

1 STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
2 NARRAGANSETT BAY COMMISSION

3
4 IN RE: MONTHLY BOARD MEETING OF THE COMMISSION

5 DATE: April 12, 2006
6 TIME: 11:00 A.M.
7 PLACE: Narragansett Bay Commission
8 Corporate Office Building
9 One Service Road
10 Providence, RI 02905

11 MEMBERS PRESENT:

12 VINCENT MESOLELLA, CHAIRMAN
13 MICHAEL SALVADORE

14 ANGELO ROTELLA
15 MICHAEL DiCHIRO, JR.

16 R. DAVID CRUISE
17 JOHN MACQUEEN

18 DR. RICHARD BURROUGHS
19 TOM PERKINS

20 ALAN NATHAN
21 JONATHAN FARNUM

22 BRUCE CAMPBELL
23 HONORABLE THOMAS LAZIEH

24 AL MONTANARI
25 PATRICK CANE

26 PAUL PINAULT, SECRETARY
27 JOSEPH D'ANGELIS, ESQUIRE

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31 RHODE ISLAND COURT REPORTING, INC.
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33 EAST PROVIDENCE, RI 02915
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1 (HEARING COMMENCED AT 11:13 A.M.)

2 THE CHAIRMAN: Good morning,
3 everyone. Welcome to the Wednesday, April 12th,
4 2006 meeting of the Narragansett Bay
5 Commission. We'll call the meeting to order at
6 11: -- well, five minutes past. 11:13, I guess.
7 Yes, it is late.

8 The first order of business is Item Number
9 2, which is the approval of the previous Minutes
10 of March 8th, 2006. Have all of our members had
11 an opportunity to review the previous Minutes;

12 and if so, are there any comments, questions, or
13 corrections regarding the previous Minutes?
14 Comments, questions, or corrections regarding
15 the previous Minutes?

16 MR. SALVADORE: Move to approve,
17 Mr. Chairman.

18 THE CHAIRMAN: We have a motion to
19 approve the previous Minutes as presented. Is
20 there a second?

21 MR. FARNUM: Second.

22 MR. BURROWS: Second.

23 MR. MACQUEEN: Second.

24 MR. MONTANARI: Second.

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1 THE CHAIRMAN: Commissioners Farnum,
2 Burrows, MacQueen, and Montanari. Discussion on
3 the previous Minutes? Hearing none, all of
4 those that are in favor will say aye.

5 (VOTE TAKEN)

6 THE CHAIRMAN: Are there any opposed?
7 Any opposed? None are opposed and the motion
8 carries.

9 The next order of business is Item Number
10 4, which is the election of officers. For the
11 purpose of election of officers, we will turn
12 the gavel over to our Executive Director to
13 preside, the Secretary to preside over the
14 election of officers.

15 MR. PINAULT: Under the Commission's
16 bylaws during the month of April, we have
17 election of officers for the Chair, Vice Chair,
18 and Treasurer. At this point, I'd like to open
19 up the floor for nominations for those
20 positions.

21 MR. SALVADORE: Mr. Chairman, I know
22 there's an old cliché, that if it ain't broke,
23 don't fix it. But I think we're in pretty good
24 shape here and our leadership certainly have

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1 demonstrated that they know what it is they're
2 doing and where we want to be, where we're
3 going. So, with that in mind, I would move that
4 one vote be cast in favor of the slate and the
5 slate is: Vincent J. Mesolella, Chairman;
6 Angelo S. Rotella, Vice Chairman; and Robert
7 Andrade, Treasurer.

8 THE CHAIRMAN: Is there a second?

9 (SECONDED BY THE BOARD)

10 THE CHAIRMAN: The entire Board has
11 seconded it.

12 MR. PINAULT: Are there any other
13 nominations to come before the Board? I assume

14 there are no other nominations to come before
15 the Board, so the Secretary will cast one vote
16 for the slate. Thank you. Congratulations.

17 MR. SALVADORE: We didn't even get a
18 chance to talk about it.

19 (APPLAUSE)

20 THE CHAIRMAN: So, thank you, Mike,
21 and thank you, the entire Board, of course.

22 Before we begin the meeting, I would just
23 like to say, as always, I think the members of
24 the Commission know my dedication to this

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1 agency. I have been proud to serve this
2 agency. I'm thinking now I'm going to show you
3 my age, since -- I'll be 39 again, right,
4 Joanne?

5 MS. MACERONI: Right.

6 THE CHAIRMAN: Since 1979. I'm very
7 proud of the accomplishments of the Narragansett
8 Bay Commission and I'm extremely proud to serve
9 this entire Board. And once again, I commit to
10 all of you my 110 percent effort to meet the
11 mission for which the Narragansett Bay
12 Commission was established. And thank you very
13 much. I appreciate your support and your
14 confidence. Thank you.

15 (APPLAUSE)

16 THE CHAIRMAN: Okay, moving right
17 along. Review approval of Resolution of
18 Appreciation to former employees Marie Smith,
19 Walter Jalbert, who are here, and I believe Juan
20 Acevedo is not. Commissioner Rotella, would you
21 assist in the presentation of the reading of the
22 Resolution of Appreciation?

23 MR. ROTELLA: Yes, Mr. Chairman. I
24 have one here that says, "Resolution of

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1 Appreciation. Whereas, Marie Smith joined the
2 Narragansett Bay Commission on April 22, 1990 as
3 a Customer Service Representative, and

4 "Whereas, she was instrumental in assisting
5 the customers of the Narragansett Bay
6 Commission, and has been regarded by her
7 co-workers as a good friend and loyal employee,
8 and

9 "Whereas, Marie has spent much time and
10 effort earning a degree in Human Services and
11 has used her skills both in her career and as a
12 volunteer for the displaced orphans of Liberia.

13 "Now therefore be it resolved that the
14 Narragansett Bay Commission shall extend its
15 sincere congratulations to Marie Smith on her

16 retirement and its sincere appreciation for her
17 service on behalf of the State of Rhode Island
18 and the ratepayers of the Narragansett Bay
19 Commission.

20 "Presented April 12, 2006. Vincent J.
21 Mesolella, Chairman; Paul Pinault, Executive
22 Director."

23 THE CHAIRMAN: Marie.

24 (APPLAUSE)

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1 THE CHAIRMAN: Congratulations.

2 (PHOTOGRAPH TAKEN)

3 THE CHAIRMAN: Thank you very much.

4 We appreciate all your services.

5 MS. SMITH: Thanks.

6 THE CHAIRMAN: Commissioner Rotella,
7 proceed.

8 MR. ROTELLA: Mr. Chairman, I have
9 another resolution. It says, "Whereas, Walter
10 Jalbert joined the Narragansett Bay Commission

11 on January 22, 1984 as a Process Monitor, and

12 "Whereas, he was primarily responsible for
13 collecting data for Operations' Semi-Annual
14 Chemical Inventory Reports, Monthly Generator
15 Reports for NOX Calculations, Monthly Utility
16 Readings, Daily Incinerator Excursion Reports,
17 and served as Vice Chairman of the Field's Point
18 Safety Committee, and

19 "Whereas, Walter was instrumental in the
20 success of the John Lennon Memorial Fund, and is
21 regarded by his co-workers as a true gentleman
22 and a good friend.

23 "Now therefore be it resolved that the
24 Narragansett Bay Commission shall extend its

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1 sincere congratulations to Walter Jalbert on his
2 retirement and its sincere appreciation for his
3 service on behalf of the State of Rhode Island
4 and the ratepayers of that Narragansett Bay
5 Commission.

6 "Presented on April 12, 2006. Vincent J.
7 Mesolella, Chair; Paul Pinault, Executive
8 Director."

9 (APPLAUSE)

10 (PHOTOGRAPH TAKEN)

11 THE CHAIRMAN: Before we continue, I
12 think I express the sentiments of the entire
13 Board when I say that the success that the
14 Narragansett Bay Commission has achieved through
15 the years is due in no small way to the efforts
16 of employees like Marie Smith, and Walter
17 Jalbert, and Juan Acevedo.

18 From the bottom of our hearts, we sincerely
19 appreciate all of the efforts of our employees
20 and staff. Thank you.

21 (APPLAUSE)

22 THE CHAIRMAN: Okay, the next order of
23 business is the Executive Director's report. Do
24 you have a report for us today, Mr. Secretary?

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1 MR. PINAULT: Yes, I do, Mr. Chairman.

2 THE CHAIRMAN: Proceed.

3 MR. PINAULT: Due to the fact that the
4 report was mailed in advance for a change, and
5 hopefully people have had a chance to review it,
6 and for the lateness of the hour, plus we will
7 be having a presentation at the end of the
8 meeting by staff on the nutrient issue, I'd just
9 like to mention a couple of things. Basically,
10 both plants are operating extremely well,
11 exceeding all permit requirements. Financially,
12 we're doing very well. We're spending at or
13 below the budgeted level.

