FACILITIES MANAGEMENT

Energy Conservation Projects Summary Updated 05/22/2016

Utility Operations – Completed in FY16

- 1. Buchtel Parking Garage LED Lighting Upgrades
- 2. UTS and Sturm Data Center [Lighting] LED Lighting Upgrades
- 3. Centennial Halls Common Area Lighting & Occupancy Sensor Upgrades
- 4. Cherrington Parking Garage LED Upgrades
- 5. Nelson Hall LED Upgrades
- 6. RSECS School of Engineering [Mechanical] Konvekta Heat Recovery System
- 7. Lucid Energy Dashboard [Controls]
- 8. Central Plant [Controls] Enernoc Demand Response
- 9. Dorm Energy Competition
- 10. Iconics Visualization Software [Controls]
- 11. Contract Gas Purchase

Utility Operations – Completed Prior to FY16

- 1. Nelson Parking Garage Lighting Upgrade
- 2. Daniel's Parking Garage Lighting Upgrade
- 3. Ritchie Magness Arena LED Lighting Retrofit
- 4. Seeley Mudd General Building Lighting Upgrade
- 5. Ritchie Center [Controls] Retro-commissioning Upgrades
- 6. Ben Cherrington Parking Garage [Lighting] Ceramic Metal Halide Lighting
- 7. Olin Hall [Mechanical] Heating Water Pump Upgrade
- 8. Seeley Mudd [Mechanical] Konvekta Heat Recovery System
- 9. General Campus LED Lighting Upgrade
- 10. SMART GRID [Controls]—
- 11. Ritchie Center [Mechanical] Ice Chiller Upgrade
- 12. Highlands Ranch Golf Course [Lighting] T12 Lighting Upgrades
- 13. Nelson Hall [Survey] Retro-commissioning Study
- 14. Sturm Hall [Survey] Energy Engineering Study
- 15. Tennis Parking Garage [Lighting] LED Lighting Upgrades
- 16. Kitchen Walk-in Freezers & Coolers [Mechanical] Motor Efficiency Upgrades
- 17. Campus [Lighting] Stairwell Lighting Upgrades
- 18. Olin Hall [Mechanical] Evaporative Pre-coolers for Air Cooled Chiller
- 19. Johnson McFarlane [Survey] Energy Star Certification
- 20. Centennial Towers Chilled Water System Pump Controls –

- 21. Mary Reed [Controls] Controls Upgrade
- 22. General CampusT12 [Lighting] Lighting Upgrade Phase II
- 23. University College T12 [Lighting] Lighting Upgrade
- 24. Academic Office Annex T12 [Lighting] Lighting Upgrade
- 25. Physics [Mechanical] AHU-1VFD Addition
- 26. Centennial Halls & Towers [Mechanical] Boiler Replacement
- 27. UtiliTech [Survey] Utility Bill Analysis
- 28. Frontier Hall [Controls] Controls Upgrade
- 29. Metallurgy [Controls] Controls
- 30. Ricketson Law [Controls] Demand Limiting
- 31. Vending Misers [Controls]
- 32. UTS & Sturm Hall [Survey] Data Center Analysis & Controls
- 33. Ritchie Center [Survey] Retro-commissioning Study
- 34. Shwayder Art [Survey] Retro-commissioning Study
- 35. Olin Hall [Mechanical] Mechanical & Controls Upgrades
- 36. Centennial Towers [Lighting] Residence Hallway Motion Sensor Lighting Upgrade
- 37. University Hall [Mechanical] Variable Speed Chilled Water Pumping
- 38. Johnson McFarlane [Mechanical] HVAC Upgrades
- 39. Olin, Driscoll Center & Sturm [Mechanical] Heating and Cooling Coil Cleaning
- 40. Ammi Hyde [Mechanical] Boiler Replacement
- 41. Ammi Hyde [Controls] Controls Upgrade
- 42. Seeley Mudd [Survey] HVAC Upgrades
- 43. Sturm Central Plant [Survey] Energy Analysis
- 44. Shwayder Art [Controls] VAV Box Controls Upgrade
- 45. Centennial Halls [Survey] Onsite Energy Assessment
- 46. Centennial Towers [Survey] Onsite Energy Assessment
- 47. Shwayder Art, Seeley Mudd, University Hall, Daniels, Physics & Evans Parking [Mechanical] Heating and Cooling Coil Cleaning
- 48. Daniels [Survey] Re-commissioning Study
- 49. Newman [Controls] Systecon Upgrade
- 50. Facilities [Controls] Controls Upgrade
- 51. Sturm Hall 348C [Mechanical] Variable Speed Hot Water Pumping
- 52. General Campus T12 [Lighting] Lighting Upgrade Phase 1
- 53. Ritchie Center [Survey] Geothermal Study
- 54. Physics [Controls] AHU-1 Retro-commissioning
- 55. Boettcher West [Mechanical] Boiler Upgrade
- 56. EnergyCAP Utility Tracking Database Implementation
- 57. Setback of Cooling Set-points across campus
- 58. Ritchie Center [Survey] Onsite Energy Analysis
- 59. University Hall [Survey] Onsite Energy Analysis

- 60. Centennial Halls [Controls] Retro-commissioning of Make-up Air Handling Unit serving Kitchen Area
- 61. Sturm Hall [Lighting] Common Area Lighting Retrofit and Restroom Occupancy Sensor Upgrade
- 62. Ricks Center [Controls] Rooftop AHU Upgrade
- 63. Newman Center [Survey] Energy Analysis
- 64. Ben Cherrington [Mechanical] Motor & VFD Rebate
- 65. Boettcher West [Mechanical] VFD Rebate
- 66. Shwayder Art [Mechanical] AHU-2 Motor & VFD Upgrade
- 67. Ritchie Center [Lighting] Concourse Restroom Occupancy Sensors
- 68. Seeley Mudd [Survey] Energy Analysis
- 69. Ritchie Center [Mechanical] Hot Water Pump VFD Upgrade
- 70. Melink Kitchen Hood Upgrades [Controls]
- 71. Real-time Monitoring [Controls]
- 72. Penrose Library [Lighting] Control Panel Upgrade