UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC ENERGY
AND LICENSING BOARD

In the Matter of	)	
	)	
WASHINGTON PUBLIC POWER SUPPLY SYSTEM	)	Docket No. 50-460-CPA
	)	
	)	
(WPPSS Nuclear Project No. 1)	)	

AFFIDAVIT OF EUGENE ROSOLIE
REGARDING THE CONSTRUCTION PERMIT EXTENSION FOR WNP-1

I, Eugene Rosolie, being first duly sworn, do depose and state as follows: I am Director of the Coalition For Safe Power (Coalition). As such I am personnally familiar with the material facts of this case and other facts related to the deferral of construction of WNP-1. A statement of my education and professional qualification is attached as Attachment 1 to this affidavit. This affidavit addresses the causes of deferral of WNP-1 and the reasonableness of the requested extension.

1. As admitted by the Licensing Board in its Memorandum and Order dated March 25, 1983, the Coalition Amended Contention #2 states:

> Petitioner contends that the Permittee's decision April 1982 to "defer" construction for two to five years, and subsequent sessation of construction at WNP-1, was dilatory. Such action was without "good cause" as required by 10 CFR 50.55(b). Moreover, the modified request for extension of completion date to 1991 does not constitute a "reasonable period of time" provided for in 10 CFR 50.55(b).

2. The NRC Staff and Applicant state that applicant's justification for extension of construction permit No. CPPR-134 to June 1, 1991 was beyond the control of Applicant and thus constitutes good cause as defined in Commission Order CLI-82-29 and ALAB-722, 17 NRC 1221;

3. NRC Staff states that the extension of the construction permit to June 1, 1991 is for a reasonable period of time;

4. I have performed a review of all documents filed by the Staff and the Applicant in this proceeding, including responses to Coalition interrogatories and the motions for summary disposition. I have also examined documents made public by the Northwest Power Planning Council (NWPPC), the Bonneville Power Administration (BPA), Natural Resources Defense Council (NRDC) and the Northwest Conservation Act Coalition (NCAC). These documents have been identified and made available to the Staff and Applicant at the offices of the Coalition;

5. I have attended meetings of the NWPPC at which the deferral of WNP-1 was discussed;

6. After reviewing the material facts it is my conclusion that Applicant was responsible for the deferral of WNP-1. The Applicant requested the recommendation from BPA and concurred in it;

7. The Applicant had other options in addition to seeking the requested extension to 1991. These options included the termination of the project, placing the project in mothball or a preservation state (as it did with its WNP-4 and 5 projects), and/or negotiated with the 30% owners of WNP-3 for earlier completion of WNP-1.

Given the level of completion of WNP-1 (63%) compared to WNP-3 (50%) this last option would have been the prudent action to take. Therefore, the requested extension was without valid purpose;

8. The Applicant's request for the extension came eight months after it decided to defer the plant;

9. The Applicant has been unable to issue any bonds for any of its project since May 1982. Since that time it has defaulted on bonds it issued to fund construction of WNP-4 and 5 and is currently in a position of being unable to issue any bonds. It is presently in the position of having its assets (WNP-1,2 and 3) attached by creditors. The Applicant has stated that completion of WNP-1 is tied to the ability to finance the plant. Given the above information it is my conclusion that the Applicant will never be able to finance completion of completion of WNP-1. Thus no good cause exists for extending the completion date to June, 1991;

10. The WPPSS Executive Board has not decided on a completion date and will not do so until October 1984. (Management Plan For Extended Construction Delay of WNP-1, June 29, 1982 at 1 and Comparsion of Present WNP-1 Delay Plan with Alternatives, presented to Participants Review Board October 8, 1982 at 2; Attachments C and D to Coalition Response to Motions For Summary Disposition.);

11. The NWPPC has tied the completion of WNP-1 to the completion of WNP-3. According to NWPPC the most likely completion date for WNP-1 would be 1996. (NWPPC meeting November 4, 1983, Portland, Oregon.);

12. Therefore the completion date for WNP-1 is uncertain and no good cause exists for extending the completion date to June, 1991;

13. The Applicant stated in its January 11, 1983 letter to NRC:

> The actual length of the delay will depend on regional energy demand considerations.

On August 17, 1983 the BPA issued its power forecast showing a decline in regional energy demand by 900 average megawatts over its 1982 forecast (Attachment B to Coalition Response to Motions For Summary Disposition);

14. Given this fact no need for WNP-1 exist and the requested extension to June, 1991 is unreasonable;

15. Due to the facts stated above it is my conclusion that good cause did not exist for the deferral of WNP-1, that such deferral was dilatory, that good cause does not exist to extend the construction permit and that the requested extension is for an unreasonable period of time.

Eugene Rosolie

Eugene Rosolie, Director
Coalition For Safe Power

SUBSCRIBED and sworn to before me this 13 day of December 1983.

Frances Lee Holaday

Notary Public
My commission expires: March 31, 1984

EUGENE ROSOLIE

PROFESSIONAL QUALIFICATIONS

I am Director of the Coalition for Safe Power. I have held that position since 1976. My responsibilities include oversight of the operation of the organization. Specifically I am responsible for overseeing litigation before the Nuclear Regulatory Commission, the Oregon Public Utility Commissioner and any other cases which may arise. I am also responsible for the financial matters of the organization.

As Director of the Coalition, I appear before federal, state and local government agencies to present the views of the organization. I also make numerous appearances before civic organizations.

I was a witness for the Coalition before the Oregon Public Utility Commissioner in UM-13 and as such was responsible for presenting testimony on the prudence of utility investments into the Skagit/Hanford Nuclear Projects.

I received a Bachelor of Science degree in Economics from Portland State University, Portland, Oregon.

MEMO ROUTE SLIP

Form AEC-95 (Rev. May 14, 1947) AECM 0240

	See me about this.		For concurrence.		For action.
	Note and return.		For signature.		For information.

TO (Name and unit)	INITIALS	REMARKS
Ray Carnall		
	DATE	As per our Conversation

TO (Name and unit)	INITIALS	REMARKS
	DATE	

TO (Name and unit)	INITIALS	REMARKS
	DATE	

FROM (Name and unit)	REMARKS
Helen Sears	— HS.

