



Jersey Central Power & Light Company
Madison Avenue at Punch Bowl Road
Morristown, New Jersey 07960
(201) 455-8200

August 29, 1980

Mr. Richard H. Vollmer
Director, Three Mile Island-2 Support
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
7920 Norfolk Avenue
Bethesda, MD 20014

Re: NRC Docket No. 50-289 - TMI-1 Restart Proceeding

Dear Mr. Vollmer:

By your letter dated September 21, 1979, to R. C. Arnold, and Mr. J. C. Petersen's data requests sent to C. W. Smyth on November 9, 1979, you requested us to keep the NRC informed of significant regulatory developments affecting the GPU companies. Accordingly, the enclosed material (8 copies) has been sent for that purpose.

Enclosed is a copy of the transcripts for hearings held August 25 and 26, 1980, in BPU Docket Nos. 804-285 and 807-488.

Very truly yours,

Lawrence E. Sweeney

Lawrence E. Sweeney
Rate Department

rc

Enclosure

cc: M. Karlowicz (w/enc)
J. Petersen "
D. Carroll (w/o enc)
W. D. Garland "
L. Gentieu "

8009030582

THIS DOCUMENT CONTAINS
POOR QUALITY PAGES

VOLUME 4
 NEW JERSEY DEPARTMENT OF ENERGY
 BOARD OF PUBLIC UTILITIES

NEWARK, NEW JERSEY

MONDAY, AUGUST 25, 1980

In the Matter of the Petition of :
 Jersey Central Power & Light Com- : OAL DOCKET NO.
 pany for approval of an increase : PUC 3518-80
 in rates for electric service : BPU DOCKET NO.
 and for amendment to the Levelized : 804-285
 Energy Adjustment Clause and fac- : 807-483
 tor for such service. :

BEFORE: STEPHEN G. MARSHALL, ESQ.,
 Administrative Law Judge

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

For the Petitioner, Jersey Central Power
 & Light Company, appears:

KIRSTEN, FRIEDMAN & CHERIN, ESQS.,
 BY: JACK B. KIRSTEN, ESQ., and
 DOLORES DELABAR, ESQ.,
 17 Academy Street
 Newark, New Jersey

-and-

WILLIAM F. HYLAND, ESQ., Of Counsel
 JAMES B. LIBERMAN, ESQ., Of Counsel

For the Department of the Public Advocate,
 Division of Rate Counsel, appears:

ALFRED L. NARDELLI, ESQ.,
 Deputy Director
 RAYMOND MAKUL, ESQ.,
 Deputy Public Advocate
 10 Commerce Court
 Newark, New Jersey

J. H. BUEHRER & ASSOCIATES
 24 Commerce Street
 Newark, New Jersey
 (201) 623-1974

1 A P P E A R A N C E S: (Continued)

2 For the Staff of the Board of Public
3 Utilities, appears:

4 CARLA VIVIAN BELLO, ESQ.,
5 Deputy Attorney General

6 I. PAUL SLEVIN,
7 Supervising Rate Analyst

8 For the Board of Chosen Freeholders of
9 Ocean County, appear:

10 BERRY, SUMMERILL, PISCAL, KAGAN &
11 PRIVETERA, ESQS.,
12 BY: JOHN C. SAHRADNIK, ESQ.,
13 34 Washington Street
14 Toms River, New Jersey
15
16
17
18
19
20
21
22
23
24
25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

JUDGE MARSHALL: Good morning, ladies and gentlemen. This is a continued hearing in the matter of the Petition of Jersey Central Power and Light for an increase in rates for a revision of their Levelized Energy Adjustment Clause, OAL Docket No. PUC 3518-80 with Stephen Marshall residing as Administrative Law Judge.

May I please have the appearances?

MR. KIRSTEN: Jack B. Kirsten of the firm of Kirsten, Friedman and Cherin, Attorneys for the Petitioner, Jersey Central Power and Light Company and Mr. James B. Liberman and William F. Hyland of Counsel.

MS. BELLO: Carla Vivian Bello, Deputy Attorney General on behalf of the Board of Public Utilities.

MR. MAKUL: Raymond Makul, Deputy Public Advocate for the Department of Public Advocate.

MR. SAHRADNIK: John C. Sahradnik of Berry, Summerill, Piscal, Kagan and Privetera, appearing on behalf of the County of Ocean.

JUDGE MARSHALL: Thank you, ladies and gentlemen.

1 JUDGE MARSHALL: (Continuing.) Are
2 there any procedural matters to cover before
3 we go to today's witnesses?

4 MR. KIRSTEN: We were in the midst of
5 the cross-examination of Mr. Goldstein.

6 JUDGE MARSHALL: Off the record a moment.
7 (A discussion was held off the record.)

8 JUDGE MARSHALL: Back on the record.
9 We will continue with the cross-
10 examination of Mr. Goldstein, who has been
11 sworn in previously.

12
13 H. LAWRENCE GOLDSTEIN, having been
14 previously sworn, testifies further as follows:

15 CROSS-EXAMINATION (CONTINUING)

16 BY MR. MAKUL:

17 Q Good morning, Mr. Goldstein.

18 A Good morning.

19 Q I believe on Friday we had established that
20 the burned rates for oil over the recent few months have
21 been lower than the 3-plus-9 budget that was prepared last
22 fall, I believe.

23 A That's true.

24 Q By approximately what magnitude has the price
25 been lowering?

1 A Can I ask what exhibit's you're on?

2 Q I believe this was one which has no number.
3 I don't recall it being assigned a number.

4 JUDGE MARSHALL: Off the record.

5 (A discussion was held off the record.)

6 JUDGE MARSHALL: On the record.

7 Q While we were off the record, Mr. Goldstein,
8 I believe you referred us to JCA.33.

9 A That is correct.

10 Q All right. Now, on Page 2 of 3, that's a
11 summary of actual versus forecast on the grades of six oil.

12 A That's correct.

13 Q And in looking at that exhibit, this is for
14 the April to July period, the .3 sulphur six oil, the fore-
15 cast price was \$31.32 a barrel. This is the bottom row.

16 A Okay. That is the four-month average cost.

17 Q Right; but the actual cost experienced was
18 \$28.99, which deviated -- was lower than the budget by \$2.32
19 a barrel.

20 A That's correct.

21

22

23

24

25

1 Q With reference to the 1 percent sulphur oil,
2 the forecast was 26.74. The actual experience was 26.05,
3 or 69 cents a barrel cheaper than what the forecast is pre-
4 dicted?

5 A That's correct.

6 Q For an overall average on six oil, the price
7 of the actual \$28.37 compared to a forecast of 30.38, or
8 \$2.01 lower than the forecast on two oil, which is on the
9 next page, 3 of 3. The forecast shows a price of \$33.63.
10 The actual experience was \$32.16, which means that the
11 actual price experience was \$1.47 less than the forecast
12 amount in the budget. Could you explain in general terms or
13 as specific as you find necessary why the actual prices came
14 in lower than the forecast?

15 A Well, there are a couple of reasons. No. 1,
16 the fact that we utilized more gas than we predicted. The
17 main significant reason for the six oil cost deviation is
18 the decrease in the purchase price over those couple of
19 months, and as I said the last time, these are the burned
20 cost.

21 If we look at the current power cost, the
22 current power cost for six oil in July is \$30. The current
23 purchase cost for 1 percent six oil is \$25.50. So on a pur-
24 chase cost basis, our cost have more than caught up with,
25 have more than come back to the normal level on a burned

1 basis.

2 Of course, because of the fact of inventory
3 roll-in, we are a dollar or two under.

4 My position here is that the market is now
5 firming up. The price decrease that we saw back in April
6 and May are now, in fact, the current level of six oil cost
7 roughly equal to what we were paying back in January, so
8 there was a dip in the price and now it is back up again.

9 Q You refer to a price in January. Could you
10 tell me what that price was?

11 A Can we go off the record?

12 JUDGE MARSHALL: Yes.

13 (Whereupon, we went off the record for
14 a short time.)

15 JUDGE MARSHALL: Back on the record.

16 THE WITNESS: Yes, the cost in January
17 was three-tenths percent sulphur was roughly
18 \$31. The cost of 1 percent sulphur oil, this
19 indicates that we didn't purchase any back
20 here. The cost of that was roughly \$28, and
21 the cost of the distillate oil was \$30, ap-
22 proximately \$30.

23 Q When you refer to prices are firming up, the
24 implication is that the prices are soft over the last few
25 months?

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A The prices of residual oil are soft.

Q I wonder if you can amplify as to what the specific phenomenon in the marketplace, what specific cause caused the price of the residual to be soft?

A Both distillate oil and residual fuel oil are seasonal products. The market price is traditionally soft. In the spring of the year and the summer of the year, the market price firms up and increases during the fall season when there is a demand for that product.

1 A (Continuing.) So, it's very cyclical.

2 Q You're saying that the softness in the price
3 was nothing more than a normal seasonal cyclical pricing
4 phenomena which occurs with regularity.

5 A I'm saying that's one factor. The other factor,
6 of course, is the back-out of a lot of the residual fuel
7 oil by gas. So, that's created a surplus on the market.

8 Again, that surplus is, I believe, diminishing
9 based on the firming up of the price.

10 Q With respect to these two factors, were either
11 or both of them predictable when the budget was made in
12 which you forecasted these prices?

13 A As I indicated, we started our forecasting
14 work back in January and at that point there was no indica-
15 tion that there was any softening in the marketplace.

16 Q Well, the two factors you cited were seasonal
17 changes --

18 A Seasonal changes, which are typical from year-
19 to-year, and also the back-out, the extent of the back-out
20 by residual fuel oil by distillate -- excuse me, let me re-
21 phrase that.

22 Back-out of residual oil by gas.

23 This is of course related to the warm weather
24 we had or the really warm winter we had. Nobody anticipated
25 the amount of gas that would be available.

1 The weather last year on a degree day basis
2 was roughly 6 percent less than normal. In 1977, the degree
3 days were something like 10 percent greater than normal.

4 So, over the course of those two winters, we
5 saw a fluctuation of something like 16 percent in degree
6 days, and that had a factor of about 30 percent on fuel
7 usage, in other words.

8 Q By degree days, which you're referring to, is
9 the local weather degree data or some sort of a national --

10 A Those are local weather degree days in New
11 Jersey.

12 Q But are not the oil markets national or inter-
13 national in nature, so that weather variations strictly in
14 New Jersey might not be expected to have that kind of an
15 effect on the worldwide price or OPEC price?

16 A Not true. The east coast of the United States
17 and primarily the New York harbor consume something like
18 75 percent of the residual fuel oil.

19 Q 75 percent of -- what makes up a hundred per-
20 cent? 75 percent of what, not the world residual fuel oil.

21 A Of the United States residual fuel oil, and
22 approximately 80 percent of that residual fuel oil is im-
23 ported.

24 Actually, what we have in this country is a
25 two-tier market. One is the imported residual fuel oil

1 where the residual fuel oil is made out in the Caribbean
2 and Europe, and the other tier is the distillate which is
3 primarily made in the U.S..

4 Now, both approach world market prices; how-
5 ever, strictly the residual fuel oil is primarily a fuel
6 that's used by utilities and it's strictly based on a
7 seasonal usage, and to the extent that the winter weather
8 was mild, this usage was down somewhat.

9 To the extent gas was available, usage was
10 down somewhat. Now, both of these, all commodities, all
11 petroleum products, is really crude oil availability and
12 that's the world market.

13 Q The seasonal variations in price, taking the
14 weather, the severity of the weather apart, because you
15 cited two components, normal seasonal variations and more
16 gas being available than anticipated, the normal seasonal
17 variation should be predictable in making a forecast, in
18 that it's not necessarily the entire magnitude, that is, as
19 summer follows winter, that has happened for years on end --
20 I hope I'm not testifying, Mr. Kirsten -- that that is a
21 phenomena which could be cranked into a projection.

22 A To the extent that we know that come the fall
23 season, late summer, that prices start increasing, that's a
24 known. To the extent that demand for residual fuel oil is
25 known, that's a function of the winter weather.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25

Yes, demand increases, no question about it,
but the extent that that demand increases is a function of
the climatic conditions.

1 A (Continuing.) Back in 1977, we had a severe
2 winter. Demand was extremely high, set records. This past
3 winter was a kind of mild winter, as I said, 6 percent
4 milder than the normal. So, there was less demand.

5 This summer there has been a big demand for
6 residual fuel oil. Residual fuel oil stocks are coming down.
7 These are very hard to predict and they're really outside
8 the capability of most forecasters.

9 Now, in terms of price differentials, I have
10 tracked from 1977 to the current period the price differen-
11 tials between the seasons, and between December and June of
12 the year prices have gone up much higher, rather, much lower
13 than June to December.

14 Q You stated that utilities are a prime pur-
15 chaser of residual oil.

16 A Yes.

17 Q Is that true for the oil that goes to the New
18 York market? Does prime purchase to you mean 50 percent or
19 more is being purchased directly or indirectly by utilities?

20 A I don't have the exact figures here, but I
21 would say that for certain grades of residual fuel oil, I
22 would say yes, that majority is purchased.

23 Q Do utilities purchase more fuel oil in the
24 summer months or in the winter months?

25 A To the extent that there is storage capability,

Goldstein-cross

1 utilities try and stock up some oil in the summer months, but
2 most of the oil is purchased on the contracts and they try --
3 most oil companies try and levelize the amount that's sold
4 each month so they can gauge and allocate production.

5 Q Referring to JCA.3C, Page 2 of 2, I'm looking
6 in the upper right-hand corner, your total No. 6 oil pur-
7 chases, and I see what I would characterize as a substantial
8 drop in purchases from January to February. It dropped from
9 106,000 barrels to 35,000 barrels, and then purchases hit a
10 low in April of 19,000 barrels, and then shot back up again,
11 or is projected to shoot back up again.

12 I'm having trouble with the column here. It
13 shot back up to 149,000 barrels in July and are forecasted
14 to remain well over 100,000 barrels a month.

15 A This is before gas adjustments were made. We
16 did not anticipate -- what order 30 gas is, is gas that was
17 made available to interstate pipelines to supply to end users.
18 That order 30 gas had a finite life of one year. It was due
19 to end in May of 1980.

20 To the extent that we thought it was ending,
21 to the extent that our gas companies advised us that it was
22 ending, we did not have gas in the budget.

23 So, that's why the residual fuel oil numbers
24 increased, and those, as I said, are before gas adjustments.

25 Q Now, the extension of the order 30 gas, I

1 believe as you called it, how long does that extension run
2 through?

3 A The DOE just ruled it will be eligible --
4 extended for another year, through May.

5 Q May of 1981?

6 A '81, but that alone does not say anything
7 about gas availability. That just indicates that the order
8 30 gas can be sold to the interstate market and intrastate
9 market.

10 Q Well, we'll talk about gas later, I guess.

11 A Right.

12 Q Now, you indicate that now you believe that
13 based on your experience that residual oil prices have firmed
14 up.

15 What specific factors can you point to that
16 lead you to that conclusion other than possibly --- well,
17 has the price changed?

18 A Yes, the price has changed. The price has
19 changed. We can attest -- there's a very good correlation,
20 a very positive correlation.

21 As I said, we get most of our oil from the
22 Caribbean. To the extent that Venezuela is a very, very
23 large supplier of residual fuel oil to the U.S., if we look
24 at Venezuelan minimum posted prices, there is an increase in
25 the price of oil over the last two months.

1 A (Continuing.) Our suppliers have all increased
2 prices.

3 Q With respect to, I think on Friday, you refer
4 to an official price and now today you talk about in
5 Venezuela an official price, and you mention a posted price.
6 Is that one and the same?

7 A Could you repeat the question?

8 Q Is the posted price the same price that when
9 you refer to on Friday a Venezuela official price?

10 A There is a Venezuela official price which
11 Venezuela sets. There is a posted price which is the price
12 that is posted by the major oil companies in the New York
13 harbor which we buy from. What I said is, there is a direct
14 relationship between the two.

15 As the Venezuela price goes up, the posted
16 price in New York harbor goes up, reflecting any increase
17 in costs.

18 Q Let's go back to JCA3, Page 2 of 3, which in-
19 cludes your projections of oil prices on a burned rate, burned
20 cost, from September through August, and not citing any spe-
21 cific numbers -- perhaps we shall cite some specific numbers.

22 Let's take a look under the .3 percent No. 6
23 oil. I see the price is projected to escalate every month
24 until August when you have a final price of \$40.16 a barrel.
25 I am looking at the bottom group which says after gas

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

adjustment.

A What is the exhibit number, again?

MR. MAKUL: Could we go off the record?

JUDGE MARSHALL: Yes.

(Whereupon, we went off the record for a moment.)

JUDGE MARSHALL: Back on the record.

Q Are you with me; the group that has the final August 1981 price for .3 percent, \$40.16 a barrel?

A Yes, I have it.

Q And we're starting at 1980, September, at 32.73?

A That's correct.

Q And you have a very specific price listed for each and every month in between. Could you explain to me how you arrived at those prices for each and every month?

A I make a forecast of the escalation rate. There are two ways of doing it. One, I can end up with a year-end price and then factor, determine the escalation rate based on that year-end price; and then what we do is, for example, if a 12 percent escalation rate, we assign 1 percent per month to the price of oil. It is a very simple linear model that we use, and to that extent it doesn't follow the normal seasonal sequences.

