

SNAKE RIVER



HYDRO POWER

# IDAHO POWER COMPANY

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BOX 70 • BOISE, IDAHO 83707

90 JUN 21 PM 3 06

June 21, 1990

IDAHO PUBLIC  
UTILITIES COMMISSION

Mrs. Myrna J. Walters  
Secretary  
Idaho Public Utilities Commission  
Statehouse  
Boise, Idaho 83720

Re: Supplement to Initial Application  
Case No. IPC-E-90-2

Dear Mrs. Walters:

Please find enclosed for filing an original and seven (7) copies of Idaho Power Company's Supplement to Initial Application to Provide Commitment Estimate. The supplement has also been mailed to those individuals indicated on the Certificate of Mailing.

If you have any questions, please feel free to call me.

Sincerely,

Larry D. Ripley  
Attorney

LDR:mmmb

Enclosures

CERTIFICATE OF MAILING

I HEREBY CERTIFY that on this 21st day of June, 1990, I mailed a true and correct copy of the within and foregoing SUPPLEMENT TO INITIAL APPLICATION TO PROVIDE COMMITMENT ESTIMATE, postage prepaid and addressed as follows:

Grant E. Tanner  
Lindsay, Hart, Neil & Weigler  
Suite 1800  
222 SW Columbia  
Portland, OR 97201

Peter J. Richardson  
Lindsay, Hart, Neil & Weigler  
Jefferson Place, Suite 400  
350 N. Ninth  
Boise, ID 83702

Afton Energy, Inc.  
c/o Owen H. Orndorff  
Orndorff & Peterson  
Suite 230  
1087 West River Street  
Boise, ID 83702

Harold C. Miles  
Energy & Natural Resources Committee  
316 Fifteenth Ave., South  
Nampa, ID 83651

  
s/ Larry D. Ripley

EVANS, KEANE, KOONTZ, BOYD, SIMKO & RIPLEY  
c/o Idaho Power Company  
1220 West Idaho Street  
P.O. Box 70  
Boise, Idaho 83707  
(208) 383-2674

STEVEN L. HERNDON  
Idaho Power Company  
1220 West Idaho Street  
P.O. Box 70  
Boise, Idaho 83707  
(208) 383-2918

Attorneys for Idaho Power Company

RECEIVED   
FILED   
30 JUN 21 PM 3 06  
IDAHO PUBLIC  
UTILITIES COMMISSION

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION OF )  
IDAHO POWER COMPANY FOR AUTHORITY )  
TO RATE BASE THE INVESTMENT REQUIRED) )  
FOR THE REBUILD OF THE SWAN FALLS )  
HYDROELECTRIC FACILITY )

CASE NO. IPC-E-90-2

SUPPLEMENT TO INITIAL  
APPLICATION TO PROVIDE  
COMMITMENT ESTIMATE

In its initial Application dated February 14, 1990, Idaho Power Company (Idaho Power or Company) stated it would supplement that filing with a Commitment Estimate for the Swan Falls Project.

COMMITMENT ESTIMATE

I

Set forth in Attachment 3 is the Swan Falls Project Cost Estimate and Commitment Estimate for (1) the decommissioning of the old powerhouse, (2) FERC required renovation of the old powerhouse structure for historical purposes, and (3) construction of the new powerhouse.

II

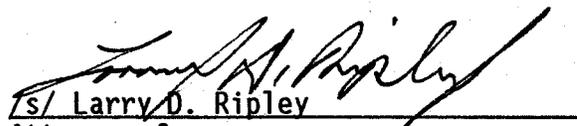
Updated Project cost estimates will be submitted to the Commission as part of the Company's Quarterly Report of Construction Projects. The updated

cost estimate will include any scope or escalation changes. The final cost report on the Project will still compare the actual costs to the Commitment Estimate.

III

In addition, Idaho Power has been required by FERC to establish an expedited construction schedule to insure stabilization of the existing powerhouse no later than January 1994. The revised schedule requires stabilization by April 1, 1994, with concentration on compressing the schedule to January 31, 1994. Attachment 4 is Idaho Power's letter, dated March 16, 1990, that submitted a revised schedule and plan, and Attachment 5, FERC's letter, dated March 26, 1990, is the approval of the revised schedule and plan. In paragraph III of the Company's Initial Application, the Company projected award of the turbine and generator contract to be on or about December 1, 1990. Under the revised schedule, the Company projects awarding the contract on October 15, 1990.

