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AMERICAN ELECTRIC POWER Company, Inc.



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Chairman of the Board
and
Chief Executive Officer
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March 30, 1983

50-315

Mr. James R. Tourtellotte, Chairman
Regulatory Reform Task Force
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Tourtellotte:

I am pleased to be able to provide you with the information on backfitting costs you requested in your February 8, 1983 letter. The enclosed report entitled Report on Donald C. Cook Nuclear Power Plant Backfitting and Regulatory Impact Costs provides backfitting cost analyses in a format similar to those contained in the enclosure to your letter.

It should be recognized that a great deal of the "utility initiated backfitting," shown on Attachment C to the above report, is actually an indirect or partial result of regulatory activity. Two examples are the Addition to the Service and Office Building (CIA #39918) and the Contractor Access Control Building (CIA #39929). The first building was necessary to accommodate the added manpower required to handle such things as increasing regulatory paperwork, tightened operational quality assurance, increased security, and shift technical advisers. The second building provides for the security, health physics and other functions necessary for the construction workers who install the backfits required by the NRC.

In conclusion, I would like you to know that I share your belief that "backfitting is the most significant immediate problem to be solved." I hope that through our prompt and full cooperation, and that of other utilities, you are successful in achieving the badly needed reform.

Very truly yours,

W. S. White, Jr.
Chairman

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REPORT ON
DONALD C. COOK NUCLEAR POWER PLANT
BACKFITTING AND REGULATORY IMPACT COSTS

The Donald C. Cook Nuclear Plant consists of two Westinghouse PWR nuclear units with a combined capacity of 2250 MWe. Commercial operation of the first unit was August 23, 1975, and the second unit was July 1, 1978. Total initial cost of the units was \$1,001,000,000, equivalent to \$445 per KW.

Backfitting costs for the Cook units through June 30, 1982 has been \$135.7 million. These costs can be allocated as \$35.2 million for NRC imposed backfitting other than TMI lessons learned; \$22.6 million for TMI lessons learned backfitting; and \$77.9 million for utility initiated backfitting. An additional \$36.4 million is anticipated for backfitting costs since June 30, 1982 and near-term future backfitting costs to satisfy NRC requirements. The following detailed listings of backfitting costs through June 30, 1982 and beyond are provided as attachments hereto:

- Attachment A - NRC IMPOSED BACKFITTING OTHER THAN TMI
- Attachment B - NRC TMI REQUIREMENTS
- Attachment C - UTILITY INITIATED BACKFITTING

DONALD C. COOK NUCLEAR PLANT

Backfitting Costs Through June 30, 1982
And Projected Costs Beyond That Date

NRC IMPOSED BACKFITTING OTHER THAN TMI

\$ In Millions

CIA #	Description	Regulatory Reference	Total Est.	Exp. 6/30/82	Bal.
39914	Misc. Minor Mods. (Except Security)		2.8	2.8	-
39914	Security Modifications	10CFR 73.55	9.9	9.9	-
39916	U#1 Cont. Purge. Mod.	BTP CSB 6-4	0.1	0.1	-
39919	Purch. Cont. Penetrations		0.1	0.1	-
39921	Iso. Val. Testing Mods.		0.2	0.2	-
39930	Redundant Fuses & Bkrs. U#1	Lic. Cond.	0.1	0.1	-
39931	Redundant Fuses & Bkrs. U#2	Lic. Cond.	0.1	0.1	-
39933	Purch. Ckt. Bkr. Test Eq.		0.1	0.1	-
39934	Seismic Anal. For Piping	79-14	8.4	8.2	0.2
39941	Anchor Bolt Testing	79-02	5.5	5.5	-
39942	Anal. of Need For Rupture Restr.	Lic. Cond.	0.3	0.3	-
39948	Purchase Addl. Cable		0.1	0.1	-
39949	Misc. Minor Mods.		5.2	5.2	-
39956	Misc. Minor Mods		0.5	0.5	-
39961	Install Evac. Alarm	79-18	0.6	0.3	0.3
39964	Cont. Anal. & H ₂ Assess.	518	3.1	1.1	2.0
39968	Seismic Block Wall	80-11	0.6	0.5	0.1
39969	Seismic Qual. of Cond.		0.2	-	0.2
39979	Human Factor Eng.	660	0.5	-	0.5
39984	Misc. Minor Mods.		1.0	-	1.0
39986	Addl. Frisker Stations	Reg. III	0.1	0.1	-
30972	Repl. U#1 Incore T/Cs	82-28	2.5	-	2.5
30973	Repl. Excore Detectors	RG1.97	0.6	-	0.6
30980	Repl. HFA Relays	81-01	0.3	-	0.3
30982	Tie-Down Provision	612	0.2	-	0.2
30995	Fire Prot. Mods.	App. R	8.7	-	8.7
31009	Mod. Cranes - Hvy. Loads	612	1.2	-	1.2
31026	Seismic Anal. El. Eq.		0.1	-	0.1
	Repl. U#2 Incore T/Cs	82-28	2.1	-	2.1
			<u>55.2</u>	<u>35.2</u>	<u>20.0</u>