14 On page 18 in my report is a summary of
15 what's happening with negotiations with DEM on
16 the nutrient issue and the BOD/TSS wet weather
17 permit issue at Bucklin Point. I'll basically
18 defer if anyone has any questions, but we do
19 have a fairly lengthy agenda today and I
20 basically would leave it at that.

21 THE CHAIRMAN: Does anyone have any
22 specific questions of the Executive Director
23 today? Commissioner Cane.

24 MR. CANE: No. I was just going to

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1 raise the same issue.

2 MR. BURROUGHS: What is it with this
3 side of the table?

4 THE CHAIRMAN: Are you in the hot seat
5 this morning? Okay, having no questions or
6 comments of the Executive Director, we'll move
7 right along to the Committee Reports and action
8 items resulting. The first committee reporting
9 is the Joint Long Range Planning and Finance
10 Committee meeting. The Finance Committee
11 reviewed the monthly financial statements and
12 expenditures. There were no purchase
13 requisitions for consideration. The Board did
14 entertain a motion, a resolution for an
15 amendment to the organizational plan, which
16 involved a minimal expenditure of additional
17 funds. Is that being put through, Paul?

18 MR. PINAULT: No.

19 THE CHAIRMAN: So, that was just a

20 change for our organizational plan. Beyond
21 that, there was Item Number 4, which is review
22 and approval of Resolution 2006:07. It's a use
23 for environmental enforcement funds, an
24 explanation of where the environmental

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1 enforcement funds derive. And the resolution,
2 which is 2006:07, is contained in your packet.
3 I think pretty much everyone was here when we
4 reviewed the use of the environmental
5 enforcement funds. Was there anyone that was
6 not present?

7 MR. ROTELLA: I move for passage.

8 THE CHAIRMAN: We have a motion to
9 approve Resolution 2006:07, which is the use of
10 environmental enforcement funds. Is there a
11 second?

12 MR. DiCHIRO: Second.

13 MR. LAZIEH: Second.

14 MR. SALVADORE: Second.

15 THE CHAIRMAN: Commissioner DiChiro,
16 Commissioner Lazieh, Commissioner Salvatore
17 second the motion. Further discussion or
18 comments on Resolution 2006:07? Hearing none,
19 all those that are in favor will say aye.

20 (VOTE TAKEN)

21 THE CHAIRMAN: Are there any opposed?
22 There are none opposed and that motion carries.
23 The next order of business is the CEO Committee.
24 Commissioner Salvatore, do you have a report for

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1 us?

2 MR. SALVADORE: We do, Mr. Chairman.

3 THE CHAIRMAN: Proceed.

4 MR. SALVADORE: The CEO Committee met
5 earlier this morning and we have three
6 resolutions for Board action. We've studied
7 these and reviewed these resolutions and
8 recommend approval by the Board of
9 Commissioners.

10 The first resolution is 2006:8, which is
11 the review and approval of Resolution 2006:8 and
12 authority to advertise for bids on Contract
13 116.00C -- I love these numbers -- miscellaneous
14 improvements to the Field's Point and Bucklin
15 Point facilities. Paul, if would you, please
16 explain that to the Board of Commissioners.

17 MR. PINAULT: Sure. In your packet is
18 a memo dated March 30th from Richard Bernier,
19 our construction manager, to myself and the
20 Deputy to the Committee and the Board. It
21 outlines some miscellaneous improvements that

22 are needed both at Field's Point and Bucklin
23 Point.

24 Field's Point is now 20 years old and
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1 overall is in good shape, but there are a number
2 of things that need to be improved. The
3 aeration tanks, replacing some gaskets in air
4 header piping, pipe support and cleaning the
5 tanks, replacing some gates in Splitter Box D,
6 building a salt shed to store sand and salt for
7 the winter months, and other miscellaneous
8 masonry repairs, et cetera.

9 Also in the memo it mentions some items for
10 Bucklin Point, including some railings and
11 safety features on the wet weather tanks and
12 also on the second page, some miscellaneous
13 paving, valves, meters and, you know, that type
14 of thing.

15 The estimated construction cost is 1.325
16 million. This design is being completed by
17 staff, which we discussed, and the CEO Committee
18 is saving us a lot of money. It's ready to go
19 out to bid. If we get the authority to
20 advertise for bids today, our intent is to bring
21 back a recommendation for a construction
22 contract award at the June Board meeting. And
23 once construction starts, the project schedule
24 is six months to complete and it's outlined in

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1 Resolution 2006:08.

2 MR. SALVADORE: Does everyone
3 understand this solution -- this solution? The
4 resolution, I'm sorry. The solution is the
5 resolution. Does everyone understand the
6 resolution? Are there any questions or
7 comments? Hearing none, a motion.

8 MR. MONTANARI: I make a motion.

9 MR. LAZIEH: Second.

10 MR. SALVADORE: A motion by
11 Commissioner Montanari, seconded by Commissioner
12 Lazieh. All those in favor will say aye.

13 (VOTE TAKEN)

14 MR. SALVADORE: Are there any
15 opposed? None opposed, the motion carries.

16 Our second resolution is 2006:09 and it's
17 the authority to advertise for bids on Contract
18 304.46C. It's the CIP Sewer Liner at Dudley
19 Street, Blackstone Street, Hartford Avenue,
20 along with Manhole Rehabilitation. Paul.

21 MR. PINAULT: Yes, Mr. Chairman.
22 Again, in your packet there's a summary of the
23 work. It's on a memo dated March 31st from

24 Richard Bernier. And basically, we have been

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1 spending a lot of time and effort over the last
2 few years cleaning and televising our sewer
3 system. We're just under a hundred miles of
4 large pipe for this district. Most of the pipe
5 is in excellent shape, but most of it has also
6 been built over a hundred years ago, most of it
7 is brick.

8 And in these particular areas, Dudley
9 Street, Blackstone, Hartford Avenue, we're
10 recommending that we line several sections of
11 these pipes to beef up their structural
12 integrity to eliminate infiltration inflow and
13 there are also miscellaneous manholes that need
14 rehabilitation. Again, this is being designed
15 in-house by staff.

16 Estimated construction cost is 1.75
17 million. Again, we intend to put this out to
18 bid shortly and bring a recommendation for
19 contract award at the June Board meeting and
20 this also has a six-month time of completion.

21 MR. SALVADORE: Any questions or
22 comments? Mr. Chairman, I didn't re-serve your
23 position, I want you to understand that.

24 THE CHAIRMAN: You did a great job.

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1 As a matter of fact, we should go back to old
2 business and election of officers. You can make
3 a motion for passage.

4 MR. SALVADORE: A motion made, please.

5 MR. DiCHIRO: I make a motion.

6 MR. CHAIRMAN: We have a motion.

7 MR. SALVADORE: Motion by Commissioner
8 DiChiro. Second?

9 MR. LAZIEH: Second.

10 MR. MACQUEEN: Second.

11 MR. SALVADORE: Commissioners Lazieh
12 and MacQueen approve.

13 MR. CHAIRMAN: All those in favor will
14 say aye.

15 (VOTE TAKEN)

16 THE CHAIRMAN: Are there any opposed?
17 And the motion carries. Proceed with the
18 further report, Commissioner Salvatore.

19 MR. SALVADORE: I feel like I'm
20 walking through a mine field.

21 THE CHAIRMAN: I know what you mean.

22 MR. SALVADORE: Our third resolution
23 is review and approval of Resolution 2006:10 and
24 it's the recommendation to increase the limits,

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1 the change order request for Contract 0130210C,
2 Outfall 032 Facilities. Again, Paul.

3 MR. PINAULT: Joe Pratt is here from
4 the Berger Group and at the CEO Committee -- he
5 has a board that he has displayed at the end of
6 the table and handed out this 8 and a half by 11
7 sheet. Basically, this was one of the
8 half-dozen surface contracts to construct
9 consolidation conduits and dropshafts that will
10 feed the Phase I tunnel. This work took place
11 on Charles Street near Orms Street and basically
12 it's done, with the exception of final paving
13 and restoration of other disturbed areas. It
14 needs some loaming and seeding and that type of
15 thing.

16 As Joe explained during his presentation,
17 if you look at the lower half of the photo
18 that's in front of you, where the red dot is on
19 the upper half, when they were microtunneling a
20 15-inch drainline, they ran across some
21 obstructions which were not known to exist. So,
22 it was a different site condition. They had to
23 do numerous things to get through there. You
24 can see in the photos what they ran into was a

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1 granite wall and some timbers, which looked like
2 either a previous foundation or a wall from --
3 the river has been relocated in that area
4 several times over the last 200 years.

5 Basically, the bottom line is there's a
6 number of credits. There's about \$120,000 in
7 credits coming to us on this contract for things
8 that did not have to be done. There's about
9 \$400,000 in extras for a net increase of
10 \$280,000, of which about 100,000 is due to
11 some paving in that yellow cross-hatched area at
12 the intersection of Orms and Charles Streets,
13 which is being requested by DOT, and we
14 anticipate that we will get reimbursed by DOT
15 for that work. So, basically, that's a quick
16 summary.

