7	Councilpersons	113:4 134:23
69:19,25 70:6	242:4 243:12	194:14,16 198:2	293:25	136:23 137:22
77:10,14 80:14	244:16 245:2,12	198:5 203:23	Councilwoman	142:23 158:10
81:9 82:8 84:23	248:2,21 249:2	206:14 236:14	1:10,16,16,17	158:14 160:17
90:6,9 91:15,18	263:8 270:19	236:16 237:12	4:14 6:4,6 10:10	183:5 193:15
91:24 92:9,13	273:24 277:10	240:20 241:23	77:18,19 78:10	196:7 200:20
92:16,17 94:16	286:15 289:6,15	242:2,6 243:13	78:17 79:7,13	230:11 243:22
95:24 97:6	290:21 291:11	249:7,9 252:20	79:24 81:13,21	243:24 244:11
98:23,25 99:10	298:14,14	254:4 255:20,22	82:4,10,12 84:2	245:10 294:7,15
99:20 100:21	299:25 300:12	255:23,25 256:4	84:20,24 112:10	306:12
101:2,12 103:9	301:12 303:13	256:6,12,14,16	120:5 121:13	course 104:15
103:17 104:21	308:18 320:17	256:17,18,19,21	123:9 183:24	118:12 121:18
106:3,8 113:10	320:23 321:9	258:19 260:20	184:19,20	131:21 134:11
123:11,15,22	322:18	261:11,25	186:13 187:7,10	162:16 186:25
124:2,4,5,12	Councilman 1:11	262:11 263:15	188:23 190:18	188:12 216:9
128:22 129:8,12	1:11,12,12,13	264:22,24 265:2	190:24 191:4	217:16 218:9
129:18,25 130:9	1:13,14,14,15	265:3 268:2	192:16 194:7,13	221:22 237:23
130:20,24	1:15,17 54:16	269:5,7 270:5,8	205:10 230:9,10	262:19 295:5
131:11,25 132:3	54:19,20 55:20	270:13 274:17	230:17,20	courses 83:8
136:17 148:6	55:24 56:5,19	275:9,19 276:2	232:11 233:16	Court 128:12
152:18,24	57:3,25 58:8,11	276:8,15,21	234:24 236:9	cover 93:5 293:13
157:24 160:15	58:12,13 60:2	281:16,19 290:6	269:10,11 270:4	covered 282:24
162:25 163:6,10	60:15 61:11,22	293:14,20,24	274:19,22,23	covering 23:22
163:14,18	62:2,23 63:16	296:8,12,20	320:11,13 323:5	26:12
164:10 165:5,16	64:6,23 65:22	297:5,11,16	Council's 1:19 4:7	co-chairs 126:9
166:3 167:3,9	67:12,17,25	305:2,16,23	7:24 8:13 99:2	co-hosting 243:16
171:6,15,19,24	68:10 69:4,8,11	306:2,7,9 307:4	217:18 286:3	crack 56:3

Craig 91:8,8 114:7 115:12 175:18,19 193:7 210:18 256:20 271:11 273:20 300:17 Craig's 176:11 create 5:21 34:12 70:25 71:5 87:13 88:9 95:11,25 105:19 109:8 140:23 159:3 163:23 165:18 195:13 203:20 207:24 265:10 292:20 304:11,11,13 318:9 created 127:2 165:15 277:24 creates 44:23 70:24 95:13 204:5 creating 5:23 23:15,25 84:5 128:5 284:15 creation 11:25 94:23 97:21 99:5 203:18,22 creative 87:16 117:5 248:9 credentials 207:21 credible 104:10 127:18 credit 176:11 203:19,25 204:7 239:14 credits 203:23 204:3 credit-worthy 143:20 crews 150:21 299:19 crisis 289:17 crisp 99:20 criteria 68:4	critical 15:16,24 38:11 97:17 188:16 189:13 209:2 212:4 criticism 245:14 criticisms 236:18 criticized 297:8 297:13 criticizing 196:15 cross 261:17 crossover 251:9 251:20 cross-section 9:14 212:21 CRP 53:25 234:10 287:11 288:18 crude 23:2 cubic 29:15 31:12 31:15 213:5 culture 98:12 cumulative 290:20 cupboard 268:25 curious 319:2 current 5:8 40:9 40:23 100:18 118:23 196:24 197:23 229:9 236:20 271:19 272:19 291:6 301:15,23 302:8 317:4 currently 22:4,12 23:13,18 25:3 26:17 27:14 29:12 35:5 38:23 113:15 142:12,24 153:16 159:14 186:14 236:3 259:2 280:5,10 299:4 302:18 307:17 curriculum 207:8 225:12 cursor 62:11	CURTIS 1:13 curve 29:17 31:2 customer 15:4 16:9 17:13 18:18 37:22 46:2 47:13,15 47:21 138:11 157:13,16,18,20 162:12 163:3,17 213:11 220:20 228:23,25 231:7 233:21 234:8 245:25 246:3,8 246:17 250:18 250:19 271:16 285:12 287:11 302:14 customers 12:2 15:5 17:5,10,11 17:14,17,20 18:12,15 19:7 19:13 20:19 24:7 28:4,4 33:15,18,23,24 34:9 36:10,10 40:24 43:12 45:18 46:5 47:14 48:5 53:25 54:9 117:8 119:4 137:25 138:8 139:14 140:6 141:6 162:23,23 163:5 181:14,21 213:7 217:20 218:16 222:21 222:24 235:11 247:9,14,18 253:5,13 259:15 260:8 261:20 263:6 271:11 282:8,11 285:8 285:18 286:11 287:3,14,18,22 288:3,4,9,11,16 289:17 290:5,21 291:4,18,25	292:6,9,12,15 292:19 293:3,5 293:9 294:20 295:3 296:9 300:4 302:7 cut 132:10 180:23 199:18 214:9 215:11 299:13 314:20 cutting 137:8 159:22,23 214:7 216:22 cycle 18:3 272:12 D D 1:16 danger 249:20 dangerous 66:5 104:5 DARRELL 1:10 data 58:24 159:16 159:17 200:20 200:21 date 60:5 117:16 192:6 199:9 200:10 304:22 dated 321:8 daunting 104:9 David 1:15 211:2 211:2 265:6 270:11 day 3:3,6 5:15,23 6:9 115:25 116:5,22 117:9 119:13 135:12 172:19,21,22 180:2 181:17 190:5 219:7 254:17,23 293:16 294:6 307:7 311:15 312:24 days 2:20 19:8 29:25 30:2,10 30:14,20 69:15 78:16 98:23 117:2,22 118:12	119:5,13,22 172:17 192:3 199:22 211:13 day-to-day 168:8 dead 165:3 deal 8:12,17 104:23 110:10 111:2,6 112:18 182:7,9,11 184:14,14 191:9 195:14 197:15 243:7 297:25 299:13 300:12 302:5 316:10 321:24 dealing 269:21 deals 107:10 dealt 260:14 316:25 death 247:16 debate 101:10 161:9 268:11 313:5 debating 268:9 DeBOISSIERE 296:22,23 297:10,14,20 305:12,21,25 306:21 307:6,23 308:8,19,24 309:5,9,17,21 310:6 312:4,12 313:17 314:17 315:6,18 317:17 319:11,16 320:4 320:14 323:6,16 debt 51:11 101:25 102:11 214:25 215:17,22,23 237:7 238:25 debts 104:4 decade 21:16 25:14 88:2 202:3 decades 21:25 83:2 95:13 201:24 262:22
--	---	---	---	---

December 111:13	207:25 260:7	190:2	241:3 243:2	242:18,20,21
decent 163:20	degrees 117:13	depend 13:7,9,11	275:6	248:17 252:17
decide 10:4	dekathermed	13:12,17 102:22	developable	266:3 272:4
267:17	270:19	depending 37:23	103:2,15	305:10 311:6
decided 6:15 51:6	dekatherms	76:5 148:21	developed 71:5	differential 22:24
63:20 125:3	115:25 116:5	170:13 314:11	97:23 268:17	23:8,12 53:4
decides 43:17	Delaware 49:24	depends 143:16	developers	150:9
deciding 29:4	105:13 206:6	169:17 195:4	142:17 143:4	differently 170:13
decision 42:19	deliberating	288:24 314:9	144:6 231:10	261:24
59:15 63:24	311:19	depressed 27:5	232:9,13	difficult 51:3
110:16,17,18	deliberations	Deputy 174:3	developing 52:3	86:12 103:16
112:23 143:2	95:23	deregulation	97:7 120:15	112:22 127:7,10
145:18 168:15	delicate 124:14	165:7	143:16 160:10	128:8 197:13
175:8 191:7,9	deliver 16:7,7	Derek 161:14	development 9:20	232:16
228:11,11,20	17:5 115:25	derive 12:10	22:19 26:25	diligence 59:22
232:6 320:19	delivered 25:19	descend 146:2	27:9 63:4,13	74:12 134:17
decisions 99:21	28:3	describe 99:17	76:2 93:25 95:2	200:2
110:23 150:8	deliveries 32:7	261:22	99:3 100:16	diligent 11:10
168:8 228:18	delivering 12:22	described 72:3	102:4,18,21	diligently 87:17
284:20	delivery 119:18	84:8 258:16	105:19 109:6	diplomatic
decision-making	170:23 189:22	describing 266:19	133:12 134:25	209:10
13:13 55:9	delta 234:19	description	139:18 170:4,5	dipping 217:25
161:22	delve 267:18	177:21	205:24 224:6	direct 113:14,24
decline 122:2	delving 225:20	descriptions	284:19 291:23	115:21 152:23
201:2 246:2,3,4	demand 29:21,23	176:23	296:3 303:9	246:20 325:22
321:10	30:6,15,19,21	design 83:7 84:13	319:6	directed 57:14
declined 200:24	31:2,10 40:25	160:4 266:17	developments	direction 6:11
declining 29:24	97:21 116:14	286:18 288:15	232:15 293:7	36:4 157:2
140:13	117:24 118:23	designed 83:18	dialogue 2:23	164:20 215:25
dedicated 93:24	126:25 145:21	154:9 228:24	154:5 309:25	235:7 286:12
268:22	147:15 212:4,8	desire 62:24 65:7	diameter 264:4	directions 292:20
deep 94:21 227:18	222:12	66:7	dictates 192:25	directive 285:17
deeper 40:14	demands 147:15	desk 174:4	Diego 110:5	directly 19:15,21
deeply 101:5	224:4	despite 31:24	diesel 23:2,7,18	22:6 33:25 48:4
107:17	democratic	298:11	25:4 96:14	89:2,7 236:3
defease 237:9	107:19 208:24	destroy 281:4	123:6 149:25	284:22 287:24
defined 168:5	demonstrate	detail 24:11 47:25	difference 55:2	288:16
207:6	83:20,22 196:20	131:23 297:25	96:9 234:19	Director 273:23
defining 156:4,19	DENNIS 1:14	details 8:6 13:9	different 40:22	294:2
definite 240:2	denominator	101:15 291:10	41:5 55:13,16	Directors 153:2
definitely 87:12	33:17	determine 42:15	102:18 116:10	196:14 240:8
150:10 151:17	density 313:13	196:11	123:3 138:18	disaffiliation
definition 14:23	department 8:18	determined 12:13	152:9 155:25	183:4
definitive 203:11	14:3 188:18	develop 66:13	168:11 170:15	disagreeing
274:12	231:5 246:19	103:15 120:8,25	175:23 183:14	193:24
degree 9:3 17:9	248:4	134:13 185:4,12	183:15,21	disapprove 8:20
50:19 136:15	departments	195:13 225:11	194:21 197:12	disasters 282:19

disconnected 246:24	146:15	237:7 248:16,17	drop 236:3	120:16,17
discount 22:24 27:18 89:14 234:11 289:22	District 132:23,24 207:2,5,12 210:8 265:11	251:17 253:21 284:17	dropped 116:15 236:5	eastern 97:2,16 105:11 116:3 125:6
discourse 35:13	dive 40:14	domestic 22:16 26:20 76:13	drops 116:14 213:13	easy 42:18 122:23 127:24 263:24
discovery 113:17	diverse 9:13	domestically 22:22 23:14	drop-off 223:2,3	eat 281:5
discuss 14:25 34:24 180:8 321:4	diversification 35:19	door 190:15 192:15	drove 138:22	economic 9:19 56:8,11 57:21 58:2 63:12 89:12 96:16 134:25 139:17 204:9 209:16 284:18 291:23 299:16 300:4 303:9,22 304:7 317:25
discussed 39:2 48:9 68:20 76:18 82:18 217:13 226:19 259:6	diversify 26:9 diversity 56:21 57:5,8,23 58:3 303:2 304:9	DOT 132:24 167:18	dry 121:3,6	economical 18:25 21:17
discussion 9:17 41:21 44:7 78:2 100:3 131:18 171:10 184:24 211:10 218:8 225:7 237:8 245:17 291:7 316:8 321:25 322:12,16,22,24	dives 131:18	double 222:2,3 267:11	DSIC 237:23 250:15 251:4 256:22 257:22 258:21 259:10 259:17,20,22 260:6,10,21 261:2,7 262:5 262:14 291:12 302:7	economics 149:7 149:16
discussions 64:5 78:4 107:25 148:10 208:8 229:11 257:24 316:19	divest 6:17	double-check 78:14	dual 303:17	economy 17:6,18 94:9,12 95:12 97:24 99:4 136:3 202:5 208:3 209:16 284:15
disposal 29:22	dividends 156:7 235:13	doubt 209:20 227:22 240:17 316:10	due 52:24 59:21 74:11 134:17 140:20,21 199:25 233:25 234:12 305:17	ED 1:14
disrupting 20:18	dividing 44:16	Dow 212:17	dunk 8:14	editorial 155:11
disruptive 20:17	document 164:6 289:21	downside 2:14	duration 29:17	educated 83:16
distant 25:17	documentation 59:13	downstream 204:9	duty 270:25	education 15:11 88:18,21 202:9 278:2 304:11
distillate 23:6	documents 7:13 58:24 60:7 78:5	downtime 178:3	E	educational 47:5 47:6 83:5 89:4,5 255:13
distinct 207:15	dog 125:7	dozen 272:8	earlier 4:17 110:8 117:4 135:4 142:4 154:5 172:14 204:22 205:10,16 226:19 233:17 252:20 272:3 297:9,10 313:11	Edwards 172:11 172:25 173:12
distribute 150:23	doing 7:3 34:8 37:16 44:19 46:17 48:2 60:25 61:11 62:19 68:21 85:14 87:3,9 88:13 117:5 152:14 159:24 161:17 165:20 179:17 201:22 214:8,21 222:19 223:24 224:9 226:9,11 229:19 233:12 244:21 250:3 257:8 262:24 269:3 275:7 299:6 313:14 319:8	do-over 311:23	earliest 51:20	effect 76:24 165:8
distributed 273:16	Dr 207:18	Dr 207:18	early 110:5 142:18 160:24 223:4,4 306:13	effectively 157:6
distribution 15:18 25:15 44:16 139:4,6 158:16 189:8 194:4 234:20 250:16 252:13 266:5 291:13	draft 304:2	drafting 322:22 322:24	earn 39:21 103:22 267:14	efficiencies 133:15 137:2 159:5 237:16
distributor 40:23	dollar 49:4 67:10 177:2,13 250:17 250:18	drive 38:2 52:12 119:15 212:3	earned 39:19	efficiency 16:19 17:22 34:4 46:7 47:7 53:23,24 158:5,12,15
Distributors	dollars 50:4,6,21 54:7 87:5,10	driven 96:9 140:11	easier 128:18 176:8	
		drivers 96:16	easily 97:20 142:9	
		drives 121:11	East 73:12 105:24	
		driving 122:8 224:16 232:5		

225:23 268:5 278:17 279:3 efficient 139:13 158:23 220:18 231:13,17,22 247:22,23,25 248:5 263:20 265:20 279:6 280:3,8 282:17 285:9 286:21 efficiently 33:24 73:23 141:3 156:12 268:12 effort 83:10 104:20 177:8,10 efforts 34:15 283:13 286:13 291:5 292:19 293:2 303:2 eight 104:23 188:13 201:25 238:11,11 eighth 137:14 either 8:10 12:14 69:3 71:2 83:12 86:10 88:11 117:10 216:22 249:3 262:23 305:18 315:17 elected 7:20 108:11 244:13 election 107:23 electric 13:25 46:2 140:15 152:10,12 162:22 242:8 283:16 electricity 46:3 138:5 140:12 155:19 166:25 electric-generat... 255:2 element 105:9 elements 97:17 102:9 eligible 188:20 189:2 227:3,4	eliminate 181:2,3 273:7 eliminated 159:12 elimination 277:17 embarks 104:22 embedded 259:6 emergency 66:3 272:9 emerging 31:17 emissions 139:21 141:17 150:10 emphasizes 290:18 employ 71:23 employable 208:2 employee 239:20 300:20 employees 46:15 89:25 108:18 174:14 180:24 181:9,11 186:22 188:19 189:21 189:21 193:8 214:2,3,6 239:18 268:15 272:22 299:19 300:17 301:2 304:8 306:16 307:8 employer 83:20 83:23 182:25 195:23 196:6 197:23 employers 203:22 employment 5:24 83:25 200:23 201:6 302:25 303:5 enable 231:12 235:25 enabling 139:12 encompasses 74:21 encourage 204:12 205:21 230:21 232:3 253:18	267:24 294:11 encourages 169:9 encouraging 136:4 endeavor 220:6 ends 190:11 229:15 energized 199:10 energizing 138:2 273:15 energy 1:21 4:10 5:5,12,23 7:25 9:19 10:13 13:21,22 16:19 17:21,22 21:10 34:4 46:21 47:7 48:12 53:22,24 57:11 60:4 66:13 70:16 71:13,17 72:5 73:15 74:18,20 74:21 75:7 76:23 92:24 93:5,16,20,21 93:25 94:23 95:3,25 96:10 96:12 97:7,16 97:25 98:3,3,4 100:2,8,13 102:17,21 105:2 105:11,21,22,24 106:2,21 113:9 113:25 115:23 120:7 121:2 122:11 124:7,17 124:20 125:5 132:9,11,13 133:2,4,22 138:3 139:5,13 144:18 148:13 148:25 149:3,20 151:8 155:13,15 165:16,18 166:5 166:7,9 185:3,4 185:12,19 195:12 202:24 203:15,20 204:8	204:15,21 205:15 207:7,23 208:3,14 209:14 209:15,17 211:16,22 212:5 212:8,13,15,19 212:21,23 217:2 217:3,20 220:16 222:8 224:2 225:22 230:12 235:5 241:4 242:12,15,16,19 244:2,14,20,24 255:15 265:16 265:19 266:17 271:7,22 273:6 274:3 278:17,20 279:2 280:7 281:2,3,3,4 283:17 284:16 286:4 294:13 299:17 304:20 EnergySense 277:25 energy-based 94:8 energy-centric 94:14 99:4,23 energy-efficiency 18:20 energy-efficient 278:12 energy-intensive 122:15 148:17 energy-related 105:23 enforcement 289:14 engage 7:4 9:13 80:4 208:7 engaged 5:10 34:22,24 45:13 157:5 283:12 engagement 59:9 79:19 engine 121:11 284:18	engineering 40:3 40:8 160:4 266:14 313:21 engines 220:15 England 314:19 enhance 102:4 139:17 247:11 enhanced 101:19 enhancements 216:23 Enovation 130:14 132:7 enrolled 83:3 ensure 109:8 185:10 189:22 282:13 285:15 287:12 290:20 ensures 108:8 ensuring 97:9 304:8 enter 49:13 entered 8:5 142:23 176:3 entering 18:21 40:22 83:12 187:19,19 295:4 enterprise 78:21 134:5 156:6,11 169:19 entertain 180:9 enthusiastically 94:13 entice 204:11 entire 3:3 30:3 66:9 234:18,19 246:23 entirely 84:4 entities 48:2 49:3 49:8,9 79:11,12 79:22 203:6 212:16 253:8 254:13 255:6 entitled 4:6 entity 43:17 55:4 74:9 108:7 113:20 245:6 253:17 266:20
--	--	---	--	--

267:8,13 292:14	evaluate 40:5	exchanged 64:17	expander 220:11	exploit 128:20
entry 24:12	104:17 205:22	excited 45:21	220:11	explore 1:20 4:8
environment 21:8	evening 174:5,7	50:12	expanding 5:19	185:2
21:25 22:4	184:21 199:2	exciting 145:25	186:5,9 204:7	explored 291:16
101:12 163:23	200:13 281:24	147:7,8 148:4	220:8	explosions 189:14
205:7 207:9	296:25	excluded 81:2,12	expansion 38:2	export 22:15 69:2
239:6 240:19	eventually 53:6	81:15,17	135:10 204:17	72:14 75:25
280:18	104:8 127:21	Excuse 129:19	292:11	76:12,15 98:6
environmentally	251:9,19	execute 13:18	expect 55:11	105:22 118:5,6
158:22	everybody 2:17	86:4 134:13	150:3 153:3	118:8,22 143:7
envisions 148:13	3:14 4:21 83:10	135:20	251:22	145:21 167:2
envy 105:24	109:20 138:19	execution 13:14	expectation 63:8	exportation
EOP 57:20 58:6,7	156:25 172:19	55:5,8,10	expectations	219:21
298:10,13	173:10 174:23	Executive 93:15	26:17	exporting 118:9
317:22	177:11 179:15	210:19 294:2	expected 27:13	118:10 219:17
EPA 141:16	249:19 256:2	executives 93:21	135:16	219:19
EPA's 141:22	257:9,12 262:2	Exelon 183:10	expedite 260:17	exports 49:15
equipment 23:18	275:12 298:17	196:21 212:19	expedited 231:8	65:10 68:12,17
23:19 167:12	301:14,24	exhaustive 64:20	expenditures	147:13
220:21 278:13	302:16 312:24	exhibits 133:20	164:12	expressed 68:16
equity 215:22,24	312:25 316:24	exhilarating	expense 213:22	101:3,7 102:19
238:25	323:11	199:14	expensive 27:16	111:18 193:22
escape 216:14	everybody's 2:21	exist 87:22 122:11	251:21	expressing 37:19
Eskom 155:20	evidence 243:5	191:23	experience 78:18	extant 126:25
especially 76:11	325:4	existence 98:20	79:8 81:15,19	extend 82:11
134:5 149:12	evidenced 311:9	existing 22:5	86:15 131:8	extended 251:2
164:23 188:16	evolving 170:23	35:25 36:5,24	135:23 136:6	251:18
espouse 283:6	170:24	38:22 39:5 51:7	189:12 194:2	extension 182:13
essential 97:9	exact 65:13	51:23 72:11	231:7,9	182:14 301:23
essentially 82:5	exactly 152:20	84:6 142:14	experienced	313:2
98:19	258:6 296:10	165:22 203:18	34:17 194:5	extensive 145:19
establish 1:20 4:9	305:20 314:21	204:12,18	231:4	240:8 242:12
203:15 303:10	314:22	218:24 221:14	experiencing	extent 16:6 17:4
303:11 304:14	examine 200:2	222:11 302:13	191:12 246:10	19:8 24:25
established 63:7	examined 36:3	302:15 313:19	246:12	33:21 89:8
76:19 318:6	example 16:5	exists 5:2 89:19	expert 72:9	299:25 321:15
establishing	46:5 75:6 77:9	96:2 166:8	308:20	extra 167:16
92:23 105:10	80:16 86:6,6	186:15 191:24	expertise 58:17	261:20 262:18
establishment	134:21 148:17	283:23 285:7	71:19	264:5
58:25	195:5 196:21	exodus 301:18	experts 242:20	extract 21:17
estimate 40:10	265:10	expand 51:12	286:3 297:24	extracted 13:5
estimated 36:13	examples 80:2	203:17 204:13	explain 70:15	extraction 128:15
39:14	265:24	221:2,3 225:15	88:19 115:5	extraordinarily
ethane 28:6	exceed 26:16	238:19 259:12	249:22	94:21
120:20	excellent 228:7	271:15	explaining 261:11	extraordinary
Europe 76:14	excess 31:2 114:5	expanded 235:6	explains 290:24	95:14
European 148:16	116:16 127:20	236:7	explicit 170:3	extreme 6:16

