

AGENDA ITEM #34
May 10, 2010

Consent Calendar

MEMORANDUM

May 6, 2010

TO: County Council

FROM:  Keith Levchenko, Senior Legislative Analyst

SUBJECT: **Consent Calendar:** FY11 Operating Budget: Utilities

T&E Committee Recommendation: Approve a 4% cut (\$1,192,930) in the Utilities Non-Departmental Account (NDA) with savings assumed to come from energy conservation and energy efficiency improvements.

Note: Depending on the Council's final action regarding increases to the Fuel-Energy Tax, costs associated with the energy tax which are funded out of this NDA could increase.

As part of the annual Operating Budget review process, the Council reviews utility costs across all agencies and policy issues associated with utility¹ costs. This review covers utility costs for electricity, natural gas, water & sewer, fuel oil, and propane for the County Government, the College, MCPS, Park and Planning, and the entire bi-County area of WSSC.

Utility costs associated with County Government General Fund departments are included in the Utilities Non-Departmental Account. Utility costs associated with Tax and Non-Tax Supported Special Funds as well as the outside agencies are budgeted separately in each of those funds and agencies. The relevant sections from the Recommended Operating Budget are attached on ©1-6.

¹ Motor fuel costs are not included in the numbers presented in this memorandum. General Fund costs for motor fuels are budgeted in the Department of General Services-Division of Fleet Management Services. Motor fuel costs are also included in the various special funds and outside agency budgets.

Agency representatives from County Government, Montgomery College, MCPS, M-NCPPC, and WSSC have been invited to attend this worksession.

Agency representatives meet periodically through the Interagency Committee on Energy and Utilities Management (ICEUM) to discuss energy issues, including rate assumption ceilings for budget preparation (see ©7). Given the volatility of energy and fuel prices, and the unique circumstances of each agency in terms of its short and long-term contracting practices for energy, adopting specific rates applicable to all agencies is not feasible. However, the rate ceilings provide some helpful guidance to the agencies.

Utility budgets are based on these rate assumptions as well as projected changes in energy consumption at existing facilities and estimated energy requirements for new facilities coming on-line during FY11. Energy efficiency measures are taken into account as well. It is important to note that energy use is also greatly affected by the severity of weather conditions in a given year. The utilities budgets presented here assume a typical weather year.

FY11 Resource Conservation Plans are currently being finalized. However, ICEUM members will be available at the T&E meeting to discuss major initiatives and trends.

Fiscal Summary (All Agencies)

The FY11 budgets for utilities by agency are summarized below.

Table 1:
Utility Costs by Agency

Type of Utility	Actual		Approved FY10	CE Rec FY11	Change (FY11 vs. FY10)	
	FY08	FY09			\$	%
County Government	31,619,056	34,201,404	35,056,630	38,527,920	3,471,290	9.9%
MCPS	40,005,101	40,350,189	44,834,460	39,818,960	(5,015,500)	-11.2%
Montgomery College	5,488,169	6,236,514	7,153,430	7,764,200	610,770	8.5%
WSSC	23,338,000	26,617,000	28,908,000	28,231,000	(677,000)	-2.3%
M-NCPPC	3,344,700	3,411,679	4,340,250	4,371,600	31,350	0.7%
Total	103,795,026	110,816,786	120,292,770	118,713,680	(1,579,090)	-1.3%

Overall, utility costs are recommended to decrease by \$1.6 million (or 1.3 percent). This is the first decrease in utility costs across agencies in many years. However, the trends among the agencies vary greatly, with MCPS and WSSC experiencing decreases while the other agencies are experiencing increases.² **The T&E Committee discussed the different trends being experienced and asked for further information regarding County Government and MCPS' cost experience (see ©8-15 for the responses received).**

The following chart presents utility costs by type. As in past years, electricity costs account for the bulk of all utility costs (approximately 80 percent). Across all agencies, electricity costs are recommended to drop slightly.

² Comparisons between agencies are problematic given the differences in each agency's energy usage profile and differing opportunities to achieve energy savings. Comparing a particular agency over time is a fairer measure of progress.

**Table 2:
Utility Costs by Type (All Agencies)**

Type of Utility	Actual		Approved	CE Rec	Change (FY11 vs. FY10)	
	FY08	FY09	FY10	FY11	\$\$	%
Electricity	83,495,407	88,230,639	96,301,275	95,961,700	(339,575)	-0.4%
Water and Sewer	4,986,138	5,653,148	6,511,050	6,924,860	413,810	6.4%
Fuel Oil	364,622	494,202	799,680	528,190	(271,490)	-33.9%
Natural Gas	14,662,367	16,227,906	16,367,615	15,040,368	(1,327,247)	-8.1%
Propane	286,492	210,891	313,150	258,561	(54,589)	-17.4%
Total	103,795,026	110,816,786	120,292,770	118,713,679	(1,579,091)	-1.3%

**Fiscal Summary:
(General Fund Non-Departmental Account)**

The Department of General Services (which manages County Government utility costs) is responsible for about 124 facilities (105 of which have significant energy costs and energy savings opportunities) and about 3.5 million square feet of space.

For the General Fund NDA (which accounts for most of the County Government's utility costs, utilities are recommended to increase by approximately \$1.5 million (or 5.6 percent) as shown in the following chart. The NDA increase is mostly related to increases in electricity costs, although water and sewer costs are also increasing substantially. The water and sewer increase in FY11 is a result of rate increases expected for both WSSC and the City of Rockville and increased consumption from new facilities (such as the Edison Building).

**Table 3:
NDA Utility Costs by Type (General Fund Only)**

Type of Utility	Actual		Approved	CE Rec	Change (FY11 vs. FY10)	
	FY08	FY09	FY10	FY11	\$\$	%
Electricity	21,187,956	21,571,183	22,992,350	25,634,430	1,640,920	7.1%
Water and Sewer	1,056,152	1,675,841	1,444,950	1,881,230	436,280	30.2%
Fuel Oil	-	96,935	128,270	106,000	(22,270)	-17.4%
Natural Gas	2,011,668	2,174,604	2,716,270	2,199,260	(517,010)	-19.0%
Propane	250	2,457	1,060	2,450	1,390	131.1%
Total	24,256,026	25,521,020	27,282,900	29,823,370	1,539,310	5.6%

Discussion

FY10 Council Cut to the Utilities NDA

For FY10, as part of the Council's budget approval for the Utilities Non-Departmental Account (NDA), the Council reduced the Executive's Recommendation by 4 percent (\$1.12 million)³ with the expectation that the Department of General Services (DGS) would pursue energy conservation efforts during FY10 to achieve these savings.

