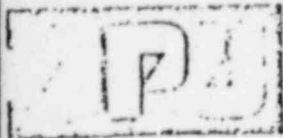


William G. Kuhns
Chairman

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GENERAL
PUBLIC
UTILITIES
CORPORATION

August 11, 1978

Pennsylvania Public Utility Commission
Commonwealth of Pennsylvania
104 North Office Building
Harrisburg, Pennsylvania 17120

Attention: Hon. Louis J. Carter,
Chairman

Dear Chairman Carter:

During the course of the oral argument on May 10, 1978 in the Metropolitan Edison Company rate case in RID 434, and again during the course of the annual review with the Commission of Metropolitan Edison on June 23rd, there were discussions about when a generating station should be declared to be "in commercial service". We believe that it is imperative that the multifaceted technical and financial aspects of this question be reviewed. It is the purpose of this letter to summarize the considerations involved in a declaration of "in commercial service" and the impact of such declaration on the rate paying customers and the company.

In accordance with Section 501 of the Pennsylvania Public Utility Law, your Commission has, by its Regulation §57.42, directed each Class A and Class B electric public utility to keep its accounts in conformity with the "Uniform System of Accounts Prescribed for Public Utilities and Licensees (Class A and Class B)" of the Federal Power Commission (now FERC). (The GPU subsidiaries are Class A public utilities as defined in your Commission's Regulation §57.41.) Presumably, then the interpretations of the FPC with respect to its Uniform System of Accounts are equally applicable to your Commission's System of Accounts.

Criteria

The criteria available for reaching a judgment about the appropriate timing of a declaration of "in commercial service" for utility plant can not be precisely articulated. As the FPC has pointed out, it is not controlled by artificial rules, is not a matter of formula but is a matter of reasonable judgment based on a consideration of all the pertinent facts; neither

full capacity generation nor the completion of all construction activities, nor the making of permanent installations, as against those of a temporary nature, are necessary for this determination. Re Pennsylvania Water and Power Company, (1949) 82 PUR NS 193,237. However, some general prerequisites can be stated:

(a) The plant should have been submitted to a series of operational tests sufficient to assure that construction has been substantially completed in accordance with plans and specifications and that the plant as constructed is capable of providing the service intended.

(b) In some cases (a) above has also been influenced by the need to assess the operational acceptability of major items of plant equipment and such tests have been the basis for acceptance and supplier payments.

(c) The plant start-up test and evaluation program should be sufficiently complete to permit all or part of the plant's capacity (kw) to be made available to the system or pool operators for economic dispatch.

(d) The plant should be capable of producing significant energy (kwhrs.) at dependable capacity (kw) levels for use by the rate payers.

(e) General Instruction 9D for the Plant Accounts of the Uniform System of Accounts requires that a nuclear plant be declared "in commercial service" within 120 days of initial test power operation, unless the company is able to provide detailed justification for extension of the test period; this term establishes a normal time-frame for the declaration of "in commercial service".

(f) In the case of TMI-2, items (a) and (b) above are specifically elaborated to include a number of performance tests to be successfully completed before the Operating Permit, issued by the Nuclear Regulatory Commission, can become effective for full power operation.

In Herman Dieckamp's letter, dated July 19, 1978, in which he reported on the TMI-2 start-up and test status, he pointed out that the test program is a formal and detailed program planned to fully exercise all of the plant equipment

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under carefully controlled and monitored conditions so that any deficiencies in design or construction can be identified and he annexed an outline of that program as initially developed and as modified in the light of the problems that have arisen during the testing program.

Even though the items enumerated above are designed to assure that plant construction culminates in an operable plant, the start up test program can assess initial operability and control but cannot assess long term equipment lifetime or reliability problems that can significantly influence plant productivity or capacity factors, i.e., the attained fraction of theoretical energy output.

What this boils down to is that, under your Commission's Uniform System of Accounts, a generating unit must be transferred from CWIP to plant in service when, after a reasonable testing period, it is ready for service even if there are some clean-up construction activities remaining.

Energy

The benefits of all energy production flow directly to the customers under the energy adjustment clauses in effect in GPU's Pennsylvania and New Jersey operating companies. All energy from test operations as well as from commercial operation acts immediately to displace higher cost generation or interchange purchases and all financial impact of such changes in energy sources are included in the workings of each subsidiary's energy adjustment clause so as to retain all benefits for the customers. The earnings of the operating companies are not influenced by the availability of lower cost energy from new plants whether or not they are still in test or have been declared "commercial".

Accounting

During construction, i.e., prior to "commercial in service", all costs are capitalized for recovery via depreciation charges over the life of the project (except those financing costs associated with CWIP in rate base). However, as soon as the plant is declared "in commercial service" a number of specific changes in accounting take place:

- (a) The costs of financing the investment are no longer capitalized (AFC, is stopped).

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(b) Depreciation is initiated and charged to operating expense.

(c) All O&M expenses are no longer capitalized and, instead, are charged to operating expense.

(d) To the extent that the GPU operating companies are short of their capacity obligation to PJM, the companies' annual capacity payments to PJM are reduced (currently at the rate of about \$23/Kw).

(e) Job development and/or investment tax credits and liberalized depreciation deductions for tax purposes reduce the company's current cash obligation for Federal Income Tax, but do not appreciably impact current net income. These credits and deductions are recognized in rate making as they are normalized, by tax law, over the life of the plant. Any resulting cash, to the extent available, displaces external financings for construction and other needs.

