Appalachian State University

Utilities at a Glance

Appalachian State Utilities

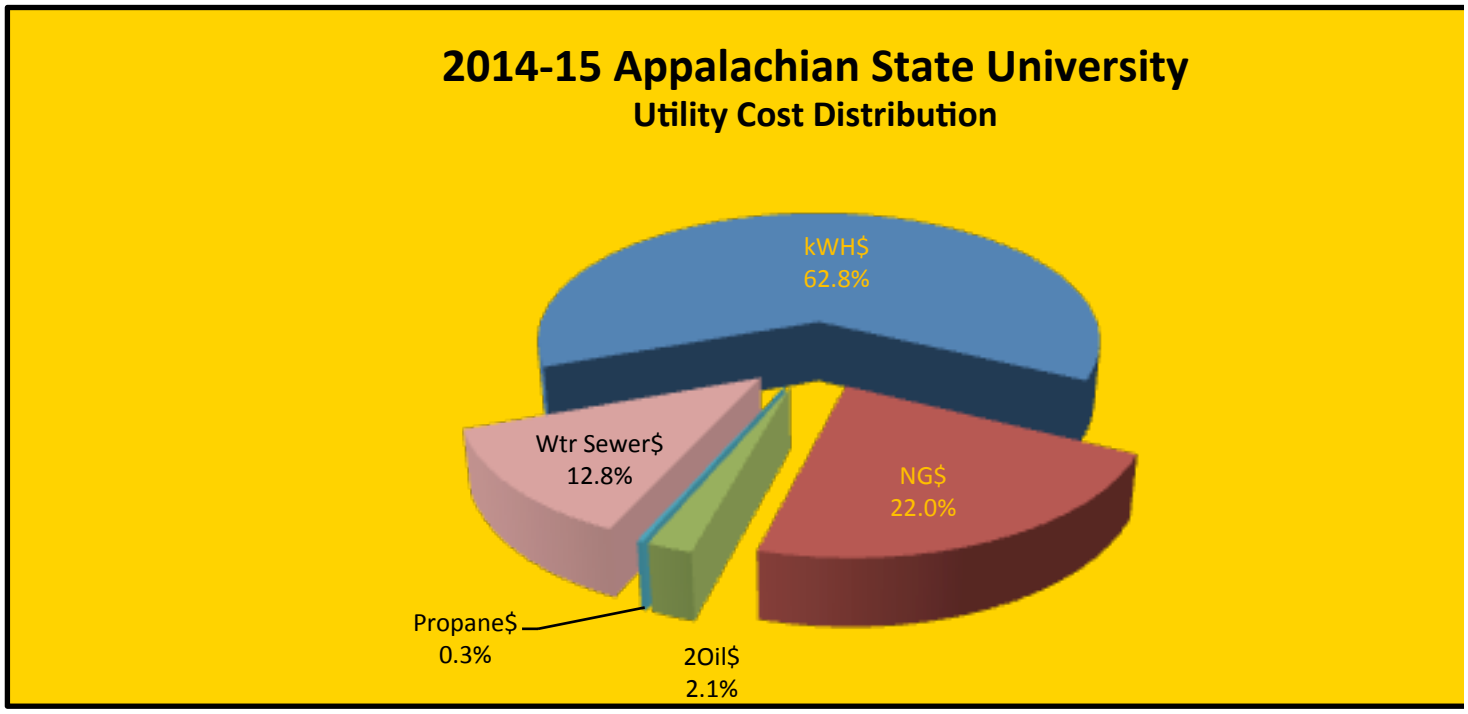
Metric	Basline 2002-2003	Current 2013-2015	% change
Gross square feet	3,524,709	5,240,610	49%
Btu per square foot per year	155,016	102,387	-34%
Cost per million Btu	$ 10.99	$ 13.26	21%
Total Avoided Costs		$ 25,643,711	
Electric consumption in kWh	56,240,704	57,184,595	2%
Electric Cost	$ 3,634,233	$ 5,121,832	41%
Natural Gas consumption in Therms	2,178,550	3,301,570	52%
Natural Gas Cost	$ 1,458,761	$ 1,797,450	23%
#2 Fuel oil gallons	955,465	67,699	-93%
#2 Fuel oil cost	$ 865,549	$ 174,442	-80%
#6 Fuel oil gallons	0	0	%
#6 Fuel oil cost	$ -	$ -	%
Propane gallons	45,000	20,865	-54%
Propane cost	$ 48,150	$ 21,224	-56%
Steam thousands of pounds	0	0	%
Steam cost	$ -	$ -	%
Chilled Water tons	0	0	%
Chilled Water cost	$ -	$ -	%
Water thousands of gallons	125,750	90,828	-28%
Water & Sewer cost	$ 497,262	$ 1,040,186	109%

