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 ORIGINAL

OFFICE OF THE SUFFOLK COUNTY
LEGISLATURE

CARBON CAP COMMITTEE MEETING

March 28, 2008

Legislature Building

Hauppauge, New York

10:00 A.M.

NEAL LEWIS, Chairman

Reported by: Donna L. Spratt
Court reporter

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2 A P P E A R A N C E S :

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4 Wayne Horsley, Legislator

5 Joseph Schroeder

6 Joseph Muncey

7 Jim Meyers

8 Paul Kalb

9 Mark Seratoff

10 John Waffenschmidt

11 Harry Davitian

12 Andrew Manitt

13 Gordian Raacke

14 Todd Stebbins

15 Monique Brechter

16 Michael White, Esq.

17 Adam Filios

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MR. LEWIS: Good morning. I want to apologize for the late start.

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The good side is that the meeting you see the agenda is geared to the data collection, these charts. I don't see this to be a three hour meeting.

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The goal is usually two hours. It is reasonable to think we can stay within the two hour envelope, despite problems this is morning.

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My apologies for getting us off on a bad note.

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Maybe we could introduce ourselves.

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MR. SCHROEDER: Joe Schroeder, budget review.

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MR. MUNCEY: Joe Muncey, Assistant Legislative Analyst, Budget Review Office.

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MR. MEYERS: Jim Meyers, Health Services.

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MR. KALB: Paul Kalb, Brookhaven National Laboratory.

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MR. SERATOFF: Mark Seratoff, coordinator, Sustainable Energy Lines.

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MR. STANTON: Brendan Stanton, aide
to Legislator Horsley.

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MR. WAFFENSCHMIDT: John
Waffenschmidt, Covanta Energy.

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MR. HORSLEY: Wayne Horsley, County
Legislator.

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MR. LEWIS: Neal Lewis.

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MR. MANITT: Andrew Manitt.

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MR. RAACKE: Gordian Raacke,
Renewable Energy.

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MR. STEBBINS: Todd Stebbins.

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MS. BRECHTER: Monica Brechter,
LIPA.

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MR. WHITE: Michael White,
Executive Director, Long Island Regional
Planning Board.

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MR. FILIOS: Adam Filios,
Farmingdale State College.

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MR. CAFFREY: Jack Caffrey,
representing the presiding officer.

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MR. LEWIS: Welcome. You should
have in front of you an agenda which is
fairly simplified. It's really all about
charts.

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You should have this yellow packet that has charts numbered one, one A and three to number five, and in a minute, I'll ask Joe to explain the printout he did to help with all this.

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That is the large paper, the yellow one I prepared and Joe Schroeder prepared the white one. It is marked at the bottom of the agenda.

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The next meeting date is April 24, at 3:00 PM. In terms of this meeting and that next one, the goals that we've discussed were to attempt to satisfy the Legislature's requirement that we come up with certain data, which we're going to dive into in a second, and then we need to make policy recommendations.

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The way we have divvied this up, this was the meeting we were able to kind of nail down the data part of the equation and what would go into the report, and on the April 24th meeting, we can have more free flowing decisions or recommendations that would be included in the report.

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In broad terms, that is kind of
where we're at with this process.

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MR. HORSLEY: I don't think at this
point I have a great deal to add to the
numbers particularly, but what I do want
to say is I appreciate you guys.

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You're doing this because it's
clear to everybody that the County is
moving in a more progressive way about
carbon emissions, and this is going to add
substance to where we're going, not only
as a Legislature, but as a County itself.

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I think that this is going to be a
baseline that you guys are going to be
putting together today that we're going to
work off, not only with recommendations
because I'm hopeful these recommendations
you're going to be making are going to be
put into legislation very shortly
thereafter.

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So I applaud the fact we're kind of
on the wrap up stage.

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Neal, I want to congratulate you on
how you have brought us so far. The fact

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that these things are on paper is amazing
itself.

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I appreciate your work, guys.

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MR. LEWIS: Thank you, Wayne, I
appreciate that.

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The charts were a little tricky to
get to this committee. There is no
denying that a lot of effort went back and
forth. I know that Bob Teetz sent a
message, he is sort of unavoidably in the
City today.

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We do have Monique from LIPA.
Together they were pushing to get
particularly the historical data, because
part of what the law was looking at was
going back to 1990. Thankfully, the
budget review office came through with a
lot of data, which we appreciate.

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We're going to dive into it. We'll
take turns and go through these charts.
I'll tell you in advance I have a chart
that I particularly like, which is number
four, but I think we're going to go in
order.

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That is like a teaser, like on TV at night where you get a commercial for an upcoming show.

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Number four is upcoming. I think it is really helpful. We need to go through some basics of what was in the Legislation about getting a handle on our carbon footprint as it relates to power plants.

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We came up with, as I say, several different ways to organize it. That is what constitutes these different charts. I think maybe this is a good time.

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Chart one A, Joe, do you want to jump in with what you organized?

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Do we want to do one first?

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MR. SCHROEDER: I don't know how far you want to go with it, Neal.

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I did the chart. The revisions to chart one, that is represented on the budget review sheet that I distributed on the basis of the updates that we were asked to provide on the combined charts.

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Part of the problem that I faced

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when I was asked to do the work on the combined charts was that was there I didn't appear to be working with the same formulas that others worked with.

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I put the formulas I was using on what is page two of the handout that I distributed, and you could see on chart one A that there is a generic power plant emissions calculation to the right of the data. That data was provided by Keyspan and LIPA.

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That's from Bob Teetz?

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MS. BRECHTER: I believe so.

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MR. SCHROEDER: Just to show that I'm not saying that the generic calculations are the ones we should use, we should use the ones provided by the local utility, but to show there is a difference between the numbers.

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Do how you calculate the numbers as is reflected on the other chart is very important to know how they were calculated.

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But just the first page of the

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2 handout reflects chart one A. It is
3 complete from 1990 through 2020 but
4 doesn't have the fuel data that we
5 requested, and if you look at the graphs
6 down below there, I think the fuel data
7 will help explain some of the fluctuations
8 in emissions that we're seeing here in the
9 first graph to the left, and it will
10 certainly help to speak to the graph to
11 the right which is pounds of carbon per
12 megawatt hour.

13 If we look at emissions, we
14 discussed this in the first meeting,
15 ultimately we're looking at pounds or
16 emissions per megawatt hour as a measure
17 of efficiency and improvement.

18 The graphic on the bottom right of
19 this page is critical to the evaluation
20 and recommendations that this committee
21 may make, and furthermore, I know Jim
22 didn't have much time to look at this, but
23 on a quick glance, it looks like the
24 emissions profile on a per megawatt hour
25 basis may not even meet the existing

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regulations that the County has on

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emissions, the reduction of CO2.

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That may be something we want to

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look at in more detail.

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MR. LEWIS: Yeah. That is a pretty

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important point. Remind us of what CO2

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per megawatt hour rule was adopted for

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Suffolk County?

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MR. MEYERS: I believe it is

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currently seventeen hundred and six pounds

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of CO2 per megawatt hour. It goes down

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based on as low as fourteen hundred four,

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so as this graph shows, down the road it

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probably will not meet the existing.

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MR. RAACKE: It started at eighteen

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hundred.

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MS. BRECHTER: That is for new

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plants, not existing.

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MR. MEYERS: New and existing

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plants.

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MS. BRECHTER: Existing, too?

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MR. MEYERS: Existing.

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MR. LEWIS: For those of us who are

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chart challenged, do we want him to point

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out what line it is that shows a CO2 per

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megawatt hour that might exceed the

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seventeen zero seven, was it?

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MR. SCHROEDER: If you look at the

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bottom left graph, that's actual

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electricity output of the plant and actual

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or projected emissions of CO2 from the

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plants on an annual basis.

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The graph to the right indicates

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the CO2 emissions as projected per

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megawatt hour of electricity produced.

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MR. WAFFENSCHMIDT: That lower

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graph on the left is misleading. That is

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basically looking only at existing, not at

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other sources that create -- this is, I

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imagine, like there is a change, but there

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is really no change.

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The real graph you want to look at

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is CO2 pounds per megawatt hour. That is

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the one that you're really seeing,

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interestingly enough, a deterioration in

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efficiency, not improvement.

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I find fascinating that would be

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our MO.

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MR. SCHROEDER: Exactly. That is the graph on the bottom right, the CO2 emissions per megawatt hour.

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MR. WAFFENSCHMIDT: What the bottom graph is showing you is the -- it is the actual tons of emissions and basically showing a reduction, because there is going to be less capacity in that --

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MR. SCHROEDER: Over all emissions, but not emissions per megawatt hour, correct. That is why I did the two graphs, because it is important to look at this in context of emissions per megawatt hours.

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Simply reducing electricity output does not improve efficiency.

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MR. WAFFENSCHMIDT: The problem I'm having with this is that if you think the future should look like combined cycle, what this is basically saying is there is not going to be any movement towards combined cycle until 2020, and I guess that is an interesting concept and to what extent we want to be forward looking.

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We're basically -- if that is the case, we're basically missing the ball on the opportunities on the improvement in efficiency. If anything, what we should be saying, if this is what the status quo is, this is static, we want to look to the future.

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Here is what happens if you put in one combined cycle, I'm assuming, someplace, Caithness, because that is going to drop that number when it comes on.

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That is the most efficient we have.

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MR. SCHROEDER: I would have to ask Bob what assumptions were made. These are not my numbers. I only graphed them.

MR. WAFFENSCHMIDT: I think it all depends on how much value you want to put into the service of this committee, but at the end of the day, we're basically saying as a society, we're unable to improve in efficiency.

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It gets worse when you start to look at electrical production going out to

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2020. That is basically, in effect,
saying we're unable to address the CO2
issues currently.

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That is the result of this.

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MR. SCHROEDER: That is the point
of the bottom right graph exactly. We're
not improving the operating efficiency
plants here, not achieving our goal.

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MR. LEWIS: Let's get some other
people.