DATED This 21st day of June, 1990 at Boise, Idaho

  
s/ Larry D. Ripley  
Attorney for  
Idaho Power Company

**BEFORE THE**

**IDAHO PUBLIC UTILITIES COMMISSION**

**CASE NO. IPC-E-90-2**

**SUPPLEMENT TO INITIAL APPLICATION**

**IDAHO POWER COMPANY  
ATTACHMENT 3**

IDAHO POWER COMPANY  
SWAN FALLS HYDROELECTRIC PROJECT

COMMITMENT ESTIMATE

(IN THOUSANDS OF DOLLARS)

	PROJECT ESTIMATE 1/
1 NEW POWERHOUSE:	
2 DIRECTS:	
3   GENERAL CONSTRUCTION CONTRACTS	\$ 23,065
4   PROCUREMENT CONTRACTS	19,192
5   OTHER CONTRACTS & FACILITIES	926
6 TOTAL DIRECTS	\$ 43,183
7 INDIRECTS	404
8 OVERHEADS	9,504
9 AFUDC	6,843
10 TOTAL NEW POWERHOUSE	\$ 59,934
11 DECOMMISSION OLD POWERHOUSE:	
12 DIRECTS:	
13   GENERAL CONSTRUCTION CONTRACTS	\$ 2,900
14   PROCUREMENT CONTRACTS	0
15   OTHER CONTRACTS & FACILITIES	9
16 TOTAL DIRECTS	\$ 2,909
17 INDIRECTS	0
18 OVERHEADS	435
19 AFUDC	108
20 TOTAL DECOMMISSION OLD POWERHOUSE	\$ 3,452
21 RESTORATION OLD POWERHOUSE:	
22 DIRECTS:	
23   GENERAL CONSTRUCTION CONTRACTS	\$ 668
24   PROCUREMENT CONTRACTS	0
25   OTHER CONTRACTS & FACILITIES	0
26 TOTAL DIRECTS	\$ 668
27 INDIRECTS	0
28 OVERHEADS	155
29 AFUDC	19
30 TOTAL RESTORATION OLD POWERHOUSE	\$ 842
31 TOTAL SWAN FALLS PROJECT 2/	\$ 64,228
32	1.25
33 TOTAL COMMITMENT ESTIMATE	\$ 80,285

1/ COST ESTIMATE REPORTED IN DOLLARS AT COMPLETION.  
2/ COST ESTIMATE EXCLUDES 'REMOVAL COSTS' OF \$804,000.

**BEFORE THE**

**IDAHO PUBLIC UTILITIES COMMISSION**

**CASE NO. IPC-E-90-2**

**SUPPLEMENT TO INITIAL APPLICATION**

**IDAHO POWER COMPANY  
ATTACHMENT 4**



# IDAHO POWER COMPANY

BOX 70 • BOISE, IDAHO 83707

March 16, 1990

Mr Ronald A Corso  
Director  
D-D-S-I  
Federal Energy Regulatory Commission  
825 North Capital Street, NE  
Washington, DC 20426

Subject: Swan Falls Hydroelectric Project  
Project No. 503, Idaho

Dear Mr Corso:

This is in reference to our March 12, 1990 meeting with you and staff on the schedule and existing powerhouse stabilization plans for the Swan Falls Project.

As agreed, the presented schedule, option 2, will be adopted. During the progress of the design and construction, our effort will be concentrated on finishing the stabilization of the existing powerhouse one year earlier than our previous schedule, dated January 22, 1990.

Resubmitted for your approval under Article 304 of the Swan Falls Amended License are an original and fourteen (14) copies of the revised schedule, dated March 14, 1990, with a revised plan. The plan also includes these additional features as agreed in our meeting:

- ° Prior to the new powerhouse excavation:
  - Piezometers for monitoring existing powerhouse uplift under the east bay adjacent to unit #10, and under the wall between units #8 and 9 will, be installed.
  - Concrete backfill will be placed in the east bay adjacent to unit #10. Concrete backfill will also be placed in the bay between units #6 and #7 if it will not interfere with access and operation of the powerhouse.
- ° The current monitoring program for the existing powerhouse includes:

ATTACHMENT 4  
SUPPLEMENT TO INITIAL APPLICATION

- Continuation of the current crack monitoring that consists of:
  1. Read and record the Avongard monitors at least once per month. Additional measurements shall be taken prior to, during, and immediately after any dewatering activity or a reservoir drawdown in excess of 3.5 feet. There are two monitors located below the generator floor; one on the right wall of unit #10, and one on the left wall of unit #7.
  2. Measure and record the generator floor longitudinal crack at locations in units 3, 4, 5 and 10 every three months.
  3. Survey and record horizontal and vertical movement of points located on the generator floor over each wall between all units every six months.

