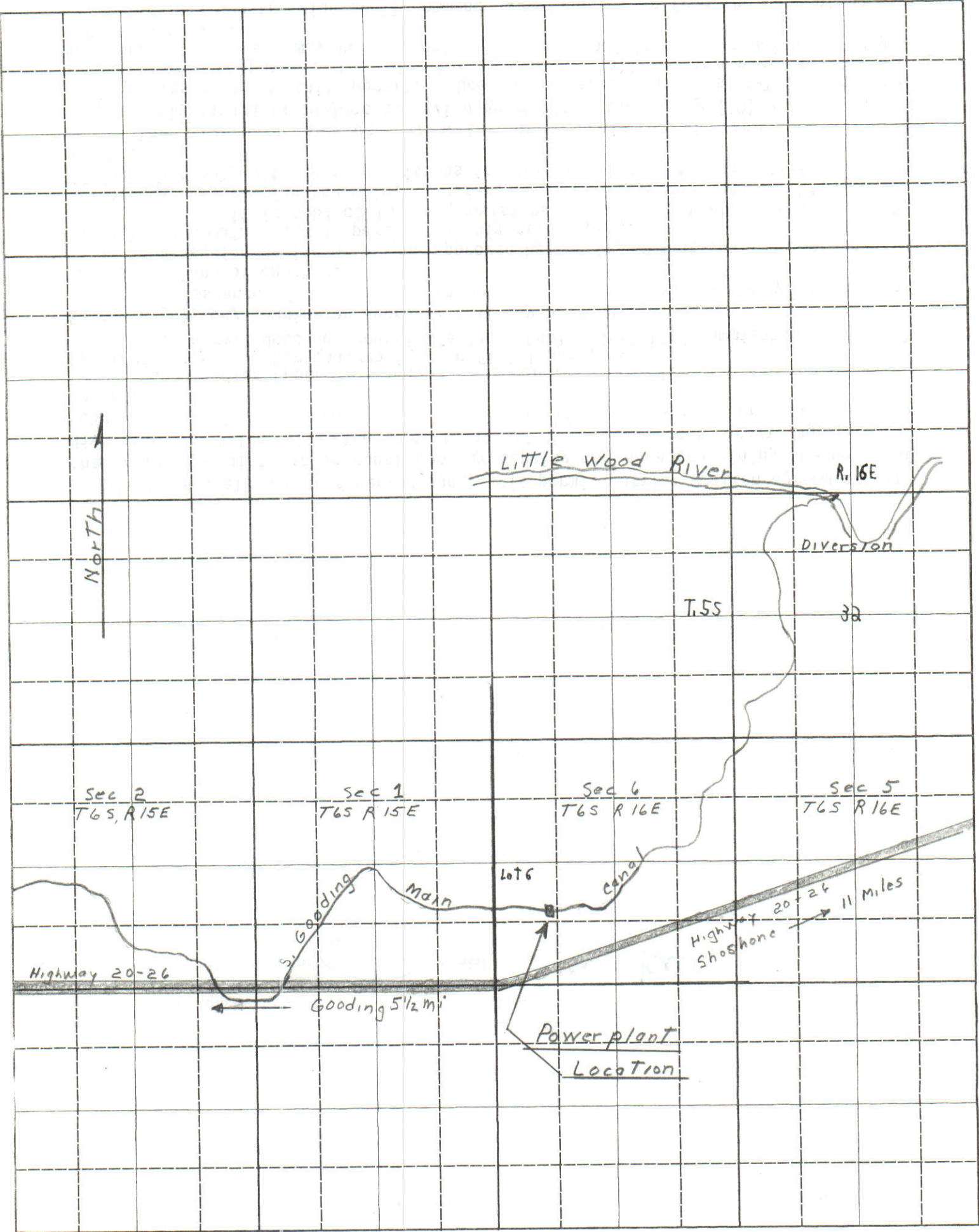


11. Map of proposed project: show clearly the proposed point of diversion, place of use, section number, township and range number.



Scale: 2 inches equal 1 mile.

BE IT KNOWN that the undersigned hereby makes application for permit to appropriate the public waters of the State of Idaho as herein set forth.

Donald Sandy
(Applicant)
Big Wood Canal Co.
Donald Sandy, President

FIGURE A

RECEIVED

SEP 22 1964

SEP 26 1986

A. GENERAL INFORMATION

Department of Water Resources

Permit No. 37-8166

Phone No. _____

1. Owner: Big Wood CANAL Co.

Current Address:

2. Accompanied by: Graig Olsen

EXAM. DATE: 6-26-86 10:00AM

Address:

Phone No. _____

Relationship to Permit Holder: operator

3. Source: _____ tributary to

B. OVERLAP REVIEW

1. Other water rights with same place of use:

☐ Copies Attached

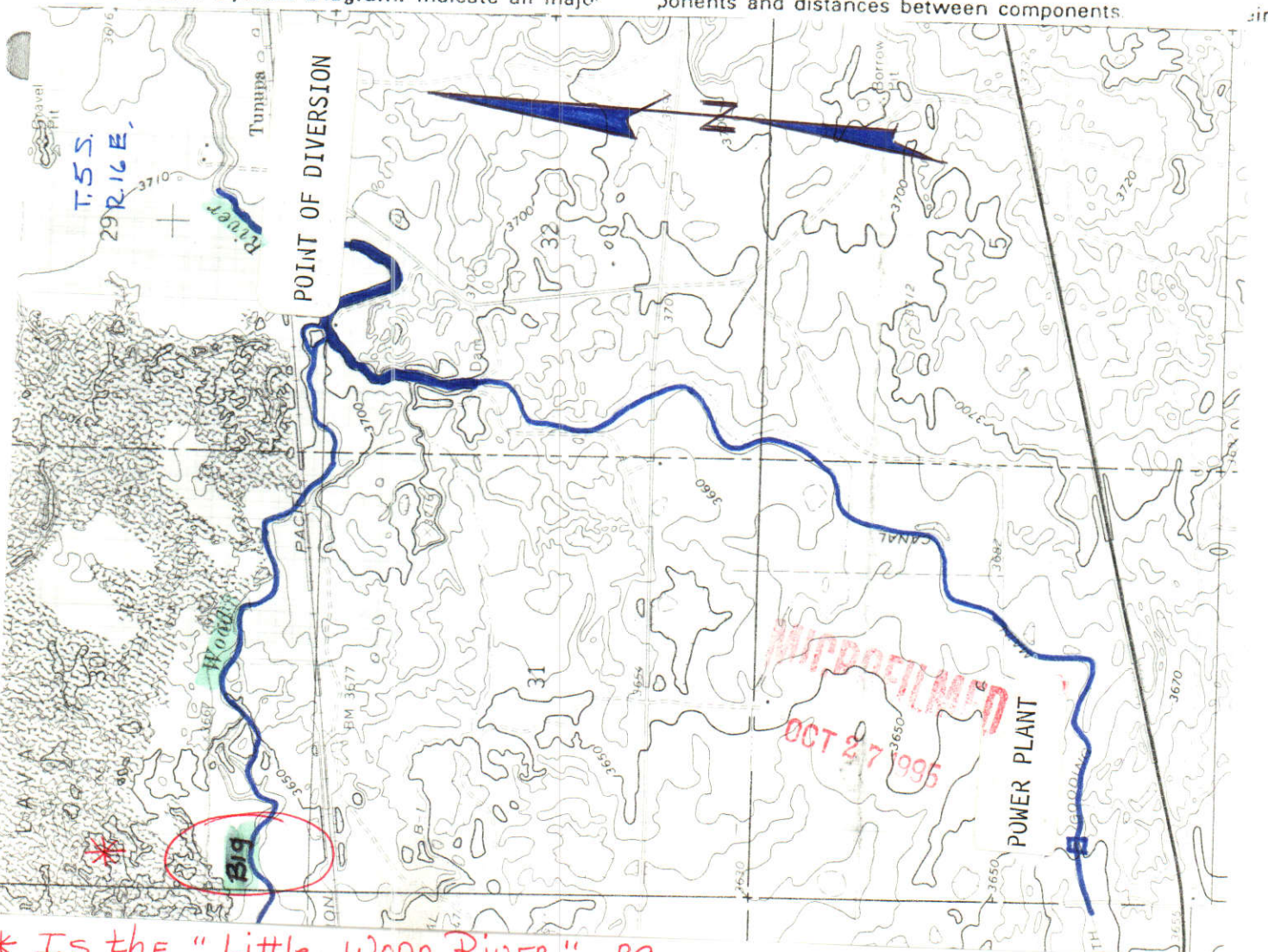
2. Other water rights with same point of diversion:

3 Attached

☐ Copies of Field Exam's Attached

C. SYSTEM DESCRIPTION

1. **Diversion System Diagram:** Indicate all major components and distances between components.

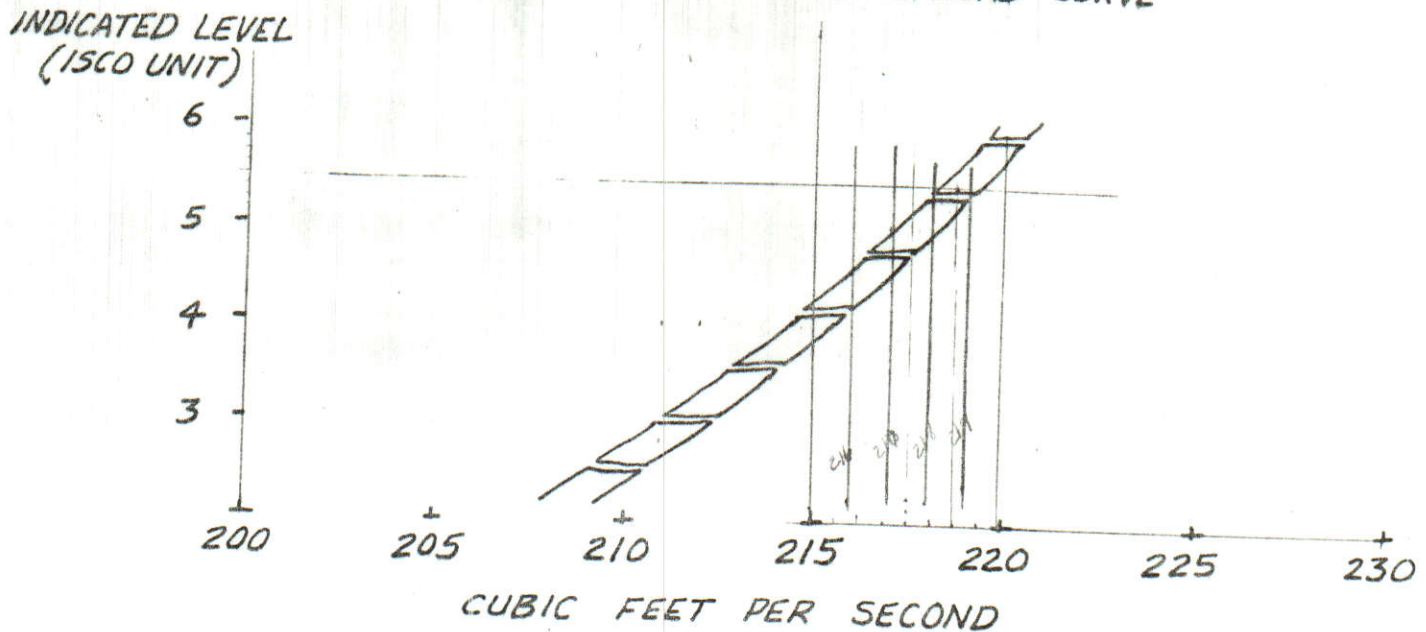


* Is the "Little Wood River". BC

Att: ~~3~~ C

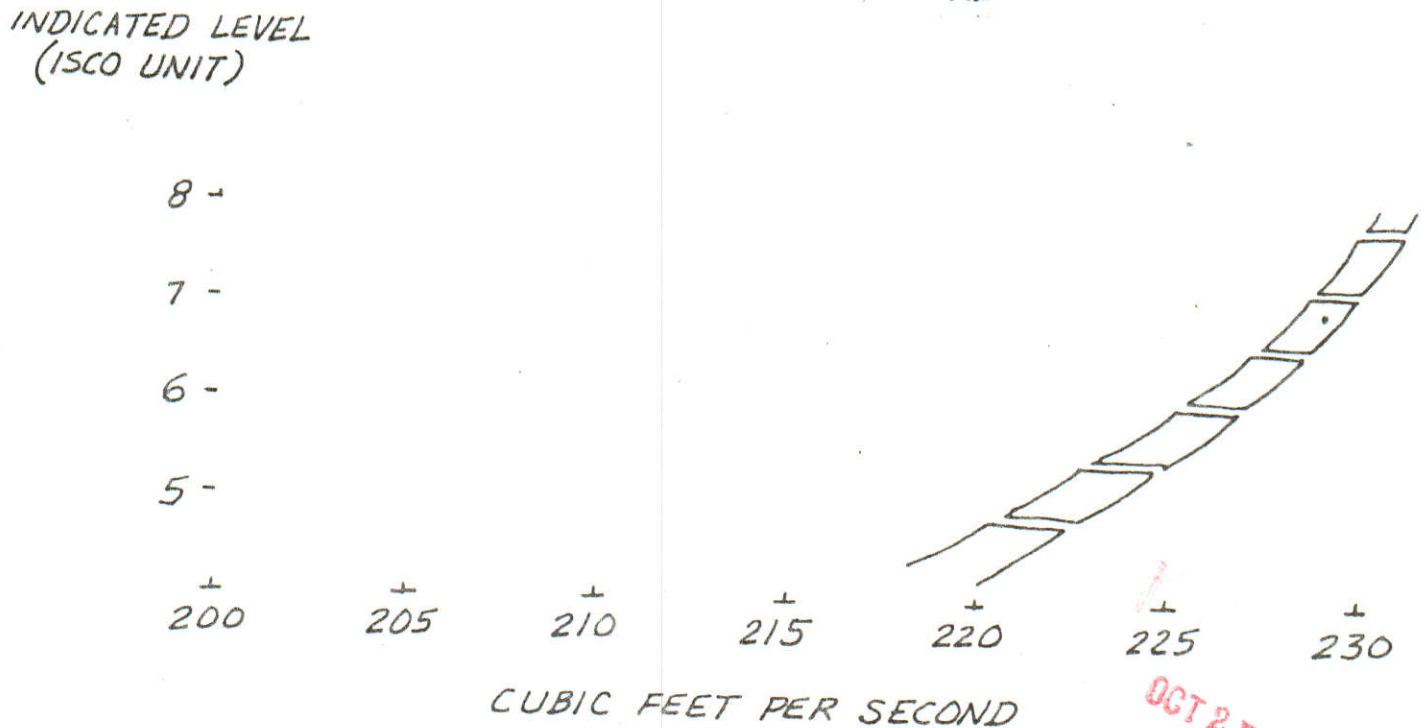
JIM KNIGHT HYDROELECTRIC PLANT

TOTAL PLANT FLOW VS. HEAD CURVE



SAGEBRUSH HYDROELECTRIC PLANT

TOTAL PLANT FLOW VS. HEAD



OCT 27 1995

BIG WOOD CANAL CO.

37-8166



DOWN STREAM LOOKING UP TO POWER PLANT.



POWER PLANT CONTROL HOUSE.



TURBINE LOCATIONS

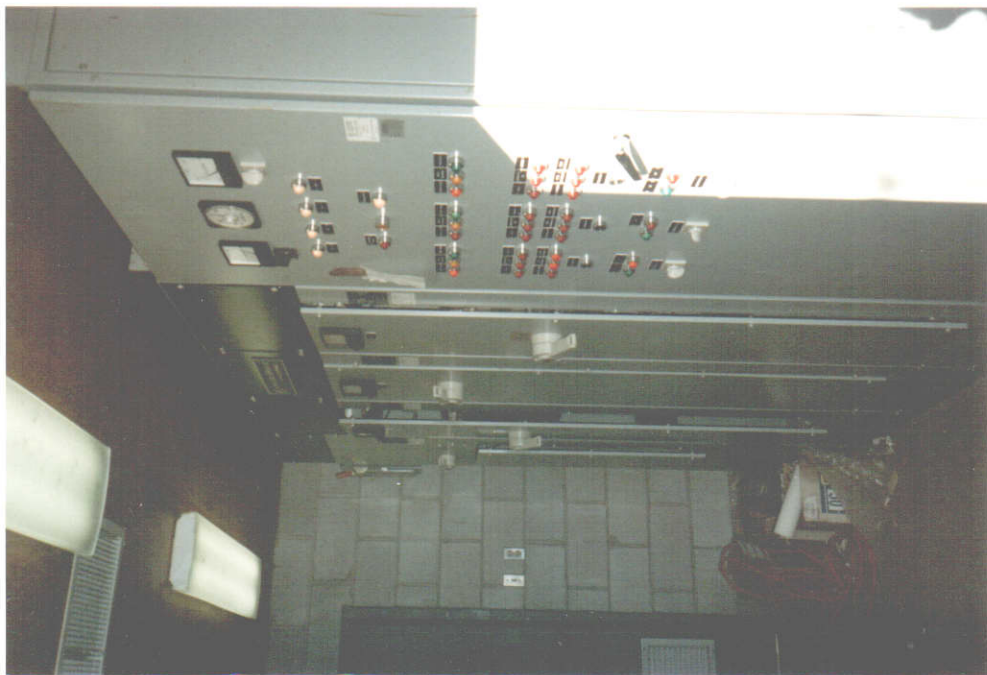


INLET TO TURBINES FROM CANAL

BIG WOOD CANAL CO.
37-8166

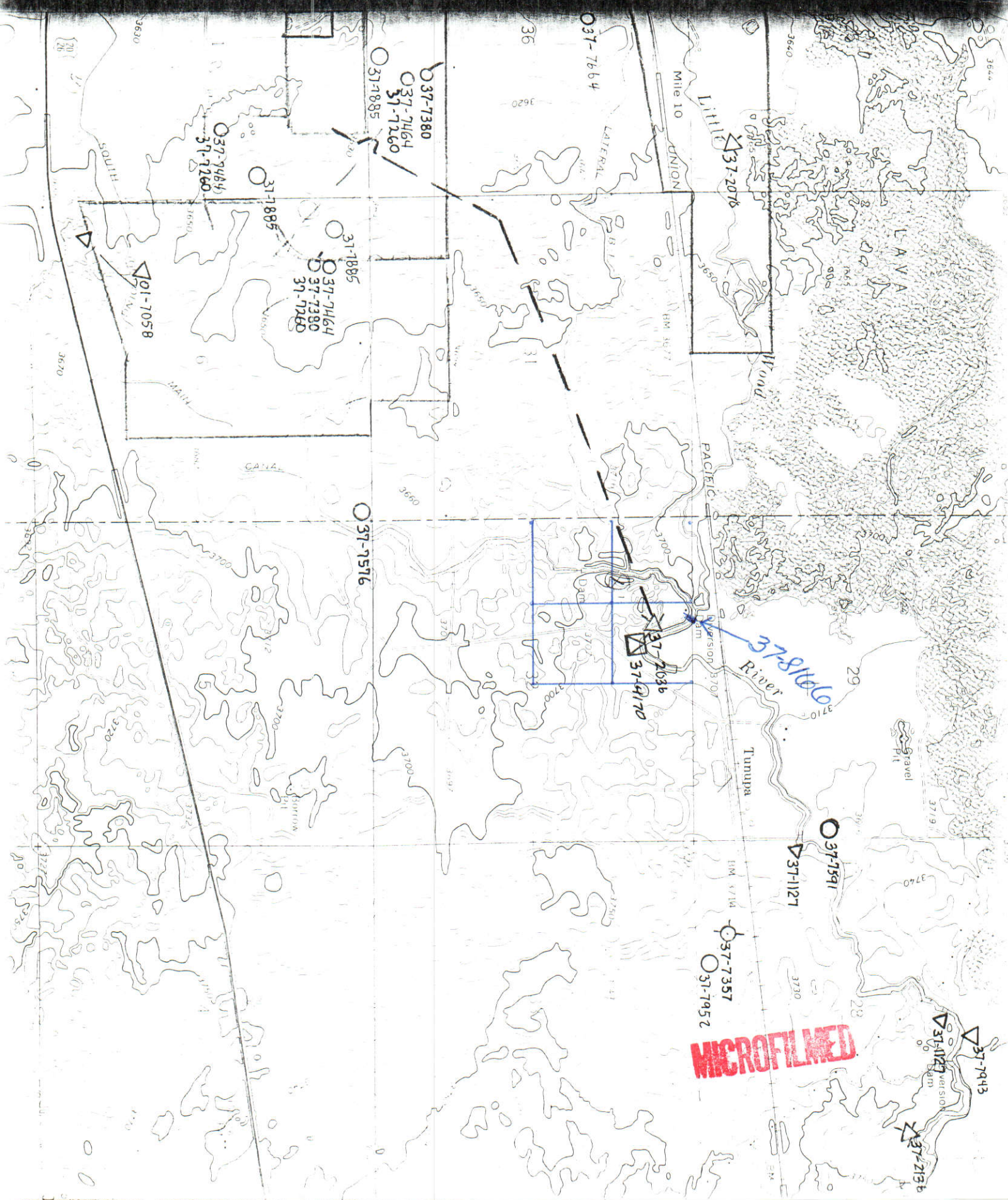


MEASUREING DEVICE



CONTROL PANALS FOR POWER PLANT

OCT 27 1995



UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Notice of Application Filed with the Commission

(January 3, 1984)