extremely 109:17 121:25 127:7 199:15 eye 97:12	failed 306:17,18 failures 171:3 fair 53:11 153:10 191:11 232:12 295:19 fairly 23:10 24:4 42:12 43:16 74:21 76:19 149:7 154:2 fairness 292:5 fair-minded 6:25 faith 99:22 fall 63:10 fallback 220:20 falling 140:22 familiar 56:25 168:18 families 272:24 282:13 288:10 288:21,21,25 family 17:15 95:18 282:21 famous 96:21 fan 33:5 fanatic 33:2,2 fanciful 318:13 far 33:2 45:11 116:17 138:22 152:6,15 156:8 156:14,18 167:11,23 188:21 196:3 214:2 225:22 238:2 298:16 303:21 308:13 316:23 318:16 319:12,12 Farang 130:17,17 130:22 133:6,7 158:13 168:17 fast 85:18 154:6 157:10 164:25 262:7 fatal 49:22 fault 110:11 favor 179:5 188:6 197:16	favorable 196:4 favorably 216:3 fear 103:19 104:18 feature 287:25 features 122:3 278:6 286:19,20 federal 126:22 196:10 294:17 fee 278:23 feeds 17:23 feedstocks 28:25 77:5 feel 106:14 111:11 113:13 315:17 feeling 315:21 feet 29:15 31:13 31:15 213:6 fell 216:5,6 fellow 7:20 felt 277:8 fences 147:2 fertilizer 254:24 few-week 186:25 fiduciary 270:25 field 151:21 252:3 252:14 fields 116:8 Fifteen 20:12 fifth 46:18 fight 125:7 figure 91:25 170:7 171:11 275:5 figuring 96:19 file 78:8 240:9,10 filed 259:8 282:25 315:8,10 fill 145:9 318:15 filled 145:12 147:11 filling 221:13 final 30:18 274:5 292:10 315:14 finally 20:7 30:16 40:19 136:25 208:6 289:20	finance 181:4 266:18 273:23 financial 15:23 57:12 67:6 86:10 140:10,23 168:10 174:18 212:22 217:7 224:9 225:4 255:19 271:3,9 271:20 272:6 financially 34:18 259:19 financing 279:16 financings 153:4 find 35:23 38:10 84:14 101:8 104:22 105:4 233:14 279:13 303:4 320:15 finding 207:21 finds 19:17 fine 163:19 253:12 270:3 finger 37:17 fingers 65:13 finish 189:19 280:11 finished 270:9 firm 49:19 84:12 116:7 117:8 133:17 182:22 214:15 248:8 313:21 firming 40:10 firms 79:16 84:16 133:25 134:12 134:23 first 2:9 4:15 10:11,24 34:5 35:16 43:3 52:9 66:2 83:13,19 95:12 96:24 98:17 100:3 110:22 145:7,11 160:21 172:19 172:22 174:11 175:17 179:10	186:18 191:10 200:21,22 211:8 221:5 222:8 227:20 233:2,4 250:2 251:5 257:3 258:21 259:3 263:24 264:6 272:4 277:11 286:9 298:25 308:23 313:18 fits 151:16 five 34:25 61:25 62:5,15 89:15 96:15 140:14 193:19 203:13 254:6 256:7 299:21 fix 249:21 fixed 44:18 287:18 300:6 fixed-cost 33:12 flagships 141:13 141:18 flashback 199:21 flat 158:7 213:22 213:23 flavor 144:9 flaws 11:12 49:22 fleet 144:22 224:11 fleets 45:5,10,10 146:14 147:5 225:2 fleshed 185:20 241:7 flexible 165:24 241:15 318:4,11 flight 90:15 flood 21:19 floor 308:18 Florida 90:23 132:24 133:5 137:11,13 144:13 flow 292:18 flows 37:5
---	---	--	--	--

focus 14:10 31:7 160:3 211:14,16 290:13,22 292:3 304:15	foreseeable 27:17 forgive 238:9 form 36:11 60:17 100:14 134:2	found 27:23 39:19 166:15 314:18 314:21	front 157:3 167:19 177:18 223:25 234:14 234:15 257:20 309:2	319:15
focused 48:14 64:15 98:25 133:12 145:23 157:22 256:22 285:22 291:8 292:5	forma 300:22 formal 176:16 formally 3:16 format 173:6 205:11	foundation 160:11 234:14 234:16 303:11	fruitful 106:24 fruition 94:7 104:20	furnace 121:9 furnaces 231:17
focuses 14:7 focusing 14:7 134:8 156:20	formed 144:14 former 93:17 303:24	foundational 94:22 98:18	fuel 23:6,21 24:8 24:13 34:5 96:14 114:7 122:16 123:6 135:9 141:19,25 145:9 149:16,24 149:25 220:13 280:16,21,25	further 1:20 4:9 13:4 36:4 100:24 160:6 171:10 187:20 204:8 208:8 216:22 262:21 269:9 291:14 304:24 309:20
folks 5:13 76:6 81:10 90:12 173:24 200:9 212:21 227:12 227:15 229:23 231:12 232:3 268:21 299:2	forth 17:16 60:13 71:11 131:12 136:21 140:22 150:24 153:5 154:7,17 212:23 231:18 238:22 255:5 264:19 273:13 280:20 308:15,16 310:17	four 38:16 46:4 115:15 116:11 132:20 135:22 156:24 163:19 222:6	fueled 45:25 145:12	future 6:11 11:21 27:17 74:14 94:6 99:21,23 100:14,14 102:4 102:17,22 187:15 211:19 215:16 219:24 225:17 226:16 229:10 247:15 262:21 268:24 273:16 280:12 281:7,7,10 285:4,16 286:6 286:8,12 288:6 290:22 291:24 292:17 301:19
follow 2:25 41:19 185:8 188:24	forms 24:14	fourth 45:15 137:12	fuels 232:4 278:4 281:12,12,13	
followup 163:22 190:25	forth 17:16 60:13 71:11 131:12 136:21 140:22 150:24 153:5 154:7,17 212:23 231:18 238:22 255:5 264:19 273:13 280:20 308:15,16 310:17	frack 221:16 fracking 25:5 32:6 65:8	full 313:13 fullest 117:23 243:3	
follow-up 187:11 256:20	forward 7:6 32:20 71:18 101:8 106:4 115:20 138:21 168:16 169:16 170:6 171:22 175:24 176:17 177:9 185:10,13 187:22 193:3 209:21 210:9 241:14 295:24 296:6 305:15 314:9	framed 192:18 framework 273:9 franchise 155:5 frankly 110:11 189:10 217:24 224:14 268:23	fully 1:20 4:8 201:18 228:21 228:23 279:21 291:16 325:5	
food 281:5 footing 39:9 footprints 243:5 forbid 184:5 force 126:10 148:22 150:20 193:12 203:3 206:16	fortunately 215:5 forum 305:14	free 100:16 freeing 159:24 freeze 118:4 302:5	full-fledged 292:25	G
forced 191:6 192:15 292:14	forward 7:6 32:20 71:18 101:8 106:4 115:20 138:21 168:16 169:16 170:6 171:22 175:24 176:17 177:9 185:10,13 187:22 193:3 209:21 210:9 241:14 295:24 296:6 305:15 314:9	freight 24:25 221:20	full-time 83:25 fun 14:11 function 279:21 functions 181:2 fund 64:13 65:4,5 66:9,11 104:3 248:19 272:7,9	gain 8:13 105:8 188:4,5 235:10 283:13
forces 252:4 forecast 23:7 forecasts 21:24 26:17	forward-thinking 162:4	frequent 151:2 frequently 34:6 94:25	fundamental 107:13	gaining 223:7 gallons 135:12 221:9,12
foreclosures 302:23	fossil 278:4 280:16,21,25 281:12	fresh 221:17 freshman 242:5 311:18	fundamentals 223:8,10 funded 285:12 287:21	game 144:24 245:13,21
forego 243:7 foregoing 325:7 325:19	fostering 93:24 125:4	Friday 283:2 323:21	funder 160:8 funding 65:17 104:4 289:8	gang 187:6 gas 4:25 5:9 13:24 13:25 14:9 18:8 18:10,21,22 19:4,13,19 21:2 21:8,10,18,20 21:23,25 22:3,6 22:7,10,11,13 22:16,22 23:6 23:13,20 24:9
foreman 187:5 189:8 194:6		friend 70:2 90:25 114:8,9 friendly 158:23 friends 206:21	funds 43:22 66:8 237:19,20	

24:14,18 25:11 25:13,15,23,25 26:21 27:3,11 27:15,22,23,25 28:2,5,8,13,17 29:7,18 31:17 32:8 33:11,23 35:19,24 36:11 36:17 38:6 40:23 44:15 45:25 46:25 47:12,15 48:18 48:21 50:13 51:21,23 52:10 52:18 53:4 65:9 65:9 68:11,12 68:25 71:8 73:18,23 74:3 75:11 77:3,4 88:22 90:4 93:8 94:4 95:6 96:3,6 96:11 97:15,20 99:15 102:23 103:12 104:25 113:10 114:5,6 114:10,25 115:13,17 117:10 118:25 119:8,17,17 120:8,10,17,20 121:3,4,5,5,6 125:17 126:14 126:21 130:17 130:25 132:13 133:7 134:6,19 136:2,3 138:7 138:23,25 139:4 139:6,8,11,21 139:22,25 140:7 140:9 142:10 145:2 147:19,21 148:9 149:16,18 150:4,19 151:4 151:9,12 155:5 155:7 158:16 166:25 174:13 179:25 183:23	184:9 188:11,14 189:14,22 201:7 204:19,24 209:18 210:19 212:6 213:6,10 215:15 216:24 217:6,16 218:7 218:9,14,17,21 219:23 220:14 220:17 223:11 223:13 224:4,6 224:22,25 228:14 230:15 231:13 232:6,6 233:19 234:4 239:11 240:13 248:10,25 249:22 252:9,11 252:15,24 253:9 253:12,14 254:14,22 266:4 266:7,12 267:23 269:24,25 271:17 272:15 273:22 277:15 278:3,12 279:6 279:18 282:10 283:4,9,10 292:21,23 302:17,20 312:10 314:18 319:7 gases 185:6 gasoline 24:20 28:7 96:13 123:5 gas-to-liquids 254:25 gas-to-oil 231:25 GCR 236:7 general 14:9 35:13 62:6 65:24 75:9,12 86:7,22 89:9 106:21 153:2,9 248:19 272:7,9 314:5	generally 105:16 107:21 155:8 196:16 245:20 Generals 207:18 generate 46:3 50:20 51:8 236:2 248:17 generated 103:21 237:19 generating 19:12 22:14 139:19 237:17 248:16 generation 45:24 generations 281:10 generic 250:24 generosity 297:22 gentleman 323:12 gentlemen 10:21 92:16 174:6 184:21 194:10 198:10 gently 129:11 209:9 Georgia 147:18 getting 48:20 63:2 110:14 137:9 140:8 167:12 170:9 192:2 193:18 232:12 252:24,24 259:9 293:12 313:25 315:13 319:7 give 2:13 10:7 35:2 56:9,9,12 66:19 72:6 75:6 103:21 117:2 144:9 175:10 180:3 182:12 192:3 196:10 211:18 213:21 219:25 236:4 244:9 254:18 265:23 274:11 301:24 310:19 315:19 giveback 226:25	given 5:5,6 71:23 78:3,11,17 109:10 131:12 151:9 154:13 172:15 191:10 192:17 258:25 321:23 gives 196:9 giving 279:23 glad 200:18 gleaned 283:18 global 242:16 globe 22:21 gloves 174:4 go 12:23 14:15 20:10 25:9 29:9 33:18 38:25 43:20 47:24 50:2 56:5 58:20 79:5 85:24 87:4 104:24 105:4 120:21 124:22 124:22 126:2 127:7 131:13,19 133:20 137:19 139:8 149:6 164:20 165:13 170:5 182:24 186:23,24 187:2 188:13 190:16 191:2 193:9 199:25 216:11 222:5 229:11 235:7 238:16 240:9 241:14 248:18,19,20 262:9 263:17 276:3 281:23 285:5 290:14,16 290:23 293:17 295:23 296:6,24 297:16 300:12 313:22 314:14 314:23 321:18 321:19 goal 40:2 66:17 103:6	goals 34:2 60:19 156:8 278:7 God 179:20 184:5 goes 33:17 49:14 188:2 189:16 226:6 228:14 268:15 298:16 298:23 314:9,11 315:22,22 going 2:4 6:24 14:13 20:24,25 25:6 33:6 34:23 35:7,15 38:17 43:2,6,10,18 44:8 49:23 50:15,16 51:6,7 53:8 58:20 59:5 60:8 61:12 66:20 70:7 95:24 110:21 112:3 118:19 120:23 123:17 124:21,22 125:14,23,24,25 126:2,16 129:5 130:2 134:7 141:14 146:12 147:13 149:22 151:5 157:2 160:18 165:12 165:12,13 168:2 172:2,23 173:17 173:21,24,25 175:19 177:20 178:15 179:19 180:6,15,17,18 180:19 181:2,3 181:4,8 182:19 183:11 185:10 185:13 187:21 188:2,12,13 190:4,13 193:3 194:3 196:12 197:6 210:5 211:6,8,16 213:2 217:22 219:17,23 220:3
---	--	--	---	---

222:12 223:21 223:25 229:5 230:13,22,23,24 235:13,16 243:6 243:14,18 245:13,17 252:3 254:12 258:6,11 259:4 261:17,19 263:25 265:13 266:22,23 267:6 267:16,18 274:18 278:21 279:4 280:10 298:24 307:11 314:14 318:9,14 319:9 gold 96:25 good 2:2,3,4,6 6:8 8:12 10:20,22 21:6 31:8 39:9 41:11 44:23 54:22 70:7 73:14 77:21 85:6 88:2,11,13 92:15 103:20,24 107:10 111:2 114:8 133:4 140:4 146:11 161:15 174:5,7 175:19 181:19 184:21 192:8,14 194:23,25 195:7 198:25 203:7 216:8 224:15 227:13 229:19 235:17 237:14 265:10 268:23 274:13 278:5 281:24 303:7 313:23 318:12 Goode 1:11 3:20 54:16,19,20 55:20,24 56:5 56:19 57:3,25 58:8 77:24 80:9 80:15,16,23 203:23	good-paying 109:13,22 gotten 277:7 governance 112:2 136:19 152:6,15 152:21,23 154:4 164:14,16 168:4 169:18 227:19 227:23 228:24 229:2,10 233:7 236:24 239:4,5 240:4 255:18 273:9,14 government 72:18,24 79:11 85:20 87:2 107:23,25 108:6 108:7 111:23 112:7 126:22 132:20 144:10 165:22 175:4 201:19 202:17 320:18 governments 164:4 Governor 128:13 Governor's 94:17 GPEAT 93:24 grab 201:19 202:19 206:17 grandfather 301:14 grandfathering 308:5 grandparents 276:19 grand-kids 276:20 280:15 281:9 grant 279:15 grants 278:11 279:9,23 graphic 23:4,4 26:10 29:16,23 30:23 grave 249:20 gray 132:15	great 13:14,15 38:13,19 44:4 45:10 58:19 122:3 125:8 200:9 201:2 224:19 229:25 230:2 231:11 255:10,11 260:7 269:15 300:18 303:5 311:15 317:11 greater 24:9 65:8 93:19 94:2 199:7 201:21 208:13 209:4 219:25 224:3 297:25 greatest 63:4 98:8 264:7 greatly 98:22 123:7 green 26:11 34:2 greenfield 142:8 greenhouse 139:21 Greenlee 1:11 3:20 255:22 256:4,12,16 264:24 269:7 270:5,13 274:17 275:9,19 276:2 276:8,15,21 281:16,19 290:6 293:14,20,24 296:8,12,20 297:5,11,16 305:2,16,23 306:2 310:7 312:15 315:24 320:9 323:4,7 323:18 green-shaded 30:9 grew 32:24 grid 115:22 ground 200:16 260:15 293:13	314:7 groundwork 21:2 group 48:5 93:20 133:22 146:7 151:3 268:20 270:7 groups 304:19 grow 5:25 45:17 82:14 127:3 135:25 136:2 140:25 151:8 201:17 204:12 271:12 growing 42:21 139:11,22 149:15 158:3 208:2 209:16 growth 26:7,22 134:13,14 151:13 181:10 195:12 200:7,10 231:19 GTI 133:7 160:8 guarantee 40:25 290:17 293:5,8 guaranteed 122:10 guard 288:7 307:10 guess 69:6 72:7 122:6 163:21 170:13 172:5 314:8 Gulf 19:5 25:18 25:25 26:3,5 27:19 37:2 52:10 75:8 117:11 126:3 143:12 219:10 219:18 gut 278:14 guy 56:3 179:2 193:14 207:18 guys 173:17 229:25	hair 132:15 half 3:6 31:13 38:17 67:20 101:20 172:20 215:2 221:11 242:6 244:22 259:25 270:22 271:10 299:14 313:8,14 314:3 314:20 Hall 1:6 hamper 217:11 240:16 hand 35:7 103:24 195:2 260:14 handle 105:21 handled 100:5 hands 218:14 handsomely 212:8 handwritten 277:5 hanging 227:15 293:11 323:8 happen 54:3 89:24 98:16 104:21 112:8 126:17 147:7 161:8 165:9 179:19 219:18 255:16 322:3 happened 69:8 213:16 248:4 happening 33:20 37:12,13 141:7 147:16 205:24 happens 53:3 196:23 206:19 260:9 301:19 happy 2:9 6:9 128:2 217:24 218:15 223:19 229:16 237:4 hard 7:4 33:4 47:11 56:18 83:22 131:21 179:23 204:22
--	---	--	--	---

H

226:14 276:12 hardship 286:25 318:2 hardships 300:5 hard-working 268:15 harmless 301:20 308:6 Harrisburg 177:6 haste 311:16 hat 43:3 hate 107:19 123:23 HBU 56:3 head 69:6 78:15 303:24 headquarters 303:17,18 headroom 263:4 263:7,11 headway 156:23 health 15:23 271:9 282:18 295:7 healthcare 140:21 180:4 202:9 215:3,7,9 301:16 308:5 healthy 16:24 99:24 hear 3:25 82:5 113:11 114:23 230:21 276:12 276:13,16 298:6 305:10 heard 61:7 117:4 181:9 187:17 190:19 194:21 204:15,20 236:19 237:13 249:11 257:22 258:2,21 259:3 274:5 282:23 306:14 310:4 313:11 314:4 317:11,15 hearing 3:17,23	3:25 9:17 71:18 106:5 161:5 172:16 178:21 191:4 199:9 200:6,18 211:15 274:11 297:23 311:12 319:20 323:19 hearings 1:20 4:8 285:21 heat 18:25 24:10 45:16,23 46:4 114:3 122:17 136:11 139:15 149:8 151:6,12 222:20 232:21 248:11 263:9 267:21 287:15 288:25 295:4 heater 247:19,20 heating 30:15 213:11 222:23 300:3 heavily 313:13 heavy-duty 24:24 32:6 heck 166:3 held 301:20 hello 173:25,25 173:25 help 29:19 73:19 73:21 83:6,8 88:21 114:7 129:2 160:5 175:15 233:3,13 233:14 252:23 253:18,21 277:22 278:2,21 279:16 287:2 305:14 309:23 helped 128:10 helpful 9:23 115:7 297:2 helping 28:22 33:23 45:17 225:11 279:17 helps 18:2 33:24	89:9 Henon 1:12 70:4 70:5 71:14 72:20,23 73:25 77:8,12 91:14 123:12,14,20,25 126:5 128:21 206:14 Hess 239:24 he'll 91:10 211:4 Hi 57:10 hiding 193:24 high 18:10 33:12 44:25 46:7 131:15 264:2 278:16 302:4 higher 15:11 22:18 47:14 51:17 53:17 76:9 88:18,20 96:16 202:9 233:24 277:15 290:20 291:20 292:8 highest 10:3,16 14:23 54:23 66:14 216:12,15 233:18 250:10 263:12 271:13 294:25 295:2 301:2,3 highest-use 29:25 highlighted 211:12 highlights 299:12 highly 29:6 71:25 97:22 209:10 highways 74:24 206:9 high-pressure 254:21 high-value 138:3 Hill 264:19 hindered 31:20 hire 84:18 193:7,9 313:20 hired 303:22	hires 153:2 hiring 193:10 historic 22:23 100:17 historically 138:25 history 98:11 122:5,6 175:11 196:19 214:23 hit 192:5 239:7 252:3 314:12 hold 1:19 4:8 84:14 117:21 130:4 158:6 181:17 holder 139:25 Holding 296:24 Holmes 174:7,11 174:13 178:12 186:18 187:9 189:24 190:8 191:15 192:24 251:25 Holt 212:18 home 141:10 239:9 278:13 279:5 280:7 282:21 homelessness 295:6 homes 47:21 234:5 280:3 287:15 288:25 302:24 homework 82:19 honest 78:25 191:19 Honeywell 98:4 honor 183:11 199:5 207:15 honored 183:12 Hook 120:22 hoops 167:16 273:20 hope 9:12 34:8 84:10 88:9 105:8 106:2	128:12 131:5 181:16 267:23 304:23 hopefully 73:6 117:17 128:16 313:17 hoping 143:22 Horizon 266:8 host 52:25 140:6 hot 125:12 Hotel 46:4 hour 91:3 178:4 179:24 hours 119:12 hour's 212:3 house 9:11 85:4 132:11 251:10 household 287:18 houses 230:24 231:21 housing 231:15 231:16 246:13 282:20 287:7 289:10 Houston 75:7,9 75:20 76:9 77:9 97:2 104:24 125:8 HR 181:3 hub 1:21 4:10 5:21 46:21 48:12 70:16 71:13 72:5 73:15 74:19,20 75:8 92:24 93:5 94:23 95:25 97:16 100:3 102:6 105:2 121:17 124:12 124:17,20 148:14,25 185:3 185:4,19 203:15 209:14,15,17 211:16,22 212:5 217:3,3,21 222:8 224:2 230:12 241:4
---	---	---	--	--