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MR. RAACKE: Looking at the right
graph, I think at a minimum we should, if
we want to use that graph for the report,
we should break that line up beyond actual
data, and then make it clear like in the
chart here, that the going forward numbers
are projected numbers under a "business as
usual" scenario and possibly add a couple
of others to it.

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To the casual reader, this may look
like this is what it is going to be like.
That is not the case. Scenarios would
include re-powering and a whole host of
others.

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MR. SCHROEDER: That can be done very easily with you illustrating that with the existing data and the more we get for projection purposes, we could certainly include projected scenarios on the same graph as well.

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But we need more input in terms of projections.

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MR. LEWIS: You wanted --

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MR. STEBBINS: What data do you need now from Keyspan to continue on this line?

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MR. SCHROEDER: Well, I need to speak to Bob on what he included in his parameters for the projections that appear in this chart, and it certainly would be helpful to have the fuels data that we requested, because that's going to be a significant influence on the emissions that are both actual and projected.

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MR. STEBBINS: Which is what I was kind of leading into is we might want to run the scenario of what it would look like if the base plants burned oil year

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round versus natural gas rear round, and then versus re-powering the standing facilities.

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MR. SCHROEDER: I don't know if Bob included a re-powering. To my recollection, this does not include a re-powering scenario.

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Certainly a re-powering scenario that was a full re-powering, like a backyard re-powering, would be the only way they could achieve significant improvements at the end of the day.

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The front end of existing plants is a boiler, and a boiler is a boiler is a boiler. There is only so much you can do with that.

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MR. STEBBINS: You sit on the stakeholder committee representing budget review office. It should be interesting to see when that design is done, what numbers actually LIPA comes back with National Grid.

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MR. SCHROEDER: For your information, when I did speak with Bob

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2 about fuels data, there are concerns that
3 Keyspan and National Grid may have with
4 releasing that information, because some
5 of that goes to what is considered
6 proprietary information on power
7 generation plant efficiency.

8 And so that may influence their
9 competitive advantage in an open market
10 situation.

11 MS. BRECHTER: A couple of things.
12 One, the result of a re-powering analysis,
13 we'll talk about any improvements.

14 Secondly, I don't know which
15 scenario this encompasses, but we have a
16 lot of different scenarios. I would be
17 very surprised it didn't include
18 Caithness.

19 There is a very small decrease in
20 pounds per megawatt hour, which doesn't
21 seem to be reflecting of Caithness coming
22 on line.

23 The other thing is the oil and gas
24 price forecasts are important drivers in
25 your pounds per megawatt hour, CO2.

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Obviously, other drivers that -- in terms of total emissions, not the rate, but total electricity demand.

We might also want the low growth. That is another thing. Don't forget, that keeps climbing. That is a rate and total.

So I wanted to throw in a couple of those thoughts. We certainly have as many scenarios as you want on this sort of thing. There is data there.

MR. SERATOFF: With the Northport power plant being the second largest emitter of CO2 in the northeast of the country, I think it would be very important to have a hypothetical emissions graph of the four units, showing the Northport reduction in emissions. Re-powering can drop the emissions over 90 percent.

That's very significant. That should be included.

MR. LEWIS: Okay. I guess part of what is going on is that we asked to get the actual numbers from the past, and we

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asked to get the projections from the future as it sort of exists today.

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No assumptions of re-powering, because we want to start with "business as usual" or basically the baseline, what is going to happen if there was no re-powering, and I think this reflects things that are already in the pipe line.

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Caithness is under construction, Neptune was recently turned on. This is supposed to reflect where we are today with things that exist today, and things that are under construction today.

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I think it would have been interesting to analyze a series of different scenarios. I want to be clear, that is not what we asked. In some respects, that might be different to generate in terms of they have computer models, and my understanding is they already have to plan the next several years.

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Asking them to run the numbers as we did through 2020 is consistent with the

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way the computer models and what not work.

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We were asking them to do stuff that is

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consistent with how they operate. That

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was the intention behind this document,

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not to make any assumptions or changes.

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This is where we stand today, and

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where we're headed with what has been

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approved and what is under way today.

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MS. BRECHTER: That is the base

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case, and we do scenarios on re-powering

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one or two units and scenarios on what if

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we do this and that. When I said there is

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reams of data, you can -- I'm sure we have

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studied every single scenario you can

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think of.

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What I would suggest is ask Bob for

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the details on base case that he used when

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Caithness comes on line, what the fuel

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forecast is because we update it. He'll

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be able to give you what assumptions used

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in the base case.

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MR. WAFFENSCHMIDT: If you look at

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your favorite chart four, and I guess what

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is really necessary for chart four is some

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disclosure or how these are calculated.

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People in other parts of the country come

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up with different numbers for the same

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technology.

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If you look at Caithness

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projections on chart four where it is

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listed at 840 pounds of CO2, that project

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from an overall Long Island grid

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standpoint is about five percent or so of

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the overall LIPA generation, and so if you

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look at it on Suffolk, if you're adding it

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in 2009, how could you have no change in

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net CO2 which is not lead based? It is a

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unitized value.

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So somehow we can create this

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image, but I'm not sure it is an image

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that is accurate.

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MS. BRECHTER: You need the detail.

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It goes down by about 40 pounds.

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MR. WAFFENSCHMIDT: Let me finish.

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Maybe Wayne needs to give us guidance. I

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look at the next chart. I brought this up

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previously.

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Our actual per capita CO2 emissions

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are going up. We're saying we are projecting as a committee, we're projecting that there will be no success in the conversion to more efficient technologies; no success per capita.

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MR. LEWIS: You made the point earlier.

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MR. WAFFENSCHMIDT: Not at this meeting. At a different meeting.

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MR. LEWIS: No. You said if you look at the chart, it tells us there is no -- going to be no change in this going forward.

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MR. WAFFENSCHMIDT: I'm talking about the per capita chart on the next page. That is going up. You're on this big sheet.

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MR. SCHROEDER: Page two of the hand out.

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MR. WAFFENSCHMIDT: You go to the right hand list. It is basically saying on a per capita basis, each human being is going to produce more in 2020 than today.

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That is what that chart is saying.

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My comments earlier were about the efficiency per unitized generation efficiency. Two separate topics.

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I'll be quiet for a while.

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MR. LEWIS: All right, I'm lost. I think what we need to do is this.

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Andrew, we're going to go back to chart one, and you're going to explain what the chart is. Go to the yellow chart handouts and start with one, and we need to be clear about what each chart says.

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MR. WHITE: I have a question.

When we're looking at data, are these just from generated facilities here or are those looking at the per capita issue, looking at power that is coming into Long Island as an example, from the Neptune cable and putting those numbers --

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MR. LEWIS: You will see we attempt to address -- we broke it up. I think your question will be addressed.

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We do attempt to capture stuff coming.

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MR. RAACKE: On the first chart,

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the chart on the right, on the first page,

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could you just fill in what we're looking

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at?

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MR. SCHROEDER: The chart or graph?

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MR. RAACKE: The chart.

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MR. SCHROEDER: The chart.

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That's a generic calculation. It

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is down below the table for power plant

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emissions based on output, and it's only

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done to illustrate there is a difference

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between how these numbers are being

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calculated.

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I put that there to demonstrate

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that those calculations are different from

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the actuals and projected that we got from

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Bob. Those are not reflected in the

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graphs, those numbers.

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MR. RAACKE: We show emissions rate

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of?

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MR. WAFFENSCHMIDT: Eight, but

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under kilowatt hour, where do these

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numbers come from in the column kilowatt

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hours on the left?

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MS. BRECHTER: There was EPA, the

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source down below, and Drew took megawatt hours from the chart on the left and translated them to kilowatt hours to the chart on the right and used generic numbers for EPA.

MR. SCHROEDER: So that you could see on an apples to apples basis, there is a difference in deriving these numbers.

I apologize, this is confusing on this sheet, but I did that because of the difficulties I was having on the sheet behind that, because numbers I was coming up with were different than numbers that were filled out by others.

I didn't know how they derived them.

MR. LEWIS: To answer your questions, numbers on the second chart that I handed out are reflected on the Suffolk County numbers, that is per capita Suffolk County. The chart on the data, this first chart, is LIPA, Keyspan, National Grid generation in Suffolk County only.

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Let's take this from the top.
We're back at chart one.

First, this is CO2 emissions attributed to electric generation to Suffolk County. Remember, we think of Long Island as one sort of geo-political unit, but LIPA serves two counties, regions.

Essentially the law -- and we're sitting here in the legislative building of Suffolk County -- the law is focused on Suffolk County, so we had to break things up from the beginning.

Andrew, explain what we have.

MR. MANITT: Chart one covers generation in Suffolk County. It is not how much electricity is generated in Suffolk County that goes to Nassau.

There is some coming in from other sources used here, but this is looking at generation in Suffolk County.

The first section is what is actually National Grid generating plants. The second is non-National Grid generating

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plants. These are all in Suffolk County.

Non-National Grid generation in Suffolk County, that would include Caithness when it comes on line, and third is the waste to energy plants in Suffolk County.

Then, of course, there is a total.

MR. LEWIS: Let's make sure we're clear. Chart one is only dealing with electricity generation in Suffolk County. It is not making a distinction between -- East Northport clearly generates electricity in Suffolk, but that electricity is going to run to Nassau to a certain percentage and a certain amount goes to Suffolk. We're not making a distinction between that.

Chart one is saying that the physical location of the plants in the County, and these are the numbers that have been generated in the past historically, and then you see the last three with the "P" there, indicating projections for 2006 data to 2015 and

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2020.

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MS. BRECHTER: Is there a megawatt plant site break off here?

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MR. MANITT: It was twelve megawatts.

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MS. BRECHTER: Put that down.

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MR. LEWIS: That is a good suggestion. We want to clarify. We always want to try and be clear about what the assumptions were that led into any of these charts for one.

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We're talking twenty-five megawatts or more.

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MS. BRECHTER: The question was 2015 and 2020 projections, why is the rate pounds per megawatt hour going up? I'm guessing oil, gas, fuel forecast.