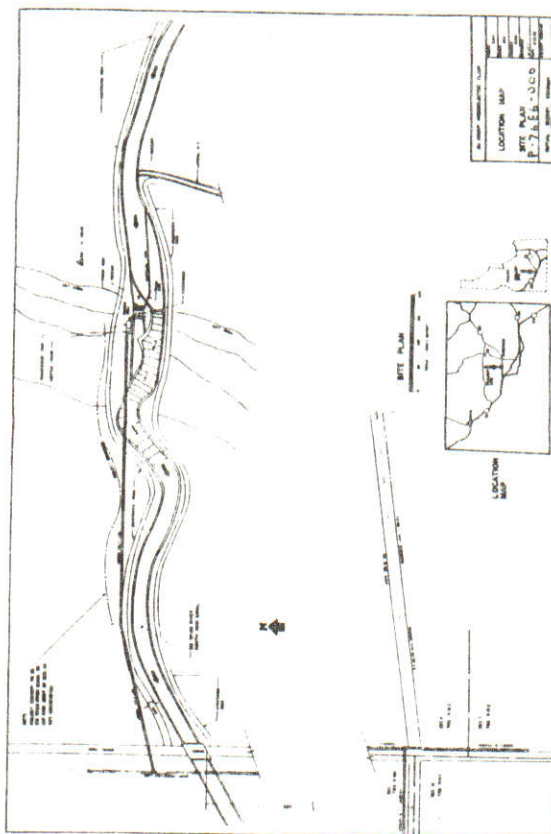
Take notice that the following hydroelectric application has been filed with the Federal Energy Regulatory Commission and is available for public inspection:

- a. Type of Application: Exemption From Licensing (Small Conduit)
- b. Project No: 7686-000
- c. Date Filed: October 5, 1983.
- d. Applicant: Mutual Energy Company
- e. Name of Project: Jim Knight Hydroelectric Powerplant
- f. Location: On South Gooding Main Canal, near Gooding, in Gooding County, Idaho
- g. Filed Pursuant to: Section 408 of the Energy Security Act of 1980 (16 U.S.C. §§2705 and 2708 as amended)
- h. Contact Person: Bart M. O'Keefe
President, Mutual Energy Company
1250 Pine Street, Walnut Creek, California 94596
- i. Comment Date: FEB 13 1984
- j. Description of Project: The proposed project would consist of: (1) a 175-foot-long, 4-foot-high concrete overflow weir forming; (2) a forebay at elevation 3665 feet; (3) a semi-underground powerhouse structure containing three submersible turbine/generators at elevation 3643 feet, two having a rated capacity of 120 kW, one with a rated capacity of 75 kW, and a combined annual energy production of 1.59 GWh; (4) a cinderblock control house; (5) a transformer yard; and (6) a 900-foot-long, 43-kV transmission line to an existing Idaho Power Company powerline.
- k. Purpose of Exemption - An exemption, if issued, gives an Exemptee priority of control, development, and operation of the project under the terms of the exemption from licensing, and protects the Exemptee from permit or license applicants that would seek to take or develop the project.
- l. This notice also consists of the following standard paragraphs: A3, A9, B, C, D3b

DC-A-10

D3b. **Agency Comments** - The U.S. Fish and Wildlife Service, The National Marine Fisheries Service, and the State Fish and Game agency(ies) are requested, for the purposes set forth in Section 10 of the Act, to file within 45 days from the date of issuance of this notice appropriate terms and conditions to protect any fish and wildlife resources or otherwise carry out the provisions of the Fish and Wildlife Coordination Act. General comments concerning the project and its resources are requested; however, specific terms and conditions to be included as a condition of exemption must be clearly identified in the agency letter. If an agency does not file terms and conditions within this time period, that agency will be presumed to have none. Other Federal, State, and local agencies are requested to provide comments they may have in accordance with their duties and responsibilities. No other formal requests for comments will be made. Comments should be confined to substantive issues relevant to the granting of an exemption. If an agency does not file comments within 45 days from the date of issuance of this notice, it will be presumed to have no comments. One copy of an agency's comments must also be sent to the Applicant's representatives.

Kenneth F. Plumb
Secretary



MICROFILMED

**NOTICE OF APPLICATION
FOR WATER RIGHT**

Notice is hereby given that the following application(s) have been submitted for permit to appropriate the public waters of the State of Idaho:

37-8166

BIG WOOD CANAL CO.
P.O. BOX C, SHOSHONE, ID
83352

Source: LITTLE WOOD
RIVER trib. to MALAD
RIVER

Date Filed: 12/30/83

Diversion Pt: NENW Sec 32

T 05S R 16E

Use: POWER (218.00 CFS)

In: LOT 06 (NWSW) Sec 06 T
06S R 16E

If issued, the permit(s) will be subject to all prior water rights. Protests against the granting of any permit must be filed with the Director of the Idaho Department of Water Resources, 1041 Blue Lakes Blvd. North, Twin Falls, Idaho 83301 and received on or before FEBRUARY 20, 1984.

/s/ A. KENNETH DUNN
Director

PUB: 1-31; 2-7

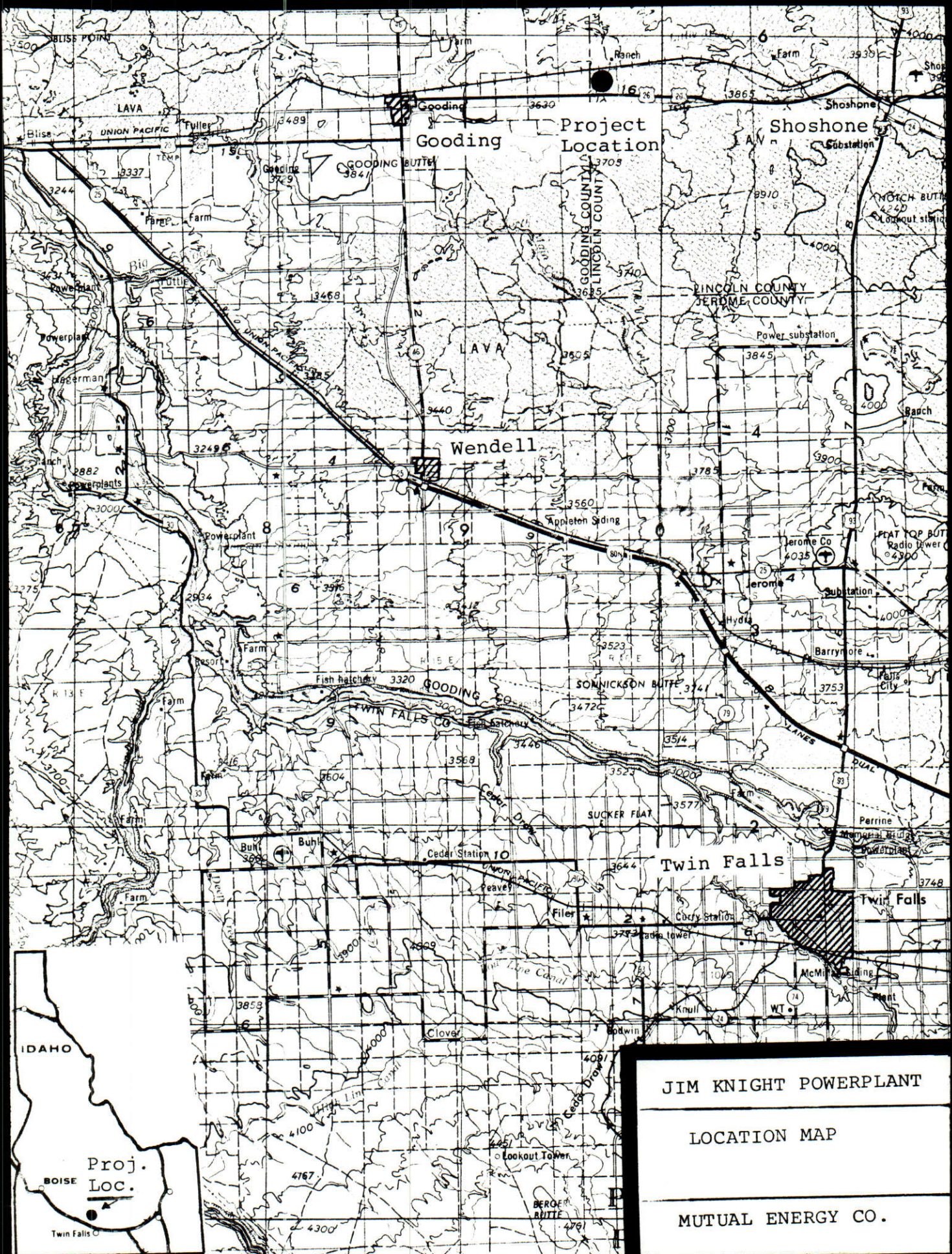
**BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**APPLICATION FOR EXEMPTION OF
SMALL CONDUIT HYDROELECTRIC FACILITY
FROM LICENSING**

**JIM KNIGHT
HYDROELECTRIC
POWERPLANT**

MUTUAL ENERGY COMPANY, INC.

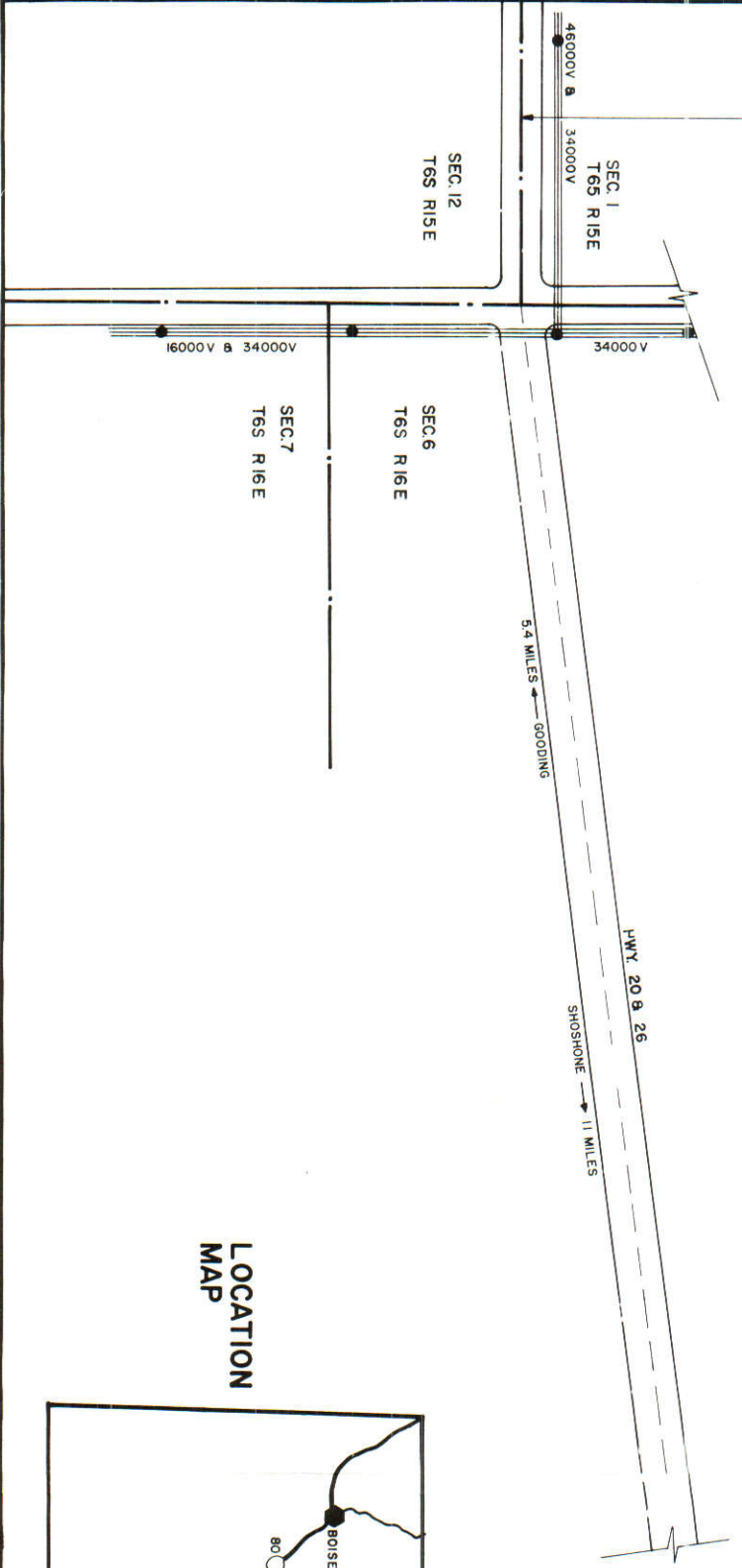
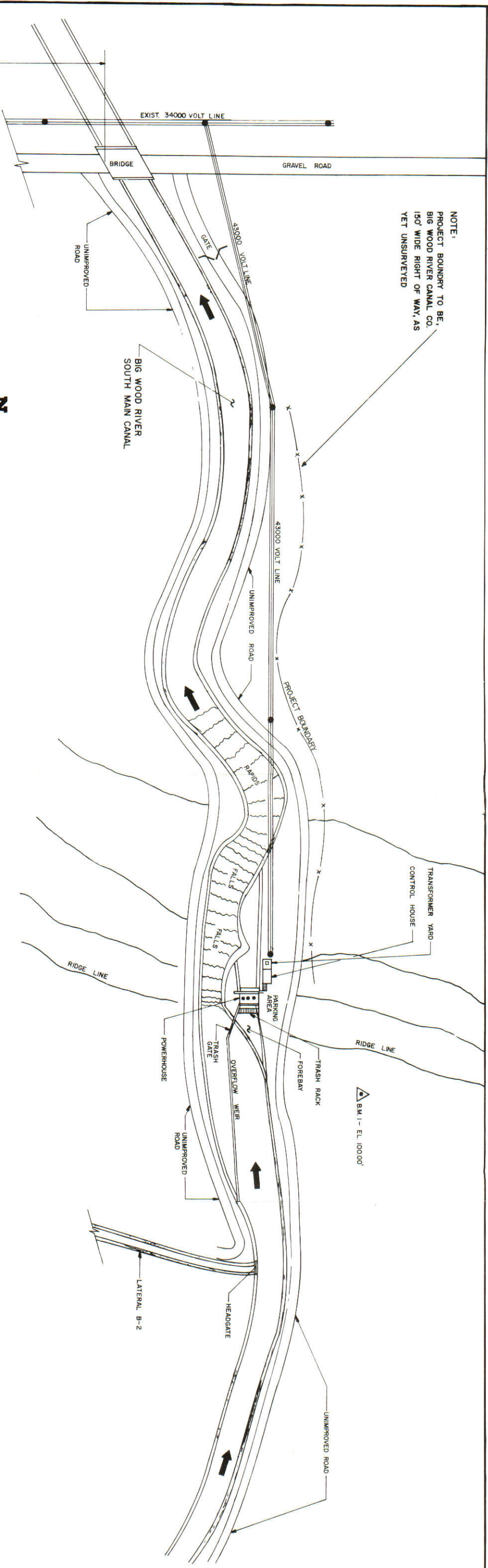
SEPTEMBER 1983



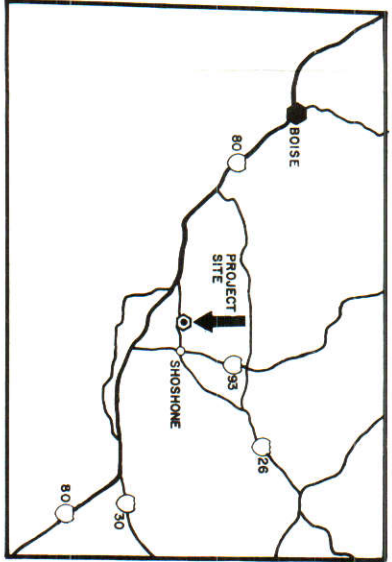
JIM KNIGHT POWERPLANT

LOCATION MAP

MUTUAL ENERGY CO.

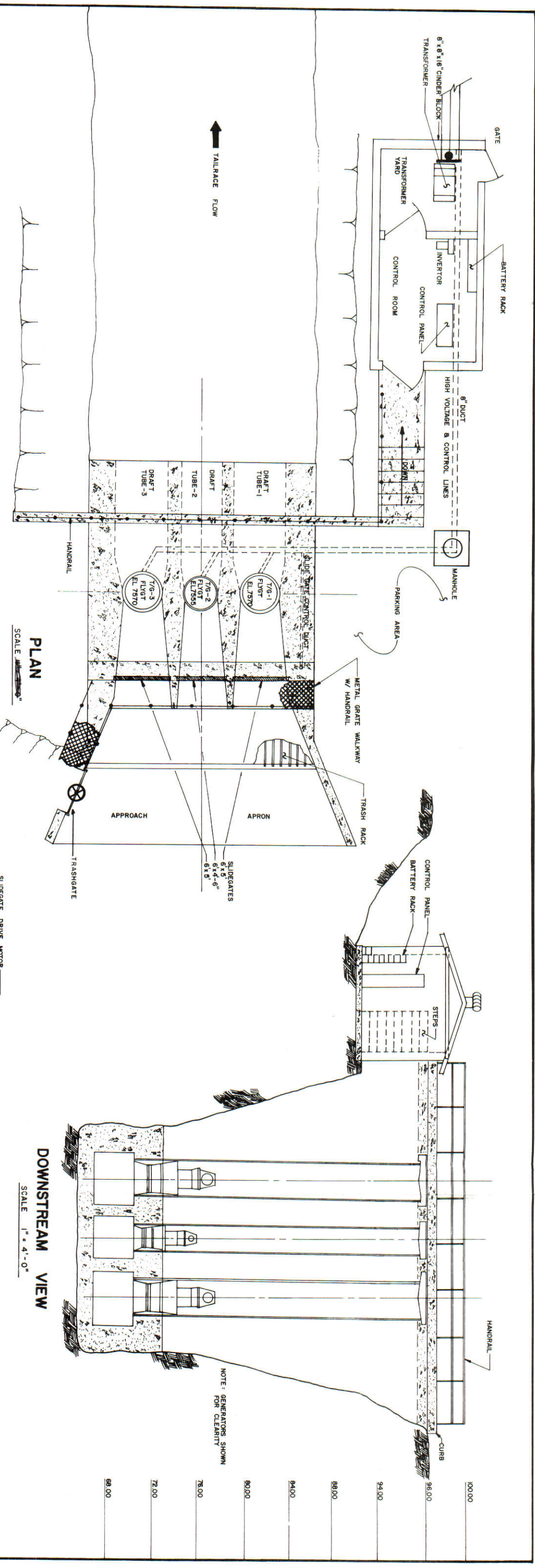


LOCATION MAP



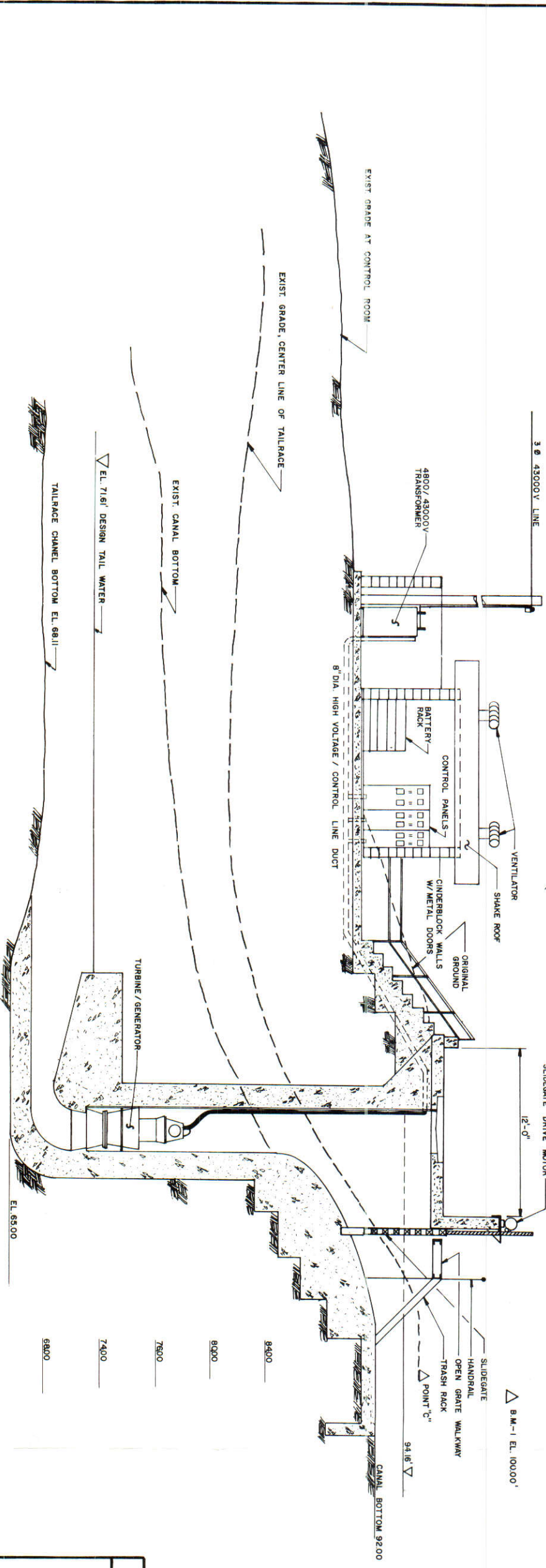
JIM KNIGHT HYDROELECTRIC PLANT	
LOCATION MAP	
SITE PLAN	
DESIGN	B.M.O.
DRAWN	J.V.B.
CHECKED	B.M.O.
APPROVED	<i>[Signature]</i>
DATE	9-10-83
PROJECT DRAWING	
SHT.	OF

MUTUAL ENERGY COMPANY
WALNUT CREEK, CA. 94596



DOWNSTREAM VIEW

SCALE 1" = 4'-0"



SECTION

SCALE 1" = 4'-0"

JIM KNIGHT HYDROELECTRIC PLANT		DESIGN	B.M.O.
POWERHOUSE		DRAWN	J.V.B.
CONTROLHOUSE		CHECKED	B.M.O.
		APPROVED	
		DATE	9-15-83
		PROJECT DRAWING	
MUTUAL ENERGY COMPANY WALNUT CREEK, CA. 94596		SHT.	OF

State of Idaho
Department of Water Resources

WATER RIGHT LICENSE

WATER RIGHT NO. 37-08166

Priority: December 29, 1983

Maximum Diversion Rate:

218.00 CFS

Maximum Diversion Volume:

79994.6 AF

This is to certify, that BIG WOOD CANAL CO

PO BOX C

SHOSHONE ID 83352

has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated December 29, 1983; and has submitted Proof of Beneficial Use on May 6, 1985. An examination indicates that the works have a diversion capacity of 218.600 cfs of water from:

LITTLE WOOD RIVER

tributary to MALAD RIVER

source, and a water right has been established as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>	<u>ANNUAL VOLUME</u>
POWER	04/01 to 10/31	218.00 CFS	79994.6 AF

LOCATION OF POINT(S) OF DIVERSION:

NENW , Sec. 32, Township 05S, Range 16E
GOODING County

PLACE OF USE: POWER

TWN RGE SEC

06S 16E 6 Lot 6(NWSW)

CONDITIONS OF APPROVAL AND REMARKS

1. The maximum diversion volume is defined as the maximum allowable volume of water that may be diverted annually from the source under this right. The use of water confirmed by this right is limited to the amount which can actually be beneficially used. The maximum diversion volume may be adjusted to more accurately describe the beneficial use or to implement accepted standards of diversion and use efficiency.
2. This water right is appurtenant to the described place of use.
3. This right is subject to all prior water rights and may be forfeited by five years of non-use.
4. Modifications to or variance from this license must be made within the limits of Section 42-222, Idaho Code, or the applicable Idaho law.
5. The rights for the use of water confirmed in this license shall be junior and subordinate to all rights for the use of water other than hydropower, within the State of Idaho that are initiated later in time than the priority of this right and shall not give rise to any right or claim against any future rights for the use of water, other than hydropower, within the State of Idaho initiated later in time than the priority of this right.

