



Staff Report

for the Board of Directors' Meeting of February 24, 2021

TO: Board of Directors
FROM: Keane Sommers, P.E., Hydroelectric Manager *KSS*
DATE: February 17, 2021
SUBJECT: Hydroelectric Department Training Request

HYDROELECTRIC

RECOMMENDATION:

Approve using the 2021 Hydroelectric Department training budget to send staff to a Pacific Gas & Electric (PG&E) or similar training program provided by a reputable institution.

BACKGROUND:

Hydroelectric Department Plant Operators, Electrical Machinists, and Systems Technicians are responsible for the operation and maintenance of high risk Nevada Irrigation District assets including seven powerhouses, three flume systems, and more than a dozen dams that supply water from the upper division to the water distribution system. Having well trained staff ensures that the assets are maintained by people that are capable of performing their duties to the highest standard possible, minimizing the risk to the public.

The District has struggled to recruit journey level or higher candidates for these positions and must provide training for entry level employees. The District is actively seeking classes from a variety of venues including Pacific Gas & Electric, universities and colleges, and private vendors in order to provide a level of knowledge that meets industry standards and ensures that District staff is able to respond to the situations they face during their normal job duties.

Currently, several employees are involved in multi-year programs which will be budgeted for in future years. NID Board Policy 2175.2 requires Board approval for training expenses in excess of \$3,000. When training opportunities arise it is

critical that staff be able to respond immediately or past experience has shown that the class may be filled before Board approval can be obtained. It is therefore necessary to bring this open ended training expense request to spend budgeted money for consideration.

If PG&E Hydroelectric Operations classes are available, staff plans to send one Hydroelectric Plant Operator I. The course of study, duration, and tuition from a previous PG&E operator training program are provided in Table 1 below. The current program and costs are not currently available.

Table 1

Course Title	Duration	Tuition
Hydro Fundamentals	80 hours	\$7,000
Basic Electricity	40 hours	\$3,200
Schematics	40 hours	\$3,200
Print Reading	20 hours	\$1,600
Hydro Advanced Fundamentals	80 hours	\$7,000
Simulator Modules with Progress Tests	24 hours	\$1,920
Total Tuition		\$23,920

Staff also proposes sending a Hydroelectric Machinist to PG&E training. This will either be the continuation of the program for a Hydroelectric Machinist II and/or the initiation of the program for a Hydroelectric Machinist I depending on availability and budget. The course of study, duration, and tuition from a previous PG&E year one machinist training program are provided in Table 2 below.

Table 2

Course Title	Duration	Tuition
Mechanical Drawings	30 hours	\$2,758
Tool Bit Grinding	40 hours	\$2,758
Arc/MIG Welding	80 hours	\$7,380
Lathe Operations	80 hours	\$5,317
Milling Machine Operation	40 hours	\$2,658
Total Tuition		\$20,871

If NID staff are unable to attend the PG&E training programs staff will attempt to generate a similar level of training using classes from the Western Area Power Administration's Electric Power Training Center, Bismark State College's Energy Program, 360 Training or similar programs.

In the past, the District has had problems retaining trained employees. Directors on the Water & Hydroelectric Operations Committee questioned whether or not a District employee could be required to stay with the District following the training or be required to pay back portions of the training program. District legal counsel reviewed this question and determined that this may present legal challenges.

These trainings are in alignment with Goal Nos. 1 and 4 of the District's Strategic Plan by ensuring resilient and sustainable operation of our systems and educates staff to continue to look for processes and technologies that will allow us to operate at peak efficiency.

BUDGETARY IMPACT:

The 2021 Hydroelectric Maintenance Department Budget includes \$35,000 for training. 2021 Hydroelectric Operations Department Budget includes \$40,000 for training.

KSS