

## Capital Project Prioritization Process (CPPP)

Capital projects are evaluated each fiscal year and integrated into the multi-year financial plan, which is linked to the Strategic Plan. The Utility Board sets the strategic plan by developing the year's strategic goals. These goals are management's basis for the multi-year financial plan.

### Determine Total Project Funding Amount

To determine the Total Project Funding Amount, the Financial Plan, along with the various funding sources, must be reviewed with focus on amounts that may be available from the Revenue Fund, Renewal & Replacement Fund, Designated Retained Earnings, Contribution in Aid of Construction Fund, Line Extension Fees, and other reimbursements.

### Capital Project Evaluation Form

The *Capital Project Evaluation Form* is prepared for each proposed project. The top portion of the form describes the capital project in detail. This is comprised of a description of the work, Cost-Benefit Analysis, and breakdown of the proposed project costs. The middle part describes the relationship of the project to each strategic goal with a total score included. The evaluator reviews the score for appropriateness and makes changes as needed. The total score of the proposed project for each fiscal year is calculated by adding the numbers in each column.

### Rank Proposed Projects

The Finance Department prepares a list of projects based on number of points in descending order, with the requested funding for each project included. The list indicates whether total funding equals available funding. Proposed projects that fall below the total available are cut from funding in the current year and are reconsidered in subsequent years.

The department directors and direct reports meet with the Chief Financial Officer to discuss the results of the CPPP. Any adjustments the group deems necessary are made. The results are forwarded to the General Manager & CEO for review and final approval.

**Utility Board of the City of Key West  
Budget Prioritization Form**

**Project Title**

**Detailed Description of work**

**Impact to KEYS (Indicate Related Strategy Number) (See 1-5 Below)**

**Circle one from each group**

- Budgeted Project Total**
- Estimated Labor Cost**
- Estimated Overtime Cost**
- Estimated Material Cost - Inventory**
- Estimated Material Cost - Vendors**
- Estimated Transportation Costs**
- Estimated Outside Services Cost**

Core Business?	Yes	No	Type of Expense ?	O&M	Capital
\$	-				

Score	Please enter your score for 2005 tasks only in column "C"				
	2008	2009	2010	2011	2012

<b>Core Business / Electricity</b>	
<b>Necessity</b>	
▶ Required by Law, Contracts & Agreements	Yes/No
▶ Operationally Required	Yes/No
▶ Security	Yes/No
<b>If the task being evaluated satisfies either of the "Necessity" criteria, STOP at this point, do not score any further</b>	
<b>1) Develop a Methodology to Operate with Flat or Declining Sales</b>	
<b>2) Create a Stable, Capable, Committed Work Force.</b>	
<b>3) Maintain Reasonable Long-Term Reliability Level Compared to Industry Benchmarks and Improve Customer Perceived Reliability</b>	
<b>4) Maximize Benefits to KEYS from FMPA</b>	
<b>5) Maintain a High Level of Customer Service and Satisfaction</b>	
<b>Total Score - Core Items</b>	-