PHONE NO.	DATE
~~7791~~	8/9/72

USE OTHER SIDE FOR ADDITIONAL REMARKS

GPO 1968 O—294-619

Washington

LINE NO.	ITEM	PUBLIC UTILITY DISTRICT NO. 1 OF CHELAN COUNTY (A)	PUBLIC UTILITY DISTRICT NO. 1 OF CHELAN COUNTY (B)	CHENEY	ELLENSBURG	PUBLIC UTILITY DISTRICT NO. 1 OF FERRY COUNTY	PUBLIC UTILITY DISTRICT NO. 1 OF FRANKLIN COUNTY	PUBLIC UTILITY DISTRICT NO. 1 OF GRANT COUNTY	PUBLIC UTILITY DISTRICT NO. 1 OF GRAYS HARBOR COUNTY	LINE NO.
	Fiscal year ends	DECEMBER 31	DECEMBER 31	DECEMBER 31	DECEMBER 31	DECEMBER 31	DECEMBER 31	DECEMBER 31	DECEMBER 31	
	BALANCE SHEET									
	Assets and other debits:	$	$	$	$	$	$	$	$	
1	Electric utility plant	60 608 884	221 129 746	1 241 740	2 713 784	3 069 265	9 708 859	25 214 549	19 563 136	1
2	Accumulated provisions for depreciation and amortization	7 632 606	6 713 360	380 665	722 541	991 663	2 727 618	9 456 809	3 115 795	2
3	Net electric utility plant	52 976 278	214 416 386	861 075	1 990 243	2 077 602	6 979 241	15 757 740	16 447 341	3
4	Other utility plant									4
5	Accumulated provisions for depreciation and amortization									5
6	Net other utility plant									6
7	Total utility plant	60 608 884	221 129 746	1 241 740	2 713 784	3 069 265	9 708 859	25 214 549	19 563 136	7
8	Accumulated provisions for depreciation and amortization	7 632 606	6 713 360	380 665	722 541	991 663	2 727 618	9 456 809	3 115 795	8
9	Net Total Utility Plant	52 976 278	214 416 386	861 075	1 990 243	2 077 602	6 979 241	15 757 740	16 447 341	9
10	Investment and fund accounts less reserves	14 262 663	67 909 404	18 603	290 247	136 669	291 478	1 141 653	1 289 070	10
11	Current and accrued assets less reserves	2 259 588	3 457 890	200 283	300 547	125 604	933 683	5 299 932	1 923 334	11
12	Deferred debits	4 805 534	23 880 545	1 404	7 611	33 716	343 508	566 927	1 093 819	12
13	TOTAL ASSETS AND OTHER DEBITS	74 304 063	309 664 225	1 081 365	2 588 649	2 371 651	8 547 910	22 746 157	20 753 574	13
	Liabilities and other credits:									
14	Investment of municipality			136 412						14
15	Constructive surplus or deficit									15
16	Earned surplus	3 968 732	12 133 071	902 063	2 316 102	369 239	4 706 492	18 365 241	407 758	16
17	Total Investment and Surplus	3 968 732	12 133 071	1 038 474	2 316 102	369 239	4 706 492	18 365 241	407 758	17
18	Long-term debt	67 316 000	288 595 698		150 000	1 925 504	3 185 000	1 870 000	19 330 000	18
19	Current and accrued liabilities	1 679 152	8 686 860	41 619	100 181	46 694	298 519	1 971 580	1 015 816	19
20	Deferred credits	1 115 049	62 592			1 442	90 793	208 689		20
21	Operating reserves			1 272				77 432		21
22	Contributions in aid of construction	225 130	186 004		22 386	78 692	267 106	254 815		22
23	TOTAL LIABILITIES AND OTHER CREDITS	74 304 063	309 664 225	1 081 365	2 588 649	2 371 651	8 547 910	22 746 157	20 753 574	23
	INCOME ACCOUNT									
	Electric utility operating income:	$	$	$	$	$	$	$	$	
24	Operating revenues	4 869 941	17 469 093	406 440	855 001	378 546	2 282 081	7 670 144	1 277 029	24
25	Operation expenses	914 395	1 523 710	246 127	470 612	176 411	1 306 651	4 986 947	76 212	25
26	Maintenance expenses	312 731	326 465		24 389	22 656	69 532	459 695		26
27	Depreciation and amortization	711 327	1 014 782	35 089	89 145	86 844	267 510	866 316	313 658	27
28	Taxes and tax equivalents	280 914	918 250	34 148	73 568	25 290	184 361	627 148	50 415	28
29	Total operating expenses	2 219 367	3 783 207	317 364	662 715	311 191	1 823 054	6 940 306	440 525	29
30	Net operating revenues	2 650 574	13 685 886	89 076	192 287	67 355	459 027	729 838	836 504	30
31	Income from electric plant leased to others									31
32	Electric Utility Operating Income	2 650 574	13 685 886	89 076	192 287	67 355	459 027	729 838	836 504	32
33	Other utility operating income									33
34	Total utility operating income	2 650 574	13 685 886	89 076	192 287	67 355	459 027	729 838	836 504	34
35	Other income	523 142	1 290 282	4 413	71 723	3 730	25 870	259 274	112 273	35
36	Gross Income	3 173 716	14 976 168	93 489	214 010	71 085	484 897	989 112	948 777	36
	Income deductions:									
37	Interest on long-term debt	2 414 662	12 497 300		6 657	38 163	116 427	48 115	730 442	37
38	Interest charged to construction – Cr.									38
39	Other income deductions		476 701	8 145	24 603	4 447	5 844	2 643	77 340	39
40	Total income deductions	2 414 662	12 974 001	8 145	31 260	42 610	122 271	50 758	807 782	40
41	Net Income	759 054	2 002 167	85 344	182 750	28 475	362 626	938 354	140 995	41
	ELECTRIC OPERATING REVENUES									
	Number of customers:									
42	Residential			1 807	3 690	1 209	7 139	23 715		42
	Commercial and industrial:									
43	Small (or commercial)			290	752	159	2 119	2 572		43
44	Large (or industrial)			1	1	3	7	7		44
45	Other ultimate consumers	2		6	2	1	11	39		45
46	Total ultimate consumers	2		1 804	4 444	1 374	9 271	26 333		46
47	Resale	4	6					3	1	47
48	Total Customers	6	6	1 804	4 444	1 374	9 271	26 336	1	48
	Kilowatt-hour sales (thousands):									
49	Residential			24 247	44 486	13 191	114 178	433 475		49
	Commercial and industrial:									
50	Small (or commercial)			15 879	145 133	2 334	116 690	132 018		50
51	Large (or industrial)			2 784		9 718	18 814	1 034 651		51
52	Other ultimate consumers	214		1 361	2 259	106	2 402	11 084		52
53	Total sales to ultimate consumers	214		52 270	91 839	25 349	252 074	1 611 235		53
54	For resale	1 902 722	4 630 722					3 134	233 419	54
55	TOTAL KILOWATT-HOUR SALES	1 902 936	4 630 722	52 270	91 839	25 349	252 074	1 614 369	233 419	55
	Revenues:	$	$	$	$	$	$	$	$	
56	Residential			229 719	414 430	202 174	1 068 888	3 414 085		56
	Commercial and industrial:									
57	Small (or commercial)			144 658	383 959	49 863	967 517	1 307 893		57
58	Large (or industrial)			18 484		117 633	108 894	2 636 445		58
59	Other ultimate consumers	206		9 297	15 775	2 626	90 334	138 114		59
60	Total revenues from ultimate consumers	206		402 158	814 172	372 296	2 235 633	7 501 039		60
61	From sales for resale	4 639 680	17 394 691					16 234	1 277 029	61
62	TOTAL REVENUES FROM SALES OF ELECTRICITY	4 639 886	17 394 691	402 158	814 172	372 296	2 235 633	7 517 273	1 277 029	62
63	Other electric revenues	30 055	74 402	4 282	40 829	6 049	46 448	152 871		63
64	TOTAL ELECTRIC OPERATING REVENUES	4 869 941	17 469 093	406 440	855 001	378 345	2 282 081	7 670 144	1 277 029	64
	ELECTRIC UTILITY PLANT									
	Electric plant in service:	$	$	$	$	$	$	$	$	
65	Intangible plant				1	51	23 502	122 454	18 401	65
	Production plant:									
66	Steam							4 576 043		66
67	Hydraulic	55 160 280	206 311 532						18 782 230	67
68	Internal combustion engine									68
69	Total Production Plant	55 160 280	206 311 532					4 576 043	18 782 230	69
70	Transmission plant	5 259 776	10 432 620			281 000		1 614 635	762 505	70
71	Distribution plant			1 241 740	2 137 174	2 488 041	7 398 266	15 050 151		71
72	General plant	191 530	2 315 441		403 437	233 423	1 127 324	2 654 370		72
73	TOTAL ELECTRIC PLANT IN SERVICE	60 608 884	219 059 593	1 241 740	2 540 567	3 012 523	8 549 092	24 217 653	19 563 136	73
74	Electric plant leased to others									74
75	Construction work in progress	38 288	2 070 153		57 492	56 742	84 153	413 791		75
76	Electric plant held for future use									76
77	Electric plant acquisition adjustments				116 725		949 224	130 691		77
78	TOTAL ELECTRIC UTILITY PLANT	60 647 172	221 129 746	1 241 740	2 713 784	3 069 265	9 582 469	24 762 135	19 563 136	78
79	Accumulated provisions for depreciation and amortization	7 632 606	6 713 360	380 665	722 541	991 663	2 727 618	9 456 809	3 115 795	79
80	NET ELECTRIC UTILITY PLANT	53 014 566	214 416 386	861 075	1 991 243	2 077 602	6 854 851	15 305 326	16 447 341	80

FPC Form 1-M
Rev (12-69)

Form Approved.
Budget Bureau No. 54-R072

MUNICIPAL ELECTRIC UTILITIES

(Having Annual Electric Revenues of $250,000 or More)

ANNUAL REPORT

OF

Hanford Number One Electric Steam Generating Project

Washington Public Power Supply System

(Exact legal name of respondent)

TO THE

FEDERAL POWER COMMISSION

FOR THE

YEAR ENDED August 31 19 71

FPC Form 1-M
Municipal utilities, annual electric revenues of $250,000 or more

ANNUAL REPORT TO THE FEDERAL POWER COMMISSION

For the Year Ended August 31, 19 71

OF

Washington Public Power Supply System
(Exact legal name of respondent)

P.O. Box 6510, 132 Vista Way Kennewick, Washington 99336
(Address of principal business office at end of year)

GENERAL INSTRUCTIONS

An original and three conformed copies of this report form, completed in the best manner possible from available records and verified, shall be filed with the Federal Power Commission, Washington D.C., 20426, on or before the last day of the third month following the close of the calendar or other established fiscal year, by each municipality which is engaged in the generation, transmission or distribution of electricity, and whose annual electric operating revenues amount to $250,000 or more.