The estimated budget for the Utilities NDA for FY10 shows that DGS was able to meet about \$700,000 of the goal. The NDA is expected to exceed the FY10 budget by \$400,000.

³ Given that approximately half of the NDA budget is for street lights and is essentially a fixed cost, the 4% cut meant DGS had to find about 8% worth of savings in the balance of its NDA expenditures.

The County's electricity rates are locked in through 2012, so any savings (or cost avoidance) in electricity (the largest energy category by far) must come from reduced consumption.

DGS will be considering new methods for procuring electricity during FY11, including DGS' current fixed price purchase model as well as MCPS' wholesale block purchase approach as well.

The T&E Committee recommends a 4 percent cut (\$1,192,930), similar to the Council action in FY10 with the savings assumed to come from energy conservation and energy efficiency improvements.

Cost Changes in the Utilities NDA from FY10 to FY11

The Executive's recommendation (as shown on the chart on ©4) includes the previously mentioned energy tax increase (\$996,030 although this number will increase if the latest recommendation is adopted by the Council), \$209,270 for estimated utility costs associated with the opening of the Silver Spring civic building and skate house, and the annualization of electricity costs at the newly acquired Edison (GE) Building (\$120,000). Two reductions in costs are also assumed: reduced energy consulting (-\$50,000) and energy efficiency gains from the installation of LED traffic signals (-\$426,580). A slight increase in costs (\$16,350) is shown for the County to achieve a clean energy purchase of 30% of its total energy purchases in FY11. This percentage is actually higher than the goal of 20 percent previously set for each agency FY11 and is made possible because of favorable auction results for the purchase of national renewable energy certificates (RECs) during FY10.

The balance of the increase (\$1.4 million) is the result of rate and consumption changes at existing facilities.

Fuel/Energy Tax

In his March 15 Recommended Budget, the Executive recommended an increase in the Fuel-Energy Tax of 39.6 percent for FY11. The NDA includes an additional \$996,030 is included in the NDA to cover this increase. In fact, this number includes all County Government energy tax costs; including special funds. The NDA accounts for about 75% of the overall cost impact on County Government of the Energy Tax. Based on OMB's calculations, the March 15 estimated impact on the NDA is \$740,070. The balance, \$255,060, would be spread over various special funds.

On March 25, the County Executive recommended a further increase in the Fuel-Energy Tax (up to 63.7 percent) as well as an acceleration of the implementation date up to May 1, 2010. This additional cost is not included in the NDA. The total estimated cost to County Government in FY11 is about \$1.714,590. Of this amount, about 1,273,970 would hit the NDA.

On April 22, the County Executive recommended a still larger increase in the Fuel-Energy Tax (100 percent). According to OMB staff, the impact on the NDA (above what was already budgeted) is approximately \$1.0 million.

None of the energy tax increases have been figured into agency budgets. The fiscal impact of the Fuel-Energy Tax on each agency will need to be taken into account if and when the Council approves a Fuel-Energy tax increase.

Energy Analysis of County Government Facilities

Consistent with Council Bill 30-07, Buildings – Energy Efficiency (approved last year) and Montgomery County’s Climate Protection Plan (transmitted to the Council in January 2009), the Department of General Services (DGS) hired a consultant (EMG) to do an energy analysis of Montgomery County facilities. The report identifies what the consultant believes are reasonable targets for potential cost savings (60%), energy savings (45%), and greenhouse gas reductions (58,000 metric tons) by 2015. These annual cost savings would result in a payback period on the upfront capital costs (\$57 to \$67 million) of 8 to 10 years.

DGS and the consultant provided an update to the T&E Committee on September 10, 2009 and DGS continues to work to identify and move forward with the highest yield projects. Much of this work is detailed in DGS’ 2011 Resource Conservation Plan for County Government which is expected to be released shortly.

Funding for this work is coming from multiple sources, including: the Energy Conservation: MCG project (\$225,000 per year in current revenue funding) and American Recovery and Reinvestment Act of 2009 (Energy Independence and Security Act (EISA)) Federal grant dollars (\$7.6 million grant of which \$3.2 million is to be allocated to County agencies for energy efficiency projects). The grant dollars are expected to be encumbered during the later part of FY11.

Cross Agency Resource Sharing Committee – Utilities Workgroup

On March 24, the Chief Administrative Officer announced a new interagency initiative to look at possible efficiencies from better coordination and possible consolidation of similar efforts across agencies. In addition to the creation of a high level Executive Committee, nine subject specific interagency workgroups are to be convened, including one for utilities. ICEUM representatives are expected to fill the role of the utilities workgroup. While the agencies coordinate efforts and share information via ICEUM now, the implication of this new effort is to go beyond current practices.

Attachments

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Utilities

MISSION STATEMENT

The goals of the County Government relating to utility consumption are to:

- achieve energy savings by the elimination of wasteful or inefficient operation of building systems;
- continue improvements in energy efficiency in all County operations; and
- obtain required energy fuels at the most favorable cost to the County.

HIGHLIGHTS

This budget funds the utility costs for 236 (General Fund) facilities with approximately 5,592,578 total square feet, and over 66,752 streetlights and 772 traffic controlled signalized intersections.

BUDGET OVERVIEW

The FY11 Recommended Budget for the tax supported Utilities non-departmental account (NDA) is \$29,823,370, an increase of \$2,540,470 or 9.3 percent from the FY10 Approved Budget of \$27,282,900. Allocation of these utilities expenditures is approximately: electricity, 86.0 percent; natural gas, 7.4 percent; water and sewer, 6.3 percent; and fuel oil, 0.3 percent. The total increase is due to unit rate cost increases, and from new or annualized facilities, streetlights, or traffic signals.