Q Are you telling me that what you forecasted

1 was an end point as to where the prices will go, and you
2 started from a base and you assumed a linear increase in all
3 the intervening months?

4 A That's exactly right.

5 Q Now, in terms of establishing the year-end
6 price, what base are you using to escalate from the price
7 for what month?

8 A I use a -- well, this budget, we used a Decem-
9 ber end point, December 1979 end point. However, since we
10 are dealing with the official 3-plus-9 budget, it means we
11 used three months of actual plus nine months of forecast,
12 so the three months of actual we escalated from the third
13 month which is April.

14 Q So then these are escalations from the April
15 price?

16 A That's exactly right. We take our April price
17 and we escalate on a linear basis from April onward.

18 Q To the extent that the prices in May, June and
19 July did not go up, to what extent would this affect the
20 projection?

21 A Well, again, I don't expect the price to go
22 up significantly in May, June and July, and so I do expect
23 the price to go up very significantly in the fall. There-
24 fore, it is a matter of catch-up. Yes, we are behind May,
25 June and July, but we do catch up in September, October,

1 November and December, and that is essentially what the
2 budget is based on.

3 If you look at the purchases, and that is
4 JCF, rather than burned basis where we can sort out the
5 effects of generation mix and gas adjustments, we just look
6 at strictly purchases. This would be Page 4 of 5, JCF.
7 This is Page 4 of 5. There is a data request made and this
8 was in response to it.

9 MR. MAKUL: Could we go off the record?

10 JUDGE MARSHALL: Off the record.

11 (Whereupon, there was an off-the-record
12 discussion.)

13 JUDGE MARSHALL: Back on the record.
14
15
16
17
18
19
20
21
22
23
24
25

1 Q Before we went off the record, we were talking
2 about the trends in the purchase prices for the No. 5 oil
3 and we were talking about something about the historical
4 trends, and we had some problem in agreeing on it, but you
5 said now, I think while we were off the record, we agreed
6 that we would go over JCA-30, Page 2 of 2.

7 Would you continue on with the point you were
8 making?

9 A For the LEAC period, in consideration, if we
10 take the snapshot we were talking about three-tenths percent
11 sulphur. If we look at the September 1980 through December
12 of 1980, the increase is roughly \$2.49 a barrel, or roughly
13 50 cents a month.

14 Now, traditionally or historically, the price
15 of the residual fuel oil has never gone up 50 cents a month.
16 It has gone up considerably more than that per month. In
17 the winter months it has gone up \$1.50 to \$2; so to the ex-
18 tent that we under-recover there, we make up for it in the
19 summer months by allowing 50 cents per month, and that is
20 what the linear escalation does for us.

21 We may come out ahead in the summer but in the
22 wintertime we catch up and the price usually exceeds our
23 forecast.

24 Q By the winter months, you mean December, January
25 and February?

1 A I am starting in September when the prices
2 firm up and they last through April. Depending on how warm
3 or cold April is, the price increase will last right through
4 there.

5 Q Do you recall what exhibit you may have pre-
6 pared that shows the actual burned rate of last year as com-
7 pared to what had been projected?

8 A The burned rate from 1973?

9 Q By rate, I mean the unit cost.

10 A The unit cost for 1979?

11 Q Yes.

12 A I don't recall the exhibit.

13 Q Off the record, during a break, we can
14 straighten that out.

15 Now, what specifically -- you talk about a
16 50 percent or more a month escalation. Are there any spe-
17 cific factors that we can look at in terms of OPEC increases
18 or whatever that we can tie this monthly increase to, or is
19 this strictly a projection based on what has been observed
20 in prior years?

21 A First of all, let me correct your statement.
22 It is a 50 cents a month increase, not 50 percent increase.

23 Q 50 cents, I'm sorry.

24 A Yes, there is a significant difference.

25 Q Sure.

1 A Two things. One of our projections is based,
2 of course, on historic cost of OPEC oil, and the second pro-
3 jection is based on where we think OPEC oil costs are going.
4 over the LEAC period. In that case, we use the services of
5 Data Resource Incorporated, who has a worldwide energy model.
6 We also tailor the numbers based on the Department of Energy,
7 the EIA summaries, and several oil companies' outlooks.
8 These are all inputs into the final estimation of where we
9 think the cost of crude oil is going.

10 Q You said that these are used to assist you in
11 determining where the price of crude oil is going. I be-
12 lieve earlier we had established that the methodology you
13 use is essentially to predict what the price will be a year
14 from now and that you made a linear assumption to expect a
15 monthly increase between now and a year from now.

16 A That is consistent with what I just said. If
17 we estimate that the price of crude oil is going to increase
18 by \$8 a barrel over the next year, then our product prices
19 will be raised by \$8 a barrel.

20 Q Would you agree, Mr. Goldstein, that if we
21 accept the end point as to where the prices of crude oil are
22 going, that Jersey Central's cost will be greatly affected
23 by ^{whether} that increase all comes in the last month, prices
24 remain stable until that last month, or whether the whole
25 increase takes place at a very early day and remains stable

1 the entire period?

2 A If the increases come very early and we under-
3 estimate those increases, then we may catch up. If the in-
4 creases come later, we have allowed a certain linear escula-
5 tion in our forecast and we coincide. The increases we are
6 talking about, essentially the OPEC increases, or the in-
7 creases that are affecting the price of crude oil, are com-
8 ing every month now.

9 Because of the fact that domestic oil is being
10 decontrolled and it is being decontrolled every month, and
11 by October 1961 oil will be completely decontrolled in the
12 United States, and that as long as there is an upward pres-
13 sure on the market, because right now there is about a \$10
14 differential between the price of domestic oil, the average
15 price of domestic oil and the OPEC crude oil prices, so that
16 by / ^{itself} forces an upward pressure on the market. If OPEC
17 doesn't raise their price \$1 between now and the next year,
18 the price of oil will rise.

19 Q When did this decontrol -- decontrolling of
20 domestic crude oil prices begin?

21 A I believe that is part of the Fuel Use Act.
22 No, I take that back. I think it began about a year ago.
23 I'm not too certain on that. I have to check. I think it
24 was a year ago.
25

F 1 Goldstein - cross

1 Q Well then, even with that decontrol, that
2 progressive decontrol which you described, the May, June
3 and July prices were still lower than budgeted and in fact,
4 did go down on an absolute basis.

5 A Yeah but, you see, you're looking again at
6 two things. Distillate prices have not gone up. Distillate
7 prices have increased and that's a direct reflect of the
8 increase in cost of the U.S. crude oil as the decontrol is
9 phased in.

10 Residual fuel oil is primarily made
11 out in the Caribbean and that's affected by world market
12 prices.

13 Q So, the decontrol of the domestic crude will
14 have an impact on distillate or No. 2 oil prices, but not
15 have so much of an impact on the No. 6 oil prices?

16 A That is primarily correct, but there is very
17 little six oil production in the United States.

18 Q Okay. Now, because the six oil prices are
19 more controlled by the worldwide market, are you assuming
20 that there will be a monthly escalation/in the price of worldwide
21 crudes which with the cost pass through model will result
22 in a monthly escalation in the price of resid?

23 A Yes. We're projecting about a six --- an
24 \$8 a barrel increase in the cost of crude oil.

25 Q Is that going to occur on a monthly basis

1 where every month there will be 8/12ths of a dollar or
2 about 67 cents a barrel crude price increase?

3 A The way we factor in our escalation, that's
4 the way that would occur.

5 Q That's the way the model works, but what
6 about the marketplace? How will it occur?

7 A The marketplace could very well react much
8 differently. For example, they're talking now about an
9 OPEC meeting in September and most observers expect the
10 price of Saudi Arabian crude oil to go up \$2 a barrel.

11 So, that means that if we're projecting
12 an \$8 increase, we're already seeing in one month's time two
13 of that \$8 or roughly a quarter.

14 Q Isn't Saudi Arabian oil just one of several
15 OPEC oils?

16 A That is correct.

17 Q And is their oil not presently selling at a
18 lower price as compared to many of the other OPEC oils?

19 A That is correct. We buy considerably quantity
20 of Saudi Arabian oil and that has a bottom price of \$28 a
21 barrel, however, most oil economists will indicate that that
22 price is significantly under the market price.

23 The price right now between OPEC oil
24 varies anywhere from 23 up to \$33 a barrel with premiums.

25 Q So just an increase in the price of Saudi oil

1 by \$2 a barrel is not the equivalent of the price of OPEC
2 oil going up \$2 a barrel because it's only one of the
3 many oils that are a part of the overall OPEC supply?

4 A To the extent that Saudi Arabian oil makes up
5 probably 35 or 40 percent of our imports, it has a very sig-
6 nificant impact on the refiners' acquisition costs.

7 A \$2 increase in the cost of Saudi
8 crude would probably raise the refiners' acquisition costs
9 by dollar.

10 JUDGE MARSHALL: Excuse me. When you
11 say 35 percent of our imports, did you mean
12 American imports in general or the imports of
13 Jersey Central?

14 THE WITNESS: The American imports.
15 We're just talking generically about the
16 marketplace.

17 JUDGE MARSHALL: Okay.

18 Q If you source through the six oil that Jersey
19 Central purchases, what are the countries of origin and ap-
20 proximately what proportions?

21 You mentioned before a lot --- you were
22 talking earlier about Venezuelan prices.

23 A Our major supplier is Hess. Hess gets oil
24 from Saudi Arabia, very little from Saudi Arabia. Hess
25 gets most of their oil from Libya, Nigeria and they get in

1 North Slope oil.

2 All these oils are the top premium
3 oils, top premium being the highest priced oil.

4 Q Are they not top premium because they're
5 character --- you get a lot of what's called light products
6 rather than residual oil out of it?

7 A It's a mix, yeah. Nigerian oil is extremely
8 high priced because it does have a significant yield of
9 gasoline. That is the top quality oil.

10 Q So, it doesn't necessarily follow then that
11 because the price is high of that particular crude, that the
12 price of the residual/oil coming out of it will be higher than
13 if it came out of another crude oil, or does it?

14 A I don't follow your question.

15 Q All right. You indicated that the price of
16 these oils are high or higher than average and then in re-
17 sponse to my question, you did state they result in a high
18 yield of gasoline or other --- possibly heating oil also.
19 Is that also correct?

20 A Possibly.

21 Q Is that possibly not the reason why these
22 crude oils are so high in price, that they deliver a higher
23 proportion of distillates rather than residual oil?

24 A Well, in the whole oil pricing scheme, this
25 historical way that prices were derived was there was a

1 marker price.

2 A marker crude oil price is a Saudi
3 Arabian price for crude oil for particular grades and every-
4 thing was paid to that grade.

5 The higher quality grades, in other
6 words, the grades that were higher that offered more gaso-
7 line were priced higher than that. These traditional re-
8 lationships have fallen by the wayside.

9 We now have militant or hawkish pric-
10 ing countries and we have what people tend to say are dov-
11 ish pricing countries, Saudi Arabia being one of the more
12 conservative of dovish pricing countries, however, in the
13 end analysis Saudi Arabia has never lowered their price.
14 They have always supported higher prices.

15 The other OPEC nations are are hawkish
16 have increased. Every time Saudi Arabia has increased
17 their price, the other OPEC nations have increased their
18 prices more essentially because the supply of top quality
19 crudes is getting scarcer.

20 The crude quality slates are shifting
21 towards heavier and heavier crudes with less and less gaso-
22 line yields.

23 Q And more and more resid yields?

24 A Residual yield is --- if you call anything
25 that's not gasoline, residual yields, that is correct.

1 Overall the yields are lower.

2 In a refinery, if you get a very heavy
3 crude, you end up with some gasoline, some residual fuel
4 oil and a lot of coke. To be explicit, coke has no value
5 at all. In other words, your overall yield for a barrel of
6 crude oil falls off.

7 JUDGE MARSHALL: Off the record.

8 (A discussion was held off the record.)

9 (A recess was taken.)

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
FENNER CO., BAYONNE, N.J. 07001 - FORM 2044

1 JUDGE MARSHALL: Back on the record.

2 Q I believe where we left off, we were discuss-
3 ing a possible increase in the price of Saudi Arabian crude
4 and we were talking about certain crudes that are more ex-
5 pensive.

6 I believe where we left off, and please correct
7 me if I am wrong, that is, crudes that were more expensive
8 provided high yield of distillate products or gasoline and
9 as a result these were more valuable. The question I had
10 asked you or was going to ask you was: wouldn't that not
11 seem to indicate that the crude that provides a lot of dis-
12 tillate are not going, not distillate, provide a lot of
13 residual are not as valuable and not possibly going to go
14 up as fast?

15 A The projections we have on refiners' acquisi-
16 tion cost indicate that foreign crude over old composite
17 foreign crude landed in the United States will go up from
18 33 and 50. This is mid-year, average price for 1980, \$33.50
19 to \$37.43. To the extent that affects all crude, some are
20 going to go up more and some are going to go up less, but
21 the net effect is an upward movement of roughly \$4 a barrel.

22 Q There are crude oils that yield very high
23 percentages of residual. Would Venezuelan crude be one of
24 those?

25 A Venezuelan crude would yield higher percentage

1 residual fuel oil.

2 Q How does Venezuelan crude price compare to the
3 Nigerian and Libyan prices?

4 A I think I have some information. You are talk-
5 ing about strictly crude oil, now?

6 Q Yes.

7 A The latest price information I have is that
8 Venezuelan crude is comparable in price to Saudi Arabia
9 crude, and compared to Nigerian crude is about \$6 or \$7
10 lower in cost.

11 Q If the push in the oil marketplace is to get
12 gasoline and distillate products, and the Venezuelan crude
13 yields a very large percentage of residual oil, how will the
14 Venezuelan crude be able to keep up in terms of the price
15 with the lighter crude oil?

16 A As I said, the lighter crude oils are becoming
17 harder and harder to find. The trend is toward heavier
18 crude oils. In other words, a lot of the OPEC nations as
19 well as Venezuela are now requiring that for every barrel
20 that a company lifts of light crude, they lift a couple of
21 barrels of heavy crude.

22 Q And the heavier crudes do not provide as great
23 a yield?

24 A Of all products.

25 Q Of distillate products in particular?

1 A Of distillate products in particular, so there-
2 fore a number of companies to develop prices for upgraded
3 heavy ends and make gasoline and lighter products out of that.

4 Q But, in the meantime, there will be a lot of
5 these heavy ends around?

6 A Well, when you say heavy ends, what you are
7 really saying are what is on the bottom of the barrel, which
8 are unacceptable environmentally because they contain very
9 high sulphur and a considerable amount of metal. They are
10 worthless as a fuel unless they are upgraded, and the up-
11 grading costs considerable dollars because of the fact they
12 contain a lot of sulphur and metals.

13 Q If an OPEC price increase does occur at some
14 point in September, is this a price based on the oil that is
15 loaded aboard tankers?

16 A That would affect -- yes, that would affect
17 the price of oil that is being loaded on tankers, not the
18 price of the tankers that are in transit.

19 Q How long does it take a tanker to get from
20 Saudia Arabia to the refinery?

21 A It is variable in terms of whether there is an
22 immediate demand for that barrel of oil or there is not a
23 demand.

24 Q Based on present inventory conditions?

25 MR. KIRSTEN: I didn't hear the question.

1 Q Based on present inventory conditions which
2 you might describe?

3 A I would say it takes probably, and this has
4 to be a guess, I am not really familiar with it, about a
5 month. If you ask me about a barrel moving from Aruba to
6 the U.S., it takes four days.

7 Q Right now we are still talking about from the
8 oil fields to the refinery. Have you read anywhere about
9 tankers going slower than they used to in order to burn less
10 fuel in transit? Have you heard anything about that?

11 MR. WIRSIEN: I object. I don't know
12 the relevance or materiality of that question.

13 MR. MAKUL: The materiality is the
14 question about the transport time, the effect
15 of the whole thing we're looking toward is
16 at what time will a September OPEC oil price
17 increase embark the burnt rate. The speed at
18 which the tanker goes from the oil field to
19 the refinery is very much a part of the over-
20 all calculation of lag, before the price in-
21 crease winds up, before the oil at least winds
22 up at the burnt rate.

23 JUDGE MARSHALL: Are there any further
24 comments?

25 (No response.)

1 JUDGE MARSHALL: Objection denied.

2 THE WITNESS: Yes, I have read about it,
3 and as I said the tanker speeds up or slows
4 down depending on supply needs. They're
5 probably in a position where they're slowing
6 down right now but, again, for every increase
7 in OPEC, in the price of OPEC oil that in-
8 crease is the refiner acquisition cost of
9 foreign components, of acquisition cost and
10 there is a proposed increase in domestic
11 acquisition cost; so while you might have a
12 lag of foreign oil, you don't have that lag
13 in domestic oil.

14 Q Mr. Goldstein, I believe we established
15 earlier that decontrolling of domestic oil could have an
16 impact on No. 2 oil prices, but the six oil prices being
17 worldwide in nature would be somewhat less affected, if
18 affected at all; is that correct?

19
20
21
22
23
24
25

1 A I said that, but I think you're carrying the
2 extension too far. Everything reacts to a world market
3 price and there is exchange of information on the market.

4 If the distillate price was lower in the
5 United States than it was overseas, then the barrels would
6 flow overseas.

7 If residual fuel oil prices were lower
8 in the U.S., barrels would flow overseas.

9 In other words, there is an exchange,
10 and I don't want you to get the impression that the market
11 is completely decoupled and that there's an American market
12 and an European market.