One copy of the report should be retained by the respondent in its files. The conformed copies may be carbon copies. If the respondent publishes financial and operating statements of its utility department submit three copies of such statements with this report. If the respondent maintains a one line geographic map or schematic diagram of its principal lines and substations, one copy should be submitted with this report.

Account numbers and titles used in the schedules herein relate to account numbers and titles in the Uniform System of Accounts Prescribed for Public Utilities and Licensees (Class A and Class B). A copy of this system will be furnished upon request for the information and guidance of respondent in the preparation of this annual report.

EXCERPTS FROM THE LAW
(Federal Power Act, 16 U. S. C., 791a-825r)

"Sec. 3. The words defined in this section shall have the following meanings for purposes of this Act, to wit: * * * "municipality" means a city, county, irrigation district, drainage district, or other political subdivision or agency of a State competent under the laws thereof to carry on the business of developing, transmitting, utilizing, or distributing power; * * *"

"Sec. 311. In order to secure information necessary or appropriate as a basis for recommending legislation, the Commission is authorized and directed to conduct investigations regarding the generation, transmission, distribution, and sale of electric energy, however produced, throughout the United States and its possessions, whether or not otherwise subject to the jurisdiction of the Commission, including the generation, transmission, distribution, and sale of electric energy by any agency, authority, or instrumentality of the United States, or of any State or municipality or other political subdivision of a State. It shall, so far as is practicable, secure and keep current information regarding the ownership, operation, management, and control of all facilities for such generation, transmission, distribution, and sale; the capacity and output thereof and the relationship between the two; the cost of generation, transmission, and distribution; the rates, charges, and contracts in respect of the sale of electric energy and its service to residential, rural, commercial, and industrial consumers and other purchases by private and public agencies; * * *"

GENERAL INFORMATION

1. Name, title, address and telephone number (including area code) of the person to be contacted concerning this report. Paul E. Cox, Controller - P.O. Box 6510 132 Vista Way
Kennewick, Washington 99336 509-783-6141

2. State the classes of utility and other services furnished by respondent during the year.
Electrical energy production - wholesale only

Annual report of Hanford No. 1 Year ended August 31 ,19 71

BALANCE SHEET - End of Year

Line No.	Assets and Other Debits	Amount (a)	Liabilities and Other Credits	Amount (b)
1	UTILITY PLANT	$	INVESTMENT OF MUNICIPALITY & SURPLUS	$
2	Utility Plant	68,097,632	Investment of Municipality (c)	
3	Less Accumulated Provision for		Constructive Surplus or Deficit (d).....	
4	Deprec. & Amortization	10,836,377	Earned Surplus (e)	
5	Net Utility Plant	57,261,255	Total Investment & Surplus	
6	INVESTMENTS		LONG-TERM DEBT	
7	Nonutility Property (less Accum.		Bonds	78,145,000
8	prov. for Deprec. and		Advances from Municipality (f)	
9	Amortization $ .....)		Other Long-Term Debt	
10	Advances to Municipality (a) ...		Total Long-Term Debt	78,145,000
11	Investments & Special Funds ...	11,857,050	CURRENT AND ACCRUED LIABILITIES	
12	Total Investments	11,857,050	Warrants Payable	20,705
13	CURRENT AND ACCRUED ASSETS		Notes and Accounts Payable	1,836,723
14	Cash & Working Funds	8,363,036	Payables to Municipality (g)	
15	Temp. Cash Investments		Customer Deposits	
16	Notes & Accts. Receivable		Taxes Accrued	71,466
17	(less Accum. Prov. for		Interest Accrued	
18	Uncoll. Accounts $.....)	1,980,013	Misc. Current & Accrued Liabilities	1,981,975
19	Receivables from Municipality (b).		Total Current & Accrued Liabilities.	3,910,869
20	Materials & Supplies	218,369	DEFERRED CREDITS	
21	Prepayments	253,060	Unamortized Premium on Debt	
22	Misc. Current & Accrued Assets..	2,563,605	Customer Advances for Construction	
23	Total Current & Accrued Assets.	13,378,083	Other Deferred Credits	12,612,248
24	DEFERRED DEBITS		Total Deferred Credits	12,612,248
25	Unamort. Debt Discount & Expense.		OPERATING RESERVES	
26	Extraordinary Property Losses ..		Property Insurance Reserve	
27	Miscellaneous Deferred Debits ..	12,192,652	Injuries and Damages Reserve	
28	Total Deferred Debits	12,192,652	Pensions and Benefits Reserve	
29	.....		Miscellaneous Operating Reserves	
30	.....		Total Operating Reserves	
31	.....			
32	.....		CONTRIBUTIONS IN AID OF CONSTRUCTION	
33	.....		Contributions in Aid of Construction ...	20,923
34	.....			
35	TOTAL ASSETS & OTHER DEBITS..	94,689,040	TOTAL LIABILITIES & OTHER CREDITS...	94,689,040

(Footnotes on page 4).

Annual report of Hanford No. 1 Year ended August 31 ,1971

CONDENSED INCOME STATEMENT - For the Year

Line No.	Item (a)	Amount (b)
	Electric utility operating income:	$
1	Operating revenues	9,525,692
2	Operation expenses	4,925,799
3	Maintenance expenses	359,120
4	Depreciation and amortization	2,779,013
5	Taxes and tax equivalents	24,877
6	Total electric operating expenses	8,088,809
7	Net operating revenues	1,436,883
8	Income from plant leased to others	
9	Electric utility operating income	1,436,883
10	Other utility operating income (utility departments other than electric - specify)	
11		
12	Total utility operating income	1,436,883
13	*Other income Interest	651,685
14	Interest charged to construction	399,968
15	Gross income	2,488,536
	Income deductions:	
16	Interest on long-term debt	2,403,907
17	*Other income deductions (see sch. pg. 4, Exp. for Cert. Civic, Political & Rel. Activities)	
18	Total income deductions	2,403,907
19	Income before extraordinary items	2,403,907
20	Extraordinary income (see footnote (i) page 4)	
21	Extraordinary deductions (see footnote (i) page 4)	
22	Net income	84,629

EARNED SURPLUS

Line No.	Item (a)	Amount (b)
31	Balance beginning of year	$ -0-
32	Amount transferred from income account	84,629
33	*Miscellaneous credits Amortized Profit on Reacquisition of Revenue Bonds	54,136
34	Write-up of U.S. Gov't Securities	261,203
35	Authorized cash distribution to municipality (see note (h) on page 4)	
36	*Miscellaneous debits	
37	Amount Transferred to Due Power Purchasers	399,968
38	Balance end of year	-0-

ELECTRIC SALES DATA FOR THE YEAR

Line No.	Class of Service (a)	Revenues (b)	Kilowatt-hours (c)	Avg. No. of Customers 2/ (d)
41	Residential sales	$		
	Commercial and industrial sales :			
42	Small (or Commercial) see 1/ below			
43	Large (or Industrial) see 1/ below			
44	Public street and highway lighting			
45	Other sales to ultimate consumers			
46	Total sales to ultimate consumers			
47	Sales for resale			
48	Total sales of electric energy	See Note (A) page 22		
49	Other electric revenues		xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx
50	Total electric operating revenues		xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx

1/ Classification of Commercial and Industrial sales according to Small (or Commercial) and Large (or Industrial) may be according to the basis of classification regularly used by the respondent. However, if such regularly used classification is based on demand and the division between small and large is in excess of 1000 kw demand then for purposes of this report the classification shall be small, 1000 kw demand or less, and large, demand in excess of 1000 kw.

2/ Number of customers should be reported on the basis of number of meters, plus number of flat rate accounts, except that where separate meter readings are added for billing purposes, one customer shall be counted for each group of meters so added. The average number of customers means the average of the 12 figures at the close of each month. If the customer count in the residential service classification includes customers counted more than once because of special services, such as water heating, etc., indicate in a footnote the number of such duplicate customers included in the classification.

* Explain significant amounts.