OCT 27 1985

State of Idaho
Department of Water Resources**WATER RIGHT LICENSE**

WATER RIGHT NO. 37-08166

CONDITIONS OF APPROVAL AND REMARKS

6. This right does not constitute Idaho Public Utilities Commission or Federal Energy Regulatory Commission approval that may be required.
7. A measuring device of a type approved by this Department shall be maintained as a part of the diverting works.
8. The issuance of this right does not grant any right-of-way or easement across the land of another.
9. Use of water under this right shall be non-consumptive.
10. The diversion and use of water under right is subject to review by the Director on December 31, 2013. Upon appropriate findings relative to the interest of the public, the Director may cancel all or any part of the use authorized herein and may revise, delete or add conditions under which the right may be exercised.

This license is issued pursuant to the provisions of Section 42-219, Idaho Code.
Witness the seal and signature of the Director, affixed at Boise, this 13TH
day of OCTOBER, 1995.

Acting for

KARL J. DREHER, Director

OCT 27 1995

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
PROOF OF BENEFICIAL USE

RECEIVED
MAY 6 1985

Department of Water Resources

The Idaho Department of Water Resources will consider this form as a statement that the permit holder(s) has completed development under this permit and that water has been applied according to the provisions of the permit for the beneficial use(s) described below:

Permit No. 37-8166

Name(s) of Permit Holder: Big Wood Canal Co. ✓

Post Office Address: Box C Shoshone, Id. 83352 ✓

Telephone No. 886-2331

Source of Water: _____

Extent of Use:

Domestic _____ (number of households)

Stockwater _____ (number and type of stock)

Irrigation _____ (acres)

Other/Remarks Power Generation ✓

Indicate the date water was first diverted and beneficially used under this permit: Sept. 1984 ✓

Measuring Device: Required? ☒ Yes ☐ No
Installed? ☐ Yes ☐ No

Flow Measurement Port: Required? ☐ Yes ☒ No
Installed? ☐ Yes ☐ No

MICROFILMED

Person to contact to accompany the Department representative during the field examination:

Richard M. Oneida Big Wood Office Shoshone
(Name)

Box C Shoshone, Id. 83352 886-2331
(Address) (Telephone Number)

The above information is a true statement of the extent to which the above numbered permit has been developed.

5/2/85 Big Wood Canal Co.
Date Signature of Permit Holder (and Title, if appropriate) ✓
Richard M. Oneida Manager
for

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

Ident. No. 37-8166
RECEIVED
DEC 29 1983

APPROVED

To appropriate the public waters of the State of Idaho

Department of Water Resources

1. Name of applicant Big Wood Canal Co. Phone (208) 886-2331
- Post office address P.O. Box C, Shoshone, ID 83352
2. Source of water supply * Little Wood River which is a tributary of * Malad River
3. Location of point of diversion is -NW- $\frac{1}{4}$ of SW- $\frac{1}{4}$ of Section -6- Township -6S- 5S *
- Range 16E B.M. Gooding County, additional points of diversion if any: _____
- * Per conversation w/Con Okeefe of Mutual Energy Co., 1-17-84

4. Water will be used for the following purposes:

Amount 218 for Power Gener. purposes from Jan 1 to Dec 31 (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

5. Total quantity to be appropriated:

a. 218 cfs max cubic feet per second and/or b. _____ acre-feet per annum.

6. Proposed diverting works:

- a. Description of ditches, flumes, pumps, headgates, etc. powerhouse to be set in Main Canal
with adequate bypass, utilizing entire flow of canal for power
generation. No ditches, pipes or flumes. See attached FERC Application
- b. Height of storage dam N/A feet, active reservoir capacity N/A acre-feet; total reservoir
capacity N/A acre-feet, materials used in storage dam: N/A
- Period of year when water will be diverted to storage N/A to N/A inclusive.
(Month/Day) (Month/Day)
- c. Proposed well diameter is N/A inches; proposed depth of well is N/A feet.

7. Time required for the completion of the works and application of the water to the proposed beneficial
use is 1 years (minimum 1 year — maximum 5 years).

8. Description of proposed uses:

- a. If water is not for irrigation: Lot 6
- (1) Give the place of use of water: (NW $\frac{1}{4}$ of SW) $\frac{1}{4}$ of Section 6 Township 6S
Range 16E B.M.
- (2) Amount of power to be generated: 442 horsepower under 22 feet of head.
- (3) List number of each kind of livestock to be watered None
- (4) Name of municipality to be served None, or number of families to be
supplied with domestic water _____.
- (5) If water is to be used for other purposes describe: electrical power generation.
Power to be sold to Idaho Power Co.

RECEIVED

b. If water is for irrigation, indicate acreage in each subdivision in the tabulation below:

TWP	RANGE	SEC.	NE¼				NW¼				SW¼				SE¼				TOTALS
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	

Total number of acres to be irrigated 0

c. Describe any other water rights used for the same purposes as described above. None

9. a. Who owns the property at the point of diversion Big Wood Canal Co.

b. Who owns the land to be irrigated or place of use Big Wood Canal Co.

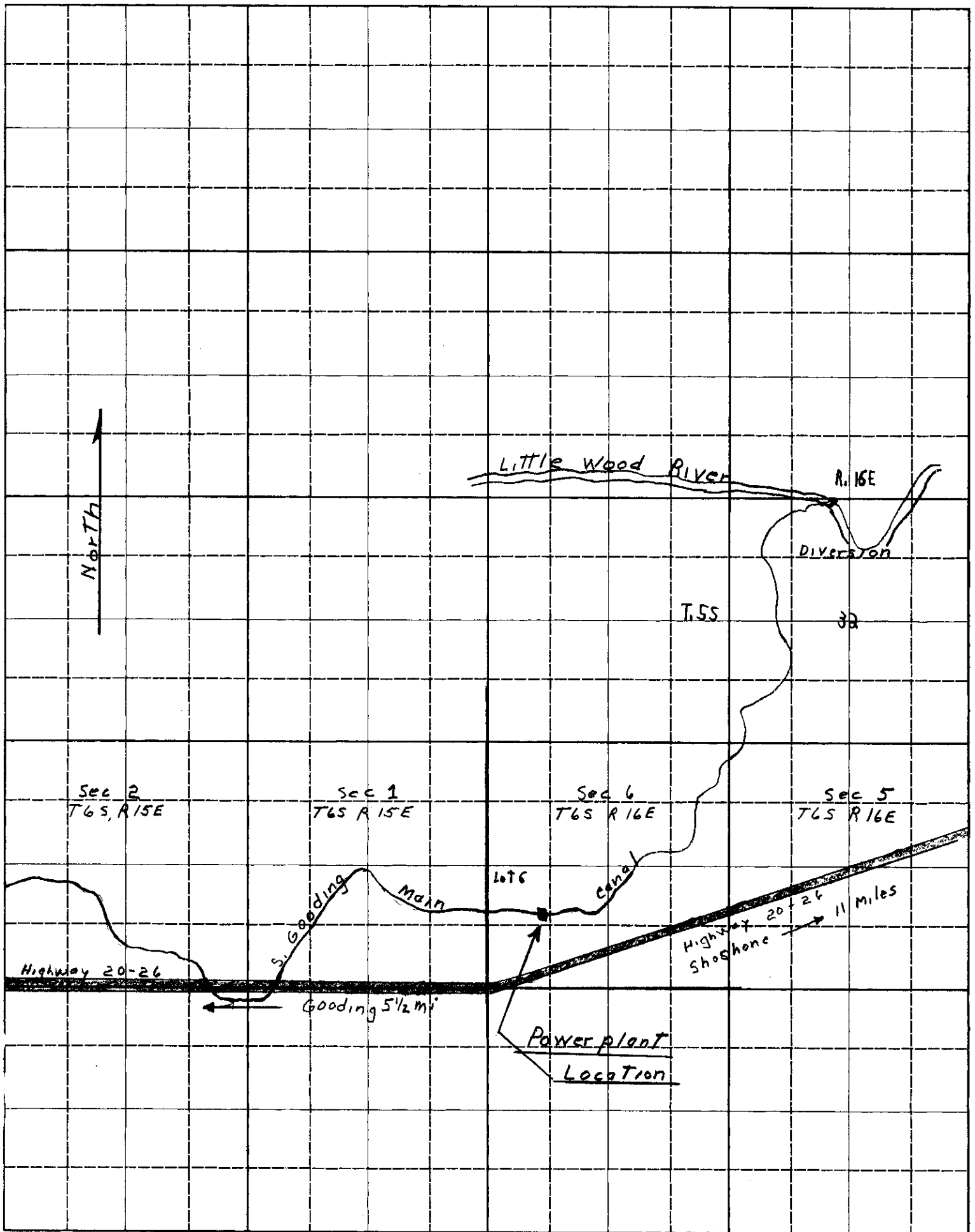
c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing _____

10. Remarks (1) Point of use, the powerhouse, is considered the point of ^{use} diversion.

(2) Big Wood Canal Co. has leased the powerplant site to Mutual Energy Co. for the purpose of developing a hydroelectric facility. After a number of years the powerplant will revert to Big Wood Canal Co. Title to the site and the water right will remain with Big Wood Canal Co.

(3) Technical questions regarding this application should be addressed to: Mr. Bart M. O'Keeffe, Mutual Energy Co., 3451 Longview Drive, Suite 130, North Highlands, CA 95660, (415) 945-1950

11. Map of proposed project: show clearly the proposed point of diversion, place of use, section number, township and range number.



Scale: 2 inches equal 1 mile.

BE IT KNOWN that the undersigned hereby makes application for permit to appropriate the public waters of the State of Idaho as herein set forth.

Donald Sandy
(Applicant)

Big Wood Canal Co.
Donald Sandy, President

MICROFILMED

Proposed Priority 12/29/83

Received by Marya Date 1/3/84 Time 11:30 a
Preliminary check by JH Fee \$ 1815⁰⁰ # 32967
Receipted by Marya Date 1/1/84
Publication prepared by Marya Date 1/26/84
Published in Gooding Co. Record
Publication dates 2/1 + 2/8/84 1/31/84 2/7/84
Publication approved 2/1/84 Date 1/31/84
Protests filed by: None

MICROFILMED

Copies of protests forwarded by _____

Hearing held by _____ Date _____

Recommended for approval denial by ADN kw

ACTION OF THE DIRECTOR, DEPARTMENT OF WATER RESOURCES

This is to certify that I have examined Application for Permit to appropriate the public waters of the State of Idaho No. 37-8166, and said application is hereby APPROVED.

1. Approval of said application is subject to the following limitations and conditions:

a. SUBJECT TO ALL PRIOR WATER RIGHTS.

b. Proof of construction of works and application of water to beneficial use shall be submitted on or before July 1, 19 85.

c. The rate of diversion, if water is to be used for irrigation under this permit, when combined with all other water rights for the same land shall not exceed 0.02 cubic feet per second for each acre of land.

d. Other: Water shall not be diverted under this permit until a written agreement with the irrigation district or canal company serving the area containing the point of diversion is filed with the Department of Water Resources providing for the coordination of the permit use with the irrigation district or canal company operation.

Use of water under this permit is subordinated to future diversion of water for irrigation or other consumptive beneficial uses.

This permit does not constitute Idaho Public Utilities Commission or Federal Energy Regulatory Commission approval that may be required.

The issuance of this permit in no way grants any right-of-way or easement across the land of another.

A measuring device of a type approved by the Department shall be permanently installed and maintained as part of the diverting works.

This permit is subject to the provisions of Sections 42-205 through 42-210, Idaho Code, restricting the sale, transfer, assignment, or mortgage of this permit. Failure to comply with these provisions is cause for immediate cancellation of this permit.

The diversion and use of water under this permit and any license subsequently issued is subject to review by the Director thirty (30) years from the date of issuance of this permit. Upon appropriate findings relative to the interest of the public, the Director may cancel all or any part of the use authorized herein and may revise, delete or add conditions under which the right may be exercised.

Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which permit holder had no control.

Witness my hand and seal 10th day of July, 1984.

J. Glen Saylor
Chief, Operations Bureau

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
AFFIDAVIT FOR WATER RIGHTS TO BE USED
FOR POWER PURPOSES

RECEIVED
DEC 29 1983

A. Establishment of Residency: (Complete either 1, or 2).

1. Individual Applicant or Individual Members of a Partnership: Department of Water Resources

I, _____ of _____,
(name) (city)

county of _____, State of Idaho, being duly sworn, do
hereby certify that I am a bona fide resident of the State of Idaho.

2. Corporation:

I, Donald Sandy of Shoshone,
(name) (city)

County of Lincoln, State of Idaho, being duly sworn, depose
and say: That I am the designated registered agent of the Big Wood Canal Co.

_____ : that as such I am in charge of the registered
(name of corporation)

office of the said corporation as required by Section 30-1-12, Idaho Code, at
Shoshone Idaho, wherein are kept the corporate records required
(city)

by Section 30-1-52, Idaho Code: and that Big Wood Canal Co.
(name of corporation)

is a corporation qualified to do business in the State of Idaho under the laws of
the State of Idaho.

B. Ownership of Facilities: (To be completed for hydropower projects only)

The hydropower facility to be developed pursuant to the attached Application for
Permit:

(check one)

- ☐ Will not utilize existing man-made irrigation facilities such as a dam or a canal.
- ☐ Will utilize existing man-made irrigation facilities such as a dam or a canal, and permission of the owner is documented in an affidavit attached hereto.
- ☒ Will utilize existing man-made irrigation facilities such as a dam or a canal and the owner of the facilities is the signee of this affidavit.

State of Idaho }
County of Lincoln } ss.

Donald Sandy
Applicant Big Wood Canal Co.

Donald Sandy, President

On this 7th day of October, 1983, personally
appeared before me the signer(s) of the above instrument, who duly acknowledged
to me that he (she) (they) executed the same.

seal

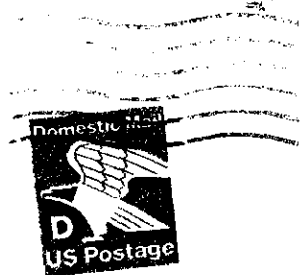
Bartholomew
Notary Public residing at
Shoshone, Idaho

My commission expires:

Life

MICROFILMED

Big Wood Canal Co.
Box C
Shoshone, Id 83352



Idaho Department of Water Resources
Statehouse Mail
Boise, ID 83720



State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000

Phone: (208) 327-7900 FAX: (208) 327-7866

PHILIP E. BATT
GOVERNOR

KARL J. DREHER
DIRECTOR

October 16, 1995

BIG WOOD CANAL CO
PO BOX C
SHOSHONE ID 83352

RE: WATER RIGHT NO. 37-08166

Dear Water Right Holder(s):

Enclosed is a copy of the Water Right License issued on the above referenced permit. If you have any questions, please contact me within 10 days of receipt of this license.

Sincerely,

Shelley W. Keen
Water Rights Supervisor

SK:rl

Enclosure

RECEIVED
OCT 27 1995

LICENS.. REVIEW CHECKLIST

Additional review (from 1994) JUNE



PERMIT NO. 037-08166 DATE 10-12-95

NAME	<u>Change OK</u>	<u>Or Address Change?</u>
PRIORITY DATE	<u>Advance?</u>	<u>Advanced to:</u>
	<u>Order to reinstate needed?</u>	
	<u>Incorrect fee for rate recommended?</u>	
SOURCE	<u>Changes or just clarification of originally intended source?</u>	
	<u>Notice of Intent to Void necessary?</u>	
POINT OF DIV	<u>Amendment needed?</u>	
	<u>Overlaps?</u>	
PLACE OF USE	<u>Amendment needed?</u>	
	<u>Overlaps?</u>	
DIV RATE	<u>Permit/fee limits:</u>	<u>218 CFS / POWER</u>
	<u>Meas Q = 218.6</u>	<u>Theo Q =</u> <u>Recommend: 218 CFS</u>
	<u>Combined rates exceed capacity</u>	
ANNUAL VOLUME	<u>Volume Limit:</u>	<u>Season: C 4-1 to 10-31</u>
	<u>Calculations:</u>	<u>IRRIGATION SEASON IS 7 months</u>
		<u>Plant operates 6 months or 185 days</u>
	<u>Flow limit:</u>	<u>218 cfs x 185 x 1.9835 = 79994.6</u>
	<u>Combined volumes exceed capacity/allowable</u>	
USES	<u>Change in Nature of Use or additional uses?</u>	
	<u>Amendment necessary?</u>	
ADDITIONAL INFO	<u>Supplemental Groundwater</u>	<u>PPU Scenario</u>
	<u>Irr/Dom Combination</u>	<u>Shared G/W System</u>
NEW REMARKS	<u>Multiple p/d(s) in 1/4 1/4?</u>	
	<u>YES Other</u>	<u>W42 - NO EVIDENCE OF A FERC LICENSE/permit</u>
		<u>(Filed for exemption)</u>
NEW CONDITIONS	<u>Watermaster control - District</u>	
	<u>BOI Measuring/Locking Devices</u>	
	<u>Irrigation Overlap</u>	
	<u>YES Other</u>	<u>R22 (not R23)</u>
	<u>Water Quality</u>	<u>Heat/Cool/Fish verified</u>

COMMENTS: ① 30 yr limits obtained from permit
② Season of use change per info in Mutual Energy Co Report.

RECOMMENDATION	CFS	VOLUME	SRBA Claim Filed	YES
<u>Power</u>	<u>218</u>	<u>79994.6</u>	<u>Adjustment Memo Needed</u>	<u>YES</u>
			<u>LICENSE</u>	<u>✓</u>
			<u>1ST AMEND LETTER</u>	
			<u>2ND AMEND LETTER</u>	

MEMORANDUM

TO: File 37-08166 / Big Wood Canal Co.
FROM: Brenda Chapman
DATE: October 12, 1995
RE: Recommendation Adjustment(s)

=====

The final licensing recommendations for Right 37-08166 are based on the information below:

NOTE: A change in the season of use is recommended based on information contained in the Mutual Energy Company, Inc. Report to the Federal Energy Regulatory Commission. See attachments.

G. VOLUME CALCULATIONS

According to Rule 5,1,10. of the Beneficial Use Rules and Regulations, the only uses exempt from listing the volume are municipal and fire protection. Even though the power use is considered "non-consumptive", an annual volume recommendation should be made.

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use	Rate of Div	Annual Vol
Power	4-01 to 10-31	218.0	79994.6

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OCT 27 1995

10. Visual Resources:

There will be minimal impact on the visual resources of the area. The top of the powerhouse is essentially at ground level, and the control house is recessed into the ground with a low profile. The facility is located in a farming/dairy area where rural type buildings are a common feature of the landscape.

11. Construction Impacts:

Any disturbance to the land will be during construction only, and will be confined to the project boundaries. Disturbed soil areas will be reseeded with natural grass. Little impact on area wildlife is anticipated, and then only during construction. Construction will be during the winter months while wildlife activities are at a low ebb. Also the wintertime construction will have the least impact on the vegetative habitat.

12. Operational Impacts:

The powerplant will be semiautomatic in operation with occasional maintenance visits. Therefore, human activity in the area will be minimal.

14. Proposed Changes in the Canal Flow Regime:

None. The powerplant operation will be for six months out of the year, during the normal irrigation season. Water discharged from the powerhouse will continue on down the canal for agricultural consumptive use.

15. Agencies Consulted:

See attached list, as per Idaho State Clearinghouse Project Review Notification and U.S. Fish and Wildlife Service.

1. Description of Environmental Setting:

The Jim Knight Powerplant is located on the South Gooding Main Canal. This is an irrigation canal used to carry consumptive water for agricultural irrigation. The canal was constructed in the early 1900's.