The FY11 Recommended Budget includes County government utilities expenditures for both tax and non-tax supported operations. Tax supported utilities expenditures related to the General Fund departments are budgeted in the Utilities NDA, while utilities expenditures related to special fund departments are budgeted in those funds. Some of these special funds, such as Recreation and portions of the Department of Transportation, are tax supported. Other special funds, such as Solid Waste, are not supported by taxes, but through user fees or charges for services.

Utilities expenditures are also found in the budgets of other County agencies: Montgomery County Public Schools (MCPS), Montgomery College, the Washington Suburban Sanitary Commission (WSSC), and the Maryland-National Capital Park and Planning Commission (M-NCPPC). The total budget request for these "outside" agencies is \$80,185,760 which includes the entire bi-county area of WSSC.

The FY11 Recommended tax supported budget for Utilities Management, including both the General Fund NDA (\$29,823,370) and the other tax supported funds (\$3,276,000), is \$33,099,370, an increase of \$3,009,020 or approximately 10.0 percent from the FY10 Approved utilities budget. The FY11 Recommended budget for non-tax supported utilities expenditures is \$5,428,550, an increase of \$462,270 or 9.3 percent from the FY10 Approved Budget.

In both the tax and non-tax supported funds, increased utilities expenditures result primarily from higher commodity unit costs due to market price fluctuations; greater consumption due to new facilities or services; and in some cases, a more precise alignment of budgeted costs with actual prior-year expenditures by utility type. Energy conservation and cost-saving measures (e.g., new building design, lighting technology, energy and HVAC management systems) help offset increased utility consumption or unit costs.

The Executive is recommending an energy tax increase to generate \$50 million in additional revenue in FY11. The County's Interagency Committee on Energy and Utility Management (ICEUM) is currently projecting a cost change potential for Electricity (7.7%), Fuel Oil (-18.3%), Natural Gas (-12.8%), and Water and Sewer (-2.6%). These projections reflect market concern about current world events on the commodities futures markets, or anticipated unit price changes by service providers. According to ICEUM, Motor Fuels, consisting of Unleaded Gasoline, Diesel, and Compressed Natural Gas, are expected to fluctuate upward based on current market trends. These fuels are purchased from various providers, and are budgeted in the Department of General Services, Division of Fleet Management Services; not the General Fund Utilities NDA. ICEUM also monitors changes in energy costs in the current year and will recommend appropriate changes, if necessary, prior to final Council approval of the FY11 Budget.

The following is a description of utility service requirements for departments which receive tax or non-tax supported appropriations for utilities expenditures. The utilities expenditures for the non-tax supported operations are appropriated within their respective operating funds but are described in the combined utilities presentation for reader convenience.

TAX SUPPORTED

Department of General Services

The Department of General Services is responsible for managing all utilities for general County operations including all County office buildings, police stations, libraries, health and human services facilities, correctional facilities, maintenance buildings, and warehouses.

Department of Transportation

The Department of Transportation manages all County streetlights, traffic signals, traffic count stations, and flashing school signs. The utilities expenditures for these devices are budgeted here as this Department designs, installs, controls, and maintains them. In addition, minimal utility costs for the Operations Center and Highway Maintenance Depots are budgeted in the Traffic Engineering component of the General Fund non-departmental account.

Division of Transit Services - Mass Transit

The Department of Transportation Mass Transit Facilities Fund supports all utilities associated with the Ride On transit centers and Park and Ride Lots.

Department of Recreation

The Department of Recreation funds all utility costs for its recreational facilities located throughout the County, such as swimming pools, community recreation centers, and senior citizen centers.

Urban Districts

Urban District utilities are supported by Urban District Funds, which are included in the operating budget for Regional Services Centers.

NON-TAX SUPPORTED

Fleet Management Services

The Department of General Services - Fleet Management Services utility expenditures are displayed in the Special Fund Agencies - Non-Tax Supported section, to reflect that Fleet Management Services expenditures are not appropriated directly but in the budgets of other departments.

The Department of General Services - Fleet Management Services Motor Pool Internal Service Fund supports all utilities associated with the vehicle maintenance garages in Rockville, Silver Spring, and Gaithersburg. Fuel for the County's fleet is also budgeted in that special fund, but these costs are not included in the utilities expenditures displayed in this section.

Parking Districts

The Parking Districts funds utility expenditures associated with the operation of all County-owned parking garages and parking lots.

Liquor Control

The Department of Liquor Control funds utility expenditures associated with the operation of the liquor warehouse, administrative offices, and the County-owned and contractor-operated retail liquor stores.

Department of Environmental Protection, Solid Waste Services

Solid Waste Services funds utility expenditures associated with the operation of the County's Solid Waste Management System. Utilities expenditures associated with the operation of the Oaks Sanitary Landfill maintenance building, the County's Recycling Center, the Resource Recovery Facility, and most of the Solid Waste Transfer Station are currently the responsibility of the operators. Only the site office and maintenance depot costs continue to be budgeted as an identifiable utilities expenditure in the Solid Waste Disposal Fund.

Other Agencies

Utilities for MCPS, Montgomery College, (bi-county) WSSC, and M-NCPPC are displayed in the charts on the following pages. These are the amounts requested in the budgets of those agencies.

LINKAGE TO COUNTY RESULT AREAS

While this program area supports all eight of the County Result Areas, the following are emphasized:

❖ *An Effective and Efficient Transportation Network*

❖ *Safe Streets and Secure Neighborhoods*

PROGRAM CONTACTS

Contact Adam Damin of the Office of Management and Budget at 240.777.2794 for more information regarding this department's operating budget.

PROGRAM DESCRIPTIONS

Utilities (for All General Fund Departments)

The Utilities non-departmental account provides the General Fund utilities operating expense appropriations for the facilities maintained by the Department of General Services and the Department of Transportation. The utilities expenditures for other non-tax supported operations and other agencies are appropriated within their respective department or agency.

