MINUTES OF THE REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE COLUMBIA BASIN HYDROPOWER EPHRATA, WASHINGTON AUGUST 28, 2018

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

CBHP Directors	Other CBHP Directors Attending	Others Attending
SCBID – Richard Conrad QCBID – Phil Stadelman QCBID – Mike LaPlant ECBID – Dennis Mickelsen ECBID – Boe Clausen SCBID – J.J. Danz (Alt)	ECBID – Duaine Anderson (Alt) SCBID – Charles Lyall (Alt) ECBID – Bernard Erickson (Alt)	Dave Solem, SCBID Darvin Fales, ECBID Craig Simpson, ECBID Maurice Balcom, SCBID Amy Rodman, USBR Michael Hill, Tacoma Public Utilities Jim Russell, Tacoma Power
<u>Staff</u>		Stefanie Johnson, SCL
Tim Culbertson, Secretary-N	lanager	Yochi Zakai, SCL
Jacob Taylor, Treasurer		Alexis Mills, USBR
Larry Thomas, Assistant Ma	nager/Hydro Supervisor	Anna Franz, LKFW
Robert Stoaks, Engineer		
Derek Wolf, Engineer		
Betty Craig, Technical Inforr		
Judy Runge, Administrative	Assistant	

INTRODUCTION

New Cities' representatives who will be attending this meeting are Yochi Zakai from Seattle City Light, Michael Hill and Jim Russell from Tacoma Power.

CONSIDERATION OF MEETING MINUTES

Stacey Bresee, Data Management Technician

Phil Stadelman moved that the minutes of the July 24, 2018 meeting be approved as distributed. J.J. Danz seconded the motion. Motion passed.

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

Power Production Reports July 2018

Accumulated Kilowatt Hours and Energy and Incentive reports were distributed in Board packets. Total June generation was 95.39% of 2013-2017 average.

Travel Authorization:

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

Ratify travel, Tim Culbertson, Kalispell, MT, Annual Board Meeting Western Montana G&G, August 14&15, 2018

Washington State Archives Open Government Training, Richland, WA, September 12, 2018, Reg. -0- 0 Stacey Bresee and Betty Craig

MM/UA Technical Workshon Walla Walla October 2-4 2018

Reg. \$275 – Larry Thomas

Boe Clausen seconded the motion. Motion passed.

Proposed 2019 0&M Budget

The Budget and Finance Committee, which met on August 27, 2018, recommended adoption of the CY 2019 0&M budget as presented.

Phil Stadelman moved to adopt the CY 2019 0&M Budget as presented effective January 1, 2019. Dennis Mickelsen seconded the motion. Motion passed. *The 2019 0&M Budget* is *attached and incorporated by reference.*

EBC 4.6 and PEC 66.0 Power Plants

Task Order No. 3 – H2E Contract 12356-13-17 Engineering Consultants. Task Order No. 3 was presented by Bob Stoaks for engineering, design, drawing development, manuals and programming at the EBC 4.6 and PEC 66.0 power plants.

Phil Stadelman moved to approve Task Order No. 3, Contract 12356-13-17. Boe Clausen seconded the motion. motion passed.

Russell D. Smith Power Plant

(1) Task Order No. 4, H2E Contract 12356-13-17. Task Order No. 4 was presented by Bob Stoaks for H2E engineering consultants to perform commissioning support for new relays, PLCs, networks, subsystems and perform functional testing at the Russell D. Smith Power Plant.

Boe Clausen moved to approve Task Order No. 4, Contract 12356-13-17. Phil Stadelman seconded the motion. motion passed.

(2) Purchase Authorization for Equipment

- Sole Source Purchase of Schweitzer Engineering Lab (SEL) protective relays for Russell D. Smith Power Plant and award to Peak Measure/SEL for an amount not to exceed \$11,710.00 plus Washington State sales tax.
- The following quotes were received for the purchase of GE Programmable Logic Controller for the Russell D. Smith Power Plant.