Evaluated by: \_\_\_\_\_ Date: \_\_\_\_\_  
Disposition: \_\_\_\_\_

**Multi Year Capital Improvement Plan**

<b>Project Description</b>	<b>Amended FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>
Transmission Line and Substations Maintenance- FKEC territory	\$ 192,945	\$ 446,000	\$ 305,380	\$ 446,630	\$ 65,000	65,000
Adjust Tapchangers & Replace Contacts	-	30,000	-	30,000	-	30,000
Reinsulate Line 4 (water portion)	-	-	50,000	200,000	200,000	-
Repair Line 1 Crossarm Bolts	25,000	-	-	-	-	-
Repair Over the Water Transmission Pole Foundations	49,166	100,000	250,000	250,000	250,000	-
Reinsulate Stock Island Plant Substation	-	-	175,000	-	-	-
Steel Pole Painting	50,000	-	-	-	-	-
Replace Transmission Oil Circuit Breakers	950,000	150,000	-	-	-	-
KWDS motorized Switches	59,000	-	-	-	-	-
Replace 69Kv Switches @ US1(9) & Kennedy Drive(9)	341,000	110,000	-	-	-	-
Purchase Potential Transformers	35,000	-	-	-	-	-
Upgrade Transmission Relay Panels	269,000	325,000	350,200	-	-	-
SC Transformer	411,438	50,000	-	-	-	-
Repair Line 4 Over the Water Transmission Pole Tops & Static Wire *	-	500,000	-	-	-	-
Replace 138KV & 69KV Lighting Arrestors *	-	100,000	-	-	-	-
Transmission Pole Guard Rails - Big Coppitt	-	120,000	-	-	-	-
Substation Structure Painting	-	-	150,000	-	-	-
<b>Total - Transmission</b>	<b>2,382,549</b>	<b>1,931,000</b>	<b>1,280,580</b>	<b>926,630</b>	<b>515,000</b>	<b>95,000</b>
Change out Voltage Regulator	-	-	50,000	-	-	-
Construct New Substation - Stock Island	200,000	994,513	1,005,487	-	-	-
Underground Trenching Conversion Program	-	100,000	-	-	-	-
Purchase Transformers	680,000	1,330,000	1,000,000	1,050,000	1,050,000	1,050,000
Other - Daily Work Orders, Engineer's Requests	1,300,000	1,000,000	1,000,000	1,050,000	1,050,000	1,050,000
Improve Distribution(Sectionalizers/Reclosurers/Capacitors)	-	-	100,000	-	-	100,000
Distribution Improvements	3,455,000	2,885,000	2,940,000	3,245,000	3,135,000	600,000
Install new Feeder / Reconductor - Stock Island Substations	-	100,000	50,000	-	-	-
Construct New Feeders on Distribution System - BPS	-	100,000	-	-	150,000	-
Re-work 4160 for future use	-	50,000	-	-	-	-
Relocate Poles-DOT Right-of-Way (North Roosevelt Rehabilitation)	-	-	-	150,000	-	-
Replace Down Guy	-	-	100,000	100,000	-	-
Stub Pole Removal	50,000	-	50,000	-	50,000	-
Power Quality Meter	-	10,000	-	-	-	-
Replace Substation Transformers- KDS #1	-	994,513	375,487	-	-	-
Replace Substation Transformers- KDS #2	-	994,513	375,487	-	-	-
Replace Substation Transformers- US-1	-	994,513	255,487	-	-	-
Fiber Drops @ US1, Big Pine, Big Coppitt Substations	100,000	-	-	-	-	-
Normal Improvements/upgrades to Substations	40,000	40,000	40,000	40,000	40,000	40,000
Purchase Residential and Commercial Meters Bond Funds \$182,264	413,194	495,000	504,900	514,998	525,298	535,804
Remote Metering [study, implementation]	-	-	25,000	-	-	-
Substation Feeder Cable Change Out (12 Feeders)	165,000	485,000	-	-	-	-
Replace Remote Terminal Unit	-	15,000	15,000	15,000	-	-
Field Communications / Radio Replacement	-	-	200,000	-	-	-
Install System Wide Fiber Network (Backbone)	-	1,289,750	1,976,250	-	-	-
Replace Cable Trench (US1 & BPS)	-	45,000	-	-	-	-
Arc Flash Substation Fault Delay	-	60,000	-	-	-	-
<b>Total - Distribution</b>	<b>6,403,194</b>	<b>11,982,802</b>	<b>10,063,098</b>	<b>6,164,998</b>	<b>6,000,298</b>	<b>3,375,804</b>
Upgrade Emissions Monitoring Equipment	9,352	-	-	-	-	200,000
Purchase & Install MSD Turbo Chargers(5)	-	-	850,000	-	-	-
Control Upgrade for HSD's	25,000	-	-	-	-	-
Repair Various Generating Units Bond Funds \$92,000.	122,000	-	-	-	-	-
Oil Boom	-	-	-	50,000	-	-
Overhaul High Speed Diesel at Stock Island [#1 and #3]	-	-	110,000	110,000	-	-
Hydrogen Panel for SC	-	50,000	-	-	-	-
Overhaul - Medium Speed Diesel #2	438,000	-	-	-	-	-
Overhaul - Medium Speed Diesel #1	-	500,000	-	-	-	-
Replace Turbo Charger - High Speed Diesels	30,000	35,000	-	-	-	-
Purchase Fin Fan Coolers (5)	950,000	325,000	-	-	-	-
Repair Exhaust Stack @ MSD's	11,501	-	-	-	-	-
Annual Capital Improvements	-	-	-	150,000	300,000	100,000
MSD Fuel Lines	50,000	-	-	-	-	-
Air Compressor for SC	-	26,000	-	-	-	-