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MR. MANITT: That Bob would be able to answer. I think that must be a big part.

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MS. BRECHTER: Our base case planning shows new units coming on line that are, by definition, more efficient than old units.

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MR. LEWIS: Which line are you
looking at?

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MS. BRECHTER: The 2015 to 2020
National Grid section.

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MR. LEWIS: Right at the beginning
where it says Lilco/National Grid Suffolk
generation, and you're going down to the
bottom of that. 2020 shows the CO2,
number megawatt hours number and CO2
pounds per megawatt hour of sixteen
ninety-three.

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MS. BRECHTER: Maybe it is because
they're getting older and older. I'm
wondering why the rate goes up.

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MR. MANITT: Plants are getting
older, less efficient and being used less
maybe.

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MR. LEWIS: If people catch that
last point, the first three columns on
chart one are only looking at what are
currently National Grid power plants.

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People asked a question a couple of
times about Caithness. That would not be
in the first three, so we're looking at

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East Northport, Port Jeff and whatever is held by National Grid.

In those three columns, you see CO2 per megawatt hour numbers.

If you go back to 1990, they were quite high; nineteen eighteen. Someone already pointed out law is seventeen zero seven for Suffolk County.

MR. MEYERS: Seventeen zero six, I believe.

MR. LEWIS: Seventeen zero six is the law. Back in 1990, it would not have met that number, and it would be coming very close back up to that number by 2020 if you only looked at these power plants.

So Monique asked a question why the number is lower now than projected in future years, but this is just the existing plants that presumably would be operated somewhat less, because of more energy coming from the cables and coming from Caithness and maybe some other --

MS. BRECHTER: That is in the reduction of the column of non-National

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Grid generation. You see the rates going down.

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MR. SERATOFF: It's possible, given time, the demand is going up; greater population, greater demand especially in Brookhaven, and the older plants are now being called back into service.

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MS. BRECHTER: Our projection is an assumption of them going down, but now this makes more sense. If you look at non-National Grid, the rate goes down so the overall rate does actually go down over time.

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MR. LEWIS: This is important where it says non-National Grid generation units in Suffolk County. There is where Caithness would be captured, because we're talking about generation in the County, but by plants that are not currently owned by National Grid.

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With that one, you see CO2 per megawatt hour numbers going down fairly substantially in terms of getting below a thousand. By 2020, it's projected at

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eight eight one.

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You have to mix all those numbers together to get the total, which is what we see at the last end, which includes waste to energy numbers, and it does show, if you take chart one and go all the way to the right, we see CO2 per megawatt hour numbers for combining of the different generation sources in the County of Suffolk, would be producing a CO2 per megawatt hour of one thousand one hundred thirty-six by 2020.

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That is a more or less.

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MR. SCHROEDER: Those can't be totals, because that is less than the National Grid plants only.

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MR. MANITT: It is the totals of the megawatt hours, and you get the CO2 per megawatt hours from that.

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So it is the average of.

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MR. WAFFENSCHMIDT: I previously gave you other numbers that didn't get reflected in that table.

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How do I resubmit them to you

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again?

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MR. LEWIS: On the waste energy

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numbers?

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MR. WAFFENSCHMIDT: Right.

6

MR. LEWIS: We should deal with

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that with this chart more or less.

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Probably do it now or as soon to now as

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possible, I guess.

10

Let's see if we're clear on

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everything else on the chart.

12

Joe, do you see the answer to what

13

you just asked?

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MR. SCHROEDER: The way it is

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represented here is not easy for an

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observer to observe. It looks to me like

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this is a total of the CO2 emissions,

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megawatt hours and CO2 pounds per megawatt

19

hour.

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What I'm being told is that the

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first two columns are, it looks like it is

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National Grid data. The total doesn't

23

seem to tally across.

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MR. MANITT: I think you may be

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right.

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MR. SCHROEDER: I'm sure I am.

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MR. MANITT: Wait. Wait a second.

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The ninety does, but if you look down to

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2006, it is considerably higher for the

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total for CO2 and megawatt hours.

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MR. SCHROEDER: Total emissions

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doesn't seem to --

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MR. MANITT: I don't think it adds

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up right.

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MR. LEWIS: Let's take a year,

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2006.

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MR. SCHROEDER: 2020.

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MR. LEWIS: In 2006, start with the

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Lilco National Grid. The megawatt hours

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is seven nine, seven million nine hundred

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seventy-four thousand.

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Then you go to the non-National

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Grid power plants for megawatt hours. It

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is two million zero six five thousand

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seven hundred twenty-six.

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Then you go to waste energy

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numbers. To the three hundred fifty-four

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thousand, you would add the seven nine

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seven four, the two zero six five and the

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three five four together, and that should get us the ten million three hundred ninety-five thousand two hundred seven total megawatts to be generated within the County of Suffolk.

MR. SCHROEDER: The CO2 pounds per megawatt hours doesn't tally across.

MR. MANITT: They wouldn't, because that is not something you could add up. They're a ratio.

MR. SCHROEDER: I see, sorry. No problem.

MR. RAACKE: While we're on emissions, a quick question; what is the assumption on re-powering?

MR. LEWIS: None. Chart one is just a statement of case. That was the point to clarify between base case and what would be involved.

MS. BRECHTER: Base case assumptions should be spelled out.

MR. STEBBINS: That should be somewhere. That is the standard term.

MR. LEWIS: Good suggestion.

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Other than waste to energy

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question, are we clear on chart one?

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We may need details as to what went

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into the generation of this chart, and

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we're looking at changing the name

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"potential" to "base case assumptions."

8

It includes twenty-five megawatts or more.

9

MR. STEBBINS: The waste to energy

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numbers, is that something that we're

11

going to visit now?

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MR. LEWIS: Yeah. John, explain

13

what your concerns are.

14

MR. WAFFENSCHMIDT: I sat on the

15

subcommittee that developed these charts.

16

I put together a chart which went into the

17

exact using -- not that I'm agreeing with

18

the methodology here -- - but that gave

19

the CO2 emissions on a per megawatt hour

20

is not reflected in the chart.

21

My same comments I made in the

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subcommittee, and I think one or more of

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the three plants may be less than

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twenty-five megawatts. I think the most

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efficient way to do this, I know who to

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give it to, give a specific writing with specific information.

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I asked Islip on several occasions to give me data, but they've yet to give it to me.

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You made an assumption here for Islip, but I can certainly speak for our two plants that are in Suffolk. If you want numbers, the chart that I put

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together in July relative to this exact question, using the exact methodology that's attributed here, for Babylon, it is fifteen eighty-seven and for Huntington thirteen thirty-nine, and the difference there is the efficiency in electrical production between the two.

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MR. MANITT: Thirteen eighty-nine.

19

MR. WAFFENSCHMIDT: Thirteen

20

thirty-nine.

21

MR. LEWIS: We have an asterisk

22

here. Explain what that is saying.

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MR. MANITT: The main point there

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is when garbage includes things like

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plastics, which are adding net CO2 when

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they're burned, but they also include a lot of biomaterials which are plant based matter, it takes CO2 out of the air before you put it back.

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So you have to back out the amount of biomaterial in the emissions, because they're not net increase in CO2. The numbers that John gave us also had a lot of things about offsets from trucking the garbage, so not putting CO2 in the air; that way, no methane gas. You have offsets in that.

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But I didn't include all those offsets in this number.

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MR. WAFFENSCHMIDT: The numbers that I gave you, those were just anthropogenic, but a proper treatment of it would look into the grid offset and would look into methane offsets.

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Both are not included in these numbers.

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MR. MANITT: You did give me anthropogenic?

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MR. WAFFENSCHMIDT: I gave you

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everything.

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MR. MANITT: I thought I asked for everything. Might just be because, well, I was trying to get Islip or something -- miscalculated something there. I'll take that chart again, crunch the numbers again.

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MR. KALB: Any reason not to use the offsets?

MR. LEWIS: My attitude was as long as we clarify, I'm fine with however way we present it all, so if you want to make that as a motion that we do use the data with the --

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MR. KALB: It is a non-standard approach. If you look at it compared with the standard way we do business, you ought to have those pieces factored.

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MR. MANITT: The standard approach is you're looking at it from a waste disposal point of view which is, this is better than, you know, trucking it off to a landfill, having gases escaping.

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I was trying to look at it from an

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energy production point of view and just see the garbage as fuel.

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MR. KALB: But it is more complicated.

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MR. MANITT: I understand that, but this is essentially a committee talking about energy production, not waste disposal.

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MR. WAFFENSCHMIDT: I thought the committee was about a carbon cap. I thought that related to greenhouse gases.

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I can tell you I have a problem inside the company, I come back and say how do you guys want to do that? They think it is an appropriate way to do it.

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I understand the math behind what you did, the concept of listing it in, but one of the challenges that we face with greenhouse and global warming is that what we are doing is cherry-picking what we want to do and how we want to represent it, and the fact is, it is either true or not true.

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I think some of you are copied on

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the letter I wrote to the State. I'm suggesting let's lay them side by side, going to a landfill or a waste energy plant, and whatever the numbers are, we'll use them.

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If it's true that if you put it into a burn plant versus going to landfill, your net effect from a global greenhouse gas standpoint is less, that certainly should be reflected.

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That is partly what we're doing.

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MR. MANITT: Whatever the committee decides, how they want to represent it, it is not a problem. I'll crunch the numbers and do the math either way.

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MR. LEWIS: Do you want to make a motion?

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MR. KALB: Sure.

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MR. LEWIS: Take another stab at restating it.

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MR. KALB: I think we ought to look at the contribution of waste energy from a holistic perspective, including any offsets that might be derived from

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transport, etc.

MR. MANITT: There was one other offset. You included a grid offset which was the offset of other fuels not having to be burned in other power plants, which I don't think is appropriate when we're looking at energy production.

MR. WAFFENSCHMIDT: That comes from the EPA DST model. That is what they do. I have this battle internally.

