
**Finance and Facilities Committee
also Sitting as the Audit Committee
Agenda**

	<u>Page</u>
1. Call to Order/Roll/Declaration of a Quorum (9:30am) <i>Chair Sliva</i>	
2. Consent Agenda <i>Chair Sliva</i>	
2.1 Approve Minutes of February 23, 2017 Meeting	1
3. Reports (9:35am)	
3.1 Fiscal Operations Advisory Council (10 min) <i>FOAC Chair, Terri Torres</i>	
3.2 Finance, Facilities and Audit Status: Quarterly Review (20 min) <i>VPFA Fox</i>	6
4. Action Items (10:05am)	
4.1 Recommendation to the Full Board to Adopt the 2017-18 Education and General Operating Fund Budget (40 min) <i>VPFA Fox</i>	20
4.2 Approval of the Quarterly Internal Audit Report (15 min) <i>Kernutt Stokes</i>	26
5. Discussion Items (11:00am)	
5.1 Update on Geothermal Power Plant (20 min) <i>Ron Young and Craig Mays, Johnson Controls International</i>	29
6. Other Business/New Business (11:20am) <i>Chair Sliva</i>	
7. Adjournment (11:30am)	



**Meeting of the
Oregon Tech Board of Trustees
Finance and Facilities Committee
Mt. McLoughlin Room, Klamath Falls Campus
February 23, 2017
9:00am–Noon**

DRAFT MINUTES

Trustees Present:

Steve Sliwa, Chair
Jessica Gomez (via phone)

Bill Goloski (via phone)
Vince Jones

Jay Kenton, Interim Pres.

University Staff and Faculty Present:

Lita Colligan, AVP Strategic Partnerships
Thom Darrah, Facilities Project and Planning Manager
Erin Foley, VP Student Affairs/Dean of Students
Brian Fox, VP Finance and Administration
LeAnn Maupin, Acting Provost/Dean of the College of HAS
Michelle Meyer, Director of Business Affairs
Steve Neihsel, VP Strategic Enrollment Management
Hallie Neupert, Interim Dean of the College of ETM/Department Chair
Tracy Ricketts, AVP of Development and Alumni Relations
Di Saunders, AVP Marketing and Public Relations
Terri Torres, Mathematics Associate Professor

Others Present:

Matt Appleby, BBT Architects
Jean Bushong, Clifton Larsen Allen
Dr. Nagi Naganathan, President Designate

1. Call to Order/Roll/Declaration of a Quorum

Chair Sliwa called the meeting to order at 9:05am. The Secretary called roll and a quorum was declared.

2. Consent Agenda

2.1 Approve Minutes of November 15, 2016 Meeting

With the acknowledgment of a Scribner's error to the amount of funds mentioned in the motion in section 4.1 Action Items: \$7,500,000,000 (\$7.5B) should be \$7,500,000 (\$7.5M), the minutes were approved.

The correct motion reads: Trustee Gomez moved to recommend the Board approve the creation and funding of a quasi-endowment fund from the E&G Fund at a level of \$7,500,000 and set the spending policy at a four percent annual spend rate.

3. Reports

3.1 Fiscal Operations Advisory Council

Chair Sliwa requested a standing report from the FOAC group. **FOAC Chair, Terri Torres** explained the makeup of the group and that she represents faculty. She stated some of the concerns of the Council in the past have been Athletics and the soccer field project, specifically whether the Athletic Department has adequate funding. Other concerns are an analysis of Wilsonville's contributions and the difficulty hiring adjuncts and faculty; the lack of an equipment replacement plan; learning to understand tuition setting; and getting faculty salaries on level with where they should be. She stated there is an increase in communication between administration and the FOAC Chair. She feels faculty concerns are being heard and addressed and explained that information from FOAC is disseminated back to faculty at faculty meetings but mostly through informal conversations in the hallways. **VPFA Fox** stated FOAC meetings are held approximately three to four weeks prior to F&F Committee meetings so he can cover the same information that the board will here.

3.2 Finance, Facilities and Audit Status: Quarterly Review

VPFA Fox walked through the report calling out that it is still under development. Discussion regarding construction timelines and funding of projects.

Manager Darrah walked through the structure of the Facilities spreadsheet. **Chair Sliwa** requested staff take steps to ensure all procurement rules are followed to prevent businesses from contacting the President, Trustees, and Foundation members regarding projects. **VPFA Fox** stated staff will add red, yellow, green quick visuals to identify if projects are on budget or have issues; issue report quarterly to the committee quarterly and contact the committee if they see an issue on a monthly report; and add a section for notes on the spreadsheet. Staff is working to establish systematic reporting structures for trustees and executive staff. There is a plan to spend down deferred maintenance funds.

VPFA Fox explained the internal audit is mid-process and will be complete in a month; they will focus on Financial Aid and report back at the next meeting. External auditors completed the financial audit and single audit; close out anticipated in November.

4. Action Items

4.1 Recommendation to the Full Board to Approve the Procurement of Diagnostic Equipment and Authorize the President, or Designee, to Enter into a Contract in Excess of One Million Dollars

Interim Provost/Dean Maupin explained the history of the acquisition of equipment and the types and importance of equipment leased for various programs in the Martha Anne Dow Center for Health Professions. She stated the amount is \$1.5m for 25 systems over a 5-year period and the contract was awarded to Mind-Ray with a 5-year warranty.

Dr. Naganathan asked if there was a discount offered in exchange for the naming rights. **Interim Provost/Dean Maupin** stated there are two rooms in the DOW Center with Toshiba's name from the original lease. There is no expiration date for the naming rights.

VPFA Fox clarified the amount of the lease is budgeted over 5 years.

Trustee Jones moved to recommend the full board approve the procurement of diagnostic equipment and authorize the President, or designee, to enter into a contract in excess of one million dollars. Trustee Gomez seconded the motion. With all trustees present voting aye, the motion passed unanimously.

Discussion regarding the process. **Trustee Sliwa** suggested that if items are previously approved in the budget then it is in the President's authority to spend the amount. **VPFA Fox** will call out the projects estimated to be in excess of \$1M when the budget is brought before the Committee.

4.2 Recommendation to the Full Board to Adopt a Quasi-Endowment Investment Policy

VPFA Fox provided a brief overview of the proposed policy. A quasi-endowment was established as an accounting entity and funds were moved from the E&G Fund to the quasi-endowment on January 1, 2017. The funds continue to be invested in the Public University Fund (PUF) and a Board adopted Investment Policy is required to move the funds into a different investment class or allocation. It is proposed to continue the relationship with the Oregon Treasury and USSE as the investment managers. The policy was written to limit the asset classes to those offered by the Oregon Treasury; for conservative management and long-term investment to preserve the capital. He will distribute quarterly USSE reports to the committee and request a presentation at least once a year. The Investment Advisor and Investment Manager are the same person so long as the Oregon Treasury is used. The Designee reports to the Board. Spending distribution of 4% per year is authorized to shift into General Fund for use by the president.

Discussion regarding who controls investments; the investment agreement with Oregon State University to handle the PUF; and OSU's unilateral decision to divest from fossil fuels. **Trustee Gomez** suggested the committee review the PUF annually and make a determination to stay with OSU.

Proposed amendments:

3.0 Responsibility of the Board

The role of the Board is to recommend broad investment goals to the investment Advisor, as outlined in this Policy, including spending rate information and to provide input into the asset allocation process.

9.2.1 Subject to the terms and conditions of this Policy ~~and conditions of this Policy~~ and the investment management agreement...

Trustee Jones moved to recommend to the full board to adopt a quasi-endowment investment policy with the proposed changes to sections 3.0 and 9.2.1. Trustee

Goloski seconded the motion. With all trustees present voting aye, the motion passed unanimously.

BREAK 10:35am – 10:45am

5. Discussion Items

5.1 Annual Financial and Single Audit Report

VPFA Fox introduced **Jean Bushong, Clifton Larsen Allen Partner and Lead Oregon Tech Auditor**, and stated there were three findings in the annual financial audit, the single audit recommended the university focus on financial aid, and an unmodified audit was issued. **Ms. Bushong** walked through the scope of the audit highlighting the 2016 changes: \$44M increase to net position from the removal of state paid debt, and the change of the net pension (PERS) from an asset to a liability. She highlighted some of the notes: depreciation outpaced purchases for capital, and there is a great deal of sensitivity in the estimated percentage related to the net pension asset.

Single audit of federal programs was focused on Financial Aid. Financial Reporting report: one significant deficiency which has since been remedied: Segregation of Duties - IT programmers were able to put things into production without going through the normal approval cue. Student Financial Aid report: a clean/unmodified opinion was issued. Two findings: Global finding – report information to NSLDS through NSC (third party) and respond within 10 days. Issues with uploading information from NSC to NSLDS were not resolved within the timeline. FSEOG Grant based on lowest level of family income – one particular student was mistakenly awarded the grant. A management letter was issued identified two employees who could process payroll but others were monitoring compensating controls. Recommendation to alter practice.

Discussion regarding the need to find a balance of internal controls; look at restrictions versus functionality and streamlined processes.

5.2 2017-19 Biennium Budget and Legislative Update

AVP Colligan walked through her report. The Public University Support Fund (our operating fund) is in the Governor's Budget at \$667M, leaving the seven universities \$100M short based on continued service levels. Senator Betsy Johnson is proposing \$9M in additional funding (beyond the \$1.6M in Business Oregon budget) for OMIC: \$4.5M for site development and building improvements and \$4.5M for equipment purchases; she is asking all of the universities to lobby on this effort. Majority of the public universities will request tuition increases in the double digits; the Legislature has discussed capping tuition increases.