These monitoring intervals are in accordance with FERC's regional director's letter of January 26, 1990, our letter of February 22, 1990, and the March 13, 1990 confirmation phone discussion with Mr Norm Weseloh of the regional office.

- o Monitoring of the existing powerhouse during the new powerhouse excavation includes:
  - The current monitoring will be continued until the existing powerhouse is stabilized, except during blasting for the new powerhouse excavation. During this period, the monitoring interval will be increased to daily for monitoring numbered (1), every week for monitoring numbered (2), and monthly for monitoring numbered (3). However, if conditions change for the numbered (1) or (2) monitoring, then more frequent interval for monitoring numbered (3) will be established consistent with need. Intervals for monitoring numbered (1) and (2) will also be adjusted to reflect any changed condition.
  - Read and record piezometers daily during blasting for the new powerhouse excavation and existing powerhouse stabilization. Monitoring intervals will be adjusted to reflect any changed condition. At other times during new powerhouse construction, monitoring will be less frequent, but responsive to encountered conditions.
  - Seismic monitoring of the existing powerhouse for each blast during new powerhouse excavation.
  - Monitoring by one person and prompt dissemination of the information to those designated.

Mr Ronald A Corso  
Page 3  
March 16, 1990

- ° Pool lowering elevations during blasting for the new powerhouse excavation will be established to satisfy requirements for the existing powerhouse stability. The pool levels will be coordinated with headwater concerns including irrigation.
- ° As-built drawings for the entire project, including the previously constructed new spillway and tailrace channel, will be submitted after project completion.
- ° Monitoring data will be summarized and provided to the Portland Regional Office at the end of each month unless unusual instrumentation data develops. When unusual readings of the instrumentation data occurs, it will be reported to the regional office immediately, along with plans for assessing the significants of the data as it may affect the projects structural integrity.

Correspondence on Swan Falls was received on March 13, 1990, from your regional office relative to Part 12, Safety of Water Power Projects. However, our response to this matter will be addressed by separate letter.

Sincerely,

*J. L. Herndon /s/*

Steven L Herndon  
Attorney

SLH:EOG:cy  
Encs

cc: Arthur Martin, FERC  
Lee S Sherline, Leighton & Sherline  
L E Lanham  
E O Groff

SWAN FALLS PROJECT  
IDAHO POWER COMPANY

FERC Project No 503  
Idaho

PLAN AND SCHEDULE  
Revised March 16, 1990

Subject

Plan and schedule for constructing the new powerhouse and for modifying the existing powerhouse.

Reference

Order Amending License issued December 8, 1989, Project No 503-006, Article 304.

Schedule

Attached is a detailed schedule showing each activity of work. Also, attached is a summary schedule showing the project by major feature.

Plan

- ° Work began on January 22, 1990, to actively pursue the design, construction and begin operation of the new 25 MW powerhouse as scheduled.
- ° The earlier 1980s design effort expended toward building the new plant at that time is being utilized to the fullest extent feasible. However, a review of each feature is being made to take advantage of recent experience of similar plants and the latest technology for the most efficient and safe construction and plant operation. The bulb turbine with a speed increaser and high-speed generator has been determined to be most cost effective and efficient for operation.
- ° The initial critical item is to develop specifications for a single supply contract for the two 12.5 MW turbines with speed increasers, generators and governors. Information from the turbine supplier for turbine setting, water intake and waterway configurations is needed earlier to finalize the powerhouse bid solicitation drawings. The powerhouse contractor will install the turbines and associated equipment with direction from the turbine erection engineer.
- ° The powerhouse contract will be awarded by April 15, 1991. The overall excavation and concrete placing durations allow for winter weather in 1991-92 and 1992-93. Installation of the first turbine will begin by February 1, 1993.
- ° Major accessory equipment will be supplied by individual contracts and furnished to the powerhouse contractor for installation.
- ° Power on-line is scheduled for the first unit on November 1, 1993, and the second unit on January 1, 1994.