17 Also, I note at the end of the package on
18 the last sheet is a summary of all of our
19 ongoing construction projects totaling over
20 325 million -- \$325 million and right now we
21 carry 10 percent in our budget for changes. And
22 although most of these are complete, right now
23 we're at 3.04 percent above the low bid amount.

24 Some contracts have come in over the

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1 10 percent, many of them have come in below the
2 10 percent and overall it's 3 percent. So, you

3 get this every month. It's updated monthly.
4 That's the summary and our recommendation is
5 outlined in Resolution 2006:10.

6 We anticipate that the paving and the
7 restoration work will be done a hundred percent
8 by the end of May, weather permitting.

9 MR. SALVADORE: Does Joe want to give
10 his explanation of what's happening there?

11 MR. PRATT: I think Paul covered it
12 all, sir. The only other thing I'd add for
13 those who aren't aware of it. We will pave this
14 entire area as part of this contract, these
15 dashed yellow lines that you see on the charts.
16 So, the entire area will be completely
17 curb-to-curb paved.

18 MR. PINAULT: Which is included in the
19 budget.

20 MR. PRATT: Yes, sir.

21 THE CHAIRMAN: That will coordinate
22 with DOT.

23 MR. PRATT: Yes.

24 MR. LAZIEH: If I can ask a question.

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1 Is there any changes to the traffic light
2 systems to be included in this?

3 MR. PRATT: DOT sets the traffic
4 light system. We'll coordinate with them and
5 we'll install what they want to install. We're
6 using their subcontractor on this job to do
7 that. So, that will be coordinated to be put
8 in, but there will -- I believe there are some
9 changes, but I'm not prepared to tell you
10 exactly what they are right now until we
11 coordinate that with DOT.

12 THE CHAIRMAN: We have a reimbursable
13 expense there, Joe?

14 MR. PRATT: I believe we do.

15 THE CHAIRMAN: Do you want to go into
16 that, or let the Executive Director go into that
17 reimbursable expense? We'll make the
18 expenditure first, in advance?

19 MR. PRATT: And then we get reimbursed
20 by DOT.

21 THE CHAIRMAN: Right.

22 MR. SALVADORE: Questions, comments?
23 Everyone's satisfied with the explanation?

24 MR. ROTELLA: Move passage.

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1 MR. SALVADORE: We have a motion to
2 move passage. Is there a second?

3 MR. FARNUM: Second.

4 MR. SALVADORE: Seconded by

5 Commissioner Farnum. All those in favor?

6 Mr. President -- Mr. Chairman, I'm sorry.

7 THE CHAIRMAN: You're doing a great
8 job.

9 MR. SALVADORE: I'm so used to reading
10 the --

11 THE CHAIRMAN: You're doing a great
12 job. All those that are in favor of the motion
13 and second it, say aye.

14 (VOTE TAKEN)

15 MR. CHAIRMAN: Are there any opposed?
16 There are none opposed.

17 MR. SALVADORE: Opposed or confused?

18 THE CHAIRMAN: There are none opposed
19 and the motion carries. Do you have a further
20 report for us today, Mr. Chairman?

21 MR. SALVADORE: That concludes our
22 report, Mr. Chairman.

23 THE CHAIRMAN: Thank you very much.
24 Moving right along to other committees reporting

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1 this morning. The next committee reporting is
2 the Personnel Committee.

3 MR. CAMPBELL: The Personnel Committee
4 met and approved some changes to the
5 organizational plan, which I believe do not
6 require full Board approval.

7 THE CHAIRMAN: Does that conclude your
8 report?

9 MR. CAMPBELL: Yes.

10 THE CHAIRMAN: Okay. Moving right
11 along to the Legislative Committee.

12 MR. PINAULT: In the packet is a memo
13 dated April 10th from Joanne Maceroni, our
14 Government Affairs Manager, summarizing the
15 legislation that we're tracking and the
16 positions we're taking, including whether we
17 oppose, or support, or take no position. Noted
18 in the first paragraph is something that came up
19 at a previous subcommittee meeting, and, that
20 is, last week the Governor submitted to the
21 General Assembly, or to the Finance Committee, a
22 budget article requesting that the Narragansett
23 Bay Commission give DEM \$1 million on July 1,
24 2006 to hire seven people and do river and bay

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1 monitoring, most of which is outside of our
2 district; and needless to say, we just found out
3 about that and we are opposed to it. We have
4 prepared a position paper. We've already met
5 with the Chair of House Finance and we've met
6 with Commissioner Cruise, as you know, who is

7 the Chief of Staff to the President and the
8 Senate, to brief him on our position. If and
9 when it is heard in either committee, we will
10 express our opinion.

11 MR. LAZIEH: Mr. Chairman.

12 THE CHAIRMAN: Commissioner Lazieh.

13 MR. LAZIEH: Mr. Chairman, due to the
14 knowledge of this, which just recently came up
15 with the Governor's submission, do you think it
16 appropriate at this time as a Board to take a
17 stand and inform the Governor of our objection
18 or our decision to oppose this as a Board? I
19 would make such a motion, if appropriate.

20 THE CHAIRMAN: Well, I think it's
21 abundantly appropriate, I mean, to put the
22 measure before the Board. I think maybe -- are
23 we waiting for a position paper?

24 MR. PINAULT: We've prepared it. I

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1 would suggest that we distribute that, let you
2 read it and take it up at the next meeting,
3 May 10th. I don't think it will matter.
4 Legally, we're not supposed to vote on things
5 that aren't on the agenda and it wasn't on the
6 agenda of actions. That would be my
7 recommendation.

8 THE CHAIRMAN: If you want, we'll put
9 the matter on the agenda for next month.

10 MR. LAZIEH: Yes.

11 THE CHAIRMAN: Whether you decide to
12 make a motion or not, it's entirely up to you.
13 It's the Board's prerogative.

14 MR. PINAULT: Joanne is here. Joanne,
15 could you make copies of that available to the
16 Board before they leave?

17 MS. MACERONI: Yes.

18 MR. PINAULT: And if you can just send
19 it to the Board members who aren't here, so at
20 least they'll have an advance copy.

21 THE CHAIRMAN: Commissioner DiChiro.

22 MR. DiCHIRO: Is that something the
23 PUC has to be involved in? Wouldn't it have an
24 effect on the rate?

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1 THE CHAIRMAN: Yeah, it would have
2 some effect.

3 THE DiCHIRO: It would have an effect
4 on the rate. The PUC would have to be involved
5 --

6 THE CHAIRMAN: Of course it would.
7 Of course. Just to be clear, you know, the
8 Governor has the prerogative to introduce, you

9 know, an appropriate budget resolution to the
10 General Assembly, the General Assembly obviously
11 has the prerogative to either deny or approve.
12 We don't -- it's not that we don't support the
13 General Assembly for providing a million dollars
14 to the Department of Environmental Management
15 for monitoring, we just don't think that the
16 people in our district should have to pay for
17 that. That's our position.

18 MR. DiCHIRO: Right.

19 THE CHAIRMAN: Anyway, what we'll do,
20 if we can get your cooperation on this, is we'll
21 prepare, or Joanne will prepare and submit --

22 MR. PINAULT: They'll get it before
23 they leave.

24 THE CHAIRMAN: You'll get it before

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1 you leave.

2 MR. PINAULT: Right.

3 THE CHAIRMAN: We'll put it on the
4 agenda for discussion at next month's meeting
5 and then I think it will be appropriate to
6 entertain a summary or whatever the Board
7 decides.

8 MR. LAZIEH: Mr. Chairman, just a
9 question. Between now and the next meeting, is
10 this up for hearing? I wasn't sure of the day
11 of the hearing.

12 MR. PINAULT: No. Not to my
13 knowledge.

14 THE CHAIRMAN: I mean, historically, I
15 don't think anything is going to start to move
16 until -- Commissioner Cruise, can you shed any
17 light on it?

18 MR. CRUISE: May or June.

19 THE CHAIRMAN: The latter part of May,
20 the latter part of May.

21 MR. CRUISE: (Nodding head).

22 THE CHAIRMAN: So, you'll have plenty
23 of time, I think, to express your thoughts.
24 Okay. Does that complete the legislative

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1 report?

2 MR. PINAULT: Yes, it does,
3 Mr. Chairman.

4 THE CHAIRMAN: Okay. The next
5 committee reporting, Rules and Regulations.

6 MR. PINAULT: No report.

7 THE CHAIRMAN: No report. The next
8 committee reporting, Ad Hoc Stormwater Rate
9 Committee.

10 MR. PERKINS: They didn't meet. No

11 report.