Rev (12-61)

Annual report of Hanford No. 1 Year ended August 31 ,19 71

EXPENDITURES FOR CERTAIN CIVIC, POLITICAL AND RELATED ACTIVITIES

1. Report below all expenditures incurred by the respondent during the year for the purpose of influencing public opinion with respect to the election or appointment of public officials, referenda, legislation, or ordinances (either with respect to the possible adoption of new referenda, legislation or ordinances or repeal or modification of existing referenda, legislation or ordinances) or approval, modification, or revocation of franchises; or for the purpose of influencing the decisions of public officials, but shall not include such expenditures which are directly related to appearances before regulatory or other governmental bodies in connection with the reporting utility's existing or proposed operations.
2. Advertising expenditures included in this Schedule shall be classified according to subheadings, as follows: (a) radio, television, and motion picture advertising; (b) newspaper, magazine, and pamphlet advertising; (c) letters or inserts in customers' bills; (d) inserts in reports to stockholders; (e) newspaper and magazine editorial services; and (f) other advertising.
3. Expenditures within the definition of Instruction (1), other than advertising shall be reported according to captions or descriptions, clearly indicating the nature and purpose of the activity.
4. If respondent has not incurred any expenditures contemplated by Instruction (1), so state.
5. For reporting years which begin during the calendar year 1964 only, minor amounts may be grouped by classes if the number of items so grouped is shown.

Line No.	Item (a)	Amount (b)
1		$
2		
3		
4		
5	NONE	
6		
7		
8		
9		
10		

THE FOLLOWING EXPLANATIONS ARE FURNISHED FOR THE INFORMATION OF PERSONS NOT FAMILIAR WITH THE ACCOUNTS INDICATED.

(a) ADVANCES TO MUNICIPALITY, This account is designed to include the amount of loans and advances made by the utility department to the municipality or its other departments, when such loans or advances are subject to repayment but not subject to current settlement.

(b) RECEIVABLES FROM MUNICIPALITY, This account is designed to include all charges by the utility department against the municipality or its other departments which are subject to current settlement.

(c) INVESTMENT OF MUNICIPALITY This account is designed to include the investment of the municipality in its utility department, when such investment is not subject to cash settlement on demand or at a fixed future time. Include herein the cost of debt-free utility plant constructed or acquired by the municipality and made available for use of the utility department, cash transferred to the utility department for working capital, and other expenditures of an investment nature.

(d) CONSTRUCTIVE SURPLUS OR DEFICIT, This account is designed to include amounts representing the exchange of services, supplies, etc., between the utility department and the municipality and its other departments without charge or at a reduced charge. Charges to this account would include utility and other services, supplies, etc., furnished by the utility department to the municipality or its other departments without charge, or the amount of the reduction if furnished at a reduced charge. Credits to the account would consist of services, supplies, office space, etc., furnished by the municipality to the utility department without charge or the amount of the reduction if furnished at a reduced charge.

(e) EARNED SURPLUS, This account is designed to include the balance, either debit or credit, of appropriated or unappropriated surplus of the utility department arising from earnings.

(f) ADVANCES FROM MUNICIPALITY, This account is designed to include the amount of loans and advances made by the municipality or its other departments to the utility department when such loans and advances are subject to repayment but not subject to current settlement.

(g) PAYABLES TO MUNICIPALITY, This account is designed to include amounts payable by the utility department to the municipality or its other departments which are subject to current settlement.

(h) AUTHORIZED CASH DISTRIBUTION TO MUNICIPALITY, This account is designed to include the cash distributions authorized to be made to the municipality out of the earned surplus of the utility department.

(i) EXTRAORDINARY INCOME (DEDUCTIONS), These accounts are designed to include those items related to transactions of a nonrecurring nature which are not typical or customary business activities of the utility and which would significantly distort the current year's net income if reported other than as extraordinary items.

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SALES OF ELECTRICITY FOR RESALE

(ADP Code 041)

1. Report below the information called for concerning sales during year to other electric utilities, cooperatives, and to cities or other public authorities for distribution to ultimate consumers.
2. For each sale designate statistical classification in column (b) thus: FP, for firm power supplying total system requirements of customer or total requirements at a specific point of delivery; FP(P), for firm power supplementing customer's own generation or other purchases; O, for other power. Note: Include in the O classification sales in which the power delivered cannot be classified under either of the above definitions.
3. The number of kilowatt-hours sold should be the quantities shown on the bills rendered.

Line No.	Sales to (a)	Statistical Classification (b)	Point of Delivery (c)	Voltage (d)	Kilowatt-hours (e)	Annual Maximum Demand 1/ (f)	Revenues Amount (g)	Revenues Per Kwh (h)
							$	Cents
1 2 3 4 5 6 7	See Note (A) page 22							

OPERATION AND MAINTENANCE EXPENSES

(ADP Code 050)

Line No.	Item (a)	Operation (b)	Maintenance (c)	Total (d)
	Production expenses:	$	$	$
11	Steam power generation	4,286,421	325,460	4,611,881
12	Nuclear power generation			
13	Hydraulic power generation			
14	Other power generation (specify)			
15	Purchased power			
16	Other production expenses			
	Total production expenses:	4,286,421	325,460	4,611,881
17	Transmission expenses	12,103	29,775	41,878
18	Distribution expenses			
19	Customer accounts penses			
20	Sales expenses			
21	Administrative & general expenses	627,275	3,885	631,160
22	TOTAL ELECT. OPERATION & MAINT. EXPENSES	4,925,799	359,120	5,284,919

PURCHASED POWER

(ADP Code 052)

1. Report below the information called for concerning power purchased for resale during the year.
2. The number of kilowatt-hours purchased should be the quantities shown on the bills rendered.
3. Interchange transactions should be reported net in this schedule whether the net is a receipt or a delivery by respondent. Indicate such transactions with an asterisk.

Line No.	Purchased From (a)	Point of Receipt (b)	Voltage (c)	Kilowatt-hours (d)	Annual Maximum Demand 1/ (e)	Cost Amount (f)	Cost Per kwh (g)
						$	Cents
31 32 33 34 35 36 37 38 39	NONE						

1/ Kw or kva (specify which).

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UTILITY PLANT

Line No.	Item (a)	Balance Beginning of Year (b)	Additions During Year (c)	Retirements During Year (d)	Transfers and Adjustments (e)	Balance End of Year (f)
	Electric Utility Plant:	$	$	$	$	$
	Electric Plant in Service:					
1	Intangible Plant					
	Production Plant:					
2	Steam Production	Plant not unitized				
3	Nuclear Production					
4	Hydraulic Production					
5	Other Production (specify)					
6	Total Production Plant					
7	Transmission Plant					
8	Distribution Plant					
9	General Plant					
10	Total Electric Plant in Service ..					
11	Electric Plant Leased to Others					
12	Construction Work in Progress-Electric,	68,060,559				68,097,632
13	Electric Plant Held for Future Use.....					
14	*Electric Plant Acquisition Adjustments,					
15	Total Electric Plant	68,060,559				68,097,632
16	Plant of Other Utility Depts. (specify)..					
17	.....					
18	Total Utility Plant	68,060,559				68,097,632

* This account is designed to include the difference between (a) the cost to the respondent utility of electric plant acquired as an operating unit or system by purchase and (b) the depreciated original cost, estimated if not known, of such property.

ACCUMULATED PROVISIONS FOR DEPRECIATION OF UTILITY PLANT

Line No.	Name of Utility Department (a)	Balance Beginning of Year (b)	Depreciation Accruals for Year (c)	Net Charges for Plant Retired During Year (d)	Other Items Debit or Credit (Explain) (e)	Balance End of Year (f)
21	Electric	$ 8,544,899	$ 2,291,478	$	$	$ 10,836,377
22	Other utility department (specify)					
23	.....					
24	.....					
25	Total	8,544,899	2,291,478			10,836,377

LONG-TERM DEBT

Line No.	Class and Series of Obligation (a)	Nominal Date of Issue (b)	Date of Maturity (c)	Outstanding per Balance Sheet (d)	Interest for Year Rate (e)	Interest for Year Amount (f)
				$		$
31						
32						
33	See attached Schedule					
34						
35						
36						
37						
38						
39						
40						