In my opinion, that particular question is a policy question, and the policy question boils down to this:

If you have an alternative energy source, which means you didn't specifically mine it for the purposes of produced energy, is it valid for that alternative energy to get a grid off set?

That is what that question is. It is a possible policy question, and all I'm saying is when you go to the DST model, EPA certified, done by their consultants on their web site.

As far as data, that model has

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2 both, you know, as you properly did not
3 include the biogenic and it does include
4 anthropogenic, which -- not the best for
5 the methane, and it includes the grid
6 offset, I say that is a policy question of
7 whether or not that is appropriate.

8 MR. LEWIS: Let's be clear on which
9 offsets you're saying should be.

10 MR. SERATOFF: What seems to be
11 being proposed is incineration as
12 preferable to trucking. It should be kept
13 in mind that the more you incinerate, the
14 more toxic pollutants goes into the air
15 carcinogens, heavy metals and ash.

16 If you're thinking about offsets
17 and costs, think about medical and health
18 care costs from the increased toxic
19 pollutants from the incineration.

20 MR. MANITT: If we're looking at
21 greenhouse gases and carbon in particular
22 here, there is nowhere to put that on the
23 chart.

24 MR. SCHROEDER: Not that I disagree
25 with the holistic approach, I think that

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is the best way to go. Looking at
legislation, specifically we are looking
at stack emissions as the issue here.

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So I'm sort of torn between
recognizing the value of the holistic
approach on the waste to energy
facilities, and also fulfilling the
mandate of the Legislation, which is, I
think, designed to squeeze the maximum
efficiency for minimum emissions out of
our singular stacks.

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So I think this is a per facility
over twenty-five megawatt issue; how much
are we emitting, how can we reduce that?
That is the explanation for me, and Drew
and myself presented this raw data, but we
didn't mean to say there wasn't validity
in the discussion about offsets and,
frankly, if the committee feels we should
indicate the numbers so that that is
reflected and there is, I think, something
of an argument, that is commonly how the
numbers are presented in other contexts,
whatever.

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MR. SCHROEDER: From the prospective of the budget review office, I think that speaking to the stack emissions and focusing on what is mandated of the Legislature, it certainly is illustrated to the Legislature to have an explanation of the offsets that bring public benefit to Suffolk County from waste to energy.

So I think there is a way to address that but still keep focused on mandate of the Legislature.

MR. LEWIS: You're thinking there should be a raw number and a second category that says "with offsets."

MR. SCHROEDER: That might satisfy the situation.

MR. LEWIS: I don't know. Can we clarify which offsets that we are talking about potentially including?

MR. WAFFENSCHMIDT: Two prime offsets, one is fairly straight forward which is the methane offset. If you went to a landfill, you would produce methane and trucking, going there. Those are two

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that are fairly obvious.

The other one that I think is I mentioned, it is a matter of public policy question, is it appropriate that the only non-fossil generation in this deliberation deserves a credit for a grid offset?

I say that is a public policy decision of whether that is an appropriate thing as Andrew said. From a strict methodology calculation of CO2 emissions, that policy question doesn't come out in those numbers.

That is just -- all I'm saying is that the EPA in the DST models gave that credit. I recognize just from a technical standpoint, that is not a technical decision, that is a policy decision.

MR. LEWIS: We got to make a judgment one way or another. We do have a motion to say that we show simply the numbers with the offsets or perhaps there is another suggestion.

We have both the raw numbers and the numbers with the offsets. There is

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sort of two approaches on the table.

MR. KALB: I'll withdraw my motion and go with the two numbers.

MR. LEWIS: Show both is what you're suggesting.

If we're going to show both, the question is which of the offsets would be included? I think John has made a good explanation of each.

The trucking, I think, we're saying is relatively straight forward. The data exists on how far they have to go and how much fuel and so, John, that is straight forward.

MR. WAFFENSCHMIDT: And I believe it is also straight forward using current methodologies for methane. IGCC has made an argument that we have miscalculated the methane intensity, and so there is a possibility in a future time we're going to use something other than twenty-one to one, which is the current ratio, but today the information I gave was based on twenty-one to one.

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MR. LEWIS: If the committee agrees to include these numbers, you can supply us with what the assumptions are, you could help explain where the methane and trucking numbers, all three offsets, how the numbers were derived and your sources, some various standards that are available to help do that.

MR. RAACKE: On that point, two quick points. We need to, in the interests of being able to manage this vast amount of data and complex issues, we have to keep an eye on the ball here. We have a report due.

I fully support putting everything we know and possibly and reasonably include here, to put that in the report, but we need to keep an eye on sensitivity and how these things affect the final numbers.

When you back out the waste to energy numbers, there isn't, if you assumed that you wouldn't account for them at all, there is very little change in the

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emission rate.

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MR. LEWIS: That argues -- we should wrap up this item. I think it was a healthy discussion. It is an important point John raised. Nonetheless the total amount is kind of gaffed by the overall system.

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So it is not going to really affect the total numbers substantially one way or another. I think we have a motion and perhaps a second, if I interpret the two of you comments, which is that we present the raw data for waste energy and present a category that says something like, with offsets, and down below we explain what these three offsets are and that is the proposal.

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How do people feel?

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MR. RAACKE: What did we include in the total emission rate?

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MR. LEWIS: Would you recall?

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MR. WAFFENSCHMIDT: They're on the sheet that I had previously prepared. I'll just use Huntington for an example.

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If we did, purely using the anthropogenic components, thirteen thirty-nine per megawatt hour, if we look at what the offset is at the landfill for that, it ends up being about twenty-four fifty-seven.

Understand that would be a minus number, and the grid offset number that is used here is minus sixteen zero eight.

I had put this together, including all of the disclosures as to calculations. If you like, I can send that to you so you can look at it.

MS. BRECHTER: It is a net negative.

MR. WAFFENSCHMIDT: Yes, it is pretty straight forward, because you think about the two offsets that are offered, if you offset a hundred pounds of methane, you end up picking up twenty-one hundred pounds of CO2.

That is the reason why the numbers are so dramatic, because of the intensity of methane, and that policy question; if

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you produce one megawatt hour and taking a

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credit for a megawatt hour fossil fuel,

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that is why those numbers are fairly

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large.

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MR. LEWIS: Do we get that methane

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is the wild card here? Methane is much

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more powerful than CO2 as a greenhouse

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gas. This can throw this number into

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negative. As long as we're showing both,

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that is the suggestion that is on the

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table.

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We show both, we explain what the

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offsets are that generated the lower

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number for that, I think.

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MR. RAACKE: My question was what

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the impact on the numbers and emission

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rate numbers in the last column would be?

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MR. LEWIS: I think maybe what

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we're going to agree, it does not have an

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impact, because I think we're going to

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show two columns.

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It gets confusing if we're

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averaging in a negative.

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MR. WAFFENSCHMIDT: You're a

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hundred percent right in the broad scheme of things. While important to those of us in the industry and policy question for other reasons, it is small relative to this task.

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We would be comfortable to get the second column that shows that.

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MR. LEWIS: Let me sum this up. We accept chart one with the various qualifiers that explain what went into it; base case assumption, twenty-five megawatts or more and some other stuff about how the data was generated for waste to energy.

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The CO2 per megawatt hours numbers was going to be shown as raw data, and a separate column inserted indicating with offsets, and down below the three different types of offsets will be described with some explanation of what the standard approach is to include such offsets.

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However, when we get back to the totals on the right from the chart, the

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totals will work with the numbers based on the sort of raw data, rather than taking into account those offsets, because it gets confusing to mix apples and oranges.

Can I ask that we all agree on that for chart one?

Anybody disagree or wish to discuss it further?

(Whereupon, there was no response.)

No, okay.

Chart one A, I'm unclear as to why we called it one A as opposed to two. We talked about it, because it is what is reproduced in the large chart Joe prepared.

Andrew, explain what one A was intended to --

MR. MANITT: Chart one A is basically just, again, Suffolk County and just the Lilco National Grid plants, and it just fills in all the years instead of just the benchmark years we had from chart one which might be why it is one A.

It is an expansion of the National

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Grid column.

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MR. LEWIS: I think Joe raised the point that if we only had four or five years, it is harder to chart and use the information more effectively. This chart attempts to walk year by year from 1990, so that is part of how this is different.

The other part is the generation in Suffolk County of National Grid plants.

MR. MANITT: Same as the first three columns from chart one, except it's adding extra years.

MR. LEWIS: As pointed out, we don't have the oil versus natural gas percentage break down. It would be helpful if we had that, that explains variations in CO2 numbers.

They're clearly much better when natural gas is being used as opposed to oil. If we can get numbers between now and the next meeting, we would seek to insert them.

Otherwise, for the left hand side of chart one A, any questions or concerns

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with what's presented here?

MR. SCHROEDER: I would move that the graphs that were done on the basis of this information be included officially in the representation of chart one A.

MR. LEWIS: Let's take a look at that.

On the large white sheet that you prepared, the graph on the bottom left would be the first one?

MR. SCHROEDER: That's correct.

MR. LEWIS: This shows a blue and a red, blue-ish being the electricity and red being the CO2 emission numbers, and this is total CO2 as generated from the plants, which under this scenario, are going to be operating less.

So we need to keep in mind that the amount of electricity megawatt hours generated, if we go from the top to the bottom, 1990 it was nine million seven hundred sixty-one thousand megawatt hours and in 2020, it's less than half of that with four million three hundred forty.

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That has an effect on this all.

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MR. SCHROEDER: This just visually illustrates the data in the table above.

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MR. WAFFENSCHMIDT: Only what I said earlier, I think the trouble with this chart, it creates the image without the detailed understanding of it, that CO2 emissions have gone down. That is not true.

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All that happened is that CO2 generation by a class of people have gone down.

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MR. SCHROEDER: This is specific to the Keyspan plants, yes.

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MR. WAFFENSCHMIDT: It looks like we're going to have less CO2 emissions when they're being offset by the "none," in reality --

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MR. SCHROEDER: I would be happy to work with the committee on doing graph illustrations for the other.