Company	Total (Exclusive of Sales Tax)
Instrumart	\$17,416.00
CBPacific	\$15,674.40
CIMTEC Automation	\$17,282.00

Phil Stadelman moved to award the sole source purchase to Peak Measure/SEL for the purchase of protective relays for the Russell D. Smith Power Plant in an amount not to exceed \$11,710.00 plus Washington State sales tax and award CBPacific for the purchase of GE Programmable Logic Controller for the Russell D. Smith Power Plant in the amount of \$15,674.40 plus Washington State sales tax. Richard Conrad seconded the motion. Motion passed.

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Resolution 2018-04 – Declaring Miscellaneous Equipment Surplus

Presented for consideration was the following entitled resolution: "Resolution 2018-04 of Columbia Basin Hydropower (CBHP) Declaring Miscellaneous Equipment Surplus to the Needs of CBHP."

Boe Clausen moved to adopt Resolution 2018-04. Phil Stadelman seconded the motion. Motion passed. A copy of said resolution is attached hereto and incorporated by reference.

TREASURER'S REPORT

Financial Reports

The July 31, 2018 Balance Sheet (unaudited) and All Power Plants Income Statement (unaudited) 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) – \$2,311,848.92 Check Numbers: 17343-17420

On motion by Boe Clausen, seconded by Richard Conrad, which motion passed unanimously, the Current Expense Voucher (0&M) dated August 28, 2018 in the amount of \$2,311,848.92 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 BUSINESS

Project Development

Manager Culbertson reported that CBHP has responded to the Puget RFP and that CBHP was getting ready to release an RFP for the five conduit sites in Franklin County and one in Grant County.

Project Development Fund Status

Treasurer Taylor provided the Board with the Project Development Fund status for the month of July 2018.

Columbia River Treaty

Richard Conrad moved to approve travel authorization for Tim Culbertson to participate in Power Group subcommittee meetings in the Northwest and Washington DC. Boe Clausen seconded the motion. Motion passed.

USBR - No report

<u>Cities</u> - No report

Districts - No report

DATE OF NEXT BOARD MEETING

A motion was made by Richard Conrad to change the regular Board of Directors meeting date from September 25 to September 18, 2018. Boe Clausen seconded the motion. Motion passed.

RECESS AND RECONVENE

After a ten minute recess the meeting reconvened.

EXECUTIVE SESSION

At 10:35 AM Vice President LaPlant called for a 70-minute executive session to discuss personnel and potential sale of real estate.

ADJOURNMENT

There being no further business to come before the Board, the meeting was adjourned by Vice President LaPlant at 11:45 AM.

Bry W. and President

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Secretary

		ADMINISTRATIVE & GENERAL	R.D.S.	P.E.C.	E.B.C	М.С.	S.F.	2018 BUDGET	2019 BUDGET
920.10	12 mo	SALARIES	108,611	62,762	72,622	215,037	475,498	829,500	934,528
920.20	12 mo	VAC-SICK-HOLIDAY	23,039	13,313	15,405	45,614	100,863	154,235	198,233
920.30	12 mo	S/S-RET-INS	43,582	25,185	29,141	86,289	190,803	282,824	375,000
920.35	12 mo	VEBA, DEFERRED COMP	9,879	5,709	6,605	19,559	43,249	83,250	85,000
921.10	12 mo	OFFICE SUPPLIES	1,395	806	933	2,761	6,106	12,000	12,000
921.20	12 mo	POSTAGE	291	168	194	575	1,272	3,000	2,500
921.40	12 mo	COMPUTER EQUIP/SOFTWARE	4,757	2,749	3,181	9,419	20,828	35,000	40,935
920.40	12 mo	ATTORNEY	4,068	2,351	2,720	8,054	17,808	50,000	35,000
924.10	12 mo	INSURANCE	43,582	25,185	29,141	86,289	190,803	355,000	375,000
930.10	12 mo	BOARD MEETINGS	814	470	544	1,611	3,562	6,500	7,000
921.50	12 mo	TELEPHONE	174	101	117	345	763	5,000	1,500
923.30	12 mo	PROFESSIONAL SERVICES	10,084	5,827	6,742	19,964	44,146	85,000	86,763
923.20	12 mo	TRUSTEE / SERVICE CHARGES			-		· _	-	<u> </u>
930.30	12 mo	EMPLOYEE TRAINING	5,811	3,358	3,885	11,505	25,440	50,000	50,000
930.40	12 mo	MISC. ADMINISTRATION	2,324	1,343	1,554	4,602	10,176	25,000	. 20,000
921.30	JAJN	OFFICE SPACE RENT	6,090	3,519	4,072	12,057	26,662	51,000	52,400
921.60	12 mo	OFFICE EQUIPMENT	581	336	389	1,151	2,544	5,000	5,000
930.20	МА	AUDITING FEES	1,743	1,007	1,166	3,452	7,632	15,000	15,000
		TOTAL	266,824	154,187	178,411	528,283	1,168,155	2,047,309	2,295,859