5.3 Tuition Setting and Budget Update, and Priority Discussion

VPFA Fox explained the process for developing a budget and related principles, and the process for developing a tuition recommendation and the related principles. He stated it is likely HECC or Legislative approval will be required as the recommendation for tuition increase could be greater than 5%. He walked through the timeline, explaining HECC will

hear tuition increases on May 13 which could require this Board to hold an additional Executive committee and Board meeting.

Vice Chair Sliwa recommended the inclusion of a statement that tuition should be set at a rate that is appropriate to the market, and to do that a market analysis is necessary. Discussion about comparator and competitor markets. He suggested the first priority be the market response. **Trustee Gomez** stated private colleges do not have the same constraints as public universities and yet Oregon Tech needs to act as a private institution due to decreased public funding. **Trustee Goloski** requested the forums be well advertised and expressed concern that current students could be priced out which hurts retention.

VPFA Fox walked through various funding scenarios, stating enrollment needs to increase and costs need to be managed (increase in credit hour loads in classes); the budget proposed this year will likely show deficit spending; PERS increases will be multi-biennial; and staff's focus is on building decision support tools.

5.4 **Cornett Hall Project Update**

Matt Appleby, BBT Architects project architect, walked through the timeline of the project, the need to cost out the project based on conceptual designs, and the existing and proposed uses/layouts. The focus is to create a safe, clean learning environment. The structure has a 96,800SF footprint and the budget is \$9M. Discussion regarding second floor classrooms, uses of the structure, the potential need for high-bay space, and the schedule for renovation.

5.5. **Academic Equipment Update**

Dean Neupert stated faculty projected their 5-year equipment needs and allocations were made based on mission alignment, program maintenance and growth based on market demand, and maintaining program quality. She walked through the equipment list that is evenly split between the two colleges and does not include the lease of the imaging equipment.

6. **Other Business/New Business - no new business.**

7. **Adjournment**

Chair Sliwa adjourned the meeting at 12:27pm.

REPORT

Agenda Item No. 3.2

Finance, Facilities and Audit Status: Quarterly Review

Background

The following Quarterly Finance, Facilities and Audit Status Report provides information on the major areas of responsibility for the Finance and Administration Division of Oregon Tech. This includes budget, forward looking revenue and enrollment indicators, facilities, equipment and capital projects as well as internal/external audit coordination. This information is used by the Vice President of Finance and Administration to track progress of the institution in meeting its financial and operational goals, and reported to the Finance and Facilities Committee on a quarterly basis. This is the second publication of Quarterly Report and as the reporting structure and metrics have been adjusted from the first quarterly report issued in advance of the November F&F Committee meeting. It is expected that the Quarterly Report will be further refined through the end of the fiscal year.

These reports are designed to provide information and status updates to the Vice President of Finance and Administration as well as to the Board to ensure systematic tracking and execution on operational objectives. Where information is readily available, currently tracked or reported in a systematic fashion it is included. In certain areas information does not currently exist or is not held in a central location. This is particularly true as it relates to equipment purchasing and replacement as well as the condition and replacement of buildings, grounds and major subsystems is underway and will be incorporated in subsequent reports. These areas will be added or detail increased as projects to develop this information come to fruition. Feedback provided by the Finance and Facilities Committee on its preferences, information needs and reporting structure during the current and subsequent meetings will be incorporated into future Quarterly Finance, Facilities and Audit Status Reports.

Staff Recommendation

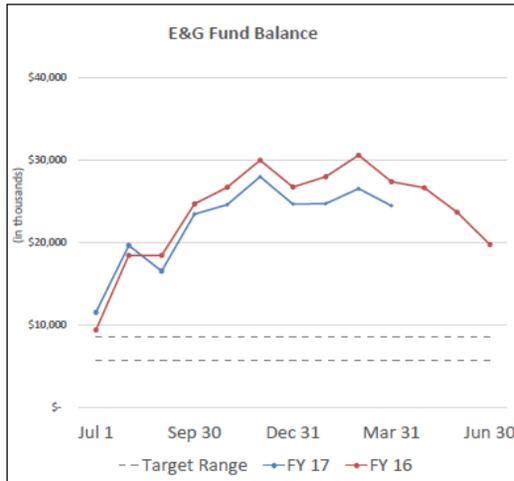
No action required. For discussion purposes only.

Attachments

Q2 Quarterly Finance, Facilities and Audit Status Reports including the following:

- A. [Financial and Enrollment Metrics](#)
- B. [Detailed Budget Review](#)
- C. [Facilities and Capital Projects](#)
 - a. Capital Projects Status Report
 - b. Deferred Maintenance and Capital Renewal
 - c. Facilities Maintenance Projects
- D. [Equipment Purchases and Replacement](#)
- E. [Audit Status](#)

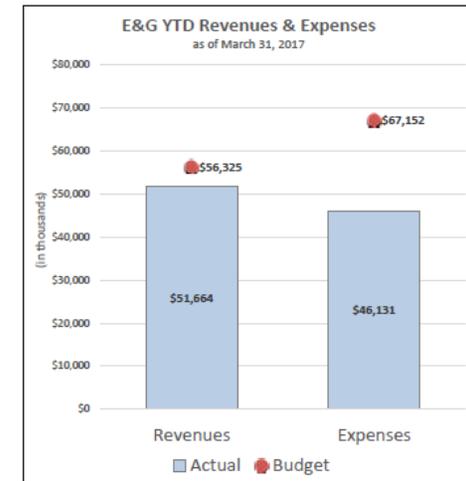
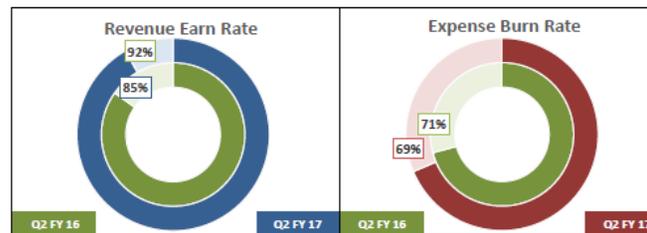
ATTACHMENT A Financial and Enrollment Metrics



Oregon TECH

Quarterly Financial Dashboard

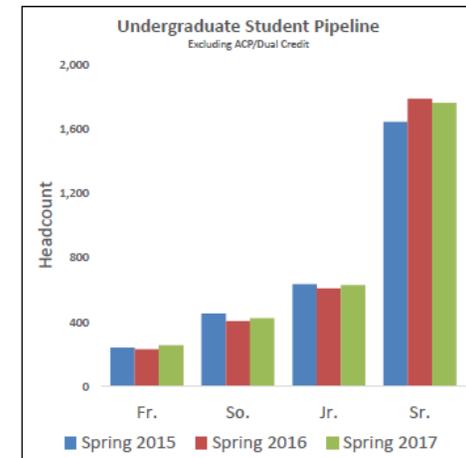
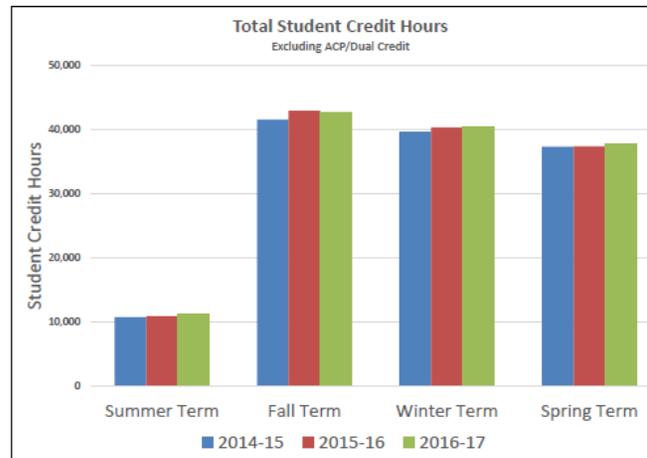
As of March 31, 2017



Key Financial Indicators		
E&G Fund Balance:	\$24,478	As of Mar. 31, 2017
Cash on Hand:	\$34,213	As of Mar. 31, 2017
E&G Cash on Hand:	\$16,718	As of Mar. 31, 2017
Days Cash on Hand:	171 Days	As of Mar. 31, 2017
Debt Burden Ratio:	4.8%	As of Jun. 30, 2016
Quasi Endowment:	\$7,500	As of Mar. 31, 2017
Foundation Assets:	\$22,829	As of Jun. 30, 2016
Deferred Maint. Backlog:	TBD	As of Jun. 30, 2016

Student Tuition		
Undergraduate Tuition		
	2016-17	2015-16
Resident:	\$7,543	\$7,324
Non-Resident:	\$24,010	\$23,311
WUE:	\$11,315	\$10,986
Online:	\$10,215	\$10,215
Differential:	15% Premium	

Graduate Tuition		
	2016-17	2015-16
Resident:	\$14,082	\$13,672
Non-Resident:	\$23,639	\$22,951
Online:	\$11,088	\$11,088
ETM Differential:	15% Premium	



Degree Completions					
		2016-17 (Est.)	2015-16	2014-15	3 Year Δ
Undergraduate	Resident:	573	557	529	8.3%
	Non-Resident:	199	193	144	38.2%
Graduate	Resident:	9	8	9	0.0%
	Non-Resident:	20	16	12	66.7%

Notes:

- E&G Fund Balance reduced by \$7.5M in FY17 for funding of Quasi Endowment (1/1/2017), E&G Expenses increased by equal amount
- Tuition calculated at 15 credits
- Enrollment and completion projection dates as of 5.14.17
- Spring Term enrollment calculated at 4th Week census date
- Note: E&G Expenses include \$7.5M funding of Quasi Endowment

Definitions

Budget: A financial plan that identifies the resources necessary to meet a set of goals for a period of time.