**Multi Year Capital Improvement Plan**

<b>Project Description</b>	<b>Amended FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>
Replace Stock Island Peaking Diesel Radiators	-	120,000	-	-	-	-
Replace Door with Stainless Steel and Paint CT #1	-	70,000	-	-	-	-
Replace VR204 Air Meters	-	18,000	-	-	-	-
Replace Fuel Line Stainless Steel for CT's	-	55,000	-	-	-	-
Control Cab (Cat 5 Rating) for HSD w/Breakers & Controls	-	500,000	-	-	-	-
<b>Total - Generation</b>	<b>1,635,853</b>	<b>1,699,000</b>	<b>960,000</b>	<b>310,000</b>	<b>300,000</b>	<b>300,000</b>
Purchase & Installation of siding for the SIGF	35,000	-	-	-	-	-
Install Concrete Riprap @ Seawall	277,000	-	-	-	-	-
Replace MSD Roof	85,000	-	-	-	-	-
Gas Pump Replacement	-	-	20,000	-	-	-
Industrial Floor Sweeper (Warehouse)	-	-	15,000	-	-	-
Roof Replacement @ RGSC	-	-	40,000	-	-	-
Enclosure of James Street Building (Mail room)	-	-	75,000	-	-	-
Wellness Center Restroom	-	-	25,000	-	-	-
Purchase 10,000lb Forklift	45,000	-	-	-	-	-
Elevator Upgrade Service Building	35,000	-	-	-	-	-
Convert Louisa St Substation - Pocket Park	25,000	-	-	-	-	-
Improvements to Facilities	60,000	64,500	69,338	74,538	80,128	86,138
Storm water Runoff at James Street	75,000	-	-	-	-	-
Purchase 15,000 lb Vehicle Lift	15,000	-	-	-	-	-
Upgrade Service Building A/C	-	-	-	50,000	-	-
Install Air Conditioning at Warehouse "C"	50,000	-	-	-	-	-
Paving and Fencing Service Building	-	-	120,000	-	-	-
Transformer Containment area for Electrical	-	5,000	10,000	-	-	-
<b>Total - Facilities</b>	<b>702,000</b>	<b>69,500</b>	<b>374,338</b>	<b>124,538</b>	<b>80,128</b>	<b>86,138</b>
Replace Drive Through Car Wash joint ownership with Monroe County	-	75,000	-	-	-	-
Purchase Tie-Line Maintenance Barge	-	75,000	-	-	-	-
Replace (2) Fuel Tanks @ Garage	-	-	100,000	-	-	-
Purchase EZ Hauler	135,000	-	-	-	-	-
Purchase Skid Steer Loader	30,000	-	-	-	-	-
Overhaul Company Vehicles	-	60,000	60,000	60,000	60,000	60,000
Replace Vehicle #10 - Tree Trimmer (est. surplus \$13,000)	135,000	-	-	-	-	-
Replace Vehicle #100 - Digger Derrick (est. surplus \$25,000+)	180,000	-	-	-	-	-
Replace Vehicle #13 - Crane Knuckle Truck (flatbed) (est. surplus \$0)	110,000	-	-	-	-	-