O & M BUDGET FOR 2019

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		OPERATIONS	R.D.S.	P.E.C.	E.B.C.	M.C.	S.F	2018 BUDGET	2019 BUDGET
536.10	Sep Dec	LICENSE FEES	23,244	13,432	15,542	46,021	101,762	200,000	200,000
537.10	7 mo	SALARIES, (HYDRAULIC)	5,255	3,037	3,514	10,405	23,008	48,994	45,220
537.20	7 mo	VAC-SICK-HOLIDAY	1,752	1,013	1,172	3,469	7,671	11,418	15,077
537.30	7 mo	S/S-RET-INS.	2,591	1,497	1,733	5,130	11,345	17,369	22,296
538.10	7 mo	SALARIES, (ELECTRICAL)	35,391	20,451	23,664	70,071	154,943	308,857	304,522
538.20	7 mo	VAC-SICK-HOLIDAY	11,797	6,817	7,888	23,357	51,648	71,791	101,507
538.30	7 mo	S/S-RET-INS.	17,450	10,084	11,668	34,550	76,397	109,436	150,150
538.40	7 mo	MATERIAL & SUPPLIES ELECTRICAL	872	504	583	1,726	3,816	7,000	7,500
539.10	12 mo	PLANT TELEPHONE	1,976	1,142	1,321	3,912	8,650	17,500	17,000
539.20	12 mo	STATION SERVICE	7,903	4,567	5,284	15,647	34,600	70,000	68,000
539.60	AMJ	PURCHASED VEHICLES	8,716	5,037	5,828	17,258	38,161	80,000	75,000
539.40	12 mo	VEHICLE USE EXPENSE	6,973	4,030	4,663	13,806	30,529	60,000	60,000
539.30	12 mo	RADIO & TELEMETRY	2,324	1,343	1,554	4,602	10,176	20,000	20,000
539.90	12 mo	SAFETY SUPPLIES	2,499	1,444	1,671	4,947	10,939	25,000	21,500
539.50	7 mo	EMPLOYEE MEALS	58	34	39	115	254	500	500
537.50	7 mn	SOUTH DISTRICT STANDBY	5,000	5,000	5,000		-	15,500	15,000
539.70	12 mo	TOOLS & TESTING EQUIPMENT	8,716	5,037	5,828	17,258	38,161	75,000	75,000
		TOTAL OPERATIONS	142,520	84,467	96,952	272,274	602,060	1,138,366	1,198,272