BUDGET SUMMARY

	Actual FY09	Budget FY10	Estimated FY10	Recommended FY11	% Chg Bud/Rec
COUNTY GENERAL FUND					
EXPENDITURES					
Salaries and Wages	0	0	0	0	—
Employee Benefits	0	0	0	0	—
County General Fund Personnel Costs	0	0	0	0	—
Operating Expenses	25,521,020	27,282,900	27,682,900	29,823,370	9.3%
Capital Outlay	0	0	0	0	—
County General Fund Expenditures	25,521,020	27,282,900	27,682,900	29,823,370	9.3%
PERSONNEL					
Full-Time	0	0	0	0	—
Part-Time	0	0	0	0	—
Workyears	0.0	0.0	0.0	0.0	—

FY11 RECOMMENDED CHANGES

	Expenditures	WYs
COUNTY GENERAL FUND		
FY10 ORIGINAL APPROPRIATION	27,282,900	0.0
Changes (with service impacts)		
Enhance: Renewable Energy (30% for FY11)	16,350	0.0
Other Adjustments (with no service impacts)		
Increase Cost: Due to Rate and Consumption Changes	1,675,400	0.0
Increase Cost: Recommended Energy Tax Increase	996,030	0.0
Increase Cost: Silver Spring Civic Building/Skate House Coming Online	209,270	0.0
Increase Cost: Annualization of GE Building Electricity	120,000	0.0
Decrease Cost: Reduce Energy Consulting	-50,000	0.0
Decrease Cost: Energy Efficiency Related to LED Traffic Signals	-426,580	0.0
FY11 RECOMMENDED:	29,823,370	0.0

FUTURE FISCAL IMPACTS

Title	CE REC.					
	FY11	FY12	FY13	(\$000's)		
	FY14	FY15	FY16			
This table is intended to present significant future fiscal impacts of the department's programs.						
COUNTY GENERAL FUND						
Expenditures						
FY11 Recommended	29,823	29,823	29,823	29,823	29,823	29,823
No inflation or compensation change is included in outyear projections.						
Subtotal Expenditures	29,823	29,823	29,823	29,823	29,823	29,823

COUNTY UTILITIES EXPENDITURES						
EXPENDITURES BY DEPARTMENT/AGENCY						
	ACTUAL FY08	ACTUAL FY09	BUDGET FY10	RECOMMENDED FY11	CHANGE BUD/APPR	% CHANGE REC/APPR
COUNTY GOVERNMENT TAX SUPPORTED OPERATIONS						
NON-DEPARTMENTAL ACCOUNT						
Facilities	14,890,780	16,070,412	16,745,850	19,314,490	2,568,640	15.3%
Traffic Signals and Streetlighting	9,365,246	9,450,608	10,537,050	10,508,880	(28,170)	-0.3%
GENERAL FUND NDA EXPENDITURES	24,256,026	25,521,020	27,282,900	29,823,370	2,540,470	9.3%
OTHER TAX SUPPORTED OPERATIONS						
Transit Services	86,831	82,504	102,400	102,400	0	0.0%
Recreation	3,099,038	3,439,915	2,705,050	3,173,600	468,550	17.3%
Urban Districts Funds	0	0	0	0	0	0.0%
SUBTOTAL	3,185,869	3,522,419	2,807,450	3,276,000	468,550	16.7%
TOTAL TAX SUPPORTED	27,441,895	29,043,439	30,090,350	33,099,370	3,009,020	10.0%
COUNTY GOVERNMENT NON-TAX SUPPORTED OPERATIONS						
Fleet Management Services	753,812	1,062,540	1,047,460	1,047,460	0	0.0%
Parking Districts	2,520,175	3,029,459	2,738,780	3,205,180	466,400	17.0%
Liquor Control	733,515	902,335	969,340	970,890	1,550	0.2%
Solid Waste Services	169,659	163,631	210,700	205,020	(5,680)	-2.7%
TOTAL NON-TAX SUPPORTED	4,177,161	5,157,965	4,966,280	5,428,550	462,270	9.3%
SUMMARY - COUNTY GOVERNMENT						
TOTAL TAX SUPPORTED	27,441,895	29,043,439	30,090,350	33,099,370	3,009,020	10.0%
TOTAL NON-TAX SUPPORTED	4,177,161	5,157,965	4,966,280	5,428,550	462,270	9.3%
TOTAL COUNTY GOVERNMENT	31,619,056	34,201,404	35,056,630	38,527,920	3,471,290	9.9%
OTHER AGENCIES TAX AND NON-TAX SUPPORTED OPERATIONS						
Montgomery County Public Schools	40,005,101	40,350,189	44,834,460	39,818,960	(5,015,500)	-11.2%
Montgomery College	5,488,169	6,236,514	7,153,430	7,764,200	610,770	8.5%
Washington Suburban Sanitary Commission	23,338,000	26,617,000	28,908,000	28,231,000	(677,000)	-2.3%
M-NCPPC	3,344,700	3,411,679	4,340,250	4,371,600	31,350	0.7%
TOTAL OTHER AGENCIES EXPENDITURES	72,175,970	76,615,382	85,236,140	80,185,760	(5,050,380)	-5.9%
TOTAL UTILITIES EXPENDITURES	103,795,026	110,816,786	120,292,770	118,713,680	(1,579,090)	-1.3%