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MR. LEWIS: I do think we attempt to capture that other stuff in the other charts. Taking these baby steps, I think

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what we have so far is that the chart appears to be accurate for our purposes, and the graph that was created hopes to illustrate it.

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Pretty well, there is no issue there.

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MS. BRECHTER: Perhaps on the other axis, megawatt hours for the electricity generation, there is only --

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MR. SCHROEDER: This was actually a quick illustration that I did for purposes of the meeting, so we can clean that up.

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MR. LEWIS: Is a suggestion that we're calling it a grid? A graph, so the graph for one A should perhaps include megawatt hour production from these plants, so we see that number going down.

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That helps to explain the other numbers.

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MR. SCHROEDER: The title of the graph does state that CO2 pounds per megawatt hour.

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MR. KALB: Just doesn't have the axis.

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MR. LEWIS: It is more of just not
being on the axis.

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MR. RAACKE: I think the graphs
tell a good story, and obviously need to
be labeled properly so that people can
understand what we're showing.

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I would suggest that we generate
the same kind of graph for table one and
some of the other tables, because one has
the total non-Keyspan generation in it, so
then we can show what the overall picture
would be.

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MR. SCHROEDER: I would comment
that this is the reason why I requested
the additional years worth of data,
because to illustrate graphically, 1990,
then jump to 2006 and end up at 2020, that
is a difficult illustration, because it is
not representative of reality.

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When people get a very false
impression on the basis of that kind of
gap in data, it is hard to illustrate with
the data available for those charts.

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We can do what we can to illustrate

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that, but without this data -- may want to speak to some of these charts in the context of this more complete data, so maybe we want to roll chart one into chart one A somehow.

MR. RAACKE: I do agree with John. If we, for chart one A, we also did a separate chart, this generic power plant CO2 emissions to the right, I'm finding this a tad confusing.

Having some second thoughts about whether or not it made sense to present.

MR. SCHROEDER: It's not intended to be a permanent fixture on this chart. That was illustrated for the committee for purposes of describing and explaining difficulties I have with the calculations on subsequent charts.

If you want to remove that, I have no problem with that.

MR. LEWIS: I think that might help. I'm finding it a tad confusing.

The data that has been generated seems a little inconsistent with some of

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the data generated from other sources, so you gave us this national web site source and how numbers -- if we take the same CO2 or megawatt hours and pump them in, we get a different number than what we see here.

MR. SCHROEDER: The point was more in the calculations I was asked to perform on the subsequent table which we can discuss after this.

I came up with numbers that didn't reflect the numbers that were in the table before, and I demonstrated with this column, I could come up with different numbers than what was represented here.

We need to be on the same page with how we're providing the data.

MR. LEWIS: I would remind you again, Bob wasn't able to make it today. Hopefully at the next meeting he'll be there. We'll have a chance to --

My understanding for the past years there is, in fact, a hard number that is not just a formula. The number does exist, somewhere put on various documents

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that are filed, so that for the past years, the CO2 numbers are hard numbers.

The point is well taken that perhaps we should double check the numbers in some ways to question whether or not it is consistent with what has been done in other places.

But, hopefully, we got real numbers here that will hold up. I believe that is what Bob represented in the previous meeting.

MR. KALB: They were based on a formula, not measured CO2 concentrations, correct? They're based on some formula that multiplies the electrical generation rate.

MR. LEWIS: Unless Monique wants to take a stab, we should have it add on questions we want answered between now and the next meeting. Yes, it is a formula, but also written down on certain forms that makes it a little more official.

MS. BRECHTER: I believe these are reported numbers.

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MR. LEWIS: Not necessarily a meter that spins that gives the number.

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MR. SCHROEDER: I have a question on whether they're actual or not, because we took a tour of both Northport and Port Jefferson power plants.

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While in the control room, I asked the operator to pull up CO2 emissions. I was told they don't monitor them.

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MR. MANITT: They know how much they burn. They have a conversion rate.

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MR. KALB: Those should match up. My point is we should find out what is the rate of this discrepancy and rather than have two sets, figure out why there is a discrepancy and stick with one number.

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MR. WAFFENSCHMIDT: If you had -- when we do stack testing, that is the way you get actual data. If you burn that gas, two different types of oil in plants side by side, it assumes they're the same efficiencies, you would get three different CO2 emissions, because there are different types of oils that are

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available.

National gas is more consistent.

MS. BRECHTER: They calculate based on fuel usage, but they do report these. I'm not 100 percent sure. That is subject to confirmation.

MR. LEWIS: Can budget review shed any light on this in terms of information sent -- not budget review, the Health Department, because of the law that was passed years back to say it should only be seventeen zero six.

That meant there had to be reporting.

MR. MEYER: I believe the best way to do it is based on fuel usage.

MR. SCHROEDER: It is a calculation.

MR. LEWIS: Based on the burn and conversion rate for the different fuels.

MR. MEYERS: That should be accurate.

MR. KALB: The number didn't take into account the fuel, just kilowatt

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hours.

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MR. SCHROEDER: The number on the page was simply a generic EPA calculation.

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It was to illustrate the point that I

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don't know how these numbers were derived.

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MR. KALB: The generic calculations are probably based on fuel content in

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items of CO2 production. Hopefully, the

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Keyspan numbers are actual, not average.

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MR. RAACKE: In the absence of Bob, we will not know where these came from,

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but my assumption is that they come from

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the data that is filed and put into the

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data base.

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I assume that is correct. We need to clarify that, but I would want to see

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the source mentioned in the report is E

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grid data source or whatever.

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MR. LEWIS: Thank you.

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I think there is a difference

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between doing formulas and calculations

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that any one of us could attempt to do and

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taking numbers that are reported which are based on those kinds of formulas, but are

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the official reported numbers.

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That was my point. That was my understanding here. There could be questions raised, but if we're not clear, we should get it clarified.

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I do think that what we have is a suggestion that we clarify the numbers, report the numbers, whether E grid or what is that reported, who it's submitted to and how it's the source of the number in terms of how that reporting is generated. It is based on conversion rate of fuel.

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If we can explain all that in the chart, that will capture a lot of what we discussed.

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MS. BRECHTER: Another thing that goes into calculations is the heat rate of the plant, plant efficiency, what efficiency rate are they using in addition to the fuel?

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MR. LEWIS: First we removed the generic power plant CO2 emissions. We do have chart four that addresses some of that. Remove that.

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2 B, that we do include the graph
3 illustration so we're removing one, adding
4 in the other. That we clarify with
5 greater information, explanation as to
6 where the numbers came from, how
7 calculated, the role that both the choice
8 of fuel plays and that also there is a
9 heat rate or plant efficiency rate that
10 can vary, that can affect numbers.

11 Each should be explained, where
12 numbers are reported so the point is we're
13 all using data that is official data. If
14 we can include all that I described with
15 chart one A, that is a way to move
16 forward.

17 The generic power plant off to the
18 right is excluded. The one that is under
19 it, do you want to say anything about
20 that; the electricity generation
21 associated emissions, pounds per megawatt
22 hour?

23 MR. SCHROEDER: Both graphs simply
24 illustrate the data in the table to the
25 left on chart one A. If you eliminate the

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generic, doesn't eliminate either of the graphs, and both graphs are important because I agree with what John is saying.

This simply illustrates the data in the table, and the importance of the second graph, the bottom right graph, is that there is no allowance in the pounds per megawatt hour, even though the gross result occurs or is projected to occur in CO2 emissions due to decreased electricity generation.

MR. KALB: We're going to change the total of the table to base case, correct? That should be --

MR. SERATOFF: These numbers have even been determined to reflect the National Grid system status quo or has re-powering been done so a qualifier statement should be inserted?

MR. LEWIS: Yes, this is base case, business as usual without any changes other than the ones that have been approved.

I don't see any objections that we

1
2 include both graphs with this one, and
3 perhaps there is a way to organize one and
4 one A because one is the summary years,
5 but one also did include non-Keyspan power
6 plants which is not the one A. May need a
7 tweak about labeling.

8 Otherwise I believe we have
9 agreement on first two charts.

10 MR. RAACKE: I want to make a
11 point. The project, the numbers should be
12 clearly identified, both in the chart and
13 graph.

14 MR. LEWIS: Chart two.

15 Andrew, walk us through the
16 explanation. Like, chart one, we don't
17 show every single year. We picked
18 highlight years.

19 MR. MANITT: This looks rather than
20 at what is being generated physically in
21 Suffolk County, that first half is what is
22 being used in Long Island.

23 No total on the right, what is used
24 in Suffolk County. It is kind of taking a
25 blend of all LIPA's generation sources and

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getting a rate for that and looking at what that comes out to, if you look at it per capita.

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MR. SCHROEDER: That is the table that has the second page of my handout. This is the combined?

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MR. MANITT: Yeah, this is analogous to that.

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MR. SCHROEDER: I want to make a point. In some of the calculations that we were asked to perform, this isn't exactly the table, but the sales tax receipts, revenues were used to do our calculations for non-power plant emissions.

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This is a different table?

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MR. MANITT: This is, like, five, I think.

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MR. SCHROEDER: Sorry. No problem. This one hopefully is easier. I found the stuff on that other one confusing. Don't look at the white sheet yet.

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Staying with the yellow chart, two, we have Long Island population numbers

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which is an obvious source of the census.

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Now you got total LIPA customer consumption. This is where all sorts of questions could be raised; are we assuming success with efficiency growth rate increase, we have a three percent, growth rate is seven percent in Southampton.

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By the way, I find fascinating with demand for cables to be put underground and yet they still build big houses wasting lots of energy. We do have a growth rate issue with those numbers.

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This is attempting to take the basic assumptions as we look forward. We need to be clear where we're dealing with projections as opposed to actual.

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The effort was to get into a per capita way of looking at some of these numbers. Anything in terms of what this chart brings to light?

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MR. MANITT: I think the basic message from this chart is that the increases in generation efficiency are being erased by the increases in

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consumption.