242:12,19 271:8 271:22 273:6 274:3 294:13 299:17 hubs 73:9 huge 143:7 223:2 267:12 human 98:12 hundred 20:12 28:19 163:19 202:20 hung 310:3 hurdles 41:12 hydrogen 122:25 123:2	288:15 impacting 251:18 impede 99:3 impediments 273:8 impeding 85:15 imperative 272:15 273:3 implement 86:12 195:24 207:2 259:10 280:2 304:12 implementation 13:9 55:16 133:13 169:6 196:3 implications 20:15 implore 99:19 implying 27:25 import 105:22 239:24 importance 95:8 304:17 important 2:11 2:22 4:19 5:16 8:7 27:20 28:10 28:17 29:8 32:12 39:25 40:13 52:16 58:21 74:19 82:15 95:9,10 95:22 100:2 102:25 105:10 109:18 112:25 113:18 127:18 158:3 173:9 177:10 189:19 190:11 196:7 206:4 217:8,21 236:21 241:17 271:8 300:16 303:3 309:25 310:2 importantly 121:2 209:2 217:5	impose 209:9 impressed 199:15 impression 86:23 87:13,14,25 88:10 improve 11:20 17:18 35:3 178:2 improved 88:7 177:14 improvement 250:16 291:13 improvements 156:15 159:20 177:16 improving 158:5 241:3 incent 203:19 incenting 23:17 incentive 38:9 86:9,10,11 204:10 228:17 228:19 incentives 46:12 46:15 86:6 169:4 232:2 278:8 293:6 incentivizing 263:10 288:23 include 93:6 212:16 322:7 included 81:3,14 322:8,22 includes 6:13 14:8 65:17 294:10 296:4 including 60:7 64:7 97:25 98:12 283:14 304:18 income 17:15 135:16 204:4 226:6 287:7,19 294:21 incomes 300:6 inconsequential 42:14	incorporated 262:16 increase 31:4 33:13,22 44:13 128:16 137:6 139:16 246:12 246:14,16 258:8 258:16 260:9 291:12,14,22 302:16,25 303:8 increased 76:23 201:7 216:6,7 216:24 increasing 33:11 45:19 128:14 incredible 96:9 increment 30:18 incremental 18:11 30:15 51:24 104:25 119:14 independent 7:24 11:11 152:7 286:3 indicate 65:6 68:2 indicated 3:12 64:24 106:12 111:18 189:5 227:5 308:16 indicator 200:22 201:5 indirect 19:16 indirectly 19:15 288:17 indiscriminately 238:4 individual 33:18 individually 199:12 200:8 209:22 individuals 90:22 276:18 278:23 industrial 24:7,16 25:2 29:2 39:4 73:5 77:2,5 98:9 119:11 140:6 147:14,15 206:3	265:9,18 271:16 287:23 industrials 38:6 industries 13:25 75:4 136:5 industry 13:22 71:17 78:22 80:2 90:4 93:21 124:9 126:9,14 127:3 131:8 132:9 145:22 146:2,8,15,16 151:3 164:24 182:21,23 183:3 183:9,23 184:5 184:7 197:2 201:7,25 204:15 207:7,22 212:9 217:4 222:16 242:15 246:5 304:20 314:5 inefficient 231:23 inexpensive 150:6 influence 130:5 influenced 98:22 information 59:10,15,22,23 60:22 80:10 113:11 114:17 130:23 131:6 137:4 159:10 informed 148:2,2 infrastructure 5:7 27:2 71:9,22 74:23 80:17 93:25 95:3 97:23 98:7 102:5,6 125:9 147:4 158:18 159:7 186:6 206:8 237:25 241:3 246:22 247:2,5 259:7 304:13 313:7 infrastructures 71:15 infusions 102:12
--	---	---	---	---

ingredients 265:15	insulation 231:18	internal 168:4	319:14	295:23 307:12
inherent 15:9	intact 177:4	internally 237:19	investments 40:6	308:9
100:17	integral 15:25	240:6	186:5 233:15	issues 9:9,15 14:8
initial 40:4	112:16	international	253:24	57:23 92:20
169:13	integrated 12:7	22:13,17 106:2	investors 186:3	102:13 107:13
initially 39:13	33:9 37:4	134:18 143:7,25	209:6 311:25	112:21 119:9
initiate 59:16	intelligent 42:2	Internet 277:7	investor-owned	211:11 237:3
initiative 4:19	intend 43:5 87:13	internships 83:18	151:11 250:23	252:22 277:16
initiatives 35:4	145:18 201:18	interpretation	250:25 251:16	286:14 290:4
151:13 156:21	243:6 298:16	35:2 317:7	252:19 253:25	298:3,9
157:7,23 158:3	317:22	interrelated 17:3	258:13 261:23	item 204:5 205:14
303:9 304:15	intent 140:25	interrupt 297:6	264:13 266:21	205:17,20
innovation 47:18	intention 312:2	interruptible	267:7 272:5,23	206:18,20 220:7
innovative 289:8	intentions 99:9,11	219:2	275:3	224:5 273:17
input 2:22 10:7	interacted 48:6	interruption	invests 235:16	items 217:22
152:24 157:3	interchangeable	184:8 313:24	invite 59:6	240:16 304:6
303:16	73:11	interstate 115:22	invited 6:22	iterations 168:14
Inquirer's 258:3	interconnections	116:17 219:3,12	274:11	iterative 170:24
inroads 24:19	100:12	219:12 222:13	inviting 210:16	I-95 91:4
inside 164:25	interest 3:13 5:14	222:15 223:14	involve 138:6	
insists 8:15	22:14 37:20	254:16	144:4	J
install 231:12	38:8 47:22	introduce 317:20	involved 6:20	J 1:15
278:12	49:15 56:14	introduced 13:20	36:12 40:20	Jacksonville
installations	58:19 75:13	309:6,10,14	58:25 94:15	90:13 92:2,5,6
266:15	76:25 97:6	introduction	138:4 166:21	110:4 123:18
installed 260:13	152:2 158:11	132:6	170:12 222:19	129:22 132:19
installing 159:6	185:9 215:19	inventory 30:17	225:10 257:23	132:25 133:5
instance 51:11	239:2 255:9	250:5	322:23	135:23,25
56:20 214:14,17	261:16 284:7,13	invest 16:11,18,19	involves 7:3 18:16	136:20 137:11
231:20 266:4	284:14 312:8	17:21 65:3	involving 48:3	137:11 139:3,7
309:11	interested 9:16	262:9 266:25	iron 20:13,14,16	140:3 141:8,10
instances 202:8	10:2 32:18	invested 226:13	41:10 101:21	141:12,24 142:5
218:25 231:19	64:11 83:24	investing 32:16	214:22 250:5	143:4,14 144:24
239:15	89:6,10,17	39:11 47:7	260:12,12	148:10,12,19
Institute 130:18	136:18 138:23	226:4 319:6	264:16 267:11	150:15 152:8,12
131:2 133:8	141:25 217:2	investment 38:20	291:8	153:15 162:13
201:15	240:22 242:10	38:24 39:7	irrelevant 165:3	170:16
institutional	242:11,11 253:6	40:11 42:7,13	isolated 147:15	James 1:13 182:2
271:17 273:8	258:2	54:5 55:15 63:3	issue 2:22 102:25	JANNIE 1:10
313:20	interesting	63:13 65:8	113:9 128:8	JAX 130:15
institutions 15:11	104:17 130:23	100:6 128:4	161:19 173:9	144:14,15
47:5,6 83:6	137:4 166:23	143:10,11,21	206:15 210:9	JEA 135:24
88:19,21 89:4,5	interests 97:10	150:8 186:4	213:13 239:22	136:19 137:9,9
303:6	176:5 197:24	195:11,11	241:5 245:25	137:14,19
insulated 44:2	277:11 285:18	235:24 241:2	252:25 257:9	138:22 139:11
insulating 44:3	interest-based	258:14 260:23	261:4 291:17	142:17,21
	176:4	261:9 291:2	294:22 295:11	143:22,24 144:4

152:6,7,13 153:13 155:6 156:18 157:12 157:21 JEA's 136:6 139:7 152:25 154:25 169:19 Jersey 178:6 Jim 174:15,19 job 17:19 83:21 84:17 87:9 88:2 88:13 98:13 99:5 109:9 154:11 176:22 177:21 181:10 194:5 200:15 203:18,22 221:19 224:15 229:19 269:2,15 296:6 300:18 303:4 304:11 jobs 82:15 83:14 95:14,14,15,16 95:17 109:13,13 109:15,22 124:8 159:23 177:24 182:12,18 185:10,18,22 186:11 187:24 187:25 188:2,4 188:5 195:7,14 195:16 197:6 200:7 201:9,11 201:16,17,20 202:2,5,20 203:21 204:5 209:17 212:10 217:5 227:8 277:15 303:7 312:7 John 132:22 Johnson 1:12 3:20 130:3 Joining 210:25 joint 41:8 170:4 187:20 239:14 Jones 1:13 112:10	113:5,6,23 114:12,15,22 115:2,10 117:19 118:2,18 119:6 119:19,22 120:3 265:2,3 268:2 269:5 306:7 310:9,10 312:5 312:13 JP 60:11 JR 1:11,13 jump 167:15 273:21 June 183:8 junk 238:7 J.D 157:19 K K 1:11 keep 16:25 103:12 129:3 143:5 146:25 197:23 226:14 272:19 285:3 295:23 301:4 314:16 keeping 184:14 189:13 234:4 277:12 keeps 261:15 Keith 174:12 178:11 184:13 227:12 251:24 268:17 272:17 300:17 301:8 306:25 Kemp 129:21 130:7,12,13,19 132:5,6 133:16 148:8 158:2 162:20 163:4,8 163:12,16 164:21 166:20 167:25 169:17 171:21 Kenney 1:13 3:19 KENYATTA 1:12	KEPCO 242:7 kept 11:19,22 141:19 297:19 key 6:13 85:10 93:21 102:4 125:16 127:15 127:16 143:2 146:23 200:20 201:4 289:3 294:22 kicked 129:11 kind 18:4 32:13 40:5,11 41:7 44:6 58:20 68:24 115:3 119:13,16 122:19 123:6 126:23 127:19 128:3,17 135:13 142:18 144:8 146:2,10 147:2 147:9,14,20 148:4 152:3 154:3,6 155:4 161:17 167:23 185:16 192:25 197:7,9,10 198:18 254:9 269:4 279:15 280:24 286:21 295:16 301:25 kinds 49:25 150:23 286:7 knew 172:17 177:9 227:2 231:6 know 3:9,9 33:3 40:4 45:22 50:11 69:8 72:8 80:25 82:2 84:7 85:16 89:5 91:2 91:6,10 93:14 105:18 111:13 113:18 114:5 120:18 121:16 122:6 125:21,21 145:22,22	151:18 152:20 162:12 167:17 175:3 176:6 177:14,15,25 179:23 180:7 181:10,17 183:24 185:3 186:21,23 191:18,20,23,25 192:2,10 193:3 193:6,9,11,14 216:9 225:7 246:9,14 258:7 267:2 270:23 273:2 274:20 292:4 293:12 294:4 303:2 306:5 307:24 309:8 310:13,21 315:12,15,17 knowing 203:10 knowledge 146:4 knowledgeable 106:20 known 27:25 29:17 105:16 303:23 knows 32:17 174:24 177:12 Knudsen 176:11 Korea 242:7,14 L L 1:10 325:14 labor 94:19 101:6 148:22 150:20 183:21 184:6 186:6,8 195:25 196:10 202:17 205:8 206:21 244:13 265:15 266:11 272:25 lack 107:23 246:4 271:20,25 lacks 287:8 ladies 92:16 lag 167:14	laid 18:5 214:16 214:18 land 49:23 73:4,5 landlords 295:13 language 111:25 large 15:4 26:12 26:13 35:21 37:22 38:5,6 94:20 134:21 136:14 144:21 144:22 149:15 189:4 205:23 218:19 232:18 233:9,25 234:7 234:22 253:5,8 253:17,24 266:14,18,20 287:6,7 largely 64:15 larger 44:17 63:19 265:14 319:20 largest 18:8 137:12,14 225:23 233:23 233:23 260:2,3 large-scale 148:13 206:3,9 lasting 21:25 lasts 247:19 latched 290:12 late 68:14 152:11 157:16 183:25 243:17 293:12 304:21 306:6 307:10 laterals 246:24 latest 235:21 latitude 317:8 laundry 46:6 law 8:17 109:2 182:21 195:23 195:23 196:3,9 196:10 206:24 321:16 laws 9:4 183:20 318:9
---	--	---	--	---

lay 21:2 180:22 251:14	174:17 192:14 227:3 276:18 277:14	237:5	120:10	lives 20:18
layers 156:24		LEWIS 4:5	liquids 28:5,17	LLC 130:14
laying 214:10	legal 41:12 42:3	Liberties 231:20	29:7 48:18,21	LNG 14:9 15:2
layoff 300:20	60:10 181:3	lien 289:16	65:9 68:12 77:4	19:5,6,9 22:15
layoffs 319:12	273:8 282:2	liens 289:13	96:13 120:18,20	24:21 29:11,12
layperson 119:11	289:23 318:5	302:23,23	liquify 118:3,14	30:17,21 31:8
lays 217:18	legally 323:2	life 96:3 190:12	118:24 220:14	31:12,18 32:11
Lazard 61:14,17	legislation 128:18	302:12	220:19,19	32:14,16 33:10
63:9	169:15,20	lifestyles 95:18	Lisa 57:10 59:6	38:15,20,22
LDC 151:4	250:13 308:14	lift 232:16	list 3:11 217:22	39:2,7,18 49:14
LDCs 15:18 20:13	308:25 309:6,10	light 147:19 154:2	220:7 297:12	49:15,23 51:13
25:15 26:4	309:15	lights 77:13	310:3	52:3,12,19
151:12	legislative 199:11	light-duty 24:20	listed 14:25 183:7	55:14 68:16,21
lead 211:8 282:5	203:11 205:2	likes 203:11	217:23 323:23	68:25 100:11,11
leader 114:9	209:7 318:8	limit 69:10,20	listening 200:11	102:5 116:11,14
leaders 101:6	320:22	91:25 114:11	312:24 323:11	116:16 117:5
176:6	legislatively 205:4	263:16	listing 3:11	120:19 135:8,9
leadership 101:13	legitimate 185:9	limitation 66:3	lists 60:5	135:14 136:11
176:14,15	240:3	241:8 287:19	literally 246:25	141:9,25 142:3
179:16 206:15	leisure 202:9	289:14	literature 89:12	142:6,13,16
268:6 269:13,17	311:17	limitations 31:25	283:19	143:3,5 144:25
269:24	lend 239:14	40:9 165:21	little 11:3 14:10	145:8,12 147:8
leading 59:13,15	length 104:9	236:21 322:25	25:12 29:10	147:12,16,17
201:4 249:13	lengths 231:11	limited 8:11 9:3	44:8 53:18	149:12,24
lead-in 55:25	Lennox 174:19	63:18 266:7	55:13 88:20	150:23 151:5
League 303:25	lens 99:2	321:15	90:22 91:13	219:19 220:8
learn 294:9	lessons 131:10	limits 239:13	110:2 115:6	221:7 222:12
learned 257:5,11	letter 321:8	line 29:24 145:16	120:18 132:17	223:25 235:6
learning 171:2	let's 127:9 203:17	157:3 162:2	135:6 136:5,10	236:2,7 239:20
207:9	233:18 250:24	236:4,6	144:9 148:8	239:22 248:12
lease 114:15	266:6	lined 255:23	155:11 161:18	267:22 298:16
115:4	level 17:15 62:14	lines 75:18 141:11	162:9 166:22	LNG-related 21:3
leased 113:19	108:3,3 110:15	141:24 142:7	170:6 171:9	load 26:7 29:17
119:24	112:24 172:15	145:5,19 206:8	172:3 175:11	31:5 37:23,24
least-cost 218:12	229:3,4 230:4	252:23	182:5 211:18	116:14 248:8,10
218:13	262:10 294:18	linger 41:12	212:11 222:4	loan 233:5 251:12
leave 9:5,6 131:23	315:20	lion's 235:17	236:8 238:13	272:9
190:4 243:23	levels 112:7,9,11	liquefaction	243:17 244:7,9	local 15:18 25:15
268:25 274:21	153:24 164:8	31:22 39:7,11	245:18 256:21	76:21 139:4,6
leave-it-or-take...	302:8	222:9	259:15 263:13	142:21 172:4
321:24	leverage 12:3	liquefied 144:25	276:9 283:5	174:14 179:16
leaving 147:13	15:8 72:11	liquefier 118:13	301:24	181:7,10 182:3
193:8,23 227:6	88:17 133:3	220:11,12	live 89:24,25	183:19 185:11
led 87:7 162:15	136:3 144:17	liquefy 221:3	109:10 181:12	186:11 202:19
left 8:6 23:4 29:16	146:3,10 302:11	liquid 65:9 68:12	188:11,14	204:15 206:23
30:2,17 87:10	leveraged 215:21	68:25 117:14	284:10	272:18 284:3,15
		118:16,17	lively 161:9	284:16 303:6,11

locally 284:21	178:2 180:7,20	loss 277:15	19:13 21:24	135:22 139:25
locate 89:13	185:23 187:25	282:19	22:12 35:24	141:10 153:5
203:20	191:25 208:10	lost 125:23 128:11	36:11 51:18	156:20,22 183:8
located 18:13	209:21 210:9	197:17 202:2,4	53:18 88:22	193:5 201:25
locating 89:20	212:25 219:7	248:7,13	150:9,10 185:5	296:2
148:19	225:15,16 230:3	lot 22:14 35:9,12	206:5 287:7	majority 25:25
location 5:6 15:10	235:9 254:11	41:4,21 43:9	299:3,10 302:6	26:2 52:15
15:12 70:21	262:20 266:3	58:16,16,18	lowered 21:22	59:21 201:10
75:15 96:22	267:8,16 270:19	69:16 70:10	lowering 44:17	230:16,18
211:22	281:7,7,8	72:15 74:15	47:12	314:12
locations 206:7	294:12,13 302:3	75:5,10 77:6	lowest 27:6,6	making 13:3,3
Logistics 98:5	313:4 315:14	108:4 110:8	lowest-use 30:2	24:18 32:4
120:15 195:8	319:22 322:17	112:19,21	low-cost 5:23 29:6	47:22 126:16
212:18,18	looked 12:12	113:11 117:5	75:17 94:8	148:23 150:7
long 32:13 50:11	42:17 45:16	120:13 121:19	122:11 223:10	186:4 207:11
77:15 87:11	49:20 63:25	122:16,17	279:15	238:8 245:15
125:14 133:10	64:18 82:21	127:25 130:5	low-income 17:11	280:3
138:9 150:5	178:6 213:20	134:3 146:23	272:24 282:11	management 87:8
165:2 185:18,22	looking 14:14	148:3 159:11,13	286:10,14,19,24	132:8 153:9,9
187:24 218:7	26:7 29:3 30:23	159:18 160:9	287:3,10,14	155:24 156:24
229:21 238:6	36:22 37:24	185:15 192:8,12	288:9,21,24	159:17 175:20
252:16 290:18	68:20 71:18	192:13 193:10	289:10	239:8 268:6
293:16,16	76:6,7 77:2	214:7 220:16	luck 90:16 91:5	292:2 313:19
312:23	111:4 144:23	227:11,13,14	luxury 321:5	manages 96:25
longer 76:10	145:23 160:13	230:12 231:14		270:24
150:7 242:5	191:13 196:23	231:19,21	M	mandate 60:20
249:18	196:24,25	233:12 234:2	Macon 147:18	manner 66:14
longtime 56:8	219:24 220:25	240:5 241:2	Madam 120:4	101:4 103:19
long-haul 25:21	221:2 222:21	245:20 248:7,15	269:23	231:13 264:6
221:15	226:12 246:19	249:11,12	Madeline 275:15	mantra 268:24
long-term 19:25	311:2,13,20	253:21 264:21	276:6	269:4
56:10 168:22	312:6	266:15 292:15	main 133:14	manual 159:16,17
242:24 259:7	looks 155:24	293:13 294:24	158:19 160:4	159:25
285:17 290:22	loop 17:7 60:12	295:13 307:20	214:22 249:15	manufacture
302:12 319:5,9	164:10 232:18	308:4 310:16	249:16,17	126:13
319:14	232:20	316:20 323:23	250:11 267:11	manufacturer
look 34:3 40:6	looser 170:7	lots 16:23 123:3	286:13 291:4	253:6
42:7,8,10 44:20	Lord 275:20	283:8	mains 291:9	manufacturers
45:7 47:17,21	281:22 293:17	louder 6:21 7:23	maintain 109:9	75:14 98:24
49:3 54:13 58:6	293:21,23 294:2	79:14	109:12 234:17	123:7 125:24
72:17,25 89:12	296:10	Louisiana 75:9	261:2 289:9	127:17 148:16
99:12 106:14	lose 179:3 187:25	love 316:7	302:13,15	203:3
107:15 108:12	188:2 190:13	low 22:3,4 220:19	maintaining	manufacturing
115:20 127:17	loses 288:11	226:6 277:18,22	215:15 272:25	28:25 94:8
144:20 148:4	losing 87:4 196:7	279:25 280:5	major 52:5 54:5	95:11,13,19
171:22 175:18	196:8,11 223:6	294:17,21	78:21 94:3	98:10,11 119:15
175:22 177:23	223:8	lower 16:8,10	134:17,23	121:12,15,16,22

122:2,5,13,15 126:7 149:2 202:7,24 203:19 204:8 206:16 207:7,23 208:3 manufacturing-... 97:24 manufacturing-... 244:25 map 106:2 mapped 285:16 Marcellus 19:15 19:17,23 25:7 25:24 26:6,10 26:15,19,23 27:4,11,15,21 27:22 35:24 37:3,25 52:11 70:22 76:3 94:4 95:5 96:3 97:19 104:25 113:17 117:11 128:15 201:11 204:19 211:25 218:6,9 218:18,21 219:11,23 220:2 223:11 302:17 302:21 Marcellus-Utica 15:12 March 306:23 307:2 Marcus 120:22 margin 39:19,22 141:4 margins 42:9 52:20 235:10 MARIA 1:16 MARIAN 1:17 marine 24:24 145:9 Mariner 120:16 120:16 MARK 1:17 market 24:5 32:15 34:4 37:15 40:14,21	41:3 42:8,16,19 43:18 44:12,22 44:22 46:21 47:5 48:19 49:2 49:4,13 50:7 61:4 68:25 83:17 87:20 89:3 96:13 98:8 105:4 118:16 149:15 150:2 151:8,16,23 154:14 164:2 221:24 222:2,5 223:16 224:7,23 231:2 238:16 marketing 18:23 46:12 48:21 86:19 115:17 231:4 244:22 marketplace 44:21 120:14 209:19 221:23 223:14 232:5 267:20 markets 14:9 19:11 22:17 24:12,15 27:3 27:14 31:17 32:2,5,6 39:2 40:7,17 45:2 60:12 72:14 76:12 89:6 98:6 149:12 235:6 299:21 319:7 market-related 14:8 married 128:17 Marriott 320:25 Maryland 97:3 125:5 mass 38:11 301:18 Massachusetts 14:3 massive 166:24 master 105:19 match 142:22	material 60:5,8 60:16 64:7,21 131:17,20 149:10 materialize 41:2 materials 59:22 64:17,24 67:2 158:24 258:24 matter 42:5 55:8 95:7,8,21 102:18 134:24 148:20 189:10 195:10,11 197:16 209:11 222:25 224:10 288:22 325:7 matters 98:18 208:12 269:20 273:24 282:4 max 118:21 119:3 maxed 119:3 maximize 62:17 62:25 156:11 197:2 maximizing 54:24 55:5 67:5 maximum 119:18 119:24,25 Mayor 6:15,19 7:7 8:6,15 99:8 132:22 152:16 152:23,24 166:2 166:6 283:2 308:15 318:18 320:18 322:6,15 Mayor's 60:9 94:16 203:3 206:16 318:7 ma'am 129:19 172:14 MBE/WBE 78:23 MBE/WBE/DBE 78:19 80:4 MBE/WBE/DB... 81:22 McBride 10:12 14:6 21:5 33:4	35:17 52:8 68:23 74:15 MCF 213:7,12 254:22 mean 48:13 51:16 71:16 80:7,24 81:3 86:7 87:24 106:11 111:13 121:25 124:13 125:15 141:19 143:24 161:16 161:16 164:12 165:6 185:23 187:24 191:12 191:17 193:6 197:13 247:14 247:16 257:9 260:25 262:3 275:4 307:15 308:6 319:11 meaning 31:3,14 meaningful 95:11 293:8 means 20:17 148:24 156:3 217:3,4,4 220:13 236:25 250:7 284:16 313:9 325:21 meant 32:10 237:11 measurable 246:16 measurably 247:11 measure 304:5 measured 96:4 measures 99:2 251:23 mechanism 26:9 237:24 250:15 251:4 259:10,17 media 67:18 290:11 medium-sized 135:13 meet 29:20 30:5	31:10 94:5 106:22 119:4 126:24 154:22 179:14,15 306:15,17,18 meeting 134:22 243:15 307:7 meetings 6:23 60:6,9 78:4 151:3 245:10 284:21 307:9 322:15 member 126:10 161:24,25 244:3 245:16 271:5 303:19 304:2 members 3:17,21 4:22 17:12 90:10,21 92:17 94:15 107:6 111:15 113:3 126:8 152:17 173:4 177:19 178:11,12 184:22 199:10 200:12 208:21 209:22 212:15 243:15,19 244:14 303:3 305:3 Memphis 110:4 166:16 mention 12:6 212:22 257:14 257:17 mentioned 24:4 32:24 34:25 35:22 38:16 42:13 48:11 52:23 85:8 145:17 149:17 154:25 205:10 212:14 216:4 256:7 257:20 258:20,22 303:7 merger 183:3 merits 271:25,25
---	--	--	--	---

