## PENNSYLVANIA ELECTRIC COMPANY

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Fred D. Hafer	300
Thomas L. Carroll	100
Stewart Gordon, Jr.	200
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## SUPPLEMENTAL TESTIMONY OF FRED D. HAFER ON BEHALF OF PENNSYLVANIA ELECTRIC COMPANY

- Q. Are you the same Fred D. Hafer who has previously submitted testimony in this proceeding?
- A. Yes, I am.

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- Q. Mr. Hafer, what is the purpose of your supplemental testimony?
- 8 At the prehearing conference on April 16, 1979, it was agreed that, in view of the accident at the Three 10 Mile Island No. 2 nuclear generating unit, it would be 11 appropriate for Penelec to present a supplemental case 12 indicating its position with respect to the rate increase 13 at issue here in light of the events at Three Mile 14 Island No. 2. It is the purpose of my testimony to 15 describe briefly the scope and content of Penelec's 16 supplemental case, to explain the position which we take, 17 and to sponsor various exhibits and testimony, filed in 18 other proceedings, but which are pertinent here. 19
- 20 21 Q. Would you describe briefly the contents of Penelec's supple-22 mental case?
- 23 24 A. Yes. Our supplemental case will cover the following areas:
  - A brief description of the accident at TMI-2 and the current prognosis for the plant;
  - A brief description of our insurance coverages, the potential for recovery, and additional expense items which Penelec will incur which are not likely to be recovered by insurance;
  - An analysis of the benefits which our customers have received in the past by virtue of Penelec (and GPU's) investment in nuclear generating facilities;
- 4. Items directly related to the question of the retention of TMI-2 investment in rate base, including evidence with respect to our actual investment in TMI-2 (as opposed to our estimate) evidence with respect to the current limited usefulness of the plant; and evidence with respect to the appropriate legal considerations which apply.

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- Updated evidence with respect to the current cost of common equity capital for Penelec; and
- 6. A revised cost of service exhibit which illustrates a method of sharing the cost of the temporary loss of TMI-2 among shareholders and ratepayers.
- 8 Q. Mr. Hafer, how will this evidence be presented?
- 10 A. Mr. Sanford Reis will present updated testimony as to our current cost of common equity capital. Mr. Thomas Carroll and Mr. Stewart Gordon will each present portions of the revised cost of service analysis which I mentioned. Mr. John Graham will testify with respect to legal and factual considerations applicable to the question of retaining the TMI-2 investment in Penelec's rate base.

With respect to the other subjects I described, these subjects have already been addressed in testimony and exhibits presented before the Pennsylvania Public Utilities Commission in their investigation entitled "Met-Ed, Penelec, Docket No. I-79040308."

I understand that the testimony and exhibits filed by the Company and by other witnesses in the Pennsylvania proceeding have been made available to all parties to this proceeding. We have not attempted to repeat the entire record of that proceeding, but rather to present the portions of that proceeding which we deem relevant here. Other parties, of course, are free to utilize additional portions of any testimony or exhibits by witnesses whose testimony is being introduced here. The witnesses presenting testimony with respect to the various subjects I have described, are busily occupied with other matters to such an extent that we felt that it was most appropriate to proceed in this fashion. In this way, the latest available information can be presented here in our supplemental case and, if desired, these witnesses can be made available for cross-examination at the hearing which I now understand to be scheduled for some time in September.

43 Q. Mr. Hafer, turning to your first subject, who is to 44 testify with regard to the accident and the current 45 prognosis for TMI-2?

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1 A. I am sponsoring as Exhibit No. (PN-307), a five page document, consisting of a report on the TMI-2 accident presented at the annual GPU shareholders meeting on May 9, 1979 by Mr. Herman Dieckamp. Mr. Dieckamp describes the accident in terms readily understood by a layman.

Since the causes of the accident are being thoroughly examined elsewhere, we do not intend to present any further detail with respect to this subject in this proceeding.

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13 Q. Mr. Hafer, Mr. Dieckamp states that GPU expects the plant
14 to be out of service for approximately three years.
15 Has there been any change in this prognosis?
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17 A. No. It is difficult to estimate the time it will
18 take to bring the unit back on line and we currently
19 expect it to be out of service for two to four years.

20 21 Q. Who will testify with respect to insurance recoveries? 22

23 A. I am sponsoring as Exhibit No. (PN-308) a seven
24 page document, the cover page of which is entitled
25 "Testimony and Exhibits Presented by Mr. Harry Gerety
26 before the Pennsylvania Public Utilities Commission in
27 Docket No. I-79040308."

28
29 Q. Mr. Hafer, are there additional expense items which Penelec
30 will incur as a result of the TMI-2 accident which are
31 definitely not covered by insurance?