Cash on Hand: Total amount of any accessible cash or cash equivalents

Days Cash on Hand: Number of days that an organization can continue to pay its operating expense, given the amount of cash available

Debt Burden Ratio: The ratio of total monthly installment of debt and total income. Ratio = (Total monthly installment of debt/total Income)

Deferred Maintenance Funds: Funds made available to OIT (outside of the institutional budget) from the State of Oregon, which are allocated for capital repair, renewal and deferred maintenance

E&G (Education and General Fund): Represents state approved appropriations, tuition and other funds used for the general operating expenses of instructional programs and support functions

Expense Burn Rate: Percentage of actual expenses as of report date to projected yearly expenses

Endowment Funds: Funds used to record gifts when the principal must remain intact in perpetuity; income earned by the endowment may be unrestricted or restricted as specified by the donor

Fiscal Period: A unit of time into which the fiscal year is divided; period 1 is July 1-31

Fiscal Year: The period of time used of financial reporting purposes. OIT has a July 1 to June 30 fiscal year

Fund Balance: Defined as the difference between the assets and liabilities of a fund

Fund Balance %: Calculated as fund balance divided by revenues

General Fund: The main University fund used to record state appropriation, tuition and expenses related to the University's core mission

Quasi Endowment Fund: Funds functioning as endowments, used to report resources that the University, rather than a donor has determined are to be retained and managed like an endowment

Revenue Earn Rate: Percentage of actual revenues as of report date to projected yearly revenues

ACP: Advanced Credit Program is a partnership between Oregon Tech and participating high schools which offer college level courses at the high school at a reduced tuition rate

WUE – Students enrolled in the Western Undergraduate Exchange program, which pay 150% of resident tuition

ATTACHMENT B Detailed Budget Review

OREGON INSTITUTE OF TECHNOLOGY
Periodic Report
 As of March 31, 2017
 For the Fiscal Year ended June 30, 2017

(in thousands)	2015-16 Year-End Actual	Year-to Date				Budget Forecast			Notes
		2015-16 YTD Actual	2016-17 YTD Actual	Current YTD as a % of Forecast Budget	Prior YTD as a % of PY Actuals	Board Approved Budget	Forecast Budget	Variance from Board Approved Budget	
EDUCATION & GENERAL									
State General Fund	24,908	20,113	22,151	84%	81%	26,135	26,391	256	(1)
Tuition & Resource Fees	30,867	30,251	31,844	97%	98%	32,552	32,535	(17)	(2)
Fee Remissions	(3,180)	(2,889)	(3,178)	89%	91%	(3,415)	(3,579)	(164)	(3)
Other	940	1,502	1,047	79%	160%	1,053	1,325	272	(4)
Total Revenues	53,535	48,977	51,664	91%	91%	56,325	56,672	347	
Unclassified	(20,664)	(14,492)	(15,751)	69%	70%	(23,048)	(22,877)	371	(5)
Classified	(4,715)	(3,513)	(3,908)	74%	75%	(5,366)	(5,284)	102	(5)
Student	(724)	(506)	(435)	60%	70%	(739)	(725)	14	(6)
GTA	(31)	(26)	(11)	85%	84%	(40)	(13)	27	(6)
OPE	(12,157)	(8,549)	(9,255)	70%	70%	(13,717)	(13,303)	414	(5)
Supplies & Services	(8,192)	(5,888)	(6,185)	64%	69%	(9,772)	(9,720)	52	
Internal Sales	1,244	794	861	63%	64%	933	1,366	362	(7)
Debt Services	(1,529)	(1,093)	(1,012)	69%	71%	(1,472)	(1,472)	-	
Capital	(350)	(319)	(287)	17%	91%	(807)	(1,642)	(835)	(8)
Utilities	(1,386)	(864)	(924)	72%	62%	(1,107)	(1,290)	(183)	(9)
Transfers Out	(1,193)	(919)	(943)	78%	77%	(1,190)	(1,204)	(14)	(10)
Total Expenditures	(49,697)	(35,173)	(37,850)	68%	71%	(56,325)	(55,944)	381	
Net from Operations	3,838	13,804	13,814			0	728	728	
Transfers In	73	5	115	100%	7%	0	115	115	(11)
Transfers Out - Quasi Endowment	-	-	(7,500)	-	-	0	(7,500)	(7,500)	(12)
Sale of Harmony	4,200	4,200	-	-	-	(3,327)	(2,596)	731	(13)
OMIC, Comett Match, Planned Use carryforward	-	-	(896)	-	-	-	-	-	
Fund Additions/(Deductions)	1,533	-	-	N/A	0%	-	-	-	
Change in Fund Balance	9,644	18,009	5,533			(3,327)	(9,253)	5,926	
Beginning Fund Balance	9,394	9,394	18,945			18,945	18,945	0	(14)
Ending Fund Balance	18,945	27,403	24,478			15,618	9,692	5,926	(14)
% Operating Revenues	35.4%	56.0%	47.4%			27.7%	17.1%		(15)
AUXILIARY ENTERPRISES									
Enrollment Fees	2,951	2,346	2,379	78%	79%	3,138	3,138	0	
Sales & Services	5,784	4,078	3,527	55%	70%	5,766	6,429	663	(16)
Other	893	530	806	71%	59%	870	1,131	261	(17)
Total Revenues	9,628	6,952	6,712	63%	72%	9,772	10,696	924	
Personnel Services	(3,534)	(2,655)	(2,721)	72%	75%	(3,845)	(3,783)	62	(18)
Supplies & Services / Capital Outlay	(7,458)	(5,176)	(5,159)	64%	69%	(7,745)	(8,058)	(313)	(19)
Total Expenditures	(10,992)	(7,831)	(7,880)	67%	71%	(11,590)	(11,841)	(251)	
Net from Operations	(1,364)	(879)	(1,168)			(1,818)	(1,145)	673	
Transfers In	1,895	915	931	53%	48%	1,735	1,752	17	(20)
Transfers Out	(798)	(12)	(54)	7%	2%	(708)	(722)	(14)	(21)
Fund Addition	-	-	-	-	-	-	-	0	
Additions/(Deductions) to Unrestricted Net Assets	999	(19)	(39)	N/A	-2%	-	-	0	
Change in Unrestricted Net Assets	702	5	(330)			(791)	(115)	676	
Beginning Unrestricted Net Assets	2,606	2,606	3,308			3,308	3,308	0	
Ending Unrestricted Net Assets	3,308	2,611	2,978			2,517	3,193	676	
% Operating Revenues	34.4%	37.6%	44.4%			25.8%	29.9%		
DESIGNATED OPERATIONS, SERVICE DEPARTMENTS, CLEARING FUNDS									

OREGON INSTITUTE OF TECHNOLOGY
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For the Fiscal Year ended June 30, 2017

	Year-to-Date					Budget Forecast			Notes
	2015-16 Year-End Actual	2015-16 YTD Actual	2016-17 YTD Actual	Current YTD as a % of Forecast Budget	Prior YTD as a % of PY Actuals	Board Approved Budget	Forecast Budget	Variance from Board Approved Budget	
(in thousands)									
Enrollment Fees	38	37	33	100%	97%	26	33	7	(22)
Sales & Services	30	4	5	18%	13%	28	28	0	
Other	994	651	598	77%	65%	1,040	781	(259)	(23)
Total Revenues	1,062	692	636	76%	65%	1,094	842	(252)	
Personnel Services	(119)	(79)	(83)	72%	66%	(147)	(115)	32	(24)
Supplies & Services & Capital Outlay	(1,193)	(957)	(501)	57%	80%	(1,071)	(884)	187	(25)
Total Expenditures	(1,312)	(1,036)	(584)	58%	79%	(1,218)	(999)	219	
Net from Operations	(250)	(344)	52			(124)	(157)	219	
Transfers In	3	3	0	N/A	100%	0	0	0	
Transfers Out	(72)	(8)	(74)	100%	8%	0	(74)	(74)	(26)
Additions/(Deductions) to Unrestricted Net Assets	80	274	101					0	
Change in Unrestricted Net Assets	(239)	(73)	79			(124)	(231)	145	
Beginning Unrestricted Net Assets	395	395	156			156	156	0	
Ending Unrestricted Net Assets	156	322	235			32	(75)	145	
% Operating Revenues	14.7%	46.5%	36.9%			2.9%	-8.9%		
Total unrestricted fund balance		30,336	27,691			18,167	12,810		
Days of expenditures		251	218			96	68		

Notes:

Education & General

- (1) SSCM True Up
- (2) Enrollment increased more than anticipated in previous report
- (3) Number of students qualifying for remissions is increasing. High School program waivers up ~\$120k, Institutional Scholarships up ~\$49k
- (4) Sale of the President's residence
- (5) Net of unfilled vacancies and additional positions added mid-year
- (6) We have not utilized GTA's this year as expected
- (7) Administrative Assessments to Auxiliaries ~\$200k higher than budget. Added budget for Auxiliary Rentals reimbursement of \$180k
- (8) Due to fund balance carryforwards awarded to academic departments for equipment purchases and other equipment needs identified.
- (9) Costs increasing for sewer and power this fiscal year due to geothermal wells not functioning properly
- (10) Increase support to Athletics by \$17k for COLAS.
- (11) Miscellaneous unbudgeted one-time transfers
- (12) Transferred from fund balance to Quasi-Endowment on 1/1/17
- (13) Forecast is remaining planned use of fund balance (OMIC \$1.7m), Semon Hall remodel (\$274k), and Cornett Match (\$822k)
- (14) Change in 15-16 ending fund balance, 16-17 beginning fund balance due to FY16 period 14 adjustments. Net reduction of \$93k
- (15) Moved fund balance of \$7.5m to Quasi Endowment. If transfer had not occurred, percentage would be 30.3%, or 280 basis points greater than the Board Approved Budget