285:22 message 149:14 met 242:14 306:25 319:4 metals 122:18 meter 295:14 methane 28:2 96:11 122:22,23 methanol 123:4 method 217:19 methods 24:23 170:23 metro 140:3 162:21 163:8 metropolitan 137:12 mic 79:14 Michael 283:3 MICHELE 325:14 microphone 10:24 81:6 172:12 173:2,13 276:9 mid 145:24 middle 95:20 Mid-Atlantic 76:17 Mike 174:17 mild 32:12 mile 250:4 mileage 313:20 miles 20:10 28:19 76:4 250:4,6,9 250:12 259:12 259:14 260:11 261:3 264:5 284:10 313:10 militate 213:19 million 36:18 39:22 42:14 50:24 51:9 52:14 53:13,13 55:15 96:12,15 135:5,17 137:13 143:9 162:20 213:24 215:4,5	215:14,18 216:17,20 218:17 221:9,11 225:25 226:4,6 236:5,6 237:10 237:17,22,24 238:10,18,20 250:19,20 251:2 251:5,6,7 254:17 259:14 259:16,24,25 260:8 261:5,6 261:12,21 262:16 271:10 280:4 288:5 302:9,10 millions 50:4,6 87:4,5,9,10 mind 11:19,23 16:25 64:25 143:5 285:3 288:14 295:23 mindful 292:16 minimal 178:19 minimum 287:17 300:25 Minister 242:15 Minneapolis 283:14 minus 216:7 minutes 12:6 82:7 91:23 218:5 mirror 99:13 missing 124:19 mission 137:23 138:2,20 154:11 270:25 284:2 mistake 96:23 misunderstandi... 80:12 mitigate 41:6 62:19 mix 228:9 model 166:14,17 168:25 252:18 261:24 291:3,6 models 37:4	168:17 moderate 280:6 moderate-income 277:19,22 280:2 modern 114:3 265:20 modernize 265:9 modest 8:23 321:13 modifications 278:7 modified 220:10 306:13 modify 298:4 modular 235:22 molecule 119:12 122:21 molecules 113:16 moment 66:20 145:15 212:25 momentarily 214:24 Monday 135:2 money 8:4 16:14 42:10 46:3 65:3 66:5,10 67:9 103:25 134:19 141:21 195:13 218:22 219:16 228:13 233:5,14 234:16 248:6 254:9 278:9,15 280:23 281:6 298:12 299:24 314:2 monitor 304:5 monitoring 159:2 monopoly 155:5 Monroe 98:3 month 242:14 months 104:24 125:22 157:19 189:10 226:22 276:25 moral 205:4 Morgan 60:11 mortgage 251:14	251:17 Mosley 129:21 130:15,15 132:18,18 144:12 167:17 170:17,21 171:13,18 motion 91:16 motivation 140:8 motivator 141:23 move 5:19 9:8 34:11 106:4 107:10 125:17 154:20 168:15 169:16 172:2 175:24 176:17 192:12 209:3 219:10 224:2,3 232:3,25 238:21 275:23 280:25 305:14 moved 154:6 202:7 213:5 moving 7:6 32:20 125:13 147:9 161:19 215:25 280:21 muddled 182:6 multiple 184:23 262:22,22 266:2 multi-billion 49:4 multi-faceted 50:17 municipal 104:2 104:10 134:22 135:24 137:10 142:18 182:12 184:15 185:18 185:22 186:12 187:24 188:5 195:15,21,23 197:6 229:9 233:7 239:5,18 239:19 240:19 252:18 253:3 255:17 259:18 261:8 271:19	272:16 273:4,10 274:25 283:21 284:6 302:23 municipalities 283:6,20 municipality 162:11 311:21 municipally 18:8 100:19 102:25 162:18 163:24 MURPHY 325:14 myriad 164:8 184:10 N name 115:11 130:11,12 133:6 174:9 181:25 199:2,4 210:17 276:5 281:25 293:25 names 134:2 277:6 narrow 79:25 national 108:2 155:21 178:8 native 132:19 natural 18:10,21 18:22 21:7,10 21:18,20,22,24 22:3,5,10,11,22 23:6,13,20 24:9 24:14,18 28:5,7 28:13,17 29:7 31:17 45:25 46:25 48:18,21 50:12 53:4 65:9 65:9 68:11,12 68:25 72:12 73:18,22 74:5 77:4 95:6 96:3 96:11 97:15 117:10 119:17 120:8,10,17,20 134:5 136:2 138:23,25 139:11 140:8
---	---	---	--	---

144:25 147:21 148:9 149:18 151:9 201:6 204:24 205:13 209:18 213:6 216:24 220:14 220:16 223:13 224:4,6,22,24 228:14 232:6,6 248:10 252:9,10 253:9 254:14 266:12 267:23 278:12 302:17 319:6 naturally 102:8 279:18 nature 57:24 60:17,23,24 61:10 107:3 108:21 154:7,14 232:3 236:22,24 near 51:24 nearby 75:16 nearly 271:10 necessarily 82:25 111:2 134:9 161:6 168:19 219:4,14 234:21 251:13 252:2,3 253:11,23 285:22 necessary 23:22 26:25 40:12 98:13 103:23 145:9 235:2 282:14 necessity 227:20 227:22 need 17:10 19:7 28:8 31:11 32:15 40:6 45:6 46:11,22 47:2 48:25 49:9,11 69:16 76:8 78:3 78:13 83:13 85:4 99:16 100:15 102:9	107:8 111:16,19 112:15 114:5 116:19,23 118:12,24 119:11 122:17 137:17 151:20 151:21 154:20 168:3 170:2 171:11 178:2,2 178:3 184:8 192:2 197:10,11 202:16 206:2 219:21,22 221:11,11 224:3 252:9,11,12,13 252:15 254:5 263:6 273:7,13 278:20 279:2,13 286:6 287:6,8 288:25 289:2 292:16 294:18 296:25 311:23 needed 7:9 91:2 99:19 101:9,20 104:13 111:9 206:8 221:6,10 234:4 272:8 needing 31:5 39:6 needle 224:2,3 needless 243:17 needs 30:11 38:24 42:17 54:3 94:6 116:25 147:4 164:13,15 185:19 212:4 284:23 285:7 295:8 negotiate 104:12 179:11 241:11 313:5 negotiated 100:24 153:14 307:13 316:11 321:11 negotiating 239:23 321:17 negotiation 322:21	negotiations 142:23 176:4 neighborhood 263:18,21 neighborhoods 263:22 Neilson 1:14 3:20 85:2,3,23 86:24 88:15 89:21 91:17 128:25 249:8,9 252:20 254:4 255:20,25 256:6,14,21 258:19 261:11 306:7,9 307:4 307:18 308:2,12 308:22 309:3,7 309:12,19,24 Neither 288:11 nervousness 110:15 net 39:22 135:16 291:22 292:7 network 44:16 225:11 networks 15:10 never 81:16 189:11 197:7,8 197:9,13,14 214:10 257:22 258:2 322:13,16 nevertheless 226:10 261:19 new 16:18,22 18:12,15,23,24 19:11 22:9 24:12,14 26:13 31:16 33:15 36:7 37:6,20,25 38:3,25 41:4 46:22 52:20 70:13 73:6,21 74:3,13 84:4 88:6 89:6 94:3 96:7 97:21 103:20 114:2 124:22 125:2,3	127:6,8 128:13 134:3 136:4 137:19 138:21 140:5,25 141:22 142:13 153:23 154:16 155:19 155:20 156:19 158:21,24,25,25 159:2,6 167:12 167:12 169:3,7 195:13 201:9 202:20 204:5 206:11 207:18 214:8 217:20 220:11 222:16 222:21 230:12 230:14,22,22,23 230:24 231:16 241:16 245:21 246:13 247:9,14 247:17,24 272:21 278:13 279:23 293:6 302:22 303:4 314:19 316:15 317:6 newly 76:19 news 67:17 216:8 257:21 NGL 68:24 120:19 NGLs 68:16 70:22 71:3,7 72:16 120:18 NGV 44:12,22 nice 321:6 night 306:6 nimble 154:19 163:25 168:5 240:5 274:2 nine 116:9 Ninety-five 181:12 nitrate 123:5 non-attorneys 42:2 non-fuel 259:23	260:2,5 263:12 non-low-income 288:20 non-profit 270:23 non-union 227:8 268:21 non-value-added 159:13 non-viable 44:9 48:8,16 normal 153:7 norms 61:4 North 21:19,23 27:7,16 75:19 150:6 275:16 276:6 Northeast 25:16 26:4 76:13 133:5 144:13 northeastern 121:6 northern 201:14 231:20 note 12:21 27:20 28:10,14,18 32:13 52:16 noted 25:22 notes 325:6 notice 192:3 noticed 256:12 notion 108:15 161:9 162:10 not-for-profit 133:8 November 1:7 323:21 number 2:24 16:13 22:9,18 23:25 24:23 28:20 35:18 40:2 51:2,4,16 52:4,12 53:7 57:16 69:22 78:15 90:21 111:14 127:22 127:24 135:5 154:11 163:13
--	--	---	--	--

166:17 182:22 188:24 191:13 193:23 203:7 214:20 227:7 231:6 232:14 246:8 264:8 295:3,21 300:25 319:4 numbers 52:22 53:9,12,19 108:23 188:24 191:5 215:24 258:25 300:20 Nutter 99:8 283:3	occasions 319:4 occur 145:14 227:10 282:21 286:8 occurred 201:11 317:9 occurring 75:12 144:18 OEO 77:24 78:3 offer 63:18 64:25 92:18 182:9 197:15 204:2 274:4 278:10 279:25 307:15 307:16 offered 8:2 78:20 182:7 offering 60:18 offerings 226:15 offers 203:21 241:16 office 94:16,17 217:15 232:18 318:7 Officer 93:15 132:21 210:19 official 108:11 officials 7:20 244:13 offshore 121:18 121:20 off-system 32:14 oh 1:15 58:12,13 60:2,15 61:11 61:22 62:2,23 63:16 64:6,23 65:22 67:12,17 67:25 68:10 69:4,11,17,23 123:12 128:24 182:6,12 194:15 194:16 198:2 236:15,16 237:12 240:20 241:23 242:2,6 265:6 316:2,3 318:3 319:13,24	320:6 Ohio 26:14 27:24 97:2 125:6 146:19 oil 22:24 23:3,6 24:9 75:11 141:19 149:21 149:21 182:23 201:6 okay 10:24 53:21 54:15,18 55:20 60:2,15 64:23 69:20 82:12 85:22 90:10 115:2 121:13 132:2 133:16 161:17 165:12 167:4 171:4 198:2 222:18 237:14 240:20 243:18 256:4,14 261:25 264:22 270:13 276:21 281:16 297:12 297:14,20 306:4 321:5 old 11:3 26:18 104:3,5 190:16 191:18 192:11 231:15 247:23 258:10,11 264:18,21 265:12 314:13 older 231:23 234:13 265:8 313:11 314:6 omnibus 302:2 once 127:13,23 156:6,9 170:9 182:18 216:2 257:22 262:18 311:22 314:12 315:21,21 ones 48:10 170:20 171:3 243:22 266:19 one-fifth 26:20	149:19 one-for-one 15:21 one-time 55:22 one-year 52:6 301:22 ongoing 232:21 303:15 on-site 45:24 Ooh 311:23 open 101:10 136:4 284:21 311:4 313:15 322:11,12 opened 145:21 opening 20:18 146:17 operate 45:9 150:22 229:3 240:23 283:4 299:3,9 operated 272:16 284:7 298:18 operates 46:13 93:17 192:23 270:24 operating 93:22 159:7 168:7 170:2,8 188:18 190:2 214:15 240:10,12 268:11 282:9 284:20 operation 112:6 161:12 266:21 operational 133:14 137:2 156:14 158:5,12 158:14 159:4 operations 25:5 28:22 40:23 76:20 77:4 170:10 242:16 285:13 303:15 320:17 operator 194:6 operators 45:8 252:15	opinion 23:11 41:25 60:17 66:16 72:7,9 86:25 100:23 102:14 155:23 opinions 42:3 242:21 opportunities 1:20 4:9 5:12,24 9:20 12:8,10,12 12:20,24 13:5,7 13:17 16:3 17:19 20:5 21:4 21:12 22:9 24:2 28:21 32:19 33:8 34:23 35:6 35:8 41:16 44:10,21 48:9 48:16 51:13,19 52:9 53:12,14 55:6 56:8,11,15 57:7 62:16 63:19 70:13 72:15 73:2 74:4 74:6,13 80:19 80:22 81:22 83:11 86:8,19 87:18,21,22 88:6,8 92:21 108:9 109:9 134:4 135:7,18 136:12 148:15 151:7 154:17,22 164:2 166:10 186:17 200:7 204:9 217:12 219:8 225:16 243:8 267:17 271:23 274:3 289:8 291:19,21 292:3 303:7 311:7 opportunity 2:21 5:2,5,16,20 16:3 18:12 23:25 29:8 32:3 35:21 36:7,15 38:13
---	---	---	--	---

38:14,19 39:16 42:6,22 43:22 44:12,24 45:12 45:15 46:18 47:2,8,17 49:17 49:20 50:3 54:24 55:9 57:21 58:2,23 59:9 72:10,17 73:17 78:20 82:11,23 83:19 92:19 95:10,25 96:8,21 97:13 103:22 104:19 105:3 113:24 124:17 131:4 148:23 158:20 161:21 162:3,6 171:22 185:4 187:21 199:15 202:24 222:25 225:19 242:18 247:12 267:8 293:10 303:22 304:7 316:15 321:4 opposed 63:2,19 64:3 81:13 120:9 137:7 153:24 183:19 185:21 319:10 opposing 277:3 opposite 33:19 optimal 37:7 optimization 38:15 52:11 optimize 271:21 optimizing 33:10 273:6 option 100:20 104:17 126:4 191:23 201:23 options 6:12 61:13,19,20,23 62:3,6 66:17 70:12 292:7 311:6,20	oranges 197:5 order 3:17 41:6 68:4 99:21 103:11 126:20 128:19 135:12 143:9 151:22 224:3 286:5 orders 239:10 298:21 order-of-magni... 36:14 39:15 52:17 ordinance 206:24 273:13 305:8 317:20 ordinances 318:15 ordinary 102:14 organization 133:9 157:5,8 186:15 192:23 organizations 48:4 157:4 169:9 282:12 organized 29:25 94:19 205:8 206:21 244:12 original 61:14,16 74:16 75:20 224:12 originally 75:11 other's 167:20 176:5 outcome 7:10 206:2 outcomes 288:12 outlier 273:4 outline 8:8 outlook 11:21 outpaced 26:24 outreach 277:25 304:19 outright 279:23 outset 12:21 outside 28:15 59:19 79:3 81:4 88:20 147:5	165:2,20 280:13 284:5 outstanding 88:18 200:14 215:10 289:5 overall 261:5 overlapping 261:15 overly 264:17 overnight 257:10 oversight 153:3 197:8 240:7,7 240:15 277:16 303:14 oversized 38:23 overview 133:17 owned 18:8 55:3 100:19 102:24 102:25 105:13 139:5 152:7 153:19 155:16 162:18 163:24 283:22 owner 42:25 43:4 55:11,19 ownership 13:8 13:10,12 56:21 57:6 100:18 102:3 103:4 108:22 283:7,13 283:21 284:12 284:16 290:19 291:3 owner-occupied 302:24 owns 55:8 93:16 O'Brien 1:14 3:19 o'clock 243:16 307:2 O'Neill 1:15 81:5 81:11 256:18,19 260:20 261:25 262:11 263:15 264:22	65:13 66:22,23 83:11 88:16 paid 54:9 180:4 pain 176:20 pale 213:8 paper 218:10 papers 190:3,7 192:4,5 paperwork 58:24 par 162:14 PARA 184:2 paradigm 84:4 parameters 316:13 318:6,20 parcels 105:20 park 20:11 part 2:14 13:6,11 18:15 25:6,7 57:12 71:22 78:20 82:18 87:6 109:23 112:16 121:7 133:9 146:23 160:10 174:23 176:8,10 212:13 212:23 216:10 226:15 233:25 234:7,9,22 244:4 248:3 249:25 250:2,21 273:19 296:3 298:19,19 301:11 302:2 313:8 316:21 partially 27:11 119:2 participant 9:19 151:2 participants 17:12 59:24 participate 16:22 49:2 160:22 161:11 217:12 253:19 participated 203:2 238:10 participates	255:17 participating 48:18 235:5 participatory 7:22 particular 11:15 12:19 20:21 31:18 48:5 59:17 62:22,23 63:18 67:4,11 81:2 117:9 166:2 172:16 186:16 220:21 245:6 246:24 310:19 particularly 9:16 27:22 44:24 45:21 47:9 70:25 94:3 95:22 161:12 172:20 206:4 207:23 246:6 247:10 271:16 parties 10:2 127:19 142:24 169:13 321:12 321:12 partner 103:14 104:7 130:13 132:7 138:10,14 142:20 151:21 168:7,9 186:8,9 200:9 204:14 235:3 239:14 254:7 292:25 partnering 134:22 138:8 143:25 partners 130:14 132:7 144:16 176:19 partnership 41:9 90:14 93:12 103:11 109:25 150:11 166:24 167:9,15 168:3 168:19 183:22
---	--	--	--	--

P

page 4:21 5:18

187:16 200:12 201:18 203:4 235:2,15 268:18 partnerships 41:22 110:3 161:2 166:18 207:6 293:4 304:11 parts 27:24 75:19 84:6 116:10 266:11 party 253:9 pass 292:8 passed 289:6 passionately 94:25 passthrough 253:14 Passyunk 29:13 186:20 Pat 303:24 path 128:6 177:23 pathways 207:24 patience 274:15 pause 293:19 pay 16:10 17:14 51:10 95:15 181:13 223:21 228:9 229:24 248:25 251:3,4 251:11,12 253:16 278:23 279:4,6 291:4 292:15 paying 104:3 226:8 248:24 249:3 261:20 280:9 295:17 payment 235:14 payments 215:17 payroll 213:22 pay-as-you-go 259:20 261:18 PBF 98:3 peace 183:21 peak 116:15,22 peaks 119:21	PECO 98:5 139:5 155:6 262:23 peer 272:20 peers 233:21 penalty 188:20 penetration 24:9 Pennsylvania 1:6 14:5 26:13 27:23 105:14 121:4 200:25 201:13,17 202:21 203:24 225:24 275:2 286:22 287:16 300:10 302:19 Pennsylvania's 95:5 pension 64:13 65:4,5,18 66:8 66:11 102:3,12 104:4 140:20 177:3 178:24 179:4 180:3 196:12 301:15 pensions 178:22 196:24 people 2:16,24 3:9,11 5:10 6:25 48:10 51:6 58:16 69:16,22 71:23 82:9 83:2 83:7,12,18 86:8 92:5 96:18 108:5,8,8,19,23 109:2,3,9,20,21 110:25 111:24 123:18 129:2 131:7 137:13 146:7 150:3 161:7 163:13,17 164:7 172:22 175:4 176:13 177:17,19 178:8 179:21 180:14 180:14 182:6 186:16 189:15 190:12,14	191:24,25 192:10,12,21 193:10,13,20,23 213:25 214:10 214:16 223:11 227:3 228:9,12 234:2 244:6 247:20 252:9 255:11,23 257:7 270:14,19 277:2 277:5,8,19,22 278:2,11,15,20 279:3,10,20 287:6 295:22 297:24 299:5 300:17 302:19 310:22,23 314:4 317:25 321:20 323:23 Peoples 155:6 260:4 people's 9:11 perceived 232:8 percent 26:20 114:18 116:20 126:12 140:16 140:18 149:23 153:17 179:4 181:12 200:22 200:24 201:3,5 212:2 213:9 215:2,3,8,10,21 215:22,22,23,24 220:12 222:22 237:5 238:22 247:21,23,25 251:3 259:22,23 259:25 260:4 261:2,9,13,14 302:20 percentage 153:14 189:4 218:19 287:6,18 percentile 157:15 perceptions 65:24 PERC-regulated 126:23	performance 168:12 performance-b... 167:22 performed 63:7 159:15 perimeter 5:8 period 23:23 87:11 116:15 176:21 183:20 184:15 188:3 190:10 201:8 215:13,18 216:16 251:2,18 258:10 316:18 periodic 168:12 permanently 6:17 permitted 289:24 321:15 perpetuate 146:11 person 4:23 14:14 63:23 65:19 106:20 245:9 252:10 269:2 280:16 personal 72:7 86:15,25 107:14 128:12 157:6 191:8 personally 111:8 180:15 194:22 311:24 316:7 persons 82:15 perspective 50:9 94:23 107:14 131:7 135:7 136:8 222:8 242:18 271:5 272:17 274:12 pertained 62:17 PES 195:6 petrochemical 71:24 75:14 124:8 149:3 petroleum 22:25 201:14	Peyton 132:22 PFMC 161:25 270:21 273:19 273:22 PGW 6:12 9:18 10:3 11:25 12:19,22 15:8 15:17,19,20,23 16:6,9,24 17:10 18:2,7 19:20,22 20:7 21:13 24:2 25:22 29:11 30:5 31:3,20,25 32:17,17 34:12 34:13,17,21,22 34:24 35:4,21 36:16,20 37:21 39:20 40:4 41:6 44:14,24 45:3 45:12,22 46:8 46:13,14,21 47:10,12 48:14 48:14 49:6 50:9 51:25 55:17 57:15 60:13 61:21 63:2,21 65:2 67:11 70:11,12 71:20 72:22 73:17 74:8,13 83:4,7 85:11,14 86:17 86:21 87:4,8,14 87:25 88:17,22 89:25 93:9 99:24 100:2,10 100:15,22 101:9 102:4,17 103:3 105:6 108:22 112:3 114:4 115:9 130:24 133:9 135:11 136:13 138:18 151:16 152:9,21 154:6 158:17 159:16 160:8 174:15,25 175:9 175:15 177:9
--	---	--	---	---

