

July 19, 1981

Mr. Robert Cackowski
Deputy Director, Office of El. Power Reg.
Federal Energy Regulatory Commission
825 N. Capitol St., N.E.
Washington, D.C. 20426

Dear Mr. Cackowski,

The enclosed refers to:

OEPR - HL
Project no. 4769-000 Idaho
S & S Limited Partnership

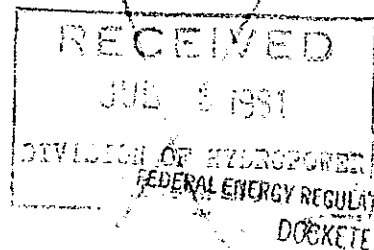
Our previous application was incomplete. We are confident all necessary information is now enclosed. If this is not the case, would you please phone so that we may rush it to you? We have already lost much of our ideal construction weather, and Idaho needs the power. (S & S needs the mortgage-lifting potential also.)

Sincerely,

Wayne B. Skeem

Wayne B. Skeem
S & S Limited Partnership
1742 Targhee Dr. (208) 734-8296
Twin Falls, Idaho 83301

WBS:cws



JUL 8 1981
BW
DOCKET SECTION

APPLICATION FOR EXEMPTION OF SMALL
HYDRO-ELECTRIC POWER PROJECT

(1) S & S Limited Partnership applies to the Federal Energy Regulating Commission for an exemption for their Mud Creek Hydro Project, a small hydro-electric power project that is proposed to have an installed capacity of 5 megawatts or less, from certain provisions of the Federal Power Act.

(2) The location of the project is:

State of Idaho
County of Twin Falls
Buhl, Idaho 83316

(3) The exact name and address of each applicant is:

S and S Limited Partnership
1742 Targhee Dr.
Twin Falls, Idaho 83301

(4) The exact name and address of each person authorized to act as agent for the applicant in this application is:

Dan C. Skeem	or	Wayne B. Skeem
Route 3		1742 Targhee Dr.
Buhl, Idaho 83316		Twin Falls, Idaho 83301

(5) S & S Ltd. is an association of citizens of the United States (Father and Son); legal partners under the laws of the State of Idaho and the project owner.

- - -

S & S proposes to use the Mud Creek waters for power generation at two locations on the same privately-held property and utilize two ("upper" and "lower") diversions already in place and in use.

The upper diversion is only in fair condition since its construction in early 1900 to divert water for irrigation purposes. The installation of new weir boards and trash racks will be required. A fish ladder and screens will have to be built. The upgraded weir, less than six feet high will continue to be used to divert Mud Creek water for irrigation purposes, and the hydro concept will be an additional use of the diversion structure.

Actual generation occurs approximately 2,000 feet downstream from the "upper" diversion by returning the water 75 vertical feet to the stream bed.

The returning water is then in place above an already existing weir (fitted with screens and ladder) which diverts Mud Creek for trout farming purposes. S & S requests permission to generate power a second time at the "lower" site by utilizing the present structures and capitalizing upon a return flow head of approximately 50 feet. (See Exhibit B.)

All adjacent property is either owned or held in option by the general partner. Please refer to land ownership and option exhibits.

Since there is a market for the power and we have had no protests whatsoever, S & S plans to proceed with the project as soon as this exemption application is approved.

EXHIBIT A

The MUD CREEK diversions are located on MUD CREEK approximately $3\frac{1}{2}$ miles NW of Buhl, Idaho. (U.S. Geological Survey Topographic quad sheet and USDA Conservation Service map enclosed.)

Table 1 below gives necessary statistics:

Table 1

"Upper Diversion"

Dam - upgrading needed

Height - 5'

Length - 15'

Material - rock and concrete

Design - gravity, uncontrolled spillway,
dam diverts water for farm irrigation purposes.

Storage - negligible

Surface area - $\frac{1}{4}$ acre or less

Customer - Power output is proposed for sale to the Idaho Power Company under rates (.054) established by the Idaho Public Utilities

Commission pursuant to the Public Utility Regulatory Policies Act.

Transmission - 300 + KW - 1400' from powerhouse to substation.

Penstock

190' of 38" ($\frac{1}{4}$ ") .281 wellsteel

Powerplant:

Rating - 1 unit @ 166 KW

Mfgr. - Johnstone - francis typ

Operating Head - 73'

Hydraulic Capacity - 34 cfs

Plant factor - 85%

Annual output - 1,223 MWh

Table 2

"Lower Diversion"

Dam - Weir in place with screens
and ladder

Height - 5'

Length - 25'

Material - Concrete

Design - gravity, diverts water for
trout ponds (see map)

Storage - negligible

Surface - $\frac{1}{4}$ acre or less

Customer - Same as above.