13 Q Well, for the time being, all of my questions,
14 Mr. Goldstein, are directed toward 6 oil rather than 2 oil.

15 Now, the tankers, I think you agree
16 that the tankers are going slower.

17 A Crude oil tankers are going slower.

18 Q So, as a result, does that one a month figure
19 get lengthened by any extent?

20 A Maybe it's a month and a half. There are a
21 lot of crude oil tankers that are being used as storage right
22 now for storage. Those are available at a moment's notice.

23 Q Providing they could be emptied?

24 A Yes, that's true. However, crude oil stocks
25 are coming down, if that's what you're driving at.

1 Q Now, with respect to how long it takes for this
2 oil to get through the refinery from the time the tanker pulls
3 into the port at the refiners' end, how long does it take
4 until it's loaded onto another boat for shipment to the New
5 York Harbor?

6 A There's a concept called "economic rent."
7 A barrel of crude oil that goes up in price and goes into a
8 refinery, and that refinery has so many barrels in storage,
9 those barrels in storage now become the new and are now
10 raised in price to whatever the price has gone up to.

11 So, in other words, there's a prompt
12 exchange of price.

13 I don't think I know for a fact that
14 refiners do not segregate barrels based on this barrel has
15 a cost of \$30 and this has a cost of \$35. They're all co-
16 mingled and I believe they used a pricing system where what-
17 ever the price is in effect that day is the price of all
18 their inventory, i.e., economic rent.

19 Q Are you telling me that there's no pricing lag
20 at all with respect to refiners, that when the price of oil
21 that's coming in goes up, that they immediately reflect that
22 price in all their sales?

23 A Well, there are a lot of cases pending before
24 the -- well, a lot of cases that the DCE are looking into
25 that involve that principle.

1 I mean, that is supposedly illegal, but
2 I really don't -- you know, I really can't say what the
3 refiners do except that I know that DOE is looking very
4 seriously into a number of cases that involve just that kind
5 of concept.

6 Q You know approximately how many days at the
7 present crude running rates at refineries -- how many days
8 inventory of crude they might have in storage?

9 MR. KIRSTEN: I have to object. Ma-
10 teriality is a question that the degree of
11 probative value is so small as to not warrant
12 the time and effort involved, and I think this
13 is a perfect example of it.

14 Speed of tankers, amount of loading,
15 may have some effect on the timing, but what
16 impact it may have on this case is so insig-
17 nificant as compared to the time lag that we
18 are experiencing here to go through these
19 questions and is certainly a perfect example
20 of lack of materiality.

21 MR. MAKUL: Mr. Kirsten is apparently
22 anticipating the answer. I don't think there's
23 anything on the record/that necessarily says that
24 the lag is significant or insignificant.

25 The whole area that we're going to is

1 the methodology that was used to project month
2 by month increases, and what we're generally
3 testing is the validity of those assumptions,
4 and as a secondary thing, what we think we're
5 doing is of value. We're testing Mr. Gold-
6 stein's qualifications as an expert in the
7 petroleum industry and what the dollar effect
8 per barrel will be for changes in September,
9 if any.

10 JUDGE MARSHALL: Could the Court Reporter
11 read back the question?

12 (The Court Reporter read back the
13 following:

14 Question: You know approximately how
15 many days at the present crude running rates
16 at refineries -- how many days inventory of
17 crude they might have in storage?)

18 A I can answer that question.

19 MR. KIRSTEN: Just a moment. There's
20 an objection pending.

21 JUDGE MARSHALL: I'll deny it. Answer
22 the question, please.

23 A As of May 31, 1980 there was 377.2 million
24 barrels of crude oil in storage at a utilization rate of
25 13.6 million barrels a day going into the crude distillation.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

That comes out to approximately 30 days, 27 days of supply.

We are importing approximately 6. -- 5.1 million barrels of crude oil at this rate.

PENGAD CO., BAYONNE, N.J. 07002 - FORM 1844

1 Q Now, how often does OPEC meet to raise prices
2 normally?

3 A They just decided on quarterly meetings.

4 Q Quarterly meetings?

5 A The first meeting taking place in September.

6 Q Can you tell me when the last OPEC meeting was
7 that affected crude oil prices?

8 A Yeah. The last meeting of OPEC -- I think
9 June. I believe June was a meeting.

10 Q Did that result in an increase in prices?

11 A Yes, it did. Saudi Arabia raised their price
12 of crude oil by \$2 a barrel. All of the other OPEC countries
13 raised their prices significantly higher and taxed on their
14 premiums to boot.

15 Q And despite all of this, at least with respect
16 to 6 oil, in the three month period or the period after that
17 meeting, at least June and July, prices did not go up. In
18 fact, to some extent they declined?

19 A No. I never said that.

20 Q Well, I'm looking at the --

21 A Prices have firmed up. They have gone up.
22 They declined over, I guess, March, April, May, and they're
23 firming up now.

24 Q There was no immediate upward impact of those
25 increases?

2h2 Goldstain-cross

1 A We received a distillate increase of \$1.40 a
2 barrel.

3 Q My question went to 6 oil.

4 A Okay. 6 oil prices have firmed up. If we use
5 the minimum Venezuelan posted price, the price of 6 oil has
6 gone up from two months ago by about \$1.50 and that's for the
7 grade of 1 percent sulfur fuel oil.

8 Q Do the OPEC countries ever sell below their
9 posted prices?

10 A The OPEC countries sell below the posted prices?

11 Q Or the official prices.

12 A Saudi Arabia, as far as I know, at this current
13 junction is not selling below their prices.

14 Some of the other countries have elimi-
15 nated their premiums.

16 Q So that, in effect, is a price discount, a price
17 reduction?

18 A Not off the posted price.

19 Q But it was in terms of market price?

20 A It was a waiver of the premium. Some of the
21 countries like Algeria have a \$3 premium on top of their
22 \$37 a barrel crude price. Those premiums have now been
23 waived, so they're still insisting upon their official price,
24 but as far as I know, they have not officially lowered their
25 price.

1 Q Well, isn't the true market price the posted
2 price plus any premium that might be required and the net
3 effect of eliminating that premium would reduce the price
4 of oil?

5 A Well, the question you asked is whether they
6 give a discount off the posted price, and I'm saying they
7 do not give a discount off the posted price.

8 Q Okay. But you would agree that going beyond
9 that question, that if the true price of the oil sold the
10 posted price plus the premium, that the act of eliminating
11 the premium was, in effect, a reduction of the dockside price
12 of the oil?

13 A To the extent that they could not support the
14 premium, they waived it, but they're still insisting upon
15 the posted price, that's correct.

16 Q I think that about does it for our oil ques-
17 tions.

18 Now, I think we're going to go on to
19 coal.

20 Now, for the LEAC period, Mr. Goldstein,
21 can you provide us with the assumptions that you made about
22 the coal market that would affect the average costs for a
23 ton of coal during the LEAC period?

24 A I believe I provided an escalation rate of
25 8 percent a year for 1980 and 1981.

1 Q And that is starting with what price as a
2 base?

3 A Again, that started with our December price.

4 Q Your actual December 1979 price?

5 A Right, and that again was upgraded in April with
6 our current budget of 3 plus 9.

7 Q What is the base price right now for your pro-
8 jections that you make in April? I believe you said you
9 updated the base price to the one in April.

10 A We use an April base price, yeah. The base
11 price in April was 24.50.

12 Q How does the most recently experienced burned
13 price for coal compare to the most recent forecast?

14 A For the first six months of the year -- well,
15 let's take it from -- yes, for the first six months of the
16 year we are under our budget.

17 Q By how much per ton?

18 A Can I go off the record and find out what
19 exhibit we're looking at?

20 JUDGE MARSHALL: Off the record.

21 (A discussion was held off the record.)

22 JUDGE MARSHALL: Back on.

23 A The cost for the six month total actual was,
24 through June, was \$24.32.

25

1 A (Continuing.) Excuse me, I have to go off
2 again. That is incorrect.

3 JUDGE MARSHALL: Off the record.

4 (Whereupon, there was an off-the-record
5 discussion.)

6 JUDGE MARSHALL: Back on the record.

7 MR. KIRSTEN: In order to save time,
8 would it be helpful if we put that information
9 in as an exhibit rather than just to read it?
10 I have extra copies.

11 MR. MAKUL: Fine. I have no objection.

12 JUDGE MARSHALL: If there are no objec-
13 tions, this exhibit will be marked JCA-6 for
14 identification.

15 (Whereupon, a one-page document entitled
16 Jersey Central Power and Light Analysis of
17 Coal Burned, Actual versus Budget, was marked
18 JCA-6 for Identification.)

19 MR. KIRSTEN: Can we have this marked
20 JCA-7? Actually, it is the other half of the
21 comparison. JCA-6 is the analysis of the coal
22 burned, and JCA, the other item which I sug-
23 gest we mark JCA-7, is the analysis of the
24 coal purchased.

25 JUDGE MARSHALL: If there is no

1 objection, the one-page analysis of the coal
2 burned shall be so marked JCA-7 for identifi-
3 cation.

4 (Whereupon, a one-page document en=
5 titled Analysis of Coal Purchases was marked
6 JCA-7 for Identification.)

7 BY MR. MAKUL:

8 Q Mr. Goldstein, the only place where Jersey
9 Central is burning coal is at the Keystone Station; is that
10 correct?

11 A That's correct.

12 Q And you said that the 8 percent escalation
13 which I think we established, is now off of an April 1980
14 price. Is that 8 percent escalation, is that the prices a
15 year? In the future it will be 8 percent higher or the
16 average price during the life of the filings will be 8 per-
17 cent higher than the price experienced in April of 1980?

18 A It should be -- we are forecasting on a yearly
19 basis, so I think the latter, the 8 percent over the life
20 of the period.

21 Q So the average price during the LEAC would be
22 escalated from, it would be 8 percent higher than the April
23 1980 cost?

24 A I believe that would be correct.

25 Q The reason why I ask is in the filing on

1 JCA, Page 2, Page 2 of 15, in the filing we see an average
2 cost of \$29.37 per ton, at Keystone, and the unit cost that
3 I see here at JCA-6 in April, the actual was \$24.51, and I
4 guess you have a calculated, but the difference seems to
5 be more than 8 percent.

6 A Are you looking at burned or purchased?

7 Q The filing on Page 2 of 15 are prices shown
8 as burned, and I am comparing that to JCA-6 which shows an
9 actual cost in April of 1980 of \$24.51 actual as burned.
10 I would submit that 29.11 is much more than an 8 percent
11 increase compared to the April actual figure.

12 A I have escalated this on a purchase basis, and
13 let me just check my escalation one more time.

14 Q I am looking at the purchase, the second page
15 of JCA-6 of April unit cost per ton was \$22.92, which means
16 that the 29.37 figure as found in the filing represents
17 approximately a 25 percent increase.

18 Excuse me, I don't know about the 25 percent
19 but it represents what looks like substantially more than
20 8 percent.

21 A 13 percent.

22 Q Yes.

23 A I will withdraw my comment, then. The second
24 part of this is a 13 percent escalation.

25 Q Do you have, does Jersey Central have a coal

1 contract to supply this coal?

2 A They have two contracts. Jersey Central has
3 two coal contracts.

4 Q And how is the price determined under that
5 contract?

6 A There are two coal contracts. One coal con-
7 tract which supplies the majority of the coal, roughly 90
8 percent, is that cost of production plus profit escalation.
9 We pay all the costs of production plus profit which is
10 escalated.

11 The second coal contract is a market contract
12 where we pay the average coal price delivered to all of the
13 partners in the station, excluding minemouth plants, and
14 that supplies roughly 300,000 tons a year.

1 Q The escalation in prices which are predicted,
2 is that based on the seller's profit escalating or is it
3 primarily based on projections on the cost of the products
4 escalating or, I wonder if you could break that down for me?

5 A We are projecting on a, I would say a price
6 that includes profit, because the profit is escalated by
7 the WPI.

8 Q The wholesale price index?

9 A Yes.

10 Q At present, let's take the actual purchase
11 cost of 22.92 in April. How does that 22.92 break down into
12 costs of production and the profit components?

13 A I think the profits, I am unsure about the
14 exact amount of the profits, but I would say the profits in
15 April is probably in the order of \$1 or so. I think the
16 profits over the whole year is about \$1, \$1.20, \$1.30.

17 Q And the balance is the cost of the products?

18 A The balance is the cost of the products.

19 Q So if the profit goes up by the wholesale
20 price index, and even if the wholesale price index goes up
21 by 20 percent, that's 20 cents approximately of a dollar?

22 A Yes; there is a bonus provision in there but,
23 okay, I assume you're correct.

24 Q Does that mean the balance of your projection
25 is due to increases in costs of production?

1 A Exactly.

2 Q What increase in the cost of production do
3 you anticipate?

4 A The measure increase would be the labor
5 charge, labor components that is going to be determined by
6 the UMW, United Mine Workers Association contract renewal
7 talks which are scheduled. The United Mine Workers contract
8 terminates in March. The thinking right now is that con-
9 tract should be going up by about 15 percent.

10 Q Does that mean that the wage rate will remain
11 stable until March?

12 A No; there are increases in there.

13 Q Reflecting --

14 A Quarterly adjustments. This is the standard
15 contract. There is a cost-of-production, energy, explosives,
16 bolts, nuts, reinforcing bars, anything that has to do with
17 underground mining. We pay those costs. We also pay in-
18 surance costs for -- well, in the labor component, we have
19 all of the costs that are associated with the mine workers,
20 the entire cost pass-through. We have environmental regula-
21 tion pass-throughs. We have all the cost of production pass-
22 throughs.

23 Q Do you get regular communication from, I am
24 speaking with respect to this contract that you get 90 per-
25 cent of the coal requirements, are there regular communi-

1 cations or forecasts provided by that coal supplier to indi-
2 cate where the coal supplier thinks the cost of production
3 will be moving?

4 A Yes.

5 Q To what extent were they relied upon in your
6 development of your projections?

7 A To a large extent, I used what they had indi-
8 cated as their increase in the cost of production.

9 Q I did a little quickie analysis on the numbers
10 that were provided just now compared to the numbers that are
11 in the filing, and the explanation you gave us that would
12 account for approximately \$1 per ton as being the profit
13 component.

14 Now, backing a dollar out of the 22.92 purchase
15 price in April would indicate a cost of production of \$21.92
16 or approximately \$22, and if we take a look at the projected
17 average price for the LEAC period of 29.37 as is found in
18 the filing, I am assuming a 20 percent escalation rate on
19 profit which will be a 20 percent wholesale price index in-
20 crease, which would back \$1.20 out of the 29.37 figure, and
21 be left with a cost of production of \$28.17.

22 Now, maybe for convenience, we will write the
23 numbers down for you so you can look at them. I think the
24 end result of this analysis is that you have assumed that the
25 cost of production will increase by almost 30 percent and

1 16 percent escalation of the production from the cost of
2 April would appear to give a yield to coal prices of about
3 \$26.40.

4 A In April I have 3-plus-9 forecast. I have a
5 price of \$26.83 as a forecast price. That comes from the
6 budget.

7 Q Are you using the actual April coal prices as
8 the basis or the budgeted April coal prices as the basis
9 for making further escalations? I believe we have been,
10 unless my ears were wrong, we had been saying it was the
11 actual not April costs.

12 A I will have to check on that.

13 JUDGE MARSHALL: If we are going to
14 break at 12:00, we will take a ten-minute
15 recess now.

16 (Whereupon, a recess was taken.)
17
18
19
20
21
22
23
24
25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

JUDGE MARSHALL: On the record.

MR. KIRSTEN: There have been previously distributed to the parties a portion of the budget which shows the station fuel costs forecasts. These are the figures which were contained in the budget before adjustment and were the basis for the filing before the various adjustments that were testified to by the witnesses.

Just so that the record is complete, I thought it might be appropriate that that document be marked as an exhibit so that it is a part of the record. I would suggest it be marked JCA-8. It has been previously distributed to all the parties, sir.

JUDGE MARSHALL: If there's no objection, it shall be so marked.

(Document entitled "Station Fuel Cost Forecast-Summary," referred to above by Mr. Kirsten, is received for Identification and marked Exhibit JCA-8.)

Q Prior to the break, we were asking you to reconcile your assumptions with respect to the escalation in the cost of production of coal with what appears to be the end results, and we asked you whether or not you base

1 your escalations from the actual price for April 1980 or
2 some budgeted price which had been estimated prior to April
3 1980.

4 A I just want to check something out here before
5 I answer that question.

6 If I use the actual March price, which is the
7 book price of \$24.96, which is in the budget, then the escu-
8 lation is roughly 13 percent for the year.

9 Q Mr. Goldstein, before your prior testimony we
10 were told we're incrementing off April and that it was 8 per-
11 cent, and now it's off of March and it's 13 percent.

12 You gave us a price of 24.96 and that appears
13 to be, I believe you just indicated, a March budgeted number.

14 A \$24.96 is the cost of production and that
15 Keystone and Canterbury coal comes out. Now, to the extent
16 there have been inventory adjustments and dollar adjustments,
17 the price is \$21.96. That does not appear in our budget.

18 We use the book price, the price that Keystone
19 and Canterbury charges us. That's the weighted average price
20 of coal. That's \$24.96.

