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*This form is to be filled out (typed or hand-printed) by the person who announced the meeting (i.e., the person who issued the meeting notice). The completed form, and the attached copy of meeting handout materials, will be sent to the Document Control Desk on the same day of the meeting; under no circumstances will this be done later than the working day after the meeting.
Do not include proprietary materials.*

DATE OF MEETING

12/17/2001

The attached document(s), which was/were handed out in this meeting, is/are to be placed in the public domain as soon as possible. The minutes of the meeting will be issued in the near future. Following are administrative details regarding this meeting:

Docket Number(s) **050-460**

Plant/Facility Name **Washington Nuclear Project No. 1 (WNP-1)**

TAC Number(s) (if available)

Reference Meeting Notice **December 4, 2001**

Purpose of Meeting
(copy from meeting notice) **Energy Northwest commissioned a study to determine**

the feasibility of completing the construction of WNP-1.

The purpose of the meeting is to discuss this study

NAME OF PERSON WHO ISSUED MEETING NOTICE

Joseph M. Sebrosky

TITLE

Project Manager

OFFICE

NRR

DIVISION

NRLPO

BRANCH

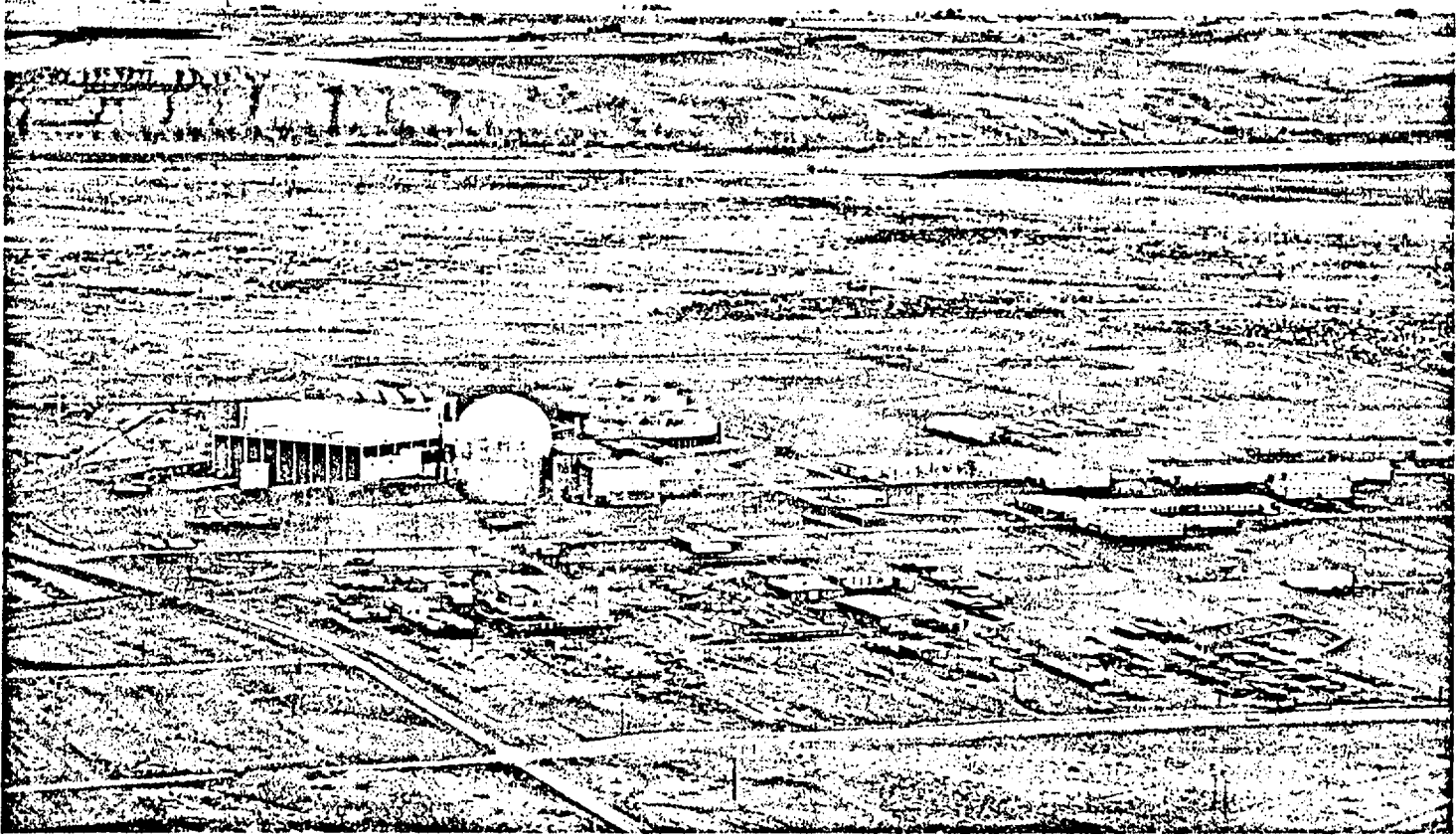
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Docket File/Central File