Penstock

250' of 42"

Powerplant:

Rating - 1 unit @ 100 KW

Mfgr. - Johnstone - francis typ

Operating Head - 45'

Hydraulic Capacity - 34cfs

Plant factor - 85%

Annual Output - @ 600 MWh

EXHIBIT E
ENVIRONMENTAL REPORT

Mud Creek exists primarily as a result of irrigation drainage and seepage waters. Adjacent lands on both sides of the creek are irrigated pastures, alfalfa and occasional row-crops.

Within the confines of our proposed generating projects, there are no historic relics or endangered species that we know of.

As seen on the map (Exhibit B), there are presently in place two diversions of Mud Creek. The "lower" one (Mid-distance downstream from the "upper" one) is a weir with screens and fish passage facilities. This diversion directs water to trout ponds as seen. We would like to amplify this use and harness the return flow for power generation.

The upper diversion structure is presently used for irrigation purposes. We plan to remodel and provide for fish passage, etc. The upstream diversion will be less than six feet high and will then serve a dual role -- irrigation and generation.

Stream flow below the upper diversion would be maintained at 5cfs or more, as is already the case with the lower weir. The amount of water impounded is negligible in both cases.

Typical vegetation includes grass, weeds, willows, and moss. Typical bird life includes crows, blackbirds, magpies, sparrows, and robins. Wildlife includes gophers, mice and rabbits.

The water quality of this creek has been improved in the last few years as farmers have tried to minimize their erosion problems. Many farmers have adopted improved methods for controlling surface irrigation procedures. The proposed operation would not negatively affect the quality of the creek. It could be argued that the weirs would serve as control devices to divide and divert some rather harsh spring run-off that occurs occasionally.

There are a few small trout in Mud Creek. The property is not posted, but we almost never see anyone fishing the stream.

All water flowing through the proposed "upper" and "lower" turbines would be returned to the creek. The streambed, between the diversions and power generators is primarily steeply sloping bedrock with seepage returning water to the creek at many points. It does not appear that the natural environment of this section of Mud Creek would be adversely affected even by extremely low-flow conditions. A minimum flow of 5cfs would be maintained in areas affected by this project.