Replace Vehicle #75 - Ford Ranger (est. surplus \$1,500)	20,000	-	-	-	-	-
Replace Vehicle #83 - 1/2 Ton Pickup (est. surplus \$1,500)	20,000	-	-	-	-	-
Replace Vehicle #82 - 1/2 Ton Pickup (est. surplus \$1,500)	20,000	-	-	-	-	-
Replace Vehicle #98 - 1/2 Ton Pickup (est. surplus \$1,500)	20,000	-	-	-	-	-
Replace Vehicle #61 - 1/2 Ton Pickup (est. surplus \$1,500)	20,000	-	-	-	-	-
Replace Vehicle #60 - 1/2 Ton Pickup (est. surplus \$1,500)	20,000	-	-	-	-	-
Replace Vehicle #26 - Utility Body (est. surplus \$ 5,000)	-	35,000	-	-	-	-
Replace Vehicle #81 - 1/2 Ton Pickup(est. surplus \$2,500)	-	20,000	-	-	-	-
Replace Vehicle #43 - 1/2 Ton Pickup (est. surplus \$2,500)	-	20,000	-	-	-	-
Replace Vehicle #17 - 1/2 Ton Pickup (est. surplus \$2,500)	-	20,000	-	-	-	-
Replace Vehicle #20 - 1/2 Ton Pickup (est. surplus \$2,500)	-	-	20,000	-	-	-
Replace Vehicle #95 - 1/2 Ton Pickup (est. surplus \$2,500)	-	-	20,000	-	-	-
Replace Vehicle #19 - 1/2 Ton Pickup (est. surplus \$2,500)	-	-	20,000	-	-	-
Replace Vehicle #28 - 1/2 Ton Pickup (est. surplus \$2,500)	-	-	20,000	-	-	-
Replace Vehicle #40 - 1/2 Ton Pickup (est. surplus \$2,500)	-	-	20,000	-	-	-
Replace Vehicle #68 - 1/2 Ton Pickup (est. surplus \$2,500)	-	-	20,000	-	-	-
Replace Vehicle #71 - 1/2 Ton Pickup (est. surplus \$2,500)	-	-	20,000	-	-	-
Replace Vehicle #96 - 1/2 Ton Pickup (est. surplus \$2,500)	-	-	20,000	-	-	-
Replace Vehicle #18 - Bucket Truck (est. surplus \$15,000)	-	-	135,000	-	-	-
Replace Vehicle #15 - Cargo Trailer (est. surplus \$500)	-	-	-	10,000	-	-
Replace Vehicle #32 - 3 spool Wire Trailer (est. surplus \$500)	-	-	-	20,000	-	-
Replace Vehicle #33 - Dump Trailer (est. surplus \$500)	-	-	-	15,000	-	-
Replace Vehicle #38 - Air Compressor (est. surplus \$2,500)	-	-	-	25,000	-	-
Replace Vehicle #84 - Vermeer Chipper (est. surplus \$7,500)	-	-	-	45,000	-	-
Replace Vehicle #103 - Cargo Trailer (est. surplus \$500)	-	-	-	10,000	-	-
Replace Vehicle #21 - Vermeer Chipper (est. surplus \$5,000)	-	-	-	35,000	-	-
Replace Vehicle #9 - Digger (est. surplus \$25,000)	-	-	200,000	-	-	-
Replace Vehicle #34 - Step Van (est. surplus \$1,500)	-	-	-	-	-	55,000