DONALD C. COOK NUCLEAR PLANT
Backfitting Costs Through June 30, 1982
And Projected Costs Beyond That Date
NRC TMI REQUIREMENTS

\$ In Millions

CIA 39943	<u>Description</u>	<u>Total Est.</u>	<u>Exp. 6/30/82</u>	<u>Bal.</u>
-2440	Valve Pos. Ind.	0.1	0.1	-
-2441	Subcooling Meter	0.1	0.1	-
-2443	PORV - Upgrade Emerg. Bus	0.1	0.1	-
-2444	Core Cooling Instr.	2.6	2.2	0.4
-2448	Rad. Mon. Sys.	6.6	3.6	3.0
-2451	Cont. Water Level Ind.	0.6	0.6	-
-2457	Tech. Support Center	12.9	7.9	5.0
-2460	Aux. F.W. Lo Press. Trip	0.2	0.2	-
-2461	Emer. PWR. - Press. Htrs.	0.2	0.1	0.1
-2462	RCS Venting	1.2	1.2	-
-2463	Cont. Hyd. Ind.	1.3	1.3	-
-2465	Post Accident Sampling	3.1	2.3	0.8
-2524	Uninterruptible Pwr.	0.8	0.1	0.7
	Early Warning Sys.	0.2	0.2	-
	Bal. of Work Incl. O/Hs	8.9	2.6	6.3
40489	Purchase Lithium Counter	0.1	-	0.1
		<u>39.0</u>	<u>22.6</u>	<u>16.4</u>

DONALD C. COOK NUCLEAR PLANT

ATTACHMENT C

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Backfitting Costs Through June 30, 1982
And Projected Costs Beyond That DateUTILITY INITIATED BACKFITTING

\$ In Millions

CIA #	Description	Total Est.	Exp. 6/30/82	Bal.
39912	Purch. Breathing Eq.	0.1	0.1	-
39913	Purch. Spare Motors	0.5	0.5	-
39914	Misc. Minor Mods.	20.8	20.8	-
39915	Mod. PL Rod Devices	0.1	0.1	-
39917	U#2 Tube Bundles	8.4	8.4	-
39918	Add. to Svc. & Off. Bldg.	4.1	4.1	-
39920	Prod. Plant Blanket	3.1	3.1	-
39922	Concrete Disch. Scour Bed	0.3	0.3	-
39924	S/G Mock-up	0.1	0.1	-
39926	U#2 Disch. Mods	0.9	0.9	-
39928	U#2 Turb. Spare Parts	3.1	3.1	-
39929	Contractor Acc. Cont. Bldg.	1.1	0.9	0.2
39932	Startup Steam Supp. Sys.	1.1	1.1	-
39935	Dry Cleaning Eq.	0.1	0.1	-
39936	Rx Cavity Filtration	0.1	0.1	-
39937	Rx Cavity Sandbox	0.1	0.1	-
39938	Install FW Therm. Slvs.	5.8	5.8	-
39944	Sodium Anal. Sys.	0.8	0.4	0.4
39945	Micrographics Camera	0.1	0.1	-
39947	Addl. MCCs	0.1	0.1	-
39948	Purchase Addl. Cable	0.4	0.4	-
39949	Misc. Minor Mods.	21.0	20.9	0.1
39950	U#2 HP Turb. Mod.	1.0	1.0	-
39951	Addl. Sewage Plant	0.3	0.3	-
39952	U#1 MSR Baffles	0.1	0.1	-
39953	Spare Circ. Water Pp. Imp.	0.2	0.2	-
39955	RCP Motor Bearing Mod.	0.4	0.4	-
39956	Misc. Minor Mods.	1.9	1.9	-
39957	Spare ESW Pump	0.1	0.1	-
39958	As-Built Drawing Prog.	0.4	0.3	0.1
39959	Purch. Press. Switches	0.1	0.1	-
39963	RCP Vibration Mon.	0.3	-	0.3
39966	W. Steam Encl. Vent	0.1	-	0.1