PUBLIC

A001

WNP-1

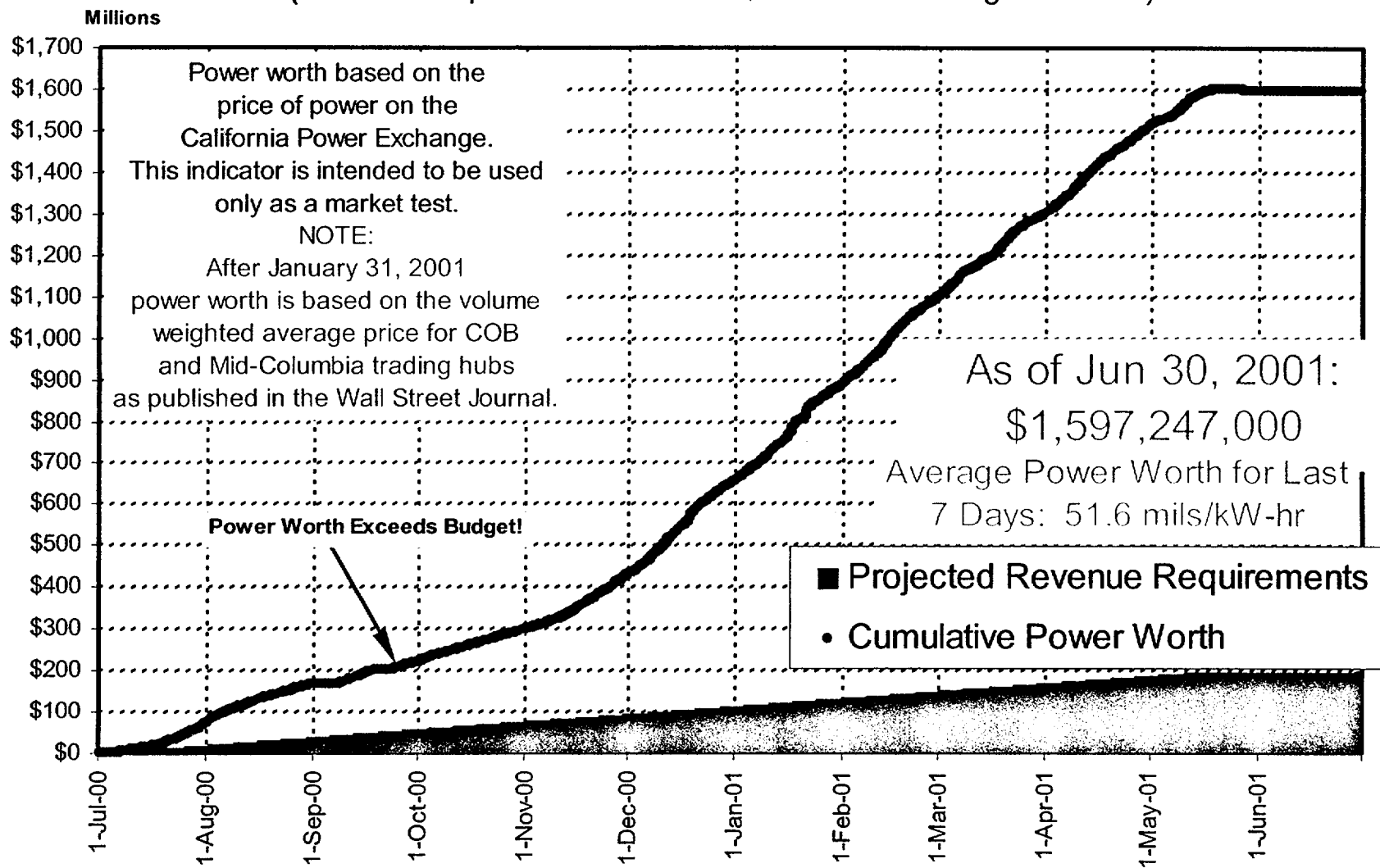


Presentation to
US Nuclear Regulatory Commission

ENERGY
NORTHWEST

Cumulative Replacement Power Worth

(Revenue Requirements based on \$199.5 Million Budget Estimate)



