

MINUTES OF THE REGULAR MEETING OF THE
BOARD OF DIRECTORS OF THE COLUMBIA BASIN HYDROPOWER
EPHRATA, WASHINGTON APRIL 23, 2018

President Alford called the regular meeting of the Columbia Basin Hydropower to order at 9:30 AM.

CBHP Directors

SCBID – Bryan Alford
ECBID – Dennis Mickelsen
QCBID – Phil Stadelman
QCBID - Mike LaPlant
ECBID – Boe Clausen
SCBID - Richard Conrad

Other CBHP Directors Attending

ECBID – Duaine Anderson (Alt)
SCBID – Charles Lyall (Alt)

Others Attending

Dave Solem, SCBID
Darvin Fales, QCBID
Craig Simpson, ECBID
Bill Dickens, Tacoma Power
Orman Johnson, ECBID

Staff

Tim Culbertson, Secretary-Manager
Richard Lemargie, Attorney
Jacob Taylor, Treasurer
Judy Runge, Administrative Assistant
Betty Craig, Technical Information Administrator
Larry Thomas, Assistant Manager/Hydro Supervisor
Robert Stoaks, Engineer
Derek Wolf, Engineer
Stacey Bresee, Data Management Technician
Jeremy Dreher, Hydro Craftworker

INTRODUCTION

Manager Culbertson introduced our employee Jeremy Dreher who will be attending the meeting.

CONSIDERATION OF MEETING MINUTES

Boe Clausen moved that the minutes of the March 27, 2018 meeting be approved as distributed. Mike LaPlant seconded the motion. Motion passed.

ACKNOWLEDGEMENT, REVIEW AND/OR APPROPRIATE CONSIDERATION OF THE FOLLOWING:

Power Production Reports March 2018

Accumulated Kilowatt Hours and Energy and Incentive reports were distributed in Board packets. Total March generation was 120.59% of 2013-2017 of that average.

Travel Authorizations:

Richard Conrad moved to authorize attendance and payment of reasonable expenses for travel, lodging and meals for the following:

SkillPath Seminar – Excelling as a Manager or Supervisor – June 21, 2018, Spokane, WA –
Reg. \$99 – Derek Wolf

Washington DC Trip on Banks Lake Pumped Storage Project, May 7-11, 2018 – Tim Culbertson
and up to three Board members.

Mike LaPlant seconded the motion. Motion passed.

TREASURER'S REPORTFinancial Reports

The March 31, 2018 Balance Sheet (unaudited), All Power Plants Income Statement (unaudited) and First Quarter O&M Deposits were included in the Board packets for review.

Approval of Voucher

The Current Expense Voucher (O&M) was presented at the meeting for consideration. Check numbering is as follows:

Current Expense Voucher (O&M) - \$452,416.61
Check Numbers: 16941-17047

On motion by Mike LaPlant, seconded by Richard Conrad, which motion passed unanimously, the Current Expense Voucher (O&M) dated April 23, 2018 in the amount of \$452,416.61 was approved.

STAFF AND OTHER REPORTS

The following written activity reports, attached and incorporated by reference, were made available for review and comments:

Field O&M Activities (Larry Thomas)
Engineering (Bob Stoaks)
Engineering (Derek Wolf)
Technical Information (Betty Craig)

OTHER POWER BUSINESSProject Development

Manager Culbertson informed the Board that East, South and Quincy irrigation districts approved a \$100,000 deposit payable to the BPA, utilizing Project Development funds, for the next phase of transmission interconnection studies for the Banks Lake Pumped Storage Project.

Richard Conrad moved to approve a \$100,000 deposit, previously approved by the East, Quincy and South irrigation districts, payable to the BPA, utilizing Project Development funds for the next phase of transmission interconnection studies for the Banks Lake Pumped Storage Project. Boe Clausen seconded the motion. Motion passed.

Modeling Work Refund

Manager Culbertson informed the Board that CBHP had recently received notice of a credit in the amount of \$46,982.71 from the BPA for funds remaining from advanced payment for Banks Lake Pumped Storage Project, Phase I modeling work.

Project Development Expense Report for the month of March 2018 was presented to the Board for review.

Manager Culbertson provided an update on treaty activity from the latest Power Group meeting and his recent trip to Washington, D.C. with the Power Group.

USBR – No report

Cities – Bill Dickens handed out talking points for the Columbia Basin Irrigation Districts about his plans to visit each of the three districts in the next two months.

Districts – No report

DATE OF NEXT BOARD MEETING

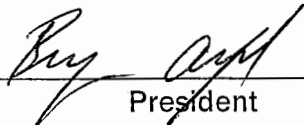
President Alford announced that the next meeting of the Board of Directors will be May 22, 2018.

RECESS

At 10:30 AM President Alford called for a five minute recess before going into a 30-minute executive session to discuss potential litigation with Grant PUD.

RECONVENE AND ADJOURNMENT

President Alford reconvened the meeting and being no further business to come before the Board, the meeting was adjourned by President Alford at 11:05 AM.



President



Secretary

COLUMBIA BASIN HYDROPOWER
Activity Report

For period March 16, 2018 to April 13, 2018

Reported by: Larry Thomas Function: Field O&M Activities

Russell D. Smith Power Plant

- . March 30, following commissioning of the new exciter, the unit was started for the season at 1432 hours. Online automatic operation of the unit was erratic so unit output has been reduced to approximately 1.5 MW and locked-in to troubleshoot the problem.
- . The project was plagued with communication system failures this period resulting in several outages to address the matter. Troubleshooting and repair of the communications system continued.