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STATEMENT OF BONDED DEBT

HANFORD PROJECT ELECTRIC REVENUE BONDS, SERIES OF 1963

HANFORD PROJECT OF
WASHINGTON PUBLIC POWER SUPPLY SYSTEM

August 31, 1971

Redemption on September 1, of:	Balance of Principal	Interest Rate	Annual Interest Fiscal Year	Annual Interest Amount	Annual Debt Requirement
1971	$ 5,135,000	2.6	1971	$ 2,403,905	$ 7,538,905
1972	2,205,000	2.6	1972	2,270,395	4,475,395
1973	1,430,000	2.7	1973	2,213,065	3,643,065
1974	1,150,000	2.75	1974	2,174,455	3,324,455
1975	1,130,000	2.8	1975	2,142,830	3,272,830
1976	2,200,000	2.8	1976	2,111,190	4,311,190
1977	2,510,000	2.9	1977	2,049,590	4,559,590
1978	2,635,000	2.9	1978	1,976,800	4,611,800
1979	2,710,000	3.0	1979	1,900,385	4,610,385
1980	2,810,000	3.0	1980	1,819,085	4,629,085
1981	2,915,000	3.1	1981	1,734,785	4,649,785
1982	2,915,000	3.1	1982	1,644,420	4,559,420
1983	3,010,000	3.1	1983	1,554,055	4,564,055
1984	3,125,000	3.1	1984	1,460,745	4,585,745
1985	3,240,000	3.1	1985	1,363,870	4,603,870
1986	3,255,000	3.1	1986	1,263,430	4,518,430
1987	3,360,000	3.25	1987	1,162,525	4,522,525
1988	3,485,000	3.25	1988	1,053,325	4,538,325
1989	3,455,000	3.25	1989	940,062	4,395,062
1990	5,065,000	3.25	1990	827,775	5,892,775
1991	5,585,000	3.25	1991	663,162	6,248,162
1992	5,835,000	3.25	1992	481,650	6,316,650
1993	6,060,000	3.25	1993	292,012	6,352,012
1994	2,925,000	3.25	1994	95,062	3,020,062
	$78,145,000				

TAXES, TAX EQUIVALENTS, CONTRIBUTIONS AND SERVICES DURING YEAR

1. Report below the information called for respecting contributions and services to the municipality or other government units by the electric utility and, conversely, by those bodies to the electric utility. Do not include: (a) loans and advances which are subject to repayment or which bear interest, (b) payments in retirement of loans or advances previously made, (c) contributions by the municipality of funds or property which are of the nature of investment in the electric utility department.
2. Enter in column (c) the total contributions made or received. Show in column (d) amounts included in column (c) which have been accounted for in the respondent's financial statements, i.e., balance sheet, income account, earned surplus, operating revenues, operating expenses, etc., and in column (e) show amounts which are not accounted for in respondent's financial statements. For those amounts not included in respondent's financial statements, explain in a footnote the reason for their omission.
3. Taxes included in this schedule should be limited to those amounts chargeable to operations of the electric utility department. Exclude gasoline and other sales taxes which are included in the cost of transportation and materials.
4. Tax equivalents included in this schedule should be amounts which are understood to constitute payments equivalent to or in lieu of amounts which would be paid if the electric utility department were subject to local tax levies.

Line No.	Item (a)	kwh 1,000's (b)	Amount of Contribution or Value of Services: Total (c)	Included in Financial Statements (d)	Not included in Financial Statements (e)
	By the Electric Utility to the Municipality or Other Government Units:		$	$	$
1	Taxes	xxxxxxxxxxxxx	24,877	24,877	
2	Tax equivalents	xxxxxxxxxxxxx			
3	To general funds of the municipality	xxxxxxxxxxxxx			
4	Other (specify*)	xxxxxxxxxxxxx			
5		xxxxxxxxxxxxx			
6	Total contributions	xxxxxxxxxxxxx	24,877	24,877	
7	Street and highway lighting				
8	Municipal pumping				
9	Other municipal light and power				
10	Other electric service				
11	Nonelectric service (specify*)	xxxxxxxxxxxxx			
12		xxxxxxxxxxxxx			
13	Total services				
14	Total contributions and services by the electric utility		24,877	24,877	
	By the Municipality or Other Government Units to the Electric Utility:				
15	For operations and property maintenance				
16	Other (specify*)				
17					
18	Total contributions				
19	Office space				
20	Water				
21	Engineering service				
22	Legal service				
23	Other service (specify*)				
24					
25	Total services				
26	Total contributions and services by the municipality				
27	Net Contributions and Services by the Electric Utility to the Municipality or Other Government Units (line 14 minus line 26)		24,877	24,877	

* Use insert sheet if necessary.

Annual report of Hanford No. 1 Year ended Aug. 31, 1971

STEAM-ELECTRIC GENERATING PLANT STATISTICS (Large Plants)

1. Large plants are steam plants of 25,000 kw. or more of installed capacity (name plate rating). Include gas-turbine and internal combustion plants of 10,000 kw. and more in this schedule. Include nuclear plants.

2. If any plant is leased or operated as a joint facility, indicate such facts by the use of asterisks and footnotes.

3. If net peak demand for 60 minutes is not available, give that which is available, specifying period.

4. If a group of employees attends more than one generating plant, report on line 11 the approximate average number of employees assignable to each plant.

5. If gas is used and purchased on a therm basis, the B.t.u. content of the gas should be given and the quantity of fuel burned converted to M cu. ft. (14.73 psia at 60 °F).

6. Quantities of fuel burned (line 38) and average cost per unit of fuel burned (line 41) should be consistent with charges to expense accounts 501 and 547 (line 42) as shown on line 21.

7. If more than one fuel is burned in a plant furnish only the composite heat rate for all fuels burned.

8. The items under cost of plant represents accounts or combinations of accounts prescribed by the Uniform System of Accounts. Production

Line No	Item (a)	Plant Name: (b)	(c)
1	Kind of plant (steam, internal combustion, gas turbine or nuclear)	Nuclear	
2	Type of plant construction (conventional, outdoor boiler, full outdoor, etc.)	Generating only - Purchase Nuclear steam	
3	Year originally constructed	1966	
4	Year last unit was installed	1966	N/A
5	Total installed capacity (maximum generator name plate ratings in kw.)	842,000	
6	Net peak demand on plant—kw. (60 minutes)	860,000	
7	Plant hours connected to load	4,663.38	
8	Net continuous plant capability, kilowatts:		
9	(a) When not limited by condenser water	860,000	
10	(b) When limited by condenser water	Not limited	
11	Average number of employees	41	
12	Net generation, exclusive of plant use	1,690,858,000	
13	Cost of plant:		
14	Land and land rights		
15	Structures and improvements	Plant not yet unitized	
16	Equipment costs		
17	Total cost Const. Wk. in Progress	68,097,632	
18	Cost per net kw. of installed capacity (Line 5)	891	
19	Production expenses:		
20	Operation supervision and engineering	60,381	
21	Fuel		
22	Coolants and water (nuclear plants only)	54,737	
23	Steam expenses		
24	Steam from other sources	3,712,331	
25	Steam transferred (Cr.)		
26	Electric expenses	219,048	
27	Misc. steam power expenses (or nuclear)	239,914	
28	Rents	10	
29	Maintenance supervision and engineering	46,270	
30	Maintenance of structures	52,940	
31	Maintenance of boiler plant (or reactor plant)	73,898	
32	Maintenance of electric plant	143,170	
33	Maintenance of misc. steam plant (or nuclear)	9,182	
34	Total production expenses	4,611,881	
35	Expenses per net kwh. (Mills—2 places)	2.73	
36	Fuel: Kind	Coal / Gas / Oil	Coal / Gas / Oil
37	Unit: (Coal—tons of 2,000 lb.) (Oil—barrels of 42 gals.) (Gas—M cu. ft.) (Nuclear, indicate)	The System purchases excess steam from the U. S. Atomic Energy Commission New Production Reactor. This reactor is used for the production of weapons grade plutonium. The fueling costs are classified.	
38	Quantity (units) of fuel burned		
39	Average heat content of fuel burned (B.t.u. per lb. of coal, per gal. of oil, or per cu. ft. of gas)		
40	Average cost of fuel per unit, as delivered f.o.b. plant during year		
41	Average cost of fuel per unit burned		
42	Avg. cost of fuel burned per million B.t.u.		
43	Avg. cost of fuel burned per kwh. net gen.		
44	Average B.t.u. per kwh. net generation		

STEAM-ELECTRIC GENERATING PLANT STATISTICS (Large Plants) (Continued)

expenses do not include Purchased Power, System Control and Load Dispatching, and Other Expenses classified as "Other Power Supply Expenses."

9. For I.C. and G.T. plants report Operating Expenses, Acc'ts. Nos. 548 and 549 on line 26 "Electric Expenses," and Maintenance Acc'ts. Nos. 553 and 554 on line 32 "Maintenance of Electric Plant." Indicate plants designed for peak load service. Designate automatically operated plants.