12 THE CHAIRMAN: Next committee
13 reporting is the Citizens Advisory Committee.
14 Harold -- there he is.

15 MR. GADON: The CAC did meet
16 Wednesday, November 29 -- March 29th with a
17 quorum present. A report was presented by Tom
18 Bruckner on nitrogen removal at Field's Point.
19 The limits proposed by DEM are presently being
20 appealed by the NBC. Because of that appeal,
21 DEM directed Mr. Sullivan, which, Mr. Sullivan
22 will hear. He declined at this time to accept
23 an invitation to the CAC meeting. His legal
24 staff had advised him that until the appeal

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1 process is over, it would be a conflict of
2 interest.

3 We are also in contact with and in the
4 process of inviting our neighbor at Field's
5 Point, Save the Bay, to again become an active
6 member of the CAC. In view of the recent letter
7 writing operation by Save the Bay to urge NBC to
8 accept the 5 mg limit, that situation appears to
9 now be in some doubt.

10 We are waiting to see the outcome of the
11 Separation of Powers interpretation on the
12 municipal appointees to the NBC, and I do share
13 the frustration expressed by Commissioner
14 Perkins and others as to some of the onerous
15 situations that are forced upon us. We will
16 meet again on May 3rd.

17 THE CHAIRMAN: Thank you, Howard. I
18 appreciate your report. Moving along, we have
19 an Executive Committee report. The Executive
20 Committee did not meet. So, we'll move right
21 along to the Chairman's report.

22 The first thing I'd like to report to the
23 Board is the progress that we are making with
24 regard to a sale of surplus property to Quality

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1 Beef. We've brought this matter before the
2 Board in the past. In fact, we had a discussion
3 on it last month. This is the property that's
4 located -- on Calvery Street, which is no longer
5 needed by the Narragansett Bay Commission.

6 The Council and I met with the Providence
7 Redevelopment Agency, members of the city's
8 administration staff, the perspective owners of
9 the property and literally numerous others
10 regarding the disposition of this property. It
11 seems that we have reached some agreement with
12 the Providence Redevelopment Agency.

13 As you know, there's a whole different set
14 of procurement rules and regulations and laws
15 with regard to the disposition of surplus
16 property. Because we're going to be
17 transferring this property to a city agency, or
18 the city, it's appropriate for them to be
19 involved in the discussions and negotiations.

20 I can only tell you that we're moving
21 forward with this. There is an expectation that
22 the prospective buyer will consummate the
23 project and close on this property within the
24 next, I guess, 90 days. So, things are moving

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1 along.

2 You were all sent copies of a letter that
3 we received from Save the Bay relative to
4 nitrogen removal and DEM proposal permit limits
5 were responded to that letter. You all have
6 copies of that and I know we're going to have --
7 in just a few minutes, we're going to have a
8 presentation on nitrogen limits. So, whether or
9 not you're available to stay for that; if you
10 do, that would be great.

11 The next meeting is scheduled for May the
12 10th, make a note, and I think the schedule of
13 committee assignments have been distributed to
14 you. Everybody has that, so you'll know who is
15 serving on what committee. And that, I think,
16 is basically the Chairman's report. Some of the
17 issues that I had intended to talk about were
18 discussed during the course of the meeting. So,
19 that basically completes the Chairman's report.

20 The next order of business is new
21 business. Do any of the members of the
22 Commission have any new business before the
23 Board? New business?

24 MR. SALVADORE: I have some business,

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1 Mr. Chairman.

2 THE CHAIRMAN: Commissioner Salvadore,
3 proceed.

4 MR. SALVADORE: We have a number of
5 new Commissioners here at the NBC and I'm
6 wondering if it isn't time, we haven't had one
7 in a while, for us to have a Directors' retreat?

8 MR. PINAULT: I was planning to send
9 out a memo next week asking Commissioners when
10 they would like to do that, maybe putting out
11 some proposed dates. In the past, what we've
12 done is in the morning, usually from 9 to 12,
13 our Directors and other department heads have
14 gotten into issues that we talk about every

15 month, but in more detail.

16 So, for instance, you know, the details and
17 the status of our current PUC filing, what's
18 going on with pending negotiations, things of
19 that nature. And generally, we have lunch. And
20 then in the afternoon, we take a tour of our
21 treatment facilities and/or active construction
22 projects.

23 So, what we try and do is get a consensus
24 on -- everyone's schedule is different. Some
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1 people can only make the morning session, some
2 people can only go on the tours, some people go
3 on both. Whether 3 people show up or all
4 19 show up, we'll be here to do it.

5 I think last year we had between five and
6 seven people who came to at least part of it or
7 all of it. So, my intent is over the next month
8 to hold one, depending on the interest of the
9 Board. So, we will be following up on that.

10 Thanks for bringing that up.

11 MR. SALVADORE: I've attended a lot of
12 them. We've probably had about four of them,
13 Paul. And every time I come away from one of
14 those Commissioners' retreats I've learned
15 something. There's always something new to
16 learn about this Commission. So, I hope we can
17 do it.

18 THE CHAIRMAN: Thank you for bringing
19 that up again. I think it's great for all the
20 Commissioners to attend, if you can. It's an
21 education. And so, if you can make it when we
22 schedule it, that will be great.

23 Continuing along the lines of new
24 business. Is there any new business? Any of

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1 the Commissioners who want to raise any new
2 business issues? Okay, the next order of
3 business is other business.

4 MR. LAZIEH: Mr. Chairman, I'm not
5 sure if we addressed it before, but the issue of
6 the abandonment of a street.

7 THE CHAIRMAN: Yes.

8 MR. PINAULT: We gave an update last
9 month, the Vice Chairman and I, and Joanne
10 Maceroni, we met with Mayor Cicilline and his
11 Chief of Staff last month. We told them what
12 we'd like to do and they're evaluating our
13 position. We haven't heard back from them. I
14 have a call in to Mike Mello, the Mayor's Chief
15 of Staff, and he hasn't returned my call, to try
16 to find out where they are on that.

17 MR. LAZIEH: Thank you.
18 THE CHAIRMAN: Under new business
19 we're about to have a briefing on the NBC's
20 proposed RIPDES permit regarding nitrogen
21 limits. Tom, are you going to need the screen?
22 MR. BRUCKNER: Yes, I'm going to need
23 the screen.
24 THE CHAIRMAN: You do need the screen?

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1 MR. BRUCKNER: Yes.
2 THE CHAIRMAN: Okay. How long of a
3 presentation?
4 MR. BRUCKNER: About 15 minutes, 20
5 minutes.
6 THE CHAIRMAN: Okay. We're here.
7 Incidentally, we have some guests, I guess, who
8 are interested in the issue. Specifically who
9 they are, I don't know. I think we have a
10 representative from the Edgewood Community
11 somewhere. We have representatives from the --
12 MS. RUBINE: Actually, there are four
13 people.

14 THE CHAIRMAN: I'm sorry?
15 MS. RUBINE: There are four people
16 from the community.
17 THE CHAIRMAN: From the Edgewood
18 Community?

19 MS. RUBINE: From the Edgewood
20 Waterfront Preservation Association, which is
21 very interested in your upcoming proposal on
22 nitrogen.
23 THE CHAIRMAN: I understand we have a
24 representative from Save the Bay as well, am I

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1 correct?
2 MS. AUSTIN: Yes, Jane Austin.
3 THE CHAIRMAN: Are there any other
4 group representatives that we should just note?
5 Okay, Tom, I'll move and you can proceed with
6 your --
7 MR. BRUCKNER: We're handing out the
8 presentation that's going to be given, to have a
9 copy of it to take with you, if you wish. I
10 just want to warn you that there are some
11 graphic slides in here of a technical nature, I
12 hope they don't frighten you.
13 We wanted to give this briefing to you
14 primarily because we're just about at the point
15 where we finished our investigation of
16 alternatives for us to install nitrogen control
17 at the Field's Point plant.
18 And also, as you know, DEM has issued us a

19 permit with limits in it that we are probably
20 going to contest. We requested a hearing. So,
21 I just wanted to give you some background on it
22 and let you know where we stand and where we
23 think we are going forward from here.

24 Just a little background. The problems

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1 associated with nitrogen, the first one is fish
2 toxicity, and that's usually due to ammonia
3 nitrogen. We had in our permit for Bucklin
4 Point probably eight years ago, when it was
5 issued, a limit for ammonia because we were
6 receiving water from the Seekonk River. And at
7 the time we received that permit, we knew we
8 were doing some upgrades in the Bucklin Point
9 plant, we were in the design mode.

10 We made a decision at that time to go ahead
11 with not just eliminating ammonia nitrogen, but
12 all of the forms of nitrogen. So, we've
13 provided total nitrogen removal at that facility
14 during design. And as you'll see a little bit
15 later on in the slide presentation, we actually
16 have that constructed and we are providing
17 nitrogen removal at that facility now.

18 The other problem with -- by the way, we
19 did not have an ammonia nitrogen issue at the
20 Field's Point plant, so that was not required in
21 our permit at Field's Point; and that's why we
22 really had not done any design at this point for
23 nitrogen removal at Field's Point. So, we're a
24 little behind at Field's point due to this

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1 ammonia nitrogen issue.

