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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSIONBEFORE THE ATOMIC SAFETY AND LICENSING BOARDOFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

In the Matter of	)	
	)	
COMMONWEALTH EDISON COMPANY	)	Docket Nos. 50-454 OL
	)	50-455 OL
(Byron Nuclear Power Station,	)	
Units 1 & 2)	)	

AFFIDAVIT OF RALPH L. HEUMANN

1. My name is Ralph L. Heumann. I am a Vice President of Commonwealth Edison Company. My business address is One First National Plaza, Post Office Box 767, Chicago, Illinois 60690.

2. I attended Northwestern University with a major in Accountancy. I am a Certified Public Accountant in Illinois. Following military service, I was employed by American Paper Goods Company in February, 1946, as a cost accountant. In August, 1950, I was employed by Commonwealth Edison Company as a Staff Auditor. Except for relatively brief assignments as Industrial Relations Representative in 1954 and as Area Manager of the Company's North Shore Area in 1963-1964, I have been engaged continuously in accounting and financial activities of the Company. From 1959 to 1963, I was Assistant Comptroller, and from 1964 to 1968, I was Manager of Accounting. I was elected Comptroller on November 7, 1968 and Vice President on January 25, 1982.

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3. My responsibilities include general management of the Company's accounting and budgeting activities and the determination and implementation of accounting policies in accordance with Illinois and federal Uniform Systems of Accounts and generally accepted accounting principles.

4. The purpose of this affidavit is to explain the costs of delay in the startup and operation of Byron Unit 1 as a part of the Commonwealth Edison power generating system. I provided similar information in a prior affidavit dated January 24, 1984. That affidavit was submitted in support of Commonwealth Edison's Motion for Expedited Consideration which was filed on January 24, 1984 with the Atomic Safety and Licensing Appeal Board. The information in my January 24 affidavit regarding the costs associated with the delay in startup of Byron Unit 1 is essentially unchanged. There have been a few relatively minor changes in the costs which are reflected in the present affidavit.

5. The principal costs affected by a delay are Allowance for Funds Used During Construction ("AFUDC"), continuing overhead and standby costs, and additional fuel and purchased power costs. Presently, these costs of delay in the startup of Byron total approximately \$40 million per month of delay. Each of the costs that comprise this total cost is discussed separately below.

Allowance For Funds Used During Construction ("AFUDC")

7. AFUDC represents the cost of the funds invested in the Construction Work in Progress account from the time the money is spent until the unit is considered to be in service.<sup>1/</sup> The formula is prescribed by the Federal Energy Regulatory Commission and approved by the Illinois Commerce Commission. It consists of the after-tax<sup>2/</sup> interest cost of borrowed funds, the preferred dividend cost of preferred equity funds, and a fair return on common equity funds as previously determined by the Illinois Commerce Commission in a rate proceeding. The weighted average annual rate for AFUDC is currently 10.3% percent but it will vary slightly from month to month with changes in the proportions and costs of funds from the various sources. The Company's investment in Byron Unit 1 will average about \$2,100 million during a period of delay. Thus, AFUDC amounts to about \$18 million ( $10.3\% \times \$2,100 \text{ million} \times 1/12$ ) for each month that the unit is not in service. This cost is expected to be added to the cost of the unit and recovered through depreciation charges that will be included in revenue allowances over the life of the unit. Such depreciation, plus a fair return on the unrecovered

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<sup>1/</sup> "In service" as used herein is an accounting concept indicating that output of the unit has reached a significant level on a consistent basis for a reasonable period of time. At this point, AFUDC is discontinued and depreciation provisions are commenced.

<sup>2/</sup> Interest costs are deductible for income tax purposes when incurred even if capitalized and considered to be a cost of construction.

balance of the original investment, will be passed on to customers as a part of the cost of electricity produced by the plant.

#### Overhead and Standby Costs

7. Byron Unit 1 is staffed with a number of engineers, technicians, operating and maintenance personnel for loading fuel, pre-operational and post-startup testing. These costs are currently about \$6 million per month. Until a unit is considered to be in service, such costs will continue and will be capitalized and added to the cost of the plant.

#### Additional Fuel and Purchased Power Costs

8. The incremental cost of fuel for electricity generated by Byron Unit 1 is expected to be substantially less than the cost from alternative sources if the unit is not available. The amount of the difference is computed by a computer program called PROMOD.<sup>3/</sup> This program simulates the manner in which the Company's load is assigned to various sources of energy on an economic loading basis and measures the cost of fuel and purchased power for any given set of circumstances. Economic loading is the selection of energy sources which, for every combination of load level

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<sup>3/</sup> PROMOD is a commercially available program developed by Energy Management Associates, Inc., 100 Northcreek, Suite 500, Atlanta, Georgia 30327. It is widely used in the electric utility industry.



and available capacity that occurs during any given time period, produces the lowest overall fuel and purchased power cost. PROMOD computations, with various degrees of availability of Byron Unit 1, provide a reasonable estimate of the savings in energy costs resulting from increased availability of the unit. Whatever the startup date, the unit is expected to have very low outputs at first with increasing loads as operational testing is completed. The loss of energy cost savings from a delay is the sum of the day-to-day differences in energy costs for the period from the startup date if there were no delay until the unit reaches its normal level of output with a delay.

9. Based on computations as described above, Commonwealth Edison estimates that the loss of savings of fuel and purchased power costs average about \$16 million for every month that the Byron Unit 1 is not in service. Savings in energy costs are passed on to customers in part by operation of the Company's fuel adjustment clause and the balance by a reduction in base rates when the Unit is considered to be in service for ratemaking purposes by the Illinois Commerce Commission. Thus, a delay in the service date directly increases the cost of electricity to consumers by delaying the time at which fuel savings would be passed through to them.

To the best of my knowledge and belief, the  
statements in this affidavit are true and correct.

*Ralph L. Heumann*

Ralph L. Heumann  
Vice President  
Commonwealth Edison Company

Subscribed and sworn to  
before me this 27th day of  
September, 1984.

*Larrence J. McBride*

Notary Public

My Commission Expires July 6, 1987