10. If any plant is equipped with combinations of steam, hydro, internal combustion or gas turbine equipment, each should be reported as a separate plant. However, if a gas turbine unit functions in a combined cycle operation with a conventional steam unit, the gas turbine should be included with the steam plant.

11. If the respondent operates a nuclear power generating plant append: (a) a brief explanatory statement concerning accounting for the cost of power generated including any attribution of excess costs to research and development expenses; (b) a brief explanation of the fuel accounting specifying the accounting methods and types of cost units used with respect to the various components of the fuel cost, and (c) such additional information as may be informative concerning the type of plant, kind of fuel used, and other physical and operating characteristics of the plant.

(d)	(e)	(f)	Line No.
N/A	N/A	N/A	1
			2
			3
			4
			5
			6
			7
			8
			9
			10
			11
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			33
			34
			35

Coal	Gas	Oil	Coal	Gas	Oil	Coal	Gas	Oil	Line No.
									36
									37
									38
									39
									40
									41
									42
									43
									44

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HYDROELECTRIC GENERATING PLANT STATISTICS (Large Plants)

1. Large plants are hydro plants of 10,000 kw. or more of installed capacity (name plate ratings).

2. If any plant is leased, operated under a license from the Federal Power Commission, or operated as a joint facility, indicate such facts by the use of asterisks and footnotes. If licensed project give project number.

3. If net peak demand for 60 minutes is not available, give that which is available, specifying period.

4. If a group of employees attends more than one generating plant, report on line 11 the approximate average number of employees assignable to each plant.

Line No.	FPC Licensed Project No. and Plant Name: Item (a)	(b)	(c)
1	Kind of plant (run-of-river or storage)	N/A	N/A
2	Type of plant construction (conventional or outdoor)		
3	Year originally constructed		
4	Year last unit was installed		
5	Total installed capacity (generator name plate ratings in kw.)		
6	Net peak demand on plant—kilowatts (60 minutes)		
7	Plant hours connected to load		
8	Net plant capability, kilowatts:		
9	(a) Under the most favorable oper. conditions		
10	(b) Under the most adverse oper. conditions		
11	Average number of employees		
12	Net generation, exclusive of plant use		
13	Cost of plant:		
14	Land and land rights		
15	Structures and improvements		
16	Reservoirs, dams, and waterways		
17	Equipment costs		
18	Roads, railroads, and bridges		
19	Total cost		
20	Cost per kw. of installed capacity (Line 5)		
21	Production expenses:		
22	Operation supervision and engineering		
23	Water for power		
24	Hydraulic expenses		
25	Electric expenses		
26	Misc. hydraulic power generation expenses		
27	Rents		
28	Maintenance supervision and engineering		
29	Maintenance of structures		
30	Maintenance of reservoirs, dams, and waterways		
31	Maintenance of electric plant		
32	Maintenance of misc. hydraulic plant		
33	Total production expenses		
34	Expenses per net kwh. (Mills—2 places)		

HYDROELECTRIC GENERATING PLANT STATISTICS (Large Plants) (Continued)

5. The items under cost of plant represent accounts or combinations of accounts prescribed by the Uniform System of Accounts. Production expenses do not include Purchased Power, System Control and Load Dispatching, and Other Expenses classified as "Other Power Supply Expenses."

6. If any plant is equipped with combinations of steam, hydro, internal combustion engine or gas turbine equipment, each should be reported as a separate plant.

(d)	(e)	(f)	Line No.
N/A	N/A	N/A	1
			2
			3
			4
			5
			6
			7
			8
			9
			10
			11
			12
			13
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			32
			33
			34

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STEAM-ELECTRIC GENERATING PLANT STATISTICS (Large Plants)

Average Annual Heat Rates and Corresponding Net Kwh Output for Most Efficient Generating Units

1. Report only the most efficient generating units (not to exceed 10 in number) which were operated at annual capacity factors† of 50 percent or higher. List only unit type installations, i.e., single boiler serving one turbine-generator. It is not necessary to report single unit plants in this schedule. Do not include non-condensing or automatic extraction-type turbine units operated for processing steam and electric power generation.

2. Report annual system heat rate for total conventional steam-power generation and corresponding net generation (Line 11).

3. All heat rates on this page and also on page 8 and 9 should be computed on the basis of total fuel burned including burner lighting and banking fuel.

Line No.	Plant Name (a)	Unit No (b)	MW* (c)	B.t.u. Per Net Kwh. (d)	Net Generation Million Kwh. (e)	Kind of Fuel (f)
1	Hanford No. 1	One	463,000	14,278	820	Nuclear
2	Hanford No. 1	Two	463,000	14,211	871	Nuclear
3						
4						
5						
6						
7						
8						
9						
10						
	Total System Steam Plants					
11			926,000	28,489	1,691	

*Generator rating at maximum hydrogen pressure.

†Annual Unit Capacity Factor = Net Generation—Kwh / Unit KW. Capacity (as included in plant total—line 5, pg. 8 & 9) X 8,760 hours

GENERATING PLANT STATISTICS (Small Plants)

1. Small generating plants are steam plants of less than 25,000 kw.; internal combustion and gas turbine-plants, conventional hydro plants and pumped storage plants of less than 10,000 kw. installed capacity (name plate rating).

2. Designate any plant leased from others, operated under a license from the Federal Power Commission, or operated as a joint facility, and give a concise statement of the facts in a footnote. If licensed project give project number in footnote.

3. List plants appropriately under subheadings for steam, hydro, nuclear, internal combustion and gas turbine plants. For nuclear, see instruction 10, page 432a.

4. If net peak demand for 60 minutes is not available, give that which is available, specifying period.

5. If any plant is equipped with combinations of steam, hydro, internal combustion or gas turbine equipment, each should be reported as a separate plant. However, if the exhaust heat from the gas turbine is utilized in a steam turbine regenerative feed water cycle, or for preheated combustion air in a boiler, report as one plant.

Line No.	Name of Plant (a)	Year Orig. Const. (b)	Installed Capacity-Name Plate Rating-KW (c)	Net Peak Demand KW (60 Min.) (d)	Net Generation Excluding Plant Use (e)	Cost of Plant (f)	Plant Cost per KW Inst. Capacity (g)	Production Expenses			Kind of Fuel (k)	Fuel Cost Cents per Million B.t.u (l)
								Operation Exc'l. Fuel (h)	Fuel (i)	Maintenance (j)		
1												
2												
3												
4												
5	N/A											
6												
7												
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STEAM-ELECTRIC GENERATING PLANTS

1. Include in this schedule steam-electric plants of 25,000 kw. (name plate rating) or more of installed capacity.

2. Report the information called for concerning generating plants and equipment at end of year. Show unit type installation, boiler and turbine-generator, on same line.

3. Exclude from this schedule, plant, the book cost of which is included in Account 121, Nonutility Property.

4. Designate any generating plant or portion thereof for which the respondent is not the sole owner. If such property is leased from another company give name of lessor, date and term of lease, and annual rent. For any generating plant, other than a leased plant or portion thereof for which the respondent is not the sole owner but which the respondent operates or shares in the operation of, furnish a succinct statement explaining the arrangement and giving particulars as to such matters as percent ownership by respondent, name of co-owner, basis of sharing output, expenses or revenues, and how

Line No.	Name of Plant	Location of Plant	BOILERS				
			Number and Year Installed	Kind of Fuel and Method of Firing	Rated Pressure psig. †††††	Rated Steam Temperature* †††††	Rated Max. Continuous M lbs. Steam per Hour †††††
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	Hanford No. 1	Benton County Wash.	This owned by the Atomic Energy Commission. The steam is purchased from them.				
2							
3							
4							
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33							

Note reference:

*Indicate reheat boilers thusly. 1050/1000

STEAM-ELECTRIC GENERATING PLANTS (Continued)

expenses and/or revenues are accounted for and accounts affected. Specify if lessor, co-owner, or other party is an associated company.

5. Designate any generating plant or portion thereof leased to another company and give name of lessee, date and term of lease and annual rent and how determined. Specify whether lessee is an associated company.

6. Designate any plant or equipment owned, not operated, and not leased to another company. If such plant or equipment was not operated within the past year explain whether it has been retired in the books of account or what disposition of the plant or equipment and its book cost are contemplated.

7. Include in this schedule gas-turbines operated in a combined cycle with a conventional steam unit with its associated steam unit.