2 Depletion of oxygen in the receiving waters
3 is another issue with nitrogen; and that's due
4 to excessive algal blooms from the nitrogen
5 being added to the water and the subsequent
6 die-off it uses up to dissolve oxygen in the
7 water when the algae is decomposing.

8 Just to talk a little bit about the
9 development of the permit limits for nitrogen by
10 DEM for us, and actually, for the other
11 facilities throughout the State who discharge to
12 these receiving waters. The way the permit
13 limit was to be developed, according to EPA
14 criteria, is that a Total Maximum Daily Load was
15 to be determined for the water body that you're
16 discharging to, and then the load was to be
17 apportioned among the different users
18 discharging to that water body.

19 So, for the Providence River, for example,
20 we discharge from our Field's Point plant, the

21 discharge is coming upstream from the Bucklin
22 Point facility and from the discharges on the
23 Blackstone River in Massachusetts and Rhode
24 Island.

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1 So, according to this approach, the DEM
2 should have determined what the loading could be
3 to that river and then apportioned that load
4 among the different discharges. They tried to
5 develop a receiving water model for the
6 Providence River to do that loading, but they
7 couldn't get the model to work; so, they
8 abandoned that approach and instead used the
9 results of a study done by the University of
10 Rhode Island Graduate School of Oceanography
11 from 1981 to 1984, the Marine Ecosystem Research
12 study, lab study, MERL study.

13 They used instead of a model, the results
14 of that study; and that was a series of tanks
15 that they had on the docks of the Narragansett
16 Bay, the URIGSO school, where they introduced
17 different levels of nitrogen into these tanks to
18 see what would happen. And I think one can
19 safely say that they found the more you put
20 nitrogen into the tanks, the more algae grew and
21 more problems developed with DO.

22 So, they found a relationship between
23 nitrogen and dissolved oxygen. And then, they
24 also loaded the tanks with different rates and

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1 they determined which rates appeared to cause
2 the most problems. And obviously, the higher
3 rates caused more problems and came to the
4 conclusion that loading between two to four
5 times, what they were seeing in the lower bay,
6 were probably acceptable; beyond that, would be
7 too much.

8 DEM used those loading rates then to
9 establish what the limits would be for the
10 treatment plants. So, that was based on a study
11 done in tanks and they applied it to a very
12 dynamic situation, which was the Providence
13 River receiving water.

14 So, the development of permit limits for
15 nitrogen -- so, based on the MERL study, the
16 total nitrogen limit DEM realized should be zero
17 for the treatment plants and couldn't
18 accommodate any nitrogen loading from the
19 plants. They also stated in their position
20 paper that the limit of technology for nitrogen
21 removal is 3 milligrams per liter. And that's
22 being achieved at a few plants throughout the

23 country; mostly, in the warmer climates. One of
24 the reasons is nitrogen removal is very

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1 sensitive to temperature. The higher the
2 temperature of the wastewater, the better your
3 chances of removing nitrogen.

4 Based on a cost-effective analysis that DEM
5 did looking at a whole range of alternatives.

6 For different discharge limits for the various
7 plants discharging into Narragansett Bay, they
8 established a total nitrogen limit of 5 for NBC
9 and Woonsocket, and 8 milligrams per liter for
10 all the other plants discharging into the bay.

11 Usually, because they're a little bit upstream
12 on rivers and felt they were not as much of an
13 impact as the plants that were discharging
14 directly into the Providence River.

15 The draft permit was issued December 31st,
16 2004. The hearing was held in February. We
17 testified at the hearing, Paul did, submitted
18 40 pages of comments at the hearing. Actually,
19 DEM did respond, but they did not accept any of
20 our comments into their revisions for the
21 permit.

22 The permit was then issued on June 27, 2005
23 and it became effective August 1, 2005. And
24 then, we requested a stay in hearing of the

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1 permit. And actually, Laurie's going to talk a
2 little bit at the end about where we are with
3 the dealings with DEM.

4 Just to give you an idea of where we are
5 currently with nitrogen effluent limit for
6 nitrogen: The permit limit proposed by DEM is 5
7 milligrams per liter, that would only be applied
8 during the summer months when the problems for
9 nitrogen would be worst; and that would be at
10 both Bucklin Point and Field's Point.

11 The current discharge for Field's Point is
12 13 milligrams per liter. And, by the way,
13 there's also a mass loading associated with the
14 permit, which is based on the flow. So, the
15 permit limit for Field's Point is 2,711 pounds a
16 day. For Bucklin Point, because there's a lower
17 flow there, it's currently 1,293 pounds a day.

18 The current discharge from Field's Point is
19 13 milligrams per liter, about 4,600 pounds per
20 day; and for Bucklin Point, 9 milligrams per
21 liter. And that was based on readings taken
22 from October to February of 2006.

23 I had mentioned earlier that we had done a
24 design for Bucklin Point. We actually have the

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1 plant fully in operation now for nitrogen
2 removal; although, I have to say it's not quite
3 optimized, because we didn't get it running
4 until November, during last summer we had half
5 of the nitrogen removal facilities in.

6 In November we got the full nitrogen
7 removal facilities online, but because of the
8 cold weather you see during the winter months,
9 we have not yet optimized it and we also have
10 other control issues with regard to oxygen,
11 which we're trying to work out. But with regard
12 to 9 milligrams per liter, we were 16 before we
13 had this facility online. So, it's only half
14 operating.

15 The design for Bucklin Point, though, was
16 only for 8 milligrams per liter and our permit
17 is written for 5. So, we're not sure that we
18 can get to the 5 with what we currently have
19 constructed there.

20 NBC studies in total nitrogen removal. We
21 proactively completed the design, as I mentioned
22 before, for nitrogen removal in July of 2001 to
23 achieve the 8 milligram per liter before the
24 permit limits were established. And as I

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1 mentioned, the plant went online in November of
2 2005.

3 For Field's Point we began the facility's
4 plan in March of 2001 to determine the cost for
5 a range of nitrogen removals. 8 milligrams per
6 liter, 5, and less than 5, and for different
7 technologies, because we wanted to understand
8 what the problems were at Field's Point and get
9 an idea of what it would cost us to get to these
10 different levels.

11 We then reinitiated the facility's plan,
12 after the limits were initiated or proposed and
13 to reconsider the technologies that were
14 available, because we had gotten a lot more
15 information since we first did the study in
16 2001. One way was actually running a pilot
17 scale test over at the Field's Point facility.

18 I just want to give you a little bit of
19 background on how you remove nitrogen.
20 Typically, at the treatment plants now, they're
21 designed to just provide removal of carbon
22 containing oxygen demanding material; and that's
23 done by means of bacteria and it's done usually
24 in an aeration tank. And so, we add

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1 microorganisms and air to the primary effluent,

2 which is food for the bugs, they eat the
3 pollutants and create a clear effluent.

4 This gives you an idea of the aeration
5 tanks at the Field's Point plant. You can tell
6 by the foaming on the surface, they're adding
7 air to the wastewater and there's bacteria in
8 those tanks that perform the removals.

9 For nitrogen removal, it's a two-step
10 biological process using different bacteria than
11 you'd use for the carbon removal; and then, you
12 convert the ammonia to nitrogen gas and water,
13 and that's how the nitrogen is removed as
14 nitrogen gas.

15 The first step is to convert the ammonia,
16 which I had mentioned earlier was the primary
17 source of fish toxicity for the Seekonk River
18 from the Bucklin Point plant. That's converted
19 to nitrite and nitrate in the presence of
20 oxygen; and then, you have a denitrification
21 step using different bacteria in the absence of
22 oxygen to convert the nitrate to nitrogen gas.

23 So, what we installed at Bucklin Point,
24 which was really the technology in use up to

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1 that time, the tried-and-true nitrogen removal
2 technology that could get you to about 8
3 milligrams per liter, was to convert our
4 aeration tank into an aerobic zone.

5 Basically, we took a portion of the tank
6 and made it into an anoxic zone; and then, we
7 had an aerobic zone where we converted the
8 ammonia to nitrate. And then, we would recycle
9 that to the front of the tank where there was an
10 anoxic zone; and that's where the nitrogen would
11 go off as nitrogen gas.

12 As I mentioned that's -- we've achieved
13 some removals, but we're not quite to where we
14 feel the design could be, because of the cold
15 weather and some of the DO issues we're having
16 at the facility. The DO is a little too high.

17 When you look at the Field's Point plant,
18 we have this footprint for the site. Here are
19 the aeration tanks. Now, at Bucklin Point we
20 had enough room at the facility and the aeration
21 tanks were big enough, that we could put an
22 anoxic zone in the tank and still meet the
23 requirements for 8.

24 We looked at the Field's Point plant and

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1 realized that to get to 5, we don't have enough
2 capacity in these aeration tanks. We'd have to
3 expand them. If you look, there's really no

4 room to put more tanks on this site. It's very
5 constrained.