		MAINTENANCE	R.D.S.	P.E.C.	E.B.C.	M.C.	S.F.	2018 BUDGET	2019 BUDGET
		MAINTENANCE	R.D.S.	1.15.0.	B.D.C.	m.c.	5		
541.40	12 mo	ENGR. CONSULTANT	2,324	1,343	1,554	4,602	10,176	25,000	20,000
542.10	12 mo	SALARIES, (STRUCTURES)	2,372	1,371	1,586	4,696	10,383	8,674	20,407
542.20	12 mo	VAC-SICK-HOLIDAY	791	457	529	1,565	3,461	1,777	6,803
542.30	12 mo	S/S-RET-INS.	1,169	676	782	2,315	5,120	3,005	10,062
542.40	12 mo	MATERIALS & SUPPLIES	2,905	1,679	1,943	5,753	12,720	25,000	25,000
543.10	12 mo	SALARIES, (WATERWAYS)	7,393	4,272	4,944	14,638	32,368	49,166	63,616
543.15	12 mo	VAC-SICK-HOLIDAY	2,464	1,424	1,648	4,879	10,789	16,273	21,205
543.20	12 mo	S/S-RET-INS.	3,645	2,107	2,438	7,218	15,960	18,814	31,367
543. 2 5	12 mo	MATERIALS & SUPPLIES	4,068	2,351	2,720	8,054	17,808	35,000	35,000
543.30	May	HEAVY WORK EQUIP.	581	336	389	1,151	2,544	5,000	5,000
543.40	12 mo	BARRIER NET	-		-	7,500		15,000	7,500
543.50	12 mo	BARGE MAINTENANCE				6,000	-	5,000	6,000
544.10	12 mo	SALARIES, (ELECTRICAL)	75,793	43,798	50,680	150,063	331,821	746,406	652,153
544.20	12 mo	VAC-SICK-HOLIDAY	25,264	14,599	16,893	50,021	110,607	168,629	217,384
544.30	12 mo	S/S-RET-INS.	37,371	21,595	24,988	73,991	163,610	263,073	321,555
544.40	12 mo	MATERIALS & SUPPLIES	17,433	10,074	11,656	34,515	76,321	180,000	150,000
544.50	12 mo	HEAVY WORK EQUIP.	1,220	705	816	2,416	5,342	12,500	10,500
544.60	12 mo	SUB CONT LABOR CITIES	1,162	672	777	2,301	5,088	25,000	10,000
544.70	12 mo	SUB CONT LABOR DIST.	1,046	604	699	2,071	4,579	10,000	9,000
545.10	12 mo	MISC MAINTENANCE			-			500	
	[TOTAL MAINTENANCE	187,004	108,062	125,040	383,748	818,700	1,613,816	1,622,552

2018

2019

CAPITAL IMPROVEMENTS & EXTRAORDINARY MAINTENANCE COSTS	R.D.S.	P.E.C.	E.B.C.	м.с.	S.F.	BUDGET	BUDGET
SUMMER FALLS CRANE ANALYSIS					10,000	10,000	
MC STORAGE BUILDING				200,000		200,000	
ACCESS ROAD AND PARKING LOT CRACK SEALING				10,000	10,000	20,000	
SPARE VACUUM BREAKER					40,000	40,000	
STRATFORD - SF LINE DESIGN AND REBUILD					490,000	490,000	

	110,000	20,000				2018	2019
TOTAL CAP. REPAIRS & REPLACEMENTS	440,000	50,000	70,000	210,000	550,000	1,060,000	- 885,000
POLE-MOUNTED DISCONNECT		30,000					30,000
GOVERNOR OIL HEATER SYSTEM				15,000	30,000		45,000
DESIGN/MATERIALS - CONTROL SYSTEM		125,000	125,000	100,000			350,000
HYDRAULIC SYSTEM	200,000						200,000
GOVERNOR	240,000						240,000
LABYRINTH SEAL	•		20,000				20,000
DESIGN/ENGINEERING - SCADA/PLC RELAY	200,000	50,000	50,000			300,000	
STRATFORD - SF LINE DESIGN AND REBUILD					490,000	490,000	
STARE TACOON BREAKER					10,000	-10,000	

TRANSMISSION & TOTALS	R.D.S.	P.E.C.	E.B.C.	M.C.	S.F.	BUDGET	BUDGET
TRANSMISSION	4,000	1,500	1,500	-	8,000	15,000	15,000
O & M BUDGET TOTALS	1,040,348	398,217	471,903	1,394,306	3,146,915	5,874,491	6,016,683

EACH CITIES MONTHLY PAYMENT FOR 2019 (1/24) (O&M TOTAL) IS:

\$250,695

RESOLUTION 2018-04 RESOLUTION OF COLUMBIA BASIN HYDROPOWER (CBHP) DECLARING MISCELLANEOUS EQUIPMENT SURPLUS TO THE NEEDS OF CBHP

WHEREAS, listed miscellaneous equipment has become obsolete, uneconomical to maintain, and surplus to the needs of CBHP;

NOW, THEREFORE, BE IT HEREBY RESOLVED, that the following miscellaneous equipment are here by declared to be not necessary or needed for the use of CBHP.