TURBINE-GENERATORS**												
	TURBINES				GENERATORS							
					Name Plate Rating in Kilowatts							
Year Installed	Max. Rating Kilowatt †††††	Type†	Steam Pressure at Throttle psig. †††††	R.P.M.	At Minimum Hydrogen Pressure	At Maximum Hydrogen Pressure †††††	Hydrogen Pressure †† Min.	Hydrogen Pressure †† Max.	Power Factor	Voltage K.v.†††	Plant Capacity, Maximum Generator Name Plate Rating††††	Line No.
(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	
												1
												2
1966	430,000	TC	125	1800	421,000	463,000	30	60	97.5	22 kv	430,000	3
1966	430,000	TC	125	1800	421,000	463,000	30	60	97.5	22 kv	430,000	4
												5
												6
												7
												8
												9
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												31
												32
												33

Note references:

**Report cross-compound turbine-generator units on two lines: H.P. section and L.P. section.

Designate units with shaft connected boiler feed pumps. Give capacity rating of pumps in terms of full load requirements.

†Indicate tandem-compound (T.C.), cross-compound (C.C.), single casing (S.C.), topping unit (T.), and non-condensing (N.C.). Show back pressure.

††Designate air cooled generators.

†††If other than 3 phase, 60 cycle, indicate other characteristic.

††††Should agree with column (n).

†††††Include both ratings for the boiler and the turbine-generator of dual-rated installations.

HYDROELECTRIC GENERATING PLANTS

1. Include in this schedule Hydro plants of 10,000 kw. (name plate rating) or more of installed capacity.

2. Report the information called for concerning generating plants and equipment at end of year. Show associated prime movers and generators on the same line.

3. Exclude from this schedule, plant, the book cost of which is included in Account 121, Nonutility Property.

4. Designate any plant or portion thereof for which the respondent is not the sole owner. If such property is leased from another company, give name of lessor, date and term of lease, and annual rent. For any generating plant, other than a leased plant, or portion thereof, for which the respondent is not the sole owner but which the respondent operates or shares in the operation of, furnish a succinct statement ex-

Line No.	Name of Plant (a)	Location (b)	Name of Stream (c)	WATER WHEELS			
				Attended or Unattended (d)	Type of Unit* (e)	Year Installed (f)	Gross Static Head With Pond Full (g)
1							
2							
3							
4							
5							
6	N/A						
7							
8							
9							
10							
11							
12							
13							
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15							
16							
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18							
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38							
39							
40							

*Horizontal or vertical. Also indicate type of runner—Francis (F), fixed propeller (FP), automatically adjustable propeller (AP), Impulse (I). Designate reversible type units by appropriate footnote.

HYDROELECTRIC GENERATING PLANTS (Continued)

plaining the arrangement and giving particulars as to such matters as percent ownership by respondent, name of co-owner, basis of sharing output, expenses, or revenues, and how expenses and/or revenues are accounted for and accounts affected. Specify if lessor, co-owner, or other party is an associated company.

5. Designate any plant or portion thereof leased to another company and give name of lessee, date and term of lease and annual rent and how determined. Specify whether lessee is an associated company.

6. Designate any plant or equipment owned, not operated, and not leased to another company. If such plant or equipment was not operated within the past year explain whether it has been retired in the books of account or what disposition of the plant or equipment and its book cost are contemplated.

WATER WHEELS—Continued			GENERATORS						Total Installed Generating Capacity in Kilowatts (name plate ratings)	Line No.
Design Head (h)	R.P.M. (i)	Maximum hp. Capacity of Unit at Design Head (j)	Year Installed (k)	Voltage (l)	Phase (m)	Frequency or d.c. (n)	Name Plate Rating of Unit in Kilowatts (o)	Number of Units in Plant (p)	(q)	
N/A										1
										2
										3
										4
										5
										6
										7
										8
										9
										10
										11
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										39
										40

INTERNAL-COMBUSTION ENGINE AND GAS-TURBINE GENERATING PLANTS

1. Include in this schedule internal-combustion engine and gas-turbine plants of 10,000 kilowatts and more.

2. Report the information called for concerning plants and equipment at end of year. Show associated prime movers and generators on same line.

3. Exclude from this schedule, plant, the book cost of which is included in Account 121, Nonutility Property.

4. Designate any plants or portion thereof for which the respondent is not the sole owner. If such property is leased from another company, give name of lessor, date and term of lease, and annual rent. For any generating plant other than a leased plant or portion thereof, for which the respondent is not the sole owner but which the respondent operates or shares in the operation of, furnish a succinct statement explaining the arrangement and giving particulars as to such

Line No.	Name of Plant (a)	Location of Plant (b)	PRIME MOVERS			
			Internal-Combustion or Gas-Turbine (c)	Year Installed (d)	Cycle* (e)	Belted or Direct Connected (f)
1						
2						
3						
4						
5						
6						
7	N/A					
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Note references:

*Indicate basic cycle for gas-turbine: open or closed.

Indicate basic cycle for internal-combustion: 2 or 4.

INTERNAL-COMBUSTION ENGINE AND GAS-TURBINE GENERATING PLANTS (Continued)

matters as percent of ownership by respondent, name of co-owner, basis of sharing output, expenses, or revenues, and how expenses and/or revenues are accounted for and accounts affected. Specify if lessor, co-owner, or other party is an associated company.

5. Designate any plant or portion thereof leased to another company and give name of lessee, date and term of lease and annual rent and how determined. Specify whether lessee is an associated company.

6. Designate any plant or equipment owned, not operated, and not leased to another company. If such plant or equipment was not operated within the past year, explain whether it has been retired in the books of account or what disposition of the plant or equipment and its book cost are contemplated.

PRIME MOVERS Continued	GENERATORS						Total Installed Generating Capacity in Kilowatts (name plate ratings)	Line No.
Rated hp. of Unit (g)	Year Installed (h)	Voltage (i)	Phase (j)	Frequency or d.c. (k)	Name Plate Rating of Unit in Kilowatts (l)	Number of Units in Plant (m)	(n)	
N/A								1
								2
								3
								4
								5
								6
								7
								8
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CHANGES MADE OR SCHEDULED TO BE MADE IN GENERATING PLANT CAPACITIES

Give below the information called for concerning changes in electric generating plant capacities during the year.

A. Generating Plants or Units Dismantled, Removed from Service, Sold, or Leased to Others During Year

Line No.	Name of plant (a)	Disposition* (b)	INSTALLED CAPACITY—KILOWATTS Hydro (c)	Steam (d)	(Other) (e)	Date** (f)	If sold or leased to another give name and address of purchaser or lessee (g)
1							
2							
3	NONE						
4							
5							
6							
7							

*State whether dismantled, removed from service, sold, or leased to another. Plants removed from service include those not maintained for regular or emergency service. **Date dismantled, removed from service, sold, or leased to another. Designate complete plants as such.

B. Generating Units Scheduled for or Undergoing Major Modifications

Line No.	Name of plant (a)	Character of Modification (b)	Installed Plant Capacity After Modification—Kilowatts (c)	ESTIMATED DATES OF CONSTRUCTION Start (d)	Completion (e)
1					
2					
3	NONE				
4					
5					
6					
7					

C. New Generating Plants Scheduled for or Under Construction

Line No.	Plant Name and location (a)	Type* (b)	INSTALLED CAPACITY KILOWATTS Initial (c)	Ultimate (d)	ESTIMATED DATES OF CONSTRUCTION Start (e)	Completion (f)
1	Middle Snake-Middle reach of					
2	the Snake River-Application					
3	jointly with PNPC	Hydro	1,470,000	3,430,000	1975	1979
4	Hanford No. 2	Nuclear	1,100,000	1,100,000	1972	1977
5						
6						
7						

D. New Units in Existing Plants Scheduled for or Under Construction

Line No.	Plant Name and location (a)	Type* (b)	Unit No. (c)	Size of Unit Kilowatts (d)	ESTIMATED DATES OF CONSTRUCTION Start (e)	Completion (f)
1						
2						
3						
4	NONE					
5						
6						
7						

*Hydro, pumped storage, steam, internal-combustion, gas-turbine, nuclear, etc.

Annual report of Hanford No. 1 Year ended August 31 ,1971

TRANSMISSION LINE STATISTICS

1. Report below information requested concerning each transmission line. Show highest voltages first. If more space is required use an insert page with column headings as shown in this schedule.
2. The type of supporting structure reported in column (d) should indicate whether (1) single pole, wood or steel; (2) H-frame, wood or steel poles; (3) tower; or (4) underground construction.
3. Designate any transmission line or portion thereof for which the respondent is not the sole owner. If such property is leased from another give name of lessor.
4. Designate any transmission line leased to another and give name of lessee.