COUNTY UTILITIES EXPENDITURES

EXPENDITURES BY ENERGY SOURCE

	ACTUAL FY08	ACTUAL FY09	APPROVED FY10	RECOMMENDED FY11	CHANGE BUDGET/REC	% CHANGE BUDGET/REC
COUNTY GOVERNMENT TAX SUPPORTED OPERATIONS						
NON-DEPARTMENTAL ACCOUNT						
Electricity	21,187,956	21,571,183	22,992,350	25,634,430	2,642,080	11.5%
Water & Sewer	1,056,152	1,675,841	1,444,950	1,881,230	436,280	30.2%
Fuel Oil	0	96,935	128,270	106,000	(22,270)	-17.4%
Natural Gas	2,011,668	2,174,604	2,716,270	2,199,260	(517,010)	-19.0%
Propane	250	2,457	1,060	2,450	1,390	131.1%
GENERAL FUND NDA EXPENDITURES	24,256,026	25,521,020	27,282,900	29,823,370	2,540,470	9.3%
OTHER TAX SUPPORTED OPERATIONS						
Electricity	2,246,202	2,409,720	1,945,300	2,225,180	279,880	14.4%
Water & Sewer	276,316	388,402	401,190	460,790	59,600	14.9%
Fuel Oil	0	0	19,930	0	(19,930)	-100.0%
Natural Gas	663,287	723,004	440,610	589,610	149,000	33.8%
Propane	64	1,293	420	420	0	
SUBTOTAL	3,185,869	3,522,419	2,807,450	3,276,000	468,550	16.7%
TOTAL TAX SUPPORTED	27,441,895	29,043,439	30,090,350	33,099,370	3,009,020	10.0%
NON-TAX SUPPORTED OPERATIONS						
Electricity	3,711,869	4,507,096	4,358,420	4,820,380	461,960	10.6%
Water & Sewer	113,158	126,454	221,760	220,290	(1,470)	-0.7%
Fuel Oil	0	0	0	0	0	0.0%
Natural Gas	352,134	524,415	385,060	386,840	1,780	0.5%
Propane	0	0	1,040	1,040	0	0.0%
TOTAL NON-TAX SUPPORTED	4,177,161	5,157,965	4,966,280	5,428,550	462,270	9.3%
SUMMARY - COUNTY GOVERNMENT						
Electricity	27,146,027	28,487,999	29,296,070	32,679,990	3,383,920	11.6%
Water & Sewer	1,445,626	2,190,697	2,067,900	2,562,310	494,410	23.9%
Fuel Oil	0	96,935	148,200	106,000	(42,200)	-28.5%
Natural Gas	3,027,089	3,422,023	3,541,940	3,175,710	(366,230)	-10.3%
Propane	314	3,750	2,520	3,910	1,390	55.2%
TOTAL COUNTY GOVERNMENT	31,619,056	34,201,404	35,056,630	38,527,920	3,471,290	9.9%
OUTSIDE AGENCIES TAX AND NON-TAX SUPPORTED OPERATIONS						
Electricity	56,349,380	59,742,640	67,005,205	63,281,710	(3,723,495)	-5.6%
Water & Sewer	3,540,512	3,462,451	4,443,150	4,362,550	(80,600)	-1.8%
Fuel Oil	364,622	397,267	651,480	422,190	(229,290)	-35.2%
Natural Gas	11,635,278	12,805,883	12,825,675	11,864,658	(961,017)	-7.5%
Propane	286,178	207,141	310,630	254,651	(55,979)	-18.0%
SUBTOTAL	72,175,970	76,615,382	85,236,140	80,185,760	(5,050,380)	-5.9%
TOTAL UTILITIES EXPENDITURES						
Electricity	83,495,407	88,230,639	96,301,275	95,961,700	(339,575)	-0.4%
Water & Sewer	4,986,138	5,653,148	6,511,050	6,924,860	413,810	6.4%
Fuel Oil	364,622	494,202	799,680	528,190	(271,490)	-33.9%
Natural Gas	14,662,367	16,227,906	16,367,615	15,040,368	(1,327,247)	-8.1%
Propane	286,492	210,891	313,150	258,561	(54,589)	-17.4%
TOTAL UTILITIES EXPENDITURES	103,795,026	110,816,786	120,292,770	118,713,680	(1,579,090)	-1.3%

**INTERAGENCY COMMITTEE ON ENERGY AND UTILITIES MANAGEMENT
UTILITY RATES
November 20, 2009**

FY2010, Fy2011

<u>Utilities</u>	<u>ACTUAL</u> <u>FY08</u>	<u>ACTUAL</u> <u>FY09</u>	<u>BUDGET</u> Set 10/29/08 <u>FY10</u>	<u>PROJECTED</u> <u>FY10</u>	<u>PROJECTED</u> <u>FY11</u>
Electricity	90.6	100.0	114.3	120.1	123.1
		10.4% over Fy08	26.2% over Fy08	20.1% over Fy09	23.1% over Fy09
No. 2 Fuel Oil	\$3.12 per gallon	\$2.00 per gallon	\$3.00 per gallon	\$2.25 per gallon	\$2.45 per gallon
Natural Gas	\$1.55 per therm	\$1.49 per therm	\$1.56 per therm	\$1.49 per therm	\$1.36 per therm
Propane	\$2.27 per gallon	\$1.56 per gallon	\$2.60 per gallon	\$1.75 per gallon	\$2.00 per gallon
Water & Sewer	8.1 % increase over Actual FY07	12.1 % increase over Actual Fy08	26.5% increase over Actual Fy08	12.7 % increase over actual Fy09	25.8% increase over Actual Fy09
COR Stormwater Fee			Starts here		
<u>Motor Fuels:</u>					
Unleaded	\$2.83 per gallon	\$2.26 per gallon	\$2.49 per gallon	\$x.xx per gallon	\$2.60 per gallon
Diesel	\$3.15 per gallon	\$2.22 per gallon	\$2.87 per gallon	\$x.xx per gallon	\$2.70 per gallon
CNG:	\$1.97 per gallon equivalent	\$2.19 per gallon equivalent	\$2.07 per gallon equivalent	\$x.xx per gallon equivalent	\$2.02 per gallon equivalent
E 85	\$3.12 per gallon	\$2.69 per gallon	\$2.79 per gallon	\$x.xx per gallon	\$2.49 per gallon
B5	\$3.49 per gallon	\$2.27 per gallon	\$2.92 per gallon	\$x.xx per gallon	\$2.77 per gallon
B20			\$2.97 per gallon		\$2.82 per gallon

Notes:

1. Unit cost or percentage change is a cap. Individual agency unit costs may be below the ICEUM established number, but can not exceed the projection.
2. Energy cost projections for Fy11 assume the fuel energy tax at the level established for Fy10. Electricity rate projections include the price premium for wind energy.
3. Motor fuels include State tax. CNG rate excludes Federal excise taxes, which the County does not pay.
4. City of Rockville Stormwater Management Utility Fee is not included in the Water & Sewer rates.
5. Montgomery County currently has an open IFB for E 85. As a result, pricing is expected to change. MCPS is in the process of Opening an IFB for biodiesel. Price projections are based on the current contract.
6. Water/Sewer rates Fy11: WSSC 9%; City of Rockville 24.7/3.9% for water/sewer

MEMORANDUM

May 5, 2010

TO: Transportation, Infrastructure, Energy & Environment Committee Members

FROM: *KL* Keith Levchenko, Senior Legislative Analyst

SUBJECT: Follow-up Information from the April 14 FY11 Utilities Non-Departmental Account (NDA) Worksession

At the April 14 T&E Committee worksession on the FY11 Utilities NDA, Councilmember Berliner requested additional information from Executive Branch staff and asked Council Staff to forward this information to Committee members prior to Council review of the Utilities NDA. The questions Council Staff forwarded to Executive branch staff are below along with the responses.