Auxiliary Enterprises

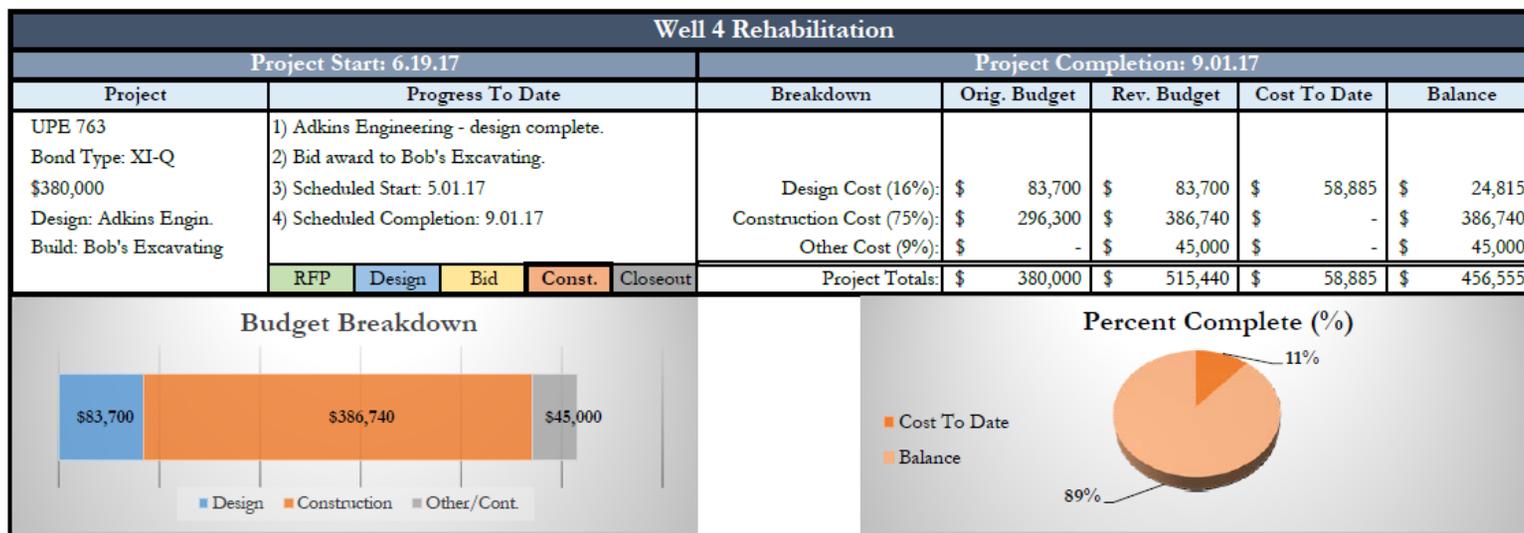
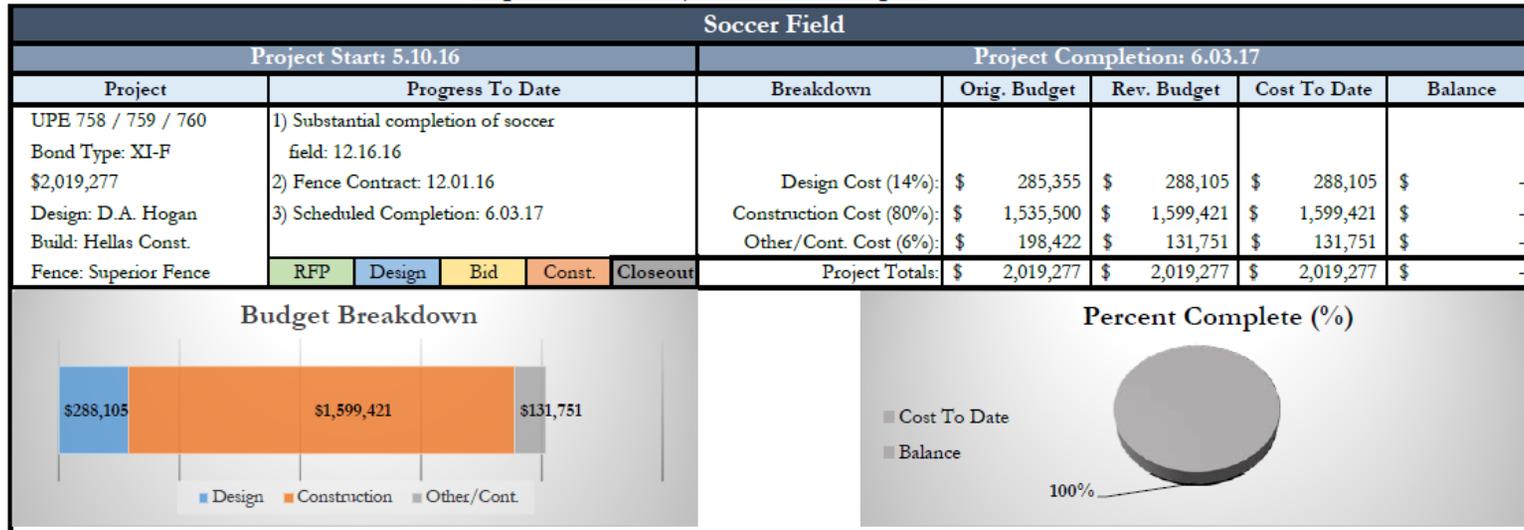
- (16) Wilsonville Rentals lease income (\$186k), Bookstore reimbursements below budget (-\$30k), St Health required to stop taking OHP (-\$25k), OMIC rentals not budgeted (\$202k), Food Service Room & Board income (\$330k)
- (17) St Health interest on bus loan budgeted as revenue, actuals as negative expense (-\$10k), Geothermal Utilities insurance settlement (\$370k), Geothermal Utilities small power plant internal sales reduced (-\$100k)
- (18) Vacancy Savings
- (19) Bookstore overhead assessments budgeted incorrectly (\$162k), St Health interest on bus loan budgeted as revenue, actuals as negative expense (-\$10k), St Health additional S&S (\$82k), Geothermal Utilities Legal and Engineering expenses not budgeted (\$49k), OMIC Rentals not budgeted (\$9k), Misc (-\$6k), Food Service overhead expenses higher than budget (\$28k)
- (20) Additional support from E&G for Athletics COLA's
- (21) Miscellaneous unbudgeted one-time transfers

OREGON INSTITUTE OF TECHNOLOGY
Periodic Report
As of March 31, 2017
For the Fiscal Year ended June 30, 2017

	2015-16 Year-End Actual	Year-to Date			Budget Forecast			Notes
		2015-16 YTD Actual	2016-17 YTD Actual	Current YTD as a % of Forecast Budget	Prior YTD as a % of PY Actuals	Board Approved Budget	Forecast Budget	
<i>(in thousands)</i>								
Designated Operations, Service Departments, & Clearing Funds								
(22)	Student Malpractice Insurance revenue higher than expected							
(23)	Budget for Athletics internal reimbursements in revenue - actuals as negative expense (\$170k). Printing Service Centers had downtime when changed service providers (\$70k). Telephone Operations Service Ctr internal sales below budget (\$14k).							
(24)	Vacancy Savings							
(25)	Budget for Athletics internal reimbursements in revenue - actuals in S&S (\$170k). Mail Center savings (\$9k). Youth Camps savings (\$3k). Print Services savings (\$4.3k)							
(26)	Unbudgeted transfer to true up telecom budgets in E&G							