The canal traverses through a dry grass pasture upland. This dry pasture is on top of a level of volcanic lava flow with minimum value for the growing of crops. At the edge of the volcanic lava flow the canal tumbles down some 22 feet in vertical distance, and then resumes its course at the bottom of the lava flow. The site of the powerplant is at the edge of the lava flow, utilizing the flow in the canal and the 22 foot drop for the generation of power.

An existing road traverses along the canal providing access to the site. Therefore no new roads are required.

The dry grassland pasture receives quite heavy use from the nearby Jim Knight dairy. This heavy grazing use limits the number of rare or endangered plants that may exist in the area.

2. Fish and Wildlife Resources:

There are no fisheries associated with the powerplant environment. The water source is an irrigation canal used entirely for agricultural comsumptive use. The canal is dry for approximately three months each winter. Wildlife associated with the project would primarily be ground squirrels and other borrowing rodents that habitat these dry pastures. In reference to the concern expressed in the letter from the Idaho Department of Fish and Game, meetings have been held with the Idaho Power Company concerning the construction of the powerline. The

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

FIGURE A
RECEIVED
SEP 26 1986

A. GENERAL INFORMATION

Department of Water Resources

Permit No. 37-8166

Phone No. _____

1. Owner: Big Wood CANAL Co.

Current Address: _____

2. Accompanied by: Gracy Olsen

EXAM. DATE: 6-26-86 10:00AM

Address: _____

Phone No. _____

Relationship to Permit Holder: operator

3. Source: _____ tributary to _____

B. OVERLAP REVIEW

1. Other water rights with same place of use: _____

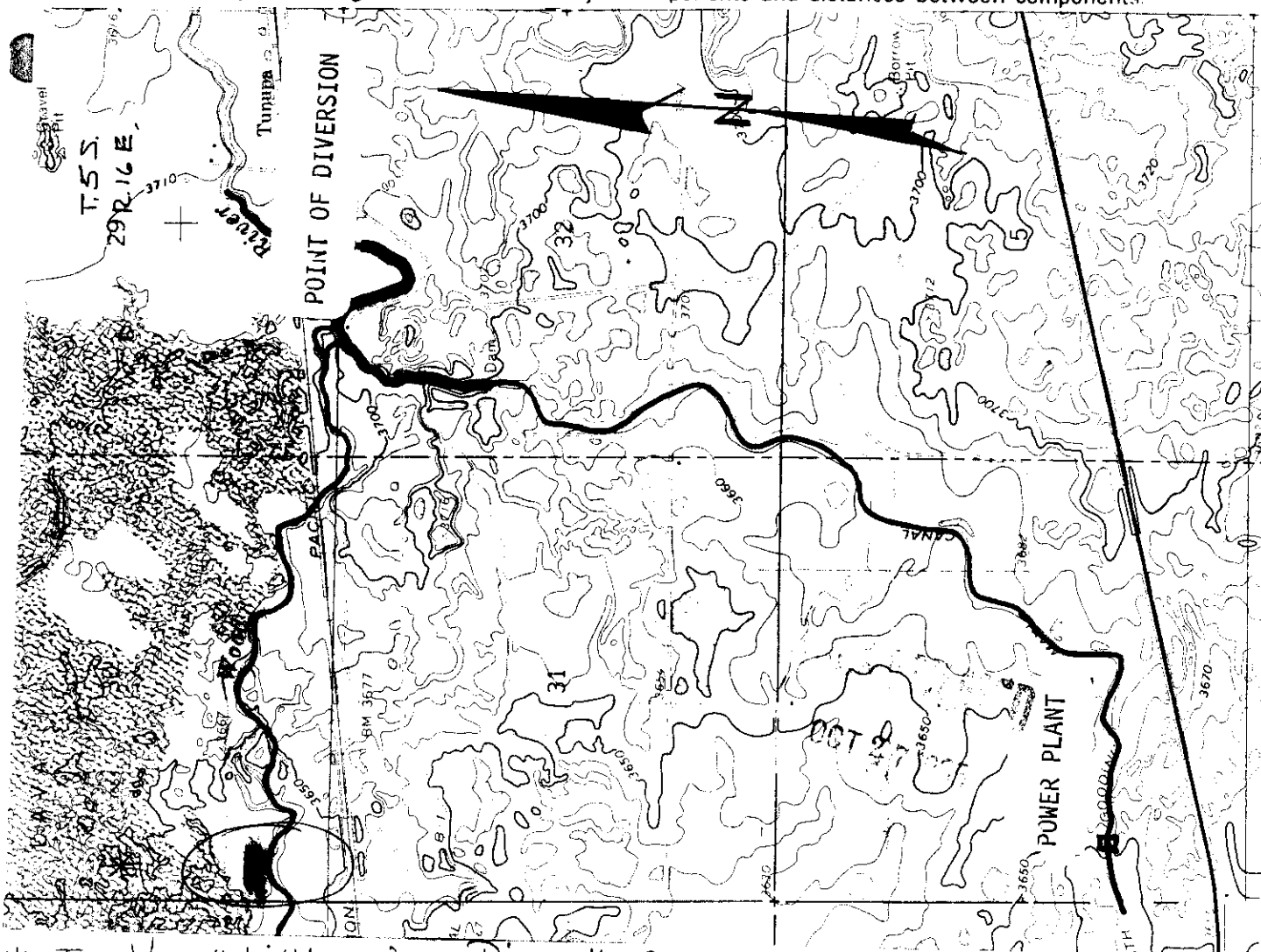
☐ Copies Attached

2. Other water rights with same point of diversion: _____

☐ Copies of Field Exam's Attached

C. SYSTEM DESCRIPTION

1. Diversion System Diagram: Indicate all major components and distances between components.



* Is the "Little Wood River". BC

- water is diverted, runs thru power plant which ~~returns~~ continues to discharge the water back to the main channel of the canal. (3) Turbines are used for developing power. See ATT-A. ATT-B. Has Diagram of Hydro-Power Plant.

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size

5. Point(s) of Diversion:

[illegible]

- Indicate Method of Determination

Twp.	Rge.	Sec.	NE¼				NW¼				SW¼				SE¼				Totals
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
6S	16E	6											X						
													46						
													X = Power Use						

Do not use this space

Do not use this space

D. FLOW MEASUREMENTS

☐ Additional Data Sheets Attached

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
ISCO Flow Meter						

2. Measurements:

Read 5.470 on measuring device.

See Curve A: C = 218.6 c.f.s. Allow 218.0 c.f.s.

See

E. FLOW CALCULATIONS

☐ Additional Computation Sheets Attached

1. Measured Method:

218.6 cfs

2. Alternate Method for Checking Purposes:

F. PUMP EFFICIENCY DATA (Optional)

Discharge Pressure: _____ psi x 2.31 = _____ ft (1); Dynamic pumping level: _____ ft (2)

Total Head: (1) + (2) = _____ (3); Flow rate: _____ cfs (4)

Water HP: (3) x (4) ÷ 8.8 = _____ (5)

Meter Input KW: 3.6 x _____ KH x _____ CTR or _____ MULT x _____ PTR x _____ N/ _____ T = _____ (6)

Meter Input HP: (6) x 1.34 = _____ (7)

Panel Input KW: _____ Ave PF x _____ Ave Volts x _____ Ave Amps x .001732 = _____ (6)

Panel Input HP: (6) x 1.34 = _____ (7) Efficiency: (5)/(7) x 100 = _____ %

G. VOLUME CALCULATIONS

N/A

1. Volume Calculations for Irrigation:

$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$ _____

$V_{DR} = [\text{Diversion Rate (cfs)}] \times [\text{Days in Irrigation Season}] \times 1.9835 =$ _____

$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} =$ _____

2. Volume Calculations for Other Uses:

001271005

H. REMARKS AND OVER-AP REVIEW ANALYSIS

I. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
power Gen.	Jan 1	Dec 31	218.0 cfs	N/A

Totals: 218.0 cfs

2. Recommended Amendments

- ☐ Change P.D. as reflected above
 ☐ Add P.D. as reflected above
 ☒ None
- ☐ Change P.U. as reflected above
 ☐ Add P.U. as reflected above
 ☐ Other

J. AUTHENTICATION

Field Examiner's Name

Mary Simelburg

Signature

Mary Simelburg

Certification Date

Field Report Preparation Date

CONSULTANT SEAL

- K. Licensing recommendation shall be prepared by an Idaho Department of Water Resources employee on a computer printout attached hereto.

OCT 27 1995

Ncy

F113

**UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION**

Brown William and Sharon William

Project No. 6137-001
Idaho

ERRATA NOTICE

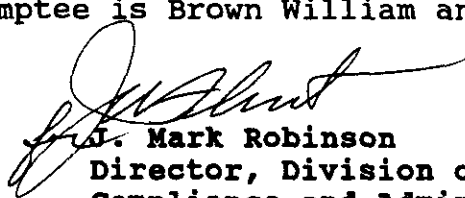
(Issued July 8, 1991)

ORDER AMENDING CONDUIT EXEMPTION

(Issued May 31, 1991)

The following change will be made to the Black Canyon No. 3 Project, FERC No. 6137-001.

1. The Big Wood Canal Company was incorrectly named as the exemptee, the correct exemptee is Brown William and Sharon.


Mark Robinson
Director, Division of Project
Compliance and Administration

DC-A-5

OCT 27 1995

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE. \$300

P-6137 131585
R. KEITH HIGGINSON DIRECTOR
IDAHO DEPARTMENT OF WATER RESOURCES
1301 NORTH ORCHARD STREET
STATEHOUSE MAIL
BOISE, ID 83720



POSTAGE AND FEES PAID
FEDERAL ENERGY
REGULATORY COMMISSION
FERC-351

37-8166
69
-2

REC'D 6-10-93

(C) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. § 385.713.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

The Big Wood Canal Company Project No. 6137-001
Idaho

ORDER AMENDING CONDUIT EXEMPTION
(Issued May 31, 1991)

On April 29, 1991, Bonneville Pacific Services, on behalf of the exemptee, The Big Wood Canal Company, filed a request for a determination of the need for an amendment to the exemption for the Black Canyon No. 3 Project, FERC No. 6137.

The licensed project consists of an intake structure, a 350-foot-long, 24-inch-diameter steel penstock, and a powerhouse containing a single generating unit with rated capacity of 150-kW. The actual installed nameplate capacity of the generator is 99-kW. This order amending conduit exemption changes the authorized capacity from 150 kW to 99 kW.

Operation of the project as amended would not result in any additional adverse environmental impacts other than those identified during processing the original application. Adherence to the conditions made a part of the original license would ensure that the operation of the project would not result in significant impacts to the quality of the human environment.

The Director orders:

- (A) The exemption for the Big Wood Canal Company, FERC No. 6137, is amended as provided in this order, effective the first day of the month in which this order is issued.
- (B) The project description found in appendix A of the exemption order, issued July 9, 1982, is revised to read as follows:

Project Description - The proposed project would consist of: (1) intake facilities; (2) a 350-foot-long; 24-inch-diameter steel penstock, (3) a powerhouse containing a single generating unit with a rated capacity of 99-kW.

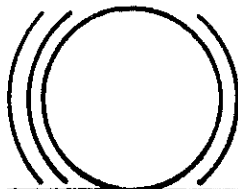
J. Mark Robinson
J. Mark Robinson
Director, Division of Project
Compliance and Administration

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JUN 06 1991

Department of Water Resources

DC-A-8

A# A



Greenwood Engineering

P.O. BOX 1571 CAVE JUNCTION, OREGON 97523
(503) 592-4100



RECEIVED

31 July, 1986

Gary Funderburg
Idaho Department of Water Resources
1041 Blue Lakes Blvd North
Twin Falls, Idaho 83301

AUG 4 1986

Department of Water Resources
Southern Oregon Canal

Dear Gary:

Enclosed are section and elevation drawings of the powerhouses at the Jim Knight and Sagebrush Hydroelectric Plants located east of Gooding on the South Gooding Canal. Also enclosed are rating curves (total plant flow vs. head) for both plants.

Both plants utilize Flygt axial flow turbines direct coupled to induction generators and thus act very predictably as flow regulators. The Jim Knight plant uses two model 7570 turbines operating at 605 RPM with 24 degree blade angles and one model 7555 turbine operating at 740 RPM with 24 degree blade angles. The Sagebrush plant uses two 7570's with 26 degree blade angles and one 7555 with 25 degree blade angles. Individual performance curves for the conditions specified have been summed to produce the rating curves, and 3% leakage past the gasket faces at the base of the turbines has been assumed. In addition, tests at the Knight plant were performed to calibrate the indicated flow meter head reading to the actual head loss through the trash racks.

As is noted on the drawing, the ISCO flow meter head reading is calibrated to the concrete floor level; for example, a reading of 4.50 on the ISCO unit corresponds to an actual water depth of 4.50 feet above the intake floor surface. At the Sagebrush plant, a reading of 7.40 on the ISCO unit is arbitrarily calibrated to a water level 3.00 feet below the top surface of the adjacent vertical wall (nearest the head level sensor mounting bracket).

With this information one should be able to determine the actual flow through the plants with an accuracy equal to a typical canal gaging station. I hope this is the information is adequate for your purposes.

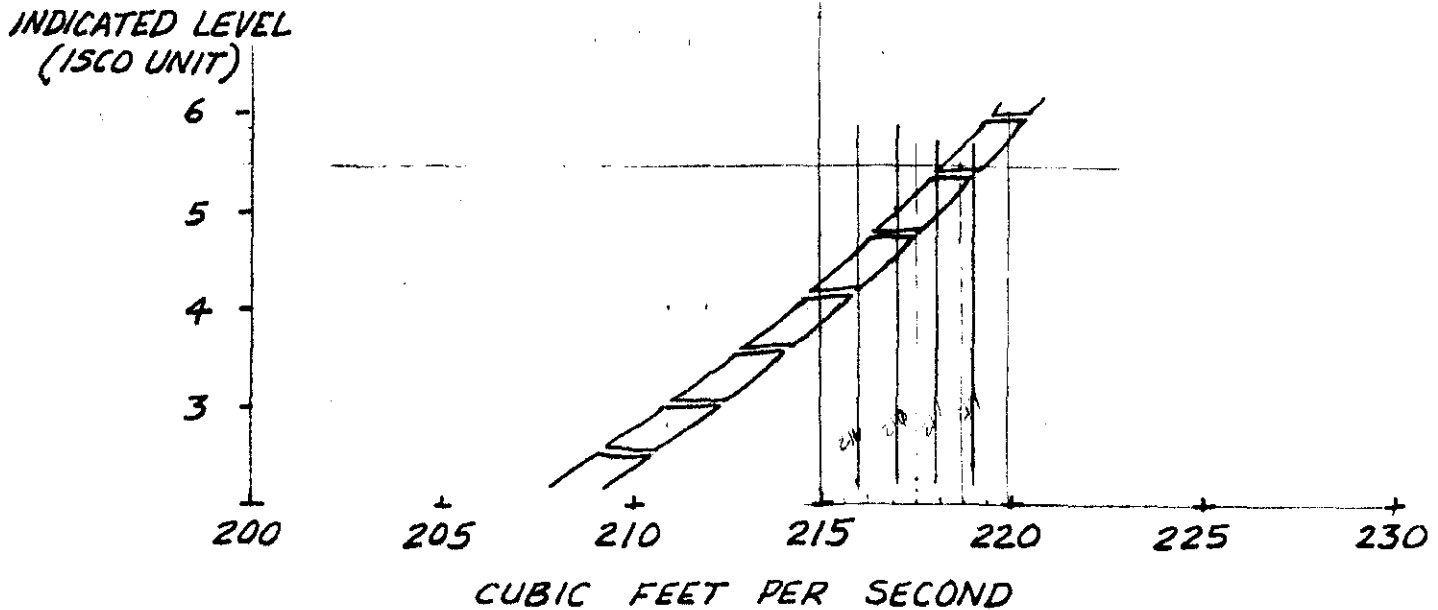
Sincerely,

Charles S. Greenwood

OCT 27 1986

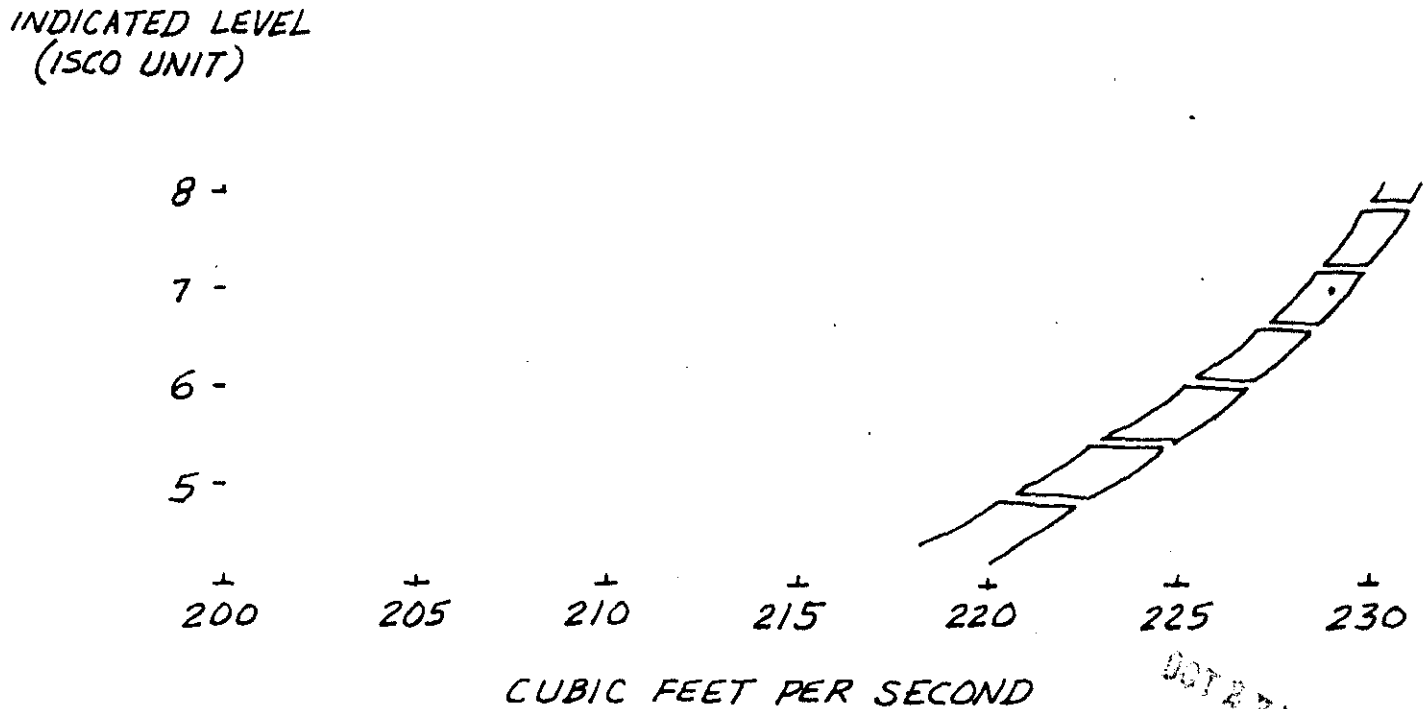
JIM KNIGHT HYDROELECTRIC PLANT

TOTAL PLANT FLOW VS. HEAD CURVE



SAGEBRUSH HYDROELECTRIC PLANT

TOTAL PLANT FLOW VS. HEAD



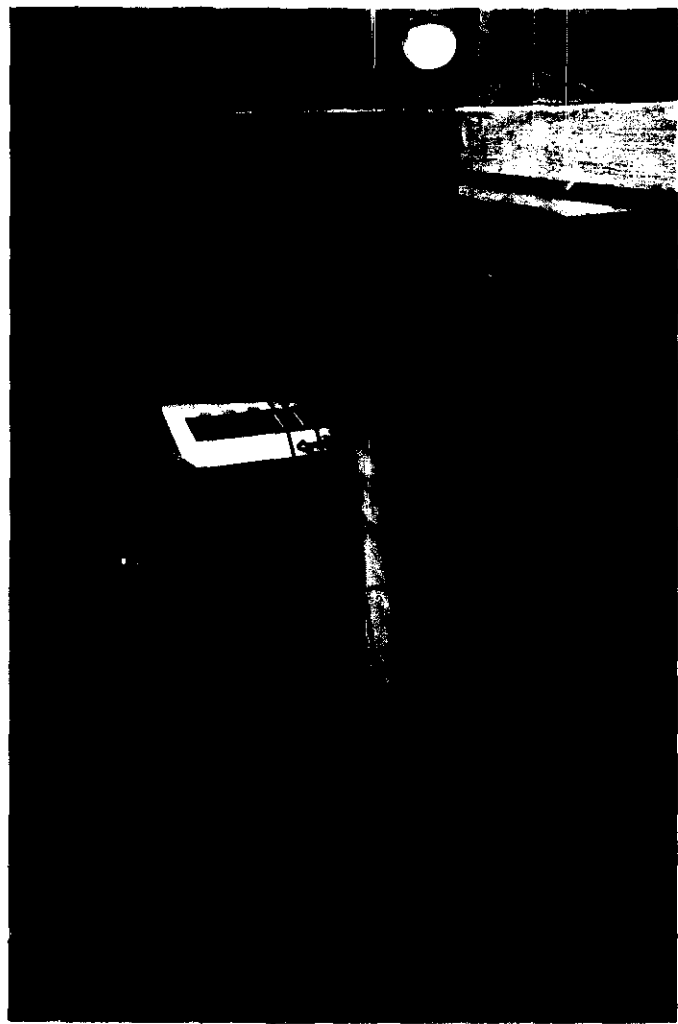
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BIG WOOD CANAL CO.