6 One of the things we looked at was if we
7 needed to expand the tanks, we'd have to take
8 these tanks out and put them some place else.
9 These tanks are the wet weather facilities,
10 which are used in every rainy event, and they'll
11 also be used when we have our CSO tunnel being
12 pumped out, a lot of the flow is going to go
13 through these tanks. So, we'd have to put these
14 some place else.

15 So, when you have to expand the volume of
16 these tanks, you are running into extremely high
17 costs. So, when we looked at alternatives, we
18 wanted to look at an alternative that would not
19 require expansion of the tanks.

20 So, we looked at MLE, which is what we had
21 put in at Bucklin Point; and again, the range
22 for the MLE process is somewhere between 5 and
23 8, but closer to the 8. Well, we don't have
24 enough capacity on the site with the existing

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1 tankage to do that. So, that would entail us
2 moving these tanks up to here, which is property
3 we don't actually own, it's owned by the City of
4 Providence for their transfer station.

5 So, we'd have to buy the land, we'd have to
6 move these tanks, and we'd have to expand these
7 tanks; so, you can see that it becomes fairly
8 expensive. The cost for that was estimated at
9 53 million.

10 Another approach that could be used, which
11 would allow us to use the existing tanks is
12 called a Step Feed process. And what you do in
13 this case is you take the aeration tank and you
14 break it up into compartments. You have four
15 anoxic zones on each side of the tanks and then
16 these are the aerobic zones. The advantage to
17 this, or the reason this gets you a better
18 result, is that because it's Step Feed, you can
19 put more bacteria in this tank, and then as you
20 go down, you decrease the amount of bacteria.
21 And the reason that you need to do that is
22 because in the final tank you can only carry
23 over -- you can only have so many solids,
24 because you have too much you're carrying over

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1 into your final clarifiers and you won't meet
2 your permit limits.

3 So, if you're going to have more bacteria,
4 which is what you need to get the nitrogen out,
5 in this case you put all your bacteria kind of

6 in the front, and then you have your anoxic
7 zones, so you get both the
8 nitrification/denitrification.

9 Now, we -- Terry Cote and I went down to
10 Virginia to look at a facility that had this
11 process in place and it was in Alexandria,
12 Virginia, which discharges to the Chesapeake
13 Bay. And we asked them, what's your permit
14 limit for nitrogen? They said we don't have
15 one. We're working with the state to try to
16 figure out what we can achieve with our facility
17 before the limit becomes effective.

18 They were operating this facility, their
19 facility Step Feed at 4 milligrams per liter
20 during the summer months, but they have twice
21 the aeration tank capacity that we do in terms
22 of flow. And they also have methanol, which is
23 a carbon source, which also increases the cost
24 of operation.

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1 So, based on their operating experience, I
2 assume Virginia will be issuing them a permit.
3 But the key factor here, as I mentioned, is they
4 had twice the aeration tank volume that we do on
5 our site now. So, in order for us to get to
6 that level that they're doing, or at least that
7 volume of tank, we have to expand on the site
8 where the other tanks are.

9 So, this shows the Step Feed configuration.
10 It works well because we can get it into these
11 tanks, but what we found is, we can only get
12 down to maybe 5, at best, probably more likely
13 around 6, because of our limited volume. So,
14 it's sort of a problem for us to go with this.
15 We're not sure we could meet 5 with Step Feed.
16 We might, but we're just not sure of that. So,
17 we were very reluctant to sign a permit that
18 said we could get 5 if we went with the Step
19 Feed alternative.

20 In addition, as I mentioned, we would have
21 to also put in alkalinity and also methanol,
22 because you have to add carbon to get down to
23 the lower numbers; and that's sort of continuing
24 operating costs, by the way, to have to add the

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1 methanol. It adds to your O&M costs.

2 The other alternative we looked at is
3 called a floating media process, which is a
4 relatively new technology. And what's done here
5 is in the aerobic zone, you put in a media,
6 which is either a plastic media or a sponge-type
7 media, and the bacteria grow on that media; and

8 that's the way you increase the amount of
9 bacteria you have in the tank. Because they're
10 floating on that, they're growing on that media,
11 and they can't escape, because there's a screen
12 here. So, you're able to keep a high
13 concentration of bacteria in the tank without
14 worrying about the carryover into the secondary
15 clarifiers, which would cause you to have permit
16 violations, and you also have your anoxic zone
17 here. And this alternative was proposed by one
18 of the vendors for this floating media.

19 They also recommended going to a second
20 anoxic zone and then a second aerobic zone in
21 the tank. And the reason you can do that is
22 because you get enough volume here with that
23 added media, that you get enough bacteria
24 growing here that you can get a bigger anoxic

0051

1 zone or a break up further into this.

2 So, the advantage to the IFAS basically, is
3 you're buying aeration tank volume by putting
4 the media in the tank for the bacteria to grow
5 on. So, this is the configuration of the site
6 for the floating media. Again, we feel we can
7 fit these into the existing tanks. We also have
8 to add methanol and alkalinity here and there
9 are other improvements that need to be made.

10 I forgot to mention the capital costs for
11 the Step Feed. We figured 28 million, but
12 28 million for this one, because you have to pay
13 for the cost of the media to be put into the
14 tanks and there are a few other things that go
15 along with it. So, this is a little more
16 expensive, but there are some advantages to
17 this.

18 One of them is the Step Feed, we found, ran
19 very close to the maximum amount of solids we
20 could put in the tanks. We were concerned that
21 we had solids carryover, if we were going to try
22 to get to 5. We might not meet 5 and we still
23 have problems with our solids loading into the
24 second clarifiers. It required us to run right

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1 at the edge.

2 With this alternative, your media keeps the
3 bacteria in the tank. You can also get some
4 denitrification actually on the media itself.
5 You don't have to put it all in the anoxic
6 zone.

7 In this case, you maintain your
8 denitrification and nitrification throughout the
9 winter months much better than you do with the

10 Step Feed. So, when May comes and your permit
11 limit kicks in, you're already in the
12 nitrification/denitrification mode. So, there
13 are several advantages to this.

14 And also, the modeling that we did, through
15 our consultant, showed you probably get one part
16 per million better removals with this
17 alternative than with Step Feed, which is
18 probably right in the range that we're concerned
19 about. 5, 6, some 7 perhaps with this
20 alternative. So, going to one part less per
21 million would give us a better shot of meeting
22 the permit limit of 5 proposed by the DEM.

23 So, we recommend -- we will be recommending
24 the IFAS. And these -- I've spoken about the

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1 advantages; constructibility, ease of
2 operation, the biomass on the media buffers,
3 impacts of the toxic compounds, the washout and
4 so on. The disadvantages are, it's a little
5 higher costs and it needs screens.

6 Now, DEM also talked about the permit being
7 issued as a phased approach. And the first
8 phase for us is 5 milligrams per liter and for
9 other treatment plants in the state it's 8
10 milligrams per liter. They have told us that --
11 as you remember from the MERL tank studies, what
12 the limit should be, zero, which they know we
13 can't get to. The limit of technology is 3.
14 So, they have suggested that after we put in 5,
15 if we don't meet 5 -- if we don't meet water
16 quality standards at 5 milligrams per liter,
17 they would consider requiring us to go to
18 3 milligrams per liter.

19 Now, we can't go to 3 milligrams per liter
20 with the IFAS in these tanks. What we then have
21 to do is go to another stage, which is called
22 denitrification, denitrification filters, and
23 the total cost for this alternative, to get us
24 down to the 3 limit, which is the limit of

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1 technology, which, this is what people put in to
2 get to 3, would be about \$86 million, or
3 substantially more money than just the first
4 phase.

5 This just shows the capital costs. So,
6 Step Feed, it's 21 million to get to 5 to 8, in
7 that range. And we use a range because we're
8 just not sure exactly what number we'll get to.
9 Also, we have a combined sewer system, and that
10 introduces cold water into the tank and that's
11 another issue we have to deal with.

12 28 million for floating. And then for Step
13 Feed, we have 79 million, if we're going to go
14 to 3 parts per million; and for floating,
15 86 million.

16 This shows the increase in operating costs
17 for the Step Feed, 5 to 8; for floating it's
18 about a 25 percent increase over current
19 operating costs; and for the -- down to 3 is
20 a 40 percent increase over current operating
21 costs. So, you can see that's substantial.

22 And this just shows the incremental cost of
23 nitrogen removal. Right here, this is the cost
24 to remove a part per million. If you're in the

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1 5 to 8 range, it's about \$3 million per
2 milligram per liter, but when you have to go
3 down to the 3 to 5 range to get that extra two
4 parts per million out, you're up in the \$30
5 million parts per million. So, we're obviously
6 reaching the point of diminishing returns when
7 you have to get down to those lower numbers.

8 And then this shows the impact of these
9 alternatives on our rates. And you can see
10 there's an increase under Step Feed here, which
11 is similar to floating, 5 to 8 is about \$22 or
12 so per year. It goes up to approximately \$60
13 per year under the floating, down to 3 to 5, and
14 these costs are shown for only the wastewater
15 treatment facility BNR project and do not
16 include the additional capital costs for other
17 ongoing projects in our CIP program or O&M costs
18 for CSO Phase I or other projects.