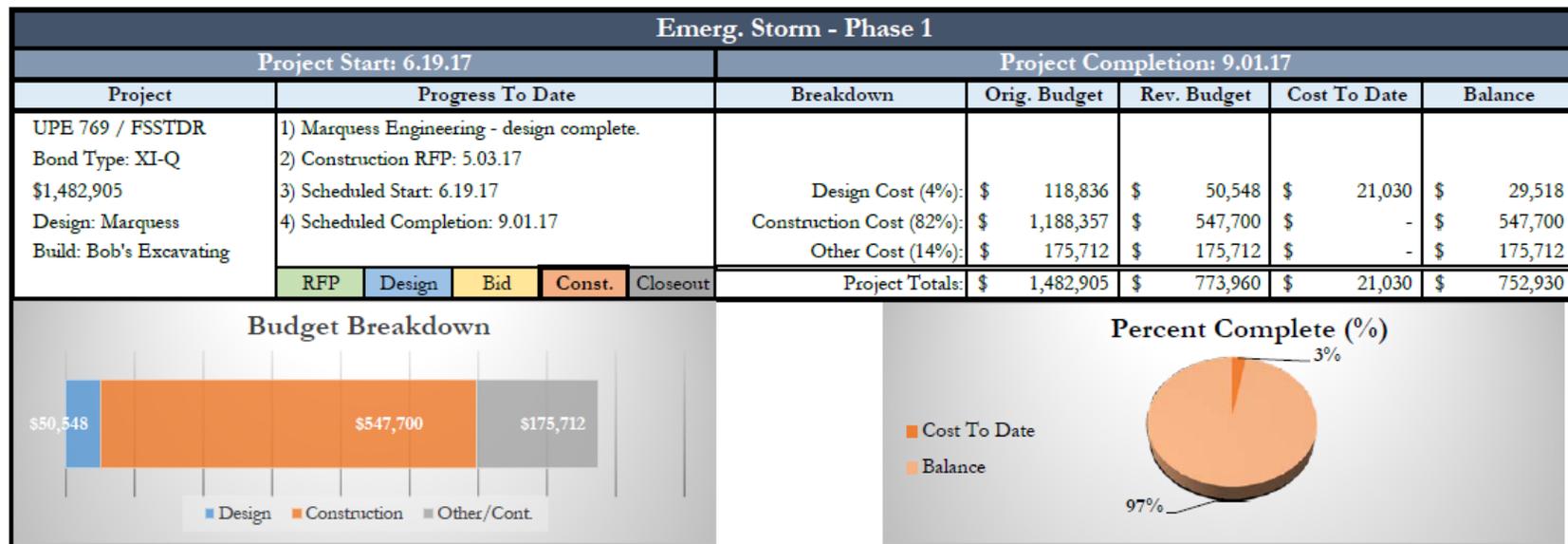
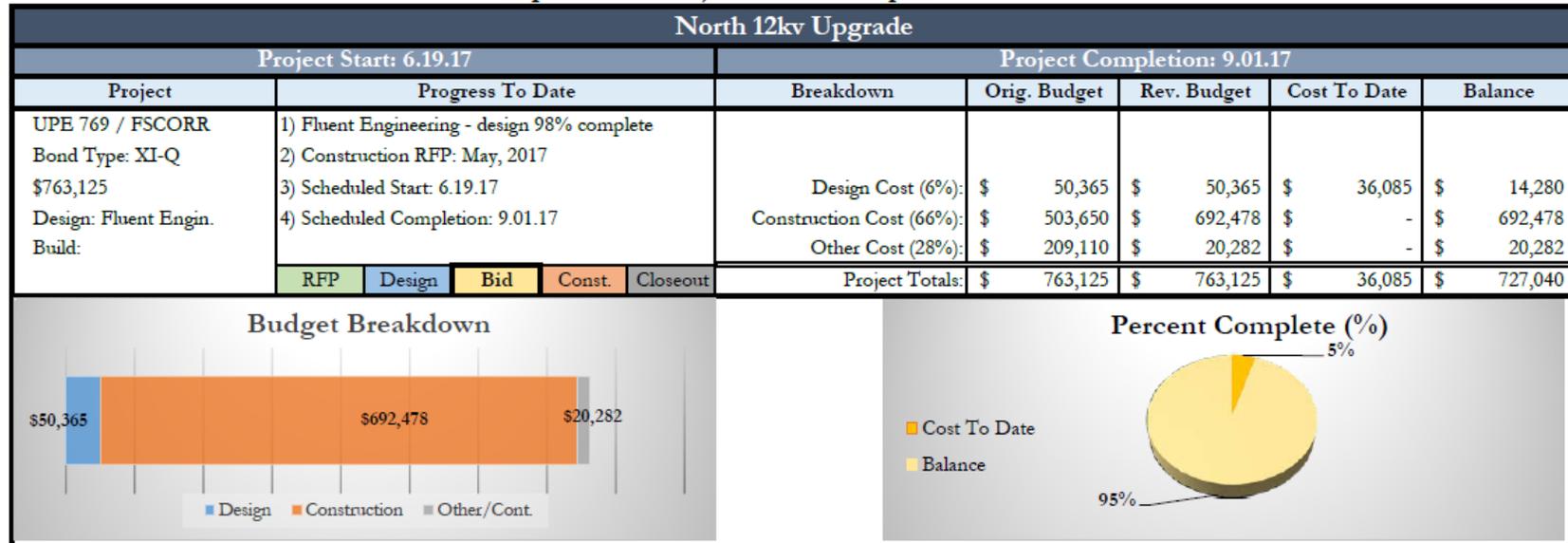
ATTACHMENT C
Facilities and Capital Projects
Capital Bond Projects - Status Report

5/25/2017



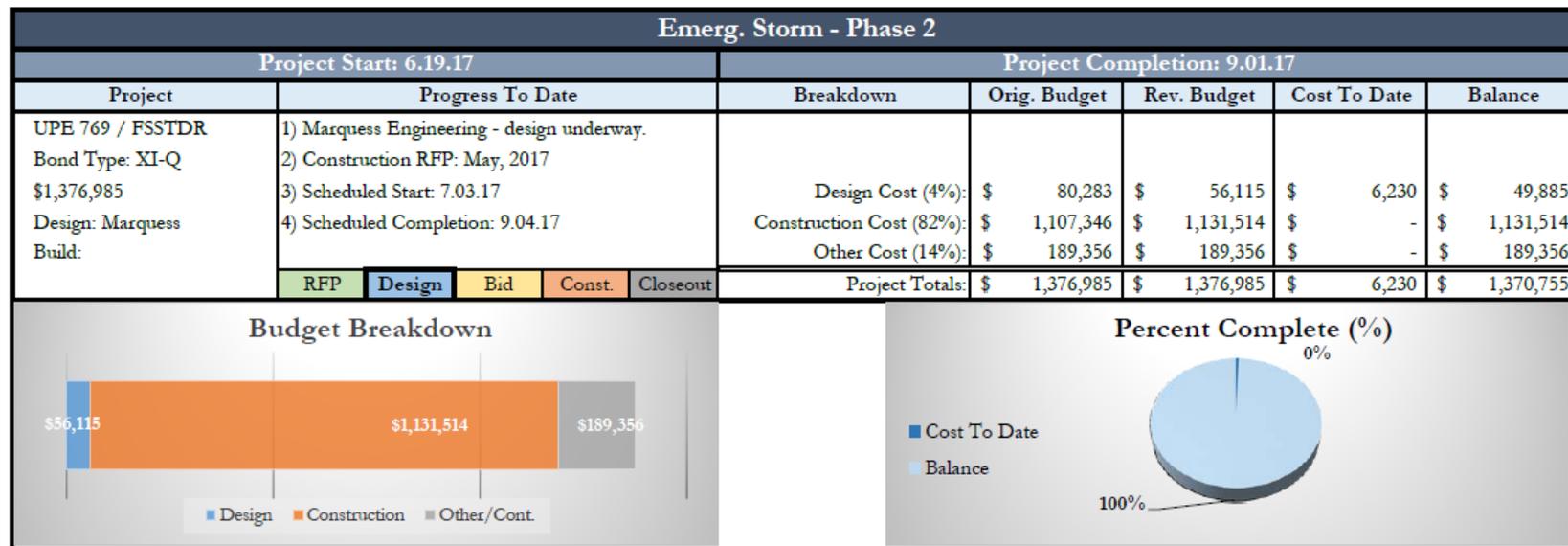
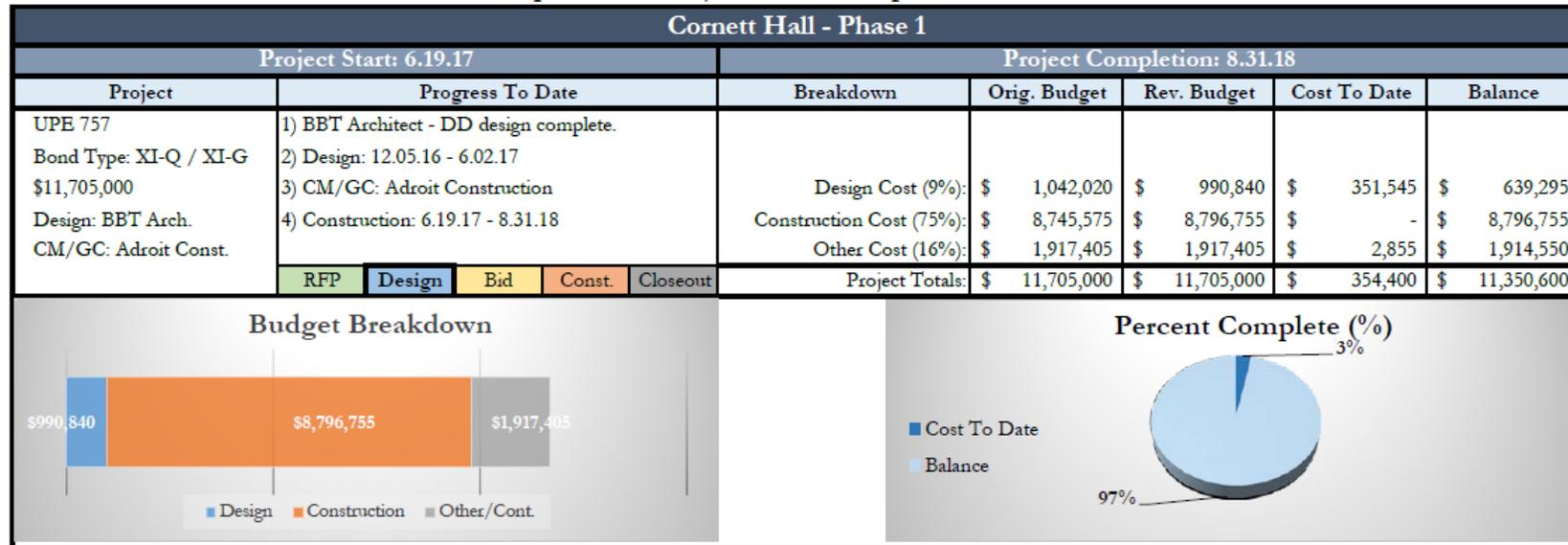
Capital Bond Projects - Status Report