Columbia Generating Station Emissions Avoided Annually

- **SO₂ avoided by nuclear generation** **62,000 tons**
- **Carbon dioxide avoided by nuclear generation** **5,320,000 tons**
- **NO_x avoided by nuclear generation** **28,000 tons**

WNP-1 Feasibility Study

Components

Reports Components	Energy Northwest	Bechtel/ Framatome	Independent Assessment Contractor RW Beck	CEO VP Ops Support	Independent Review Team Goldschmidt- Imeson	Executive Board
Completion Cost & Schedule	Input	Prepare	Review/Comment	Approval	Review/Comment	Customer
Operating Cost Forecasts	Prepare		Review/Comment	Approval	Review/Comment	Customer
Financing Options/Estimates	Prepare		Review/Comment	Approval	Review/Comment	Customer
Market Forecast			Prepare	Approval	Review/Comment	Customer
Competing Alternatives		Prepare*	Prepare**	Approval	Review/Comment	Customer
Legal Analysis	Prepare			Approval	Review/Comment	Customer
Conclusions/ Recommendation	Prepare		Prepare	Approval	Prepare	Decision
Status	Complete	Complete	Complete	Approved	April 2002	

*Comparisons With existing nuclear alternatives
** Comparisons with other alternatives



Operating License

Unique Features **B&W 205 design, evaluated for power uprate conditions**

Plant Preservation **Good record keeping and NRC approved preservation program**

Generic Issue Resolution **Appendix R, MOVs and Alloy 600 all addressed**

Digital Controls **Upgrade effort at two plants provides experience base**

————→ **A 40-year Operating License for WNP-1 can be obtained without impacting construction schedule.**
 A 20-year License extension is readily available.

Base Case

Assumptions for WNP-1

- **Base EPC Cost:** \$3 billion
- **Project Operation Period:** 40 years
- **Net Plant Capacity Factor:** 93%
- **Plant Net Electrical Output:** 1350 Mwe
- **Term Debt Tenor:** 30 years
- **Term Debt Interest Rate:** 6.25%
- **Interest Rate During Construction (IDC):** 6.25%
- **Fuel Costs:** \$50 million a year
- **O&M/Capital:** \$135 million a year
- **D&D Sinking Fund Amount:** \$400 million
- **First Capital Addition after 10 years:** \$90 million for low pressure rotors
- **Second Capital Addition after 25 years:** \$100 million for steam generators

Base Case

Estimate to Complete

\$2,907 M*

Increase of \$1,600 over 1984 estimate

- ~ 75% or \$1,200 results from current pricing of 1984 scope
- ~ 25% or \$400 are scope differences

Initial fuel core and redesign (\$132 M)

Digital control & protection and simulator (\$99 M)

Replace sold equipment (\$84 M)

New plant improvements (\$67 M)

***Bechtel number \$3,041 M less:**

- initial core \$120 M moved to operating cost
- pre-construction \$14 M not financed

Base Case

Critical Path Schedule

- Owner pre-construction activities
 - Initial project planning and preparation
 - Fuel design, fabrication, and delivery
 - Fuel load
 - Start-up testing
 - Power ascension

<u>Conservative Schedule</u>	Not shortened from 1991 V&V schedule yet assumes 20% overtime
<u>Pre-construction Initiatives</u>	Early start (with \$14 M investment) of selected engineering activities*
<u>Simulator and Training</u>	Careful review of development and training schedule and requirements.

*Fuel design, simulator and control room, NSSS upgrades, training and IT plans.

Plant Costs

<u>Cost Category</u>	<u>Base Case</u>
Construction Costs	\$ 3,192,517
Working Capital	100,000
Reserve and Contingency	100,000
Financing Expenses	74,620
Subtotal	\$ 3,467,137
Interest During Construction	944,273
Investment Income	(176,910)
Total Bonds	\$ 4,234,500

Cost of Power

	<u>Base</u>	<u>Best</u>	<u>Mills/</u>
<u>Public/BPA participation</u>	<u>Case</u>	<u>Case</u>	<u>kwh</u>
Construction Risk	\$2,907M	\$2,400*	3.75
Reduce work capital, R&C	200M	28M	1.31
Lower interest rates	6.25%	5.75%	1.20
Lower underwriter fee	75M	45M	.22
 <u>Dual Plant Efficiencies</u>			
Reduce O&M	\$ 115M/yr	\$ 105M/yr	1.50
Reduce capital	20M/yr	10M/yr	1.50
Owner’s construction	401M	300M*	.75
 <u>Other Efficiencies</u>			
NRC minimum decommissioning	\$ 400	\$ 234	.33
Non-manual ratio	406	300*	<u>.75</u>
			(11.3)
Mills/kwh	51	39.7	

*Construction/capital cost



Market Prices and WNP-1 Costs

