

Heating and Cooling Core Business

Repair/Replacement Project: Central Plant –Data Acquisition System Contact: Dana Ulanoff	Description: Install and purchase data acquisition system for steam and chilled water metered consumption data.				Justification: Existing system is over loaded due to the increase in steam, chilled water and water meters.	
Project Allocation	2005	2006	2007	2008	2009	Project Cost
Acquisition						
Design						
Construction	\$50,490				\$61,710	\$112,200
Total Allocations	\$50,490				\$61,710	\$112,200
Repair/Replacement Project: Central Plant -Steam and Condensation Line Replacement Contact: Dana Ulanoff	Description: Repair or replace existing steam and condensate line which was installed in 1967.				Justification: Failure of the pipe is causing more downtime due to age and condition	
Project Allocation	2005	2006	2007	2008	2009	Project Cost
Acquisition						
Design						
Construction	\$224,400	\$112,200			\$224,400	\$561,000
Total Allocations	\$224,400	\$112,200			\$224,400	\$561,000

Repair/Replacement Project: Central Plant-Install Meters for Data Acquisition System Contact: Dana Ulanoff	Description: Install/replace steam and chilled water meters at the downtown distribution system.				Justification: The meters are over 15 years old and are beginning to fail causing inaccurate data and excessive maintenance.	
Project Allocation	2005	2006	2007	2008	2009	Project Cost
Acquisition						
Design						
Construction	\$84,150	\$67,320				\$151,470
Total Allocations	\$84,150	\$67,320				\$151,470

Repair/Replacement Project: Central Plant –Replace Variable Frequency Drives Contact: Dana Ulanoff	Description: Replace three variable frequency drive units on chilled water pumps at the Central Plant.				Justification: Existing drives are no longer dependable due to age and lack of availability of parts.	
Project Allocation	2005	2006	2007	2008	2009	Project Cost
Acquisition						
Design						
Construction	\$140,250					\$140,250
Total Allocations	\$140,250					\$140,250

Repair/Replacement Project: Central Plant –Tower Piping & Fill Upgrade. Contact: Dana Ulanoff	Description: Replace fill material and piping on the cooling tower at the Central Plant.				Justification: Fill material replacement is required to improve cooling tower performance. Condenser water piping inside tower is worn out.	
Project Allocation	2005	2006	2007	2008	2009	Project Cost
Acquisition						
Design						
Construction	\$168,300	\$89,760				\$258,060
Total Allocations	\$168,300	\$89,760				\$258,060

Repair/Replacement Project: Kelly USA- Replace Variable Frequency Drives Contact: Dana Ulanoff	Description: Install variable frequency drives on three 850-ton electric chillers in building 1625.				Justification: Installation of the drives will improve the energy efficiency of each of the chillers during part load conditions.	
Project Allocation	2005	2006	2007	2008	2009	Project Cost
Acquisition						
Design						
Construction	\$213,180					\$213,180
Total Allocations	\$213,180					\$213,180

Repair/Replacement Project: Kelly USA- Boiler Controls Upgrade Contact: Dana Ulanoff	Description: Upgrade boiler controls located at the Kelly Central Steam Plant in building 376.				Justification: Upgrade of the boiler controls is required to improve the boiler's efficiency.	
Project Allocation	2005	2006	2007	2008	2009	Project Cost
Acquisition						
Design						
Construction	\$11,220	\$31,416				\$42,636
Total Allocations	\$11,220	\$31,416				\$42,636

Repair/Replacement Project: Kelly USA-Install Meters for Data Acquisition System Contact: Dana Ulanoff	Description: Install steam/chilled water and water meters including the flow processors at the Kelly USA distribution system.				Justification: Additional meters are required to accurately measure utility usage for customer billing.	
Project Allocation	2005	2006	2007	2008	2009	Project Cost
Acquisition						
Design						
Construction	\$50,490	\$56,100				\$106,590
Total Allocations	\$50,490	\$56,100				\$106,590

Repair/Replacement Project: Kelly USA-Replace Fill Material in Cooling Tower #3 Building 356 Contact: Dana Ulanoff	Description: Replace fill material inside 1,300 ton cooling tower #3, building 356 at Kelley USA.				Justification: Existing cooling tower fill material is deteriorated and no longer provides adequate heat exchange during peak loads. Tower cooling capacity is reduced and prevents fully loading chillers.	
Project Allocation	2005	2006	2007	2008	2009	Project Cost
Acquisition						
Design						
Construction	\$196,350					\$196,350
Total Allocations	\$196,350					\$196,350

<p>Repair/Replacement Project: Kelly USA- Install Variable Frequency Drives on 3 Cooling Towers Building 356.</p> <p>Contact: Dana Ulanoff</p>	<p>Description: Install variable frequency drives on three cooling tower fan motors Building 356.</p>				<p>Justification: Installation of the drives will reduce the energy usage of the electric motors and reduce the driveline stress normally associated with starting and stopping inductive motors.</p>	
<p>Project Allocation</p>	<p>2005</p>	<p>2006</p>	<p>2007</p>	<p>2008</p>	<p>2009</p>	<p>Project Cost</p>
<p>Acquisition</p>						
<p>Design</p>						
<p>Construction</p>	<p>\$67,320</p>					<p>\$67,320</p>
<p>Total Allocations</p>	<p>\$67,320</p>					<p>\$67,320</p>