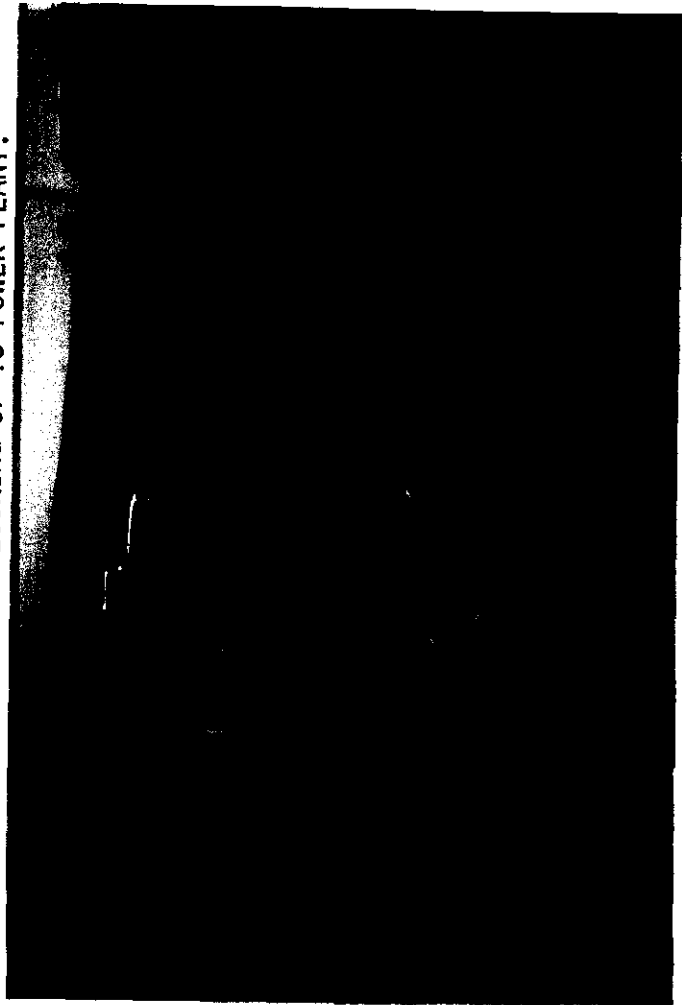
37-8166



DOWN STREAM LOOKING UP TO POWER PLANT.



POWER PLANT CONTROL HOUSE.

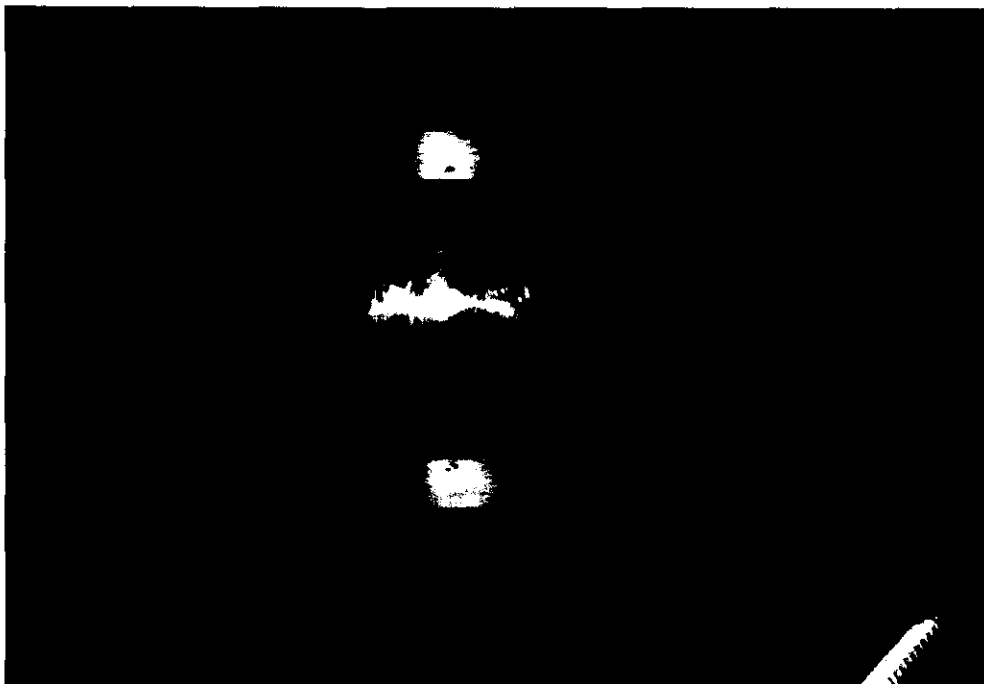


TURBIN LOCATIONS



INLET TO TURBINES FROM CANAL

BIG WOOD CANAL CO.
37-8166



MEASUREING DEVICE



CONTROL PANALS FOR POWER PLANT

OCT 27 1995

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES
Southern Region

1041 Blue Lakes Blvd. N.
Twin Falls, Idaho 83301
(208) 734-3578

AUGUST 2, 1985

BIG WOOD CANAL CO.
BOX C
SHOSHONE ID 83350

RE: Permit No. 37-8166

Dear Permit Holder:

We acknowledge receipt of your statement submitted as proof of beneficial use for the above referenced permit.

Before a license can be issued, a field examination must be made by a representative of this department.

A field examiner will contact you to arrange to examine your system.

If you have any questions regarding the field examination, please contact this office by phone at 734-3578 or in person at our office at 1041 Blue Lakes Blvd. N. Twin Falls, Idaho.

Sincerely,
s/Mary A. Newby
Secretary

OCT 2 7 1985

S T A T E O F I D A H O
DEPARTMENT OF WATER RESOURCES

STATEHOUSE
BOISE, IDAHO 83720
(208) 334-4440
CERTIFIED MAIL

138932

BIG WOOD CANAL CO.
P.O. BOX C
SHOSHONE, ID 83352

PROOF DUE NOTICE

APRIL 30, 1985

DEAR PERMIT HOLDER:

ONE OF THE CONDITIONS OF APPROVAL OF YOUR WATER PERMIT NO. 37-8166 WAS THAT PROOF OF THE EXTENT OF YOUR BENEFICIAL USE MUST BE SUBMITTED TO THIS OFFICE ON OR BEFORE JULY 01, 1985. (SEE LAST PAGE OF YOUR APPROVED PERMIT OR YOUR LAST APPROVED EXTENSION REQUEST). ENCLOSED IS A FORM WHICH MAY BE USED TO SUBMIT THE REQUIRED PROOF.

IF YOU HAVE NOT FULLY COMPLETED YOUR PROJECT, AND YOU OR A PREVIOUS OWNER OF THIS PERMIT HAVE NOT RECEIVED A PRIOR EXTENSION OF TIME, YOU MAY REQUEST AN EXTENSION OF TIME IF THE DELAY IS FOR REASONABLE CAUSE AS PROVIDED IN SECTION 42-204, IDAHO CODE. IF YOU HAVE BEEN PREVENTED FROM PROCEEDING BY A GOVERNMENTAL AGENCY OR BY LITIGATION, MORE THAN ONE EXTENSION OF TIME CAN BE GRANTED. AN EXTENSION OF TIME REQUEST FORM IS ENCLOSED FOR YOUR CONVENIENCE.

EITHER THE BENEFICIAL USE FORM OR A REQUEST FOR AN EXTENSION OF TIME MUST BE RECEIVED BY THIS DEPARTMENT ON OR BEFORE THE ABOVE DESCRIBED PROOF DUE DATE. IF NEITHER IS RECEIVED, THE DEPARTMENT WILL SEND YOU A LAPSE NOTICE. WITHIN SIXTY (60) DAYS OF THE MAILING OF THE LAPSE NOTICE, THE PERMIT WILL NO LONGER BE OF ANY FORCE NOR EFFECT.

SINCERELY,

RITA FLECK
SECRETARY/RECORDS MANAGER

ENCLOSURES

MICROFILMED



Mutual Energy Co., Inc.

HYDROELECTRIC ENGINEERS & DEVELOPERS

3451 LONGVIEW DRIVE, SUITE 130
NORTH HIGHLANDS / SACRAMENTO, CALIFORNIA 95660
(916) 971-3717

RECEIVED
AUG 1 1984

July 26, 1984

Department of Water Resources
Statehouse
Boise, ID 83720

Department of Water Resources

Attention: David R. Tuthill, Jr., P.F.
Supervisor, Water Allocation Section

DRT No response reg'd.

Subject: Permit No. 37-8166

This is in reply to your letter of July 16, 1984 which transmitted the approved application for Permit No. 37-8166.

The measuring device called for in your letter, installed at the point of diversion, has been in operation for many years, i.e. Big Wood Canal Co., Gage No. 15.

Construction of the facility commenced about March 20, 1984 and will be completed prior to December 31, 1984.

The written agreement between Big Wood Canal Company and Mutual Energy Co., Inc. as called for in the approved application, page 4, item 1d, has previously been submitted to the Idaho Dept. of Water Resources. A copy of the agreement is contained in the Application for Exemption from licensing as submitted to the Federal Energy Regulatory Commission, and filed with the Idaho Dept. of Water Resources as a portion of the application for this water right permit.

If there are further questions, please don't hesitate to contact me.

Sincerely,

MUTUAL ENERGY CO., INC.

Bart M. O'Keeffe

Bart M. O'Keeffe
President

BMO/gs

FILED

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
COMMENCEMENT OF WORKS

Permit No. 37-8166
Name(s) of Permit Holder(s): Big WOOD CANAL CO.
Post Office Address: P.O. BOX 70, 5 HOSKINS ID. 83352
Tel. No. (208) 886-2331

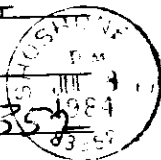
- ☒ I hereby certify that construction of diversion works for the above referenced permit began on APRIL 1, 1984 (date). I understand that I must continue to develop the water system with due diligence to maintain a valid permit.
- ☐ I hereby certify that construction of diverting works on the above referenced project has not yet begun due to the following reason beyond my control*:

*Note: A financing difficulty is not an acceptable reason.

7/17/84
Date

Richard M. Brinkley
Signature of Permit Holder
Manager

Big Wood Canal Co
Box C
Shoshone, ID 83352



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JUL 19 1984



Department of Water Resources
IDAHO DEPARTMENT OF WATER RESOURCES
STATEHOUSE
BOISE, IDAHO 83720



State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

May 15, 1984

Dr. Raymond E. Staepelaere
914 Elsinore Dr.
Palo Alto, CA 94303

RE: Permit No. 37-8166

Dear Mr. Staepelaere:

This office is in receipt of a letter dated February 24, 1984 from Mutual Energy Company, Inc., in which Mr. Bart M. O'Keeffe indicated that a Mr. Carl E. Berg will be financing a project called the ~~Tom~~ Knight Hydroelectric Power Plant, with which the above-referenced water right is associated.

The water right is currently an Application for Permit. We are now in the process of reviewing the application for approval, and find the application generally in order. One item that is not fully documented in the file, however, is the ability of the applicant to finance the project. In Mr. O'Keeffe's letter, he indicated that information on Mr. Berg's financial capability could be obtained by contacting you. The purpose of this letter is to request that you send to this office documentation regarding Mr. Berg's financial capability and his disposition regarding financing the ~~Tom~~ Knight Hydroelectric Power Plant.

Upon our receipt of your information, this office will take further action toward disposition of the above-referenced Application for Permit.

Sincerely,

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:ns

cc: Bart M. O'Keeffe
The Big Wood Canal Co.

RECEIVED

July 10, 1984

RE: Permit No. 57-8166

Big Wood Canal Co.
P.O. Box C
Shoshone, ID 83352

Dear Permit Holder:

Enclosed is a copy of your approved Application for Permit. We direct your attention to the conditions of approval on the fourth page.

Be sure to note the special condition requiring you to install and maintain a measuring device at your point of diversion. We have enclosed a description of the different types of measuring devices accepted by this office.

Please be advised that prior applications for permit have been filed to appropriate water from your source which may impact the availability of water to be used under this permit. Therefore, you should be sure to analyze the impact of these rights before making a major investment into your water use project.

Please note the requirement that as a permit holder you must commence the excavation or construction of diverting works within one year of the date the permit was issued, and you must proceed diligently until the project is completed. The enclosed blue card must be completed and returned to this office as soon as you commence construction, no later than one year from the date the permit was approved.

We have enclosed a form entitled "Instructions for Proof of Beneficial Use". Please read the instructions carefully since you must take further action to develop this permit into a license.

Sincerely,

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc
Enclosures

RECEIVED

CONVERSATION MEMORANDUM

DATE 7/10/84FILE 37-8166NAME OF PARTY Phil RassierEMPLOYEE Dave TutthillRE: Name Difference Between Applicant & FERC Exemption Recipient

In his review of this file, Norm Young raised a question about the propriety of having a water right applicant that is different from the FERC exemption recipient. In many cases a water right is assigned to the entity which applies for FERC approval, so that only one entity is considered to have control of a specific hydropower project.

Per a discussion with Phil Rassier, the following determinations were made regarding the above-referenced application:

- In a letter dated 12/23/1983 in the file, Mr. Bart O'Keeffe indicated that although the Exemption request for FERC was in the name of Mutual Energy Co., Inc., ~~at~~ at the termination of a 20 yr lease the powerplant will revert to the Big Wood Canal Co. and it was agreed that the water right would remain in the name of the Big Wood Canal Co.
- Because the relationship between the two entities is clear in the file, and because Mutual Energy Co., Inc. is essentially acting as a developing agent for Big Wood Canal Co., there is no reason to require the water right to be in a different name than the Big Wood Canal Co.

DRT

CONVERSATION MEMORANDUM

DATE June 5, 1984FILE 37-8166NAME OF PARTY JOHN FAY (408) 277-6500EMPLOYEE Dave TurhillRE: Financial Ability of Carl E. Berg

Mr. Ray Stapelaere called about 2 weeks ago to say that Mr. Berg hesitated to distribute his financial statement unless absolutely necessary due to a history of kidnapping threats in the Berg family. Instead, he asked that we consider accepting a letter from Mr. Berg, with any needed follow-up with Wells Fargo Bank in California.

After receiving Mr. Berg's letter dated May 30, 1984 I called Mr. Fay, who indicated that Mr. Berg's personal net worth is over \$100 million, and that the Wells Fargo line of credit to Mr. Berg exceeds \$27 million.

Based on the documentation in the file I see no need for further letters. I am convinced that we have adequate financial documentation for this 1/2 million - dollar Jim Knight Hydroelectric Powerplant.

Dor

RECEIVED

Berg & Berg Developers

10050 Bandley Drive
Cupertino, California 95014
(408) 725-0700

RECEIVED
JUN 4 1984

Department of Water Resources

May 30, 1984

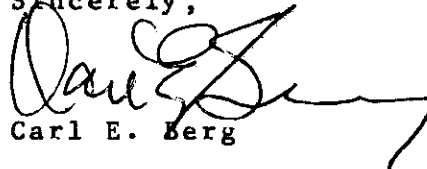
Mr. David R. Tuthill, Jr.
State of Idaho-Statehouse
DEPARTMENT OF WATER RESOURCES
450 W. State Street
Boise, ID 83720

Dear Mr. Tuthill:

This is to confirm that we have undertaken to finance the JIM KNIGHT Hydroelectric Power Plant that Mutual Energy Company Inc. is constructing.

If you wish any further information regarding our financial capabilities, please feel free to contact Mr. John Fay, Vice President at Wells Fargo (408) 277-6500.

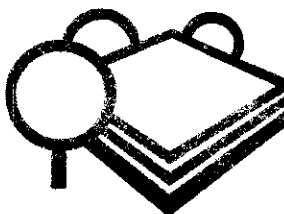
Sincerely,


Carl E. Berg

CEB:dm

CEB-148

cc: John Fay
Bart O'Keeffe
Ray Staepelaere



developers of business parks,
industrial complexes, and office buildings

RECEIVED

STATE OF IDAHO
Department of Water Resources

No 32967

Boise, Idaho,

1984

RECEIVED
FROM

Mutual Energy Co of Suckseed Corp, CA \$ 1815.⁰⁰

one thousand eight hundred fifteen & ⁰⁰/₁₀₀ DOLLARS

FOR

appl/pump	\$ 1815	00
	\$	
1254	\$	
90-3374	\$	
TOTAL - - -	\$ 1815	00

Big wood Canal Co

MICROFILMED

Mary A Newby

Send Copy of approved

app. & letters to:

Mr. Bart M. O'Keefe
Mutual Energy Co.
3451 Long~~view~~^{view} Dr., Suite 130
North Highlands, CA
95660

POWER CALCULATIONS FOR APPLICATION NO. **37-81166**

327.08

P = Kilowatts

.74 X hp

442 hp

proposed

Q = cfs **218**

H = feet **22'**

e = efficiency

- ✓ 1.) Affidavit of Residency
 - ✓ 2.) Ownership of Facilities
 - ✓ 3.) *Financial Ability
 - ✓ 4.) Feasibility of Project
 - ✓ a. Plans, drawings
 - ✓ b. Economic analysis
 - ✓ 5.) *Compliance w/FERC
- *only for projects of more than 25 cfs or more than 500 horsepower.

$$e = \frac{P(11.8)}{QH} = \frac{327.08(11.8)}{218 \times 22} = \frac{3859.544}{4796} = 0.8047 \text{ OK}$$

Based on the above calculations the proposed project must have an **80** % efficiency.

OVERLAP REVIEW

per terminal 4/16/84:

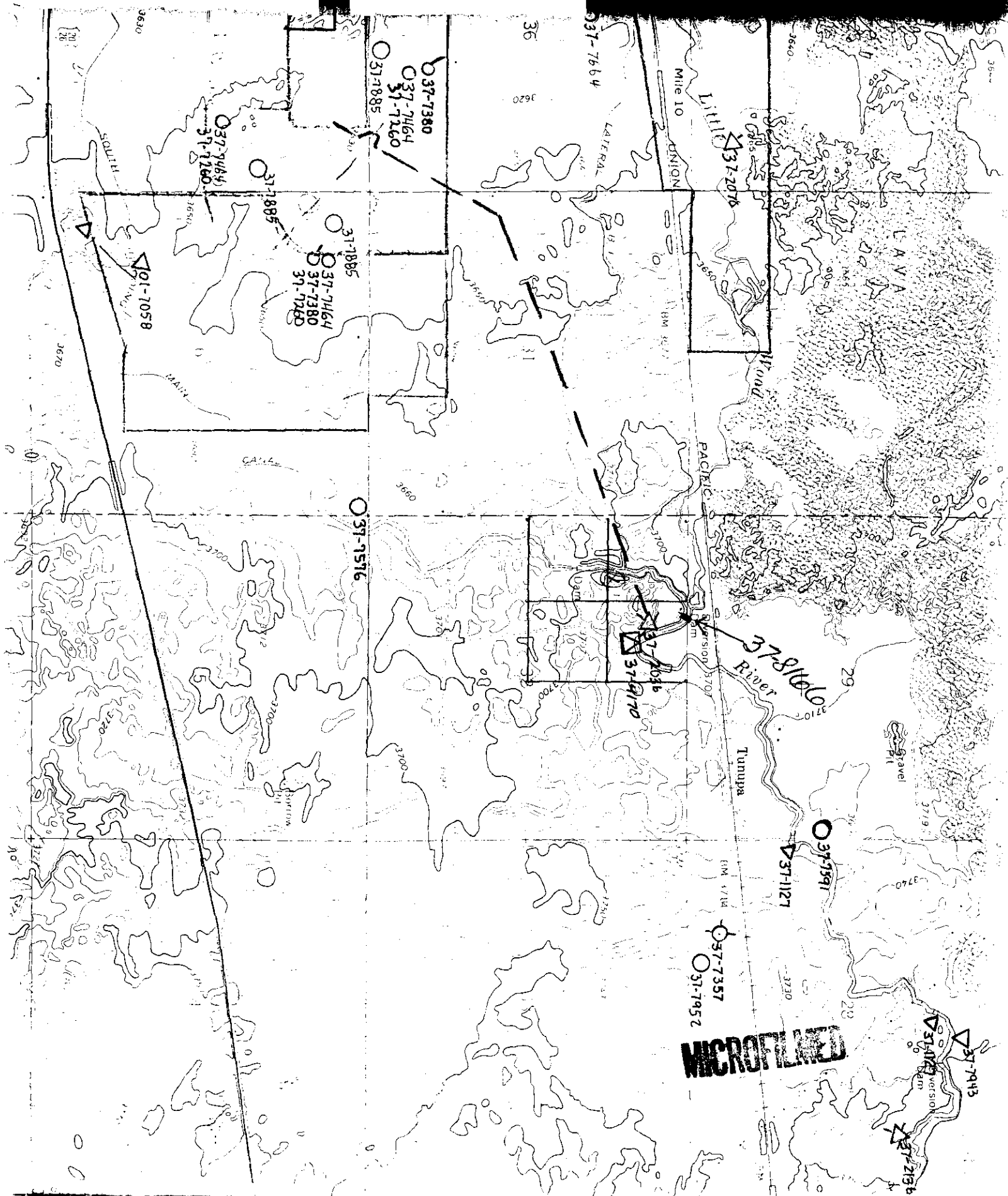
P/D /sec: **37-2036 - irr., domestic**
37-7884 - irr., stock
37-4170 - stock

P/U /sec: **37-7576 irr E'1/2 NE**
37-0613 irr E'1/2 NE
37-7885 irr SWNE, NENW, SWNW, N'1/2 SW, NWSE
37-7380 irr W'1/2 NW
37-7260 irr W'1/2 NE, NW'1/4, N'1/2 SW, NWSE

01-7058 power data 6 & 7 ← no overlap

BYPASSED AREA

APR 17 1984



RECEIVED

APR 5 1984

Department of Water Resources February 24, 1984
Southern District Office

COST ESTIMATE

JIM KNIGHT POWERPLANT

1.	Earth Excavation	1900 cu yd @ 4.00	\$ 7,600
2.	Rock Excavation	1900 cu yd @ 15.00	\$ 28,500
3.	Mass Concrete	270 cu yd @ 70.00	\$ 18,900
4.	Structural Concrete	90 cu yd @ 200.00	\$ 18,000
5.	Structural Steel		
	(a) trash racks,	(b) Draft tubes	
	(c) handrails,	(d) Weir Stanchions	
	(e) Slide gates		
	Subcontract from Yank Machine Shop		\$ 26,089
6.	Installation of Structural Steel		\$ 3,000
7.	Control Mechanism for Slide gates		\$ 9,000
8.	Turbine/generators		
	Subcontract from Flygt Corp.		\$153,000
9.	Turbine/generator, Control and Monitoring System		
	(a) generator control panels,		
	(b) turbine generator monitoring,		
	(c) emergency battery system with inverter,		
	(d) chatter box alarm,		
	(e) printer		
	Subcontract from Klockner-Moeller		\$ 45,500
10.	Commissioning of turbine/generator controls and monitoring system		
	Subcontract from Klockner-Moeller		\$ 10,000
11.	Installation of turbine/generator controls		\$ 5,000
12.	Idaho Power Co. Interconnection		\$ 11,000
13.	Control House with domestic electrical system		\$ 4,000
14.	Electrical transformer		\$ 10,000
15.	Powerline with poles 900 ft/ 4 poles		\$ 5,300
16.	Manhole covers/walkway		\$ 3,000

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17. Fencing	\$ 1,000
18. Modify Lateral B-2 Headgate	\$ 500
Direct Const. Cost	\$359,389
19. Sales tax on items 3,4,5,7,8,9,14,16	\$ 11,772
20. Leasing fee	\$ 1,000
21. Rehabilitation Bond	\$ 15,000
22. Water rights fee	\$ 1,815
23. Land purchase	\$ 2,000
24. Contingency	\$ 8,000
25. Engineering/Const.Mgnt./Admin.	\$ 50,000
	\$448,976

Mutual Energy Co., Inc.