- **Please provide more detail regarding the \$1,675,400 line item in the budget (page 68-4) entitled, "Increase Cost: Rate and Consumption Changes."**

The "Increase Cost: Due to Rate and Consumption Changes" includes all the utility categories (i.e. electricity, fuel oil, natural gas, etc.) and was determined using projected ICEUM utility rates as a guideline and projected consumption. Executive Staff provided a table (see ©1) showing NDA costs for FY09 Actuals, FY10 Approved, Recommended FY11, and the increases for FY11 broken out by: "Due to Rate Changes," "Due to Consumption," and "Other Budget Changes." A rate detail chart is also provided (see ©2)

- **With regard to electricity costs, Council Staff asked for the following information to be broken out:**
 - **Street light costs (with the assumptions of total number of street lights and cost per street light). Also, what assumptions are being made about street light costs (i.e. Pepco's request at the PSC to increase its charges)?**

The total number of streetlights in the County is 66,752 at an average cost of \$122.65 per streetlight. PEPCOs request to increase charges is estimated to cost \$835,604 (an increase of \$14 per streetlight) but is not included in our assumptions or rates for the traffic portion of the NDA.

- **Total existing County square footage powered with electricity and the electricity requirements assumed and the per kW cost**

Total square footage = 5,702,358 in FY11 with a per kWh cost of \$0.1567.

- **What energy conservation efforts are expected to come on line in FY11 and what the effect of this work will be in FY11?**

Per the Energy conservation CIP, we intend to replace windows at the Up-County Government Center and install variable flow chiller and hot water pumps at Bethesda Library which will ultimately save about \$55,000 per year, but since the work cannot start until FY11 the savings were pro-rated for only a portion of the year.

- **New county square footage coming on line in FY11 and the cost to power this.**

New square footage in FY11 = 420,577. Assumed cost = \$281,830. The additional square footage reflects an approximate increase of 8 percent in total square footage within County Government.

- **What assumptions are being made about changing the energy purchase process and the affect on rates?**

- *Hire a contractor to help us manage:*
 - *The purchase of utilities, strategies, market conditions etc.*
 - *when to use hedging*
 - *the feasibility of turning off users during high rate times (would exclude street lights and traffic lights)*
- *Award contracts, preferably to an ESCOs, for*
 - *Solar power purchase agreements*
 - *Energy conservation outreach through behavior modification*
 - *Sub-metering and loop controls for Electronic Energy Management expansion*
 - *Other opportunities for conservation and savings.*

- **What electricity price is MCPS getting today versus County Government?**

See the attached graphs and documents from consultant reports (©3-5). MCPS' wholesale approach resulted in riding the market up as well as down creating budget uncertainty.

- **What is the CE's opinion about wholesale block purchasing versus fixed price purchasing of electricity? What method and/or methods is the County Government considering for October (when it begins its new purchase cycle)? How does this compare to how MCPS currently purchases its electricity?**

The County Executive delegates the management of utilities to DGS (which is reviewing both approaches in the context of future energy purchase strategies).

Council Staff Comments

- The charts on ©3-5 MCPS' wholesale blocking approach results in MCPS riding the market up as well as down over the past few years. MCPS saw bigger increases in energy costs from FY09 to FY10 but is now showing a decline from FY10 to FY11. The wholesale block purchase approach increases the potential for fluctuations up and down in energy costs (i.e.

risk) and also requires more regular analysis and review of energy purchases than a straight fixed price purchase every few years. DGS' hiring of a contractor to review this and other energy strategies is appropriate given that the County's fixed energy price contract ends later this fall.

- As shown in the charts below, utility costs for street lights (i.e. "Traffic") represent about 35% of the total FY11 recommended County Government utility budget and about 41% of FY11 recommended County Government electricity costs. Street light costs are charges from PEPCO (regulated by the Public Service Commission). These expenditures are not affected by any energy efficiency improvements made by DGS.

Utilities NDA Costs (All Energy Sources)

	Actual FY09	Share of Total	Rec FY11	Share of Total	Change from FY09 to FY11	
					\$\$\$	%
Facilities	16,070,411	63.0%	19,314,490	64.8%	3,244,079	20.2%
Traffic	9,450,608	37.0%	10,508,880	35.2%	1,058,272	11.2%
Total	25,521,019		29,823,370		4,302,351	16.9%

Utilities NDA Costs - Electricity Only

	Actual FY09	Share of Total	Rec FY11	Share of Total	Change from FY09 to FY11	
					\$\$\$	%
Facilities	11,898,147	55.2%	14,883,240	58.1%	2,985,093	25.1%
Traffic	9,435,979	43.7%	10,496,380	40.9%	1,060,401	11.2%
Other	237,058	1.1%	254,810	1.0%	17,752	7.5%
Total	21,571,184		25,634,430		4,045,494	18.8%

The T&E Committee's recommended 4 percent cut (\$1.2 million) assuming DGS would achieve energy efficiency savings, is effectively an 8% cut if one assumes the focus will be on facility electricity costs. DGS has \$225,000 in CIP dollars and approximately \$554,000¹ in ARRA grant dollars for energy efficiency improvements for FY11. DGS has about \$4.0 million in projects prioritized and ready for funding.

Also, subsequent to the April 14 T&E worksession on the Utilities NDA, the Executive forwarded additional FY11 budget recommendations to the Council. These recommendations included a higher increase (now up to 100%) in the Fuel/Energy Tax than previously recommended. The revised recommendation on the Fuel/Energy Tax will cost County Government (which also pays the energy tax for its own facilities) approximately \$1.0 million more than assumed in the March 15 Recommended budget. However, the Executive is not recommending an increase in the Utilities NDA to cover this additional cost.

Once the Council decides upon what level of fuel/Energy Tax increase to approve, the Council will also have to decide whether to allocate additional resources to the Utilities NDA as well as the outside agencies to cover the additional costs associated with the energy tax.