21 Q And that was in March of 1980?

22 A That was in March of 1980. Now, starting in
23 April of 1980, you will see that we, for the rest of the
24 year, we have about a 21 cents per ton increase in coal which
25 comes out to about an 8 percent annual rate from the budget,

1 from the official budget, from the 3-plus-9.

2 Q An 8 percent annual rate from the budget?

3 A Right.

4 Q Which means that you did not make an escula-
5 tion at all off of the actual prices but, rather, off the
6 budget prices.

7 A It's the actual price that's booked in the
8 budget. It's the actual -- what I'm saying is it's the
9 actual price --

10 Q The actual estimate?

11 A It's the actual price of Keystone and Canter-
12 bury coal without any inventory adjustments or dollar adjust-
13 ments.

14 Q And that price is what?

15 A \$24.96, and if you use that number, then it
16 becomes a 13 percent escalation through the end of the year.
17 The end-of-the-year price would be \$23.31.

18 Q All right.

19 A Now, what I'm saying is that if we start with
20 the month of April, there is only a 21 cents per month in-
21 crease, 21 cents per ton per month increase.

22 That comes out to an annual escalation of
23 3 percent. So, there is a jump here between March and April.

24 Q You just quoted me a figure of -- a calculated
25 figure of \$23.31 at year end, I believe.

1 A Yeah.

2 Q How does that reconcile with the filing which
3 shows the price of Keystone of over \$29 on the average dur-
4 ing the LEAC period?

5 A Well, don't forget the average -- that's the
6 average through August of 1980. In other words, the final
7 price of Keystone coal, Keystone and Canterbury coal, the
8 price of delivered coal to the station is \$29.95 in our
9 budget.

10 Q What does the 28.3 run represent; that's the
11 price of coal when?

12 A That is the price of coal December, 1980.
13 Now, in the budget, the price of coal in April of 1980 is
14 \$26.33.

15 Q So, what you have done is, you have escalated
16 the old budgets to come up with the new budgets?

17 A I don't agree with that.

18

19

20

21

22

23

24

25

1 Q How did the actual price of coal in April of
2 1980 factor into the derivation of the 29.37 figure which
3 is the projected fuel cost of Keystone for the LEAC period?

4 A What I am telling you is that between April
5 and the end of the year, we had a 13 percent escalation.
6 Now you want to know for the whole LEAC period,, and our
7 escalation goes from 24.96 to a price of \$30.30 which comes
8 out to a rate of 21 percent over the entire LEAC period.

9 Q Now, you cited a possible wage settlement in
10 March in the order of 15 percent.

11 A I said that is a possibility.

12 Q It could be lower?

13 A It could be higher.

14 Q And it could be lower?

15 A I would suspect it to be higher based on the
16 UMWA position.

17 Q Is this contract not affected by wage and
18 price guidelines?

19 A I do not believe so. I don't know. Let me
20 withdraw that. There have been settlements outside of the
21 industry for 13 percent which have violated the guidelines.
22 I believe the rubber workers had a 13 percent increase.

23 Q Do you believe that the last time that there
24 was a wage settlement -- how long ago was that?

25 A Three years ago.

1 Q And what happened prior to that settlement?
2 Was there a long strike?

3 A There was a 100-day strike.

4 Q Do you view the UMW as being in a relatively
5 strong or weak bargaining position with respect to this 15
6 percent that you are projecting?

7 A I think they are in a strong bargaining posi-
8 tion. I think historically the UMW has never had a settle-
9 ment without a strike. I believe that their negotiating
10 position this year is even more firm with a new leader who
11 seems to have the mine workers behind him. There is no
12 derisiveness which characterize the last round of negotia-
13 tions. I think this time the issues are going to be more
14 in control of the mine working force than ever before. I
15 think the make-up of the bituminous workers, the bituminous
16 owners bargaining committee is very strong, very militant.

17 We have Consolidated Coal, which has a very
18 large say in the negotiations, and if you read the papers
19 you would know that the few wildcat strikes that we have had
20 so far, that Consolidated Coal Mines have had them all. I
21 believe that the ground the issues are being looked upon
22 and wage increases are significantly -- wages will be one
23 of the issues.

24 Q Do you consider yourself to be an expert in
25 labor, in the status of labor negotiations?

1 A Well, I follow the statements that are issued
2 by both the mine union and the unions and the owners and try
3 to piece them together as part of our scenario.

4 Q Do you know what the present help is of the
5 UMW strike fund?

6 A I believe it may be fairly low. That is why
7 we are expecting -- that is why most industry people are
8 expecting a short-term strike of up to a month.

9 Q And wouldn't that tend to put the coal mine
10 owners in a much stronger bargaining position than they may
11 have been had there not been such a long strike the last
12 time around?

13 A Coal mine owners are suffering from under-
14 capacity right now. They are not financially healthy. They
15 can either not take a long strike and neither the union, so
16 that is why I say the strike will be really short, possibly
17 of a month's duration.

18 For the record, I would like to say that --

19 Q I don't think there is a question pending.

20 A All right.

21 Q Has there been any assumptions on your part or
22 would it be in your area of expertise in this case to dis-
23 cuss the full utilization rate at Keystone, the BTU burn-per-
24 kilowatt hour received?

25 A No.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q That is not in your expertise?

A No, I don't believe it would be in my ex-
pertise.

1 Q I won't ask you any questions about that, then.
2 Now, moving over in the area of natural gas purchases. The
3 Company, I take it, has been purchasing quantities of natural
4 gas for use at Sayreville and Gilbert over the last few months
5 perhaps higher than what had ^{been} originally budgeted?

6 A That's correct.

7 Q For the projection for this Levelized Energy
8 Adjustment Clause, what are the assumptions with respect to
9 gas availability over the next four months, or to put it
10 another way, in your exhibit on oil prices, JCA-3, page 2
11 of 3, in the upper part of the worksheet we see some budgeted
12 figures and in the lower part of the worksheet we see after
13 gas adjustments.

14 I wonder what the assumptions were on
15 the upper part of the worksheet prior to the gas adjustment,
16 as to how much gas was going to be burned.

17 A As I indicated, I believe I said that in certain
18 stations gas would not be available after May. The adjustment --

19 Q After May of what year?

20 A 1980.

21 Q And does the upper part of that page prior to
22 gas adjustment, does that reflect no additional gas avail-
23 ability?

24 A The upper part does.

25 Q In actuality, there has been additional gas

1 availability through the summer, is that not correct?

2 A That's correct.

3 Q And what does, what is the prospect for an
4 ability to get this additional quantity of gas into the fall
5 and September or October, November, December, through that
6 period?

7 A We have been told by our suppliers/^{at}the Sayreville
8 station that we would probably have gas with an exception of
9 about 30 days during the winter.

10 We have been told by our suppliers at
11 Gilbert station that we would probably have gas with the
12 exception of 60 days during the winter. Gas quantity is
13 going to be a function of temperature. When the temperature
14 gets below 30 degrees. We have contracts, and those con-
15 tracts are on a best effort basis.

16 In other words, the best efforts of the
17 gas company to get us gas, and we have an interruptible supply.

18 Q Did the budget figures in the upper half of
19 page 2 of 3, I take it that did not reflect any new informa-
20 tion about additional gas being available?

21 A That's correct.

22 Q The after gas adjustment in the lower part of
23 the page, did that reflect the fact that some gas would be
24 available this winter where you had thought that these
25 quantities would not be available?

1 A That's correct. The gas after adjustment,
2 we reflect the additional quantity of gas that would be
3 available.

4 Q Available this winter?

5 A This winter.

6 Q I wonder if you might compare the budgeted barrels
7 of oil? Is it not true that when the gas comes in that it
8 displaces oil?

9 A To a certain extent, yes.

10 We cannot burn pure gas in our boilers
11 without doing significant damage, so we have to use some
12 oil.

13 Q It may not totally displace the oil?

14 A It will displace some of it.

15 Q It will displace another fuel which, in the
16 case of Jersey Central, is oil?

17 A It would displace some oil.

18 Q I am looking at the months of September, October,
19 November and December for 2 oil, for .3 percent 6 oil, for
20 1 percent 6 oil, and it would appear from my looking at it
21 that both the purchased budget and aftergas adjustment oil
22 usage numbers are identical both before gas adjustment and
23 after gas adjustment.

24

25

1 Q (Continuing.) Do you agree with that observa-
2 tion? Am I reading it properly?

3 A I don't see it that way.

4 Q All right.

5 A I see that our total No. 2 oil before budget
6 adjustment, we had 1.4 million, and after gas adjustment we
7 have 1.0 million.

8 Q If I might cut you off --

9 JUDGE MARSHALL: Off the record.

10 (A discussion was held off the record.)

11 Q Look at September 1980 for two oil, and I see
12 there was burned 135,000 barrels. If you look at the after-
13 gas adjustments of September 1980, two oil, it's 135,000
14 barrels.

15 Apparently this gas that is coming in is not
16 displacing any two oil in September.

17 A That's correct; a very small amount of two
18 oil.

19 Q Is six oil burned at Sayreville?

20 A .3 percent sulphur.

21 Q Looking at September 1980, I see 122,000
22 barrels before the gas adjustment; 122,000 barrels after the
23 gas adjustment. If you get gas in September, where do we
24 see a reduction in the oil purchase in the same month?

25 A I see the reductions towards the latter part

1 of the year. I see a significant reduction --

2 Q But this is --

3 MR. KIRSTEN: Let the witness finish
4 his answer, please.

5 MR. MAKUL: Well, the answer is not
6 responsive.

7 MR. KIRSTEN: I'm sorry, but until we
8 determine whether it's responsive or not, I
9 think we're entitled to have an answer on the
10 record.

11 JUDGE MARSHALL: I think I would like
12 the witness to finish the answer.

13 A I see that for the LEAC period we budgeted 1.6
14 million barrels of oil, .3 percent sulphur oil, and with gas
15 adjustments we're down to roughly .78, 700,000 barrels.
16 That, to me, reflects a back-out of oil.

17 Q Mr. Goldstein, I agree with you that the num-
18 bers are different after December which affects the total,
19 but you indicated that your goal was to be getting additional
20 quantities of gas this fall and that this was reflected in
21 the lower portion of the page called "After gas adjustment,"
22 and I'm pointing out to you that the numbers from September
23 through December are identical, both per budget and per
24 budget after gas adjustment, and that does not seem to be
25 consistent with your earlier testimony that gas will be coming

1 in through the fall period except possibly for 30 or 60 days
2 during the winter, depending on the source of supply, and
3 that that gas would be displacing oil.

4 MR. KIRSTEN: I object to the form of
5 the question. I don't know where the question
6 is.

7 MR. MAKUL: The question is: can he
8 explain that inconsistency. The only explana-
9 tion we have gotten is that the total numbers
10 are different, but I think the witness would
11 agree --

12 MR. KIRSTEN: I move to strike the
13 characterization. Let's leave it to questions,
14 if we will, Mr. Makul.

15 JUDGE MARSHALL: An objection has been
16 made to the form of the question.

17 MR. MAKUL: Well, I think to save time,
18 why don't we let the witness try to respond.

19 MR. KIRSTEN: Thank you.

20 A What we have essentially done is taken the available
21 gas and divided it through the period. We have been told
22 how much gas we're going to have, 7 million MCF, and we have
23 divided it through the period at Sayreville. That's the way
24 it appears to me.

25 Q Well, if it was divided through the period,

1 would that not indicate that each and every month you would
2 see some lesser oil utilization in the after-gas adjustments
3 than before-gas adjustments?

4 A It depends how you divide it. The net effect
5 is a reduction in oil.

6 Q Didn't you say you divided it equally?

7 A Not necessarily equally. We've backed out the
8 requisite amount of oil by the 7 million cubic feet that
9 they have offered us, or thereabouts.

10 Q You didn't back any out from September to
11 December, inclusive. Is that correct?

12 A That's the way the adjustments look over here,
13 and thereafter we backed it all out. We backed out a signi-
14 ficant portion.

15 Q Why did you not back any out in the September
16 through December period?

17 A Let me just check my notes.

18 Part of the reason is that we're having an
19 outage in Unit No. 4 in September through November. I be-
20 lieve the entire Unit No. 4 is down.

21

22

23

24

25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q Unit No. 4 at Sayreville?

A Yeah.

Q Well, doesn't Jersey Central burn the cheapest fuel it can, whenever it can?

A Yes, it does.

Q Well, if gas is available in September and one particular section of a generating station is out of service, I take it that the oil is more expensive than the gas; isn't it?

A I would say yes.

Q Why wouldn't we see the impact of an outage or a partial outage of a generating station show up in a reduction in the oil burned rather than -- we haven't seen that effect, at least I don't see it, and correct me if I'm wrong.

A I think if we're going to back out more expensive fuels, and we have already offered to you the opinion that the price of oil is going to increase in the future, then you would be wiser to back out the oil as it increases rather than now.

The price now is low; the price in the future is going to be higher.

Q If you turn back gas in September, doesn't it remain there someplace for you to obtain it in 1981, or is it permanently lost?

1 A I think it's permanently lost. I don't be-
2 believe it's available to be recovered.

3 Q Well, if it's permanently lost, that means
4 there's no point in -- or maybe you could expand on this as
5 to why it might be worthwhile to burn oil earlier and back
6 it out later when the price is still higher.

7 A Well, I would suggest that the price of oil
8 is increasing. The availability of gas, depending upon the
9 winter, may be more plentiful in the spring.

10 Q Mr. Goldstein, in September of 1980, which
11 will be more expensive, gas or .3 percent sulphur fuel?

12 A .3 percent sulphur oil.

13 Q And if, therefore, if there is no need to --
14 if a portion of the generating station is down but the over-
15 all requirements for fuel in that generating station are re-
16 duced, would it not be logical then, may I ask, to back the
17 oil out rather than the gas in that month, given your pre-
18 vious testimony that if you do not take the gas in the fall
19 period, that it's permanently lost to the Company?

20 A I would believe it would be more logical. I'd
21 like to go over a record and check some information.

22 Q You said you believe it would be more logical
23 to do something. To do what?

24 A Under the scenario that you're proposing, I
25 would believe that it would be more logical to back out the

1 oil.

2 Q And the scenario. I'm proposing, is the realis-
3 tic scenario as you understand it?

4 A Realistic if we get the gas.

5 Q Well, you believe you will get the gas?

6 A My own personal beliefs are not what the gas
7 company ascribes to all the time.

8 Q Well, the gas company has told you that the gas
9 would be available throughout the winter except, I believe,
10 from New Jersey natural, you said, for 30 days, which you
11 testified is the coldest days, and they don't occur in Sept-
12 ember, the coldest days, do they?

13 A No, but we don't have, as I say, a fixed con-
14 tract for gas with New Jersey natural. It's on a best efforts
15 basis. They have indicated to us that they will supply us
16 with the gas when it is available.

17 MR. KIRSTEN: May I suggest that we take
18 a recess for lunch? I think the colloquy be-
19 tween Counsel and the witness is not getting
20 anyplace.

21 The witness has indicated that he would
22 like to have an opportunity to check with his
23 back-up people as an explanation for the ques-
24 tion that Mr. Makul originally proposed, and
25 that is the lack of the gas adjustment --

1 apparent lack of the gas adjustment during a
2 certain period in the figures.

3 I think that information can be pro-
4 vided for him directly without going through
5 this exercise in futility.

6 MR. MAKUL: If I may say something,
7 Judge Marshall. I disagree with Mr. Kirsten.
8 I think rather than getting nowhere, we're
9 getting quite far.

10 JUDGE MARSHALL: Without making any
11 ruling upon any comments regarding the merits
12 of the colloquy, I will note that one of the
13 parties asked me if we could break at 12:00
14 o'clock for lunch and it's now 12:00. So,
15 we'll break for lunch.

16 Off the record.

17 (A discussion was held off the record.)

18 JUDGE MARSHALL: We'll meet back here
19 at 1:30.

20 (A luncheon recess was taken.)

21 - - -

AFTERNOON SESSION

JUDGE MARSHALL: We are ready to go on the record now. Mr. Kirsten, would you like to introduce your witness.

MR. KIRSTEN: Mr. Finfrock.

I V A N R. F I N F R O C K, JR., sworn on behalf of the Petitioner, testifies as follows:

DIRECT EXAMINATION

BY MR. KIRSTEN:

Q Mr. Finfrock, will you please give us your position with the GPU System and Jersey Central Power & Light Company, in particular, in a brief resume of your background?

A I am a Vice President of Jersey Central Power & Light. My exact title is Vice President-Generation.

Currently I am responsible for the operation and maintenance of all the Company's generating facilities.

In addition, I currently oversee the activities of our Environmental Affairs Department. I am a member of the Board of Directors of the Company. I have been employed by one of the Operating Companies in the GPU System for the last 28 years.

Essentially all of my experience has been in the area of design, construction, start-up, testing and predominantly the operation of our nuclear facility at

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Oyster Creek.

Q Now, in these proceedings there has been a reference to a scheduled outage at Oyster Creek in the fall of 1980, I believe, commencing in October. Are you familiar with that scheduled outage?

A Yes, I am.

1 Q Would you tell us the reasons for that scheduled
2 outage?

3 A All right. As a result of the accident at
4 Three Mile Island, the Nuclear Regulatory Commission eventually
5 published a document which is known as New Reg 05073, which
6 set forth the things that needed to be done which we generally
7 characterize as TMI lessons learned.

