

STAFF-DR-02-003

REQUEST:

Refer to the response to Staff's First Request, Item 13.

- a. Provide the Excel spread sheets requested in electronic format, with formulas intact and cells unprotected.
- b. Provide the calculations underlying the Total NPV Avoided cost of Gas Production.
- c. State whether any of the Commercial Programs have similar benefits to commercial gas customers that are described in the response to Item 12 of Staff's First Request with regard to residential gas customers.

RESPONSE:

- a. Refer to Attachment STAFF-DR-02-003.xlsx.
- b. The Total NPV Avoided cost of Gas Production is based on taking a stream of nominal avoided costs of Gas production provided by a single participant DSMore file. This stream of avoided costs is used in a standard NVP calculation, which is performed by the system of record, UI Planner. The calculation takes the Year 1 value + the NPV of the years 2-end of measure life, discounted at discount rate. These NPV values, as generated by the system of record, can be referenced in Attachment STAFF-DR-02-003 on the "KY" tab.

- c. The commercial programs do not offer the same benefits to commercial customers as the residential programs. Many of the measures within the residential programs are whole home related so there is a natural impact on gas which is different than the non-residential space.

PERSON RESPONSIBLE: a. & b. Melissa Adams
c. Trisha Haemmerle

Assumptions

Legend

User input
Reference to other sheet
Self contained formula

Shared Savings Rate
Lost Revenue Rates (per Jim Ziolkowski on 8/30/2013)

	10%	
NonRes		0.02302
Res		0.04972

Duke Energy Kentucky
 2014 Projection: July 2014 - June 2015
 Program Summary
 KY 2014 - 15 Projection 2013 10 24.xlsx

Program	Unit Type	Shared Savings Calculation: (Avoided Cost - Program Costs) x Sharing Rate											Prior Period Lost Revenue	Lost Revenue Withheld
		A	D	E	F	G	H	I	J	K	L	M		
		Annual kWh Net PR, @ Plant Total	Total NPV Avoided Cost of Capacity / Total	Total NPV Avoided Cost of Energy / Total	Total NPV Avoided Cost of TRD / Total	Total NPV Avoided Cost of Gas Production / Total	Total Avoided Costs	Non-NPV Costs	Shared Savings Pool	Shared Savings Term, after-tax	Shared Savings Revenue			
		KWH data	\$ data	\$ data	\$ data	\$ data	\$ D+E+F+G	\$ data	\$ H-I	% data	\$ J x K	\$ data	\$ data	
Shared Savings Revenue														
Res														
Energy Efficiency														
Appliance Recycling Program		1,297,065	\$183,204	\$654,471	\$182,102	\$0	\$1,019,776	\$188,478	\$831,298	10.00%	\$83,130	\$71,047	\$30,563	
Energy Efficiency Education Program for Schools		183,403	\$5,285	\$60,561	\$5,139	\$21,797	\$92,792	\$215,186	(\$122,394)	10.00%	(\$12,239)	\$14,443	\$4,335	
Low Income Neighborhood		\$56,406	\$70,335	\$249,607	\$69,897	\$0	\$389,839	\$316,099	\$73,741	10.00%	\$7,374	\$31,091	\$13,156	
Low Income Services		276,894	\$36,951	\$197,515	\$33,497	\$94,808	\$369,972	\$675,691	(\$311,719)	10.00%	(\$31,172)	\$32,548	\$6,549	
My Home Energy Report	1	9,001,128	\$205,543	\$608,878	\$203,983	\$0	\$1,013,405	\$560,562	\$452,843	10.00%	\$45,284	\$0	\$468,204	
Residential Energy Assessments		207,195	\$75,618	\$107,744	\$68,475	\$55,445	\$307,282	\$185,366	\$121,916	10.00%	\$12,192	\$23,412	\$4,899	
Residential Smart Saver*		3,159,433	\$469,893	\$1,810,634	\$498,069	\$31,670	\$2,810,266	\$1,212,081	\$1,598,184	10.00%	\$159,818	\$1,500,957	\$74,702	
Total		15,581,625	\$1,046,840	\$3,684,410	\$1,061,182	\$204,920	\$5,997,332	\$3,393,463	\$2,643,869		\$264,367	\$1,676,498	\$602,513	
Demand Response														
Power Manager		0	\$961,643	\$0	\$869,430	\$0	\$1,831,073	\$530,183	\$1,300,890	10.00%	\$130,089	\$0	\$0	
Total		0	\$961,643	\$0	\$869,430	\$0	\$1,831,073	\$530,183	\$1,300,890		\$130,089	\$0	\$0	
Weather														
Energy Efficiency														
Smart Saver® Prescriptive - Energy Star Food Service Products		210,223	\$9,150	\$116,974	\$11,947	\$0	\$138,071	\$17,941	\$120,129	10.00%	\$12,013	\$5,514	\$2,301	
Smart Saver® Prescriptive - HVAC		570,136	\$215,097	\$521,621	\$220,644	\$0	\$957,363	\$156,784	\$800,579	10.00%	\$80,058	\$41,556	\$6,240	
Smart Saver® Prescriptive - Lighting		4,287,699	\$520,007	\$2,725,017	\$471,208	\$0	\$3,716,226	\$612,515	\$3,103,712	10.00%	\$310,371	\$243,937	\$48,930	
Smart Saver® Prescriptive - Motors/Pumps/VFD		136,678	\$47,579	\$309,751	\$51,543	\$0	\$408,874	\$42,118	\$366,757	10.00%	\$36,676	\$29,494	\$4,015	
Smart Saver® Prescriptive - Process Equipment		11,567	\$2,004	\$9,076	\$1,817	\$0	\$12,897	\$1,583	\$11,315	10.00%	\$1,131	\$1,661	\$127	
Smart Saver® Prescriptive - IT		188,949	\$49	\$37,601	\$1,980	\$0	\$39,630	\$9,575	\$30,055	10.00%	\$3,005	\$517	\$974	
Smart Saver® Custom		2,008,478	\$148,776	\$1,089,509	\$134,779	\$0	\$1,372,064	\$357,573	\$1,014,491	10.00%	\$101,449	\$107,391	\$21,983	
Total		7,549,882	\$942,653	\$4,889,951	\$883,913	\$0	\$6,645,116	\$1,298,089	\$5,447,027		\$544,704	\$489,881	\$82,570	
Demand Response														
Power Share*		0	\$2,242,992	\$0	\$2,027,919	\$0	\$4,270,910	\$946,500	\$3,324,411	10.00%	\$332,441	\$0	\$0	
Total		0	\$2,242,992	\$0	\$2,027,919	\$0	\$4,270,910	\$946,500	\$3,324,411		\$332,441	\$0	\$0	
Prior Period Lost Revenue														
Personalized Energy Report Program		0										\$2,950	\$0	
Total		0										\$2,950	\$0	
Cost Recovery														
Payment Plus		0										\$0	\$0	
Total		0										\$0	\$0	
Total		23,125,516	\$6,294,137	\$4,882,951	\$4,952,423	\$204,920	\$28,704,461	\$6,428,294	\$21,716,207		\$1,774,621	\$2,199,328	\$885,083	