5/25/2017



Capital Bond Projects - Status Report

5/25/2017



Deferred Maintenance and Capital Renewal Report

Capital Renewal Replacement UPE 763, FY 13/15					
#	Project Description	Est. Cost	Project Cost	Bond Balance	Status
	UPE 763			\$ 1,076,642	
1	Bovin Fanwall	\$ 20,000	\$ 17,618	\$ 1,059,024	Completed
2	Chiller VFD	\$ 10,000	\$ 9,854	\$ 1,049,170	Completed
3	LRC Air compressor	\$ 10,000	\$ 8,244	\$ 1,040,926	Completed
4	Facilities Rollup Door	\$ 15,000	\$ 5,352	\$ 1,035,574	Completed
5	Cornett Restroom Remodel	\$ 12,500	\$ 11,938	\$ 1,023,636	Completed
6	Storm Repair @ Soccer Field	\$ 60,000	\$ 57,831	\$ 965,805	Completed
7	Well 1 Rehabilitation	\$ 30,000	\$ 26,376	\$ 939,429	Completed
8	Replace Entry Doors - Bovin	\$ 30,000	\$ 33,210	\$ 906,219	Underway
9	Replace Entry Doors - Snell	\$ 30,000	\$ 26,695	\$ 879,524	Underway
10	Replace Entry Doors - Semon	\$ 32,000	\$ 40,715	\$ 838,809	Underway
11	Well 4 Rehabilitation	\$ 380,000	\$ 515,440	\$ 323,369	Summer 2017
12	Purvine Roof Replacement	\$ 450,000	\$ 314,020	\$ 9,349	Summer 2017
	Balance	\$ -	\$ -	\$ 9,349	

Capital Renewal Replacement UPE 773 , FY 15/17					
#	Project Description	Est. Cost	Project Cost	Bond Balance	Status
	UPE 773			\$ 2,760,604	
1	LRC/PE Transformer	\$ 143,000	\$ -	\$ 2,617,604	Spring 2018
2	LRC/Snell Elevator Upgrades	\$ 172,800	\$ -	\$ 2,444,804	Summer 2018
3	SE/BV Exterior Paint	\$ 245,000	\$ -	\$ 2,199,804	Summer 2018
4	Snell Water Intrusion/Paint	\$ 212,750	\$ -	\$ 1,987,054	Summer 2018
5	SE/BV Elect. Supply Upgrades	\$ 1,150,000	\$ -	\$ 837,054	Summer 2019
6	Well 5 Rehabilitation	\$ 356,400	\$ -	\$ 480,654	Summer 2019
7	Well 6 Rehabilitation	\$ 356,400	\$ -	\$ 124,254	Summer 2019
		\$ -	\$ -	\$ -	
	Balance	\$ -	\$ -	\$ 124,254	

Identified Deferred Maintenance					
#	Building	Other	MEP Systems	Exterior	Interior
1	Bovin Hall	\$ 640,500	\$ 987,000	\$ 1,454,250	\$ 1,853,250
2	Dow Center	\$ 178,355	\$ 404,260	\$ -	\$ 598,770
3	Facilities	\$ 451,450	\$ 561,750	\$ 1,181,255	\$ 598,500
4	LRC	\$ 414,000	\$ 819,050	\$ 1,732,275	\$ 1,202,250
5	Owens Hall	\$ 141,750	\$ 402,000	\$ 971,655	\$ 278,550
6	Power Plant C	\$ 905,000	\$ 85,000	\$ 80,000	\$ -
7	Purvine Hall	\$ 605,905	\$ 1,538,255	\$ 1,298,850	\$ 1,979,235
8	Semon Hall	\$ 404,270	\$ 756,970	\$ 1,454,255	\$ 1,170,740
9	Snell Hall	\$ 94,500	\$ 434,775	\$ 561,730	\$ 514,555
10	Wilsonville	\$ 341,500	\$ 618,780	\$ 540,770	\$ 493,500
11	Campus	\$ 5,065,000			
	Subtotals	\$ 9,242,230	\$ 7,062,840	\$ 9,275,040	\$ 8,689,350
	Total	\$ 34,269,460			

Identified Deferred Maintenance - Auxiliary Services					
#	Building	Other	MEP Systems	Exterior	Interior
1	Athletic Center	\$ 614,295	\$ 2,128,550	\$ 2,587,910	\$ 2,412,000
2	Stadium/Track	\$ 437,870	\$ 735,000	\$ 1,164,550	\$ 1,085,250
3	Residence Hall	\$ 795,000	\$ 3,970,650	\$ 2,905,650	\$ 4,370,000
4	College Union	\$ 170,000	\$ 390,000	\$ 575,000	\$ 460,000
5	Village	\$ 177,550	\$ 337,500	\$ 327,450	\$ 535,770
6	Student Health	\$ 77,350	\$ 143,000	\$ 275,000	\$ 270,550
7		\$ -	\$ -	\$ -	\$ -
	Subtotals	\$ 2,272,065	\$ 7,704,700	\$ 7,835,560	\$ 9,133,570
	Total	\$ 26,945,895			

Notes:

- 1) The Deferred Maintenance plan reflects known needs and will be updated changes as required.
- 2) Deferred Maintenance for OMIC campus is not included in analysis.
- 3) Costs do not include Furniture, Fixtures, Class equipment or IT Hardware.

ATTACHMENT D

Equipment Purchases and Replacement

ITS, under the leadership of CIO Jim Jones in conjunction with Finance and Administration, the Provost, Deans and other administrative offices will establish an inventory of academic, IT, facilities equipment, including life cycle and replacement costs. The end result will be a publication of information in summary form including purchasing schedules and upcoming investments by major functional area and equipment type. It is intended that the final product will be utilized during the annual budget development processes and departmental strategic planning to plan, prioritize and invest in equipment upgrades in alignment with the institution's overall strategic needs.

To-date the equipment inventory, life cycle and replacement cost analysis has met the following milestones through winter term 2017:

- Identification of equipment groupings, including capitalized equipment and equipment not meeting capitalization thresholds (e.g. useful life greater than one year and historical cost basis of \$5,000, or more);
- Inventory classroom and lab computers, technology equipment, and personal computer devices, updating internal schedules as needed;
- Develop data points to be included in final inventory/budget.

ATTACHMENT E

Audit Status

Internal Audit

Oregon Tech has contracted Kernutt Stokes LLP (KS) for internal audit services. The contract was extended through June 30, 2018, and one one-year extension remains in the originally negotiated contract. KS reports to the Audit Committee of the Board of Trustees.

KS continues to operate with direct staff engagement and operating guidance developed by the adopted Annual Risk Assessment. This was informed a Department Risk Questionnaire, follow up interviews and Audit Committee feedback. This risk assessment will be completed and adopted every year. Though future years will build off of prior year assessments with updated information and additional insight gained through fieldwork. This will guide the development of a multi-year internal audit schedule. Further, KS is monitoring and perform case management of Oregon Tech's Fraud, Waste, and Abuse Ethics line.

Kernutt Stokes has provided a written internal audit progress report, including in Section 4.2 of the Finance & Facilities Committee Docket of this attachment and will report separately.

In May 2017 Oregon Tech extended the current contract with KS which was originally set to expire June 30, 2017. The university exercised the first of two one-year extensions. The contract has been extended through June 30, 2018.

Quarterly written updates on the internal audit function will be provided to the Audit Committee with periodic presentations from Kernutt Stokes.

Annual Financial and Compliance Audit

Staff began internal year-end planning in February 2017 with year-end work beginning in April 2017.

To-date the annual financial and compliance audit function has met the following milestones for the fiscal and compliance audits for the year ending June 30, 2017:

- February – April 2017: Internal planning including all audit areas: financial reporting, federal financial aid, and ITS portions of the audit; coordination and planning meetings with various campus departments
- April 2017: Auditors on-site conducting interim fieldwork for the financial and financial aid compliance audits;
- May 2017: Auditors conduct remote testing over ITS portion of audit (IT-related internal controls); year-end preparation

Timeline through report issuance includes:

- June - July 2017: Fiscal year-end close, audit related schedules, financial statement drafting
- August 2017: Auditors conduct on-site final fieldwork; financial statement compilation and draft review
- September - October 2017: Auditors conclude testing off-site and audit wrap-up; finalize Annual Financial Report and Single Audit Report
- November 1, 2017: Audit report issuance (tentative); State discretely presented component unit reporting
- December 7 2017: Presentation to Audit Committee (regularly scheduled Board meeting)

The scheduling of on-site interim and final fieldwork, as well as internal planning has been initiated in order to meet the goal of report issuance in November 2017 with report presentation by CLA to the Audit Committee during the regularly scheduled December 2017 Board of Trustees Meeting.

The VPFA Office oversees the progression and completion of the annual financial and compliance audits with work performed by the Business Affairs Office, Financial Aid Office and Information Technology Services. The State of Oregon requires audit and compliance reports to be issued and submitted to the State by November 15, 2017. Oregon Tech is on track to meet this requirement.

CliftonLarsonAllen LLP will be available to present the audit opinions, Annual Financial Report, Single Audit Report and results of the fiscal year as part of the Audit Committee's regularly scheduled meeting on December 7, 2017.