**Multi Year Capital Improvement Plan**

<b>Project Description</b>	<b>Amended FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>
Replace Vehicle #55 - Step Van (est. surplus \$1,500)	-	-	-	-	-	55,000
Replace Vehicle #54 - Utility Body (est. surplus \$5,000)	-	-	-	-	-	40,000
Replace Vehicle #89 - Utility Body (est. surplus \$5,000)	-	-	-	-	-	40,000
Replace Vehicle #117 - Dump Trailer (est. surplus \$500)	-	-	-	-	-	15,000
Replace Vehicle #36 - Flat Bed Trailer (est. surplus \$2,500)	-	-	-	-	-	25,000
Replace Vehicle #66 - Boom Trailer (est. surplus \$2,500)	-	-	-	-	-	50,000
Replace Vehicle #74 - Arrow Board (est. surplus \$500)	-	-	-	-	-	15,000
Replace Vehicle #76 - Arrow Board (est. surplus \$500)	-	-	-	-	-	15,000
Replace Vehicle #77 - Pontoon Boat (est. surplus \$5,00)	-	-	-	-	-	35,000
Replace Vehicle #92 - 1/2 Ton Pickup (est. surplus \$2,500)	-	-	-	-	-	25,000
Replace vehicle #51 - Utility Body	-	-	35,000	-	-	-
Replace Vehicle #110 - Enclosed Trailer for Underground Work	-	-	20,000	-	-	-
Purchase Attachments for Skid Steer Loader	-	-	35,000	-	-	-
Spare Purchase of Additional Vermeer Wood Chipper	-	-	35,000	-	-	-
Purchase of 38 Ton Capacity Crane for Installing New Concrete Poles	-	400,000	-	-	-	-
Replace Vehicle #118 - Pole Trailer (est. surplus \$2,500)	-	30,000	-	-	-	-
Replace Vehicle #119 - Pole Trailer (est. surplus \$2,500)	-	30,000	-	-	-	-
<b>Total - Fleets</b>	<b>710,000</b>	<b>765,000</b>	<b>780,000</b>	<b>220,000</b>	<b>60,000</b>	<b>430,000</b>
Integrated Voice Response [IVR] & Outage Mgmt Systems	55,000	373,000	-	-	-	-
Replace AVL Tractors	5,000	5,250	5,513	5,788	6,078	6,381
Upgrade PC's & Equipment Electrical Operation & Production	15,000	15,750	16,538	17,364	18,232	19,144
Upgrade PC's	-	30,000	95,000	40,000	40,000	40,000
Inventory Barcode System	25,000	-	-	-	5,000	5,000
Upgrade or Replace the Asset Management System (CPR)	-	35,000	-	-	-	-
Customer Service and Financial System Upgrades	-	-	-	225,000	-	-
New Circuits for Substation RTU's	50,000	15,000	15,000	60,000	15,000	-
Replace Intel Servers, Storage Devices, Fiber Channels	-	-	100,000	-	-	-
Replace or Upgrade SCADA System	200,000	-	-	-	-	-
Replace all Network Switching Equipment	50,000	-	150,000	-	-	65,000
Provide Wireless Functionality for Relays	-	50,000	-	-	-	-
Upgrade CEM Software	-	34,000	-	-	-	-
Fiber to Connect Data and Voice Servers (Big Pine & Stock Island)	-	37,500	37,500	-	-	-
Core Network Equipment to Support Fiber	-	-	125,000	-	-	-
Fiber Substation Equipment	-	205,000	45,000	-	-	-
Replace Servers	-	75,000	-	-	-	-
<b>Total - Information Technology</b>	<b>400,000</b>	<b>875,500</b>	<b>589,550</b>	<b>348,153</b>	<b>84,310</b>	<b>135,525</b>
Emergency Contingency	-	50,000	50,000	50,000	50,000	75,000
Short & Long Term Land Use Plan -Cudjoe Key & Big Pine	-	2,444,500	-	-	-	-
<b>Total - General Plant</b>	<b>-</b>	<b>2,494,500</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>75,000</b>
<b>Total All Projects</b>	<b>\$ 12,233,596</b>	<b>\$ 19,817,302</b>	<b>\$ 14,097,566</b>	<b>\$ 8,144,318</b>	<b>\$ 7,089,736</b>	<b>\$ 4,497,467</b>
<b>Proposed Projects To Be Rescheduled, deferred or carried over to another year within the five year financial plan</b>	<b>(6,150,000)</b>	<b>5,705,000</b>	<b>(1,765,000)</b>	<b>(3,955,000)</b>	<b>1,175,000</b>	<b>3,350,000</b>
<b>Total Capital Project Funding Level</b>	<b>\$ 6,083,596</b>	<b>\$ 25,522,302</b>	<b>\$ 12,332,566</b>	<b>\$ 4,189,318</b>	<b>\$ 8,264,736</b>	<b>\$ 7,847,467</b>

Utility Board of the City of Key West  
Multi-Year Capital Plan Explanations  
FY08 - FY12