178:24 180:13 180:19 181:14 181:19 185:13 186:8,17,19,22 187:8,9,12,19 208:9 210:16 211:11,18 212:20 213:2 214:8,18 217:11 217:19 218:8 219:14 220:3 222:19 225:9 226:9,15 227:13 229:7,11,23 230:25 233:13 233:17 235:3,7 235:19 236:20 240:22,23,25 242:10 247:6 248:16 251:5 252:23 253:13 254:7,19 255:17 257:5 261:18 263:4 264:14 269:4,13,21 270:9,24 271:2 271:6 272:10 276:24 277:3,9 277:12,13,21,24 279:9 280:5 285:7,10,16,23 286:12 288:7,11 289:23 290:22 291:12,22,24 292:2,4,11,18 292:23,24 294:24 295:14 298:15 299:3,4 299:18,23 300:16 303:4,9 303:13 307:8 313:19 320:19 PGW's 12:2,11 12:15 14:24 17:25 28:4,15 29:11 31:11 34:9 48:22	99:21 100:4,17 102:22 150:13 172:4 187:15 211:15 226:16 233:24 234:21 249:17 282:8 285:4,18 286:19 287:3,10 289:13 290:21 291:18 293:3,5,9 294:20 315:8 phenomenal 98:7 Phil 114:9 116:24 204:20 205:15 212:12 275:20 293:25 Philadelphia 1:2 1:6,20 4:10 5:3 5:9 9:21 10:15 11:20,22 12:5 12:17 15:7,17 17:9 19:20 20:12 28:20 29:4,5 32:25 34:10 36:8 37:21 44:23 46:20,24 47:3 48:11 71:10,12 74:17 76:4 82:23 83:6 84:5 89:11 91:9 92:23 93:8,15 93:18,19 94:2 94:11 95:12 96:2,22 97:8,15 98:2 99:9,12,15 100:8 105:10,15 105:25 107:15 107:18 108:5,12 108:13 113:25 116:2,12 120:9 121:10,16,23 122:4 124:21 125:18 131:10 148:14,20 149:13 161:13 162:15 180:12	185:3 188:15 189:14 199:7 201:21,22 202:23 203:21 203:22 204:25 205:13 206:25 207:4,13,20 208:2,13,25 209:4,19 210:19 211:21 212:6,7 212:19 217:2,6 222:23 223:12 225:10,12,13 230:13 234:3 239:11 242:11 242:19 243:2 244:24 250:11 250:17 253:7,18 254:19,23 255:10 258:9 264:11 267:10 267:20 271:7 273:3,22 277:3 277:8 282:10,13 283:2,4 287:5 294:17 299:17 299:18 300:3 303:10,18,19 304:10 310:16 310:18 Philadelphians 109:4 202:4 207:10 303:8 Philadelphia's 33:25 66:13 95:3 97:18 100:13 102:21 185:12 221:21 Phillies 32:25 33:5 Philly 33:2 110:24 phone 238:8 pick 6:16 227:18 240:25 276:19 picture 25:11 piece 147:3 220:21 309:14	pieces 53:5 Piers 105:16 pillars 94:22 pipe 20:8,11,17 66:5 67:8,13,15 67:20 74:7 102:11 104:6 113:19 114:16 115:4 127:4 215:14 257:2,4 257:10,14 258:10,10,12,20 259:14 260:12 260:12 261:4 263:19,25 264:21 299:14 302:10 314:6,13 314:14 pipeline 17:2 19:25 26:25 30:8,12 36:8 37:6,19 38:2,3 38:10 48:20 53:6 74:8,9 94:3 100:12 115:22 115:24 116:3,4 116:18 119:23 120:9,10 121:3 125:13,15,16 126:21,23 127:8 128:2,3,7 142:11,15 150:19 186:17 204:18 205:12 205:19 218:25 219:12 220:4 222:14,15 223:20 254:15 254:16,21 pipelines 25:21 28:3,9 75:17 76:10 116:6 128:19 204:25 219:3,13 223:14 303:4 pipes 15:2 101:22 313:12	pitfalls 92:21 Pittsburgh 272:21 Pivotal 145:6 place 16:15 44:7 88:12 89:19 99:25 110:9 122:9 125:25 158:21 160:13 169:3,4 178:14 227:14 251:23 272:20 279:20 309:13 placed 290:13 places 109:16 122:12 placing 11:8 plan 10:4 29:20 57:21 58:2 68:16 77:24 78:4,9 105:19 111:13 120:8 138:21 146:10 156:19,25 242:24,24 243:2 259:7 268:23 286:5,8 301:15 303:22 304:7 305:8 313:23 319:14,14,15,22 plane 123:23 129:2 planning 31:10 137:20 226:20 235:7 plans 13:15 68:9 102:3,13 224:12 317:25 plant 100:11 114:4 126:3 135:9,11,14 147:17 186:20 221:21 239:20 239:22 252:15 plants 29:13,14 75:14 139:18 143:6,7,8,11,14
---	--	--	---	---

144:2 153:23 215:15 254:24 254:25 255:4 platform 272:4 play 43:18 52:25 100:12 151:19 176:23 185:11 207:10 252:23 253:3 player 134:18 players 132:14 136:9 144:10 please 4:3 79:14 97:12 130:10 132:4 173:23 174:9 199:17 249:23 276:11 276:16 290:9 293:22 pleased 93:3 106:6 pleases 131:11 pleasure 106:22 210:4,7 269:13 plentiful 232:7 plethora 59:10 240:16 plus 94:10 161:16 pocket 248:23 298:23 pockets 227:18 point 5:17 20:24 43:25 46:22 64:10 70:18 75:20 80:9 109:24 110:14 118:11,18 136:4 164:23 178:10 182:10 188:7 197:14 200:21 224:22 228:7 234:12 239:3 257:19 261:16 272:13 274:24 283:20 286:16 291:2 292:10 298:18 310:14	320:20 pointed 218:11 224:8 273:10,15 285:19 points 68:24 98:18 111:24 136:23 164:5 200:20 237:8 270:18 272:2 285:6 294:15 302:5 poised 188:19 policies 153:6 policy 61:5 132:11 204:23 244:15 289:16 political 98:15,20 99:16,22 100:7 105:7 127:11 204:24 politically 125:3 politicians 108:2 politics 107:17,20 pollute 281:4 poor 180:17 234:2 pop 3:21 popular 180:12 population 162:21 163:9 212:2 285:12 port 71:10 73:3 76:18 105:15,21 105:24 140:5 141:10,13 142:9 147:13 portfolio 35:20 51:22 portion 17:24 31:8 97:16 201:12 235:18 264:5 portions 26:13 206:5 ports 72:13 74:24 206:9 position 72:3 73:14 88:5	115:14 165:19 191:22 233:4,5 233:6 291:24 320:16 positioned 5:4 72:4 166:6 positioning 67:11 162:5 positions 193:17 positive 206:2 288:12 possibilities 66:15 200:3 311:14 possibility 78:3 192:20 possible 21:16 24:8 33:21 46:16 66:14 73:23 152:19 172:22 179:17 185:17 187:15 275:14,23 298:8 possibly 36:2 potential 24:13 26:8 28:24 38:5 42:8,9 50:20 52:18,20 68:20 74:16 75:3,5 76:11,22 77:7 92:22 97:14 99:6 174:25 176:2 226:22 245:8 273:6 288:14 290:14 potentially 29:4 poverty 294:17 power 19:2 24:10 45:17,23 114:3 132:12 136:11 137:15 139:15 139:19 149:9 151:6,13 153:23 222:20 232:22 242:8 248:11 263:9 267:21 PowerPoint 13:15 152:5	powers 157:19 318:19 practical 279:25 practically 263:17 practices 169:6 273:25 pray 181:16 precise 203:12 predicted 202:20 preeminent 105:11 preface 211:20 preference 297:22 premises 138:9 prep 182:24 prepared 93:2 112:23 124:20 131:13 135:21 162:7 191:9 226:20 227:9 preparing 226:22 prerequisite 259:9 prescribe 167:20 presence 32:14 68:24 present 1:9 31:20 43:21 93:7 94:5 96:4 130:22 131:5 211:19 318:11 presentation 19:3 presented 162:3 244:18 276:25 285:25 316:10 presenting 322:18 presently 96:11 presents 28:20 161:21 162:7 preservation 73:5 preserve 206:2 President 1:10 2:2,7 4:11 6:7 9:11,24 10:9,20 11:2 50:14	53:20 54:2,10 54:14,21 58:9 58:10,14 69:5,7 69:13,19,25 70:6 77:10,14 80:14 81:9 82:8 84:21,23 85:24 89:22 90:5,6,9 91:15,18,24 92:9,13,16 106:8 113:7 115:13 123:11 123:15,22 124:2 124:5,13 128:22 129:8,12,18,25 130:9,20 132:3 148:6 157:24 160:15 162:25 163:6,10,14,18 165:5 167:3,7 167:10 171:6,13 171:15,19,24 172:9,13 173:3 173:16,20 174:8 174:13 175:12 175:16 181:24 184:16,22 185:25 190:21 190:22 191:2,19 194:11,12,17 198:4,9,12,17 198:21,25 199:6 199:20 200:5,17 202:13 207:19 209:23 210:2,13 210:15,18 216:5 216:14 227:24 228:16 229:13 229:18 230:6 236:12,17 241:18,21,24 242:4 243:12 244:16 245:2,12 248:2,21 249:2 249:10 263:8 276:25 296:23 press 35:12 64:7
--	--	--	--	--

64:19 pressure 140:23 158:7 263:2 pressures 140:19 presume 101:16 pretend 6:19 131:14 pretty 3:2 9:6 39:8 77:15 107:22 153:18 154:16 155:2,3 156:12 163:19 170:3 227:13 260:7 264:2 270:19 313:12 320:25 prevalent 79:20 prevent 126:16 previous 171:3 previously 31:19 68:11 323:13 pre-approved 258:5,8,15 pre-engineering 266:14 price 8:2 21:25 22:23 23:8,12 149:20 150:9 209:18 priced 149:18 185:5 prices 19:19 21:8 21:10,11 22:11 22:13,18,23,24 27:4,15,19 33:17 36:11 53:4 88:22 150:4 pricing 37:4 primarily 64:11 215:14 244:6 285:11 primary 151:8 282:4 287:4 principal 215:19 prior 25:13 112:25 175:22	308:17 prioritize 250:10 292:19 prioritized 264:7 priority 157:14 private 42:25 43:4 45:8 49:9 55:11,18 74:9 79:17,21 86:14 102:3,7 103:14 103:22,25 107:3 126:9 134:4,12 134:23 139:4 144:3,6 146:6 146:14,16,24 147:23 151:4 154:9,18 155:5 156:10 161:10 169:22 195:16 195:20,21,22 196:4,15,20 197:7,20,21,22 209:3 235:3 260:21 265:17 265:21,24 267:13 284:12 289:13 290:19 291:3 293:4 311:4 322:13 privately 102:20 102:24 111:8 151:11 private-public 150:11 private-sector 109:6 112:6 146:7 179:25 196:6,9 265:25 privatization 183:20 184:11 197:16 307:13 privatize 70:11,12 privatizing 102:16 107:25 109:15 182:11 182:18 privilege 11:15	199:6 privileged 60:3 113:13 privy 64:4 101:14 pro 161:6,7 300:22 proactive 148:15 probably 13:19 49:12 52:6 106:19 117:18 117:19 119:7 143:13 148:19 160:23 163:22 170:22,25 214:13 222:10 238:17 244:5 247:21,23 265:14 268:4 278:16 294:4 303:23 308:9,9 310:13 318:6 320:16 problem 44:2 77:15 109:14 129:13 247:18 273:20 278:19 295:5 308:3 316:18 321:21 322:11 problematic 66:6 problems 294:9 294:10 295:7 procedures 308:20 proceed 100:22 101:3 130:10 174:10 220:17 276:4 proceeding 240:11 proceedings 240:13 282:9 325:4 proceeds 62:18 65:16 67:6 process 5:10 6:20 7:2,7,22 10:6	59:12 61:12 63:9 75:22 76:15 99:14,18 101:10 103:9 104:11 106:4 110:13 112:17 113:2 115:6 122:24 127:8 137:20 145:7 156:4 160:22,25 161:22 162:6 167:24 168:15 169:16 170:24 174:23 175:3 189:16 190:11 191:17 192:25 207:17 208:18 208:23,24 209:11 220:17 229:12 240:21 244:5 256:24 260:17,18,18 294:8 305:14 306:19 313:2 317:6 320:20 322:11 processes 29:2,2 148:18 160:2 295:21 processing 122:18 procurement 218:12 produce 118:22 119:8 135:16 145:8 292:17 produced 21:20 104:16 producer 75:24 producing 22:9 134:9,11 product 19:11 production 26:15 26:21,23 32:16 38:21 39:8,18 75:11 96:4,8 135:8,14 141:9 142:6,14 143:5	products 14:10 22:25 23:2,15 28:7,11,19,24 75:22,23,25 76:8,16 77:3 105:23 150:23 278:17 profession 194:8 professional 49:19 98:13 professor 131:15 profit 156:11 196:17 235:18 283:25 298:22 profitable 62:4 87:6 181:6 profits 19:12 program 17:2,14 17:16 18:19 20:8,9 32:10 47:14 65:18 158:19 203:19 203:25 221:2 225:23 233:22 236:7 237:18 249:17 250:14 256:22 257:23 258:3 260:21 262:5,25 277:24 278:2,5,8,19,22 279:12,21 280:8 286:20,25 287:2 287:4,10,11,12 287:15,20 288:15,19 289:24 291:10 296:6 304:13,14 programs 16:18 17:5 18:20 82:13,22 83:4 83:17 89:3 130:24 133:14 151:13 160:5 185:12 204:2 207:3 238:19 272:25 277:18 277:21 278:21
--	---	--	---	--

287:2 288:24 295:16 300:3,5 304:12 progress 34:20 47:23 100:7 304:6 prohibiting 85:21 prohibitions 65:21 prohibits 184:3 project 38:11 52:5,6 113:25 125:18 142:17 143:4 projected 23:9 projects 22:19 27:8 120:17 139:15 233:9 278:14 prolific 26:16 prominent 257:19 promised 165:11 promises 307:20 promote 185:6 187:20 204:17 285:17 promoted 248:5 promoting 225:22 promotional 258:24 promulgated 239:11 propane 28:6 120:20 266:6 proper 205:6 310:20 properly 286:5 properties 247:3 property 105:13 proponents 290:12 proportion 15:5 proposal 10:16 79:6 101:15,18 102:9 107:4 112:20 318:12 318:24	proposals 64:2,3 144:3 292:21 proposed 8:12,16 18:6 57:15 60:25 79:4 93:10 106:15 285:23 286:16 289:12 proposing 105:18 249:18 proposition 86:7 86:17 prospect 191:10 prospective 98:24 99:14 127:17 protect 179:21 227:23 228:25 protected 178:17 178:22,25,25 250:8 protection 197:10 protections 178:18,20 196:8 protects 108:8 proud 11:14 provide 7:16 12:16 27:2,9 46:11,14 54:7 60:22 62:5 66:20 73:18 83:7,18 92:19 101:13 104:2 136:7,15 138:24 139:12 155:3 159:19 206:24 234:3 241:16 279:9 283:23 285:8 provided 61:13 62:14 149:5 286:17 provider 168:23 169:5 provides 17:19 25:12 29:10 137:16 153:2 278:8 280:5	providing 19:24 21:12 42:3 43:13 57:20 83:11,24 137:24 137:25 209:17 provision 289:20 289:22 provisions 128:10 128:11 proximity 72:12 95:4 97:19 98:7 211:24 234:13 pro-sale 244:7 PSC 153:25 PSEG 212:18 PSE&G 178:6 public 3:23,25 6:10 7:20 14:3 61:5 64:8,19 79:17,22 86:13 86:15 108:18,21 111:22 134:4,12 135:2 137:15 153:21 154:8,18 169:19 208:8,18 208:23 209:10 216:18 232:8 236:23 240:11 259:8 262:13 277:13 282:6,18 283:9,10,23 284:7,21 285:14 298:12 300:10 315:9 325:15 publicly 102:20 146:22 153:19 155:16 180:25 258:22 268:8,13 312:3 public-private 41:8,22 90:14 93:11 103:11 109:25 110:3 160:25 166:18 166:24 167:9 168:3,19 187:16 235:2,15	public-sector 109:15 157:11 184:3 197:6 published 65:15 PUC 14:4 20:8 218:13 273:24 287:20 317:24 Puerto 141:11,14 pull 11:2 150:21 190:7,9 192:4 pulled 146:4 pulse 37:17 pumps 221:17,17 purchase 7:14 57:4 59:3 78:7 93:9 178:20,23 179:7 180:21 193:4 264:14 274:8 purchasing 218:9 purely 144:3,6 purpose 3:24 65:25 66:9 166:8 219:22 221:15 purposes 24:16 31:11 77:6 184:25 pursue 12:19 31:16 38:25 43:22 46:15 55:12,17,19 63:20,25 86:8 pursued 53:14 61:20 142:25 pursues 42:5 pursuing 20:23 40:18 45:16 46:8 56:14 70:24 85:17,21 86:18 87:16 148:16 225:3 push 141:8 247:7 247:8 297:21 pushed 193:16 put 28:3,9 43:2 64:13 65:13	66:8 84:18 104:9 105:25 111:25 117:14 118:14 124:13 126:7 134:18 135:6 150:25 156:8 158:20 164:5 176:23 222:7,10 223:18 241:22 245:5 247:24 253:23 254:8 262:12 268:3 298:2,13 298:25 299:22 300:9 307:20 308:14,15 317:13,21 318:10,23 319:9 puts 39:8 162:13 putting 160:13 277:11 314:2 p.m 1:7 324:2 P3 70:13 93:11 104:22 143:24 144:5 P3's 103:20,24
Q				
Quaker 212:16 qualifications 59:2 133:19 quality 121:8 184:8 quandary 263:14 quartile 157:15 157:17,20 quasi-governm... 203:6 Queen 264:19 question 11:24 41:20 42:24 43:3,9,16 49:8 50:16,17 52:2 55:25 56:6 57:13 59:12 63:23 64:22 65:20,23 70:8				

70:14,18 74:17 79:25 80:12 81:13 86:21 95:22 117:18 120:7,13 124:16 124:18 135:4 143:15 150:12 151:17 167:8 169:24 187:13 187:18 188:9 192:17 193:6 202:11,15 208:19 233:17 245:7 250:22 255:21 256:20 265:7 312:25 questioned 283:3 questions 41:12 58:21 63:17 69:18 70:10 77:22 92:2 93:4 106:6 113:4,14 123:13 131:24 142:20 147:24 151:24 160:17 180:9 187:11 198:6 208:21 210:24 211:5 229:17 230:11 241:12 269:9 274:6,9,13 305:4 319:25 320:3,5 quick 88:17 124:11 160:17 167:11 168:7 190:24 243:22 quicker 231:8 quickly 20:14 129:15 131:20 154:16,21 161:20 169:2 238:21 275:23 290:8 294:15 Quilici 57:10,11 58:4 59:8 60:14 60:20 61:15,24	62:7 63:5,22 64:14 65:11 66:19 67:14,23 68:6 78:6,13,25 QUINONES-S... 1:16 quite 11:10 20:21 74:22 134:19 141:20 155:24 191:6 212:20 217:23 224:14 225:7,8,21 263:23 268:22 270:9 274:6 305:17 quo 99:24 quote/unquote 8:23 R race 96:25 97:4 124:25 125:23 radio 282:23 rail 24:25 73:9 74:24 75:18 98:7 206:8 raise 43:21 206:15 raised 9:15 63:14 63:16 65:22 67:5 77:23 100:25 165:15 231:21 raises 177:2 raising 49:24 141:5 246:20 249:21 288:20 319:15 ran 249:19 range 36:18 52:23 63:8,10 78:11 96:14 135:18 145:24 rank 62:3 rapidly 164:23 ratcheting 141:17 rate 26:22 109:11	153:4,23,24 158:7 164:24,25 216:11,17,20 240:10 248:15 257:5 258:8,15 260:8 263:4,6 ratemaking 13:24 ratepayers 217:6 226:3 228:6,13 228:15 248:18 248:20 284:13 298:21 312:9 rates 16:10 44:18 96:4 103:23 141:5 158:6 165:11,12,15 213:16 216:10 216:12,15 233:18,25 234:18 246:20 249:22 253:14 263:12 271:13 277:15 288:5 290:14,15 292:8 294:25 295:2 302:6 rating 161:16 216:5 ratings 157:18 rational 295:20 rationalizing 273:18 reach 72:14 171:9 reached 63:24 react 272:14 reaction 194:19 236:25 read 4:3 14:19 41:24 47:10 67:18 82:19,19 87:8 92:25 114:17 131:16 218:10 258:17 reading 81:15 257:25 ready 92:12 147:11 189:16	192:21 226:17 229:8,12 275:21 298:4 304:2 323:17 real 7:21 51:2 52:22 53:9,12 53:19 54:7 123:20 124:11 144:24 158:20 165:9 216:7 261:4 291:16 305:4 realistic 51:14,16 105:3 121:23,25 135:6 reality 99:23 108:20 109:19 127:10 192:17 289:23 realize 13:16 262:25 realizes 292:14 really 4:17 5:13 13:7,11 15:15 17:7 18:24 19:18 40:7,10 40:15 41:10 47:18 48:14,20 51:25 64:21 65:19 67:7 72:8 79:2,5 105:25 111:5 125:25 127:2 128:25 134:7,11 135:21 137:22 140:11 141:8 143:2,16 146:6 147:3,20 152:22 156:21 159:4,5 164:15 173:7 178:16 179:22 196:7 200:2,23 202:11 203:4 205:20 208:10 210:7 212:14 223:12 223:25 241:6 255:14 257:17	258:7 268:16,21 271:21 273:7,13 296:2 307:12,14 313:6,23 realm 200:15 reason 54:13 134:15 179:13 209:13 226:3 227:19 240:18 240:24 255:8 262:6 reasonable 8:3 23:23 39:20 254:11 272:25 292:20 reasonably 41:25 135:15 reasons 70:9 100:3 184:10,23 240:3 283:6,8 283:18 rebirth 94:7 recall 62:13 63:11 68:19,22 69:2 78:14 214:17 218:7 receipts 204:4 receive 187:3 216:3 received 35:12 216:17 recess 173:19 323:21 recessed 324:2 Recession 201:2 reciprocating 220:15 recognize 3:18 134:2 154:20 274:18 291:11 recognized 289:15 recognizes 70:3 77:17 84:25 184:18 194:14 230:8 236:14 249:7 259:18
--	---	--	---	--

recognizing 13:2 62:8	reduction 277:17 288:8	39:12 40:17 72:9,16 75:12 76:6 96:24	106:25 167:22 168:22 169:8 210:10	304:15
recommend 84:12 101:16 264:13,15	reductions 52:19	117:11 126:13 139:15 144:13 149:13 201:22 202:22 203:16 204:19 206:12 209:4,6 211:21 211:25 212:4 217:9	relationships 15:4 15:7 145:20 231:12	renewed 126:6
recommendation 313:22	reenforce 164:22	regional 70:15 72:5 73:15 92:23 94:17,21 97:23 98:11 105:14,15 136:3 136:8 139:17 144:10,12	relative 39:10 151:9	repair 287:9 289:9
recommended 12:18	reentry 304:13	regs 141:22	relatively 2:18 91:21 150:6 213:22 233:24	repairing 186:5
recommending 204:6	refer 65:14	regulate 153:25	reliability 137:7 154:10	repairs 279:17
reconfigure 51:21 219:8,24	reference 66:21 165:25 167:18 245:7	regulated 43:6,11 102:23 267:3 298:19	releases 64:8	repeatedly 7:12
record 77:25 78:24 82:6 93:2 106:18 115:6 130:11 174:9 181:25 199:3 262:13 268:4 297:7,17 308:3 312:14 323:11	referenced 31:18 50:20 52:13 57:17 110:6 142:4 245:3	regulation 14:11 141:16 153:21 284:3,5 287:21	relevant 136:13	repent 311:17
records 307:21	references 93:7	regulator 43:2,8 43:24	reliant 12:16 271:2	replace 46:23 66:5 101:20 189:7,11 193:13 194:2 248:8,13 257:4,10 258:11 263:19 264:15 299:14
recover 261:8,13 287:23	referred 75:7 168:20	regulatory 13:23	relocating 89:11	replaced 45:6 220:9 231:16,22
recovered 140:17 261:6	referring 61:16 116:21	rehabilitation 278:14	rely 20:20 26:5 233:10	replacement 17:2 20:9 67:8,13,14 67:19 80:17 102:10 133:14 158:19 160:5 214:22 237:25 249:15,16,17 257:3,15 258:20 267:11 286:13 291:5,8,15
recovery 259:21	refers 78:7 89:2 118:8	reiterate 184:12 240:18 312:21	remain 23:9 27:15 41:2 96:6 185:18,22 186:12 188:5	replacing 20:14 20:16,17 104:5 196:14 215:14 223:6,7 231:23 258:10 259:3
recruitment 304:19	refine 75:23 23:14	reiterate 184:12 240:18 312:21	remaining 41:15	replicate 303:12
rectification 99:19	refined 22:25 23:14	reiterate 184:12 240:18 312:21	remains 102:24	report 11:11,12 11:12,14 15:2 20:3 28:14 57:14 60:3 61:14 62:9,10 62:13 63:6 65:12 68:2 126:7,10,11 187:15 217:24 218:15 234:25 308:6
redid 176:22	refinery 93:17 195:6	reiterate 184:12 240:18 312:21	remarks 131:14 223:5	reporter 325:23
reduce 67:19 68:4 101:20 137:6 159:5 226:5,7 248:14 262:20 272:6 278:2,4 279:18 280:4 289:2,2	refining 28:22 76:20 77:5	reiterate 184:12 240:18 312:21	remember 7:12 183:2 229:20,22 266:16	reports 47:11 59:17 201:15
reduced 19:19 139:21 214:20 215:20 262:19 278:24 288:19	reflect 284:24	reiterate 184:12 240:18 312:21	remembers 183:24	
reduces 216:8,21	refreshing 175:3	reiterate 184:12 240:18 312:21	remote 158:25	
reducing 33:10 36:25 224:15 226:9	refueling 44:15	reiterate 184:12 240:18 312:21	removal 282:20	
	refuse 306:15	reiterate 184:12 240:18 312:21	remove 250:12	
	refused 7:16	reiterate 184:12 240:18 312:21	removed 28:8 231:15 260:11	
	regard 54:24 55:5 57:16 60:23 61:19 68:8 95:23 97:7 102:19 215:11 243:3	reiterate 184:12 240:18 312:21	renaissance 133:4 144:17,18	
	regarding 39:17 92:20	reiterate 184:12 240:18 312:21	renegotiate 316:15	
	regardless 4:21 195:9	reiterate 184:12 240:18 312:21	renewable 281:2 281:3	
	region 1:20 4:10 5:25 9:21 36:9 37:3,21 38:6,12	reiterate 184:12 240:18 312:21	renewal 152:19	