ACTION

Agenda Item No. 4.1

Recommendation to the Full Board to Adopt the 2017-18 Education and General Fund Budget

Background:

The Education and General fund operating budget is the primary budget for Oregon Tech. It includes revenues from tuition and fees, State General Fund appropriations and other income. These revenues are used to fund instruction, research, public service, academic support, student service, physical plant and administrative expenses of the institution. Adoption of this budget is one of the primary duties of the Board of Trustees each year.

Process:

The process used to adopt the budget included the following steps:

For revenues, using the projected 2016-17 revenues as a base:

1. We inflated tuition and fees based on the tuition and fee increase approved by the Board at its May 8th, 2017 special meeting. This increase included 8% for undergraduate regular tuition, increasing the differential to 20% of base tuition, graduate tuition increase of 6% and various amounts for other special tuition rates, which generated nearly \$2.47M in new revenues for the 2017-18 fiscal year.
2. We initially budgeted for a 3% enrollment increase for all enrollment, and 12% in online for 2017-18 which also increased revenues by another \$1.37M.
3. Fee remissions were budgeted at 12.1% of gross tuition revenues an increase 10% from the approximate 11% of gross tuition revenues from the current year.
4. State appropriations are budgeted based on projections made by the HECC at the Governor's Recommended Budget (GRB) level for the upcoming biennia and result in a reduction \$1.44M.
5. Other income was also increased based on enrollment growth and inflation in certain fees and higher cash balances which will generate increased investment earnings.

For expenses, again using the 2016-17 projected expenditures as the base:

1. The position roster rolled from 2016-17 which includes 14 positions (4% of the total positions) that had been vacant in 2016-17.
2. A modest set aside has been established which includes cost of increasing all faculty who are below range into range during the upcoming fiscal year as well as other inflationary increases if enrollment targets are met. Student pay was increased by 14% to additional student hires and the implementation of increased minimum wage rates.
3. Retirement expenses were calculated using the published 2017-19 PERS Tier 1 and 3, and OPSRP/Tier 3 rates.

4. Health care expenses were increased based on expected 8% increase in premiums for the upcoming fiscal year.
5. Services and supplies were increased recognizing roll forward of unused S&S. Utilities are anticipated to increase significantly for a combination of a) under-budgeting in prior years and b) increases in on-grid electrical usage and increased sewer/water treatment costs.
6. Capital outlay was reset to previous budget levels, which is a reduction from FY 2017 which included unspent prior year carryforwards.
7. Transfers were increased to fully fund the agreements made with athletics and the library.
8. A strategic investment fund has been created, the distribution of which will allow for targeted investments in revenue producing or cost reducing efforts at the university. These will be determined by the executive team during the upcoming fiscal year.

Other Budget Items to be Highlighted:

This budget contains the following reserves totaling \$2,519,307:

General Reserve - YRV001	Amount
Academic Equipment Reserve	\$ 660,000
Strategic Initiatives, targeted programs and compensation	1,552,007
Less 5% Services & Supplies Budget Reduction	(33,000)
Total General Reserve	\$ 2,179,007
<u>Various Departmental Reserves (Includes 5% Reduction)</u>	
Accreditation Costs – PVT041	\$ 80,750
Equipment Replacement-Facilities-PLT019	56,250
Equipment Replacement-RBC-Labs-PVT034	79,800
Small One-Time Campus Projects-YRV007	95,000
Small Rehab Projects-Facilities-PLT045	28,500
Total Departmental Reserves	\$ 340,300
Total Reserves Budget	\$ 2,519,307

Salary increases are predicated on a 3% enrollment (SCH) increase, excluding dual enrollment and distance education. Should enrollments fall below projection, salary increase pool and strategic investment fund will be adjusted. Oregon Tech is forecast to end FY 2017 with \$9.7M in reserves or 17.1% fund balance, thus adequate reserves are in place should enrollment targets not be met. Forecasts indicate that Oregon Tech will hit 11.0% fund balance at the end of FY 2018, within policy range.

The budget includes 12.82 FTE of new positions in the following areas:

New FY18 Positions	FTE
CSET ESET Wilsonville Professor of Practice or NTTF	1.0
CSET SET Wilsonville T/T	1.0
MGT Cybersecurity T/T	1.0
MGT Online – Current 1.0 FTE in-person to online	1.0
MGT Business Wilsonville .49 FTE Professor of Practice (backfill online shift)	0.49
MGT IT Wilsonville .33 FTE Professor of Practice (backfill online shift)	0.33
NSC Wilsonville T/T	1.0
COM Klamath Falls NTTF	1.0
MIT DMS Klamath Falls FTE T/T	1.0
HSS Klamath Falls Professor of Practice	1.0
Online Comp & Technical Writing	1.0
General Counsel	1.0
General Counsel Assistant	1.0
Associate Provost	1.0
New Positions Added in FY18	12.82

The 2017-18 budget also includes 4.5 FTE in new positions added in 2016-17 that were not filled in 2016-17 as follows:

New Positions in FY17-Never Filled	FTE
Associate Provost - Research	1.00
ETIC - EERE-WLV-Power Engineering	1.00
ETIC - MMET-WLV	1.00
Assistant Professor – NWCSM Grant	.50
Program Representative – Captionist	1.00
Total New FY16 Positions Not Filled	4.50

Positions reflect current or expected salaries.

Planned Use of Carryforward Balances:

All units, including administrative and academic units have been granted the use of carryforward supplies and services (S&S) budgets that were unspent during the current fiscal year. This creates a positive incentive structure for departments to save and invest funds. This comes after the current fiscal year in which significant equipment investments were made after relatively few investments during the prior 2015-16 fiscal year. The academic equipment budget is established at \$660K, which includes \$30K in discretionary equipment funds for each college.

With the filling of the Director for Budget and Resource Planning role and the new CIO, a comprehensive review equipment and IT needs, replacement cycles and S&S budgets for all departments to align budgets with resource needs. This is anticipated to be completed over the next fiscal year.

Comparing the proposed 2017-18 E&G budget to last year's budget and projected 6/30/17 actuals yields the following:

Education and General Fund				
2017-18 Proposed Operating Budget				
Revised Projection as of May 15, 2017				
	<u>2016-17 Approved Budget</u>	<u>6/30/17 Projected Budget</u>	<u>2017-18 Proposed Budget</u>	<u>FY 18 to FY 17 (Projected)</u>
Revenues:				
Gross Tuition	\$32,552	\$32,535	\$37,038	\$4,503
Fee remissions	(\$3,415)	(\$3,579)	(\$4,278)	(\$699)
Net Tuition	\$29,137	\$28,956	\$32,760	\$3,804
State Funding	\$26,135	\$26,391	\$24,948	(\$1,443)
Other Income	\$1,053	\$1,325	\$1,391	\$66
Total Income	\$56,325	\$56,672	\$59,099	\$2,427
Expenses:				
Unclassified	\$23,048	\$22,677	\$24,812	\$2,135
Classified	\$5,366	\$5,264	\$5,539	\$275
Student	\$739	\$725	\$753	\$28
GTA	\$40	\$13	\$40	\$27
OPE	\$13,717	\$13,303	\$15,737	\$2,434
S&S	\$10,879	\$11,010	\$12,504	\$1,494
Travel	Incl. above	Incl. above	Incl. above	Incl. above
Capital Outlay	\$807	\$1,642	\$802	(\$840)
Service credits	(\$933)	(\$1,366)	(\$1,107)	\$259
Transfers	\$1,190	\$1,204	\$1,334	\$130
Debt Service	\$1,472	\$1,472	\$1,472	(\$0)
Total Expenses	\$56,325	\$55,944	\$61,886	\$5942
Other Non-Recurring				
Harmony Sale		\$0		
Capital Match/Remodel	(\$435)	(\$896)		
OMIC	(1,700)	(\$1,700)		
Planned use of F/B	(\$1,442)		(\$430)	
Transfers-In	250	115		
Net	(\$3,327)	(1,753)	(\$3,217)	
Fund Balance	\$9,394	\$9,692	\$6,475	

The budget recommended year, though includes planned use of reserves, provides for increases in faculty in needed and growing programs, increases in remissions for targeted student populations which most need additional support, and a strategic investment pool for the President as tactical and strategic opportunities present themselves. The strong reserve position of the institution allows for continued investment to fuel and sustain continued enrollment growth into the next fiscal year, and over the medium-term.

Recommendation:

Staff recommends the Finance & Facilities Committee recommend to the full Board adoption of the proposed Fiscal Year 2017-18 Education and General Operating fund Budget as included in the docket.

ACTION

Agenda Item No. 4.2

Request to Approve the May 2017 Internal Audit Progress Report

Background

Kernutt Stokes will report on audit status as of May 25, 2017, please refer to the attached Internal Audit Progress Report. This includes the recently concluded IT/Telecomm Internal Audit. Kernutt Stokes will also report on the planned Risk Assessment update and planned engagements for FY 2018.

The Telecomm Internal Audit information will be submitted separately to the Audit Committee.

Staff Recommendation

Internal Audit recommends that the Audit Committee of the Board of Trustees approve the May 2017 Internal Audit Progress Report.

Attachment

Internal Audit Progress Report



INTERNAL AUDIT PROGRESS REPORT

SUMMARY

Kernutt Stokes, contract internal audit firm (IA), provides a progress report to the President and the Audit Committee members to assist with their governance and oversight responsibilities as outlined in the Internal Audit Activity Charter.

AUDIT PLAN PROGRESS

Below is a listing of IA engagements in progress.