8 Those items were put into two categories
9 by NRC. The one group was known as Category A, the second
10 group as Category B.

11 The Category A items were required to
12 be completed by January 1, 1980, and the Category B items
13 currently are perceived to be completed by January 1, 1981.

14 When the currently scheduled outage in
15 the fall of this year was established, it was done with the
16 perception that we would be able to be prepared to complete
17 the category B items at that time.

18 Subsequent developments have told us
19 because of a lot more engineering work than we had anticipated,
20 in some areas, the criteria was not fully defined and we're
21 now finding in some areas also that it's going to be diffi-
22 cult to obtain all of the equipment that needs to be procured
23 in order to meet all of the Category B concerns, however, we
24 now then find ourselves in a position whereby we will be
25 asking the Nuclear Regulatory Commission for some relief

1 from the January 1, 1981 date, and I expect -- and this is
2 my own judgment now -- that we will be successful in obtaining
3 some relief, but certainly not all of it.

4 In other words, I believe that the
5 Nuclear Regulatory Commission would require us to do all of
6 those things that we can do prior to January 1, 1981 and if
7 not, shortly thereafter as we can.

8 I think the situation would be one in
9 which we have to do what we can do and will be required to
10 clearly demonstrate some kind of a hardship why we can't do
11 it any sooner.

12 So, it would be our plan to obtain some
13 partial deferralment of Category B items until perhaps, in the
14 early part of next year, but in my judgment, if the NRC
15 continues with the policy that they did for the Category A
16 items, within the next six months it will be necessary to
17 have one, if not perhaps two, shutdowns to perform as much
18 of that work as we can do.

19 Q When you say one or perhaps two shutdowns, is
20 this a change in what had been indicated previously to the
21 parties, that the October scheduled outage was to be post-
22 poned until sometime in 1981.

23 A Yes. I think so, yes.

24 Q All right. Mr. Finfrock, is there some re-
25 striction about shutting down Oyster Creek during the winter?

1 A Yes, there is. We have with the Federal Govern-
2 ment, and this is the Federal Department of Environmental
3 Protection, what is known as an NPDES permit, which has a
4 condition in it that does not permit us to plan a scheduled
5 outage between the 1st of December and the 1st of March.

6 That comes about because of the cold
7 weather and the cold water and the potential for causing
8 some fish mortalities from shutting down in the winter.

9 So, what we do has to be sandwiched
10 between that, if you will, unless, of course, and I'm not
11 an attorney, but if we were ordered by someone/^{else}to shut down
12 in those winter months, then I guess we'd do that.

13 Q You did shut down in January of 1980?

14 A That's right.

15 Q How did you manage that, in light of those
16 restrictions?

17 A Okay. At that time we had an order from the
18 Nuclear Regulatory Commission to complete the Category A
19 items by January 1. We got a little relief from that order
20 which only extended to January the 5th, and we shut down.

21

22

23

24

25

1 Q So that, in effect, the NRC requirements took
2 precedence over that winter restriction?

3 A That's correct.

4 Q And is it your testimony that if the NRC re-
5 quires a shutdown for the other items in the winter of 1980-
6 81, that it would also affect those restrictions in the same
7 way?

8 A Yes, it would.

9 Q As of this point in time, sir, what is your
10 best estimate of the effects of these requirements on
11 planned outages for Oyster Creek from now through, say, of
12 August of 1981?

13 A I guess that depends a bit on whether we will
14 need to have one or two, and we do not know that at this
15 point in time because we do not know the extent of the re-
16 lief from the January 1 date. I would think that like most
17 anything the longer one could delay it, the more one can get
18 accomplished. However, there are things that we do per-
19 ceive that we can accomplish later this year and I do be-
20 lieve in my judgment would be required to do them because
21 we will not be able to demonstrate that we're not ready to
22 do them.

23 If we need to do it in pieces it may well
24 amount to three weeks or something like that for the first
25 piece and another three weeks or so in the second piece.

1 Q Do you recall testifying last year, or was it
2 this year, anyway, at some previous date, in respect to the
3 capacity of Oyster Creek?

4 A Yes.

5 Q At that time you refer to the history of
6 Oyster Creek. Could you summarize just briefly your view
7 as to the estimated capacity rate of Oyster Creek based on
8 that history?

9 A What we have been doing in the last several
10 years in making net generation estimates for the output of
11 the plant is to, first of all, determine how long scheduled
12 outages or an outage would be normally in the course of a
13 year, and then we have assumed that for all the rest of the
14 time when we perceive the plant to be running, that the
15 capacity factor will be 85 percent. We have done that
16 strictly based on past performances of the station. That
17 takes into account fluctuations in the output of the plant
18 that are dependent upon the circulating water temperature.

19 It takes into account the reduction in load
20 on the weekend to change the control blade and the reactor
21 around so we can more efficiently burn fuel, and it takes
22 into account the times that the plant is simply forced out
23 of service for several days for whatever mechanical dif-
24 ficulties that may occur.

25 Q Has this recent prolonged outage of Oyster

1 Creek affected your judgment in respect to your estimate of
2 the capacity of the plant in the future?

3 A During the, I think you called it a prolonged
4 outage, we did determine some mechanical difficulties within
5 the plant and within one of the plant's safety systems.
6 When I add that to the lessons that have been learned from
7 Three Mile Island, and when I also add to that the fact that
8 Oyster Creek is one of ten or eleven plants which the NRC
9 has involved in its systematic evaluation program, those
10 ten or eleven plants are the older plants, and I put all
11 those things together, it would be my judgment that over
12 the coming years it would be necessary to have longer out-
13 ages than we have previously had up until this year.

14 In order to perform the modification work that
15 I believe we would want to do and I think would also be
16 required in order to continually enhance the safety of the
17 plant, keeping in mind that a lot of things have happened
18 in the last 15 years in terms of design criteria which guide
19 the building of nuclear plants and Oyster Creek.

20 Although it can operate for ten years, it was
21 designed perhaps 15 years ago, and I think we would need to
22 back fit over the years what I have oftentimes said would
23 be everything that is back fitable.

24 Q Thank you sir. Based upon that, do you have
25 any opinion as to the 85 percent capacity factor other than

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

scheduled outages with respect to Oyster Creek as far as the future is concerned?

A I believe that over the coming years we will find the 85 percent number to be too high; that we are in a mode today as we have been in for a number of years and that mode will certainly accelerate by the TMI accident where the regulatory requirements are escalating rapidly. The net result of that is the fact that there is more things to do and more testing to do and some of which may not permit the plant to achieve its last ten-year history of an 85 percent capacity factor.

PENNS CO. BAYONNE, N.J. 07002 FORM 1048

1 Q What has been the experience in generation
2 for Oyster Creek, say, for the month of August, since it is
3 back in service?

4 A It has not been 85 percent. It has been more
5 like 60 percent for the month of August. We got a brief shut-
6 down. We had to go through a lot of new startup testing pro-
7 cedures.

8 As an example of the escalated regulatory
9 concern area, when the people at Brown's Ferry plant and TVA
10 system had difficulties with their control rods, all of them
11 going into the reactor that is spread across the whole
12 nuclear business, particularly the boiling water reactor
13 segment of it, like we have at Oyster Creek, we were required
14 to them perform a lot of different testing to demonstrate our
15 control rods were working properly. That is an example of
16 the kinds of things that the track from that previous 85
17 percent capacity factor.

18 MR. KIRSTEN: Thank you, sir.

19 The witness is available for cross
20 examination.

21 JUDGE MARSHALL: Do the parties wish
22 to have a few minutes to review their notes?

23 MR. MAKUL: I think we are ready to
24 go.

25

1 CROSS EXAMINATION

2 BY MR. MAKUL:

3 Q Mr. Finfrock, you referred to a possibility
4 that because all of the engineering is not complete or not
5 fully developed that there may be some equipment which may
6 be unavailable, that it would not be physically possible to
7 do all of the Category B, TMI lesson learned modification,
8 in October, is that correct?

9 A That's correct.

10 Q And one of the alternate possibilities you
11 outlined was that you might have to take a shutdown in
12 October to do whatever you are prepared to do and then take
13 another one at a future date to complete the remainder of
14 the lesson learned?

15 A Yes, that is a possibility.

16 Q When would that second shutdown occur under
17 that scenario?

18 A I think that that second shutdown, should we
19 be able to get into the mode whereby we have to shut down,
20 because I think it is very clear now we will not be able
21 to complete everything in October, the second one would be
22 determined by the availability of the equipment, the com-
23 pletion of the engineering.

24

25

1 A If we are able to obtain the kind of relief that
2 I've been addressing, it could be that the next order that we
3 get from the Nuclear Regulatory Commission will require that
4 everything be done by the 1st of January or shut down.

5 We would like to avoid that. That cer-
6 tainly is not in the best interest of anybody.

7 Q But with respect to the two shutdowns to complete
8 the lessons learned, barring the NRC ordering you to shut down
9 completely, if you were to have an outage in October to complete
10 whatever could be completed in October, when in your estimation
11 would the second shutdown occur to complete the remainder of
12 items that are on the New Reg 0578 list?

13 A Based on what we perceive today, I think the
14 outage, if required in October, would be maybe three or four
15 weeks. When we have the next one would then depend upon
16 what kind of an order or direction that we get from the Nuclear
17 Regulatory Commission which I do not know at this time, but
18 if we're going to do it in pieces, I think we could safely
19 say another 3 or 4 weeks in the early part of the year.

20 Q So the end result of doing it in two steps
21 would be 3 or 4 weeks to complete step 1 and another 3 or 4
22 weeks to complete step 2?

23 A That's right.

24 Q Is it not the original estimate that completing
25 everything in one shutdown would take five weeks?

1 A Yes.

2 Q So, the result of the two shutdown route would
3 be a total outage of six weeks to eight weeks?

4 A It could well be, keeping in mind that there is
5 a lot of head end work in simply shutting down and getting/^{ready}to
6 work and once you have the work, there's tailend work to get
7 it ready to start again.

8 If you have to do that twice, then you
9 have two times the tail end and the head end work to do and
10 that's why two comes out longer than one.

11 Q When is Oyster Creek scheduled to have its
12 mixed outage for refueling?

13 A Okay. We had, I believe, the last official
14 time was in October of 1981. We are now getting ready to
15 change that, if you will, so that that outage for refueling
16 will begin shortly after Thanksgiving 1981, close to the first
17 of December -- how about November the 30th.

18 Q I see. That particular outage, is that the
19 time in which there's going to be an amount of work done on
20 the sparger in the emergency core cooling system which had
21 the crack problems?

22 A Yes.

23 JUDGE MARSHALL: I'm sorry, how do you
24 spell that?

25 MR. MAXUL: I think it's s-p-a-r-g-e-r.

1 THE WITNESS: That's correct.

2 JUDGE MARSHALL: Okay, thank you.

3 Q As a result of having to do those repairs in
4 addition to a normal refueling, would that outage be expected
5 to be a lengthy one?

6 A Are you asking me do I expect it to be lengthy?

7 Q Well, how long, approximately?

8 A Well, we have not completed all of the scheduling
9 and critical path plan and manpower levels that's involved in
10 planning such a major outage.

11 I would think that the minimum will be
12 3 months.

13 Q I see. The NRC broke down the TMI lessons
14 learned work into Category A and Category B. What is the
15 distinction between Category A and Category B?

16 What was the NRC's philosophy in putting
17 work items in two different categories?

18 A Let me try to simplify that as much as I can.
19 The items that were in Category A were the items that the NRC
20 perceived could be achieved in a very short timeframe, like
21 by the end of last year.

22 The Category B items are generally those
23 that, if you will, take more work, take more engineering,
24 more design, are more difficult to complete and, therefore,
25 in some recognition of practicality, a longer period of time

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

was permitted for those.

Q Now, did Jersey Central complete all of the Category A items by the January 1, 1930 deadline?

A No. As I previously testified, we didn't start many of them until January the 5th, but they were all completed before we restarted the plant.

Let me clarify that --

Q I think I understand what you mean.

1 A The order was to have the items completed by
2 January 1 or, in our case, January 5 was allowed, or shut down
3 the plant and complete them.

4 So, we were in the latter part of the
5 case.

6 Q Do you know of any other licensees, plant
7 licensees, who had to conform to Category A and whether they
8 all completed the work by the January 1, 1980 deadline?

9 A I think that we all got the same order. I'm
10 not personally aware of whether everybody got everything done.
11 There may have been extenuating circumstances of one kind or
12 other for somebody else, but I'm not aware of that.

13 Q So, you're unaware as to whether, first of
14 all, whether anybody was unable to meet that deadline and
15 if they, indeed, were unable to meet it, what happened on
16 the NRC front. You have no knowledge of that in that area?

17 A Nothing specific.

18 Q Okay. Do you know the reason why you were
19 unable to complete the work prior to January 5, 1980 on
20 the Category A items?

21 A Some of the Category A items involve procedural
22 changes which were completely prior to January 1. Other
23 ones involve mechanical system or electrical system changes
24 that could not be done while the plant was running.

25 Q In other words, to have completed those Category

1 A items prior to January 1st would have required taking the
2 plant out of service to complete them all?

3 A That's correct.

4 Q Assuming the NRC allowed you to do so, I realize
5 that's a big assumption, would the Category B items be com-
6 pletable in the timeframe of the next Oyster Creek refueling
7 which I believe you said would start around December of 1981?

8 A Yeah. Should the NRC permit that, I think it
9 was my testimony, however, in my judgment, that will not be
10 permitted.

11 Q Well, you stated in your direct testimony that
12 -- you mentioned something about demonstrating hardship in
13 terms of not meeting the schedule.

14 What kind of hardship are you referring
15 to as a possible reason for requesting the NRC to be more
16 lenient with regard to this deadline?

17 A I think it would be necessary to demonstrate
18 to the NRC, in order to obtain delays, that it is impossible
19 for us to obtain the materials such as new valves that will
20 be required to make some of the Category B items in the time-
21 frame set forth for the January 1, 1981 date.

22 It will also be necessary to demonstrate
23 that we have been forthright and efficient in our engineering
24 endeavors and our specification endeavors and procurement
25 endeavors to try to get it, but if it's not available in the

1 country and you have to wait for someone to make it, that's
2 it. That's the hardship that I was referring to.

3 Q It does not refer to any kind of financial
4 hardship?

5 A No, sir.

6 Q Now, Mr. Kirsten asked you about the plant
7 capacity factor in August, and I believe you responded that
8 it was in the 60 percent range, but didn't that August period --
9 can't that be viewed as a somewhat atypical period in that
10 the plant was returning from an extended outage, and that you
11 had to go through the Brown's Ferry related control rod tests?

12 A Well, I think what you're addressing is the case
13 here whereby our assumption of 85 percent is too high.

14 Q No. The question I'm asking is whether or not
15 the factors that led to 60 percent were somewhat atypical
16 in that August represented month where the plant was being
17 returned to service, and it's my understanding it's not like
18 a light switch, that you just turn it on or off, you have to
19 ease it into service.

20 A That's correct.

21 Q And also, it was necessary to do these tests
22 to make sure that the control rods would go in and out
23 pursuant to the Brown's Ferry incident?

24 A Okay, but implicit in the August 60 percent
25 number, the plant tripped off the line. It was off for

1 several days.

2 Q And what caused that trip out of service?

3 A Oh, gee, my mind is blank for the moment. We
4 had at that time some difficulties with the conventional
5 secondary part of the plant in the turbine system and in the
6 condensate system in which the automatic control system
7 precipitated a series of events which in turn tripped the
8 reactor, which required readjustment of a lot of the
9 secondary system controls.

10 Q Could that trip-out in any way have been viewed
11 by the fact that that incident occurred, the fact that the
12 plant had just returned from service from a lengthy outage
13 as contributing in any way --

14 A No. I believe the root cause of the problem,
15 as I recall it, was a relay failure, which could happen most
16 anytime, whether the plant is returning from an outage or
17 whether it's running as it is today.

18 That's part of the considerations that
19 are in the 95 percent number that we received.

20 These things do, indeed, occur from time
21 to time.

22 Q But the fact that the capacity factor was in
23 the 60 percent range from that month, it was very definitely
24 contributed to by the fact that the plant was returning back
25 from an outage and was being, shall we say, cranked back into

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

service, and also the fact that it was necessary to do a Brown's Ferry type test?

A We had already done the Brown's Ferry type testing prior to the month of August. The requirements today now are that when the plant trips off the line, you do a large part of the Brown's Ferry required testing every time before you restart.

PERCAB CO., BALTIMORE, M.D. 07002 - FORM 2046

1 A (Continuing.) So I believe that is consistent
2 with my testimony that I still think the 85 percent is too
3 high, and it may well turn out to be shorter or smaller in
4 the future.

5 Q You mentioned something about circulating
6 water temperature limitations. Could you explain more fully
7 what those are?

8 A The net output of the electricity from that
9 plant depends on the temperature of the circulating water
10 that cools the main condenser for the turbine.

11 Q If I may interrupt for a second, is this water
12 that is taken from the bay?

13 A Yes, it is. If the water taken out of the bay
14 is, let me just use a general term, very warm, its ability
15 then to cool the condenser is somewhat decreased. The steam
16 going through the turbine and into the condenser just doesn't
17 get condensed too fast when the water is very warm. That
18 establishes a condition that engineers call back pressure
19 or higher back pressure on the machine and, therefore, it
20 just doesn't make as much electricity.