257:24 283:9	37:1 38:1 39:1	152:1 153:1	246:1 247:1	24:6 102:23
represent 109:19	40:1 41:1 42:1	154:1 155:1	248:1 249:1	103:12 205:23
174:14 207:16	43:1 44:1 45:1	156:1 157:1	250:1 251:1	213:7,11 222:23
218:19 276:6	46:1 47:1 48:1	158:1 159:1	252:1 253:1	246:6,9 247:10
282:7,11 304:9	49:1 50:1 51:1	160:1 161:1	254:1 255:1	271:11 282:8
representatives	52:1 53:1 54:1	162:1 163:1	256:1 257:1	285:11,18
94:18	55:1 56:1 57:1	164:1 165:1	258:1 259:1	287:22 288:3,15
represented	58:1 59:1 60:1	166:1 167:1	260:1 261:1	289:17 290:4
29:24	61:1 62:1 63:1	168:1 169:1	262:1 263:1	293:7,9 294:20
representing	64:1 65:1 66:1	170:1 171:1	264:1 265:1	residential
245:6	67:1 68:1 69:1	172:1 173:1	266:1 267:1	287:24
represents 109:21	70:1 71:1 72:1	174:1 175:1	268:1 269:1	residents 46:20
182:22	73:1 74:1 75:1	176:1 177:1	270:1 271:1	47:3 82:24
reprieve 182:17	76:1 77:1 78:1	178:1 179:1	272:1 273:1	248:23 283:24
183:6	79:1 80:1 81:1	180:1 181:1	274:1 275:1	284:8
reproduction	82:1 83:1 84:1	182:1 183:1	276:1 277:1	resolution 1:19,19
325:20	85:1 86:1 87:1	184:1 185:1	278:1 279:1	4:2,4,5,6 9:15
Reps 85:5	88:1 89:1 90:1	186:1 187:1	280:1 281:1	100:4 202:14
request 59:2	91:1 92:1 93:1	188:1 189:1	282:1 283:1	217:18 289:5
79:18 80:8	94:1 95:1 96:1	190:1 191:1	284:1 285:1	323:20
216:20,21	97:1 98:1 99:1	192:1 193:1	286:1 287:1	resolved 274:10
requests 153:4	100:1 101:1	194:1 195:1	288:1 289:1	resource 30:25
require 54:5 86:5	102:1 103:1	196:1 197:1	290:1 291:1	31:9 74:5
169:20 220:15	104:1 105:1	198:1 199:1	292:1 293:1	205:13
required 3:5	106:1 107:1	200:1 201:1	294:1 295:1	resources 21:18
108:25 148:21	108:1 109:1	202:1 203:1	296:1 297:1	22:7 29:22 30:5
169:21 247:2	110:1 111:1	204:1 205:1	298:1 299:1	31:6 71:16
292:15 298:12	112:1 113:1	206:1 207:1	300:1 301:1	72:12,14 75:16
317:21,21,23	114:1 115:1	208:1 209:1	302:1 303:1	75:18 98:12
requirement 78:8	116:1 117:1	210:1 211:1	304:1 305:1	159:25 160:3
218:12 257:15	118:1 119:1	212:1 213:1	306:1 307:1	240:6 282:14
287:17	120:1 121:1	214:1 215:1	308:1 309:1	respect 43:4 44:9
requirements	122:1 123:1	216:1 217:1	310:1 311:1	51:10 93:9
119:4	124:1 125:1	218:1 219:1	312:1 313:1	106:19 107:3
requires 55:14	126:1 127:1	220:1 221:1	314:1 315:1	208:10 211:14
89:16 292:6	128:1 129:1	222:1 223:1	316:1 317:1	218:6 245:14
RES 3:1 4:1 5:1	130:1 131:1	224:1 225:1	318:1 319:1	305:17
6:1 7:1 8:1 9:1	132:1 133:1	226:1 227:1	320:1 321:1	respects 124:6
10:1 11:1 12:1	134:1 135:1	228:1 229:1	322:1 323:1	200:6
13:1 14:1 15:1	136:1 137:1	230:1 231:1	324:1	respond 284:22
16:1 17:1 18:1	138:1 139:1	232:1 233:1	research 74:11	responded 2:25
19:1 20:1 21:1	140:1 141:1	234:1 235:1	84:10 160:11	responding 81:19
22:1 23:1 24:1	142:1 143:1	236:1 237:1	reserve 96:3	150:2 282:22
25:1 26:1 27:1	144:1 145:1	238:1 239:1	reserves 95:6	response 54:6
28:1 29:1 30:1	146:1 147:1	240:1 241:1	97:19	167:11 172:16
31:1 32:1 33:1	148:1 149:1	242:1 243:1	residences 15:6	198:8 272:2
34:1 35:1 36:1	150:1 151:1	244:1 245:1	residential 20:19	275:18 320:7,7

responsibilities 167:20 282:5 responsibility 11:13 17:13 18:18 47:13 228:22 233:22 287:12 responsible 123:23 289:19 responsive 284:4 rest 237:20 restore 99:22 restrictions 100:17 rests 94:24 97:17 result 3:6 21:21 27:4 44:18 101:16 134:24 139:20 285:14 288:9 resulting 21:19 results 134:9,11 resurgence 126:6 retail 139:2 retained 59:20 retire 46:23 101:24 188:19 188:20,25 189:3 189:25 227:3,4 retirees 46:23 191:13 retirement 102:11 226:23 retiring 191:20 193:20 retreat 9:25 205:11 retrofit 141:21 265:18 retrofits 266:18 retrofitting 265:8 retrospect 111:5 return 103:23 258:14 260:23 267:2,3,14 285:10 293:5,9 returns 291:2	reutilization 304:14 revenue 103:21 141:2 153:14 216:23 226:10 248:14 revenues 158:4 236:2 259:23 260:2 291:22 292:7 reverse 202:18 reversed 295:8 review 58:23 59:10 60:21 62:10,12 64:7 64:14,15,20 65:7 100:24 168:12 reviewed 60:6,16 revisit 77:22 289:7 revitalize 28:22 revitalized 76:20 reward 169:4 178:14 180:5 rewarded 46:17 Reynolds 1:16 184:19 RFP 300:22 rich 74:4 95:15 98:6 121:5 Richard 185:25 Richmond 29:13 49:17 221:8,21 Rico 141:11,14 right 6:5 14:15 16:4 23:16 28:13 30:3 31:2 33:5 38:17 43:23 54:11,15 58:3 69:14 76:13,16 83:14 85:25 95:24 111:4 117:6 119:19 122:8 129:9,20 130:6 131:18 146:21	147:12 148:7 157:25 165:6 170:16 171:10 174:15 182:7,9 182:11 184:14 184:14 189:3,25 196:19 215:25 222:3 228:11,14 228:17,20 232:5 236:9 237:6 238:5 241:23 245:11 246:6 248:18,22 249:5 256:11 261:4 264:3 281:2 296:9 297:9 299:6 308:23 309:2 312:11 314:5 rights 179:7 rights-of-way 128:6 right-hand 16:17 Rinaldi 91:2,6,20 91:22 92:3,11 92:15 106:9 113:21 114:24 119:9,20 120:6 120:12 121:24 123:13 124:3,24 126:18 129:4,6 129:10,16 142:4 204:20 205:16 212:12 252:21 252:24 Rinaldi's 254:5 ring 190:19 ripe 267:20,22,22 rise 222:2 rising 140:19,21 158:7 risk 41:6,20 43:14 43:15 105:7,7 176:7 225:4 228:8 239:6 250:11 264:7 267:5 271:21	272:6 risks 40:20,24 41:4 62:19 224:9 235:4 285:24 286:7 risky 49:5 68:14 risk/reward 267:6 river 49:24 73:4 105:13 206:5,6 road 178:15 Roadmap 200:10 roads 73:10 Rob 198:13 199:5 222:14 Robert 10:12 275:20 281:25 Robust 95:18 ROE 197:2 role 97:9 100:13 138:16 147:22 150:13,15 168:11 185:8,10 207:11 208:11 208:13 226:16 252:23 253:2 282:6 roles 168:6 roll 189:16 room 1:6 36:2,4 58:15 90:4 106:20 109:20 142:13 143:13 150:11 161:25 301:24 rotating 152:18 roughly 20:10 31:13 round 118:6 215:24 220:23 route 141:15 214:10 routes 224:17 RPR-Notary 325:15 RUB 295:22 RUBS 295:11	Rule 239:9 rules 9:5 153:3,4 239:9 ruling 128:12 run 23:18,20 37:5 77:3 101:22 108:5,10,14,18 118:5 147:18,18 150:5 153:11 155:15,22 156:10,12 158:24 161:13 220:15 254:24 254:25 255:2,3 rung 199:16 Runkle 174:16 181:22 182:2,2 185:15 187:23 189:2 190:6 193:21 195:18 running 75:18 190:15 R&D 133:8
S				
sacrifices 175:14 178:13 safe 12:16 126:4 189:14,22 271:2 282:17 285:9 safer 158:22 safest 190:17 safety 137:6 184:7 257:9 277:16 sale 7:13 8:5,21 57:15 62:20 63:21 64:25 65:16,25 66:9 66:18 67:2 99:14 100:22 101:23 103:5,9 106:13,15 161:6 161:7 174:25,25 175:9 179:5 181:6,19 188:2 188:18,22 189:6 191:17 192:25				

194:23 195:3,4 195:10 197:3 216:24 245:8,17 245:18 256:25 257:13 271:25 275:7 277:3,9 277:13 285:23 286:24 289:12 289:21 290:12 298:15 322:14 sales 19:5 32:4,15 33:11 36:9 63:9 140:12,13,15,17 140:22 195:20 235:6 sale's 286:17 San 110:4 166:15 sat 310:3 satisfaction 157:13,16 satisfied 186:11 satisfy 62:21 183:19 saturated 24:5 222:22 saturation 18:10 44:25 save 17:6 46:2 53:2 108:17 218:22 228:13 saved 218:16 saving 124:7 savings 16:11,12 16:20 23:21 36:16 51:24 224:21 saw 3:21 87:4 134:3 139:11 saying 2:9 76:7 81:24 110:25 157:9 163:2 168:14 174:22 195:9 252:7 271:12 280:11 317:11,14 318:5 says 60:3 138:2 290:15 317:20	321:9 322:3 scale 166:25 scary 191:6 scenario 34:7 196:22 schedule 262:13 scheduled 2:19 145:13 172:17 200:13 school 131:15 206:25 207:4,12 210:8 Schuykill 206:5 scope 79:5 se 67:10,16 93:6 sea 98:6 145:4,9 seaboard 105:12 search 104:11 207:17 seasonal 30:12 Seasons 46:4 second 2:14 38:14 43:3 66:6 91:14 91:16 98:17 100:9 118:3,24 145:16 236:23 239:3 249:25 250:21 251:7 284:3 293:18 297:6 Secretary 132:23 174:18 sector 39:3,4 79:21 86:13,14 86:15 147:23 161:10 196:5,20 202:18 204:8 207:24 265:17 265:21,25 311:4 sectors 201:25 securing 64:2,3 Securities 60:11 security 49:25 sedans 45:4 see 7:12,18 12:10 14:20,21 15:13 23:3,7 26:12	30:7 31:8 32:2 47:11 71:17 72:17 74:14,15 77:12 87:3 90:20,25 106:13 107:22 130:19 147:6 151:7 161:8 167:14 195:19 225:18 229:5 230:25 231:20 238:20 240:24 241:14 242:23 254:12 281:11 294:7 seed 253:21 seeing 24:18,21 144:16 146:14 240:22 246:7 seek 79:16 207:5 seeks 285:15 287:12 seen 68:18 81:16 202:3 249:12 265:24 selects 153:8 self-insurance 215:6 sell 32:10 55:21 64:2,3 66:12 85:13 117:16 127:22 178:16 179:18 180:6 194:24 320:19 seller 322:5,5 selling 19:10 44:14 45:23 221:19,20 277:12 sells 266:12 Seltzer 211:2 270:10,11,16 274:18 275:8 Senate 199:22 send 100:5 111:12 188:12 311:3 sends 209:5 senior 133:22	155:24 189:15 234:10 280:6 289:22 296:23 300:5 seniors 180:18 277:18,23 sense 34:7 35:9,10 87:18 110:6 154:12 164:19 sensitive 184:7 sensors 158:25 sent 76:8 111:12 305:19 separate 135:10 266:10,11,13,24 serious 82:14 295:5 seriously 42:23 209:8 310:24,25 311:11,18 312:7 seriousness 199:24 serve 15:19 18:12 26:7 30:10,15 46:20 97:15 135:9 141:11 199:6 283:14 284:18 285:7 serves 15:17,19 283:23 291:25 service 12:17 25:20 51:11 73:18 129:7 135:11 137:16 137:24 153:21 168:23 169:5 184:9 192:14 231:13 234:4,9 252:14 271:2 272:15 282:15 282:17 283:23 283:25 285:10 288:10 302:14 serviceman's 224:17 services 60:10 80:6 81:4 138:7	141:6 155:4 266:8 282:3 servicing 294:4 serving 30:21 33:15 135:24 137:10 282:5 session 3:4 sessions 200:11 set 80:2 82:16 104:15 136:20 148:21 156:6,10 157:22 169:4 183:14,15 206:23 244:15 244:24 266:2,24 277:21 289:16 300:23 316:12 316:15 320:20 sets 150:20 151:20 209:18 318:19 settlement 302:3 seven 104:23 152:16 seven-county 144:13,16 sewer 137:16 152:11 shaded 26:11 30:4 30:25 shaking 69:6 shale 15:13 19:17 21:18 22:7 25:13 74:4 76:3 94:4 95:5 96:6 113:17 201:12 204:19 211:25 302:17,21 shame 182:8 192:8 shape 88:3 share 151:8 232:12 235:4,17 243:10 298:20 304:2 321:23 shareholder 196:17 228:3,4
--	--	---	--	---

228:5	side 13:24 16:17	128:18 142:6	slight 90:11	son 131:16
shareholders	25:2 125:4	223:12 235:24	slow 237:2 307:12	soon 314:7
226:2 227:17,25	144:21 146:13	sited 255:7	small 9:2 143:6	sooner 189:20
228:10 235:12	147:21	sites 98:9 140:4	145:24 246:7	sorry 69:14 79:15
239:7	sign 192:5	142:8,9 221:18	264:4	80:13 188:8
sharing 221:23	signal 111:12	siting 153:23	smaller 143:8	194:20 241:18
sheets 49:5	209:5 311:3	253:6	166:22	242:3 293:12
shift 37:24 235:11	signals 100:5	sits 181:6	small-scale 135:8	301:8 304:21
265:8	signatures 277:2	sitting 199:9	135:14 141:9	sort 25:10 31:11
shifted 288:3	277:4,5	243:20	smart 96:17	31:21 36:14
shifting 36:25	signed 190:3	situation 9:7 71:6	242:24	37:9 38:21
53:3 288:16	306:22	71:11 93:8	snare 104:25	40:14 47:17,19
shifts 36:17 52:10	significant 2:19	100:4 104:2	snowball 76:24	74:17 75:8,24
Shikomba 275:15	27:18 42:12	215:20 317:4	snuck 256:10	83:14 151:8
276:3,5,6,13,17	47:22 49:11	six 34:23 35:6,8	social 18:17 61:5	186:3 188:7
276:22 281:18	134:24 158:19	104:23 112:7	156:5	257:19 272:11
281:20	159:4,19 168:10	200:11 217:22	Society 264:19	sound 13:13
ship 22:16 118:9	207:11 226:24	218:2 226:21	soft 131:21	284:15 317:11
shipped 147:11	246:12 254:3	254:6 270:14,22	sold 19:6 180:13	sounds 36:21
shipping 141:11	267:9	299:21 302:14	180:14,16	37:16 263:24
141:23 142:7	significantly 5:4	307:17	196:13 222:4	soup 238:6
143:17 145:4	53:17 140:14	sixth 47:8	237:8 240:23	source 25:23 46:4
ships 49:23	signs 42:20	sizable 153:18	277:9	113:13
141:13,21 142:2	143:17	size 17:15 39:17	sole 166:8	sourced 19:4 26:2
shoes 199:24	similar 71:2	40:16 49:11	solicitation 59:11	sources 141:2
shop 244:24	148:11 166:16	128:4 135:19	59:16,25 60:22	sourcing 19:22
319:19	211:3 246:18	162:18 163:20	63:25 104:11	22:7 302:17
short 51:5 123:14	247:6	sized 94:5	solicitations	south 93:18
173:19 207:24	similarly 170:14	skill 78:22 80:2	81:20	110:24 121:19
252:16	170:19	82:16 83:2	Solicitor 317:7	155:21
shortfall 65:4	simple 16:5 70:8	148:21 150:19	318:8,18 321:7	Southport 105:17
66:3	245:15	151:20	323:2	105:17,20,23
shortfalls 65:18	simpler 108:20	skilled 189:21	Solicitor's 41:25	southwest 25:18
short-term 89:14	simplifying	skills 98:14 146:4	217:15	Southwestern
290:14	273:17	skip 6:15	solid 39:9	27:23 201:13
show 126:12	simply 8:12 62:11	skipped 7:7	solution 138:10	space 127:20,22
178:23 280:24	64:2 262:11	slam 8:14 104:19	176:9,10	133:3 134:6,19
showcases 99:15	296:2 318:20	slate 27:8	solutions 93:16	166:25 207:8
showing 5:13	single 16:8 189:12	slated 188:25	98:3 114:2	221:8,12,13
27:14 42:20	201:20	slaughtered	120:7 138:4	266:23
161:3 278:3	sir 60:14 91:22	182:15	139:13 212:19	Spahr 60:12
shown 97:6	92:14 198:16	slide 14:14,15	solved 252:25	spanning 30:3
162:11	228:3 241:22	15:15,16 21:7	somebody 179:11	spare 127:5
shrunk 214:12,19	269:8 296:17	25:10,10 26:11	189:9 279:5	speak 6:21 7:23
shut 104:19 175:2	323:8,17	29:9,10 298:25	297:18	20:6 79:13
263:21,22	sit 180:7	slides 14:18 149:6	somewhat 76:19	82:17 129:14
314:23	site 75:15 120:22	152:5 156:17	109:17	131:4 186:13

274:16 275:13 305:13 speakers 149:17 speaking 37:18 53:10 86:14 115:20 145:2 164:9,13 252:22 263:17 spec 223:16,20 special 277:18 289:25 specialize 282:3 specific 23:5 33:8 63:11,21 68:7 75:3 78:11,15 79:6,25 107:9 159:9 168:25 specifically 68:23 69:2 169:7,25 specifics 165:14 208:16 236:5 260:19 318:21 specified 67:10 204:2 specifies 58:6 Spectra 116:4 spectrum 81:4 speculation 239:16 spend 50:3 141:20 234:16 240:5 250:18 259:20 261:5 302:9 319:22 spending 215:12 251:6 277:16 302:8 312:23 spent 115:16 132:19 185:15 spiral 247:17 spirit 202:15 203:9 spoke 18:17 222:14 291:9 spoken 101:4 274:21 290:25 sporadic 307:8	spot 115:19 241:22 spots 318:15 spread 33:16 96:20 213:14 spreading 44:18 Squilla 1:17 167:5 167:6 169:11 170:11,18 171:4 306:8 312:18,19 314:8 315:2,16 315:23 stability 154:10 217:7 271:3 stacking 207:20 stadiums 320:25 staff 61:9 136:17 156:16 270:3 staffed 226:21 stage 289:16 stake 197:25 stakeholders 4:23 6:14 7:5 101:2 101:11 106:16 205:5 292:2 304:17 311:25 stances 164:17 stand 177:18,25 179:21 214:12 223:18 226:16 227:9 298:4 323:20 standards 176:23 177:22 316:16 standpoint 247:14 260:22 stands 227:11 229:8,12 Star 145:4,9 start 2:4,9 3:16 4:15 6:4 10:6 14:17,22 16:5 16:16 70:8,14 173:21,24 174:2 174:21 193:9 200:21 205:17 211:6 238:4,21	249:25 264:9 282:22 318:14 started 106:24 125:20 142:19 152:9 176:16 213:3 214:5 243:16 starters 21:14 starting 6:10 35:18 66:22 147:6 305:10 starts 71:4 246:13 267:8 state 25:8 79:22 89:23 107:17 108:3 115:10 121:7 127:12 128:9 130:10 132:16 153:21 153:25 165:8 167:19 174:9 177:7 181:25 196:9 199:2 206:24 216:13 225:24 233:18 233:21,24 239:12 242:10 260:3 263:13 271:13 273:11 273:12 275:2 294:12 298:21 316:9 stated 67:18 180:25 statement 93:2 194:18 243:10 270:11,17 306:20,22 statements 64:8 64:19 states 19:18 27:7 134:20 234:25 283:11 state-of-the-art 186:19 256:9 260:13 stations 44:15	statistics 213:4,8 status 99:24 232:9 238:8 271:19 statute 289:25 statutes 273:12 stay 29:5 177:4 188:21 189:21 284:17 301:17 stays 149:22 steam 232:17,19 steel 101:22 122:18 250:7 steeped 98:11 stenographer 160:19 173:18 stenographic 325:6 step 41:9 127:22 127:23,23 128:5 136:7 176:9 177:9 203:17 204:14 208:5,6 238:7 255:6 stepping 254:13 steps 7:6 35:23 36:4 39:25 40:5 203:12,13 206:25 271:5 stewards 205:6 stewardship 268:7 sticking 155:9 stimulate 94:7 291:23 stock 231:15,16 287:8 stockholders 284:10,14 285:20 312:2 stone 300:23 stood 256:25 stop 69:17 84:11 241:20 261:14 stopping 85:14,20 87:2 storage 29:12,14 30:13,17 31:14	38:16,22 39:5 39:12 100:11 116:8 store 76:15 118:6 story 125:12,12 148:9 242:3 258:4 stove 121:9 straightforward 149:8 strategic 5:5 61:17,20 137:20 138:21 140:25 156:19 157:7 168:21 319:13 strategies 134:13 134:14 289:9 strategy 12:7 33:9 132:9 133:23,24 146:23 264:15 296:3 stream 28:8 103:21 streamline 128:10 273:14 streamlining 167:24 streams 226:10 248:14 street 4:24 187:4 313:16 strength 28:15 42:20 strengthen 5:3 185:5 strengthens 208:23 strengths 11:13 284:24 strictly 149:3 strife 195:25 strike 184:2,2,2,6 strikes 195:25 strive 304:10 strong 34:18 95:18 96:17 97:25 100:5
---	--	---	---	--