P.E.C. 66.0 Power Plant

- . March 21, following testing the unit was started for the season.
- . March 21-24, the unit shutdown multiple times due to heavy weeds plugging the intake.
- . The project was plagued with communication system failures this period resulting in several outages to address the matter. Troubleshooting and repair of the communications system continued.
- . Output ranged from 0.63 MW to 1.97 MW.

E.B.C. 4.6 Power Plant

- . March 28, following testing the unit was started for the season.
- . The project was plagued with communication system failures this period resulting in several outages to address the matter. Troubleshooting and repair of the communications system continued.
- . Output ranged from 0.96 MW to 1.35 MW.

Main Canal Power Plant

- . No outages or abnormal conditions.
- . Output ranged from 4 MW to 18 MW.

Summer Falls Power Plant

- . March 29, startup testing of unit 161 was completed and the unit was started for the season.
- . No outages or abnormal conditions.
- . Output ranged from 14 MW to 63 MW.

Columbia Basin Hydropower

Activity Report

For Period: March 15, 2018 through April 15, 2018

Reported by: Robert Stoaks P.E.

Function: Engineering

- 1) Travel: Doble conference, Boston, April 7-14. Rotating Machinery committee vice chair.
- 2) Travel: SEL training, Duluth MN, April 16-April 21. Industrial Power System Protection.
- 3) Main Canal check gate backup power transfer switch controller cards are faulty. Technicians repaired cards. Purchased new transfer switches and will install next offseason.
- 4) Performing study to increase efficiency and output of Main Canal and Summer Falls. Gathering information from vendors on efficiency upgrades and costs.
- 5) EBC 4.6 transformer tested for high gasses (Methane, Ethane, and Ethylene) which indicates an internal hot spot possibly from a loose connection or overheating of tap changer. Quotation for tap changer work was \$25,000. New replacement transformer quote was \$75,000. Decision to repair tap changer in-house by cleaning connections, drying oil, testing oil using Karl Fisher, and dielectric tests for moisture. Re-energize transformer, testing oil for fault gases.
- 6) Purchased replacement package to remove analog electronics on the RDS exciter and install a Basler DECS-400. Delivered on 9/25. Installation completed by electrical crew. Final commissioning March 30.
- 7) SCADA/PLC/Relay replacement for all plants: H2E is working on design.
- 8) Researching how to heat the governor hydraulic oil to lower the viscosity to less than 54cSt. Contacted experts and vendors.
- 9) Design of wireless controller for bridge crane in Main Canal shop.
- 10) Reviewing maintenance practices and making recommendations for improvement.

Columbia Basin Hydropower

Activities Report for the period of Mar 19th, 2018, through Apr 13th, 2018.

Derek Wolf, PE Mechanical Engineer

General:

- South plant communication loss investigation in process.
- Implementing insurance recommendations at all plants.
- Continuing PEC Headworks FERC coordination with Grant PUD.

Main Canal Power Plant:

- Continuing coordination with USBR for the new steel storage building.
- Performed lateral stability calculations for the machine shop to assess additional weight of bridge crane and high wind loads.
- Looked into issues with the shop bridge crane main hoist restriction setup.
- Designing the anchorage for a new antenna tower.
- Piping design for the new oil storage tanks in powerhouse.
- Erroneous signals to governor blade distribution valve were traced to the control panel of new generator cooling water strainer. Snubbers have been installed to remove interfering electrical noise.

Summer Falls Power Plant:

- Troubleshooting problems with the generator cooling water pressure regulators.
- Repair of sump pump #1 and suction piping completed.
- Fabrication of picking device for removing the Howell Bunger discharge valve actuating cylinders completed. The repair is currently scheduled for the end of October following shutdown.
- Finalized the mitigation report of the leaky hydraulic cylinders on the HB valves.
- Modifications to check structure eastern hand rail system for increased personnel safety.
- Continued looking into options to alleviate the parking problem at the powerhouse.

Russell D. Smith Power Plant:

- Governor troubleshooting for overspeed upon startup and surging issues when online.

COLUMBIA BASIN HYDROPOWER

Activity Report

For Period: March 18 through April 14, 2018Reported by: Betty Craig Function: Technical Information Dept.CMMS:

- CASCADE data entry is up to date.
- Project to add all PRC-005 related equipment to CASCADE is ongoing.

NERC/WECC COMPLIANCE:

- Reviewed NERC & WECC websites for any upcoming deadlines or revisions to existing standards.
- FAC-003 Vegetation Management Q1 reporting completed via webCDMS.
- VAR-002-WECC-2 AVR Q1 reporting completed via webCDMS.
- PRC-023 Non-Applicability letter uploaded via webCDMS.
- Completed Q1 e-GADS and MIDAS reporting.

NETWORKING & COMPUTERS:

- Routine security, maintenance, and verification of nightly backups.
- Assisted users with miscellaneous hardware and software issues.
- Replaced failed hard drive and reinstalled software and drivers on office pc.

HYDRO PROJECT DEVELOPMENT:

None

OTHER:

- Scanned and created .pdf files for CBHP staff.
- Website updates.
- Betty completed CPR/First Aid refresher training.