32 Yes. As Mr. Gerety notes, the cost of replacement power 33 A. is not covered by insurance. In this respect, our FERC 34 fuel clause will recover for the various GPU Companies, 35 after the lag period, the actual energy-related cost of 36 replacement power purchased on an economy dispatch 37 basis. However, to minimize the cost of purchasing 38 replacement power through the PJM Power Pool, the GPU 39 Companies have been able to arrange at least two nego-40 tiated arrangements outside the Pool for the purchase of 41 42 replacement power.

One of these arrangements, a 200 megawatt sale by APS to the GPU Companies, does entail payment of some demand related costs which are not recoverable under our FERC fuel clauses. Even though we will incur additional demand related costs, the arrangement is still attractive on an overall basis because it is cheaper than buying replacement energy through the PJM Power Pool. The

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demand related costs associated with this arrangement are \$100 per MW-day, and Penelec's share on an annual basis would be approximately, \$1.8 million. These demand related costs, of course, were not included in our cost of service estimate filed in support of the rate increase at issue here.

Our second arrangement consists of a sale of energy by Pennsylvania Power and Light Company to the GPU Companies out of their Martins Creek Units 3 and 4. No demand related charges are involved. We are actively seeking to negotiate any other purchases which would help to alleviate our replacement power costs.

15 16 Q. Mr. Hafer, are there other potential items which will 17 not be covered by insurance?

18 19 A. Yes, there are. While the insurance companies will pay us for the costs of decontamination, they have advised us 20 that they will not pay for any of the costs associated 21 with bringing the plant to a cold shutdown status. 22 have not as yet been able to analyze the costs incurred 23 during the time from the accident until the plant was 24 brought into a cold shutdown status in sufficient detail 25 to isolate those particular costs which may not be 26 27 recoverable.

In addition, the insurance coverage does not extend to any costs associated with the payment of premium wage rates for overtime.

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33 Q. Is it possible for you to estimate today the amount of
34 additional expenses GPU Companies will incur as a result
35 of the accident which costs are not covered by insurance?

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37 A. I do not think it is possible to come up with any reason38 able estimate at this date. It is likely that the
39 subjects I have discussed, i.e., the cost of bringing
40 the plant to cold shutdown, premium wage costs, and
41 other potential items will be the subject of negotiations
42 and possible litigation with our insurance carriers.

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44 Q. Turning to your next subject, Mr. Hafer, who will testify
45 as to past benefits of nuclear power?

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47 A. I am sponsoring as Exhibit No. (PN-309), a fourteen
48 page document, the first page of which is entitled
49 "Testimony and Exhibits Presented by Mr. B. H. Cherry in
50 Pennsylvania PUC Docket No. I-79040308." Mr. Cherry
51 discusses the past benefits which have accrued to our
52 customers as a result of GPU's investment in nuclear
53 generating units.

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- 1 Q. Mr. Hafer, it has been suggested that it has been unfair for the company to collect the rate at issue here for the first 29 days of December last year, since the TMI-2 plant was not placed into commercial operation until December 29th. What is your response to this suggestion?
- 7 Ideally, the effective date of the rate should coincide with the date of commercial operation of a major plant such as 9 TMI-2, where the investment in that plant is included in 10 11 the rate-base calculation used to support the rate. 12 This synchronization did not occur with respect to 13 Penelec, in that the Commission allowed the rate to become effective approximately 29 days prior to the 14 commercial operation date of TMI-2. With respect to the 15 other GPU subsidiaries, the effective date authorized 16 by FERC for the resale rates was several months after 17 18 commercial operation date of TMI-2. 19

In view of this fact, I believe that it might be appropriate to analyze some of the actual facts with respect to the TMI-2 plant as they may have differed from the company's estimate. Such an analysis leads me to conclude that no adjustment to the rate is appropriate here.

25 26 Q. How do you reach this conclusion?

28 A. I started by determining the total amount of revenues
29 which Penelec collected during the month of December,
30 1978, as a result of including its investment in
31 TMI-2 in our cost of service estimate. For that month,
32 we collected from Penelec's customers approximately
33 \$170,000 as a result of including this plant in our cost
34 of service estimate.

36 Q. Would it not be appropriate for Penelec to refund this \$170,000 to its wholesale customers?

39 A. I do not believe so. The \$170,000 arises because Penelec's estimate of the in-service date of TMI-2 did not coincide 40 with actual events. Our estimate of the total invest-41 ment in TMI-2 also did not coincide with actual events. 42 When the plant went into commercial operation and the 43 44 books were closed with respect to our total investment in TMI-2, it was found that our actual investment was 45 46 some \$15 million higher than the total investment which we had estimated for purposes of our cost of service 47 48 used in calculating the rate.

