

**Heating and Cooling Core Business**

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

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

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

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

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

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

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

<b>Repair/Replacement Project:</b> Kelly USA-Replace Fill Material in Cooling Tower #3 Building 356 <b>Contact:</b> Dana Ulanoff	<b>Description:</b> Replace fill material inside 1,300 ton cooling tower #3, building 356 at Kelley USA.				<b>Justification:</b> 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.	
<b>Project Allocation</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Project Cost</b>
Acquisition						
Design						
Construction	\$196,350					\$196,350
<b>Total Allocations</b>	<b>\$196,350</b>					<b>\$196,350</b>

<p><b>Repair/Replacement Project:</b> Kelly USA- Install Variable Frequency Drives on 3 Cooling Towers Building 356.</p> <p><b>Contact:</b> Dana Ulanoff</p>	<p><b>Description:</b> Install variable frequency drives on three cooling tower fan motors Building 356.</p>				<p><b>Justification:</b> 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><b>Project Allocation</b></p>	<p><b>2005</b></p>	<p><b>2006</b></p>	<p><b>2007</b></p>	<p><b>2008</b></p>	<p><b>2009</b></p>	<p><b>Project Cost</b></p>
<p>Acquisition</p>						
<p>Design</p>						
<p>Construction</p>	<p>\$67,320</p>					<p>\$67,320</p>
<p><b>Total Allocations</b></p>	<p><b>\$67,320</b></p>					<p><b>\$67,320</b></p>