Notes:
 1 My Home Energy Report impacts represent cumulative capability, and does not reflect incremental program participation from the prior filing period

Product Code	Program	Type
HECR	My Home Energy Report	Res
FRCYCL	Appliance Recycling Program	Res
RRCYCL	Appliance Recycling Program	Res
HEHC	Residential Energy Assessments	Res
RCFL	Residential Smart Saver®	Res
RCFLPM	Residential Smart Saver®	Res
RCFLSP	Residential Smart Saver®	Res
SSAC	Residential Smart Saver®	Res
SSAIAS	Residential Smart Saver®	Res
SSDSEA	Residential Smart Saver®	Res
SSHP	Residential Smart Saver®	Res
SSHPTU	Residential Smart Saver®	Res
SSDINS	Residential Smart Saver®	Res
SSACTU	Residential Smart Saver®	Res
HPWH	Residential Smart Saver®	Res
MFEEAR	Residential Smart Saver®	Res
MFEEPW	Residential Smart Saver®	Res
MFEEESH	Residential Smart Saver®	Res
PEEPVS	Residential Smart Saver®	Res
SFEAR	Residential Smart Saver®	Res
SFEEPW	Residential Smart Saver®	Res
SFEESH	Residential Smart Saver®	Res
EMIS	EMIS	Non Res
HWLI	Low Income Neighborhood	Res
REFRPL	Low Income Services	Res
WZELEC	Low Income Services	Res
K12CFL	Energy Efficiency Education Program for Schools	Res
K12PRF	Energy Efficiency Education Program for Schools	Res
NRFS	Smart Saver® Prescriptive - Energy Star Food Service Program	Non Res
NRHVAC	Smart Saver® Prescriptive - HVAC	Non Res
NRLTG	Smart Saver® Prescriptive - Lighting	Non Res
NRP&M	Smart Saver® Prescriptive - Motors/Pumps/VFD	Non Res
NRPROC	Smart Saver® Prescriptive - Process Equipment	Non Res
NRIT	Smart Saver® Prescriptive - IT	Non Res
NRPRSC	Smart Saver® Custom	Non Res
PWRMGR	Power Manager	Res
PWRSHR	Power Share®	Non Res
PAYPLS	Payment Plus	Neither
OHEC	Personalized Energy Report Program	Res
PER	Personalized Energy Report Program	Res