- 1 Q. What is the approximate impact of this difference?
- A. For Penelec, the approximate impact of this \$15 million 3 under-estimate of our total investment in TMI-2 is 4 approximately \$20 00 per month. In other words, the 5 rate is deficier by \$20,000 per month to recover the 6 appropriate retur, taxes and depreciation expense on 7 our actual investment in TMI-2. In a space of 9 months, 8 our undercollection will have more than matched the overcollection which occurred during the month of 10 December 1978. Under these circumstances, I believe 11 that it is fair and equitable that no adjustment be made 12 because of the fact that the plant did not go into com-13 mercial operation until 29 days after the rate became 14 15 effective.
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  17 Q. Mr. Hafer, you indicated that the TMI-2 plant ought to
  18 be of some limited usefulness to the current GPU rate19 payer. Could you explain, please?
- 20 The TMI-2 plant continues to be recognized as installed 21 A. capacity by the PJM power pool although it is suffering 22 a forced outage. The continued recognition of the plant 23 as "installed capacity" saves GPU approximately \$12 24 million per year in capacity payments to the pool. This 25 represents \$12 million in legitimate cost of service 26 expense which would otherwise be imposed on current rate-27 payers. The current savings will be eliminated in large 28 measure in the mid-1980's when the capacity recognition 29 given the TMI-2 plant is reduced due to the forced outage 30 rate it is currently suffering. Nevertheless, the plant 31 does constitute a \$12 million annual benefit to the 32 current ratepayer. 33
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  35 Q. Mr. Hafer, has the accident at TMI-2 had any impact on Penelec's cost of common equity capital?
- 37 GPU and all of its subsidiaries have suffered a severe 38 A. financial crisis as a result of the TMI-2 accident. 39 The accident has greatly increased the risks of invest-40 ment in GPU. Investor perception of this increased risk 41 has caused a quantum leap in the cost of common equity 42 capital. Mr. Sanford Reis testifies with respect to 43 this increase and he finds that the cost of common 44 equity capital to GPU and to Penelec is at least 16%. 45
- 46 47 Q. Is Penelec claiming a 16% return on common equity in 48 this proceeding?

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- 1 A. No. Our request remains at the level of 14.5% as originally submitted. I would note, however, that a return of 16% is justified, and if granted, such a return would have a considerable impact on our cost of service. Mr. Gordon sponsors a summary cost of service exhibit showing the revenue requirement needed to produce a 16% return on common equity.
- 9 Q. Mr. Hafer, would you describe briefly the revised cost of service exhibit which is part of Penelec's Supplemental Case?
- 12
  13 A. Yes. This revised cost of service exhibit makes a
  14 number of relatively minor changes and one major change.
  15 The relatively minor changes are as follows:
  - (1) We have utilized a revised and up-dated capital structure;
  - (2) We have changed to the use of the 46% tax rate in view of the recent legislation which reduced the corporate income tax rate;
  - (3) We have made a number of minor changes which were agreed to as a result of settlement discussions among Penelec, staff, and the customers.

The major change in this cost of service exhibit deals with the question of our investment in TMI-2. The cost of service exhibit is designed to show our overall and our allocated cost of service if the Commission were to determine that GPU's shareholders should receive a zero-return on the common equity portion of our investment in TMI-2. Mechanically, this is accomplished by removing 32.17% of our investment in TMI-2 from rate-base, since 32.17% represents the common equity proportion of Penelec's total capital. The details of this adjustment are described by Mr. Carroll.

- 39 40 Q. Mr. Hafer, is Penelec recommending the adoption of this 41 revised cost of service exhibit?
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  43 A. No, we are not. we do believe, however, that it constitutes
  44 an approach which merits consideration by the Commission.
  45 Regardless of the status of the plant, Penelec must
  46 continue to pay the fixed charges (debt interest and
  47 preferred dividends) on the debt and preferred capital
  48 invested in the plant, as well as meeting the ongoing
  49 O&M expenses associated with the plant.

There are obviously conflicting considerations at play 2 here. On the one hand, it seems fair that investors 3 should suffer some portion of the loss associated with 4 the TMI-2 accident. On the other hand, the long-term 5 best interests of consumers rests in a financially viable company capable of attracting capital on reasonable 7 terms to continue to meet its public utility responsibility. This case merits a careful consideration of the long-term 9 best interests of both rate payers and investors. GPU 10 must be restored to a semblance of financial viability if 11 it is to meet the needs of its consuming ratepayers in 12 the near future and the Commission might well conclude 13 that the long-term public interest is best served by 14 including the entire TMI-2 investment in Penelec's rate 15 base. Mr. Reis and Mr. Graham address this subject in 16 more detail. 17

18 Q. Does this conclude your supplemental testimony?

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20 A. Yes, it does.

STATE OF NEW JERSEY )

COUNTY OF MORRIS )

Affiant, being first duly sworn, deposes and says that he has read the foregoing testimony, that if asked the questions therein his answers would be as shown, and that the facts contained in those answers are true and correct to the best of his knowledge, information, and belief.

F. D. Hafer

Sworn to and subscribed

before me this 20 day

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MILDE Notary Public

NOTARY FUELIS OF HEIGHERSEY

My Commission Engines June 15, 1932

My Commission Expires: Jew 16, 1982