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MR. WAFFENSCHMIDT: I actually calculated a four percent increase, if I remember correctly. From 2015 to 2020 is six point three percent per year.

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All I'm saying one more time, I sure hope on the demand side we're going to do a better job. This says we don't do fifteen by fifteen and everything that Joe talks about in all these others about doing something on the demand side, we're buying into the failure.

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Maybe that is what we should be doing, but it seems like -- I'm hoping we're going to do a better job as a country, as a planet, as a County by 2020 than what this says on a per capita basis.

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MR. LEWIS: Which is well said. If the comment is, therefore, we shouldn't show it this way, I would disagree. Our point is we should show what the basic assumptions as they existed will lead us to --

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MR. WAFFENSCHMIDT: Is that what it

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is?

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MR. LEWIS: Yes, so the point is unless some of these new efforts to improve efficiency really take hold, unless other things are done, this is where we're headed.

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This is not to say we predict this is where we're heading or it would be a good thing. We're simply saying this is where we're heading based on what exists today and taking basic formulas.

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MR. WAFFENSCHMIDT: I make a motion that we, in the text at least, address the fifteen by fifteen and other demand-side items as a policy question of whether or not we should ultimately be at this projection in 2020 or some other point.

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MR. SCHROEDER: Joe wants to say something, but I have a question on the population.

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Is this supposed to be Suffolk County only population?

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MR. MANITT: The first one is Long Island, and over where there is a little

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break in the box Suffolk County.

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MR. MUNCEY: My question was where did these numbers come from?

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MR. MANITT: Mostly came from -- these are LIPA numbers?

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MS. BRECHTER: I think so, so we have populations, surveys and projections.

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MR. MUNCEY: This is the first time I'm looking at it. It looks like the consumption by person will increase as time goes forward.

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MS. BRECHTER: That is very correct. Flat screen televisions are incredible consumptions, MP three players. This is consistent across the country.

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Increase in vehicle miles traveled are going to go up. I've seen literature saying that will erase any savings. This is consistent with projections nationally barring any energy conservation.

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MR. MUNCEY: Where did you get the numbers from?

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MS. BRECHTER: Population survey on our web site.

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MR. MUNCEY: I'm not questioning the population growth. I'm questioning the manner of kilowatts per person.

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MR. MANITT: Just taking the trend and extending it out.

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MS. BRECHTER: We do detailed load forecasting.

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MR. SCHROEDER: Is it possible to get some of the prior years population survey data so we could do some more of this per capita, illustrate it over time to project better for the committee's report?

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MS. BRECHTER: This is the most current projections. Previous might not be --

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MR. SCHROEDER: Active ones, LIPA posted. They're very complete.

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Is it possible to go back, as Lilco did these population surveys, and does that information reside at your disposal or is it something that would be difficult to get?

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MS. BRECHTER: I don't know. What

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would be the point of you doing that;
seeing how accurate these projections are
or what?

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MR. SCHROEDER: Illustration of the
per year data from 1990 through 2020. I
think. Is easier to visualize.

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MS. BRECHTER: You want back years?
I can look.

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MR. SCHROEDER: If it's possible.
From the perspective of a layperson
looking at this data, I think the more
visual the illustrations we can provide,
the better received it is going to be, and
better able the Legislators are going to
be in determining good legislation.

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MR. LEWIS: Part of the question
was, in order to visualize the growth to
the demand side of the equation, whether
it's possible to get more of the back
years filled in so that we could perhaps
graph it or visually illustrate it.

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MS. BRECHTER: You want load over
time?

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MR. SCHROEDER: I do get annual

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2 updates from LIPA and Keyspan on Suffolk
3 and on Suffolk energy consumption and
4 population and so forth. I was looking
5 for that data going back so we could --

6 MS. BRECHTER: We have graphs of
7 load growth over time and probably, if you
8 sent me an E-mail what you're looking for,
9 I'll pass it along to the right people.

10 MR. LEWIS: We'll handle that in
11 that way.

12 For purposes of this chart, we come
13 back to what a couple of people focused
14 on, which is that some efforts to improve
15 efficiencies are not going to be
16 successful if we keep the demand side
17 growth at the rate it is going.

18 It is like making a car cleaner in
19 emissions, but if the car goes twice as
20 far, that reduction in emissions actually
21 is lost. You can see an increase because
22 the car's going further.

23 It's similar here. If the growth
24 and demand keeps going at the rate it's
25 going, then some of the efforts that have

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reduced CO2 per megawatt hour will not actually reduce CO2 in the big picture because the megawatt hour is going up.

I do think that is essentially what this chart is alarming us to, alerting us to, that some improvement in the efficiencies of the power plants could easily be lost if we don't do more on the demand side.

If we get that, that is a useful thing to include in the narrative.

MR. WAFFENSCHMIDT: I had a motion a while back that basically said in the narrative, my suggestion that we address demand side management efficiency fifteen by fifteen and other such aspects as may potentially reduce the per capita growth.

MR. WHITE: I second John's motion.

MR. LEWIS: We do have a motion and second. I attempted to explain it not so well. I'm not going to repeat it. I think you got it.

Everybody agree that the narrative captures those points to go along with

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this chart?

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(Whereupon, all responded in the affirmative.)

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Is there any other questions or concerns with this?

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MR. RAACKE: The question is would it be possible in to label these as base case scenarios, that assumptions were made?

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Is it possible to get that?

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MS. BRECHTER: This is a base case, what assumptions went into the base case?

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MR. RAACKE: Whether fifteen by fifteen was included, etc.

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MR. LEWIS: My general understanding is that it wasn't. That was what we would indicate in the narrative.

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We would say it is important that these programs being talked about be embraced and be successful. Otherwise, this is where we're headed.

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Chart number three, the heading is LIPA induced CO2 emissions by source.

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MR. MANITT: This essentially is

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everything, all the electricity that LIPA eventually sells and where they get their electricity from and what the -- how many tons of CO2 are generated by each of those individual source categories.

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MR. LEWIS: Why was this one important as opposed to previous charts?

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MR. MANITT: I think what it shows is where that generic tons per year number comes from, where that CO2 per megawatt hours comes from in the previous chart.

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You can look at what the tons were and various sources.

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MR. LEWIS: Part of what we're attempting to capture are things like the reliance on cables that are importing electricity from other locations, so if you only look at Long Island or certainly only Suffolk County power plants, you're missing the fact that there is now that the Neptune cable is up and running, there is imports from them, imports going to the north, and there is non-Keyspan plants that also generate and will be generating

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electricity on Long Island.

So you have fairly solid data on the Keyspan/National Grid generation facilities, but we wanted to -- this is the first report attempting to capture any of this information.

At least, possibly this is an attempt to not just look at -- you have existing power plants on Long Island, everyone looks at those, but we're saying wait a minute. If you want to know what is going on, take into account we have generation in other locations, uses, completely different types of facilities.

The question was asked whether PJM used coal plants or other things we don't have on Long Island, but perhaps nuclear. This was an attempt to capture all that and get it into our numbers, because for the average Long Islander, it kind of doesn't matter; they turn the power on, where is it coming from?

If CO2 is generated from New Jersey, it doesn't matter we're using

1
2 electricity here. In order to understand
3 the carbon footprint here in Suffolk
4 County, we need to take into account
5 energy that is generated outside of
6 Suffolk County, but is then sent into
7 here.

8 We started with Keyspan plants with
9 solid data, then Non-Keyspan which
10 includes Caithness by 2009, shouldn't that
11 be captured, that stuff?

12 MR. MANITT: I have to add in
13 Hempstead.

14 MR. WAFFENSCHMIDT: Along with the
15 other stuff, I'll give you the --

16 MR. MANITT: That would be great.

17 MR. SCHROEDER: I'm having
18 difficulty here understanding data. The
19 first column, Keyspan generating units
20 tons of CO2, this is per?

21 MR. MANITT: Annual.

22 MR. SCHROEDER: But the numbers
23 there don't seem to agree with the numbers
24 in 2020. This is Long Island wide. This
25 isn't just Suffolk County.

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2 What we've looked at so far is just
3 Suffolk County?

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MS. BRECHTER: Did you get these
5 numbers from Bob?

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MR. MANITT: I thought we did.

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MR. RAACKE: Numbers should be the
8 same as on the white chart.

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MR. LEWIS: Between Suffolk numbers
10 and Island wide is confusing.

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MR. SCHROEDER: You illustrate that
12 and keep it consistent. If you want to
13 list Island wide, that is fine, but also
14 list Suffolk County so it is consistent.

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On the issue of emissions, is there
16 total plant emissions based on total
17 output so we're capturing whatever energy
18 is being exported from Long Island as
19 well?

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MR. MANITT: No, I think this is
21 just LIPA.

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MR. SCHROEDER: If it is not based
23 on complete total output, then there is
24 another column that we need to put in
25 there. That would be off system sales.

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MR. WAFFENSCHMIDT: Far Rockaway.

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MR. SCHROEDER: There are also

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cables that run electricity in both

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directions. There are times that energy

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is going to the State of Connecticut.

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MS. BRECHTER: Or the rest of the

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state. I don't know the magnitude.

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MR. WAFFENSCHMIDT: I thought that

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number was pretty darn small. Far

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Rockaway is probably the biggest.

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MR. MUNCEY: I think that is

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important for this table. We're showing

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imports into New York, capturing the

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calculated carbon being generated by other

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plants that is contributing.

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We should include a column that

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shows energy that is being generated here

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with CO2 footprints and what is going out

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of the area.

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MR. SERATOFF: I agree.

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MR. LEWIS: So there is a desire to

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include exports from sales in this chart

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and a need to break out. This should be

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clearly labeled as Island wide, and I

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guess there is a need to break it out and
3 have Suffolk only.

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Part of the question was, it is not
5 so clear how you would do that. We were
6 doing some per capita numbers on the
7 previous chart because in theory, you can
8 extrapolate but --

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MR. SCHROEDER: The data for
"Suffolk only" should be the same that
11 appears on other tables.