21 When the circulating water coming into the
22 condenser is colder, like it is in the winter, then that
23 colder water has the ability to condense the steam coming out
24 of the turbine more rapidly and so the back pressure on the
25 turbine is lower and therefore the same amount of steam going

1 into it can make more electricity. That is a common phenom-
2 ens of any generating station.

3 Q It is now late August; is the ambient tempera-
4 ture, the water in the bay, at or close to the maximum at
5 this time?

6 A I did not have time this morning to look.
7 Back in July, when we had the hot weather, the bay tempera-
8 ture was very high. In fact, the inlet temperature got, I
9 believe, as high as about 86 degrees and normally there has
10 been a 20-degree increase in temperature as that water goes
11 through the condenser.

12 There is an absolute upper limit on the allow-
13 able temperature of the outlet water of 106 degrees, and
14 for a while in July we were forced to operate at a reduced
15 capacity so that we would not violate the absolute tempera-
16 ture of the discharged water.

17 Q Do you know what the temperature was, say,
18 within the last week of water going into the Oyster Creek
19 station?

20 A No, I'm not certain. Somewhere between 75 to
21 80, I would guess.

22 Q I take it that if it is lower now than it was
23 in July, that at least for the next six months this circu-
24 lating water temperature limitation should not be a problem
25 which causes you to derate Oyster Creek in any way?

Finrock-cross

1 A As long as the weather stays the way it is.

2 Q You mentioned something about, as another ex-
3 ample, as to the reason why a plant cannot operate that flat
4 out all the time, something about a control blade adjustment,
5 and you mention that this adjustment is made on the weekend.
6 Why is it made on the weekend?

7 A We usually do it on the weekends when the
8 system load is lower than Monday morning, for example, and
9 we reduce the plant output to 60 to 70 percent so that the
10 nuclear engineers have a lot of margin in the power distri-
11 bution pattern within the reactor core so they could put in
12 blades, take some blades out and get the power distribution
13 adjusted to what it needs to be so we can officially burn
14 the core and the power is raised again to the full capacity.

15 Q Would it be a fair statement that the reason
16 why this planned reduction in output occurs on weekends is
17 that the replacement power cost is lower on a weekend than
18 the average replacement power costs, if it were to be done
19 randomly at some point in the week?

20 A I am not an expert on replacement power costs.

21 Q You did say it was because the system load is
22 lower?

23 A The system load is lower, so I think what you
24 say is probably correct.

25 Q With respect to the additional work that might

1 have to be done because Oyster Creek is becoming an older
2 plant, which I believe you indicated the NRC for various
3 reasons are looking at more closely, how would that fact
4 impact on the plant capacity factor? Would the planned out-
5 ages tend to be longer or would there be more than planned
6 outages? Exactly how does that work to reduce the capacity
7 factor of the plant?

8 A In my judgment, over the next several years
9 the planned outages will be longer in order to accomplish
10 the work that we will need to do as compared to the five or
11 six-week outages that we normally have had over the last
12 nine or ten years.

13 Q It will not result in an overall rerating of
14 the plant?

15 A I don't anticipate that it will.

16 Q Other than the lesson learned outage which
17 we talked about earlier, there are no planned outages be-
18 tween now and August of next year; is that correct?

19 A That's correct.

20 Q The 85 percent figure that you quoted, does
21 that take into account planned outages?

22 A No, sir.

23 Q It does take into account, shall we say, a
24 pro rated share of forced outages?

25 A Yes.

1 Q Wouldn't the plant also operate at its capacity
2 factor if we exclude the effects of those forced outages and
3 planned outages but only for things such as the weekend
4 control blade work, for example?

5 A Let me preface my comments. I find myself in
6 an unfortunate way. I live in the real world and when no-
7 thing goes wrong, when there is no forced outages, when
8 there is no need to reduce power for one reason or another,
9 then the plant runs at 100 percent, but that simply is not
10 the world that we are living in.

11 JUDGE MARSHALL: We will take a ten-
12 minute recess and be back here at 2:30.

13 (Whereupon, a recess was taken.)
14
15
16
17
18
19
20
21
22
23
24
25

JUDGE MARSHALL: Back on the record.

BY MR. MAKUL:

Q Mr. Finrock, as things stand right now, the TMI lessons learned outage, which is coming up, has that been formally scheduled by the Company?

A We have presently scheduled it starting in October of this year formally.

Q What day in October?

A Oh, I'm sorry, I don't know if I have that in my calendar or not. I think in about the middle of October.

Q And for how long will that be out?

A I think it's scheduled now for five weeks.

Q And this is in spite of the fact that the engineering work is not complete and not expected to be complete for that outage?

A Very early in September we intend to make a submittal to the Nuclear Regulatory Commission explaining to them that we cannot accomplish all of the things that would be desired by January 1, 1981, and that submittal is now being prepared and will not only explain that we cannot do it, but why we cannot do it.

Q So, the Company is going to formally be asking for some sort of relief?

A Yes.

Q When do you expect a response to that petition

1 or request that is supposed to go out in early September?

2 A I would certainly hope before the end of
3 September.

4 CROSS-EXAMINATION

5 BY MR. NARDELLI:

6 Q Mr. Finrock, as part of the submission you
7 are making to the Nuclear Regulatory Commission, will you
8 be requesting that this outage, which is scheduled for some-
9 time around the middle of October, be delayed until 1981 so
10 that you could accomplish everything during one outage
11 rather than two?

12 A The most desirable thing from the Company's
13 point of view would be to defer everything until the end of
14 1981.

15 Q That's what I was getting to, and will that be
16 part of your request to the NRC?

17 A I doubt very much because our posture has al-
18 ways been one to take a very positive stand with the NRC be-
19 cause very clearly there are things that can be done before
20 January 1, 1981, and it's been my experience over the last
21 20-some years with the old AEC and now the Nuclear Regulatory
22 Commission, that it's not in the best interest of anyone to
23 ask for things that are perceived to be unreasonable, and
24 so I think we would point out, and there may very well be
25 some items which simply cannot be done until the end of 1981,

1 but there are items that can be done this year and items
2 that can be done in the early fall of next year which we'll
3 be prepared to do.

4 We are certainly not reluctant to do the things
5 that the Nuclear Regulatory Commission has perceived not to
6 be done, because I think it's in the best interest in en-
7 hancing the ability to operate the plant better, but I don't
8 think I would ask for the moon when I don't really expect
9 to get it.

10 That's not been our posture with the NRC in
11 the past and I do not perceive that we would change it now.

12 Q Could you be more specific about what you are
13 going to ask for? You've mentioned that as of now, you're
14 scheduling for a five-week outage, but you have also testi-
15 fied earlier today that if you went out in two stages, this
16 first outage could be as short as perhaps three weeks.

17 Is that one of the things you'll be asking
18 for, to reduce the time of the outage, this first outage
19 occurring in October?

20

21

22

23

24

25

1 A We may ask to defer things until very early
2 1981. If the posture of the Nuclear Regulatory Commission
3 remains the same as it did with the Category A items, in
4 which we really got no relief except for a couple of days,
5 it is my judgment that we will be requested to do everything
6 that we're prepared to do before this year is out, and then
7 possibly some things deferred to after January 1, 1981.

8 Q Mr. Finfrock, there/^{still}seems to be some doubt in
9 your mind as to what the Company's submission to the NRC will
10 consist of.

11 You've testified that this submission
12 will be made in earlySeptember of 1980. It is now August
13 25, 1980. When will you and the Administrative Law Judge
14 know what the submission will consist of?

15 A Well, we started out with a target date of
16 having that submittal completed by Friday, and it is --

17 Q Is that this Friday?

18 A No, this past Friday.

19 I hope to be able to have it completed
20 by the end of the week, hopefully by about Wednesday,
21 Thursday.

22 Q Wednesday, Thursday of what week?

23 A This week, but whatever happens, based on my
24 experience, I cannot foresee a mechanism whereby within the
25 next six months or so it will not be necessary to have perhaps

1 four weeks, five weeks, maybe six weeks, depending, as I
2 previously testified, it coming from two pieces to one piece.

3 MR. NARDELLI: Mr. Kirsten, could you
4 supply the parties with the letter to the NRC
5 when it becomes available?

6 MR. KIRSTEN: Yes.

7 MR. MAKUL: I believe that completes our
8 questions for Mr. Finfrock.

9 JUDGE MARSHALL: Okay. Miss Bello?

10 MS. BELLO: We have no questions.

11 JUDGE MARSHALL: Mr. Sahradnik?

12 MR. SAHRAENIX: Just one question.

13 CROSS EXAMINATION

14 BY MR. SAHRAENIX:

15 Q You had mentioned when you were initially talking
16 about capacity factor, that during the outage there were
17 certain mechanical difficulties that were observed on the
18 safety system.

19 Is that something above and beyond the
20 sparger problems?

21 A The sparger situation that we encountered was
22 certainly the most major one. Any other items that we
23 encountered during the outage were of a more minor nature
24 and accomplished within the timeframe of the sparger work
25 needed to be done.

1 Q All right. So, these problems or difficulties
2 that were observed have in fact at this point been corrected?

3 A Yes. They have been corrected to the point
4 where we as well as the NRC are confident that the plant can
5 be safely operated today.

6 Q All right, thank you.

7 JUDGE MARSHALL: Any questions on re-
8 direct?

9 MR. KIRSTEN: No.

10 JUDGE MARSHALL: Okay. Thank you very
11 much, Mr. Finfrock.

12 Do you want Mr. Goldstein to take the
13 stand now?

14 MR. MAKUL: Yes.

15 L A W R E N C E G O L D S T E I N, previously sworn,
16 resumes the stand.

17 MR. KIRSTEN: With your permission, sir,
18 some of the questions that were asked of Mr.
19 Goldstein before the luncheon recess referred
20 to schedules which were not prepared by him,
21 but by Mr. Furlong, who is on Mr. Preis'
22 staff.

23 Some of the questions that were asked
24 of Mr. Goldstein were to reconcile certain
25 figures which he submitted with those schedules.

1 I have Mr. Furlong here, who was
2 directly involved in preparing those schedules,
3 and I thought it might expedite further cross
4 examination of Mr. Makul if he's going to pur-
5 sue that line, which I assume he will.

6 Mr. Furlong might be available to discuss
7 the schedules.

8 JUDGE MARSHALL: All right. Do you want
9 to have him sworn in and sitting there also?

10 MR. KIRSTEN: If that would be permissible.

11 JUDGE MARSHALL: Any objections?

12 MR. MAKUL: No.

13 D A N I E L M. F U R L O N G, sworn on behalf of Jersey
14 Central Power & Light Company, testifies as follows:

15 MR. KIRSTEN: For the record, will you
16 please state your position with Jersey Central
17 or GPU System?

18 MR. FURLONG: Yes. I'm a staff accountant
19 with Jersey Central Power & Light in the
20 Special Accounting Department.

21 MR. KIRSTEN: And you report to Mr. Paul
22 Preis?

23 MR. FURLONG: Yes, I do.
24
25

1 MR. KIRSTEN: And some of the questions
2 which were referred to by the Counsel, by Mr.
3 Goldstein this morning, were prepared by you
4 or in your department?

5 MR. FURLONG: Yes, they were.

6 MR. KIRSTEN: Thank you, sir.

7 MR. MAKUL: I take it that we have two
8 witnesses now, and whoever feels more com-
9 fortable with the questions will handle it;
10 so I will just generally direct the questions.
11

12 CONTINUED CROSS-EXAMINATION

13 BY MR. MAKUL:

14 Q Where we left off this morning, as I recall,
15 I recall that a recent change in assumptions that gas which
16 was thought to not be available from New Jersey National for
17 its Sayreville Station is now going to be available for at
18 least the majority of the winter, except possibly for the
19 coldest day?

20 A (Mr. Goldstein.) Let me back up and explain
21 my error this morning. Looking at the budget here, I got
22 confused by the previous budget. The gas will be available
23 and the gas is in the budget through the end of the year,
24 through December.

25 Q So therefore, the budget that was at the upper

1 portion of that page, I was referring to Page 2 of 3, JCA-3,
2 that budget already includes those additional gas availability
3 at Sayreville; is that now your position?

4 A (Mr. Goldstein.) That's correct.

5 Q By the most recent budget, would that be this
6 budget which are fuel cost forecasts, which has been marked
7 JCA-8?

8 A (Mr. Goldstein.) Yes. That would be what we
9 refer to as 3-plus-9.

10 Q Are these facts and figures which appear in
11 JCA-8, which appear on Page 2 of 3?

12 A (Mr. Goldstein.) Yes. That's correct.

13 Q And these numbers in JCA-8, are they before
14 gas adjustments or after gas adjustments?

15 A (Mr. Furlong.) The top section is before gas
16 adjustments.

17 Q What does this conform to, the top half?

18 A (Mr. Furlong.) The upper section, yes, the
19 before gas adjustments.

20 MR. KIRSTEN: Are you referring to the
21 upper section of JCA-8?

22 MR. FURLONG: The upper section of
23 JCA-3.

24 Q I wonder if you might do a sample reconcilia-
25 tion for me? It is my understanding that the .3 percent

1 No. 6 oil is only burned at the Sayreville Station and the
2 Werner Station; is that correct?

3 A (Mr. Goldstein.) That's correct, and only
4 Sayreville gets gas.

5 Q On JCA-8, the oil to be burned at Sayreville
6 and Werner are stated separately, is that correct, on a
7 month-by-month basis?

8 A (Mr. Goldstein.) That's correct.

9 Q Then you have combined this number to come up
10 with an overall barrel requirement on a month-by-month
11 basis?

12 A (Mr. Furlong.) That's correct.

13 Q I wonder if we can look at June of 1981 for
14 the Sayreville Station?

15 MR. KIRSTEN: Are you looking at JCA-8?

16 MR. MAKUL: I am looking at JCA-8,

17 Page 6.1.

18 MR. GOLDSTEIN: June of 1981?

19 Q Yes. Now, is it correct that the number of
20 gallons of oil that is projected to be burned at Sayreville
21 in June of 1981 is 5,262,282 gallons?

22 A (Mr. Furlong.) No, that is incorrect. The
23 fuel cost is in dollars, the line above that which is the
24 gallons, 5,711,553.

25 Q I think that may have answered my question.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25

So, the number of gallons that would be burned at Sayreville would be 5,711,000 gallons; is that correct?

A (Mr. Furlong.) Yes.

- 1 Q The commensurate figure for the same month at
2 Werner would be found on --
- 3 A (Furlong) Page 10.1.
- 4 Q Page 10.1. And that would be 1,372,000 gallons?
5 A (Furlong) That's correct.
- 6 Q For a total gallonage of 7,083, approximately.
7 Now, this has to be converted to barrels
8 to be consistent with the other exhibit?
- 9 A (Furlong) That's correct.
- 10 Q And that is the derivation of that number that
11 is in Mr. Goldstein's exhibit?
- 12 A (Furlong) Yes.
- 13 Q It works out to approximately 169,000 barrels?
14 A (Furlong) Right.
- 15 Q Now, with respect to the gas that is burned at
16 Sayreville, what is the quantity of gas that is expected to
17 be available from New Jersey Natural Gas?
- 18 A (Goldstein) Over what period of time?
- 19 Q On a per month basis.
- 20 A (Goldstein) On a per month basis?
- 21 Q Not taking into account, obviously, the month
22 where the system requirements caused them to interrupt the
23 flow to Sayreville.
- 24 A (Goldstein) They tender gas as they have it.
25 There is submittals, contracts, letters of agreement when

1 they have a tentative quantity of gas on a 60 day emergency
2 basis. That varies, depending on what they are able to ob-
3 tain so I really cannot say that we get a consistent amount
4 of gas every month.

5 Q Is there a new budget or updated figure that
6 reflects your best estimate as to how much gas will be
7 available to Sayreville on a month by month basis?

8 A (Goldstein) I think JCA-4D has cur best
9 estimate of gas available.

10 Q Does that exhibit show the figures -- are they
11 basically as follows: August 1980, 600,000 MCF or perhaps
12 600,000 MCF, September, 600, October, 600, November, 300,
13 December, 300, January of '81, 300, February, 300, March,
14 700, April, 700 and continuing at 700 a month through August?

15 A (Goldstein) Essentially, they are the numbers.
16 I think you have got some numbers confused there.

17 Q Which one did I confuse?

18 A (Goldstein) I think that in March it is 600,
19 not 700. The total gas here that I add up is 6.8 million
20 MCF over a 12 month LEAC period.

21 MR. MAKUL: May we go off the record?

22 JUDGE MARSHALL: Off the record.

23 (Whereupon, there was an off the record
24 discussion.)

25 JUDGE MARSHALL: Back on the record.

1 Q Mr. Goldstein, the highest figure in any month
2 that we see is 700,000 MCFs. This represents a limit that
3 New Jersey Natural cannot deliver any more or is this the
4 maximum which can be utilized at the Sayreville plant?

5 A (Goldstein) No. New Jersey Natural can de-
6 liver about 850,000 MCF per month when they have it.

7 Q Well, why then are you purchasing or projecting
8 to purchase only 700, if they are capable of delivering 850
9 in some months, and I note that the 700 appears in the next
10 summer's figures.