UTILITY INITIATED BACKFITTING

\$ In Millions

<u>CIA #</u>	<u>Description</u>	<u>Total Est.</u>	<u>Exp. 6/30/82</u>	<u>Bal.</u>
39967	U#2 MSR	0.4	0.1	0.3
39970	Manip. Crane Mod.	0.3	0.1	0.2
39972	Spare Circ. Wtr. Pp. Assy.	0.4	-	0.4
39973	PCB Program	*	-	-
39974	U#2 Spare Stator Bars	0.1	-	0.1
39975	Disch. Pipe Mods.	1.3	-	1.3
39976	Rev. SSPS Logic	0.1	-	0.1
39978	New Contam. Monitors	0.1	0.1	-
39980	Repl. Cont. Purge Valves	3.4	0.1	3.3
39982	Repl. NESW Iso. Val.	3.8	1.5	2.3
39983	Thread Cleaning Mach.	0.1	0.1	-
39984	Misc. Minor Mods.	2.0	-	2.0
39989	Repl. Westronics Record.	*	-	-
40488	Main Stm. Encl. Roof.	0.2	-	0.2
30971	Upgrade Instruments	*	-	-
30974	Loose Parts Mon. Sys.	1.2	-	1.2
30986	Sanitary Absorption Pond	0.1	-	0.1
30987	Oil & Chem. Spill Control	*	-	-
30988	Spare S.I. Pp. Assy.	0.9	-	0.9
30998	U#2 Storage Area	*	-	-
31000	Mod. S/G Startup Sys.	0.6	-	0.6
31008	Inj. Water Pumps	0.4	-	0.4
31010	Mod. RCP Oil Spill Prot.	*	-	-
31011	Ice Cond. Mods.	*	-	-
31012	Purch. Spare L. P. Rotor	*	-	-
31013	Retube U#1 Cond.	*	-	-
31014	Retube U#2 Cond.	*	-	-
31016	Replace Auto Gas Anal.	*	-	-
31017	Reclaim S/G Blowdown Water	*	-	-
31019	CC & SI Pp. Mini Flow	*	-	-
31020	Move CCP Valves	*	-	-
31021	Replace Snubbers	*	-	-

UTILITY INITIATED BACKFITTING

<u>CIA #</u>	<u>Description</u>	<u>Total Est.</u>	<u>Exp. 6/30/82</u>	<u>Bal.</u>
31022	Replace Heater	*	-	-
31023	Mod. Fuel Xfer Sys.	*	-	-
31024	Misc. Matl. Handling Mod.	*	-	-
31025	Turb. Valv. Spares	*	-	-
	Upgrade Radwaste Facility	*	-	-
	Repl. U#2 Turb. Val. Internals	*	-	-
	Repl. P250 Plant Computer	*	-	-
	Change U#1 Turb. Nozzles	*	-	-
	Repl. U#1 1st Stage Buck.	*	-	-
	U#1 Turb. Mods.	*	-	-
		<u>92.5</u>	<u>77.9</u>	<u>14.6</u>

(*) Capital expenditures for these projects have not yet been approved by the Board of Directors. It is estimated that they will cost approximately \$55 million in total if they are approved.