Line No.	DESIGNATION From (a)	DESIGNATION To (b)	Voltage (c)	Type of Supporting Structure (d)	LENGTH (POLE MILES) On Structures of Line Designated (e)	LENGTH (POLE MILES) On Structures of Another Line (f)	Number of Circuits (g)	Size of Conductor and Material (h)
1	Hanford No. 1	BPA Vantage substation	500 kv	steel	24.9 mi.	N/A	1	Bundle Conductor Chucker (2) ACSR
2								
3								
4								
5								
6								
7								
8								
9								
10								

TRANSMISSION LINES ADDED DURING THE YEAR

1. Report below the information called for concerning transmission lines added during the year. It is not necessary to report minor revisions of lines. If more space is required use an insert page with column headings as shown in this schedule.
2. Show each transmission line separately. If construction is underground indicate by footnote. If actual costs of completed construction are not readily available for reporting at lines 32 through 35 it is requested that estimated final completion costs be shown. Designate if estimated amounts are reported. Include costs of Clearing Land and Rights-of-Way, and Roads and Trails, at line 32 with appropriate footnote, and costs of Underground Conduit at line 33.
3. If design voltage differs from operating voltage indicate such fact by footnotes; also where line is other than 60 cycle, 3 phase indicate such other characteristic.

Line No.	NONE				
	Line designation:	xxxx	xxxx	xxxx	xxxx
21	From				
22	To				
23	Line length in miles	xxxx	xxxx	xxxx	xxxx
	Supporting structure:				
24	Type				
25	Average number per mile	xxxx	xxxx	xxxx	xxxx
	Circuits per structure:				
26	Present				
27	Ultimate	xxxx	xxxx	xxxx	xxxx
	Conductors:				
28	Size				
29	Material				
30	Configuration and spacing				
31	Voltage - kv (operating)	xxxx	xxxx	xxxx	xxxx
	Line Cost (omit cents):				
32	Land and land rights	$	$	$	$
33	Poles, towers, and fixtures ..				
34	Conductors and devices				
35	Total				

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Annual report of Hanford No. 1 Year ended August 31 , 19 71

ELECTRIC ENERGY ACCOUNT

Report below the information called for concerning the disposition of electric energy generated, purchased, and interchanged during the year.

Line No.	Item (a)	Kilowatt-hours (b)
	SOURCES OF ENERGY	
	Generation (excluding station use):	
1	Steam	
2	Nuclear	1,694,526,000
3	Hydro	
4	Other (specify)	
5	Total generation	1,694,526,000
6	Purchases	
7	In (gross) Kwh	
8	*Interchanges Out (gross) Kwh	
9	Net	
10	Received Kwh	
11	*Transmission for/by others (wheeling) Delivered Kwh	
12	Net	
13	Total	1,694,526,000
	DISPOSITION OF ENERGY	
14	Sales to ultimate consumers (including interdepartmental sales)	1,690,858,000
15	Sales for resale	
16	Energy furnished without charge	
	Energy used by the utility (excluding station use):	
17	Electric department only (use by other departments should be accounted for as sales)	
18	Energy losses: Transmission and conversion losses	3,668,000
19	Distribution losses	
20	Unaccounted for losses	
21	Total energy losses	
22	(..... percent of total energy generated, purchased and interchanged)	
23	TOTAL	1,687,190,000

*Submit an explanatory statement of any interchange, transmission, or wheeling transaction, giving name of other party and amount of compensation for the service to or by the respondent.

(A) The System delivers all of its power output from Hanford Number One to the Bonneville Power Administration's transmission grid at Vantage, Washington. BPA then distributes this power according to its requirements. The System issues monthly billings representing one-twelfth of an annual budget based upon cost recovery to some 76 participants who are BPA customers. These participants receive a credit in a like amount of their System bill on their BPA bill. For a more detailed explanation refer to the Exchange Agreement submitted with the 1967 Annual Report.

ATTESTATION

The foregoing report must be attested by an authorized officer of the reporting utility.

Elmer A. Landin, Jr. certifies
(Insert here the name of the attester)

that he is Treasurer
(Insert here the official title of the attester)

of Washington Public Power Supply System
(Insert here the exact legal title or name of respondent)

that he has examined this report; that to the best of his knowledge, information, and belief, all statements of fact contained in the said report are true and the said report is a correct statement of the business and affairs of the above-named respondent in respect to each and every matter set forth therein during the period -

September 1 ,1970, to and including August 31 ,

1971.

Elmer A. Landin Jr.
(Signature of attester)

TRI CITY HERALD 11/30/72

Tri-City Herald

New a-plant estimates cloud WPPSS plans

11-30-72

By MARILYN DRUBY
Herald Staff Writer

New cost estimates for two Washington Public Power Supply System nuclear power plants — nearly double the costs predicted two years ago — have sparked top-level discussions and questions about the plans.

The estimate for the replacement of N reactor in a new Hanford No. 1 plant, formerly figured at $346.1 million, now is estimated at $60 million, the Washington Public Power Supply System reports.

And for its third nuclear power plant, the site to be recommended in January, costs are expected at $723,989,000 instead of $455,300,000.

The resulting increase in costs to participating Pacific Northwest utilities would have a major effect on wholesale power rates charged by the Bonneville Power Administration, WPPSS Managing Director Jack Stein noted.

The executive committee of the Public Power Council has scheduled a closed meeting today in Portland to review the issues its technical committee has been studying. The PPC voted last spring to have WPPSS plan the two new power sources for the Pacific Northwest.

"There is concern," Stein commented when asked if he'd received any feedback from utilities about the rising cost estimates. "The real question is whether all the Northwest utilities will support the program under the revised costs."

BPA is sending out notices this week and by Jan. 1 WPPSS should have "the definitive indication" of whether the 104 utilities will support plans, Stein said.

WPPSS is wondering whether the large utilities, such as Seattle City Light, will approve the increased costs, Stein said, but he noted the agency recently announced it had dropped plans to build a nuclear plant at Kiket Island near Anacortes and there's opposition to raising Ross Dam for more power on the Skagit River.

WPPSS is sending copies this week of draft enviromental impact statements on the Hanford No. 1 plans, seeking comments by Feb. 1 from various state and federal agencies particularly on plans for direct discharge of reactor coolant water into the Columbia.

"It's not cut and dried by any means," Stein said of the chances of seeing a new Hanford No. 1 built. The original aim of construction at the N reactor site was to save money by utilizing turbines and other present equipment, including $10 million in water intake and discharge systems.

"It's part of the regional hydro-thermal program through 1981. If this doesn't go, I don't know if any of it's going to go," he added.

United Engineers and Constructors Inc. of Philadelphia, consultants to BPA, did both sets of estimates, Stein said, but some factors weren't predicted or were mistakenly left out.

Sales tax of about $19,600 on a 1,233,000 kilowatt plant wasn't included. And the base cost of that size plant is estimated at $323.9 million whereas planners originally made cost estimates of $212.5 million for a 1,126,000-kilowatt plant. That's now figured at $301.9 million.

Interest during construction more than doubled, to $91,894,000. Cost of the first fuel load of uranium was figured at $34.8 million. Engineers had left it out because private power plants don't forecast costs in the same way, Stein said.

Officials didn't realize transmission lines and a railroad spur at Hanford would have to be realigned west of the present N reactor complex, Stein noted.

"They did the best they could at the time," he added of the consultants. Other newly estimated requirements were $8 million for flood protection and costs of a main power transformer and construction to connect with the present WPPSS steam plant.

Bechtel architect-engineers recently announced that inflationary and "normal escalation" for larger nuclear power plants are running at 8 per cent yearly, Stein noted.

"But evolutionary costs are 7 per cent a year and those two must be compounded to 15 per cent a year," Stein said.

In evolutionary costs he included stiffening Atomic Energy Commission requirements for better earthquake resistance, "near zero" radiation release, new mechanical engineering and electrical engineering codes and designs for waste handling within the plant which will include conversion of all nuclear wastes into solids.

He also noted in the predictions of labor costs, estimates rose from $8.33 per kilowatt hour to $10.35 estimates rose from 5.85 man hours per kilowatt at $8.33 per hour to 8.8 man hours per kilowatt at $10.35 per hour.

The only alternative to nuclear power planning would be a coal-fired steam plant, but coal in the Pacific Northwest isn't readily available and the pollution control requirements are equally stiff, he noted.

PO-12-11 (WPPSS)