19 This is just the cost of nitrogen removal
20 on top of our current costs. I'll turn it over
21 to Laurie. She can talk about the consent
22 agreement.

23 MS. HORRIDGE-BISSONNETTE: If anyone
24 is still awake after that, I can bore with you

0056

1 the legal ethics. When we filed our appeal
2 after the permits were issued last July, we
3 began a series of consent agreement proposals
4 back and forth between DEM and us. We're not
5 really at liberty to give you all the DEM
6 proposals, because they all have privileged
7 communication on the top, but this is the most
8 recent iteration of our proposed consent
9 agreement for Field's Point.

10 We're suggesting that we submit a draft
11 facility plan in May. We think we should be
12 able to get that done by then. Complete design
13 of the facility within 24 months of DEM

14 approval, construct the actual facility, which I
15 think will take about two years, and then
16 monitor the effluent for about 12 months.

17 At that point we would submit a report of
18 our findings to the DEM within about six months.
19 And if the permit limit can be met, if it
20 appears that we can consistently meet it at the
21 5, the consent agreement just terminates
22 naturally. If we need to implement operational
23 changes to meet the limit, that would be
24 methanol addition or additional tanks or

0057

1 something of that sort.

2 And with regard to the Bucklin Point
3 facility, of course, we already have that one
4 on-line as Tom indicated. We're getting about 9
5 now, but the facility was designed, of course,
6 for 8, not 5. So, what we're asking them to do
7 is to continue to operate the facility, monitor
8 effluent through October, submit a report of our
9 findings in April.

10 And again, if the permit limit can be met,
11 we can get down to the 5, then the consent
12 agreement ends. Again, if we have to do some
13 additional operational stuff, then we'll see if
14 it will get us down to the 5.

15 With regard to both facilities, if facility
16 modifications are required, we'd like an interim
17 permit limit not to exceed 8 milligrams per
18 liter. And, of course, all of this is
19 predicated on the fact that we feel that the
20 science is not there to back up the 5 at this
21 point.

22 We are asking that DEM continue to develop
23 a model of the Upper Bay to establish the TMDL,
24 which is Federally required, continue to monitor

0058

1 the water quality in the Providence and Seekonk
2 Rivers, and petition DEM to issue a renew permit
3 based on either TMDL or water quality data.

4 With regard to where we are right now,
5 we've just started discovery. We'll be
6 exchanging discovery over the next couple of
7 months. We'll be doing depositions in the
8 summer and hearings are expected at the end of
9 August. So, that's just about where we are and
10 I'll take any questions anyone has.

11 MR. CAMPBELL: It looks like part
12 of -- the start of this problem is the fact that
13 DEM is either incapable or unwilling to do this
14 TMDL study, and because they don't have
15 anything, they're relying on this other

16 inaccurate --

17 MS. HORRIDGE-BISSONETTE: Correct.

18 MR. CAMPBELL: What would it cost NBC
19 to take on this task of doing the TMDL study, or
20 is that at all possible?

21 MR. BRUCKNER: Well, we have -- we
22 already entered into a contract with the
23 University of Rhode Island Graduate School of
24 Oceanography to try to develop a water quality

0059

1 model for us.

2 Just to give you a little bit of
3 background: When DEM contracted with ASA to
4 develop the TMDL, which is a private firm, they
5 tried to do the hydrodynamic model of the
6 Providence River. They could not get the
7 hydrodynamic portion of the model to work, so
8 they couldn't proceed with the TMDL.

9 We then met with the University of Rhode
10 Island Graduate School of Oceanography. They
11 told us they had a better model that could
12 accurately model the hydrodynamics of the
13 Providence River.

14 There's a model in the public domain
15 developed by the University of -- Rutgers
16 University in New Jersey. It was being used
17 worldwide and we agreed to contribute money
18 toward their development of that.

19 In addition, another part of that contract
20 was for them to do further study of the currents
21 in the Providence River, because there just
22 wasn't even enough information. When ASA was
23 doing the work, they had no data on what was
24 going on in the river to accurately calibrate

0060

1 the model. So, that work has been done.

2 We had also done work on that subsequent to
3 the ASA trying to do their model. So, we've
4 been doing that over the years. We now have
5 sufficient data on the currents in the
6 Providence River so that a hydrodynamic model
7 can be done. And, in fact, URI has indicated to
8 us at a presentation they gave in January, that
9 the hydrodynamic portion of the model is
10 working. And the way you do that, or determine
11 if it's working, is if the model can serve
12 salinity over a period of time and it reached
13 equilibrium for salinity, which the ASA model
14 did not.

15 So, we feel comfortable that the model is
16 running, but URI has not yet calibrated it to
17 the criteria DEM requires and we've asked them

18 to do that.

19 The second step after you get the model
20 running hydraulically is to then put a component
21 on that will then do the nutrient calculations
22 for you, so you can tell if you put this much
23 loading in, this is what happens in the
24 receiving order.

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1 That is the much more tricky part and much
2 more difficult to do. This model has a nutrient
3 model, but it really needs to be tailored to
4 Narragansett Bay and URI has not yet started on
5 that because they're working on the hydraulic
6 portion of it first, but that's the next step
7 for them.

8 We then got a call from the fellow who
9 worked at ASA who had done the work for DEM. He
10 indicated to us that he now had a model that was
11 working. He had used a different model and he
12 was able to get that to work for the Providence
13 River also and had done some work on it and
14 offered us a proposal for them to develop the
15 TMDLs -- well, actually, he offered to do it for
16 DEM, but they weren't interested because they
17 had already gone down that road and they were
18 not pleased with the results. So, they didn't
19 want to basically, I guess, put good money after
20 bad.

21 So, we talked to them, but we are
22 considering it. It's about \$180,000 to do what
23 they've proposed -- well, you can spend a lot of
24 money on modeling, and even the results that you

0062

1 get -- quite frankly, this is such a complicated
2 water body, when you get results, you say okay,
3 what do they mean? I think you have to look at
4 them in terms of a sensitivity analysis, but at
5 least it gives you some science for where the
6 numbers came from.

7 I think the more important thing that we've
8 learned is the way the flow occurs in the
9 Providence River is very important. And the
10 other thing we found is, you can get hypoxia
11 problems really very much dependent upon tidal
12 flows, rainfall, temperature, time of year.
13 Those factors are very, very important as to
14 whether or not you're going to get these
15 conditions occurring. And even if you have
16 nitrogen removal, that's one of the things we'd
17 like to see, you might just still get those
18 conditions occurring, but perhaps less
19 frequently. And that, I think, is really what

20 the case would be.

21 That's the reason for our concern, is going
22 to 5 or 3. If you go to 5, you get water
23 quality improvement. Well, how often will you
24 meet the standards? Now, if you go to the 3,

0063

1 how much better is it going to be? Is it going
2 to be that much better to justify those
3 tremendous increases in cost? So, that's really
4 where we're coming from.

5 And one of our big concerns is what's the
6 next step? After we go to 5, how does DEM
7 determine whether we have to go to 3 or not.
8 There's still no model. There's no TMDL.
9 There's no water quality monitoring.

10 In addition, we're also doing the water
11 quality monitoring. We continue to do that in
12 the bay.

13 MR. CAMPBELL: It seemed it was
14 cost-effective to do as much science -- for the
15 NBC to do as much science up front.

16 MR. BRUCKNER: We're looking into
17 that. However, I -- there are many places where
18 they've done modeling and it's a black hole.
19 You can just spend lots of money on it and still
20 not know for sure what you have to do.

21 MR. SALVADORE: Tom, that
22 responsibility of doing the modeling, wouldn't
23 that be a responsibility DEM is charged with?

24 MR. BRUCKNER: That's our contention,

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1 yes.

2 MR. SALVADORE: Weren't they
3 responsible for providing us with a report on
4 the modeling results?

5 MR. BRUCKNER: Yes.

6 MS. HORRIDGE-BISSONETTE: It's a
7 Federal requirement.

8 MR. BRUCKNER: Yes.

9 MR. SALVADORE: It's a Federal
10 requirement.

11 MR. BRUCKNER: Yes. To do the TMDL,
12 right.

13 MR. SALVADORE: So, I mean, I just
14 want -- you know, just to pick up where, you
15 know, Commissioner Campbell left off. I suppose
16 we could do that, we could spend a lot of money.
17 And as you suggested, it's a black hole. This
18 is not our responsibility and not supposed to be
19 our prime interests. We're supposed to be
20 working with the results provided to us by the
21 Department of Environmental Management as a

22 result of EPA's mandate for them to provide that
23 to us, am I correct?

24 MR. BRUCKNER: Yes.

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1 MR. SALVADORE: Okay. Any discussion
2 on this nitrogen removal?