- ° The existing powerhouse will be operated until the first unit in the new powerhouse is on line. Then the existing powerhouse will begin decommissioning, turbine/generators and accessory equipment will be removed, draft tubes and scroll cases will be filled with concrete, one complete generating unit will be prepared for public exhibit, and the powerhouse superstructure will be repaired and preserved.
- ° The existing powerhouse is near the new powerhouse, some cracks have developed in the structure, and stability of the structure is a concern especially during excavation for the new powerhouse. Therefore, this program is established.

A. Prior to the new powerhouse excavation:

- Piezometers for monitoring existing powerhouse uplift under the east bay adjacent to unit #10, and under the wall between units #8 and 9 will be installed.
- Concrete backfill will be placed in the east bay adjacent to unit #10. Concrete backfill will also be placed in the bay between units #6 and #7 if it will not interfere with access and operation of the powerhouse.

B. The current monitoring program for the existing powerhouse includes:

- Continuation of the current crack monitoring that consists of:
  1. Read and record the Avongard monitors at least once per month. Additional measurements shall be taken prior to, during, and immediately after any dewatering activity or a reservoir drawdown in excess of 3.5 feet. There are two monitors located below the generator floor; one on the right wall of unit #10, and one on the left wall of unit #7.
  2. Measure and record the generator floor longitudinal crack at locations in units 3, 4, 5 and 10 every three months.
  3. Survey and record horizontal and vertical movement of points located on the generator floor over each wall between all units every six months.

These monitoring intervals are in accordance with FERC's regional director's letter of January 26, 1990, our letter of February 22, 1990, and the March 13, 1990 confirmation phone discussion with Mr Norm Weseloh of the regional office.

C. Monitoring of the existing powerhouse during the new powerhouse excavation includes:

- The current monitoring will be continued until the existing powerhouse is stabilized, except during blasting for the new

powerhouse excavation. During this period, the monitoring interval will be increased to daily for monitoring numbered (1), every week for monitoring numbered (2), and monthly for monitoring numbered (3). However, if conditions change for the numbered (1) or (2) monitoring, then more frequent interval for monitoring numbered (3) will be established consistent with need. Intervals for monitoring numbered (1) and (2) will also be adjusted to reflect any changed condition.

- Read and record piezometers daily during blasting for the new powerhouse excavation and existing powerhouse stabilization. Monitoring intervals will be adjusted to reflect any changed condition. At other times during new powerhouse construction, monitoring will be less frequent, but responsive to encountered conditions.
- Seismic monitoring of the existing powerhouse for each blast during new powerhouse excavation.
- Monitoring by one person and prompt dissemination of the information to those designated.