HYDROELECTRIC ENGINEERS & DEVELOPERS

3451 LONGVIEW DRIVE, SUITE 130
NORTH HIGHLANDS / SACRAMENTO, CALIFORNIA 95660
(916) 971-3717

March 27, 1984

State of Idaho
Department of Water Resources
1041 Blue Lakes Blvd, North
Twin Falls, ID 83301

Subject: Jim Knight Powerplant

Gentlemen:

Attached is the "Order Granting Exemption From Licensing" issued by the Federal Energy Regulatory Commission for the Jim Knight Powerplant.

We understand that this is the last document you require prior to issuing the Water Right Permit for the Jim Knight Powerplant.

If there are any questions, please contact me at Mutual Energy Co., phone (916) 971-3717.

Sincerely,

Bart M. O'Keeffe

Bart M. O'Keeffe

RECEIVED

APR 2 1984

Department of Water Resources
Southern District Office

MICROFILMED

UNITED STATES OF AMERICA 26 PERC 162,278
FEDERAL ENERGY REGULATORY COMMISSION

Mutual Energy Company, Inc.) Project No. 7686-000

ORDER GRANTING EXEMPTION FROM LICENSING FOR
A CONDUIT HYDROELECTRIC PROJECT

Issued March 20, 1984

The Applicant 1/ filed an application for exemption from all or part of Part 1 of the Federal Power Act pursuant to 18 C.F.R. Part 4 Subpart J (1980) implementing Section 30 of the Federal Power Act (Act) for a project as described in the attached public notice. 2/

Notice of the application was published and comments were requested from interested Federal and State agencies including the U. S. Fish and Wildlife Service and the State Fish and Wildlife Agency. All comments, protests and petitions to intervene that were filed have been considered. No agency has any objection relevant to issuance of this exemption.

Standard Article 2 included in this exemption, requires compliance with any terms and conditions that Federal or State fish and wildlife agencies have determined appropriate to prevent loss of, or damage to, fish and wildlife resources. The terms and conditions referred to in Article 2 are contained in any letters of comment by these agencies which have been forwarded to the Applicant in conjunction with this exemption.

1/ Mutual Energy Company, Inc., Project No. 7686-000, filed on October 5, 1983.

2/ Authority to act on this matter is delegated to the Deputy Director, Office of Electric Power Regulation, under §375.308 of the Commission's regulations, 18 C.F.R. §375.308 (1981) FERC Statutes and Regulations §30,238. This order may be appealed to the Commission by any party within 30 days of its issuance pursuant to Rule 1902, 18 C.F.R. §383.1902, FERC Statutes and Regulations §29,052.47 Fed. Reg. 19014 (1982). Filing an appeal and final Commission action on that appeal are prerequisites for filing an application for rehearing as provided in Section 313(a) of the Act. Filing an appeal does not operate as a stay of the effective date of this order or of any other date specified in this order, except as specifically directed by the Commission.

DC-A-37

- 2 -

Should the Applicant contest any terms or conditions that were proposed by Federal or State agencies in their letters of comment as being outside the scope of Article 2, the Commission shall determine whether the disputed terms or conditions are outside the scope of Article 2.

Based on the terms and conditions required by Federal and State fish and wildlife agencies, the environmental information in the application for exemption, other public comments, and staff's independent analysis, issuance of this order is not a major Federal action significantly affecting the quality of the human environment.

It is ordered that:

(A) Jim Knight Powerplant Project No. 7686 as described and designated in Mutual Energy Company, Inc.'s application filed on October 5, 1983, is exempted from all of the requirements of Part 1 of the Federal Power Act, including licensing, subject to the standard articles in §4.94 of the Commission's regulations attached hereto as Form E-1, 18 C.F.R. §4.94 (1981), and the following Special Article.

Article 3. The construction, operation, and maintenance of the exempt project may be reviewed by the Commission and subjected to further requirements for consistency with the terms and conditions of the regional fish and wildlife plan developed pursuant to the Pacific Northwest Electric Power Planning and Conservation Act. Inconsistencies between the regional plan and the mandatory conditions under Article 2 will be resolved by the Commission.

(B) The Commission may accept a license application by any qualified license applicant and revoke this exemption if actual construction or development of any proposed generating facilities has not begun within 18 months, or been completed within four years, from the date on which this exemption was granted. If an exemption is revoked, the Commission will not accept a subsequent application for exemption within two years of the revocation.

Robert E. Cackowski

Robert E. Cackowski
Deputy Director, Office of
Electric Power Regulation

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§ 4.94 Standard terms and conditions of exemption.

Any exemption granted under § 4.93 for a small conduit hydroelectric facility is subject to the following standard terms and conditions:

(a) Article 1. The Commission reserves the right to conduct investigations under sections 4(g), 306, 307, and 311 of the Federal Power Act with respect to any acts, complaints, facts, conditions, practices, or other matters related to the construction, operation, or maintenance of the exempt facility. If any term or condition of the exemption is violated, the Commission may revoke the exemption, issue a suitable order under section 4(g) of the Federal Power Act, or take appropriate action for enforcement, forfeiture, or penalties under Part III of the Federal Power Act.

(b) Article 2. The construction, operation, and maintenance of the exempt facility must comply with any terms and conditions that any Federal or State fish and wildlife agencies have determined are appropriate to prevent loss of, or damage to, fish or wildlife resources or otherwise to carry out the purposes of the Fish and Wildlife Coordination Act.

REPROFILED

Thurphy

76-7686-000

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Notice of Application Filed with the Commission

(January 1, 1984)

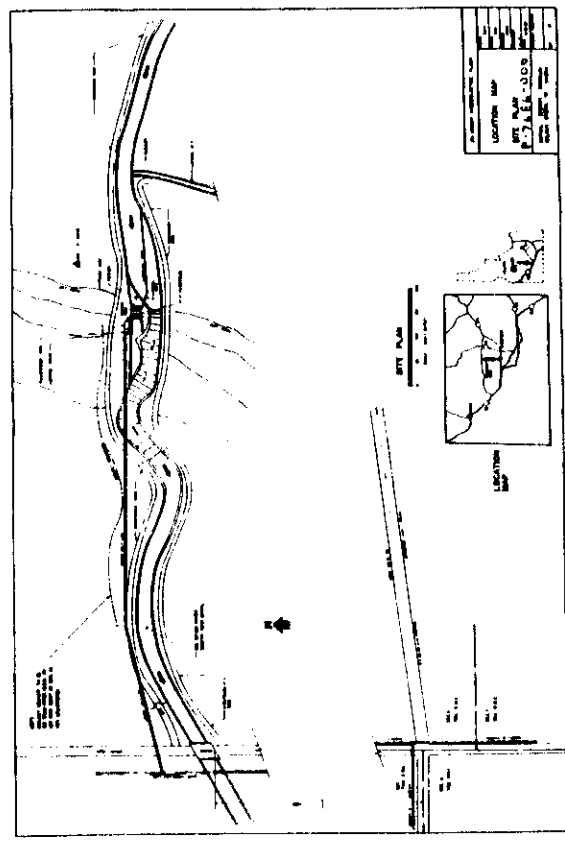
Take notice that the following hydroelectric application has been filed with the Federal Energy Regulatory Commission and is available for public inspection:

- a. Type of Application: Exemption From Licensing (small conduit)
- b. Project No: 7686-000
- c. Date Filed: October 5, 1983.
- d. Applicant: Mutual Energy Company
- e. Name of Project: Jim Knight Hydroelectric Powerplant
- f. Location: On South Gooding Main Canal, near Gooding, in Gooding County, Idaho
- g. Filed Pursuant to: Section 408 of the Energy Security Act of 1980 (16 U.S.C. 552705 and 2706 as amended)
- h. Contact Person: Bart M. O'Keefe
President, Mutual Energy Company
1250 Pine Street, Walnut Creek, California 94596
- i. Comment Date: FEB 13 1984
- j. Description of Project: The proposed project would consist of: (1) a 175-foot-long, 4-foot-high concrete overflow weir; (2) a forebay at elevation 1665 feet; (3) a semi-underground powerhouse structure containing three submersible turbine/generators at elevation 1641 feet, two having a rated capacity of 120 kW, one with a rated capacity of 75 kW, and a combined annual energy production of 1.59 GWh; (4) a cinderblock control house; (5) a transformer yard; and (6) a 900-foot-long, 43-kV transmission line to an existing Idaho Power Company powerline.
- k. Purpose of Exemption - An exemption, if issued, gives an Exemptee priority of control, development, and operation of the project under the terms of the exemption from licensing, and protects the Exemptee from permit or license applicants that would seek to take or develop the project.
- l. This notice also consists of the following standard paragraphs: A3, A9, B, C, D3D

DE-A-10

D3b. Agency Comments - The U.S. Fish and Wildlife Service, The National Marine Fisheries Service, and the State Fish and Game Agency(ies) are requested, for the purposes set forth in Section 30 of the Act, to file within 45 days from the date of issuance of this notice appropriate terms and conditions to protect any fish and wildlife resources or otherwise carry out the provisions of the Fish and Wildlife Coordination Act. General comments concerning the project and its resources are requested; however, specific terms and conditions to be included as a condition of exemption must be clearly identified in the agency letter. If an agency does not file terms and conditions within this time period, that agency will be presumed to have none. Other Federal, State, and local agencies are requested to provide comments they may have in accordance with their duties and responsibilities. No other formal requests for comments will be made. Comments should be confined to substantive issues relevant to the granting of an exemption. If an agency does not file comments within 45 days from the date of issuance of this notice, it will be presumed to have no comments. One copy of an agency's comments must also be sent to the Applicant's representatives.

Kenneth F. Plumb
Secretary



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STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
SOUTHERN REGION

John V. Evans
Governor

A. Kenneth Dunn
Director

1041 Blue Lakes Blvd. North
Twin Falls, Idaho 83421
(208) 734-3578

March 28, 1984

Bart M. O'Keeffe - President
Mutual Energy Company, Inc.
3451 Longview Drive - Suite 130
North Highland
Sacramento, California 95660

Re: Application for Permit 37-8166 (Jim Knight Plant)

Dear Mr. O'Keeffe:

On reviewing the file in preparation to forward your application to IDWR- Boise for final review, we found that the cost estimate which we requested and which you addressed in your February 24, 1984 letter was not included in the file.

Either our office has misplaced the cost estimate or it was not included in your February 24, 1984 letter.

In any event, please submit a copy of the cost estimate for the project for inclusion in the file. I apologize for this delay, but our office will hold the application until we receive the cost estimate.

If you have any questions, please feel free to contact this office.

Very truly yours,

Allen D. Merritt
Sr. Water Resource Agent

LOH:ADM:marya

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Mutual Energy Co., Inc.

HYDROELECTRIC ENGINEERS & DEVELOPERS

3451 LONGVIEW DRIVE, SUITE 130
NORTH HIGHLANDS / SACRAMENTO, CALIFORNIA 95660
(916) 971-3717

February 24, 1984

State of Idaho
Department of Water Resources
1401 Blue Lake Blvd. North
Twin Falls, Idaho 83301

Attn: Mr. Loren O. Holmes

RE: Application for Permit No. 37-8166
Big Wood Canal Co. (Jim Knight Powerplant)

RECEIVED

FEB 27 1984

Department of Water Resources
Southern District Office

Dear Mr. Holmes,

In response to your letter of February 22, 1984, I am enclosing a cost estimate for the construction of the Jim Knight Powerplant.

Also as we discussed, this letter is being submitted as the financial statement for the project.

Mutual Energy Company is the developer of the project, having leased the site for thirty years from the Big Wood Canal Company. This lease is part of the application to the FERC for exemption from licensing, a copy of which was submitted with the application for the water right permit.

The project is being funded by Mr. Carl E. Berg under an agreement with Mutual Energy Company. Mr. Berg is funding the Jim Knight Project on a cash basis, paying the bills as they become due. He is considered a very well to do individual, having extensive real estate holdings in California and Oregon, plus partial ownership of an electronics company and a professional sports team. Mr. Berg currently has interests in four hydroelectric projects, one operating in California, two under construction in California, plus the Jim Knight Project in Idaho.

Detailed information on Mr. Berg's financial capability may be obtained by contacting his agent, Dr. Raymond E. Staepelaere, at the following address:

914 Elsinore Drive
Palo Alto, CA 94303

If you need additional information, please contact Dr. Staepelaere or myself.

Sincerely,

Bart M. O'Keefe
Bart M. O'Keefe

RECEIVED



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
SOUTHERN REGION

John V. Evans
Governor

A. Kenneth Dunn
Director

1041 Blue Lakes Blvd. North
Twin Falls, Idaho 83301
(208) 734-3578

February 22, 1984

Bart M. O'Keeffe - President
Mutual Energy Co., Inc.
3451 Longview Drive - Suite 130
North Highland
Sacramento, California 95660

Re: Application for Permit No. 37-8166 - Big Wood Canal Co., (Jim Knight Plant)

Dear Mr. O'Keeffe:

Legal notice of the application has been published and there have been no protests.

In addition to the project plans contained in the application for exemption from licensing before F.E.R.C., the following additional information is needed for our file in accordance with Section 42-202 of the IDAHO CODE:

An itemized estimate of the cost of constructing the facility.

A financial statement of the applicant and the means by which funds are to be provided for construction of the facility.

Enclosed are forms for filing an application for permit on the Sagebrush Project per your request.

If you have any questions concerning this matter, please feel free to contact this office.

Very truly yours,

Loren O. Holmes
Southern Region Supervisor

LOH:marya

Encl:

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Mutual Energy Co., Inc.

HYDROELECTRIC ENGINEERS & DEVELOPERS

3451 LONGVIEW DRIVE, SUITE 130
NORTH HIGHLANDS / SACRAMENTO, CALIFORNIA 95660
(916) 971-3717

RECEIVED

FEB 10 1984

Department of Water Resources
Southern District Office

January 31, 1984

RECEIVED

FEB 8 1984

State of Idaho
Department of Water Resources
Statehouse
Boise, ID 83720

Department of Water Resources

Subject: Jim Knight Powerplant

Gentlemen:

On December 23, 1983, Mutual Energy Co. filed an "Application for Permit" for a water right for the above project.

As Mutual Energy Co. is leasing the project site from the Big Wood Canal Co., the Water Right Application was filed in the name of the Big Wood Canal Co.

Please forward to Mutual Energy Company at the above address copies of all correspondence and notifications concerning the above project. The initial application may not have made it clear that we are acting as agents for the Big Wood Canal Co. in this matter.

Sincerely,

Bart M. O'Keeffe

Bart M. O'Keeffe
President

MICROFILMED

Mutual Energy Co., Inc.

HYDROELECTRIC ENGINEERS & DEVELOPERS

3451 LONGVIEW DRIVE, SUITE 130
NORTH HIGHLANDS / SACRAMENTO, CALIFORNIA 95660
(916) 971-3717

RECEIVED

FEB 10 1984

January 31, 1984

Department of Water Resources
Southern District Office

State of Idaho
Department of Water Resources
Statehouse
Boise, ID 83720

Subject: Sagebrush Powerplant

Gentlemen:

Mutual Energy Company is initiating a second small hydroelectric project on the South Gooding Main Canal. This one entitled the "Sagebrush Hydroelectric Project" is located in the NW $\frac{1}{4}$ of Section 32, T5S, R16E.

Would you please forward blank copies of the Department of Water Resources form "Affidavit for Water Rights to be Used for Power Purposes" and "Application for Permit to Appropriate the Public Waters of the State of Idaho" to Mutual Energy Company at the above address.

This project will be very similar to the Jim Knight Project for which we filed a Water Right Permit Application on December 23, 1983. The Water Right Application for this project, as well as the Jim Knight Project will be filed in the name of the Big Wood Canal Co., owner of the canal and power site.

Sincerely,

Bart M. O'Keeffe

Bart M. O'Keeffe

MICROFILMED

AFFIDAVIT of PUBLICATION

State of Idaho,)
) SS.
 County of Gooding)

Frank T. Crow, Jr., being first duly sworn, deposes and says that he is the printer (publisher) of the Gooding County Leader, a newspaper published every week in Gooding, County of Gooding, State of Idaho, that said newspaper has been continuously and uninterruptedly published for a period of seventy-eight consecutive weeks prior to the first publication of the annexed notice, and is a newspaper qualified to publish legal notices as provided by act of the 1919 session of the legislature of the State of Idaho, known as House Bill 145; that the annexed advertisement was published once each week for 2 consecutive issues in said newspaper proper and not in a supplement; that the date of the first publication of said advertisement was on the 31 day of JAN 1984, and the date of the last publication was on the 7 day of FEB, 1984.

Frank T. Crow, Jr.
 Subscribed and sworn to before me this 7
 day of FEB, 1984.
 (SEAL)

Gandy Platts
 NOTARY PUBLIC
 GOODING COUNTY LEADER
 Gooding, Idaho
COST OF PUBLICATION

Number of Lines in Notice. 36
 Number of Insertions. 2
 Lines tabular at 42¢
36 Lines straight at 32¢ 11.52
36 Subsequent lines at 21¢ 7.56
 Total Cost 19.08

COPY OF NOTICE (Paste Here)

Notice of Appl.
 TITLE OF NOTICE
#37-8166

PLAINTIFF ATTORNEY

DEFENDANT

PLAINTIFF

Director of
 BILL TO
Idaho Dept
Water Resources

RECEIVED

FEB 9 1984

Department of Water Resources
 Southern District Office

PUBLICATION RATES

(Idaho Code, Rev. Statutes 1971)
 7 pt. per line, straight 32¢
 7 pt. per line, tabular 42¢
 7 pt. per line, successive
 insertions 21¢

No. 3277

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applica-
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State of

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NE, ID
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MALAD

Sec 32
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Sec 06 T

mit(s)
prior
against the granting of any
must be filed with the
Director of the Idaho De-
partment of Water Resour-
ces, 1041 Blue Lakes Blvd.
North Twin Falls, Idaho
83301 and received on or
before FEBRUARY 20, 1984

/s/ A. KENNETH DUNN
Director

PUB: 1-31; 2-7

NOTICE OF APPLICATION FOR WATER RIGHT

Notice is hereby given that the following application(s) have been submitted for permit to appropriate the public waters of the State of Idaho:

32-8166-

BIG WOOD CANAL CO.

P.O. BOX C, SHOSHONE, ID 83352

Source: LITTLE WOOD RIVER trib. to MALAD RIVER

Date Filed: ~~12/30/83~~ 12/30/83

Diversion Pt: NENW Sec 32 T 05S R 16E

Use: POWER (218.00 CFS)

In: LOT 06 (NWSW) Sec 06 T 06S R 16E

If issued, the permit(s) will be subject to all prior water rights. Protests against the granting of any permit must be filed with the Director of the Idaho Department of Water Resources, 1041 Blue Lakes Blvd. North, Twin Falls, Idaho 83301 and received on or before FEBRUARY 20, 1984.

A. KENNETH DUNN

Director

Published 2/1 & 2/8/1984.

RECEIVED
FEB 10 1984

LEGAL (257) 1c

**NOTICE OF APPLICATION
FOR WATER RIGHT**

Notice is hereby given
that the following applica-
tion(s) have been submitted
for permit to appropriate the
public waters of the State of
Idaho:

37-8166

BIG WOOD CANAL CO.
P.O. BOX C, SHOSHONE, ID
83352

Source: LITTLE WOOD
RIVER trib. to MALAD
RIVER

Date Filed: 12/30/83

Diversion Pt: NENW Sec 32
T 05S R 16E

Use: POWER (218.00 CFS)

In: LOT 06 (NWSW) Sec 06 T
06S R 16E

If issued, the permit(s)
will be subject to all prior
water rights. Protests a-
gainst the granting of any
permit must be filed with the
Director of the Idaho De-
partment of Water Resourc-
es, 1041 Blue Lakes Blvd.
North, Twin Falls, Idaho
83301 and received on or
before FEBRUARY 20, 1984.