NOTE: Council review of the Utilities NDA is scheduled for May 10 as part of the consent calendar. Council Staff will include this memorandum in the Council Packet for that item.

Attachments

KML:f:\evchenko\dep\energy issues\utilities budgets review\t&e 2011 utilities budget followup memo.doc

¹ The \$554,000 number is the Department of Environmental Protection's latest estimate for DGS' allocation of the grant dollars.

Utilities NDA Budget Summary

DEPARTMENT / AGENCY EXPENDITURES BY CATEGORY	Actual FY09	APPROVED FY10	Due to Rate Changes	Due to Consumption	Other Budget Changes	Recommended FY11	\$ Change Rec/App
FACILITY MAINT. & OPERATIONS							
Solid Waste Disposal	196,376	195,060	9,750			204,810	9,750
Utility Consultant Services	39,416	100,000			(50,000)	50,000	(50,000)
Electricity	11,898,147	12,172,740	195,708	1,618,991	895,800 (1)	14,883,240	2,710,500
Water & Sewer	1,670,845	1,438,950	417,239	0	19,040 (3)	1,875,230	436,280
Fuel Oil	96,935	128,270	0	(22,270)	0	106,000	(22,270)
Natural Gas	2,164,969	2,709,770	(20,165)	(525,224)	28,400 (4)	2,192,760	(517,010)
Propane	2,457	1,060	(20)	1,390		2,450	1,390
Other	1,266						
TOTAL	16,070,411	16,745,850	602,512	1,072,887	893,240	19,314,490	2,568,640
TRAFFIC ENGINEERING							
Electricity	9,435,977	10,524,550	108,980	(535,560)	398,410 (2)	10,496,380	(28,170)
Water & Sewer	4,996	6,000	0	0		6,000	0
Natural Gas	9,635	6,500	0	0		6,500	0
Propane	0	0	0	0		0	0
Other	0	0	0	0		0	0
Sub-Total	9,450,608	10,537,050	108,980	(535,560)	398,410	10,508,880	(28,170)
TOTAL NDA APPROPRIATION							
Electricity (Incl. SWDF, Consultant, and Other)	21,571,183	22,992,350				25,634,430	2,642,080
Water & Sewer	1,675,841	1,444,950				1,881,230	436,280
Fuel Oil	96,935	128,270				106,000	(22,270)
Natural Gas	2,174,604	2,716,270				2,199,260	(517,010)
Propane	2,457	1,060				2,450	1,390
TOTAL NDA EXPENDITURES	25,521,020	27,282,900	711,492	537,327	1,291,650	29,823,370	2,540,470

Notes:

(1) Enhance: Renewable Energy (30% for FY11 \$16,350); Increase Cost: Recommended Energy Tax Increase (Facilities Portion \$597,618); Increase Cost: Annualization of GE Building Electricity (\$120,000); Increase Cost: Silver Spring Civic Building Coming Online (Electricity Portion \$161,830).

(2) Decrease Cost: Energy Efficiency Related to LED Traffic Signals (- \$426,580), is distributed among consumption changes; Increase Cost: Recommended Energy Tax Increase (Traffic Portion \$398,412)

(3) Increase Cost: Silver Spring Civic Building Coming Online (Water and Sewer \$19,040)

(4) Increase Cost: Silver Spring Civic Building Coming Online (Natural Gas \$28,400)

New Facilities Coming Online
(by Square Feet)

	Total Square Feet	% Change
FY10 Existing Facilities	5,184,578	-
Additional GE Area Coming Online	310,797	-
Silver Spring Civic Building/Skate House	109,780	-
Total FY11	5,605,155	8%

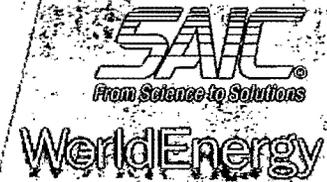
Increase/Decrease in Consumption by Category

	Actual Consumption FY09	Projected Consumption FY11	Differences in Consumption	% Change
ELECTRICITY (KWH's)	133,891,337	145,006,587	11,115,250	8%
WATER AND SEWER (GALLONS 000's)	164,907	149,389	(15,518)	-9%
FUEL OIL #2 (GALLONS)	42,871	40,000	(2,871)	-7%
NATURAL GAS (THERMS 000's)	1,537,419	1,571,736	34,317	2%
PROPANE (GALLONS)	1,014	1,020	6	1%

Rate Detail

Energy Source	Facilities			Traffic		
	Actual FY09	Recommended FY11	Differences	Actual FY09	Recommended FY11	Differences
<u>Electricity</u>						
Cost	\$11,898,147	\$14,883,240	\$2,985,093	\$6,262,862	\$6,897,601	\$634,739
KWH's	84,147,744	94,978,694	10,830,950	49,743,593	50,027,893	284,301
Budgeted Cost/KWH	0.1401	0.1567	0.0166	0.1259	0.1379	0.0120
		\$0.1567				
<u>Electricity Maintenance</u>						
Cost	na	na	na	\$3,173,117	\$3,598,779	\$425,662
KWH's	na	na	na	38,518,045	38,656,735	138,690
Budgeted Cost/KWH	na	na	na	0.0824	0.0931	0.0107
<u>Water and Sewer</u>						
COST	\$1,670,845	\$1,875,230	\$204,385	\$4,995	\$6,000	\$1,005
GALLONS (000's)	164,341	148,819	(15,521)	567	570	3
COST/GALLON	10.1670	12.6007	2.4337	8.8112	10.5263	1.7151
<u>Fuel Oil #2</u>						
COST	\$96,935	\$106,000	\$9,065	na	na	na
GALLONS	42,871	40,000	(2,871)	na	na	na
COST/GALLON	2.2611	2.6500	0.3889	na	na	na
<u>Natural Gas</u>						
COST	\$2,164,969	\$2,192,760	\$27,791	\$9,635	\$6,500	(\$3,135)
THERMS (000's)	1,533,156	1,567,436	34,280	4,263	4,300	37
COST/THERM	1.4121	1.3989	-0.0132	2.2600	1.5116	-0.7484
<u>Propane</u>						
COST	\$2,457.00	\$2,450	(\$7)	na	na	na
GALLONS	1,014	1,020	6	na	na	na
COST/GALLON	2.4226	2.4020	-0.0206	na	na	na
Other	\$1,266					
Solid Waste Disposal Charge	\$196,376	\$204,810				
Utility Consultants	\$39,416	\$50,000				
Total Cost	\$16,070,411.00	\$19,314,490	\$3,226,327	\$9,450,608	\$10,508,880	\$1,058,272