Engagement Title <i>Stage</i>	Audit Objectives
<p>Telecom Internal Service Center <i>Finalization</i> <i>Expected completion: May 2017</i></p>	<p>To ascertain the effectiveness and appropriateness of existing policies and procedures related to the telecom internal service center and to provide feedback on the standardization of the policies and procedures in order to utilize them in other internal service centers in the University.</p>
<p>Tuition Remissions <i>Planning</i> <i>Fieldwork May 15-17</i> <i>Expected completion: June 2017</i></p>	<p>To ascertain the effectiveness and appropriateness of existing policies and procedures related to Financial Aid with a focus on scholarships and tuition remissions.</p>
<p>Risk Assessment 2017/2018 <i>Planning</i> <i>Expected completion: July/Aug 2017</i></p>	<p>To update the 2016/2017 risk assessment and internal audit plan.</p>

IA is currently on target to complete the 2016/2017 internal audit plan.

AUDIT REPORTS ISSUED

None.

RECOMMENDATIONS DUE PER ACTION PLANS

None.





RECOMMENDATIONS IN PROGRESS WITHIN ACTION PLAN TIMELINES

None.

FRAUD WASTE ABUSE ETHICS LINE UPDATE

There were several related reports made to the Fraud, Waste, Abuse, Ethics Line during the 2016/2017 fiscal year to date. Management has investigated the issues identified reported and reached a resolution.

STAFF RECOMMENDATION

IA recommends that the Audit Committee of the Board approve the May 2017 progress report.

KERNUTTSTOKES

DISCUSSION

Agenda Item No. 5.1

Geothermal Power Plant Update

Background

Johnson Controls International (JCI) will provide an overview for the Finance and Facilities Committee of progress to date on completing the Geothermal Power Plant and reaching fully operational status.

The following pages include a presentation from JCI and a timetable for completion of the project. University staff continue to work with JCI to ensure that every possible measure is taken to allow the project to be completed in the timeframe established.

Staff Recommendation

Report item only. No action necessary.

Attachments

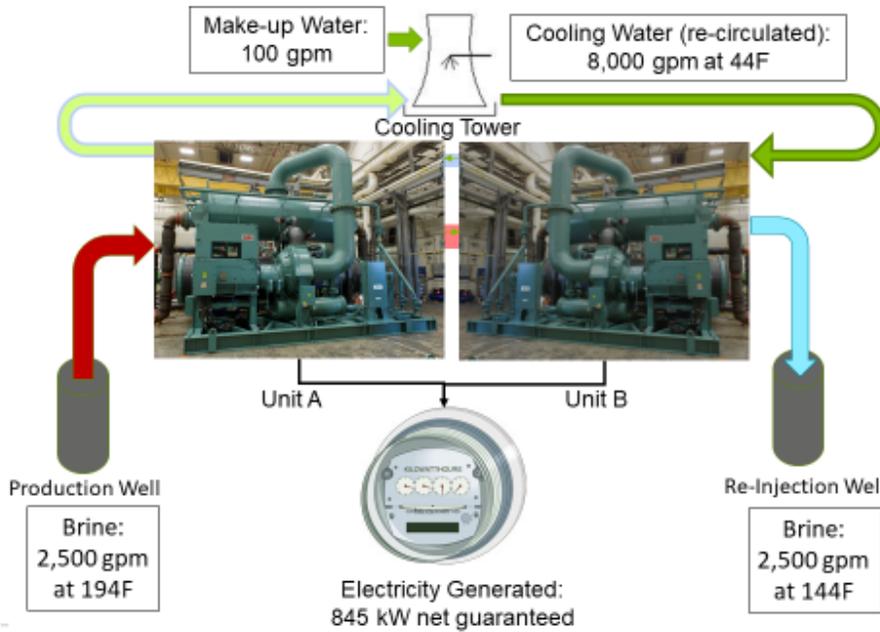
- PowerPoint Presentation
- Completion Schedule

Oregon Institute of Technology

Organic Rankine Cycle Power Plant Status and History



Geothermal Power Plant



2 Johnson Controls, Inc.

Process Description

The hot geothermal brine enters the Boiler of Unit A and evaporates the working fluid (Refrigerant R245fa) through a heat exchanger. The evaporated refrigerant drives the Turbine, generating electricity in the Generator. The evaporated refrigerant encounters the cooling water in the Condenser and becomes liquid again and starts the cycle over in the Boiler. The brine then enters Unit B, and repeats the same cycle there before re-injection to the ground. The cooling water starts in Unit B, goes through Unit A and is returned to the cooling tower ("series-counterflow" configuration).



3 Johnson Controls, Inc. --



Overview

- In September of 2011, Johnson Controls entered into a construction contract with service and performance terms to build and operate a geothermal powered Organic Rankine Cycle Turbine plant at the OIT in Klamath Falls, OR.
- The contract was for a guaranteed maximum price of \$3.3 million dollars, on-going service was separately priced.
- OIT with the help of JCI received a grant from the US DOE for \$1.1 million to buy down the project
- Delays early in the process with the well and balance of plant design prevented Johnson Controls from starting the plant until January of 2015.
- Issues with the Turbines as well as balance of plant issues and Geo well capacity have prevented us from performing a final Performance Test per the contract
- The plant operated intermittently (Unit B ran for 14 months, A much less often) for the past two years until March of 2017 when both units experienced severe failures in the generator bearings.

4 Johnson Controls, Inc. --



Status and Go Forward

- Currently the machines are undergoing a complete part by part overhaul at Johnson Control's expense. The generators are being rebuilt, the Turbine assemblies are being rebuilt, all O-rings and gaskets are being replaced and the refrigerant pumps inspected and rebuilt if needed. Anticipated completion date for restarting the plant is September of 2017.
- The geothermal injection well still does not have the capacity to fully support operation of both Turbines.
- Johnson Controls recognizes that the University is not getting it's expected power production while the plant is down. However, we are standing behind this product at considerable expense (over \$2 million dollars in repair costs, updated balance of plant, and a refrigerant reclamation system, plus outstanding change orders yet to be paid) and will continue to do so for the three years post performance acceptance per the contract
- Our intent is to get the plant in a fully operational state, execute the performance test over a short period of time subject to injection well limitations, then operate one unit at a time until OIT decides what to do with the wells
- It is possible to modify the plant to more safely run one unit at a time. JCI has a working design, we would need authorization to proceed with the work. Estimated cost of \$225,000

5 Johnson Controls, Inc. --



Status and Go Forward

- There are other projects on campus that would provide a high return on investment as well as reduce the overall electric load on campus
 - A lighting retrofit project to convert to all LED lighting could pay for itself in five years and drop your overall electric load by one third
 - Battery storage of the electricity generated by the solar panels may be beneficial in the summer months when the Turbines are not capable of producing full power due to temperature or maintenance

6 Johnson Controls, Inc. --



History of OIT

- Contract Signed 9/2/11
- All Equipment Delivered to OIT besides ORC Units by 8/17/12
- Memo from George at OIT Project Delayed do not want to take delivery of ORC Units until further notice
- Further Follow up as of 8/5/13 still no delivery date from OIT

7 Johnson Controls, Inc.™



History Continued

- OIT executes Contract with Batzer for Building Construction work to be completed by 12/31/15
- OIT has JCI Contract with Batzer for Piping and electrical work for ORC Units
- JCI has OK from OIT to deliver ORC Units, show up on Jobsite 8/26/13 Building behind schedule and not complete

8 Johnson Controls, Inc.™



History Continued

- Geo Well Commissioned by OIT 1/21/14
- Geo Well Flooded and VFD Damaged 1/31/14
- Refrigerant On site but not able to install because Injection Well Failed 3/16/14
- Injection Well repairs by OIT completed 4/4/14
- OIT has agreement with PP&L to connect to Grid 4/15/14

9 Johnson Controls, Inc.™



History Continued

- PP&L Delayed startup until 4/16/14 due to PP&L installing control wires to wrong terminal block unable to start units 4/18/14
- JCI re-scheduled startup for 5/8/14 but informed by OIT on 5/2/14 Geo well stopped pumping.
- OIT Informed JCI Geo Well will be back on line 7/11/14 so we scheduled re-start for 7/18/14

10 Johnson Controls, Inc.™



History Continued

- JCI tried to Start units on 7/21/14 but until PP&L landed control wires on right terminal block then the ORC's started.
- JCI working on 3rd Party Commissioning and performance test criteria then informed by OIT 8/8/14 Geo Well failed again and had to be re-designed.
- OIT informed JCI Well pump to be back on line 12/22/14

11 Johnson Controls, Inc.™



History Continued

- JCI took Unit A offline due to multiple refrigerant leaks on 1/5/15 and fixed 2/13/15
- JCI performed Commissioning and TAB work from 2/23/15-2/27/15.
- Planning for performance test then Unit A Refrigerant pump blew apart and was shut down for pump re-design from 3/9/15 until 8/21/15

12 Johnson Controls, Inc.™



History Continued

- Unit B Shut down 6/23/15 until 7/20/15 due to blown capacitor on well pump so OIT notified us of complete shutdown of plant.
- Redesign of Refrigerant pumps and installation on both skids complete including installation of new Condenser Water Pumps and cleaning of Refrigerant thru 3/01/17
- JCI Had Turbine failure and Generator failure so shut plant down.

13 Johnson Controls, Inc.™



History Continued

- 05/03/17 JCI reviewing turbine repair, recuperator replacement, generator repair.
- 05/08/17 JCI to clean tubes for the next 4 weeks.
- 05/08/17 we will be assessing the repair and re-installation of the turbines, generator, and recuperator heads with new gaskets on all skids.

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