/s/ A. KENNETH DUNN
Director

FUB: 1-31; 2-7

ab
marya
1/3/84

RECEIVED

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES
Southern Region

1041 Blue Lakes Blvd N.
Twin Falls, Idaho 83301
(208) 734-3578

JANUARY 26, 1984

Gooding County Leader
P.O. Box 56
Gooding, Idaho 83330

Gentlemen:

Enclosed you will find a legal notice which we wish to have published on the dates indicated (once a week for two consecutive weekly issues) in your newspaper. We have allowed ample time for you to submit a galley proof to this office for review before the first publication date. If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Your cooperation is appreciated.

Please send the affidavit of publication and publication billings to this office before FEBRUARY 20, 1984.

Yours truly,

Mary A. Newby
Secretary

Encl.

RECEIVED
JAN 27 1984



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
SOUTHERN REGION

John V. Evans
Governor

1041 Blue Lakes Blvd. North
Twin Falls, Idaho 83301
(208) 734-3578

A. Kenneth Dunn
Director

January 24, 1984

Reid J. Newby
Watermaster District 37
Box T
Shoshone, Idaho 83352

Re: Application for Permit No. 37-8166

Dear Mr. Newby:

Enclosed is a copy of the above referenced application for your information and files.

Very truly yours,

Mary A. Newby
Sec/Office Coord.

Encl:

MICROFILMED

Mutual Energy Co., Inc.

HYDROELECTRIC ENGINEERS & DEVELOPERS

3451 LONGVIEW DRIVE, SUITE 130
NORTH HIGHLANDS / SACRAMENTO, CALIFORNIA 95660
(916) 971-3717

December 23, 1983

RECEIVED
DEC 29 1983

State of Idaho
Department of Water Resources
Statehouse
Boise, ID 83720

Subject: Jim Knight Powerplant

Department of Water Resources

Gentlemen:

Enclosed is a completed application for a water right permit for the Jim Knight Powerplant. Also enclosed is the required \$1815.00 filing fee.

As is set forth in the attached Application for Exemption from Licensing, Mutual Energy Co., Inc. has leased the powerplant site from the Big Wood Canal Co. The lease will expire on December 31, 2013. At that time the powerplant will revert to the Big Wood Canal Co. It has been agreed upon that the water right will be obtained in the name of the Big Wood Canal Co. and remain under their name when the lease expires.

Both the Big Wood Canal Co. and Mutual Energy Co. are registered corporations, authorized to do business in the State of Idaho.

If there are any questions, please contact myself at Mutual Energy Co. (916) 971-3717, or contact the Big Wood Canal Co. at (208) 886-2331.

Sincerely,

Bart M. O'Keeffe

Bart M. O'Keeffe

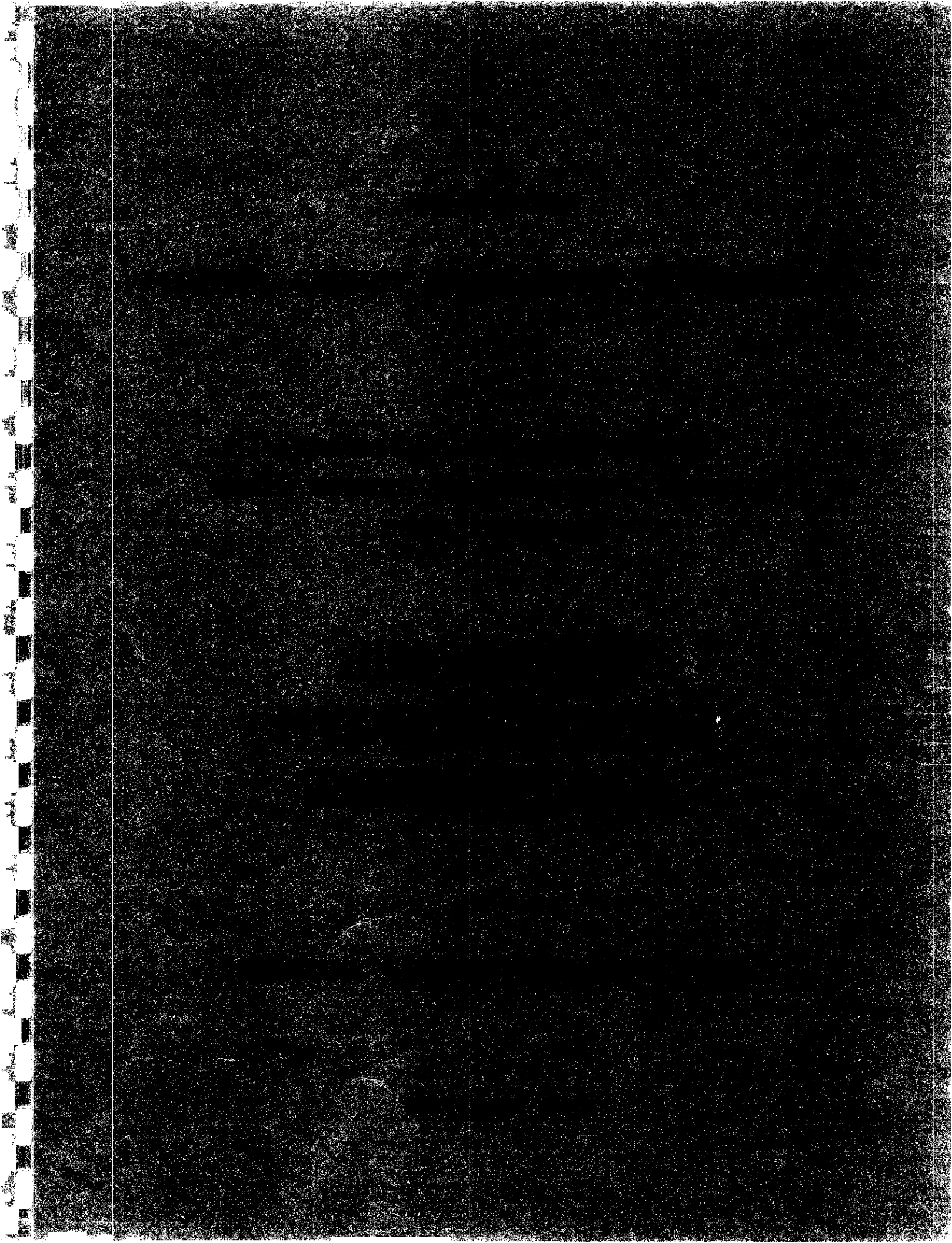
Enclosure

RECEIVED

JAN 3 1984

Department of Water Resources
Boise, Idaho 83720

MICROFILMED



Mutual Energy Co., Inc.

HYDROELECTRIC ENGINEERS & DEVELOPERS

1250 PINE STREET, SUITE 100
WALNUT CREEK, CALIFORNIA 94596
(415) 945-1950

Mr. Kenneth F. Plumb, Secretary
Federal Energy Regulatory Commission
825 North Capitol Street, N.E.
Washington, D.C. 20246

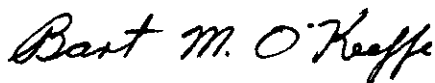
Dear Mr. Plumb:

Please find enclosed the original and fourteen (14) copies of the Application for Exemption from Licensing of the Jim Knight Small Conduit Hydroelectric plant. This filing is pursuant to Sub-Part J of Part 4, Chapter I, 18 CFR.

This application contains an introductory statement, Exhibit A, B, E and G, plus an appendix showing property interest in the site.

Please direct all comments and technical questions to myself, Bart M. O'Keefe at the address provided in the introductory statement.

Sincerely,



Bart M. O'Keefe

Attachment

BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

**APPLICATION FOR EXEMPTION OF
SMALL CONDUIT HYDROELECTRIC FACILITY
FROM LICENSING**

**JIM KNIGHT
HYDROELECTRIC
POWERPLANT**

MUTUAL ENERGY COMPANY, INC.

SEPTEMBER 1983

JIM KNIGHT HYDROELECTRIC POWERPLANT
APPLICATION FOR EXEMPTION FROM LICENSING

TABLE OF CONTENTS

I	-	INTRODUCTORY STATEMENT
II	-	VERIFICATION STATEMENT
III	-	EXHIBIT A - PROJECT DESCRIPTION
IV	-	EXHIBIT B - GENERAL LOCATION MAP
V	-	EXHIBIT E - ENVIRONMENTAL REPORT
VI	-	EXHIBIT G - PROJECT DRAWINGS
VII	-	APPENDIX - EVIDENCE OF REAL PROPERTY INTERESTS IN PROJECT LANDS

BEFORE THE FEDERAL ENERGY
REGULATORY COMMISSION
APPLICATION FOR EXEMPTION FOR
SMALL CONDUIT HYDROELECTRIC FACILITY

Mutual Energy Company Inc. applies to the Federal Energy Regulatory Commission for an exemption for the Jim Knight Powerplant, a small conduit hydroelectric facility that meets the requirements of Article 4.91(f) of this subpart from certain provisions of Part I of the Federal Power Act.

The location of the Project is:

State or Territory:	Idaho
County:	Gooding
Township or Nearby Town	Gooding

The exact name and business address of the Applicant is:

Mutual Energy Company
1250 Pine Street
Walnut Creek, California 94596

The exact name and business address of the person authorized to act as Agent for the Applicant is:

Bart M. O'Keefe, President
Mutual Energy Company
1250 Pine Street
Walnut Creek, California 94596

Mutual Energy Company is a Corporation incorporated under the laws of the State of California, plus being licensed to conduct business in the State of Idaho.

The provisions of Part I of the Federal Power Act for which exemption is requested is Article 4.91(f), Sub-Part J of Part 4, Chapter I, 18 CFR.

VERIFICATION

STATE OF CALIFORNIA)
)
County of Contra Costa)

BART M. O'KEEFFE, being first duly sworn deposes and says that he is President of MUTUAL ENERGY COMPANY, the Applicant herein named, and makes his verification for and on behalf of said Applicant; that he has read the foregoing application and knows the contents thereof; and that the same are true to the best of his knowledge and belief.

Bart M. O'Keefe
BART M. O'KEEFFE

SUBSCRIBED AND SWORN to before me this 16th
day of September, 1983, by BART M. O'KEEFFE, for MUTUAL ENERGY
COMPANY.

Sabrina Crawford
Notary Public

My Commission Expires:

February 6, 1984



EXHIBIT A
PROJECT DESCRIPTION

1. The proposed Jim Knight Powerplant is located on the South Gooding Main Canal, an agricultural irrigation canal, owned and operated by the Big Wood River Canal Company. The powerplant will be located in the SW $\frac{1}{4}$ Sec 6, T6S, R16E, BB&M, approximately 5 miles east of Gooding, Idaho, the nearest municipality.
2. The entire project lies within the canal right-of-way owned by the Big Wood River Canal Company. As indicated by the lease presented in the Appendix, Evidence of Real Property Interests in Project Lands, Mutual Energy Company has leased the project site from the Big Wood River Canal Company for the express purpose of construction and operating a powerplant.
3. As is further evidenced by the above referenced lease, the construction and operation of the powerplant will in no way effect or impinge upon the movement of agricultural irrigation water through the canal. The movement and volume of water will move in the canal strictly as it has in past years under the sole control of the Big Wood River Canal Company. The generation of electrical power at the Jim Knight Powerplant will be solely an incidental function.
4. The South Gooding Main Canal is some 25 to 30 feet wide and approximately 4 feet deep carrying up to 240 cfs of agricultural irrigation water at the powerplant site. At the time the canal was constructed it was dug across a volcanic lava flow. At this point it was allowed to tumble down the edge of the lava flow and the canal resumed its course at the bottom of the lava flow. The canal currently drops some 22 feet across the edge of the lava flow. The Jim Knight Powerplant will be built at the edge of this lava flow to utilize the power developed at this drop.

EXHIBIT A
PROJECT DESCRIPTION

5. The Jim Knight Powerplant will utilize a design flow of 218 cfs of the above maximum flow of 240 cfs. The increment of flow between the 218 cfs design flow and the 240 cfs maximum flow occurs so infrequently that it is not economically justifiable to design for the 240 cfs maximum flow. The 218 design flow across the 22 feet available at the site will justify an installed capacity of 315 kilowatts. The facility will produce an estimated 1,590,000 kilowatt-hours of energy per year. This is the equivalent of burning 2500 barrels of oil per year.

6. The powerplant will contain 3 self-contained vertical axis units manufactured by Flygt Corporation. Two units will be sized at 120 kilowatts each and the third at 75 kilowatts. The facility will be designed for semiautomatic operation, that is with manual start up, automatic shutdown and a remote alarm system.

7. The powerplant will be serviced by a three-phase, 43,000 volts powerline extending 900 feet to an existing Idaho Power Company powerline.

8. Summary of Project Statistics

Natural Source of Water	- Little Wood River
Powerplant Source of Water	- South Gooding Main Canal
Conduit	- South Gooding Main Canal
Purpose of Conduit	- Supply Consumptive Agricultural Water
Approx. Elevation of Headwater	- 3665 MSL
Approx. Elevation of Tailwater	- 3643 MSL
Number of Generating Units	- 3
Size of Units	- 2 at 120 kw each 1 at 75 kw
Total Generating Capacity	- 315 kilowatt

EXHIBIT A
PROJECT DESCRIPTION

Type of Units	- Vertical Axis Kaplan Type (Flygt Corp. Manufacture)
Type of Operation	- Semiautomatic (automatic shutdown manual start up) Nonpeaking - run of canal
Average Annual Generation	- 1,590,000 kilowatt-hours
Average Head on Plant	- 22 feet
Hydraulic Capacity of Plant	- 218 cfs
Maximum Flow in Canal	- 240 cfs
Powerline	- 900 feet of 43,000 Volt Line
Average Annual Flow at Power- plant	- 150 cfs
Average Annual Flow Available for Power Production	- 140 cfs
Planned Date for Beginning Construction	- January 1, 1984

Water from the facility continues on down the South Gooding Main Canal.

EXHIBIT "B"
GENERAL LOCATION MAP

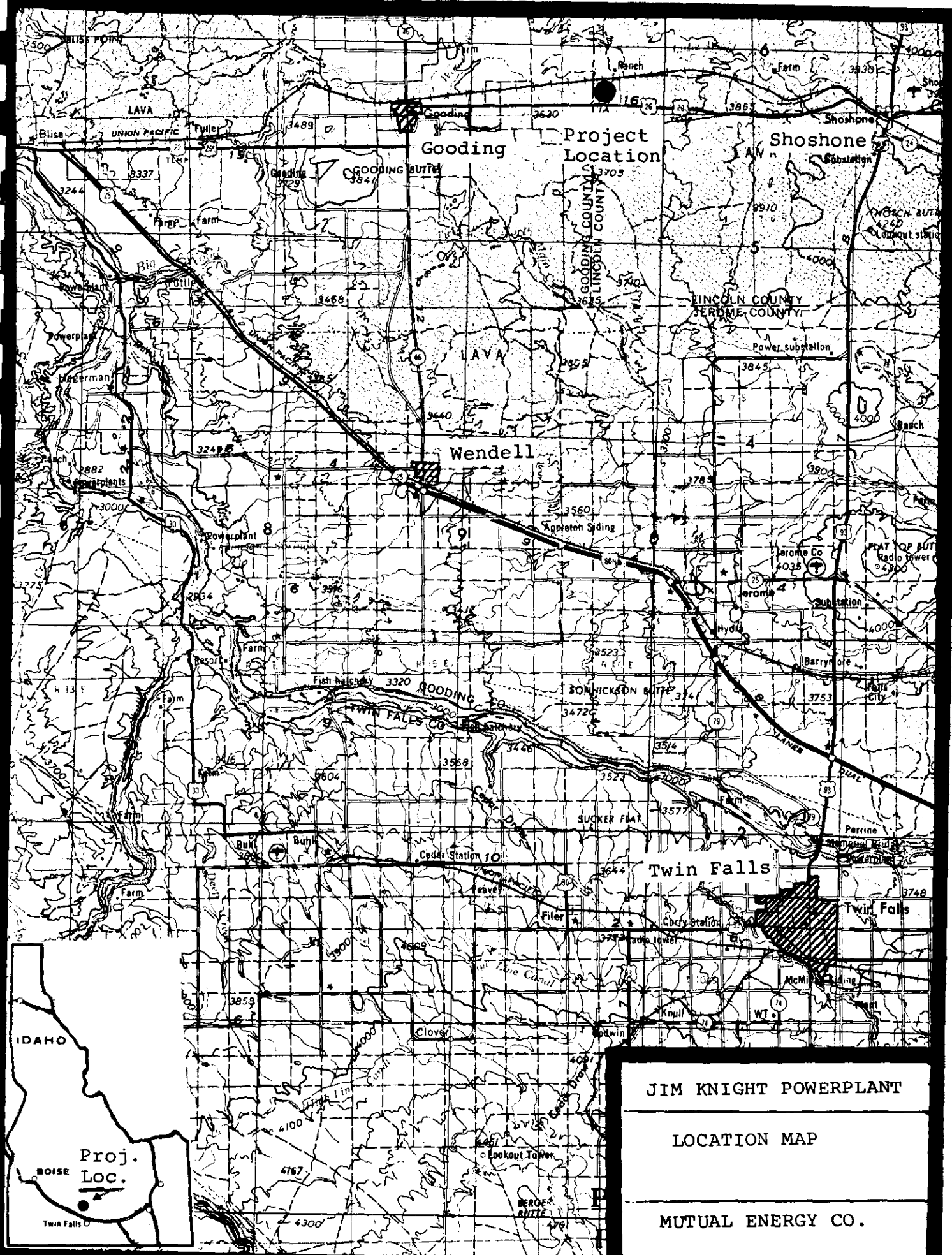


EXHIBIT "E"
ENVIRONMENTAL REPORT

1. Description of Environmental Setting:

The Jim Knight Powerplant is located on the South Gooding Main Canal. This is an irrigation canal used to carry consumptive water for agricultural irrigation. The canal was constructed in the early 1900's.

The canal traverses through a dry grass pasture upland. This dry pasture is on top of a level of volcanic lava flow with minimum value for the growing of crops. At the edge of the volcanic lava flow the canal tumbles down some 22 feet in vertical distance, and then resumes its course at the bottom of the lava flow. The site of the powerplant is at the edge of the lava flow, utilizing the flow in the canal and the 22 foot drop for the generation of power.

An existing road traverses along the canal providing access to the site. Therefore no new roads are required.

The dry grassland pasture receives quite heavy use from the nearby Jim Knight dairy. This heavy grazing use limits the number of rare or endangered plants that may exist in the area.

2. Fish and Wildlife Resources:

There are no fisheries associated with the powerplant environment. The water source is an irrigation canal used entirely for agricultural consumptive use. **The canal is dry for approximately three months each winter.** Wildlife associated with the project would primarily be ground squirrels and other borrowing rodents that habitat these dry pastures. In reference to the concern expressed in the letter from the Idaho Department of Fish and Game, meetings have been held with the Idaho Power Company concerning the construction of the powerline. The

type of construction used on the powerline will be that type used by the Idaho Power Company in area habitated by raptors.

3. Land and Water Uses:

The powerplant will take up an area less than $\frac{1}{2}$ acre. It will occupy land in a dry grass pasture having minimal commercial value. The water use associated with the project is water that moves down the irrigation canal to power the electrical generating equipment. ~~No change of mode in the operation of~~ the irrigation canal or its water will be made. With the exception of the actual site, the powerplant occupies no change in land use patterns by the construction or operation of the powerplant.

A Water Right Permit will be obtained from the State of Idaho for the project.

4. Recreation Use:

There is no recreational use associated with the existing canal. No recreational use will be instituted with this project.

5. Historical and Archaeological Resources:

As indicated by the Idaho State Historical Society in their attached letter dated August 31, 1983; there are no significant archaeological or historical properties in the vicinity of the project. However, if antiquities are discovered during the course of construction, the Idaho State Historical Society will be notified.

6. Effect on Water Quality:

The project will not effect the quality of the water as it moves down the canal and through the powerplant.

The project will be constructed during that period of the year when there is no water in the canal. Therefore the construction process will have a minimal effect on the turbidity of water passing down the canal.

As is evidenced by the attached letter from the Idaho Department of Health and Welfare, that Department has no comment concerning the impact of the project on water quality or water quality protection.

7. Endangered or Threatened Plant or Animal Species:

The project occupies less than $\frac{1}{2}$ acre in a dry land pasture, already heavily used in dairy operations. It is extremely doubtful if any endangered or threatened species could be present in this environment. No mention of any such species was made in the attached letter from the Idaho Department of Fish and Game received on September 2, 1983, or in the attached letter from the USDI Fish and Wildlife Service.

8. Critical Habitat:

No critical habitat exists in this dry land pasture. It is similar to thousands of acres of other pasture lands in South Central Idaho.

9. Socio-economic Conditions:

The project is of such a small magnitude that it will have an insignificant impact on the socio-economic conditions of the area. It will provide approximately 40-man months of construction employment to an area that certainly needs this employment. Also, it will provide the energy equivalent of burning some 2500 barrels of oil annually. This will aid the national economy toward energy independence.

10. Visual Resources:

There will be minimal impact on the visual resources of the area. The top of the powerhouse is essentially at ground level, and the control house is recessed into the ground with a low profile. The facility is located in a farming/dairy area where rural type buildings are a common feature of the landscape.

11. Construction Impacts:

Any disturbance to the land will be during construction only, and will be confined to the project boundaries. Disturbed soil areas will be reseeded with natural grass. Little impact on area wildlife is anticipated, and then only during construction. Construction will be during the winter months while wildlife activities are at a low ebb. Also the wintertime construction will have the least impact on the vegetative habitat.

12. Operational Impacts:

The powerplant will be semiautomatic in operation with occasional maintenance visits. Therefore, human activity in the area will be minimal.