MCPS Savings Projection



□ MCPS

- Awarded contracts through 2006 auction for 12 months (large accounts) and 36 months (small accounts); estimated savings of \$4.5 million

- * MCPS on wholesale contracts for large accounts from April / June 2007 on
 - Projected losses of \$2.6 million between Spring 2007 & Spring 2008
 - Projected losses of \$1.6 million between Spring 2008 & Spring 2009

- If had awarded a 3 year contract through the 2006 auction as other participating agencies did, they would have saved an additional \$4.2 million

- Based on current wholesale rates, MCPS may be able to make up earlier losses through savings from FY10 and FY11 wholesale rates

**Projected losses based on comparison of wholesale market rates + adders compared to awarded 3 year contract rates awarded for like accounts through 2006 auction*

PJM Market Prices



WorldEnergy

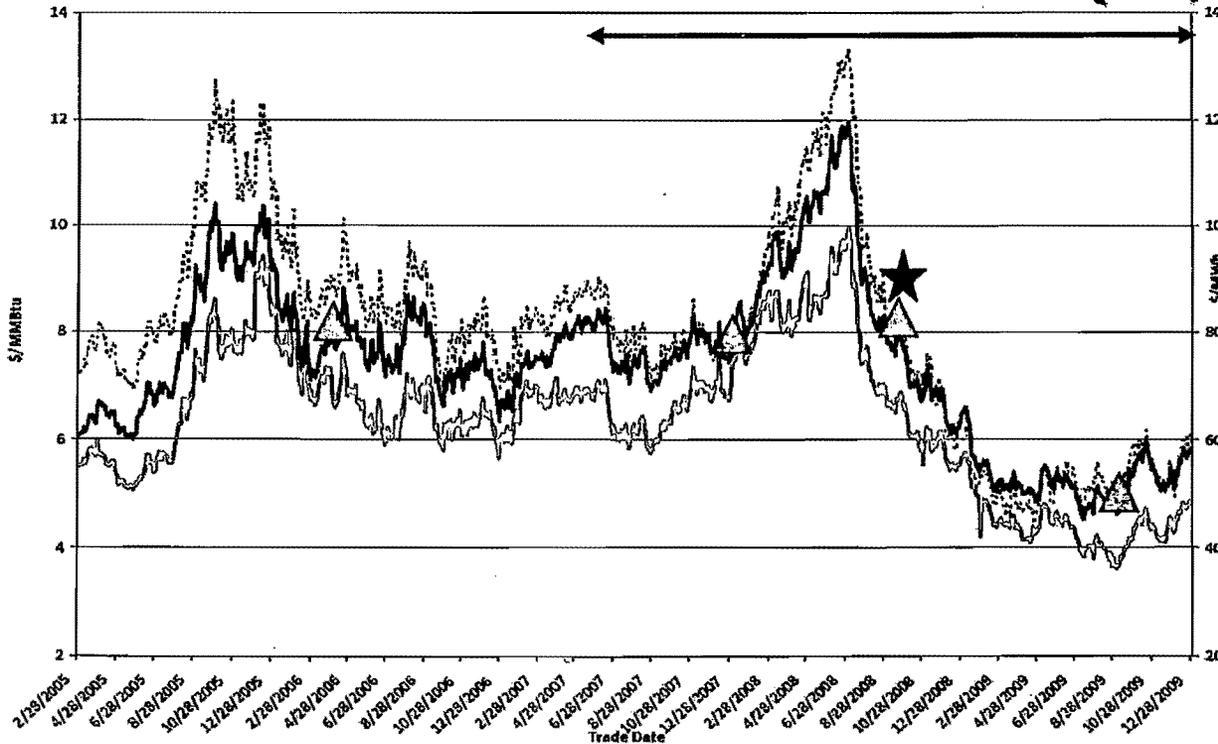
WorldEnergy

Date: 1/4/2010

PJM West Hub 12-Month Peak and Flat Strips with Natural Gas
 Peak Price: \$57.40/MWh Flat Price: \$48.01/MWh
 Peak Heat Rate: 9.78 MWh/MMBtu Flat Heat Rate: 8.18 MWh/MMBtu



-----HH Gas — PJM West Peak — PJM West Flat



Represent MCG Auctions for fixed price contracts



MCPS's wholesale approach resulted in riding the market up as well as down creating budget uncertainty



MCG internal budget estimates for electricity were \$.15 per kWh based on quotes provided by vendors; MCG decided to lock in at \$.122 per kWh as rates were predicted to increase prior to the U.S. financial collapse in September 2008 which significantly depressed demand and energy prices

MCG & ICEUM Savings Projection



	FY07 - FY09	FY07 - FY12	FY07 - FY12
	Realized Savings	* Projected Savings 1	** Projected Savings 2
MCG	\$ 6,523,595	\$ 499,130	\$ 6,993,382
MNCPPC	\$ 1,799,535	\$ 137,685	\$ 1,929,126
MCC	\$ 1,170,934	\$ 89,590	\$ 1,255,257
TOWNSHIPS	\$ 4,629,309	\$ 354,195	\$ 4,962,682
TOTAL	\$ 14,123,373	\$ 1,080,600	\$ 15,140,447

* Based on Current Tariffs and Futures Pricing

** Based on PJM prices averaging 9% over current futures pricing during final two years of contracts

From FY07 – FY09, Montgomery County & ICEUM realized \$14 million in savings

Though current contract rates for some accounts are above current market rates, Montgomery County & ICEUM would still realize savings of \$1.1 million over the life of all contracts if futures prices held

If energy prices (PJM) averaged 9% more than current projections between July 2010 and June 2012, Montgomery would add another \$1 million in savings

All Projections based on contract data, award rates, analysis of PJM wholesale historical and forward market data, utility tariffs and capacity charges.