**Project Description**

**Explanations**

**Transmission**

Transmission Line and Substation Maintenance FKEC territory	Capital projects within FKEC's territory. Upgrade remote terminal units @ Islamorada & Jewfish Creek substations and replace substation batteries.
Adjust Tap changers & Replace Contacts	Inspect and upgrade the tap changers at various substations in KEYS' service area.
Re-insulate Line 4 (water portion)	Re-insulate over water portion of Line #4.
Repair Over the Water Transmission Pole Foundations	Repair existing concrete collars on the over water transmission poles with epoxy injections.
Re-insulate Stock Island Plant Substation	Replace all existing porcelain insulators at the Stock Island switchyard with polymer insulators.
Replace Transmission Oil Circuit Breakers	Replace 138Kv tie-line oil circuit breakers installed in 1986 with new gas breakers.
Replace 69Kv Switches @ US-1 & Kennedy Drive Substations	Replace aging aluminum transmission switches. Nine switches at each substation.
Upgrade Transmission Relay Panels	Upgrade electro-mechanical transmission relays on 69kV lines with digital relays. (US-1, Stock Island, Kennedy Drive substations)
Synchronous Condenser Transformer	Re-manufacturing of the lightning damaged SC transformer.
Repair Line #4 Over the Water Transmission Pole Tops & Static Wire	Structural repair of spalling pole tops and concurrently replace 30 year old shield wire on Line #4.
Replace 138Kv & 69Kv Lightning Arrestors	Replace aging lightning arrestors at the substations.
Transmission Pole Guard Rails Big Coppitt Key	Florida Department of Transportation (FDOT) will be widening US-1 on Big Coppitt Key. Installation of guard rails in the area will maintain KEYS' "clear zone setback" as required by FDOT.
Substation Structure Painting	Painting of the substation structures are necessary to reduce the effect of the corrosive environment.

**Distribution**

Change out Voltage Regulators	Upgrade regulators to accommodate voltage fluctuation on Sugarloaf & Summerland Keys.
Construct New Substation Stock Island	A new substation is needed on Stock Island, (30MVA 69kV to 13.8kV) due to increased development in the area.
Underground Trenching Conversion Program	Conversion of overhead lines to underground per customer request.

Utility Board of the City of Key West  
Multi-Year Capital Plan Explanations  
FY08 - FY12

**Project Description**

**Explanations**

Purchase Transformers	To meet the mandatory requirement for new service and system upgrades.
Other - Daily Work Orders, Engineering Requests	To meet the mandatory requirement for new service and system upgrades.
Improve Distribution (Sectionalizes/Reclosurers/Capacitors)	Install additional capacitors for voltage support.
Distribution Improvements Storm Hardening	The inspection and replacement of approximately 3,300 wood poles with new stronger concrete poles.
Install new Feeder/Reconductor Stock Island Substations	Replace existing feeder wire with larger conductor to increase the carrying capacity.
Construct New Feeders on Distribution System - Big Pine Substation	Due to increasing loads, a new feeder at the Big Pine sub-station will be constructed to improve reliability in the area.
Re-work 4160 for future use	Work associated with utilizing previously decommissioned 4160 wires.
Relocate Poles - FDOT Right-of-Way North Roosevelt Rehabilitation	Move poles per the FDOT to allow for a wider right-of-way.
Replace Down Guy	Replace existing rusted down guys.
Stub Pole Removal	Remove and dispose of stub poles, under FPSC regulations.
Power Quality Meter	Installation of distribution equipment that will improve the quality of power supplied to the customer.
Replace Substation Transformer KDS #1	Replace existing substation transformer @ Kennedy Drive.
Replace Substation Transformer KDS #2	Replace existing substation transformer @ Kennedy Drive.
Replace Substation Transformer US-1	Replace existing substation transformer @ US-1.
Normal Improvements/Upgrades to Substations	Normal upgrades and improvements of station equipment.
Purchase Residential and Commercial Meters	New installations and replacements of broken customer meters.
Remote Metering (study & implementation plan)	Study & Implement a conversion plan for the existing meter reading system to an automatic meter reading system.
Substation Feeder Cable Change Out (12 Feeders)	Replace failing 40+ year old feeder cable at various substations.
Replace Remote Terminal Units	Replace older RTU's
Field Communications/Radio Replacement	Upgrade and/or replace radio units.