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MR. MANITT: What this whole chart,
13 three is, is just showing where the number
14 in the fourth, fifth column in the chart
15 two comes from. It's showing what the
16 different sources are.

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It is LIPA induced CO2 emissions
18 tons per year on chart two. The last
19 number, the chart -- column in chart
20 three, the number that goes into that. It
21 is really just showing what the different
22 sources are for that number.

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MR. LEWIS: Maybe that is a more
24 helpful way to present it. Explain that
25 this is essentially showing the elements

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that make up column three on chart two,
LIPA induced CO2 emissions.

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MR. MANITT: It is just a break out
of where those emissions come from by
source.

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MR. STEBBINS: Just a question.

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I'm curious as to what the goal of this
chart is, because if you look at some of
the columns, you see imports from New
England.

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I'm sure the numbers are fine, but
the problem is we don't know what type of
electricity or what type of power this is
that is being imported, hydro which has no
CO2 emissions impact.

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When you're looking at is total sum
on this chart. It leaves a different
impression or could be construed that way.

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We would want to step very
carefully as far as that is concerned.

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MR. SCHROEDER: Dollars to donuts,
based on some of this, if there is a cost
associated with coming into compliance
with a regulation that comes out of this

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committee's work, then that cost should be borne by all consumers of that plant, not just Long Island consumers.

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If there is going to be off system sale -- there was an issue with deregulation in the nineties -- it should carry the weight of some of those costs.

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MR. STEBBINS: Can someone re-review what is the real goal of these charts for the committee?

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MS. BRECHTER: To show there is Long Island induced carbon emissions, not geographically located on Long Island.

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Inasmuch as it inter-ties to other regions and we buy electricity from these others, we are at some level responsible for carbon emissions in other regions other than Suffolk County.

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I don't know that that really is a hard concept to --

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MR. STEBBINS: My question is does that really serve the purpose of the intent of the committee created by the Legislature?

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2 MR. LEWIS: I think this is where
3 it came in, was that the point was made
4 that what if there was -- we do have a law
5 that says "X" CO2 per megawatt hour, what
6 if that law was amended to a lower number
7 that was imposed on facilities Suffolk
8 County?

9 Would the practice or the effect of
10 such a requirement be that you may just
11 see an up-tick in the imports of energy
12 from other sources, because the law would
13 not reach the generations that are off
14 Long Island so that you could see an
15 increase in CO2 numbers, but it relies on
16 non-Long Island generation, and that
17 certainly wouldn't accomplish the purpose
18 of such a legislative strategy.

19 This was anticipating a legislative
20 strategy similar to what the Fisher Law
21 from "X" number of years ago, where it set
22 the seventeen hundred CO2 limit on plants
23 in Suffolk County. If you were to extend
24 that, let's say it is fifteen, and said
25 therefore, you're going to have to

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2 re-power these plants to get below or a
3 lower number -- if you did all that, you
4 have to consider the consequence that Long
5 Island is no longer isolated from these
6 other sources, and that Suffolk County
7 can't control what is going on with a New
8 Jersey plant or Connecticut plant, but we
9 may draw more in from other sources.

10 This was attempting to put on the
11 table what those are, what corrections are
12 to the CO2 numbers. Keep that in mind.

13 MR. KALB: If we were to buy all
14 power off Island, we could meet the goals,
15 and yet that is not what this is all
16 about. We have to take, integrate the
17 approach, see where CO2 is coming from.

18 MR. SCHROEDER: As we're seeing in
19 the region, the greenhouse gas initiative,
20 this is an issue relating to carbon
21 emissions reduction. Industries refer to
22 it as leakage emissions coming into our
23 region from other regions where you're
24 purchasing power to avoid costs of coming
25 into compliance for emissions reduction in

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your own territory.

It does speak to emissions elsewhere that would otherwise be generated here.

MR. SERATOFF: The cables do work in both directions, and with the six hundred new megawatt Neptune cable, there is a significant possibility of export from Long Island to PJM if they have an emergency or being more -- greater electricity demand during the hot weathers, I think what Joe said, having an off system column for off system generation and emissions should be added.

MR. LEWIS: With column three, we do have the numbers for waste to energy to fill that in. We do want to set it up by clarifying both; that there is Island wide data, and that it is essentially a break out of column three from chart two, explaining how that column three was generated.

So this is explaining it, if we can get Suffolk out or explain a way you would

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get it.

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MR. MANITT: I don't think you can say what comes in over the cables.

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MR. LEWIS: You could use previous data of the Suffolk per capita numbers to say that it should be "X" percentage of each number. I think we should give some explanation of that in the narrative, and the point was made about off systems sales, which could be very small, and we're spending a fair amount of time.

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It is a variable. I don't know how it is controlled, whether it can go up in the future depending on whose decision --

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It is an interesting question unto itself. You might have more off system sales if you had re-powering.

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You might have a plant that is more competitive to be able to sell. The off systems stuff is interesting. I don't know how deep we can get into that, other than making some reference to it.

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If it's possible to add numbers.

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MR. RAACKE: I think we should

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identify whether this is a base case, what the source of the data was. I assume that came from LIPA.

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MR. LEWIS: Should be consistent.

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Any other questions?

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MR. WHITE: The second column non-Keyspan generation, do you have an explanation of how what is changing those numbers?

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Are we anticipating more on-Island non-Keyspan units?

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MR. MANITT: Yeah, Caithness.

14

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MR. WHITE: That would come in 2009. You're showing it doubling to 2020.

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MR. MANITT: Assuming even more coming on line non-Keyspan generating units.

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MR. WHITE: We need to have a vision of that.

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Is that a Keyspan generated number?

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MR. MANITT: I think it is LIPA generated.

24

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MR. LEWIS: We need clarification on what plants are coming on line.

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Everyone is familiar with Caithness, but
what other ones?

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MR. SERATOFF: Any mention of
Spagnoli being built?

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MR. LEWIS: No, because base case
is just operating on what is approved
today, what is already in the works.
We're not speculating.

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MR. WHITE: This does speculate.
If you speculate a Keyspan plant in
Bethpage Spagnoli, that should go in
column one.

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Somebody is speculating on some
other non-Keyspan plants in --

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MR. MANITT: They're taking what
their load growth is going to be and
assumes new stuff is not necessarily going
to be Keyspan.

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MR. WHITE: Are we going to assume
that?

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MR. MANITT: We got these numbers
from LIPA, using their assumptions. I
think we need to spell out what those are.

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MR. WHITE: That is my point.

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MR. LEWIS: Any others on chart

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three?

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(Whereupon, there was no response.)

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Are we satisfied with chart three

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or not?

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If we're able to set it off

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correctly in terms of explaining what the

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essence of this is, if we're able to be

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clearer about what this non-Keyspan

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generation on Long Island is, if we're

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able to add some off system sales numbers

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and perhaps some discussion about leakage,

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how that is a major issue and how this

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chart is attempting to show numbers

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involved in those calculations, would that

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be it?

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Chart four hopefully is relatively

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straight forward. These are emission

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rates for tons of CO2 per megawatt hour

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for different power plants on Long Island

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under different fuel choices.

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MR. WAFFENSCHMIDT: We should

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disclose how these numbers were derived.

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I shared this with people in California,

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2 and they're saying if you look at the
3 combined cycle numbers, they're coming up
4 with substantially higher numbers, and I
5 was a little bit surprised because I
6 thought there was a standardized
7 methodology.

8 We, given our previous
9 conversation, if we take that last one
10 off, rather than make it more confusing
11 since we addressed it elsewhere and have
12 it be on the fossil side. I thought on
13 the fossil side, everything would have
14 been calculated the same way so that a
15 combined cycle on Long Island and one in
16 California would have the same CO2
17 emissions.

18 The California people are telling
19 me their numbers come up higher than ours.
20 We should disclose how we come about these
21 numbers.

22 MR. LEWIS: Any other comments on
23 chart four?

24 MR. SCHROEDER: I would second
25 John's thoughts on the calculation side.

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I'm going to have to disagree with him on the motion to take off the last item. We are looking at stack emissions here, and if you're going to -- well, I'll think about that more.

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MR. WAFFENSCHMIDT: I was trying to say complexity. I think this is really for illustrative purposes.

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MR. LEWIS: One suggestion is that the exemplars chart CO2 emission reports from various fossil fuel electricity generation technologies. In that case, we would not include the waste energy at all.

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The other scenario would be that we do have it, but currently there is a parenthesis, could be an asterisk, relating back to some of the offsets and other ways of looking at that number as indicated in the previous chart.

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MR. MUNCEY: I would like to keep all the categories on the table, including -- because that is what is coming out of the stack. Maybe it is a little higher than the rest.

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The thing is, it may encourage people to recycle meals; plastics, food items more efficiently rather than bringing them to the landfill than burn.

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MR. SERATOFF: These are not hypothetical numbers. They are actual emissions going into the air. It's the least efficient way of generating electricity, and it should be included.

It is there, it shouldn't be discarded.

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MR. WAFFENSCHMIDT: It is not biogenic, doesn't meet any standardized protocols in presentation. It assumes that it gets qualified.

You can't put biogenic and anthropogenic together and say it is the same thing when you're talking about global warming.

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MR. LEWIS: I think both points are well taken.

Anything else?

MR. WHITE: You could put two numbers without the offset and with the

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offset. That would get the message across.

You still relate a source, but describe how those parentheses are taken into account.

MR. SERATOFF: If it looks like a smoke stack, smells like a smoke stack, you can call it a smoke stack.

MR. LEWIS: Would the committee agree we indicate both numbers and give the explanation?

Thank you.

Any other comments on -- I get the point that we want to give some explanation of where the numbers came from.

MR. WHITE: What I was going to suggest, where are the source numbers?

MR. LEWIS: Chart five.

Any chance this could be done quickly?

MR. MANITT: The only issue on chart five, we got numbers from Bob kind of late on natural gas, non-power plant

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use, and he estimated some numbers based on that number of the heating oil.

We never got real heating oil numbers. I put them in here, but I don't know.