11 A (Goldstein) That is based on our perception
12 of availability.

13 Q That is based on your perception of what will
14 be available at that time?

15 A (Goldstein) New Jersey Natural has indicated
16 that they will probably have up to 7 million MCF available.
17 We show 6.8 million MCF available.

18 Q I wonder if you could compare that 700,000
19 MCF figure to what was actually purchased in April, May,
20 June and July of this year?

21 A (Goldstein) Well, let's see.

22 Q For Sayreville and how that compared to your
23 budget.

24 A (Goldstein) In April, they tendered 783 and
25 we had 600. These are all thousands.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q They tendered 783 which you consumed, but the budget --

A (Goldstein) Indicated 600,000. For May and June we also were above our budget.

Q Specifically, Mr. Goldstein, am I correct that in May you burned 349,000 when the budget shows 600,000?

A (Goldstein) Correct.

1 Q In June you burned 762,000 when the budget
2 showed only 300,000?

3 A (Mr. Goldstein.) That's correct. The 300,000
4 reflects an outage of three months that we anticipated would
5 occur. That never did occur because of Oyster Creek being
6 out of service.

7 Q And in July of this year, 890,000 was burned
8 compared --

9 A (Mr. Goldstein.) Versus 300, because again we
10 anticipated that outage, and that outage has slipped down to
11 September, October, November. Now, the significant point of
12 that is that represents excess gas on the Texas eastern pipe-
13 line which New Jersey Natural has a take, or gets on a take
14 or pay basis, and they pass it on to us at a very low cost.

15 Q Are you projecting any more purchases as a re-
16 sult, in the next 12 months, as a result of similar circum-
17 stances?

18 A (Mr. Goldstein.) No. In fact, the end of that
19 inexpensive gas occurred about three weeks ago or four weeks
20 ago.

21 Q What about the quantity of gas? I believe you
22 indicated that New Jersey Natural can deliver 850,000 and I
23 see in July it was 890,000.

24 A (Mr. Goldstein.) Yes.

25 Q That is over the 850,000 figure?

1 A (Goldstein) I'm sure that we have a plus or
2 minus 10 percent in there. Line capacity is 1200 MCF per
3 hour and to the extent you cannot exceed it, that represents
4 the capacity. Now, it might be instead of 850, it might be
5 860.

6 (Furlong) I believe it is about 893,000, which
7 would be the maximum on a 31-day month.

8 Q Now, it would appear, then, that so long as
9 this gas is available, you can burn it?

10 A (Goldstein) That's correct.

11 Q At the rate of 890?

12 A (Goldstein) Whatever they can tender it at.
13 If they can tender it at 890, that's what we can burn. If
14 they only tender it at 890 in one month -- as I said, that
15 represents special gas. That is surplus gas.

16 Q Can we generally say, then, so long as gas is
17 available, you can burn up to the 890 rate?

18 A (Goldstein) That's correct. But as I told you,
19 New Jersey Natural indicated that through August of next year,
20 we will be getting approximately at most 7 million MCF.

21 Q And what do they base that on?

22 A (Goldstein) I'm in no position to say.

23 Q How much was received over the last calendar
24 period?

25 A (Goldstein) From 1979? Is that the question

1 you are asking?

2 Q Yes.

3 A (Goldstein) I don't know if I have that in-
4 formation available.

5 Q It may not be crucial.

6 Now, a gas pipeline is being put into the
7 Gilbert Complex; is that correct?

8 A (Goldstein) That's correct.

9 Q And that is from Elizabethtown Gas?

10 A (Goldstein) That is from Elizabethtown Gas.

11 Q Is it correct that that agreement provides that
12 that gas will be priced at a price of \$6 per MCF?

13 A (Goldstein) That's correct.

14 Q And is it also correct that of that \$6 price,
15 about \$4.33 is actually for the cost of gas and the balance
16 is some sort of a payment for facilities charged?

17 A (Goldstein) That is a pay back on the
18 facilities that are being installed.

19 Q And once Elizabethtown Gas fully recovers its
20 out-of-pocket cost of installing that facility, the Company,
21 Jersey Central, can buy that facility for \$1?

22 A (Furlong) I believe that is correct.

23 Q And so actually of the \$6 cost, \$1.67 of it
24 is going for the gallon and not for fuel, per se; is that a
25 fair characterization?

1 A (Goldstein) That's correct. Let me clarify
2 that. That \$1 charge, not for the pipeline. That \$1 is
3 for the improvements, the improvement in the combustion
4 turbines that allows us to use dual fuel.

5 Q I see. Those improvements, are they being
6 financed out of the \$1.67?

7 A (Goldstein) That's correct.

8 Q What is the status of those purchases from
9 Elizabethtown under this new contract? About when are they
10 supposed to commence and at what quantities?

11 A (Goldstein) The new contract start in April
12 when Elizabethtown anticipates having their pipeline and
13 combustion turbines completely modified for gas. They will
14 tender 4.2 billion cubic feet of gas over a seven-month
15 period running from April to October.

16

17

18

19

20

21

22

23

24

25

1 A (Goldstein) (Continuing) And the cost would
2 be \$6 per MCF.

3 Q I wonder if you could explain the basis upon
4 which you estimated the cost of gas that would be burned at
5 Sayreville over the next 12 months. By cost I mean the
6 price per MCF.

7 A (Goldstein) Price per MCF was again based on
8 a budget escalation of 12 percent. Now, that price in light
9 of what we now know is low. That price over the LEAC period
10 is 3.52, as per the schedule number JC-A.4D.

11 The more realistic price would be ap-
12 proximately in the range of \$3.80 to \$4 per MCF.

13 MR. MAKUL: Mr. Kirsten, it was my im-
14 pression --- I don't know how you feel ----
15 it was my impression that the record this morn-
16 ing was left somewhat confused as to exactly
17 how much the price of coal was escalated by
18 MR. Goldstein off of what base and whether
19 that base was actual or from a budget, which
20 I would characterize as an estimated price.

21 If you wish, perhaps Mr. Goldstein
22 could have an opportunity to let us have it
23 one more time as to what the basis was of
24 the coal forecast.

25 MR. KIRSTEN: I think Mr. Furlong is

1 in a position to answer that question. I
2 had a note that there was some confusion that
3 I was going to try to clear/^{up}on redirect. Do
4 you want me to ask him a question?

5 MR. MAKUL: Yes, please.

6 MR. KIRSTEN: There was some discussion
7 this morning about how the calculation of the
8 coal price increases were figured in the
9 schedules, Mr. Furlong.

10 WITNESS FURLONG: Yes.

11 MR. KIRSTEN: Could you clarify that
12 for us, please?

13 WITNESS FURLONG: Well, this budget
14 is a three plus nine budget and I believe the
15 coal prices were escalated on the March
16 actual cost for coal at Keystone, which Mr.
17 Goldstein referred to this morning.

18 If You look in the fuel forecasts on
19 Page 13.1 under March, you will see on Line
20 29 the coal costs per ton of \$24.96, which
21 was referred to this morning. That is the
22 base cost on which this budget was escalated.

23 Now, for the year 1980 from March to
24 the end of the year, the cost was escalated
25 at a rate of 13 percent.

.1

1 BY MR. MAKUL:

2 Q By 13 percent, do you mean that the price esti-
3 mated for March of 1981 would be 13 percent higher than the
4 actual price experienced?

5 A (Goldstein) This would be calendar to the end
6 of the year to December of 1980.

7 Q I see. Thirteen percent through the end of
8 1980?

9 A (Furlong) Right.

10 Q Is that 13 percent an annualized rate or the
11 price will go up 13 percent in a nine month period?

12 A (Goldstein) Thirteen percent over a nine month
13 period.

14 Q And then what is the assumption for the con-
15 tinued escalation in 1981?

16 A (Goldstein) Twelve percent.

17 Q By 12 percent?

18 A (Goldstein) An annual basis.

19 Q Twelve percent on an annual basis?

20 A (Goldstein) From January through December of
21 1981.

22 Q So that if we're covering an eight month
23 period, that means on an absolute basis you forecasted an
24 eight percent increase?

25 A (Goldstein) If that's what the numbers work

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

out.

Q I see. So, that would be from the prices that were experienced in a April or in March of 1980. We have a 13 percent increase to the end of the year?

A (Goldstein) Correct.

Q And then upon that new base, which if we start out with a hundred, an index based on a hundred percent, by the end of the year it's up to 113, and then that 113 is raised by an additional eight percent to give you, let's see, roughly 122 by the end?

A (Goldstein) That's correct.

Q So essentially would it be fair to say that you've assumed that the price of coal in August of 1981 will be approximately 22 percent more expensive than coal in March of 1980?

A (Goldstein) That's correct, if those numbers come out.

Q But in actual experience, the coal prices in April, May and June are lower than budget?

2t 1

1 A (Goldstein) That is correct, because of
2 certain unique circumstances which are temporary of nature.

3 Q Which are?

4 A (Goldstein) One is a reduction in the black
5 lung contribution which amounts to approximately \$2 and the
6 second factor is the fact that we are connecting two mines
7 right now and the mining company is in a very favorable
8 mining area where the costs of production are low, productivity
9 is high and that has contributed to it.

10 The mining company has made their own
11 projections which I have to regard as the most valid, and
12 the second cost, the second part of the year costs that the
13 mining companies are projecting are roughly \$26.85 a ton of
14 coal from July through December.

15 The actual July figures are now in and
16 the costs are approximately \$30 a ton.

17 There are less production days in the
18 second part of the year, July being a two week vacation.
19 We also have November where we have vacation and in Pennsylvania
20 it's typical for the mine workers to leave the mines and go
21 deer hunting.

22 December is another area time when we
23 have very high production costs because of absentism.
24 So, the coal company is projecting, as I said, a price of
25 \$26.85 and over the LEAC period -- this projection, by the

1 way, was made June 4th -- over the LEAC period, the coal
2 company is projecting an average price of approximately
3 \$28.35.

4 That would compare with our budget price
5 of \$29.10.

6 Q So, you're actually predicting a higher cost
7 than what the coal company is projecting.

8 A (Goldstein) I'm predicting about an 80 cents
9 a ton higher cost.

10 Q On what basis do you know more than the coal
11 company so that we should believe your figures over those
12 issued by the coal company?

13 A (Goldstein) I would say that I am doing a pretty
14 good job by matching the coal company's escalation rates.
15 I don't consider 80 cents on roughly a \$28 cost a very signi-
16 ficant deviation.

17 I should also amend that to say that
18 \$28.35 is strictly one coal company's cost. The other coal
19 company has a traditional higher cost and that would add
20 something to it.

21 Q I wonder if we might have as an information
22 request an exhibit of the 1979 actual oil costs. I realize
23 this might be difficult because 1979 included the Three Mile
24 Island accident which I'm sure was not in your forecast, but
25

1 I wonder if we might have the forecast of the cost of 2 oil
2 and the two grades of 6 oil burned compared to the price that
3 existed in the forecast. Okay?

4 A (Goldstein) Yes.

5 Q We're just going through our notes here to see
6 if there's any more questions that we forgot.

7 Can you explain why the most recent
8 forecast shows greater quantities of gas being utilized than
9 the earlier budget for comparable months?

10 A (Goldstein) What exhibit are you discussing?

11 Q Well, I think we're talking about the difference
12 between the 3.9 budget and the 3.9 adjusted budget.

13 My understanding is there's a difference
14 in the projections of quantity of gas to be utilized. I
15 wonder if either you or Mr. Furlong could explain why there's
16 a difference in -- did additional supply come along or so
17 on and so forth?

18

19

20

21

22

23

24

25

Furlong/Goldstein-cross

1 A (Goldstein) The 3 plus 9 has gas through
2 December of 1980.

3 A (Furlong) Did you mean to compare the 3 plus 9
3tl 4 to the 9 plus 3?

5 Q I believe that's what we want.

6 JUDGE MARSHALL: Off the record.

7 (A discussion was held off the record.)

8 Q I believe off the record we straightened out
9 the names of the different budgets. One was the 3 plus 9
10 and the other one was the 9 plus 3, and I believe the more
11 recent of the two was the 3 plus 9 adjusted, and I wonder if
12 you could explain why there's additional gas burning shown in
13 the more recent budget.

14 A (Goldstein) Without having a copy of the 9 plus
15 3, I think that's the one I confused this morning. I do not
16 believe we have gas projected after May in the 9 plus 3, and
17 that's where that order 30 gas came in, where it was going
18 to end in May.

19 The 3 plus 9 provides gas through Jan-
20 uary -- through December of 1980 based on our advisement from
21 the gas companies that they could tender gas through December.

22 Q Is there any conversion work taking place in
23 Werner Station that would allow it to burn more natural gas?

24 A (Goldstein) Not that I'm aware of.

25 Q We were talking earlier about the cost of the
gas for New Jersey Natural to Sayreville, and if you look at

1 the actual price of gas experienced compared to the 3 plus
2 9 budget for April, May, June and July -- do you have that
3 exhibit?

4 A (Goldstein) Yes.

5 Q The April price, the actual price was 29 cents
6 above budget. Is that correct?

7 A (Goldstein) Yes.

8 Q But since then all the prices have been below
9 budget and sometimes by a considerable margin.

10 In May, the actual price was \$2.54
11 compared to a budget of 3.23.

12 In June, it was 2.19 compared to a budget
13 of 3.26, and in July it was 2.80 compared to a budget of
14 3.29, and I believe that you provided -- you made a statement
15 that part of this gas was due to an extra amount being avail-
16 able from Texas Eastern and that there was some sort of take
17 or pay provision, and this purely represented the commodity
18 cost of this gas.

19 A (Goldstein) That's correct.

20 Q What is the timing as to when that consideration
21 started impacting the actual prices?

22 A (Goldstein) If we go back to March, the pur-
23 chased price of our gas was \$3.82. In April, it was \$3.71.
24 In May, it dropped down to 2.54.

25 So, one would say that the impact started

1 in May, continued in June and in July we got a little also.
2 In other words, \$2.19, which is June, represents the pure
3 commodity gas.

4 Q Now, I take it you have not budgeted for this
5 to occur again a year from now?

6 A (Goldstein) No, I have not.

7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

1 Q Why not?

2 A (Goldstein) Because it's not a very sure
3 amount of gas. It really depends on system surplus and
4 there's no way of determining that.

5 Q Would it be fair to say that this situation
6 may develop again, it's just that in forecasting the price,
7 you're not counting on it developing again?

8 A (Goldstein) I think that might be a way of
9 characterizing it.

10 Q Just as when a nuclear plant, for example,
11 has a forced outage, Mr. Finfrock may take that into ac-
12 count in some way in coming up with his capacity factor,
13 but he doesn't necessarily take it into account one way or
14 the other?

15 A (Goldstein) I can't comment on how Mr. Fin-
16 frock does these things. I'm not a nuclear expert.

17 Q Okay. Would it be fair to say that your
18 budgeted price projected for gas does not allow or does
19 not take into account to any extent the possibility that
20 one of the special purchases might come up and be availa-
21 ble again?

22 A (Goldstein) That is correct. As I indicated
23 to you, my purchase price is essentially below the price
24 I would project now.

25 Q This situation apparently came up in 1990

1 where this additional quantity of gas was available at a
2 low price. Did anything like this happen in 1979?

3 A (Goldstein) 1979 I believe we had 1-1/2
4 months of DCQ gas, commodity gas, yes.

5 Q Now, gas is presently nationally being deregulated?
6

7 A (Goldstein) Correct.

8 Q As a reader of trade publications, is it your
9 understanding that this will make larger quantities of gas
10 available all over the country?

11 A (Goldstein) The regulation?

12 Q Yes.

13 A (Goldstein) I think that gas supplies nationally
14 are diminishing.

15 Q By diminishing, do you mean because it comes
16 out of the ground there's less remaining?

17 A (Goldstein) I think there are less reservoirs
18 that are being discovered. I think less gas is being discovered.
19

20 Q My question did not go to discovery. It goes
21 more to flow rate, as to what is going to be available to
22 customers in the future as a result of deregulation or any
23 other events occurring in the national gas markets.

24 MR. KIRSTEN: I think his answer was
25 responsive to that question.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

MR. MAKUL: I don't believe it was.

His answer went to the discoveries of reserves and I may be wrong but I think the discoveries of reserves are not related necessarily to slow rates and what's available for customers in any given year.

MR. KIRSTEN: Nor is there any indication that the items you suggested are. You asked the witness a question. He said that the gas will diminish and you asked him why, he said because there's been less gas being discovered. That's his answer. I think that's completely responsive.

MR. MAKUL: Well, if any given year no gas is discovered, that doesn't mean there will be no flow of gas.

MR. KIRSTEN: I don't know that. That's your testimony.

MR. MAKUL: I'm asking the ---

JUDGE MARSHALL: Off the record.

(A discussion was held off the record.)

1 JUDGE MARSHALL: Back on the record.
2 Mr. Goldstein, just wait one second
3 before replying to the question to see if Mr.
4 Kirsten wants to lodge an objection. Mr.
5 Kirsten, just wait one half a second until
6 after Mr. Makul finishes talking to be sure
7 he is finished.

8 MR. KIRSTEN: Absolutely, sir.

9 Q Are the natural gas prices being regulated
10 in the United States this time?

11 A Yes, there are deregulations being rolled in.

12 Q Do you recall if this deregulation will in-
13 crease the annual supplies available to customers?

14 A Over what period of time?

15 Q The next year over this year?

16 A I would say characterizing the response as
17 that depends upon the winter. If the winter is very severe,
18 there will be less gas available. If the winter is not
19 severe, then there might be more gas available. If we have
20 a hurricane in the Gulf Coast, this week, there will be
21 less gas available.