Utility Board of the City of Key West  
Multi-Year Capital Plan Explanations  
FY08 - FY12

**Project Description**

**Explanations**

Install System Wide Fiber Network (Back Bone)

Design and build 65 miles of fiber network.

Replace Cable Trench (US-1 & BPS)

Replace broken cable trench with new traffic rated cable

Arc Flash Substation Fault Delay

Relay and wiring modification to the existing relay panels at the Stock Island Generating Facility.

**Generation**

Upgrade Emissions Monitoring Equipment

Upgrade existing Opacity monitors and remote monitoring equipment.

Purchase & Install (5) MSD Turbo Chargers

Replace existing turbo chargers with new technology for increased efficiency.

Oil Boom

Replace aging oil boom. KEYS' is required to maintain an oil boom which surrounds the fuel barge during fuel delivery.

Overhaul HSD #1 & #3

Preventative maintenance policy requires the five year overhaul of the High Speed Diesels unit #1 & unit #3.

Hydrogen Panel for Synchronous Condenser

Replace the existing 30 year old hydrogen panel.

Overhaul - Medium Speed Diesel #1

Scheduled maintenance on MSD Unit #1.

Replace Turbo Charger - High Speed Diesels

Replacement of two turbo chargers on the Stock Island HSD's. Will allow KEYS to maintain efficient operations and remain emission compliant.

Purchase Fin Fan Coolers (5)

Installation of the Coolers will replace the salt water wells, eliminate hydrogen sulfide and reduce the corrosive environment at the Stock Island Generating Facility.

Annual Capital Improvements

Repairs to various generating units at Stock Island as needed.

Air Compressor for Synchronous Condenser

Purchase and install an Air Compressor for the SC.

Replace Stock Island Peaking Diesel Radiators

Replace the existing radiators to increase cooling & capacity of the units.

Replace Door with Stainless Steel and Paint CT #1

Replace the existing corroded steel doors with stainless steel doors and pain the cab.

Replace VR204 Air Meters

Replace existing meters with new state of the art meters to meet the air quality permit.

Replace Fuel Line with Stainless Steel for CT's

Replace existing corroded steel fuel lines with stainless steel that will require less O&M maintenance.

Utility Board of the City of Key West  
Multi-Year Capital Plan Explanations  
FY08 - FY12

**Project Description**

**Explanations**

Control Cab (Cat 5 Rating) for HSD w/Breakers & Controls

Replace existing Control Cab with a stronger wind rated cab. This will protect the unit and controls from storm surge.

**Facilities**

Gas Pump Replacement

Replace 15+ years old gas pumps at the Stock Island Garage.

Industrial Floor Sweeper (Warehouse)

A new sweeper will maintain a cleaner environment for the health and safety of employees.

Roof Replacement @ Ralph Garcia Synchronous Condenser (RGSC)

Replacement of 25 year old roof on the control room of the RGSC.

Enclosure of James Street Building (Mail Room)

Increase the storage at the James Street Service Building by enclosing the existing infrastructure.

Wellness Center Restroom

Install a restroom in the Wellness Center.

Improvements to Facilities

Improvements to various buildings, including fencing & paving.

Upgrade Service Building A/C

Replace the HVAC condensing units at James Street.

Paving & Fencing Service Building

Fencing and paving at the rear entrance and parking area of James Street Building.

Transformer Containment area for Electrical

Construct a transformer containment area to perform oil reclamation

**Fleets**

Replace Drive through Car Wash (joint ownership with Monroe County)

KEYS and Monroe County are in the process of a joint purchase and use agreement for a drive through car wash to be located on Rockland Key.

Purchase Tie-Line Maintenance Barge

The current standard pontoon boat does not meet Transmission & Distribution needs for over the water transmission line maintenance.

Replace (2) Fuel Tanks @ Garage

Replace the two aging Phoenix Tanks with two larger 4,000 gallon double wall UL#2085 Convault above ground tanks.

Overhaul Company Vehicles

Overhaul line trucks to increase life and reliability.

Replace Vehicles

Normal vehicle rotation and/or replacement.

Replace Vehicle #110 - Enclosed Trailer for Underground Work

Replace current trailer with a larger dual axle trailer.