MR. SCHROEDER: This refers to the second chart that I handed out, and what I tried to explain is that we did calculations on sales tax revenues from home energy tax and made several assumptions in doing that, because we don't get an apportioned revenue stream from the State. They collect those and give us lump sums.

Keyspan and LiPA both have annual data relating to Suffolk and non-Suffolk consumption, and if we had that data, it would be easier for us to back into more specific numbers for home heating oil.

I don't know what Bob used for assumptions. We did include a calculation for home heating oil. If we had better data, we would find those somewhere.

MR. LEWIS: This is the part -- I

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think I should relay the fact that we've gone through a process of several months of trying to collect this data. It has not been all easy.

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Frankly, Andrew and I have done the best we could with what we got, and people have helped out, but part of the problem is if you're missing one category, it throws off all the other stuff.

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Trying to figure out gasoline or diesel or some other numbers out there, this can get to be complicated stuff. It's very possible one of these could be way off, not like with the power plants where there is a requirement for them to fill out certain forms and bring numbers in and we can take that reporting data.

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Here, we're taking numbers that are used for sales tax purposes or some other purposes, and we're trying to extrapolate. From that gallonage, you can multiply into the CO2 formula.

Frankly, we set up a subcommittee, spent months in between meetings waiting

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for data to fall in our lap. I think

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highly of individuals that run the Oil

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Heat Institute, but I'm frustrated. I

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couldn't get basic data from them.

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What do you do? To some extent, we

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should recognize that chart five goes

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beyond what the statute asked us to do.

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This was an attempt to put everything into

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context, and it was maybe somewhat more

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ambitious than we were able to undertake.

12

And if we have questions with chart

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five, we simply say we're not going to

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adopt chart five at this point. There are

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other approaches.

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I put it on the agenda as an ICLEI

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item, that maybe that could be a

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recommendation of this committee, that

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Suffolk County embrace ICLEI, which is an

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organization that deals with helping

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communities to establish their carbon

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footprint and gets into crunching the

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numbers. That gets complicated.

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I believe we're trying to do

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without any sort of budgeted resources,

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something that could be much more -- we

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could end up with wrong numbers. I'm

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concerned with chart five.

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MR. RAACKE: I echo that concern.

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I have worked with ICLEI and taken part in

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seminars that shows -- trains people as to

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how to do this data collection and crunch

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the data and come up with various

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scenarios.

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I've been very impressed with what

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they've done for other municipalities in

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the U.S. and other countries. I think we

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are a little bit in over our head.

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I commend you, Neal, and your staff

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and everyone else on this committee, but

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I'm concerned that in order to get the

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full picture and come to the conclusions

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we're -- status point where we're

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crunching data, at the point where we want

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to make meaningful recommendations to the

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County and the rest of Long Island, we

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would need some professional help.

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I would suggest that we consider

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recommending to the County Legislature to

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retain professional help from ICLEI and other outfits that do this work professionally.

I've been impressed with ICLEI. The data software allows you to run scenarios and what -- if we do this, what is the impact on cost and CO2 reductions and what is the most cost effective way to approach that?

I would like to make a motion to utilize the services of professional consultants such as ICLEI to take this to the next step.

MR. STEBBINS: That motion is as a recommendation in the report?

MR. RAACKE: As a recommendation in our report to the County Legislature.

MR. STEBBINS: I would second the motion.

MR. LEWIS: As I understand the motion, it is not that we would use ICLEI to finalize these numbers in the report that we're submitting because it is, from a time crunching point on view, not

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practical.

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But the report would say we made our best efforts to analyze the numbers we could get hands on, but frankly, this is a bigger undertaking than what the committee could go in figuring out the carbon footprint in Suffolk County, which is what this is coming down to.

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This should be done, but let's make sure it is done right. If I understand your motion, that would be to say in report here what it is we have, and we recommend that either ICLEI be approved or something similar be utilized by the County to do these numbers more seriously. Then you can do the different scenarios raised earlier.

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We need scenarios; what if you re-power the plant, how does that reduce the numbers? What if it's two plants? You can't get to those based on our numbers.

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It is what we got. They do have the software.

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2 MR. WHITE: I think that is a
3 terrific recommendation, and if it was
4 possible to include in the report, what we
5 would ask them to ask ICLEI to do a scope.
6 I think if I were a legislator and you
7 want me to hire a consultant, what do you
8 want them to do?

9 That might be the ticket to make it
10 go forward.

11 MR. SERATOFF: Looking at five, I
12 think it is fantastic, one of the best
13 charts that came out of this. One column
14 alone shows that vehicle traffic emissions
15 almost equals all power plant emissions,
16 and I suggest that you include this chart
17 without comments, without -- just to
18 present data to show the public the
19 significant sources of emissions that
20 require greater study.

21 It's not just power plants, there's
22 many other things. We would be remiss in
23 not including chart five.

24 MR. SCHROEDER: The caveat is while
25 we did work hard, it is very inexact and

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may misrepresent the reality, so until we have sufficient hard data on which to base this, it might be better to speak to it.

It may give people the wrong impression. If the committee chooses to include the chart in the report, I would encourage that caveat to be expressed clearly.

MR. SERATOFF: I agree.

MR. MUNCEY: A lot of hard work went into this focus of the committee, talking about CO2 emissions coming out of power plants that generate electricity.

Maybe we could put in the report that in our analysis and study of that question now, there is a broader issue beyond just smoke stacks and power plants.

It involves other sources of CO2. Mention key words that maybe, the Legislature may desire some study further.

MR. LEWIS: This is my suggestion: We hold chart five for our next meeting to decide. We had a couple of people that had to leave, some data came in late.

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This one chart we're going to hold for final discussion at the next meeting. I do have a motion that we include in our report a recommendation to utilize the services of -- recommend to the Suffolk Legislature that ICLEI's program be considered as a way to really get this footprint number, and to then have a mechanism to test different scenarios of costs; if you did this or that, what that would do to the numbers.

We can't really test any of that with what we have. That is it. We include that as recommendation in our report.

We did have a motion. Any comments or questions?

(Whereupon, there was no response.)

Everyone agree with including the ICLEI recommendation?

(Whereupon, all responded in the affirmative.)

Good.

I think what we're going do to --

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2 MR. STEBBINS: On the chart,
3 somewhere in the report, I think we would
4 be remiss if we didn't make note of the
5 frustration that a lot of people on the
6 data gathering team has gone through with
7 the Oil Heat Institute.

8 As much as I agree that there are a
9 lot of people that I respect and value
10 working with, it is clear that they're
11 unable to openly supply numbers, basic
12 numbers that I still believe they have.

13 It is just really a frustrating
14 point that should be expressed, and the
15 Legislature should know that this body has
16 gone through that process and hasn't been
17 met halfway.

18 MR. LEWIS: How about a letter from
19 the committee? Since we're not adopting
20 the chart, this would be the last
21 opportunity to get that information in
22 there, and whether they could supply it to
23 us before that meeting.

24 We could write a letter to the Oil
25 Heat Institute to make it clear that we

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would like this data and that we have a meeting coming up; supply it before the meeting.

If not, we can consider your motion which says this data is still missing.

MR. STEBBINS: That is fine. I'll withdraw the motion.

MR. SCHROEDER: Anybody that you ask for that kind of data or any kind of data, that isn't a member of the committee may feel uncomfortable providing data that could be interpreted or misinterpreted in any number of ways.

If we're going to request data in the form of a letter from the Institute, we should give them an opportunity to present that data so that at least, maybe they feel they're fairly represented in how that data is used, at least on the record.

MR. LEWIS: I think that is fine.

MR. STEBBINS: I remember someone at some point, a communication being made to the Institute asking if they were

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2 interested in participating in making a
3 presentation. I don't know, I don't have
4 any record, but I recall just that being
5 done.

6 I'm not sure anybody has any
7 recollection of that.

8 MR. STANTON: The answer's yes, and
9 the Oil Heat Institute was asked if they
10 felt comfortable supplying data. Certain
11 questions posed Joe was alluding to was
12 the fact they weren't selected as an
13 appointee to the actual legislation
14 itself, and, therefore, they should be
15 afforded a more formal opportunity to come
16 down and make their case.

17 MR. LEWIS: I think we have
18 agreement that is absolutely reasonable
19 stuff to include in the last meeting.
20 We're asking them to submit data, and if
21 they would like to come to the meeting and
22 present any qualification or points they
23 want to make --

24 I see heads nodding.

25 I apologize one more time for

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getting the meeting off to a bad start.

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Fortunately, we did flow through the worst

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of it. The goal would be to take all this

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and put it into a document that we can

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share before the next meeting.

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Then we hopefully can move from the

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discussion of the base line data to the

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discussion of what recommendations we're

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making to the Legislature.

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Brendan, remind us, what is the due

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date on the work of the committee?

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MR. STANTON: The report is due to

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the Legislature by June. I don't recall

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if it is the third or second meeting, but

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it is in the month of June.

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That I can say.

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MR. LEWIS: The idea is we have a

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meeting for April twenty-fourth, and we'll

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decide whether we need a May meeting.

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If we do, that would be the last

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meeting. Hopefully we're going to satisfy

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the number part of the requirement of the

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law, that we generated all this data and

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start making recommendations on the

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twenty-fourth and maybe one more meeting.

Thank you to the stenographer. I'm
sorry we kept you a good hour after you
had planned.

That is it.

(TIME NOTED: 12:55 P.M.)

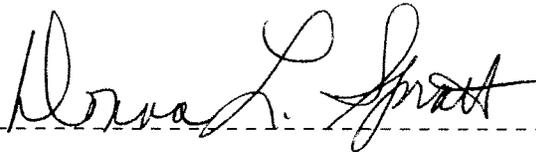
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CERTIFICATION

I, DONNA L. SPRATT, a Notary
Public in and for the State of New
York, do hereby certify:

THAT the foregoing is a true and
accurate transcript of my
stenographic notes.

IN WITNESS WHEREOF, I have
hereunto set my hand this 11th day
of April 2008.



DONNA L. SPRATT