The magnitude and impact of these accounting changes can be seen in the following summary of the revenue requirements of the 75% of TMI-2 owned by Met-Ed and Penelec:

(a) Financing Costs	\$ 82.4 million/yr.
(b) Depreciation	18.9
(c) O&M	12.6
(d) Capacity Payments	<u>(11.6)</u>
	\$102.3 million/yr.

INDICATES
DEFICIT
POSITION
PRIOR TO
TMI-2
IN
SERVICE

If these costs are not recognized in rate making which provides revenues to offset these costs, the impact of 100% of TMI-2 on GPU's earnings is about \$55 million/year or about 9¢ share per month of delay in rate recognition of these costs. It should be noted that the bulk of these costs, i.e., return, taxes, and depreciation, are precisely definable and require no experience base for rate making.

Timing

The timing of declaring a plant "in commercial service" is a matter of significant concern because of the cost impact on both the rate payers and the company.

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From the customer's point of view, the rate increase necessary to recognize the costs of the new plant can never be welcome because today's incremental costs of ownership of new capacity are generally higher than the energy cost reductions flowing from the displacement of low efficiency or high fuel cost generation and interchange. As noted, in the case of TMI-2, for the first year, the revenue requirement for the ownership of 75% of the unit is about \$102 million; the energy savings for this 75% portion of the unit at a capacity factor of 70% would be about \$67 million. The net cost of ownership is about equal to the energy savings in the third to fourth year when the unit is somewhat depreciated, the load has grown, and the projected cost of fuel and interchange have risen by virtue of inflation.

If for any reason the unit output varies from expectation, the energy savings are proportionately changed. Thus far, the record of the two GPU System operating nuclear units (TMI-1 and Oyster Creek) has been well above the national average. All of the benefits of this above-average performance have automatically flowed to the customers and this is appropriate. It must be emphasized, however, that the complexity of modern plants and the changing requirements of NRC, EPA, DEP and other governmental agencies precludes any ability to guarantee a continued level of plant output.

To the extent that the customers are paying the financing, depreciation and ownership costs of a new plant in current revenues, such costs are not being capitalized for recovery in the future. Ultimately these costs must be paid and the only question is when. In a true economic sense the ultimate cost to customer, including the cost of money, is independent of the timing of the conversion from AFC to cash revenue requirements. In terms of equity to the respective groups of customers, it is hard to argue that current customers should, by avoiding the unpleasantness of a rate increase, be in a position to derive energy cost benefits while not contributing to the cost of ownership by continuing to capitalize such costs for future customers to have to pay. Indeed the concept of changing the accounting when the plant becomes "commercial" is only an attempt to fairly distribute the cost among the customers that will benefit from the investment over its lifetime. The desired matching of costs and benefits must be viewed over the plant lifetime and not controlled by short term considerations.

If the customers do not pay the costs of ownership which are no longer capitalized after the "commercial" date, the stockholders of the company must absorb those costs while the customers gain the energy savings. This disparate result

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makes it immediately apparent why the company is concerned about the timing of rate proceedings so as to reasonably coordinate the "commercial" declaration and the granting of revenues which reflect the base revenue requirements of a new plant investment. Attachment A was discussed during the Met-Ed annual review on June 23rd, and attempts to illustrate the impact on earnings that could result from a 12-month delay in recognizing Met-Ed's 50% share of TMI-2. In that example, the equity return attributable to plant-in-service falls from 13.2% to 4.9%.

A company has no incentive to prematurely declare a plant commercial because, even with concurrent rate relief, such a declaration subjects the Company to risks of extraordinary O&M costs which the company would have to absorb. On the other hand, even if it were not inconsistent with your Commission's System of Accounts, the company would be reluctant to delay the "commercial" declaration because the basic requirement for revenues would increase with time and the acceptability of the required increase can only diminish in the eyes of the rate payers. Even though the company seeks to avoid disastrous earnings losses due to declaring plant "in commercial service" before associated rate relief is granted, the company is not without risk. Any historical review of actual vs allowed returns on equity reveals the continuing presence of significant risk.

We would appreciate the opportunity to review this matter with you or your staff in more detail and we are prepared to work with you to further define the criteria for "commercial service".

Sincerely,

lda
attachment

cc: Honorable Robert K. Bloom
Honorable Helen B. O'Bannon
Honorable Michael Johnson
Honorable H. Wilson Goode

Messrs. A. W. Johnson
R. L. Packard
M. Seidel
W. P. Thierfelder
M. P. Widoff

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IMPACT OF TMI-2 W/O RATE RELIEF
(\\$Millions)

	<u>4/30/78</u>	<u>W/TMI-2</u>
Avg. Plant in Service (AP)	686	1026
Operating Income (BIT)	96.1	96.1
TMI-2 Expenses		8.4
O&M		12.6
Depreciation		(8.5)
Capacity	96.1	83.6
Adjusted Operating Income	25.2	37.6
Interest $(.0474) \times (.491) \times (AP)$	70.9	46.0
Taxable Income	30.3	17.0
Income Tax	40.6	29.0
Available for Pref. and com.	7.0	10.4
Preferred Div. $(.0775) \times (.138) \times (AP)$	33.6	18.6
Income for Common	13.2	4.9
Return on Equity	$\frac{\text{Income}}{(.371) (AP)}$	

*Plant only

6/22/78

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