

Enclosure 2
11/23/77

TMI #2
1978 CONSTRUCTION BUDGET
ASSUMPTIONS

8002180 047

Budget Assumptions

In order to prepare this budget and give the figures on this budget more meaning, certain assumptions had to be made. These assumptions are in this enclosure.

1. Plant Operating Assumptions:

- a. Fuel load - 2/78
Initial criticality - 3/78
- c. Several plant startups and shutdowns during testing phase.
- d. Commercial operation beginning 6/1/78

2. Personnel/Payroll Assumptions:

- a. Personnel range from 258 in the beginning of December 1977 to 266 at the end of May 1978 (Payroll figures are slipped one month. Hence, months 1/78 - 6/78 are budgeted.). For control purposes, these people fall into two basic categories - those reporting to plant management and those reporting to corporate management. Personnel in the following departments report to plant management: Operations, Maintenance, Health Physics and Plant Engineers. The remainder - including Security, Administration, QC, Training and Generation Engineering - report to corporate management. The following breaks down the personnel assignment by month:

<u>Budget Month</u>	<u>Plant</u>	<u>Corporate</u>	<u>Total</u>
January 1978	199	59	258
February 1978	200	59	259
March 1978	201	59	260
April 1978	202	59	261
May 1978	202	63	265
June 1978	203	63	266

- b. Plant personnel can be broken down further, as follows:

<u>Budget Month</u>	<u>Bargaining Unit</u>	<u>Supervisory</u>	<u>Total</u>
January 1978	141	58	199
February 1978	141	59	200
March 1978	142	59	201
April 1978	142	60	202
May 1978	142	60	202
June 1978	142	61	203

¹ Budgeted straight time manhours were calculated on a man-for-man basis for plant personnel. Corporate straight time manhours were budgeted by using Unit 2 history and factoring in anticipated 1978 support.

- c. Overtime: 15% of all straight time manhours was used as the overtime factor to develop payroll.² This overtime percentage is based on calculations made for a test month (September 1977) and is consistent with the figures used to develop the 1978 Unit 2 O&M budget.
- d. Met Ed personnel will not be transferred to Unit 1 to support refueling - scheduled for Mid-March through May.
- e. 22% overhead is applied to all payroll dollars.³

3. Materials and Supplies Assumptions:

- a. Equipment accounts (325.XXXX) consist mainly of dollars committed to be spent that have not yet been booked, and to a small extent, estimates of additional equipment needed by plant personnel.
- b. Total consumable dollars budgeted for 1/78 - 3/78 are based primarily on Unit 2 construction history - using 8/77 - 10/77 data. For 4/78 - 6/78, Unit 1 history (1977) was used to estimate Radwaste Consumables and Operations Consumables. These two consumable categories are expected to be active after initial criticality.
- c. Full auxiliary steam usage is budgeted for 1/78 - 3/78, with partial usage (because plant should be operating most of the time) budgeted 4/78 and 6/78. One startup is budgeted using fuel oil.⁴
- d. 25% stores overhead is applied to materials issued from warehouse stock (T154 account).⁵

4. Consultants Assumptions:

- a. RMC, Ichthyological Associates, C. Wurtz, Teledyne Isotopes, Porter Gertz, Pickard & Lowe, and Millersville State College dollars budgeted are based on Unit 2 1977 history plus 5% escalation. These consultants are required for environmental and regulatory reasons.
- b. Stearns Roger amounts budgeted are for assistance with fuel handling bridges during fuel load.

²Overtime percentages are presented in manhours. Overtime percentage is calculated by dividing overtime manhours by straight time manhours. A factor of 1.65 converts bargaining unit manhours to dollars.

³This percentage is reviewed annually and changed, if necessary, on 3/1/78.

⁴Fuel oil costs 100K for each startup, based on Unit 1 history. Steam costs are based on 1977 Unit 2 history.

⁵25% based on Unit 1 history.

- c. Babcock & Wilcox amounts budgeted are based on 10/7/77 J. L. Kunkel memo to J. J. Barton saying Met Ed is responsible for tasks 6 and 8 of the Master Services Contract.
- d. One full time on-site Westinghouse turbine representative is budgeted to start 4/78.
- e. MPR estimate is based on 8/30/77 N. Williams to R. Hedges memo.
- f. Legal fees are based on 1977 Unit 2 history plus 5% escalation.
- g. NUS amounts budgeted are for billing lag of services completed 12/31/77.
- h. TMI #2 share of PWR OTSG Study is budgeted based on 8/3/77 J. F. McConnell to D. B. Wise memorandum.

5. Maintenance Assumptions:

- a. Catalytic involvement is not budgeted until just prior to fuel load in February; it is assumed that GPUSC will pick up these costs until fuel load. Catalytic personnel are budgeted as follows:

2/78	4 people
3/78	4 people
4/78	12 people
5/78	38 people
6/78	38 people

Only straight time manhours, at a rate of \$15/hour, are budgeted for Catalytic personnel.

- b. Currently 9 of 15 Mercury Instrument Techs on site are working for Met Ed in Unit 2. As more systems are turned over to Met Ed, more techs will be released to Met Ed. Then 6 - 8 techs will be transferred to Unit 1 for refueling. As a result, budgeted Mercury manpower is:

1/78	9 people
2/78	11 people
3/78	13 people
4/78	9 people
5/78	8 people
6/78	8 people

It is also assumed that the techs overtime rate will be 10%.

6. Other Assumptions:

- a. Office Machine Rental, Telephone Expenses, Transportation, and Miscellaneous Other Charges are budgeted in accordance with Unit 2 1977 history.
- b. Food Services, Radwaste Shipments, and Laundry estimates are based on Unit 1 1977 history.

7. General Assumptions:

- a. Billing lag: Met Ed direct costs, such as payroll, are budgeted one month after actual occurrence. Invoices to GPU are lagged one month. Materials and consultants fees incurred directly by Met Ed are lagged 2 months.
- b. No "4200 money" is budgeted after commercial date, but 1978 Unit 2 O&M budget relies on the availability of such funds to cover the completion of incomplete construction work items.