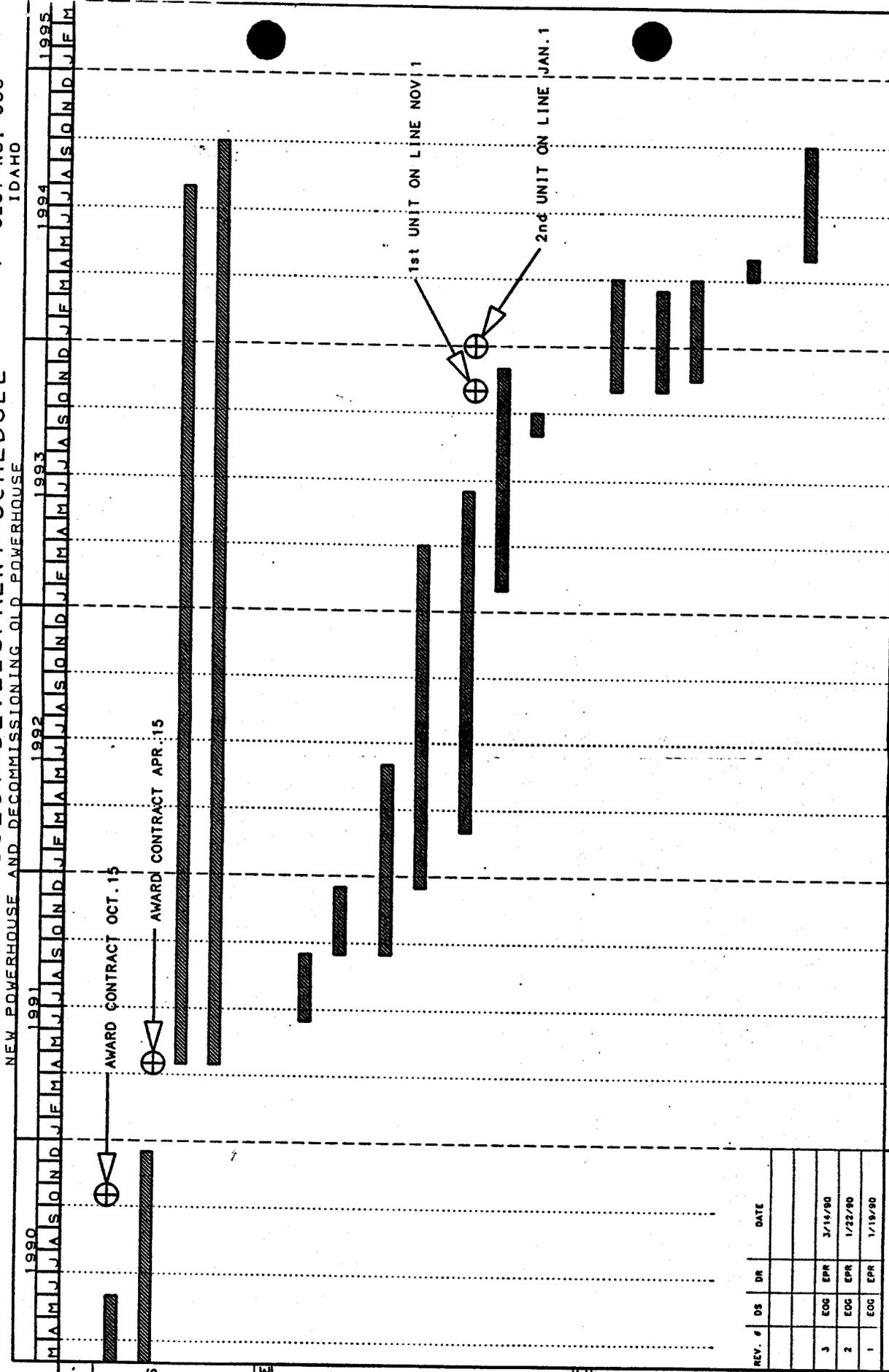
D. Pool lowering elevations during blasting for the new powerhouse excavation will be established to satisfy requirements for the existing powerhouse stability. The pool levels will be coordinated with headwater concerns including irrigation.

- ° As-built drawings for the entire project, including the previously constructed new spillway and tailrace channel, will be submitted after project completion.
- ° Monitoring data will be summarized and provided to the Portland Regional Office at the end of each month unless unusual instrumentation data develops. When unusual readings of the instrumentation data occurs, it will be reported to the regional office immediately, along with plans for assessing the significants of the data as it may affect the projects structural integrity.
- ° The entire project will be completed by October 1, 1994.



# SWAN FALLS PROJECT DEVELOPMENT SCHEDULE

PROJECT NO. 503  
IDAHO



1990	1991	1992	1993	1994	1995
M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D

REV. #	DS	DR	DATE
3	EOG	EPR	3/16/90
2	EOG	EPR	1/22/90
1	EOG	EPR	1/19/90

**BEFORE THE**

**IDAHO PUBLIC UTILITIES COMMISSION**

**CASE NO. IPC-E-90-2**

**SUPPLEMENT TO INITIAL APPLICATION**

**IDAHO POWER COMPANY  
ATTACHMENT 5**

FEDERAL ENERGY REGULATORY COMMISSION

WASHINGTON, D. C. 20426

MAR 26 1990

Project No. 503  
Swan Falls Dam  
Idaho Power Company

Mr. Steven L. Herndon  
Attorney  
Idaho Power Company  
P.O. Box 70  
Boise, Idaho 83707

Dear Mr. Herndon:

We have received your letter dated March 16, 1990 submitting your revised plan and schedule for construction of the new powerhouse and stabilization of the existing powerhouse at the Swan Falls Project No. 503. The revised schedule and the features of the revised plan are acceptable.

The revised schedule, presented as Option 2 in our March 12, 1990 meeting, indicates completion of the powerhouse stabilization one year earlier than that presented in the previous schedule of January 22, 1990. The revised plan adequately addresses instrumentation and monitoring programs during construction, concrete backfilling in the east bay and the bay between units no. 6 and 7 during the early phases of construction, and reservoir drawdown during blasting for the new powerhouse.

Sincerely,

*Ronald A. Corso*

Ronald A. Corso, Director  
Division of Dam Safety and  
Inspections