ITEM	DESCRIPTION	SERIAL NUMBER	DATE PURCHASED
Computer	Dell Precision T-1600	4HYM0R1-9793188685	08/26/11
Network Server	Dell PowerEdge 2900	91NGJL1	12/07/09
Network Server	Dell PowerEdge T410	8Z4CJQ1-19537878745	07/20/11
Laptop	Dell Latitude D830	4HVYFG1-9788728753	06/11/08

BE IT FURTHER RESOLVED that the above-listed office furniture has no salvage value and that the Secretary-Manager of the Authority is instructed to dispose of the equipment in the least cost manner as allowed by Title 87.03.136 RCW.

ADOPTED this 78th day of <u>August</u>, 2018

BOARD OF DIRECTORS

Director

Director

Director

Directo

Director

Director

ATTEST:

Cullette

Secretary



COLUMBIA BASIN HYDROPOWER Activity Report

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For period July 16, 2018 to August 20, 2018 Reported by: <u>Larry Thomas</u> Function: <u>Field O&M Activities</u>

Russell D. Smith Power Plant

. Generation ranged from 3.1 MW to 5.7 MW.

- . August 7, the plant was taken offline at 0847 hours to troubleshoot the station service switchgear and hydraulics. The plant was returned to service at 1807 hours.
- . August 8, the plant was taken offline at 0815 hours to repair the station service switchgear. The plant was returned to service at 1604 hours.
- . August 11, the plant was shut down at 2130 hours due to trash rake failure. The plant was restarted on August 13 at 1630 hours following replacement of a broken cable.
- . August 16, the unit shutdown at 2300 hours due to a plugged cooling water strainer. The unit was restarted on August 17 at 1424 hours.

P.E.C. 66.0 Power Plant

- . July 16, the plant shut down at 1501 hours due to trouble with a turbine bearing oil flow switch. The unit was restarted July 17 at 1306 following adjustments.
- . August 7, the plant was taken offline at 0717 hours due to low flow conditions. The unit was restarted August 10 at 0930 hours.
- . Output ranged from 0.4 MW to 1.7 MW.

E.B.C. 4.6 Power Plant

- . August 5, the plant shutdown at 1804 hours due to transmission line trouble. The plant was restarted August 6 at 0958 hours.
- . August 15, the plant was taken offline at 1250 hours due to water in the turbine bearing oil. The unit was returned to service August 17 at 1424 hours following adjustments.
- . Output ranged from 2.0 MW to 2.2 MW.

Main Canal Power Plant

- . August 7, the plant shutdown at 2201 hours due to transmission line trouble. The unit was returned to service on August 8 at 0822 hours.
- . Output ranged from 23 MW to 25 MW.

Summer Falls Power Plant

- . No outages or abnormal conditions.
- . Output ranged from 89 MW to 94 MW.