S&S. LIMITED PARTNERSHIP
Hydroelectric
Project

EXHIBIT B

1/4 mile → N

"Lower" Proposed turbine
penstock

Present
treat ponds

Present
treat ponds

Present diversion weir
for treat ponds

Proposed "upper" penstock
and generating turbine

Skeem
Property

Irrigated pastures
and Alfalfa

Present
Irrigation
diversion
Additional
use proposed

MUD
CREEK

23

DEPARTMENT OF AGRICULTURE
CONSERVATION SERVICE

EXHIBIT B

B,

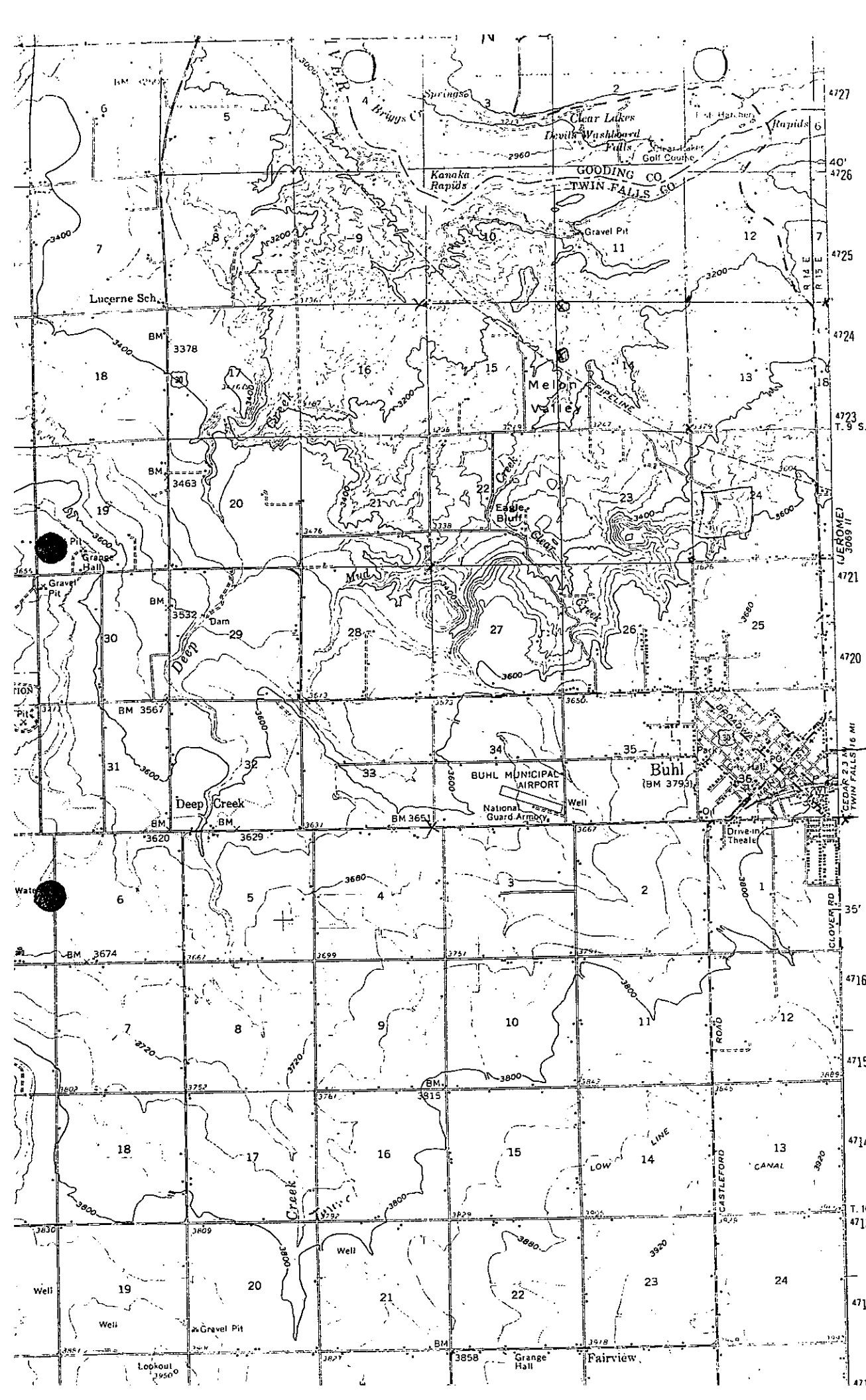
S&S limited
partnership @
Hydroelectric
Project location

within sections
14 and 15

"Melon Valley"

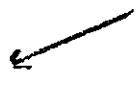
Exhibit B,

Buhl, Ida.
N4230-W11445/
1959

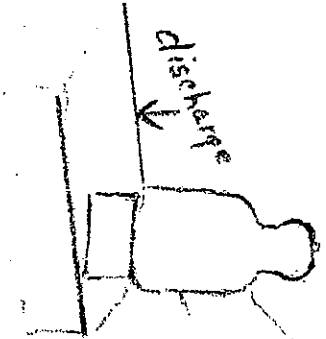


Mud Creek
"upper" use

Turbine and electrical
safety equip. enclosed
in small building



190'
38" steel penstock

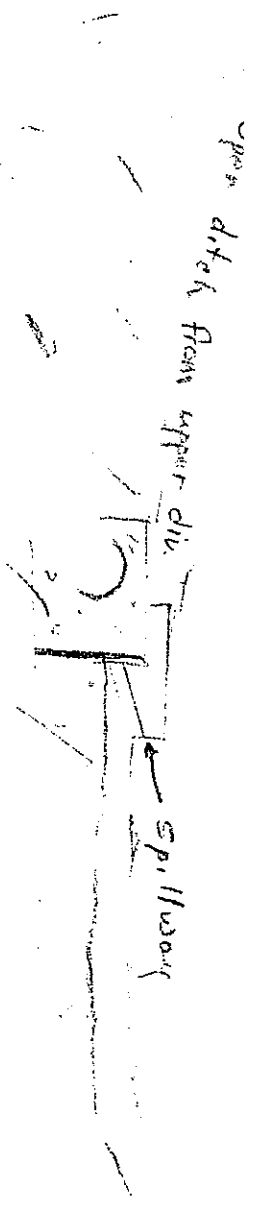
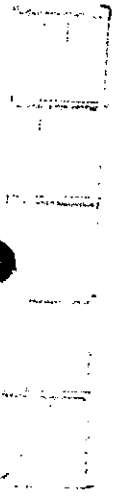


discharge

Mud
Creek - Bad
(rocky)

Present Bridge and weir
"lower" diversion for trout ponds
nearby

Scale - 1/2" = 5'



spillway

Exhibit G
"upper" use

Mud Creek
"lower" use

discharge

Turbine & Electrical
enclosure planned

250' W
#2 steel

penstock

open cement ditch

spillway

Exhibit G

"lower" use

Flow - cubic feet per second

MUD CREEK