22 Q By less gas available, you mean less gas
23 available for Jersey Central, not less gas available entotal
24 for everyone, is that correct?

25 A I would say less gas available for the entire

1 country. If a well is shut down in the Gulf Coast, there
2 will be that much less gas available.

3 Q Well, with respect to a more severe than aver-
4 age winter, could you explain a more severe than average
5 winter?

6 Could you explain how that would result
7 in less gas available for all customers in total?

8 A That is the question that you are posing to
9 me. That was only referring to Jersey Central.

10 Q That particular condition would only refer to
11 Jersey Central?

12 A Yes.

13 Q And that the gas would be diverted away to
14 heating sensitive customers?

15 A That's true.

16 Q On a weather normalized basis, if the weater
17 normalized, I assume that the heating customer takes the
18 normal amount of gas and would deregulation make more gas
19 available to Jersey Central?

20 A I don't know what a normal basis is.

21 Q You are not familiar with the words "weather
22 normalization"?

23 A I am familiar with the words "weather normali-
24 zation" but I don't know what the normal amount of gas a custo-
25 mer consumes is. There is a lot of incentive to switch to

1 gas over oil right now because of the price differential.

2 Q Would it be fair to say that because of your
3 incomplete knowledge in this area that as a result, you just
4 assumed that no gas would be available in the 1981 time period
5 at this special dump rate?

6 MR. KIRSTEN: I object to that question.
7 I have no idea what that means.

8 JUDGE MARSHALL: Could the Court Re-
9 porter read back the last question?

10 (Whereupon, the following question was
11 read back by the Reporter: "Question: Would
12 it be fair to say that because of your incom-
13 plete knowledge in this area that as a result,
14 you just assumed that no gas would be availa-
15 ble in the 1981 time period at this special
16 dump rate?")

17 JUDGE MARSHALL: Could you phrase that
18 a little bit more grammatically?

19 Q Because you do not know whether or not gas
20 would be available at the special dump rate, you included
21 no gas purchases at that rate in the budget?

22 A That's correct.

23 Q I don't know if either of our witnesses here
24 are the most appropriate witnesses but we would like to know
25 the most recent information available. Could you tell us

1 when is the work schedule for maintenance at Sayreville
2 that will reduce its ability to take gas?

3 A Yes. I believe^I/can answer that. Sayreville
4 Boiler No. 4 is coming down for a three month inspection,
5 September, October and November. Sayreville Boiler No. 5
6 is coming down for a three month inspection January, Febru-
7 ary and March.

8 Q I think perhaps the next questions are more
9 appropriate for Mr. Furlong. When you first came up to
10 testify with respect to some of the confusion that existed
11 this morning on the additional gas going into Sayreville,
12 I take it, is it your position that the budget that was
13 prepared in April of 1980 already included this gas?

14 A (Furlong) No. What I said is that the budget
15 the three plus nine budget assumes being burned at each of
16 the four units that burn gas through December of 1980.

17 Q Now, since this budget has been prepared is
18 it true that still greater quantities of gas will be availa-
19 ble over and above the quantities projected in the budget?

20 A (Furlong) That is really a question for Mr.
21 Goldstein as to what quantity will be available.

22 Q Mr. Goldstein, is there going to be more gas
23 available than appears in the budget?

24 A We are showing approximately 6.8 million MCF.
25 I believe that is the number that New Jersey Natural has

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25

said they could deliver to us during that period.

Q Does the 6.8 million MCF figure represent the most likely figure in your view or is it the absolute maximum figure?

A I would say the 6.8 million MCF represents what New Jersey Natural says, so I would imagine that would represent their most likely tender.

1 Q And what quantity of purchase from New Jersey
2 Natural appeared in the budget, the original 3 plus 9 budget?
3 A (Furlong) In the 3 plus 9 budget you are referring
4 to just the LEAC period?

5 Q Yes.

6 A (Furlong) 2,100,000 cubic feet.

7 Q That is budgeted 2,100,000?

8 A (Furlong) Yes.

9 Q And the adjusted budget now includes how much?

10 A (Furlong) 6,800,000.

11 Q Are there any gas supplies which now based on
12 current knowledge which you now believe you are going to
13 receive which did not appear anywhere in the adjusted budget?

14 A (Goldstein) Of the LEAC period, no, I don't
15 believe there is any gas available that are not covered by
16 the schedule.

17 Q With respect to the timing of the gas price
18 increase, did you assume that they went into effect on a
19 month by month basis in a manner similar to your projection
20 for oil prices?

21 A (Goldstein) Yes. We put them in on a month
22 by month basis.

23 Q With a linear escalation?

24 A Yes, that is reflected in the schedule.

25 Q How are those prices actually determined by

1 New Jersey Natural?

2 A I don't understand your question.

3 Q Well, the price you assumed, there would be an
4 escalation rate or an amount of increase over the LEAC period,
5 if I understand you properly, is that correct?

6 A Right.

7 Q And you assumed that it would escalate on a
8 month by month basis linerally?

9 A Yes.

10 Q And any gas purchased from New Jersey Natural?

11 A Correct.

12 Q How do they set the price?

13 Do they change it on a month by month
14 basis?

15 A New Jersey Natural buys gas for our account on
16 a cost plus transportation basis.

17 Whatever their cost is, they pass on to
18 us plus a 40 cent per million MCF, plus a 40 cent MCF trans-
19 portation cost.

20 Q And in terms of getting this gas for Jersey
21 Central Power & Light, is Jersey Central having New Jersey
22 Natural go out and line up special contract supplies or does
23 this represent a surplus over and beyond New Jersey Natural's
24 need from the normal supply?

25 A New Jersey Natural contracts additional gas for

Furlong-Goldstein/cross

1 Jersey Central above their normal system capacity. The only
2 time we get their gas, their system capacity gas is when it
3 is in surplus.

4 Q Now, the contracts that New Jersey Natural
5 enters into in order to provide gas beyond this special
6 dump gas, do these contracts have a time duration and if so,
7 what is their time duration?

8 A The contracts have a time duration of approxi-
9 mately 60 days right now. They are getting what they call 60
10 days emergency gas for our account and to the extent that they
11 can find gas out in the field, that's how they tender it.

12 Q Do they meet your requirements by assigning one
13 60 day contract of one supplier or several contracts with
14 several suppliers to meet your requirements from several
15 sources?

16 Which do they do?

17 A They do both or one.

18 MR. MAKUL: I think we have no more
19 questions for the time being from Mr. Goldstein.

20 JUDGE MARSHALL: Of this witness, then?

21 MR. MAKUL: Yes.

22 JUDGE MARSHALL: Ms. Bello?

23 MS. BELLO: No questions.

24 JUDGE MARSHALL: Mr. Sahradnik?

25 MR. SAHRADNIK: No, Your Honor. I

JU4

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

think Mr. Makul has thoroughly covered the
area.

JUDGE MARSHALL: Mr. Kirsten?

MR. KIRSTEN: I have one or two.

1 REDIRECT EXAMINATION

2 BY MR. KIRSTEN:

3 Q Mr. Makul asked you about availability of gas.
4 The period that you referred to, I think, was 6,300,000 cubic
5 feet; is that the amount of gas that you are budgeting for
6 the so-called LEAC period?

7 A That's correct.

8 Q Is the amount of gas based upon the maximum
9 amount of gas that is available to you?

10 A That's correct. That is what New Jersey Natural
11 has indicated is available.

12 Q To determine availability, are you limited not
13 only by the gas being for sale, but that there are facilities
14 to deliver it to your generators?

15 A That's correct.

16 Q Are you limited by the facilities that can
17 deliver gas to your generators?

18 A Very limited.

19 Q To what extent does the 6,300,000 cubic feet
20 relate to the maximum capacity of the pipeline to deliver
21 gas to your generation?

22 A That represents about 65 percent of the line
23 capacity.

24 Q And what is the relationship of the line capacity
25 for the period of time when you would be able to burn gas

1 economically, when you need that generation?

2 A About 70 percent excluding weekends.

3 Q Pardon me?

4 A About 70 percent excluding weekends.

5 Q Excluding weekends?

6 A Yes.

7 Q Are you saying, therefore, that if there were
8 additional supplies available it would only represent that
9 additional 30 percent?

10 A Approximately because the units are at reduced
11 loads during the weekend so gas would not be burned.

12 Q I am trying to get, Mr. Goldstein, to, in
13 your projection, is there any period of time when you could
14 use gas which are not budgeted because the gas is not avail-
15 able or are you in effect saying that you are budgeting all
16 the gas you can possibly use taking into consideration the
17 availability of the units and the availability of the trans-
18 mission to the units?

19 A We are budgeting all the gas we can, that we
20 have been tendered.

21 Q So that whether or not other factors would in-
22 crease the availability of gas in the national market, it
23 would not increase the availability of gas to you?

24 A That's correct.

25 Q Mr. Makul referred to deregulation. Could you

1 Q And what does that due to?

2 A That has been due to a warm winter several
3 years ago, rather a warm winter and also partially due to
4 increased cost and increased prices.

5 Q Increased prices draw out new supplies?

6 MR. KIRSTEN: I thought I was still on
7 redirect.

8 JUDGE MARSHALL: Excuse me?

9 MR. KIRSTEN: I don't mean to interrupt
10 Mr. Makul --

11 MR. MAKUL: I didn't know Mr. Kirsten
12 wasn't done.

13 Let Mr. Kirsten finish his redirect.

14 MR. KIRSTEN: Thank you.

15 JUDGE MARSHALL: Excuse me. In view
16 of the fact that there is still some redirect
17 and recross and in view of the fact that we
18 have been going on for an hour and a half now,
19 maybe we ought to take a break.

20 MR. MAKUL: I think if we go on we will
21 probably be done in 10 minutes.

22 JUDGE MARSHALL: All right.

23 MR. KIRSTEN: I have no further ques-
24 tions.

25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

RECROSS EXAMINATION

BY MR. MAKUL:

Q I think my last question that was pending is
would you agree then, Mr. Goldstein, the higher prices have
drawn out new supplies?

A In one instance, no. Higher prices -- the
Algerians are trying to get higher prices for their LIG and
that is being backed out of the marketplace. That represents
one percent of our supplies.

1 Q Mr. Goldstein, I am sure we can always find
2 examples and exceptions but generally you just stated that
3 one of the reasons why we have a bubble is higher prices.
4 Do you disagree that the higher prices have generally drawn
5 out additional supplies?

6 A Yes. There are generally correlations. Higher
7 prices have increased well drilling activity.

8 Q Mr. Kirsten was asking you questions about
9 whether or/^{not}you were burning all the gas at Sayreville which
10 you can economically handle and your response was we're
11 burning all the gas that we are being tendered. Is that
12 one in the same that what you are being tendered is all you
13 can burn economically? What if more is being tendered at
14 the same price, do you have that capability of using it?

15 A We cannot use 100 percent of our line capacity.
16 Technically, no. If somebody was to tender us the maximum,
17 extend our line capacity, we cannot burn it.

18 Q Why not?

19 A For technical reasons. The boiler would not
20 be able to handle it.

21 Q What is the upper limit assuming no pipeline
22 limitations or even economic considerations, what is the
23 greatest amount of gas that can be burned at Sayreville in
24 any given month?

25 A Right now 890 MCF goes into Sayreville, 890,000

1 MCF's. That is divided 50/50 between the two boilers. One
2 boiler can handle the entire load but technically you would
3 burn the boiler out so we split it 50/50.

4 Q The end result then is what fuel mix is being
5 burned at Sayreville as a mixture of gas and oil?

6 A Correct.

7 Q What is that percentage, that mixture?

8 A To the extent that we split the gas, 50 percent
9 goes into one boiler and 50 in the other and 50 percent repre-
10 sents oil, you can go as high as 65 percent in one boiler.

11 Q Sixty-five percent gas and 35 percent oil, is
12 that the response?

13 A That would be my best guesstimate.

14 Q What has happened to the gas supply picture
15 that caused JCP&L to increase its gas consumption estimate
16 between the time of the three plus nine and three plus nine
17 adjusted budget at the Sayreville Station from the period
18 from January to August of 1981?

19 A We have been told that additional gas would
20 be available by our supplier.

21 MR. MAXUL: That's all for Mr. Gold-
22 stein.

23 JUDGE MARSHALL: Any further questions?

24 FURTHER REDIRECT EXAMINATION
25 BY MR. KIRSTEN:

1 Q Mr. Goldstein, am I clear that in response to
 2 your questions from Mr. Makul, that it is fair to say that
 3 your present budget contemplates burning all the gas that you
 4 can reasonably use in those stations?

5 A That's correct.

6 Q Am I also clear that gas in general has a
 7 finite availability?

8 A That's correct.

9 Q That if there were more gas available, if this
 10 availability of gas increased by some magic, by some explora-
 11 tion, by some new find, it wouldn't change your ability to
 12 make use of it?

13 A That's correct.

14 MR. KIRSTEN: Thank you. I have no
 15 further questions.

16 MR. MAKUL: One more.

17 FURTHER RE-CROSS EXAMINATION
 18 BY MR. MAKUL:

19 Q You are saying that you are interrupted some
 20 days on some supplies from New Jersey Natural, is that not
 21 true?

22 A That's correct.

23
 24
 25

PENGAD CO., BAYONNE, N.J. 07002 FORM 1044

1 Q If more gas were generally available, might
2 this not reduce the number of days of interruption?

3 A Would you repeat the question?

4 Q If more gas were available in the interstate
5 market, might this not increase New Jersey Natural's supply
6 and thereby have the effect of reduce the number of days
7 of interruption to Jersey Central?

8 A We could not get any more gas. We would not
9 receive any more gas under that scenario.

10 Q If the number of days of interruption went
11 down you would not receive any more gas?

12 MR. KIPSTEN: I think the witness
13 has testified that the budget does not con-
14 template any interruption. Therefore, if
15 hypothetically there was an interruption
16 it wouldn't change the amount that he is
17 budgeting. It certainly would change in a
18 hypothetical world the amount of gas that he
19 would get but that has no relevance to the
20 amount of gas they are budgeting.

21 Q Mr. Goldstein, is that true, the budget antici-
22 pates no service interruption?

23 A We are assuming an interruption. We are
24 assuming a 30 day interruption at Sayreville.

25 Q And a 60 day interruption at Gilbert?

1 A That is what Elizabethtown has told us.

2 MR. MAKUL: Back into Mr. Kirsten's
3 court.

4 JUDGE MARSHALL: I presume that is a
5 statement, that he has no more questions and
6 I'm looking to see if anybody else has any
7 more questions.

8 MR. SAHRADNIK: After reviewing my
9 notes during redirect, I have some. There
10 was one question I overlooked that I would
11 like to pose to Mr. Goldstein.

12
13 CROSS EXAMINATION
14 BY MR. SAHRADNIK:

15 Q Mr. Goldstein, you testified about a potential coal
16 contract which you anticipate would take effect in March
17 and a potential 50 percent increase in production cost is
18 imminent from that, is that correct?

19 A Yes, that was the best guesstimate of our
20 supplier.

21 Q Am I correct in assuming that that 50 percent
22 figure has already been anticipated and is in fact factored
23 into your coal escalation prices for the LEAC period?

24 A No, it is not.

25 Q So the 13 percent increase that you mentioned

1 does not take into account any type of settlement with re-
2 spect to the coal strike?

3 A No. That was an estimate of the cost of pro-
4 duction increases due to the connection of one mine to an-
5 other. I also escalated the 1981 coal costs by 12 percent
6 which does not include the 15 percent settlement.

7 Q So in essence I take it then there is no
8 factor whatsoever with respect to any potential settlement
9 at all?

10 A No.

11 MR. SAHRADNIK: Thank you.

12 JUDGE MARSHALL: Any further questions?

13 (No response.)

14 JUDGE MARSHALL: I would like to thank
15 Mr. Goldstein for testifying. We will now
16 adjourn this hearing to meet at Sparta High
17 School at 7:30 this evening and we will be
18 here back in Newark at one o'clock tomorrow
19 afternoon.

20 Are there any further things that the
21 parties wish to bring up before we adjourn
22 right now?

23 (No response.)

24 JUDGE MARSHALL: Thank you.

25 (WHEREUPON, THE HEARING WAS ADJOURNED
TO 7:30 P.M., AUG. 25, 1980 AT SPARTA HIGH SCHOOL.)

E X H I B I T S

NO.	DESCRIPTION	PAGE
JCA-6	One-page document entitled Jersey Central Power and Light Analysis of Coal Burned, Actual versus Budget	513
JCA-7	One-page document entitled Analysis of Coal Purchases	514
JCA-3	Document entitled "Station Fuel Cost Forecast-Summary"	521.

I N D E X

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Witness Direct Cross Redirect

LAWRENCE GOLDSTEIN

By Mr. Makul 474
572
608
610
613

By Mr. Kirsten 607
612

By Mr. Sahradnik 615
IVAN R. FINFROCK

By Mr. Kirsten 540

By Mr. Makul 550

By Mr. Wardelli 566

By Mr. Sahradnik 569

DANIEL M. FURLONG

By Mr. Makul 572

By Mr. Kirsten 607

PERGAS CO., BAYONNE, N.J. 07002 - FORM 2044