14. Proposed Changes in the Canal Flow Regime:

None. ~~The powerplant operation will be for six months out of the year, during the normal irrigation season.~~ Water discharged from the powerhouse will continue on down the canal for agricultural consumptive use.

15. Agencies Consulted:

See attached list, as per Idaho State Clearinghouse Project Review Notification and U.S. Fish and Wildlife Service.

Mutual Energy Co., Inc.

HYDROELECTRIC ENGINEERS & DEVELOPERS

1250 PINE STREET, SUITE 100
WALNUT CREEK, CALIFORNIA 94596
(415) 945-1950

August 8, 1983

LIST OF AGENCIES THIS LETTER WAS SENT IS ATTACHED.

Subject: Jim Knight Powerplant

Gentlemen:

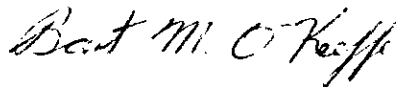
Mutual Energy Company is undertaking the development of a conduit small hydroelectric facility. The facility will be located on the Big Wood River Canal Co.'s main canal in Section 6, R16E, T6S, WB&M. This is some seven miles east of the town of Gooding, Idaho. The site is located in a natural drop in the canal, a point where the canal flow drops over a natural rock ridge.

The facility will have an installed capacity of 360 kilowatts, utilizing the 250 cfs flow in the canal with the 21 foot natural drop.

Upon the receipt of a response from yourselves and other interested agencies, Mutual Energy Company will be filing an Application for Exemption with the FERC for a small hydroelectric facility to be located on a canal or conduit.

An early response would be appreciated as we would like to construct the required concrete facilities in the canal during this coming winter when the canal is dry.

Sincerely,



Bart M. O'Keefe
President

LIST OF IDAHO AGENCIES LETTERS WERE SENT FOR JIM KNIGHT's
POWERPLANT - RESPONSES

<u>Agency</u>	<u>Response</u>
Idaho Department of Fish and Game 600 South Walnut Box 25 Boise, ID 83707	See letter dated Sept. 2, 1983 Comments in Exhibit "E" narrative.
Department of the Interior Fish and Wildlife Service Ecological Services 4620 Overland Road, Room 209 Boise, ID 83705	See letter dated August 30, 1983 Comments in Exhibit "E" narrative.
Idaho State Historical Society 610 North Julia Davis Drive Boise, ID 83706	See letter dated August 31, 1983 Comments in Exhibit "E" narrative.
Division of Economic and Community Affairs Idaho State Clearing House State Capitol Building Boise, ID 83720	Forwarded to Idaho Dept. of Water Resources Energy Office, Mr. Bol Trener. Telephone contact was made with Mr. Trener on Sept. 15, 1983, (208) 334-4440. He will get back to us if he has any comments.
State of Idaho Department of Health and Welfare Division of Environment 801 Reserve Street Boise, ID 83702	See letter dated Sept. 2, 1983 Comments in Exhibit "E" narrative.

IDAHO DEPARTMENT OF FISH AND GAME
REGION 4
868 East Main • Box 428
Jerome • Idaho • 83338

September 2, 1983

Mr. Bart M. O'Keefe, President
Energy Company, Inc.
1250 Pine Street Suite 100
Walnut Creek, CA 94596

Re: Jim Knight Power Plant - Small Conduit Hydroelectric Facility, Big
Wood River Canal Co. Main Canal

Early Consultation. Application for Exemption from FERC Licensing

Dear Mr. O'Keefe:

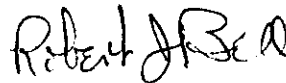
Based on the descriptive narrative and maps you provided, we suggest you be prepared to address the following concerns regarding the referenced project:

1) Transmission lines either buried or designed to prevent raptor mortalities; 2) avoidance of short- and long-term erosion in the project construction and undue disturbance of riparian habitat. Replacement of vegetation may be required.

These comments do not constitute submission of terms and conditions under Section 408 of the Energy Security Act of 1980. Terms and conditions will be submitted after notice of application from the Federal Energy Regulatory Commission (FERC).

As required by Section 4.107(a), (2) of the FERC Order No. 106, please forward a copy of the exemption application to the Idaho Department of Fish and Game, P. O. Box 25, Boise, Idaho 83707 at the time it is submitted to the Federal Energy Regulatory Commission.

Sincerely,



for William E. Webb
Supervisor, Region 4

cc: John Wolflin, USFWS
Bureau of Fisheries

RECEIVED

SEP 06 1983

REF _____



STATE OF IDAHO

DEPARTMENT OF HEALTH AND WELFARE (208) 734-9520

DIVISION OF ENVIRONMENT
P. O. Box 1626
Twin Falls, ID 83303-1626

September 2, 1983

Bart M. O'Keeffe
Mutual Energy Company, Inc.
1250 Pine Street, Suite 100
Walnut Creek, California 94596

Re: Jim Knight Power Plant FERC Exemption

Dear Mr. O'Keeffe,

We have no comments relative to the above referenced FERC exemption since the proposed project will be located in the Big Wood Canal Company main canal.

Thank you for the opportunity to comment relative to water quality protection.

Sincerely,

A handwritten signature in cursive script that reads "Michael J. McMaster".

Michael J. McMaster
Source Control Field Officer

MJM/ta
cc: Jerry Yoder

RECEIVED

SEP 06 1983

REF.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

ECOLOGICAL SERVICES

4620 Overland Road, Room 209
Boise, Idaho 83705

August 30, 1983

Mr. Bart M. O'Keeffe
President
Mutual Energy Co., Inc.
1250 Pine Street, Suite 100
Walnut Creek, California 94596

Re: Early Consultation, Jim Knight Powerplant
Big Wood Canal Company's Main Canal
Gooding, Idaho

Dear Mr. O'Keeffe:

The Fish and Wildlife Service (FWS), has received your letter of August 8, 1983. Due to FWS staffing and funding constraints, we recommend that you send to the Idaho Department of Fish and Game a complete set of drawings and project description which you will use in your application for exemption to the Federal Energy Regulatory Commission.

The applicant should design and construct power transmission lines to prevent the loss of raptors and other birds from electrocution or collision. A possible reference is entitled, Suggested Practices for Raptor Protection on Powerlines, published by the Edison Electric Institute, 1981.

Sincerely yours,


John P. Wolflin
Field Supervisor

cc: IDFG, Hdqtrs., Boise (Hanson)
IDFG, Region 4, Jerome (Bell)

RECEIVED

SEP 06 1983

REE

IDAHO STATE HISTORICAL SOCIETY
610 NORTH JULIA DAVIS DRIVE BOISE, 83702
August 31, 1983



Bart O'Keeffe
President
Mutual Energy Co., Inc.
1250 Pine Street, Suite 100
Walnut Creek, California 94596

Re: Jim Knight Powerplant

Dear Mr. O'Keeffe:

Thank you for sending us the information regarding the proposed small hydroelectric facility on the Big Wood River Canal Co.'s main canal near Gooding, Idaho.

We have checked our records and find that there are no significant archaeological or historic properties in the vicinity of the project. However, if antiquities are discovered during construction, we would like to be notified.

Sincerely,

A handwritten signature in cursive script, reading "Thomas Green".

Thomas Green
State Archaeologist
State Historic Preservation Office

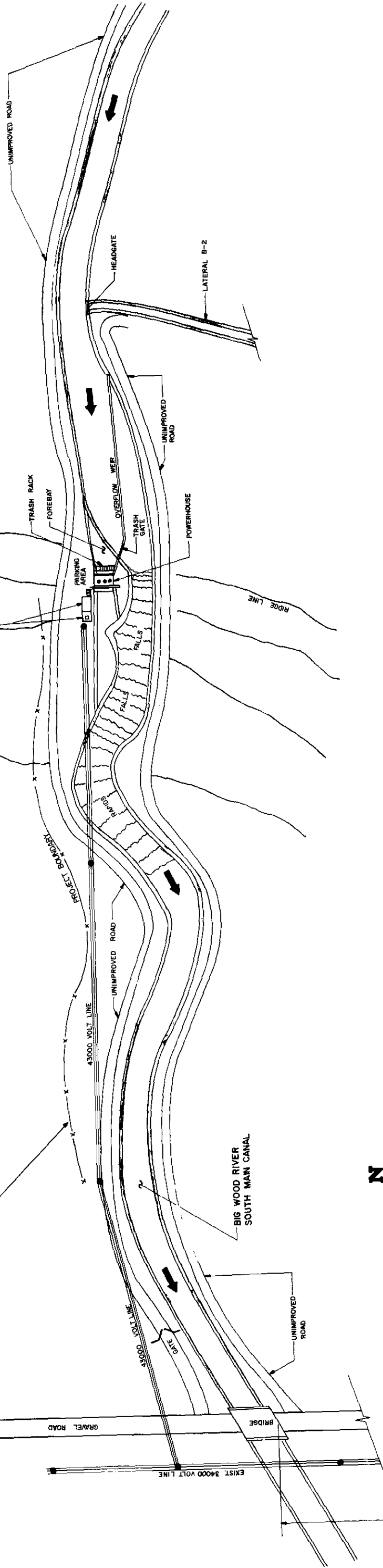
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EXHIBIT "G"
PROJECT DRAWINGS

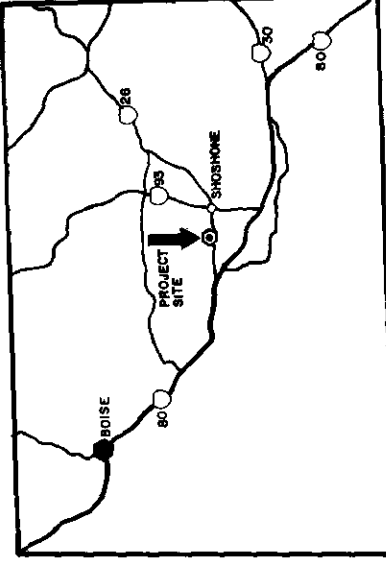
NOTE:
PROJECT BOUNDARY TO BE,
BIG WOOD RIVER CANAL CO.
150' WIDE RIGHT OF WAY, AS
YET UNSURVEYED



SITE PLAN



LOCATION MAP



JIM KNIGHT HYDROELECTRIC PLANT		DESIGN	B.M.O.
LOCATION MAP SITE PLAN		DRAWN	J.V.B.
		CHECKED	B.M.O.
		APPROVED	B.M.O.
		DATE	9-15-83
MUTUAL ENERGY COMPANY WALNUT CREEK, CA. 94596		PROJECT DRAWING	
		SHT	OF

APPENDIX

Documentary Evidence
of Property Interests
in Project Lands

The following Lease on the project site is provided as evidence that Mutual Energy Company, Inc. has the necessary property interests to develop the Jim Knight Powerplant on lands covered by the Lease.

Bart M. O'Keefe
BART M. O'KEEFE

LEASE AGREEMENT

The Big Wood Canal Company, an irrigation company whose office is located at P.O. (C), Shoshone, Idaho, 83352, herein called "Big Wood Canal", hereby leases to Mutual Energy Co., Inc., a California corporation, having its principal place of business at 1250 Pine Street, Suite 100, Walnut Creek, California, herein called "Mutual Energy" that site described in Exhibit A attached hereto, hereinafter referred to as "the site", on the following terms and conditions:

1. Purpose. The purpose of this Lease is to provide a location for the construction and operation of a hydroelectric facility, herein called "the facility."

2. Term. This Lease shall commence upon its execution and terminate on December 31, 2013, unless sooner terminated as provided herein.

3. Termination. In addition to the grounds for termination set out in Section 9 hereof:

a. This lease may be terminated by Big Wood Canal without liability on its part upon 30 days' written notice at any time after June 30, 1986, if Mutual Energy has not completed construction of and commercially operated a power generating facility at the site prior to the date of notice.

b. This Lease may be terminated by either party without liability on the part of the terminating party upon 90 days' written notice at any time after June 30, 1986, if Mutual Energy fails to commercially operate the power generating facility for 18 consecutive months.

c. As used in this Paragraph 3, the term "commercially operated" and "commercially operate" shall mean operation of the facility in such a manner that the facility generated more than one-half of its rated monthly capacity in any calendar month. The parties agree that the facility's rated monthly capacity is 100,000 kilowatt hours per month.

d. Non payment of rent for a period of three months.

e. The failure to create, establish and transfer title to the Big Wood Canal Company of the replacement fund hereinafter identified and described in paragraph 5.

4. Rent. Mutual Energy agrees to pay to Big Wood Canal rent in the following amounts.

a. The sum of \$1,000.00 upon execution of this Lease.

b. For a period of seven (7) years beginning with the first month of commercial operation Mutual Energy will pay to Big Wood Canal a sum equal to five (5) percent of the gross revenue generated from the sale of electricity at the facility. Said payment due on the first of each month following the receipt of sales revenue by Mutual Energy from the power purchaser.

c. For the period following the seven (7) year period identified in Paragraph (b) above and ending on December 31, 2013, Mutual Energy will pay to Big Wood Canal a sum equal to fifteen (15) percent of the gross revenue generated from the sale of electricity at the facility. Said payment due on the first of each month following the receipt of sales revenue by Mutual Energy from the power purchaser.

All rent that becomes due and payable under this Lease shall be paid to Big Wood Canal at the office of Big Wood Canal at P.O. (C)

Shoshone, Idaho, 83352, or such other place or places as Big Wood Canal may from time to time designate by written notice given to Mutual Energy.

5. Replacement Fund. Mutual Energy shall establish a replacement fund prior to the end of the first year of commercial operation. One year after commercial operation commences title and interest in the fund shall be transferred to Big Wood Canal.

The fund will be established by the purchase of a bond, annuity or similar instrument approved by Big Wood Canal. Mutual Energy will purchase such an instrument for approximately \$15,000 bearing an interest of approximately 11 percent which will provide an anticipated \$300,000 + fund as of December 31, 2013. The establishment of this fund constitutes Mutual Energy's sole responsibility as to the payment of this replacement fund.

6. Duty to construct. Mutual Energy shall prior to June 30, 1986, at Mutual Energy's sole cost and expense, construct or cause to be constructed on the site, power generating facilities, in the manner and according to the terms and conditions specified in this Paragraph. No structure or other improvement of any kind shall be erected or maintained on the site unless and until the plans, specifications, location and operation of said structure or improvement has been approved in writing by Big Wood Canal.

Big Wood Canal hereby licenses Mutual Energy, Mutual Energy's agents and any party involved in said construction or in the preparation

for said construction, to enter the site of Big Wood Canal for the purpose of conducting site investigations, inspections, construction, operation and maintenance of said project for the entire term of this Lease.

7. Use of Site. The site may, during the term of this lease be used by Mutual Energy for the sole purpose of constructing and operating a power generating facility on the site.

The construction, operation and maintenance of the facility shall in no way interfere with the flow of waters through the power generating facilities and it is understood between the parties that the passage of irrigation water through the site shall take priority over any activities by Mutual Energy.

8. Title to Improvements. Mutual Energy shall own any and all buildings, equipment and improvements placed or erected on the site as part of the facility as well as any and all other alterations, additions, improvements and fixtures made or placed in or on the site by Mutual Energy or any other person for the period of this Lease.

9. Permits. Mutual Energy shall be responsible for obtaining and maintaining in force and effect, all necessary permits, licenses and other authorizations from any applicable federal, state or local jurisdiction. All rights acquired through such permits by Mutual Energy shall be subordinate to and subject to Big Wood Canal's prior and superior rights as they may exist on these facilities, or in the water to be utilized by said facilities. Failure to obtain a necessary permit or authorization under this provision shall be grounds for termination of the agreement by Big Wood Canal or Mutual Energy, at either's option.

10. Big Wood Canal's Right to Inspection. Big Wood Canal retains all rights to enter upon the site for the purpose of inspection and maintenance of the irrigation facilities of Big Wood Canal.

11. Mutual Energy's Right to Encumber. Mutual Energy may, at any time and from time to time during the term of this Lease, encumber to any person or entity, by deed of trust or mortgage or other security instrument, all of Mutual Energy's interest under this Lease and the leasehold estate thereby created in Mutual Energy for any purpose or purposes without the consent of Big Wood Canal; provided, however, that no encumbrance incurred by Mutual Energy pursuant to this section shall, and Mutual Energy shall not have power to, incur any encumbrance that will constitute in any way a lien or encumbrance on the fee of the site or any interest of Big Wood Canal in the site. To insure compliance with this provision prior to any such action being taken by Mutual Energy, Mutual Energy shall submit said financing plan, along with any requested details of said financing and encumbrance, or other transfer of the property, or interest therein, to Big Wood Canal for Big Wood Canal's review and approval. If Big Wood Canal determines that said encumbrances will in any way affect Big Wood Canal's own interest in operating its facilities or underlying rights, Big Wood Canal may reject said financing. Mutual Energy shall insure that any encumbrance or other transfer of said facilities for the purpose of financing, will be subordinate to and secondary to, the rights of Big Wood Canal and the underlying landowners, and shall obtain with any such encumbrance agreement written subordination and present the same to Big Wood Canal.

12. Obligation of Big Wood Canal. Big Wood Canal agrees

to make available the interest of the Big Wood Canal in the right-of-way of Big Wood Canal for the purpose of constructing, operating and maintaining the facility. Big Wood Canal has no obligation to furnish any right-of-way which may be required out side of the existing canal right-of-way.

It is further agreed that Big Wood Canal is obligated to furnish only that water which may be routed down the canal for irrigation purposes as dictated by the demands of stockholders of Big Wood Canal or other beneficial purposes as may be determined by the Big Wood Canal Company. Such water will remain under the complete control of Big Wood Canal.

13. Maintenance. At all times during the term of this lease, Mutual Energy shall, at Mutual Energy's own cost and expense, keep and maintain said site and all improvements now and hereafter on the site as well as all facilities now and hereafter appurtenant, to said site in good order and repair and in a safe and clean condition.

Mutual Energy shall operate and maintain the facilities in accordance with Prudent Electrical Practices, The National Electric Safety Code in effect from time to time, and other applicable local, state and federal codes, and shall provide and maintain adequate protective equipment sufficient to prevent damage to the facility.

14. Indemnity and Insurance. Mutual Energy shall indemnify and hold Big Wood Canal and the property of Big Wood Canal, free and harmless from any and all liability, claims, loss, damages or expenses resulting from Mutual Energy's occupation and use of the site.

Mutual Energy shall, at Mutual Energy's own cost and expense,

secure promptly after execution of this Lease, and maintain during the entire term of this Lease a broad form comprehensive coverage policy of public liability insurance issued by an insurance company acceptable to Big Wood Canal and authorized to issue liability insurance in Idaho insuring Mutual Energy and Big Wood Canal against loss or liability caused by or connected with Mutual Energy's occupation and use of the site in amounts not less than:

a. \$3,000,000(CSL), for injury to or death of one person and, subject to such limitation for the injury or death of one person, of not less than \$3,000,000(CSL), for injury to or death of two or more persons as a result of any accident or incident; and

b. \$3,000,000(CSL), for damage to or destruction of any property of others, including property of lessor.

Provided, however, that if the insurance requirements of any Power Sales Agreement entered into by Mutual Energy with a third party are more stringent or require higher limits, Mutual Energy shall comply with such other more stringent and higher limits requirements.

Evidence of the issuance and a continuation in full force and effect of all such policies shall be supplied to Big Wood Canal upon request of Big Wood Canal.

All of such policies shall contain a provision to the effect that the policy or policies may not be cancelled without a written notice to Big Wood Canal of less than 90 days.

15. Delays. Except as otherwise expressly provided in this Lease, should the performance of any act required by this Lease to be performed by either Big Wood Canal or Mutual Energy prevented or delayed by reason of any act of God, strike, lockout, labor,

trouble, restrictive governmental laws or regulations, or any other intervening cause except financial inability not the fault of the party required to perform the act, the time for performing of the act will be extended for a period equivalent to the period of delay and performance of the act during the period of delay will be excused; provided, however, that nothing contained in this section shall excuse the prompt payment of rent by Mutual Energy as required by this Lease or the performance of any act rendered difficult or impossible solely because of the financial condition of the party, Mutual Energy or Big Wood Canal, required to perform the act.

16. Notices. Any and all notices or other communications required or permitted by this Lease or by law to be served on, given to or delivered to any party hereto by any other party to this Lease shall be in writing and shall be deemed duly served, given or delivered when personally delivered to the party or to an officer of the party, or in lieu of such personal delivery, when deposited in the United States mail, first class postage prepaid, addressed to that party at its principal place of business. The principal place of business of Big Wood Canal shall be P.O. (C), Shoshone, Idaho 83352, and the principal place of business of Mutual Energy shall be 1250 Pine Street, Suite 100, Walnut Creek, California 94596.

17. Governing Law. This Lease, and all matters relating to this Lease, shall be governed by the laws of the State of Idaho in force at the time any need for interpretation of this Lease or any decision or holding concerning this Lease arises.

18. Binding on Heirs and Successors. This Lease shall be binding on and shall inure to the benefit of the successors and

assigns of Big Wood Canal and Mutual Energy.

19. Attorneys Fees. If any action should be instituted on this Lease, the prevailing party shall be responsible for any and all reasonable attorneys fees.

20. Sole and Only Agreement. This instrument constitutes the sole and only agreement between Big Wood Canal and Mutual Energy respecting the site and correctly sets forth the obligations of Big Wood Canal and Mutual Energy to each other under this Lease as of its date. Any agreements or representations respecting said premises, their leasing to Mutual Energy by Big Wood Canal, or any other matter discussed in this Lease not expressly set forth in this instrument are null and void.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals this 12th day of September, 1983.

BIG WOOD CANAL COMPANY

ATTEST:

BY: *Donald Sandy pres.*

Kerthy Silca
Secretary

MUTUAL ENERGY CO., INC.

ATTEST:

BY: *Bart M. O'Keefe*

Beverly M O'Keefe
Secretary