Columbia Basin Hydropower

Activity Report

For Period: July 16, 2018 through August 20, 2018

Reported by: Robert Stoaks P.E. Function: Engineering

- Attended IEEE Power and Energy Society annual conference. Topics included a tutorial on energy storage, Western Energy Imbalance Market, adjustable speed pumped storage modeling workgroup, challenges implementing synchrophasor applications, overhead conductors, 100% renewables, and harmonizing IEEE standards and NERC requirements related to generator modeling.
- 2) Main Canal: Investigating a misoperation of the transformer differential relay (87T) during a fault on line near the Stratford substation. The zone 2 distance relay operated correctly, clearing the fault.
- 3) SCADA/PLC/Relay replacement for all plants: H2E has completed relay and control drawings, and programming. In the process if ordering parts. Requesting quotes for panel fabrication.
- 4) Closeout of multiple off-season projects: Calisto installation, 4.6 GSU repair, Spare PT/CT, SF MU Breaker, RDS exciter upgrade, and RDS BU Generator replacement.
- 5) Design of emergency diesel transfer switches for Main Canal.
- 6) Performed Battery Capacity test MC, SF, RDS. One cell at RDS (3 cells per jar, 19 jars per bank) failed during test (half way through test). Replacement battery ordered, expected delivery October 1.
- Performing study to increase efficiency and output of Main Canal and Summer Falls. Gathering information from vendors on efficiency upgrades and costs. Submitted information to Voith and GE.;
- 8) EBC 4.6 transformer tested for high gasses (Methane, Ethane, and Ethylene), decision to repair tap changer in-house by cleaning connections, drying oil, testing oil using Karl Fisher, and dielectric tests for moisture. Pulled oil samples for analysis after the unit was started.
- 9) Reviewing loadability requirements of PRC-025 to implement at Main Canal and Summer Falls.
- 10) Researching how to heat the governor hydraulic oil to lower the viscosity to less than 54cSt. Contacted experts and vendors.
- 11) Design of wireless controller for bridge crane in Main Canal shop. Reviewing maintenance practices and making recommendations for improvement.

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Columbia Basin Hydropower

Activities Report for the period of July 16th, 2018, through Aug 17th, 2018.

Derek Wolf, PE Mechanical Engineer

General:

- Coordinating mechanical maintenance activities at all plants.
- Developing list of maintenance tasks for the off-season at all plants.
- Finished mechanical budget for 2019.
- Improving the maintenance program for the fire protection systems at all plants.
- Research into thermal imaging devices to be used for troubleshooting equipment.

Main Canal Power Plant:

- Continuing coordination with USBR for the new steel storage building. USBR finalizing Categorical Exclusion paperwork. All FERC requested submittals have been sent in for approval.
- Exhaust louver maintenance procedures revisited. Researching gravity-fed louver redesign.

Summer Falls Power Plant:

• Sump pump #2 rehab complete.

RDS Power Plant:

- Researching governor upgrade options.
- Troubleshooting of hydraulics for turbine speed control.
- Mechanical seal replaced in turbine bearing water quality package pump. Replacement options for pump being looked into.
- Broken wire rope cable on rake replaced.

EBC 4.6 Power Plant:

- Developing repair procedures of turbine shaft labyrinth seal for the off-season.
- Investigating water intrusion into turbine guide/thrust bearing.

PEC 66.0 Power Plant:

• Investigation into turbine hydraulic brake and wicket gate issues. Repairs scheduled for off-season.

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COLUMBIA BASIN HYDROPOWER Activity Report For Period: July 15 through <u>August 14, 2018</u> Reported by: <u>Betty Craig</u> Function: <u>Technical Information Dept.</u>

CMMS:

- CASCADE data entry is up to date.
- Project to add all PRC-005 related equipment to CASCADE is nearing completion. Awaiting final review with Electrical Engineer.

NERC/WECC COMPLIANCE:

- Reviewed NERC & WECC websites for any upcoming deadlines or revisions to existing standards.
- Q2 FAC-003 Vegetation Management reporting was completed via WebCDMS.
- Q2 VAR-002-WECC-2 AVR reporting was completed via WebCDMS.
- Q2 e-GADS reporting was completed.
- Q2 MIDAS reporting was completed.

NETWORKING & COMPUTERS:

- Routine security, maintenance, and verification of nightly backups.
- Assisted users with miscellaneous hardware and software issues.
- Field beta testing of J5 logbook software is in progress.

HYDRO PROJECT DEVELOPMENT:

- Prepared meeting handouts for Manager Culbertson.
- Assisted with preparation of CBHP response to PSE RFP for all resources.

RECORDS MANAGEMENT:

- Draft Records Management Policy is in progress.
- Draft Records Management Program Manual is in progress.
- Draft Scan and Toss Policy is in progress.

OTHER:

- Scanned and created .pdf files for CBHP staff.
- Website updates.
- Prepared TI Department budget for 2019.