128:14 181:18 208:23 209:5 268:20 stronger 34:12,14 34:21 strongest 286:21 struck 94:12 257:17 structure 13:10 100:18 112:3 113:19 136:19 150:13 153:24 154:4 156:3 164:14,16 165:22 169:8,18 236:20,25 273:18 structured 170:13 170:14,19 struggling 229:24 studies 126:11 134:10 study 40:3,8,15 49:19 68:2,7 166:23 280:24 281:15 stuff 14:12 121:8 308:4 style 155:18 subject 20:15 143:23 153:20 250:8 262:3 273:11 287:16 subjectively 98:21 submitted 210:17 210:21 subscribed 135:15 subsidiary 43:7 144:15 266:9 subsidy 280:4 substantial 23:8 53:16 101:25 142:10 substantially 138:18	success 16:2 72:19 175:15 successes 171:2 successful 7:10 46:24 88:23 143:15 151:22 168:2 175:25 successfully 157:11 158:6,8 succession 226:19 243:19 268:23 succinct 270:20 sudden 221:5 suffering 295:7 suffice 99:18 133:21 sufficient 37:22 suggest 203:12 209:9 279:22 suggested 42:16 291:11 suggesting 280:22 suggestion 279:8 suggestions 13:4 304:3 309:22 suitable 104:22 300:11 suite 18:19 suited 107:17 summarize 210:22 summary 50:19 summit 111:15 255:8,8 Sunoco 70:23,24 76:7 93:17 98:4 120:14 195:6,8 197:18 212:17 super 117:12 supervision 325:22 supplement 250:14 supplier 24:13 28:16 56:16 suppliers 304:9 supplies 19:22	25:17,19 27:21 53:3 185:6 supply 13:24 14:9 16:7,8 19:4,7 25:11 26:9 29:22 30:5,25 31:6,9 35:19 36:17 37:2 51:21,23 52:10 52:18 115:17 116:7 119:16 127:14 184:9 218:18,20,21 220:2 224:24 233:20 253:12 302:25 supplying 71:25 138:5,6 supply-related 21:3 support 16:25 35:4 43:13 94:21 95:18 97:24 107:23 108:17 112:14 168:10 169:9 175:9 211:15 229:8 233:14 269:18 280:16 283:20 299:24 supported 94:15 130:25 224:14 269:25 supporting 23:16 109:7 185:11 supportive 106:3 supports 17:10 107:22 suppose 50:7 supposed 8:9 179:5 322:23 Supreme 128:11 surcharges 263:5 sure 2:20 3:14 35:18 43:12,25 64:21 111:10,14 147:24 164:18	171:8 173:7 190:18 199:4 206:18 211:4 264:12 295:15 295:18,19 296:4 317:5,18,19,24 323:14 surplus 19:6,9 32:11 surprised 81:17 surround 263:3 surrounding 57:23 99:14 survey 283:5 Susan 172:11,25 173:12 suspect 101:21 suspend 91:11 sustainability 133:3 185:7 sustained 32:14 sweet 115:19 switching 24:8 Sydney 155:13 synergies 251:23 252:6,6 synthetic 123:5,5 system 29:21 33:14,22 37:10 38:24 40:9 44:14 45:20 73:9 88:3 139:7 142:15 158:21 220:10 234:13 234:17 250:16 253:5,11 273:4 291:13 systems 252:8 281:5 283:11	298:2 TAG 294:3 tail 190:14 take 5:15 9:6 10:4 16:10 35:15 38:24 44:7 51:7 51:18,19 52:4 56:3 65:2 72:10 72:13,25 79:9 82:23 88:5 95:4 96:20 104:9 113:12 122:23 122:25 125:14 138:16 150:8,16 160:18 163:25 164:18 171:16 173:17 176:7 199:25 208:4 210:23 211:4,19 218:4 220:5 224:24 229:16 230:3 235:10,17 239:7 247:20 249:17 264:8 267:5 274:2 292:22 304:22 310:24 311:11 312:6 takeaway 27:2,10 taken 35:22 39:25 40:4 124:15 179:23 221:18 252:4 271:6 314:19 325:6 takeover 183:3,8 takes 44:22 74:18 100:14 122:14 125:19 196:21 205:18 209:7 313:23 318:4 talent 192:9 talk 4:18 10:2 15:13 19:16 67:5 74:3 107:6 109:5,14 110:21 111:15 124:16 136:10 156:18
---	--	--	---	--

158:10 161:18 162:8 164:3 186:2 212:10 215:9 218:5 223:17,19 232:20 237:9 248:15 249:15 271:24 301:5,9 303:14 304:23 305:5 307:19 308:13 312:24 talked 49:15 50:22 107:7 112:12 121:15 148:11 158:4 187:14 223:3 230:11 246:20 258:4 295:9 298:18 306:14 308:5 talking 15:25 33:7 38:5 49:16 81:5 136:18 159:21,23 165:20 172:11 172:25 173:12 181:5 192:9,12 195:20 262:22 263:8 309:22 talks 74:7 322:15 Tampa 139:5 tangibly 100:9 tank 117:15 118:15 221:9 222:10 tanks 30:22 221:7 221:8 target 183:9 tariff 115:17 Tasco 1:17 4:15 6:4,6 112:10 120:5 121:13 123:9 183:24 205:10 230:9,10 230:17,20 232:11 233:16 234:24 236:9	269:10,11 270:4 274:19,22,23 320:12,13 task 126:10 203:3 206:16 tax 89:15 128:14 128:16 203:18 203:23,25 204:3 204:4,7 246:15 taxes 181:13 248:25 249:3 taxpayers 312:8 teach 83:8 team 11:9 18:15 46:12 57:13 58:23 66:16 79:18 93:20 121:3 145:5 157:21 204:21 208:15 212:13 212:15,24 244:2 244:14,15,20 245:16 255:15 268:6 team's 64:9,15 technical 13:24 207:3 309:8 techniques 159:3 technologies 21:15,21 133:13 159:18 160:9,12 167:13 169:3,7 technology 18:23 18:24,25 31:23 73:22 130:18 131:2 133:7 159:9 247:21 technology-rela... 159:10 teed 54:16,18 90:21 91:7 teeing 129:3 teeth 132:10 telecom 139:9 televised 58:17 tell 7:17 79:8 113:23 124:15	130:4 164:22 177:20 180:11 241:19 245:22 245:23 256:8 278:25 305:12 307:15,16 telling 257:7 tells 181:8 template 84:3,6 84:13 Temple 225:13 temporary 32:4,9 182:17 183:6 ten 26:18 87:22 91:23 133:11 193:18 201:25 213:23 238:11 239:24 259:13 260:11 261:3 264:5 tenants 143:18 294:5,7 295:14 295:15,17 tend 108:3 tens 50:3,5 tension 284:12 ten-year 216:16 319:21 term 32:13 51:25 70:19 74:21 107:24 118:4,8 150:7 290:19 terminal 75:21 76:15 239:24 terminals 22:15 termination 295:2 terminations 294:24 terms 18:7 24:19 28:21 34:3 36:7 36:22,23 37:6 37:25 44:11 48:8,9,11 53:2 54:22 56:10,21 56:21,22,23 57:3,5,5,6,7	61:3 62:3 64:16 68:10 74:23 107:18 108:17 112:4 121:22 152:19 159:16 162:5 165:10,24 165:24 191:7,12 243:19 246:4 247:8 259:2 273:5 285:25 286:17,24 289:11 294:19 318:22 322:17 terrible 175:21 terrific 120:13 122:4 272:18 territories 25:20 territory 135:11 testified 205:16 testify 2:17 177:7 296:16 297:9 323:13,23 testifying 3:13 306:12 312:23 testimony 3:2,25 54:25 68:11 74:2 85:7,11 87:7 91:21 92:19 93:5 110:2 124:14 135:21 149:11 152:4 184:17 194:10 198:15 198:20 203:10 204:16 206:22 210:3,22 223:4 244:19 245:3,5 252:21 282:25 285:6 306:13,15 307:21,24 311:13 testing 54:18 Texas 113:16 116:3 text 78:2 thank 2:4,8,12 3:15 4:12 6:2,6	10:6,8,10,23,25 11:7 21:5 41:17 50:15 54:15,20 58:8,11,13 69:23 70:2,5 74:12 77:19 80:23 84:20,21 84:22,24 90:5,7 91:19 92:10,11 106:5,9,9 112:13 113:2,6 113:8 120:3,5 121:14 123:9,25 124:3,10 128:21 128:23 130:10 131:3 160:14,16 160:21 166:11 167:4,6 171:5,7 171:8,18,20,21 171:25 172:10 172:14 173:21 174:3,5 175:7 179:20 181:15 184:17,17,20 190:20,21 194:9 194:11,13,16 198:2,5,10,11 200:4 209:25 210:3,11,12,16 211:9 229:14,19 230:7 236:10,11 236:13,16 243:11,13 244:3 249:5,5,9 256:11,16 264:23,24 265:3 268:8,12,14 269:5,7,12,21 270:4,5,6 274:15 275:8,9 281:17,18,19,25 290:8 293:11,20 293:21,23,23 296:10,12,13,20 306:9 309:19 310:5,6,7 312:4 312:12,15,16,19
--	---	--	--	---

315:23,24 316:3 319:24 320:8,9 320:14 323:4,6 323:7,8,24 thanking 312:22 thanks 35:17 92:18 174:22 203:23 306:11 theirs 266:9 theme 18:4 themes 285:2 theory 321:12 they'd 40:17,21 223:18 261:6 thick 257:13 thing 4:20 90:24 116:12 123:23 125:20 126:21 127:11 164:19 167:23 169:23 175:25 177:5,17 179:10 181:19 181:23 182:4 188:10 190:17 216:21 249:4 250:23 256:25 268:10 292:13 305:18 313:18 314:22 317:9 319:2 things 15:8 16:13 16:23 17:3 18:3 34:3 36:22 50:25 51:8 57:24 65:10 73:24 74:22 75:22 85:8,17 86:4,11 87:16 106:17 107:2 117:5 122:16 124:11 133:11 136:22 137:3,5 137:21 138:8 149:4 153:22 154:15 156:9 158:10 161:4 164:21 167:13	168:12 175:11 175:19,23 176:3 193:3 194:21 196:8 214:9 216:2 219:6 223:24 225:8,19 231:5 232:2 233:6,12 243:24 251:24 263:7 266:3 268:19 283:20 294:14 297:3 299:6,22 301:25 305:6,10 306:12 317:10 318:25 319:8 think 4:20 7:2 18:9 28:14 32:21 33:19 35:8,10,20 36:2 36:6,20 38:12 38:18 39:24 50:23 53:10 58:21 61:15 68:19 69:9 71:14 72:2,21 72:23 74:19 76:22 77:6 82:10 84:12 86:7 91:23 99:16 104:20 107:8 110:11 112:24 116:20 121:24 124:4 125:2,2,23 126:18 130:23 135:4 136:7,13 136:17 137:17 138:17 139:11 144:7 146:18 147:18 148:12 148:23,24 149:7 150:3,12 151:15 151:16 153:6 154:4,12 156:13 161:17,24 162:21 170:19 175:6 185:19	187:23 188:6 192:19,25 193:21 194:22 195:4,7,18 197:4,12 199:10 200:16 202:12 202:23 205:2 208:17,22 209:12 216:4 224:7 226:17 227:14 234:7,7 241:16 244:5,7 244:8 245:19 247:13 249:20 251:24 254:10 254:11 259:3 267:7,19,21,22 273:5 274:9 280:13,20 285:23 286:6,15 290:25 292:13 295:25 296:2,9 299:9,15 300:14 309:25 313:21 315:19 318:12 319:16,20 321:22 thinking 121:21 137:7 280:12,14 third 66:12 98:20 151:11 251:8 253:9 284:6 294:16,20 third-party 179:7 thorough 40:3,7 thoroughly 102:10 290:24 thought 146:8 184:23 297:2 314:5 thoughts 93:11 thousand 202:20 294:7 thousands 124:8 202:4 threaten 12:15 three 51:20 52:6	65:24 66:15,17 67:4 76:5 89:15 92:5 97:17 98:15 128:5 142:16 143:3 156:20 163:16 165:6 180:22 182:16 203:14 205:18 215:7,10 222:6 238:18 255:23 300:21 301:6 three-minute 270:17 three-parcel 105:12 three-year 182:14 319:10 threw 163:15 262:18 thriving 95:20 throughput 33:14 33:22 44:13,17 45:19 139:22 throw 50:6 113:4 155:10 263:5 throwing 199:18 thrown 70:20 83:16 throws 237:24 Thursday 1:7 3:5 ticking 110:19 tied 260:21 tier 201:14 ties 284:11 tightening 224:16 time 23:24 33:13 50:11,12,12 51:18 56:18 64:10 65:6 67:20 68:4,15 69:5,10 71:23 82:9 83:13 85:5 85:24 87:11 88:4 95:13 101:20 104:9,24 113:9 115:16	118:23 125:11 125:14 129:13 129:17,17 131:12,23 133:10 145:25 147:10 152:2 164:4 167:11 176:3,12,22,25 177:4,19 179:22 185:16 186:23 192:11,18 199:14,25 201:9 209:3 213:16 217:14,14 233:9 236:25 241:7 247:22 251:2,19 251:21 258:21 298:13 299:14 301:7 304:22 308:10 313:8,14 313:16 314:3,15 314:21 317:23 timeframe 78:9 78:11 125:22 142:19 timely 99:20 103:19 timer 77:11 85:4 timers 85:5 times 96:15 114:21 116:19 122:7 148:4 220:23 229:22 229:23 239:5 256:8 305:7 timing 37:8 38:7 90:11 110:14 124:17,19 125:12 308:9 tired 178:21 title 4:4 today 2:10,16,18 2:24 3:4,7,13,18 10:5,11 12:23 12:25 18:7 20:4 34:14 50:22 86:18 87:6,22
--	--	--	---	---

88:3,11,24 90:4 90:19 91:13 95:7 131:4 134:16 154:5 175:15 200:19 202:12 204:17 204:22 210:17 210:22 211:12 213:8 214:3,21 218:3,10 219:9 221:10 222:11 223:9 225:8 226:19 227:4 237:15 244:19 247:24 248:16 249:12,13 253:4 274:6,20 293:11 297:4,9 298:4 306:12,15 310:2 today's 34:4,6 Todd 129:21 130:20 134:15 toe 155:9 217:25 told 6:24 7:8 8:18 8:19 9:24 257:3 305:6,18 tolerance 229:3,4 271:21 Tom 176:11 tomorrow 9:12 51:6 90:18 323:21 tomorrow's 3:2 tone 202:12 tool 29:18 top 11:22 30:16 31:7 78:14 156:23 157:13 157:17,20 topic 58:19 top-tier 133:24 153:8 Torgerson 107:7 total 17:24 153:17 189:24 200:23 215:17 totally 118:21	192:22 touch 14:13 24:11 156:16 158:13 touched 206:21 243:24 touches 21:7 tough 193:14 263:14 tourism 202:10 track 197:23 tracks 206:10 traction 156:22 trade 96:14 242:15 trading 27:18 traditionally 71:8 traffic 20:20 train 47:3 73:20 145:7,8 171:16 186:22 trained 71:25 89:9,16 90:2 189:9 192:21 225:17 231:4 training 46:19,20 75:3,4 82:13,22 83:3 89:3 176:16 186:14 186:19,25 187:4 188:9,10 194:4 207:3 256:7,10 304:12 trains 256:9 transaction 57:22 60:21,25 64:16 67:2 79:4 101:9 134:17 208:16 299:13 Transcontinental 115:24 transcript 325:8 325:20 transfer 246:15 transferred 289:12 transformed 202:5	transition 191:14 transmission 140:2 transparently 304:5 transport 36:5,10 36:24 39:3 74:24 253:10 transportation 15:10 19:10 24:15,17,23 35:25 71:9 73:9 127:9 130:3 133:2 224:19 transporter 28:16 trapped 96:6 travel 45:11 Treasurer 174:20 treasury 153:15 treatment 145:8 tremendous 17:16 255:13 280:18 tremendously 205:25 trend 202:3 246:15 295:8 trends 202:19 tried 36:13 129:14 137:22 178:13 269:20 Trillium 146:18 trough 272:11 trucking 24:24 146:16 221:14 221:16 248:12 trucks 118:11 true 7:3 157:12 194:22 290:24 306:19,22 325:7 truly 95:19 208:7 209:18 271:18 285:19 Trumka 185:25 186:10 trust 11:8 trustee 175:22	try 35:23 37:5 38:7,10 90:17 103:10 105:4 127:11,16 140:25 167:21 168:13 172:2 175:14,24 179:17 253:4 275:12,14,23 282:12 290:7 302:15 303:3 314:15 trying 3:10 44:13 87:3 104:22 108:17 110:12 120:24 121:10 128:25 133:3 135:25 138:15 147:23 154:13 154:19 170:5 172:21 173:11 193:13 238:23 238:24 245:23 248:8,13 261:22 273:25 300:14 305:11 315:19 turbine 220:18 turn 4:14 6:3 20:25 24:2 32:22 33:20 41:14 117:14 158:9 177:11 231:7 294:3,3 turnaround 167:11 214:14 229:25 turning 26:6 149:5 186:8 269:15 290:3 turnout 2:19 turns 4:24 44:4 310:12 TV 249:13,18 twice 257:5 262:6 two 2:19 14:2 29:12,14 35:9 35:16 48:17	51:19 52:9,14 53:5 59:17 69:15 82:7 94:10 97:22 100:3 112:11 115:21 116:6 126:19 127:24 132:22 141:10 143:14 156:20 172:17 182:15 183:12 193:11 194:21 204:2 205:18 207:24 218:15 221:8 222:5 235:20 236:18,20 237:2 242:6 244:21 247:3 248:3 252:9,11 262:2 272:2 274:25 twofold 124:18 177:15 two-week 190:10 two-year 152:18 182:13 type 5:21 23:24 41:5 59:23 70:23 78:21,23 79:18 80:8 159:9 186:14 211:10 220:6 250:23 255:9 317:8 types 75:4 138:7 248:9 typical 213:6,11 typically 25:17 28:24 30:14 118:8 220:14
U				
UGI 212:20 266:3				
UIL 8:2,9,25 55:3				
57:9,15,19,19				
68:8 93:10				
100:22 101:2,15				
101:18,18 103:5				

107:6 175:9	272:14,17	186:7,21 191:20	47:13,15,20	182:23 183:9
183:6 188:2	293:15 304:24	195:16,25 227:7	51:22 54:23	197:2 216:18
193:2 196:21	305:3,11 315:20	268:18 272:22	62:4 65:16 71:3	236:23 240:11
208:8 241:5	318:17 319:3	unions 182:22	73:21 86:5	259:8 266:23
242:23 249:18	320:17 322:19	269:18 307:17	88:17 114:25	267:2 271:20
250:22 258:25	understanding	unique 12:4,5	117:9,22 118:7	272:6,16 273:10
260:16 261:22	41:11 68:15	15:16 17:8	119:8,11,23	274:25 277:13
274:8,8,11	114:17 221:24	47:19 170:22,25	122:21 141:3	282:3,17 283:5
296:24 297:19	305:22,24 306:3	United 19:18 27:7	145:18 220:23	283:22 284:6,17
298:4 305:13	308:25 309:18	134:20 283:11	220:24 221:16	284:22 285:9
310:11 316:22	315:7	units 45:24 46:7	237:21 238:19	290:2 294:10
316:25 319:4,8	understood 176:5	213:14 231:22	239:17 250:24	300:10 315:9
319:23 323:12	316:24	231:24	260:10 263:10	utility's 284:2
UIL's 7:14 56:20	undertake 304:18	universal 234:9	280:23 281:6	utilize 31:21
UK 155:18	undertaking	universities 75:2	299:20 302:12	113:20 114:18
Ullico 186:3	103:17 267:10	unleash 299:15	302:22	139:23
ultimately 13:16	267:12	unprecedented	useful 131:5,10	utilized 31:10,16
16:15 17:20	underutilized	191:11,14 192:7	285:3	utilizing 36:24
unassailable	38:18	unprotected	users 22:5 23:17	50:21 303:5
98:19	underway 22:19	101:22 250:6	38:5 77:2	UWA 182:3
unbelievable	underwrite	unrealistic 318:13	uses 30:5 135:9	U.S. 22:11,15,20
177:16 299:15	127:20	unregulated 43:8	220:12 230:14	26:20 141:13,16
uncertain 41:4	undue 290:13	43:19 267:4	usually 187:2	141:18 149:19
53:18	unemployed	unsafe 102:10	320:21	
uncertainties	82:25	unused 31:22	Utica 76:3	V
189:6	unemployment	unusual 26:3	utilities 14:4	vague 74:21
uncertainty 52:24	109:11	unutilized 38:18	25:16 29:18	validate 40:15
112:20 188:17	unfamiliar	unwind 219:9,15	32:8 79:10,17	valorized 97:20
188:22 189:17	192:22	upper 16:17	132:12 140:20	valuable 6:18
191:21	unfettered 86:18	uptick 246:7	151:4 154:8,18	28:11,12 29:7
underfunded	unfortunately	upward 272:11	154:18 155:23	71:21 219:20
102:2,12 104:4	186:21 231:14	upwards 50:23	165:10 197:21	valuation 63:7
underground	241:6,13 246:2	51:9	197:21,22 249:3	value 11:25 13:4
116:8	320:15	up-front 23:23	258:9 263:3	15:8 36:14
underrepresent...	unilateral 196:2	urban 146:14	272:23 283:7,13	39:15 53:15,23
304:20	unilaterally	303:25 304:14	283:16,17	61:2 62:25 63:8
understand 29:20	195:24	urea 123:4,4	287:23	63:10,12 96:5
37:6 40:15,20	uninterruptible	urge 180:10	utility 4:25 43:6	96:10,10,13
41:10 55:18	119:16	urgency 95:8	43:11 100:19	160:2 196:18
57:18 63:6	union 60:11	110:6	135:2,24 137:10	valued 138:13,14
90:15 103:8	174:16,18,20,22	urgent 95:21	137:15 142:18	values 52:17
110:5 111:7,21	175:2,14,17,21	usage 213:13	142:21 153:11	284:24
112:11 115:4	175:21 176:6,15	223:2 226:5,7	153:20 155:4,6	variety 95:14
145:10 163:2	176:21,22 177:5	254:17 287:19	155:19,21	various 29:21
176:17 177:17	177:6 178:8,11	use 10:3,17 14:23	157:12 158:17	30:4 61:7,8,19
228:22 241:9,10	178:12 179:21	17:22 30:18	159:15 161:14	66:25 106:15
244:17 263:16	181:7,11 182:18	38:21 39:5 46:6	168:23 169:5	108:2,24 264:16