3 MR. CANE: Mr. Chairman, if I may.

4 MR. SALVADORE: Yes.

5 MR. CANE: Just a quick question.
6 What I'm still confused about from a scientific
7 perspective is, you can model all day long. The
8 issue is, you know, this winter was warmer than
9 last winter. There was less snowfall than the
10 year before. It may be warmer in August, which
11 creates greater algae growth, that may or may
12 not contribute to higher nitrogen levels in the
13 water. Now, there's lots of different things
14 that relate to it. To me, still, the issue is
15 who is monitoring the water today to take a look
16 at it? I mean, we have our dynamic environment
17 right outside our window.

18 If we're monitoring the water, it seems to
19 me those results are the results we really need
20 to use and I'm just wondering whether DEM is
21 doing any of that.

22 I mean, we can create models all day long,
23 but the models are only going to matter if they
24 match the environment and the environment

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1 changes, frankly, year to year. I'm not sure
2 what kind of monitoring is actually happening
3 today to back up the results of any model that
4 you have. Do you follow what I'm saying?

5 MR. BRUCKNER: Yes.

6 MR. UVA: Commissioner, we have an NBC
7 boat and we are monitoring and we are receiving
8 water on a weekly basis.

9 MR. CANE: I guess the question is, is
10 DEM doing any of the monitoring?

11 MR. UVA: Well, there are a lot of
12 gaps in the monitoring. The Governor's
13 Coordination Team has identified those gaps and
14 this million dollars in funding that they want
15 the Bay Commission to pay for is to fill the
16 gaps. Unfortunately, there are no gaps in our
17 district because of the monitoring we do, but we
18 don't know all of the discharges that are coming
19 into Rhode Island from Massachusetts and across
20 the borders. 60 percent of the watershed in
21 Narragansett Bay is from Massachusetts.

22 So, it is important that they close those
23 gaps and determine where is all of the nutrients

24 coming from? How much is attributable to

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1 atmospheric deposition, and from other sources,
2 and runoff? So, that's what the TMDL would
3 determine. How much is coming from the lawns
4 along the waterfronts, running off roads and
5 into Narragansett Bay?

6 So, we cover our gap. We don't have a
7 gap. We cover our discharges very well and we
8 will be able to determine what's coming down the
9 Blackstone, what's coming down the Seekonk
10 that's not attributed to the Bay Commission.

11 MS. HORRIDGE-BISSONETTE: Right. I
12 mean, part of our consent proposal was that we
13 actually monitor our effluent after
14 construction -- before and after construction of
15 our facility essentially so that we'll have that
16 data available, but of course, that doesn't take
17 into account what else is coming in from outside
18 our district.

19 MR. CANE: I guess, just from a global
20 perspective, we have DEM, who is still using a
21 1981-1984 static study in a tank, which doesn't
22 provide anything -- any changes with weather or
23 any of the other stuff that rolls along; and
24 that's the basis for the NBC, the City of East

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1 Providence, and whoever else has a wastewater
2 treatment facility to make those kind of
3 judgment calls without having that consistent
4 monitoring.

5 Frankly, they could have been monitoring
6 from 1984 on to determine what was happening.
7 It seems to be sort of, you know, the tail
8 that's wagging the dog, really. What's your
9 feeling from a -- whether DEM is even in the
10 mood to consent to anything along the lines of
11 what we've proposed?

12 MS. HORRIDGE-BISSONETTE: Without
13 getting into the specifics, I can tell you the
14 most reasonable response we got to this consent
15 agreement that we did imposed even lower numbers
16 for us. So, clearly, we're not making any
17 headway towards an agreement and we anticipate
18 going to a full hearing in August.

19 MR. CANE: That was, I think, one of
20 my jokes either at the last meeting or the
21 meeting before, which was, we talked about a
22 consent agreement from East Providence's
23 perspective. I know -- I think you've been
24 working with Bill Conley a little bit and they

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1 came back with more stringent requirements,
2 which I thought was a little bizarre.

3 MS. HORRIDGE-BISSONETTE: The same as
4 us, right.

5 MR. SALVADORE: So, Tom, from my own
6 perspective, if we lower our limits to 3 and
7 control our waters under our jurisdiction,
8 what would that -- what would conversely
9 happen? So waters, you know, below would be
10 able to discharge higher limits, correct?
11 Because it's an average, right? It's an
12 average --

13 MS. HORRIDGE-BISSONETTE: Well, more
14 importantly, since we can't control what's
15 above us, the impact that you see above us may
16 not be --

17 MR. SALVADORE: Exactly. Without even
18 taking what's above us into consideration. If
19 we went into lower limits, what happens below us
20 allows them to discharge higher limits, correct?

21 MR. BRUCKNER: Well, this is one of
22 the curious things about the way DEM came up
23 with the numbers. We thought if 5 was easily
24 achievable, why wouldn't they make 5 for

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1 everybody? The reason that they made 8 for some
2 facilities is the argument that they discharged
3 upriver. And as the flow went down the river,
4 some of that nitrogen would be assimilated; and
5 therefore, the loading to the bay would be less
6 because it was taken up in the river. So, that
7 was the argument as to why those numbers could
8 be higher.

9 But our position is 5 is very difficult to
10 achieve consistently; and the fact they didn't
11 give the others 5, suggests that they know
12 that.

13 MR. CANE: Mr. Chairman, one other
14 simple question. I think it's a simple
15 question. When you take a look at obviously all
16 the land that is right along the riverfronts,
17 and the bay, and the rest, do we even have a
18 clue what kind of number of nitrogen comes from,
19 frankly, lawn fertilizer or other unnatural and
20 natural sources, but not just the discharge? It
21 seems to us -- it seems to me anyway, the
22 discharge from NBC or from any other sewer
23 treatment facility has to be a much smaller
24 portion of all of the nitrates that are really

0071

1 coming into the system.

2 Does anybody -- I mean, has anybody ever

3 looked at that ever?

4 MR. BRUCKNER: I think Scott Nixon has
5 studies every ten years for the last three
6 decades to try and determine the total pounds
7 coming in. And you know the total pounds --
8 well, they can estimate the total pounds coming
9 in, and then they can subtract what they know is
10 coming in from the treatment plant. So, you
11 determine the pounds from the other sources
12 indirectly by subtraction method. And I think
13 the -- I'm reluctant to say what the numbers
14 are, but I think the point scores are up in the
15 60, 70 percent range.

16 MR. CANE: Outside of the --

17 MR. BRUCKNER: That's just from the
18 treatment plants, but that includes the
19 treatment plants in Massachusetts as well as
20 ours, like other plants, like the Pawtuxet going
21 into the Upper Bay.

22 MR. CANE: So, the simple solution
23 would be no fertilizer for properties that are
24 close to or feeds an aquifer.

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1 MR. BRUCKNER: Yes.

2 MR. CANE: Thank you, Mr. Chairman.

3 THE CHAIRMAN: You're welcome. I
4 think we're finished with this, right? Do you
5 want to bring the screen up? I mean, obviously,
6 the issue is not going to get decided today, but
7 we did want to at least take the opportunity to
8 apprise, you know, the Commission of the status
9 of our studies and our legal position. Thank
10 you, Laurie and Tom.

11 I know it's going to be an ongoing debate
12 and things are going to be developing on a daily
13 basis. So, everything we say today may not be
14 true tomorrow, but we'll keep you apprised every
15 step of the way; and, of course, we all
16 recognize the issue. Narragansett Bay
17 Commission has never turned a blind eye to
18 environmental concerns.

19 Our responsibility to -- our fiduciary
20 responsibility to our ratepayers is equally as
21 great and it always comes down to the cost
22 benefit ratio; and that's a decision that the
23 Board will have to make sometime in the future.

24 I don't know if there's any other business.

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1 I think we've lost the quorum, but that
2 completes the agenda for today, unless anyone
3 else has any other matters they wish to raise?

4 MR. SALVADORE: Move to adjourn,

5 Mr. Chairman.
6 THE CHAIRMAN: We have a motion to
7 adjourn.
8 MR. ROTELLA: Second.
9 THE CHAIRMAN: I have a second.
10 Before we adjourn, I note that there's a
11 possibility we may have a request by some of the
12 interested parties to be on our agenda next
13 month, to which we'd be happy to provide you the
14 opportunity. So, just please let us know; and
15 having said that, we're adjourned.
16 (HEARING ADJOURNED AT 12:30 P.M.)

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1 CERTIFICATE
2 I, BARBARA M. MONTIJO, do hereby certify
3 that the foregoing is a true, accurate and
4 complete record taken of my stenographic notes
5 in the above hearing.
6
7 IN WITNESS WHEREOF, I have hereunto set my
8 hand this _____ day of _____, 2006.
9
10
11 _____
12 BARBARA M. MONTIJO, RPR/COMMISSIONER
13 MY COMMISSION EXPIRES 11/29/2009.
14 IN RE: Monthly Board Meeting of the Commission
15 DATE: April 12, 2006
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