Purchase Attachments for Skid Steer Loader

Purchase of the attachments will allow for additional usage of the skid steer loader.

Utility Board of the City of Key West  
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**Project Description**

**Explanations**

Spare Purchase of Additional Vermeer Wood Chipper	A spare chipper for the tree trimming crews is necessary when maintenance is being performed on the other unit.
Purchase of 38 Ton Capacity Crane for Installing New Concrete Poles	Purchase of a crane truck with the capability of installing the new heavier and larger concrete poles.
Replace Vehicle #118 - Pole Trailer	Normal vehicle rotation and/or replacement.
Replace Vehicle #119 - Pole Trailer	Normal vehicle rotation and/or replacement.

**Information Technology**

Integrated Voice Response (IVR) & Outage Management System	Installation of IVR software will enhance customers ability to access account information as well as pay bills by phone. Outage management software will allow customers to report trouble call & request services by using an automated phone system, with a customer call back feature.
Replace Automated Vehicle Locators (AVL) Tractors	Replacing automated vehicle locaters as they fail or break.
Upgrade PC's & Equipment Electrical Operation & Production	Specific types of hardware, software required to interact, test, configure & maintain in various area of utility.
Upgrade PC's	Replacement of Personal Computer's as new technology is developed.
Inventory Barcode System	Hardware associated with bar coding every inventory item in KEYS warehouse.
Upgrade or Replace Asset Management System	Upgrade or replacement of the Continuing Property Records Asset Management System.
Customer Service and Financial System Upgrade	Upgrade to next level of software to current with new technologies and increase system functionality.
New Circuits for Substation RTU's	Upgrade existing circuits for improved substation connectivity.
Replace Intel Servers, Storage Devices & Fiber Channels	Scheduled replacement in order to maintain the reliability of KEYS data services.
Replace all Network Switching Equipment	Scheduled replacement in order to maintain the reliability of KEYS data and voice network services.
Provide Wireless Functionality for Relays	Connecting and controlling KEYS relays with wireless technology will reduce the O&M costs associated with using telephone lines for communication.
Upgrade Continuous Emissions Monitoring (CEM) Software	Replacement of the current CEM software will improve the retention of data.

Utility Board of the City of Key West  
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FY08 - FY12

**Project Description**

**Explanations**

Fiber to Connect Data and Voice Servers (Big Pine & Stock Island)

Equipment necessary to connect data voice on a fiber network for Big Pine Key and Stock Island.

Core Network Equipment to Support Fiber

Purchase of equipment essential for the function of the fiber network.

Fiber Substation Equipment

Purchase of equipment necessary to connect substations to the new SCADA System.

Replace Servers

Replacement of KEYS' servers to keep pace with new technologies.

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**General Plant**

Emergency Contingency

Project set up to fund unbudgeted emergencies and utilized at the General Managers request.

Short & Long Term Land Use Plan - Cudjoe Key & Big Pine Key

Develop Cudjoe & Big Pine Key Properties.

## Significant Capital Project Benefit

The majority of Keys Energy Services' (KEYS) capital projects are routine in nature, therefore, not discussed in this section. The three exceptions are described below.

Distribution Improvements capital project is budgeted in the five year plan for \$13.7 million. The project scope is to replace existing assets that are nearing the end of their useful life with upgraded materials. This project of replacing poles and wire will lower the future O&M costs for maintenance of fixtures and the maintenance of lines. The old poles are being replaced with stronger and heavier concrete poles. The new poles also have a higher wind rating thus reducing the potential of failure.

Constructing New Substation at Stock Island, Replacing Substation Transformers at Kennedy Drive Substation and Replacing Substation Transformer at US1 Substation are projects budgeted in the five year plan for \$6.0 million. Three of the existing transformers are at the end of their useful life. The new substation and transformer replacement will lower the future O&M costs for current substations.

Due to the significant increase in capital spending, it is difficult at this time to quantify the savings that are a direct result of renewal and replacement expenditures, however, staff is convinced that short and long term decreases in operations and maintenance costs do result from the improvements.

### FY 08 Budgeted Capital Projects