277:21 280:19	vision 124:7	150:16 151:19	224:13 268:11	282:24
vast 21:17 230:16	126:20 137:23	156:7,16 161:7	water 137:16	weekends 258:4
230:17	138:12,16,20	166:11 170:8	138:3,6 140:13	weeks 98:24
vehicle 224:7,18	visit 242:7	172:7 175:7,10	140:17 152:10	101:4 188:13
vehicles 18:21	Vista 264:18	178:10 179:14	152:14 155:10	189:10 211:13
24:21 32:7 45:6	vis-a-vis 61:3,4	180:14 181:15	162:23 221:16	weigh 208:15
224:11,23	vital 206:10,10	184:6 190:16	221:17 246:19	weighed 97:11
248:10 267:23	247:15	200:4 205:6	248:4 281:5	welcome 194:19
venture 41:8	vocational 207:2	211:8,17 219:14	waterfront 206:6	304:3 310:4
187:20 239:14	voices 276:11	229:6 230:2	waterways 73:8	wellhead 96:10
239:19,21	volatile 271:18	235:17 243:22	way 5:20 7:19	well-capitalized
ventures 72:19	volume 118:14	243:25 256:2	8:11 12:15 23:9	96:18
verbal 199:18	volumes 33:16	258:7 261:2	26:7,9 43:13	well-placed 101:5
version 51:5	44:19	268:3,12 269:11	46:13 47:20,20	well-suited 98:10
149:10	vote 8:21 181:13	270:15 272:2	67:11 74:12	went 69:9,10
versus 245:18	305:9 308:17	275:13 277:9	76:9 84:8 91:25	114:4 121:18,19
259:4	316:14,17	292:10 295:10	101:8 103:5	122:2 138:21
vessel 145:10,11	318:21	295:14 297:12	106:13 111:11	152:12 157:17
147:10	voted 320:22	297:17,21 301:5	117:6 118:10	157:20 165:7
vessels 24:24	votes 108:4	307:19 310:10	122:7 127:3	176:15 177:5,12
vetted 102:10		310:12,19,20	132:5 134:15	178:5 215:6
284:20	W	311:3,8 312:21	155:22 157:8	257:6 264:3
viability 40:16	W 1:11 77:23	318:13 321:6	164:19 166:4,6	weren't 197:15
viable 24:22 25:3	wait 256:5	322:9 323:10,13	169:8 171:11	310:3
49:17 50:8	waited 311:11	wanted 3:8 8:22	172:18 175:19	WesPac 145:6
62:21 71:13	waiting 293:15,21	12:3 20:3 90:24	183:18 184:25	West 26:14 27:24
112:5 247:12	311:12	139:16,17	188:5 189:18	74:6 105:17
vibrant 73:8	walk 301:13	160:20 161:4	192:18,23	western 25:7,18
Vice 242:14	walking 4:23	165:23 181:22	196:18 207:22	121:4
296:23	walk-in 302:14	182:4 184:12	209:10 217:19	wet 27:25 74:3
view 48:21 108:6	wall 234:16	243:10 253:7	253:20 254:11	121:5
187:17,18	Waller 174:17	268:8 272:13	254:14 265:22	we'll 4:15 6:4
292:24 306:22	walls 234:14	312:3 320:12,19	271:14 275:4,6	12:6,9,23 15:13
310:17	want 2:11 3:13,18	322:17	288:18 310:12	19:2 35:2 69:22
viewed 98:21	6:2 12:21 16:24	wanting 82:14	311:24 315:8,10	77:16 110:2
109:16	31:6 33:20	272:19	ways 20:9 48:5	111:12 131:19
viewpoint 139:10	34:18,21 35:11	wants 134:18	103:7 248:17	163:22 166:12
140:11	41:19 43:12,25	180:16 296:16	262:20 278:3	172:4 180:8
views 106:5	45:7 46:9,14	308:15 321:2	300:7 301:10	230:3 238:5
vigorous 103:23	48:12 56:4	warned 131:15	315:19	308:3
Village 264:20	69:20,21 77:21	warranted 209:12	wealth 78:18 99:5	we're 2:4 3:4 10:5
Virginia 26:14	82:5 86:16	Washington	weatherization	11:14 15:25
27:24	106:18 107:16	94:19 186:2	286:25 287:8	17:23 33:6
virtually 122:10	112:13 113:2,4	272:22 275:16	288:23 289:3	34:23 41:23
208:15	118:9 122:20	276:7	295:9	43:18 44:7,13
virtue 197:3	124:9 126:20	wasn't 191:19	website 14:19	45:21 49:16
246:13,14 263:2	132:16 138:19	218:7 220:8	week 113:24	51:6,7 58:15,17

70:9 77:11	315:15,18 318:8	249:24 253:2	witnesses 10:18	174:13 175:5,7
82:14 85:6	318:9,14 322:7	254:10 259:5	129:23 173:14	179:19 180:19
96:25 109:7	322:23 323:16	260:24 262:8,15	198:7,23 275:11	181:20 184:3
111:4 112:23	we've 3:11 5:11	264:3 265:23	275:24	195:15 197:11
117:4,7 118:10	12:18 14:25	268:14 269:23	woefully 102:2	225:17 252:13
120:24 121:9	18:5 35:6,8,9	270:8 285:19	woman 193:15	252:14
123:16 125:23	41:24 47:10	291:9 292:4	wonderful 114:2	workforce 15:3
125:25 126:2	48:14 59:14	whittle 271:15	317:14	56:23 57:8 61:6
130:2 134:7,8	107:21 111:17	wholeheartedly	wondering	71:4,20,25
143:22 146:14	146:3,4,20	99:7	133:18 307:11	82:13,22 83:13
147:6,9 159:21	161:13 166:20	wholly 103:12	Wonderling	89:2,9,17,18,23
159:22 160:18	179:13,22,23	wider 119:7	198:13 199:4,5	90:3 156:8
161:16,17	185:15,23	304:12	199:17,21,23	180:23 185:13
165:11 172:2,21	200:11 204:15	William 1:11	210:12 244:12	225:6 226:18
172:23 173:10	213:19 214:18	129:20 130:13	244:18 245:11	255:11,12
173:17,21,24,25	214:20 215:19	132:6	word 149:10	306:16
176:18,19	217:13 221:13	Williams 115:23	252:7	working 12:24
177:21,24	224:10,15	willing 56:17	words 4:13 6:21	47:12 96:19
178:15 179:4	226:20 231:11	72:24 83:21	7:23 8:21 66:4	122:18 134:12
180:6 183:19	233:8 248:7,13	105:5 128:2	85:10 95:17	134:16 146:17
185:21 187:25	249:11,12 250:3	183:17 223:12	216:23 239:19	157:22 188:11
188:6 192:9	255:15 259:11	267:5 313:3,4	work 7:4,19 11:15	204:22 207:22
200:17 204:6,22	260:11 262:19	317:2 318:3	48:4 56:17	209:21 210:4,8
213:9,24 215:22	298:9,10 299:12	willingness 3:12	79:11,16,22	210:10 225:14
216:25 217:24	306:14 307:8	101:3,7 111:20	83:22 84:7	226:14 269:14
217:25 219:23	314:19,20	316:20,21	101:8 108:24	269:18 294:14
220:25 221:2,19	whatnot 195:12	Wilson 1:11 77:24	109:3 146:9,11	works 5:9 91:8
221:20 222:19	wherewithal	win 97:3 151:19	147:8 169:14	93:8 99:15
222:20,21 223:5	242:25	wind 156:23	177:22 185:21	115:13 120:11
223:6,6,7,8,24	White 91:9 114:7	windfall 102:11	188:14 190:12	158:20 203:8
225:14,20 226:5	114:14,20 115:8	window 96:21,24	192:10 193:15	210:20 212:6
226:7,10,12,14	115:12,12	97:13 104:18	201:18 202:17	217:7 269:25
229:5 232:11	117:25 118:7	110:7,19	202:22 205:9	world 34:6 98:9
233:4,12 234:14	119:2,25 123:16	winter 30:14	209:3,7 227:14	122:12 132:14
237:5,16 238:23	129:13,14	31:11 32:12	230:2 272:18	145:12 155:12
238:23 246:7,10	132:11 161:18	116:15,23	275:6 279:14	155:23 212:22
246:12 248:8,12	172:5,7 175:18	wintertimes	296:14 298:5	215:9 219:16
254:18,20 260:6	193:7 198:14,16	295:4	302:16 304:12	244:23 267:4
260:14 262:21	198:19 210:14	wires 257:21	worked 11:9	world-scale
262:23 263:13	210:15,18 228:2	wish 90:15 91:5	132:12 155:7,11	105:21
268:9 272:11	228:19 229:15	277:10,20	155:16 167:23	worst-case 116:23
273:19,20	230:5,16,19	witness 3:10 4:16	179:2,22 233:8	worth 225:3
274:24 294:11	231:3 232:14	10:11,18 92:7,7	298:10	279:14
297:18 298:11	234:6 235:9	129:23 133:19	worker 179:25	wouldn't 34:18
299:5 300:13	236:11,18 237:4	173:14 198:23	194:5	62:11 82:3
305:9 309:21	237:14 247:13	275:24 296:18	workers 46:19,22	83:15 84:11,13
311:10,19,19	248:7,24 249:11	296:18	47:2 73:20	88:7 176:7

264:17 268:10 268:18 279:24 313:18 319:19 wrap 33:7 242:3 290:8 wrapping 241:25 242:2 writing 318:14 written 131:19 149:9 152:4 169:12 210:21 307:22 wrong 50:24 99:17 228:10 244:10 wrote 277:6	193:11 213:8,12 213:24 215:8 220:23,24 222:4 224:10 236:8 237:18 238:20 250:4,19 251:5 251:7,8 254:19 254:20 259:12 259:21 261:13 280:5 288:5 289:6 294:7 313:10 314:10 years 14:2 26:18 34:15,16 51:20 52:4,7 67:21,21 68:5,5 87:23 88:14 89:15 94:10 95:16,17 96:5 106:23 110:22 115:15 116:13 121:17 132:10,14,19,20 132:22 133:11 137:22 140:14 155:8,14,25 161:14,15,15,15 161:23 165:7 175:10,13 177:3 178:15 180:5,22 182:16 183:5,12 183:22 189:11 190:16 191:17 191:18 192:10 192:11,14 193:16,18,19 194:2 203:14 205:18 210:6 213:24 214:17 215:7 217:15 218:16 220:9 223:3 225:21 227:13 231:6 232:10 238:11 238:11,18 239:25 242:7 244:22 247:19 247:22 250:13	259:2,5 261:19 262:18,25 269:14 270:2,22 272:8 292:16 294:6 300:21 301:6 year-round 118:21 yesterday 107:7 York 26:13 124:22 125:2,3 272:21 young 82:24 186:16 192:13 192:21 193:10 207:9 303:8 Youth 225:11	\$25 96:14 \$30 50:23 51:8 52:14 135:17 \$300 143:9 \$33 215:4 \$35 218:17 237:17 \$4 96:12 236:5 \$40 216:19 \$43 215:4 \$50 42:13 55:15 \$500 143:9 278:23 \$622 215:13 \$7 143:10 \$75 280:4 \$750 278:11 \$8 39:21 143:10 \$80 149:21 237:22 \$80,000 251:13 \$954 215:18	10,000 209:17 10:00 323:22 100 76:4 116:19 261:6 100,000 201:16 105 190:3 227:3,5 227:6,11 11 175:10,13 178:14 214:25 226:4 321:9 11/13/14 3:1 4:1 5:1 6:1 7:1 8:1 9:1 10:1 11:1 12:1 13:1 14:1 15:1 16:1 17:1 18:1 19:1 20:1 21:1 22:1 23:1 24:1 25:1 26:1 27:1 28:1 29:1 30:1 31:1 32:1 33:1 34:1 35:1 36:1 37:1 38:1 39:1 40:1 41:1 42:1 43:1 44:1 45:1 46:1 47:1 48:1 49:1 50:1 51:1 52:1 53:1 54:1 55:1 56:1 57:1 58:1 59:1 60:1 61:1 62:1 63:1 64:1 65:1 66:1 67:1 68:1 69:1 70:1 71:1 72:1 73:1 74:1 75:1 76:1 77:1 78:1 79:1 80:1 81:1 82:1 83:1 84:1 85:1 86:1 87:1 88:1 89:1 90:1 91:1 92:1 93:1 94:1 95:1 96:1 97:1 98:1 99:1 100:1 101:1 102:1 103:1 104:1 105:1 106:1 107:1 108:1
X		Z		1
X 188:24		Z 81:23 Zealand 155:19 155:20 zero 53:24 117:13 177:2 zoning 205:22 206:3		1 120:16 203:17 204:6 237:10,10 237:11 1,000 277:4 283:10 1,140 174:14 181:11 182:18 1,150 254:22 1,350 180:24 300:25 1,500 71:23 250:4 1,600 108:23 109:15 180:23 181:11 1,650 213:25 1,658 214:5,21 1,760 214:3 1.3 200:22,24 201:2 1.4 137:13 162:13 162:20 163:3,7 260:4 1/1/2015 301:17 10 30:19 53:13 177:19 251:3 261:8,13,14
Y		\$		
Yardley 10:12,22 11:5 13:20 32:23 33:6 41:17 51:15 53:22 54:4,12 54:25 55:7,23 56:2,12,24 59:5 68:18 70:17 72:6,22 73:16 79:9,15 80:5,11 80:20,24 81:7 81:16,25 82:21 84:9 85:7,22 86:2 87:12 88:25 yeah 56:2 82:21 88:25 191:15 276:16 320:13 year 19:8 30:3,10 30:20 52:14 87:5 104:15 114:21 116:19 118:5 119:13,23 125:21 135:17 145:13 147:10 156:4 157:17 179:12 189:4,18		\$1 128:3 \$1,000 279:14 \$1.86 101:24 105:6 \$10 39:22 213:24 \$11 225:25 226:6 \$150 278:24 279:4 \$154 242:8 \$17 36:18 \$170 216:17 \$183 234:8,22 \$2 128:3 220:5 236:6 \$2,000 279:14 \$2.2 251:4 \$20 135:5,17 288:4 \$22 237:24 250:25 259:14 260:8 261:5		

109:1 110:1	203:1 204:1	297:1 298:1	74:1 75:1 76:1	177:1 178:1
111:1 112:1	205:1 206:1	299:1 300:1	77:1 78:1 79:1	179:1 180:1
113:1 114:1	207:1 208:1	301:1 302:1	80:1 81:1 82:1	181:1 182:1
115:1 116:1	209:1 210:1	303:1 304:1	83:1 84:1 85:1	183:1 184:1
117:1 118:1	211:1 212:1	305:1 306:1	86:1 87:1 88:1	185:1 186:1
119:1 120:1	213:1 214:1	307:1 308:1	89:1 90:1 91:1	187:1 188:1
121:1 122:1	215:1 216:1	309:1 310:1	92:1 93:1 94:1	189:1 190:1
123:1 124:1	217:1 218:1	311:1 312:1	95:1 96:1 97:1	191:1 192:1
125:1 126:1	219:1 220:1	313:1 314:1	98:1 99:1 100:1	193:1 194:1
127:1 128:1	221:1 222:1	315:1 316:1	101:1 102:1	195:1 196:1
129:1 130:1	223:1 224:1	317:1 318:1	103:1 104:1	197:1 198:1
131:1 132:1	225:1 226:1	319:1 320:1	105:1 106:1	199:1 200:1
133:1 134:1	227:1 228:1	321:1 322:1	107:1 108:1	201:1 202:1
135:1 136:1	229:1 230:1	323:1 324:1	109:1 110:1	203:1 204:1
137:1 138:1	231:1 232:1	12:20 306:24	111:1 112:1	205:1 206:1
139:1 140:1	233:1 234:1	120 30:14	113:1 114:1	207:1 208:1
141:1 142:1	235:1 236:1	122 105:16	115:1 116:1	209:1 210:1
143:1 144:1	237:1 238:1	124 105:16	117:1 118:1	211:1 212:1
145:1 146:1	239:1 240:1	125 262:17	119:1 120:1	213:1 214:1
147:1 148:1	241:1 242:1	129 213:7 233:10	121:1 122:1	215:1 216:1
149:1 150:1	243:1 244:1	13 1:7 128:9	123:1 124:1	217:1 218:1
151:1 152:1	245:1 246:1	134,822 116:5	125:1 126:1	219:1 220:1
153:1 154:1	247:1 248:1	14th 323:22	127:1 128:1	221:1 222:1
155:1 156:1	249:1 250:1	140869 1:19 3:1	129:1 130:1	223:1 224:1
157:1 158:1	251:1 252:1	4:1,2,6 5:1 6:1	131:1 132:1	225:1 226:1
159:1 160:1	253:1 254:1	7:1 8:1 9:1 10:1	133:1 134:1	227:1 228:1
161:1 162:1	255:1 256:1	11:1 12:1 13:1	135:1 136:1	229:1 230:1
163:1 164:1	257:1 258:1	14:1 15:1 16:1	137:1 138:1	231:1 232:1
165:1 166:1	259:1 260:1	17:1 18:1 19:1	139:1 140:1	233:1 234:1
167:1 168:1	261:1 262:1	20:1 21:1 22:1	141:1 142:1	235:1 236:1
169:1 170:1	263:1 264:1	23:1 24:1 25:1	143:1 144:1	237:1 238:1
171:1 172:1	265:1 266:1	26:1 27:1 28:1	145:1 146:1	239:1 240:1
173:1 174:1	267:1 268:1	29:1 30:1 31:1	147:1 148:1	241:1 242:1
175:1 176:1	269:1 270:1	32:1 33:1 34:1	149:1 150:1	243:1 244:1
177:1 178:1	271:1 272:1	35:1 36:1 37:1	151:1 152:1	245:1 246:1
179:1 180:1	273:1 274:1	38:1 39:1 40:1	153:1 154:1	247:1 248:1
181:1 182:1	275:1 276:1	41:1 42:1 43:1	155:1 156:1	249:1 250:1
183:1 184:1	277:1 278:1	44:1 45:1 46:1	157:1 158:1	251:1 252:1
185:1 186:1	279:1 280:1	47:1 48:1 49:1	159:1 160:1	253:1 254:1
187:1 188:1	281:1 282:1	50:1 51:1 52:1	161:1 162:1	255:1 256:1
189:1 190:1	283:1 284:1	53:1 54:1 55:1	163:1 164:1	257:1 258:1
191:1 192:1	285:1 286:1	56:1 57:1 58:1	165:1 166:1	259:1 260:1
193:1 194:1	287:1 288:1	59:1 60:1 61:1	167:1 168:1	261:1 262:1
195:1 196:1	289:1 290:1	62:1 63:1 64:1	169:1 170:1	263:1 264:1
197:1 198:1	291:1 292:1	65:1 66:1 67:1	171:1 172:1	265:1 266:1
199:1 200:1	293:1 294:1	68:1 69:1 70:1	173:1 174:1	267:1 268:1
201:1 202:1	295:1 296:1	71:1 72:1 73:1	175:1 176:1	269:1 270:1

271:1 272:1	2 31:12,12,15	23 227:7	259:25 261:2	88-year 260:18
273:1 274:1	88:16 120:17	24 45:4 119:12	5th 111:13	262:17 315:10
275:1 276:1	132:23,24	227:7	5.9 215:3	
277:1 278:1	204:14	25 132:10,14	50 67:21 68:5	9
279:1 280:1	2nd 306:23 307:2	215:23 221:9,11	114:18 149:23	90 67:21 68:4
281:1 282:1	2,000 244:22	250 188:18 190:2	190:15 191:17	247:24
283:1 284:1	2,825 214:6	193:8	238:19 247:23	90s 152:11
285:1 286:1	2.2 261:10	259 201:5	254:19,20 264:9	96 157:15
287:1 288:1	2.5 195:8	260 117:13 189:25	313:9 314:10	98 177:13
289:1 290:1	2:30 1:7	273-acre 105:12	50's 192:13	
291:1 292:1	20 26:19 116:13	28 66:22 259:13	500,000 135:12	
293:1 294:1	155:25 157:19	264:2,4,8	51 190:16 191:6	
295:1 296:1	183:22 224:11	29 66:23		
297:1 298:1	247:19,22		6	
299:1 300:1	262:25	3	6 179:24 243:16	
301:1 302:1	20-year-old	3 205:20 215:8	6,000 60:7	
303:1 304:1	247:20	3,000 20:10 277:2	6.6 251:8	
305:1 306:1	200,000 251:12	30 132:19 149:23	6:30 90:15	
307:1 308:1	2001 226:24	180:5 192:3	60 30:13 211:25	
309:1 310:1	2003 175:16	194:2 314:10	60/40 238:25	
311:1 312:1	214:25	30-year 189:8	65 192:11	
313:1 314:1	2004 214:3 215:3	251:12	686 172:4 174:14	
315:1 316:1	215:13	31 191:18	179:16 181:7,10	
317:1 318:1	2007 200:25	330,000 162:23	182:3 183:19	
319:1 320:1	2008 140:16,18	35 115:16 179:3	185:11 272:18	
321:1 322:1	2010 216:16	213:9 214:16	301:23 307:9	
323:1,20 324:1	2012 157:16	259:4	686's 187:18	
143 227:2	200:25 215:13	36-inch 254:14,20		
15 30:19 177:19	2013 142:18	365 30:10 119:13	7	
178:25 179:2,9	213:10 214:4	119:22	7 273:17	
179:10 188:25	215:5		7:30 311:10	
214:16 215:22	2014 1:7 281:8	4	7:55 324:2	
15,000 201:9	321:9	4 29:15 206:20	70 237:5 238:21	
150 238:18 279:3	2015 281:8	307:2	259:3	
16 140:17 214:4	2016 141:17 281:8	4th 265:11	74 213:5	
165,000 115:25	2017 302:6	4.4 251:7	75 215:23 238:22	
17 53:13 222:24	2018 216:20,22	40 93:21 179:4	302:20	
265:13	2020 201:16	192:10 294:6		
170 161:14	2040 23:10	400 1:6 189:24	8	
18 125:21 238:9	2050 280:14 281:8	227:4 250:6	8 53:13 140:15	
250:4,9,12	281:9	400,000 162:22	80 238:22 247:21	
259:12 263:25	22 153:16 250:18	420,000 162:22	80s 183:25	
264:4,6	250:20 251:6	430,000 163:4	80,000 251:11	
1981 213:5 221:6	259:15,24,24	44-year 260:18	83 213:12 222:21	
1993 184:4	261:6,12,20	49 213:10	85 126:12 215:21	
	262:16 302:9,10		215:21	
2	220,000 201:17	5	86 176:25 177:12	
		5 208:7 259:22,23	227:6	