Appalachian State University

Year End Utility Comparison

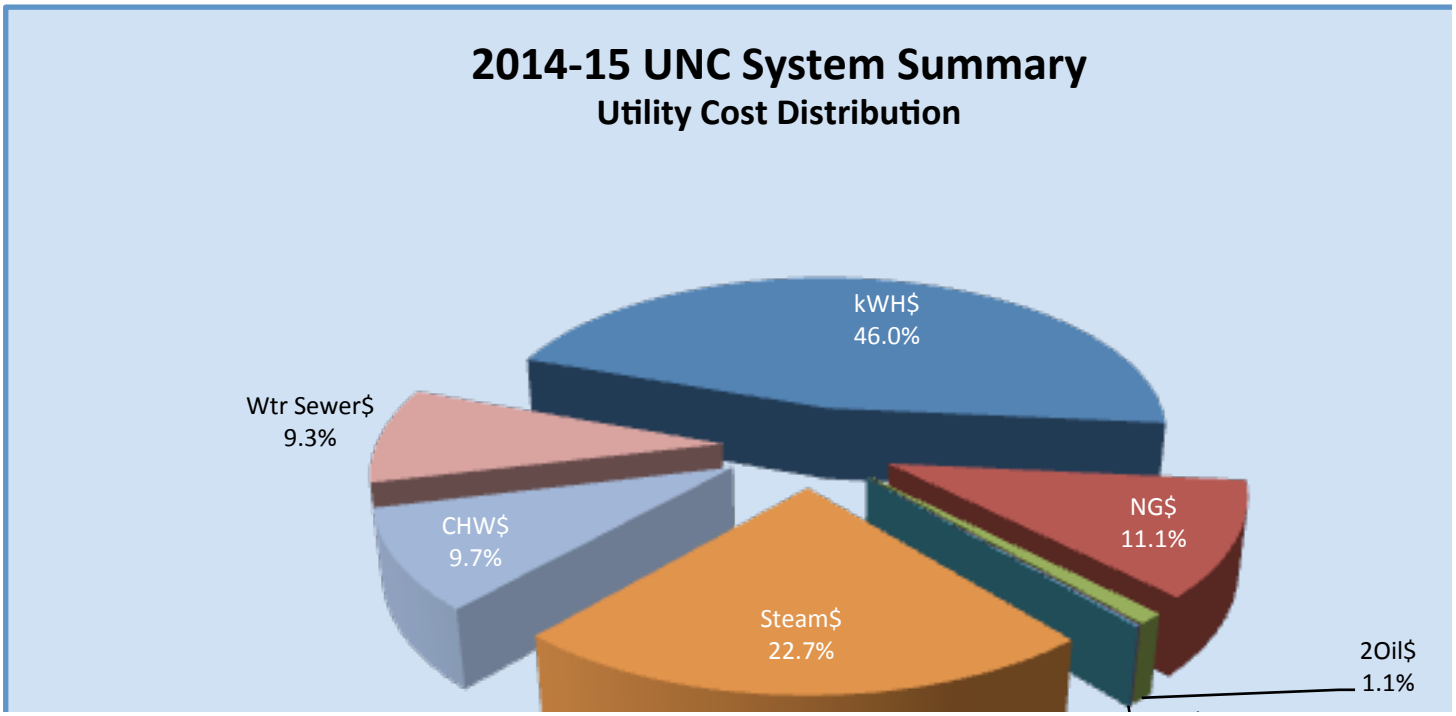
Appalachian Utilities Summary 2014-15

kWH$	NG$	2Oil$	6Oil$	Propane$	Steam$	CHW$	Wtr Sewer$
$ 5,121,832	$ 1,797,450	$ 174,442		$ 21,224			$ 1,040,186



UNC System Utilities Summary 2014-15

kWH$	NG$	2Oil$	6Oil$	Propane$	Steam$	CHW$	Wtr Sewer$
$ 106,341,037	$ 25,650,437	$ 2,433,883	$ 240,540	$ 219,997	$ 52,453,892	$ 22,389,388	$ 21,535,495



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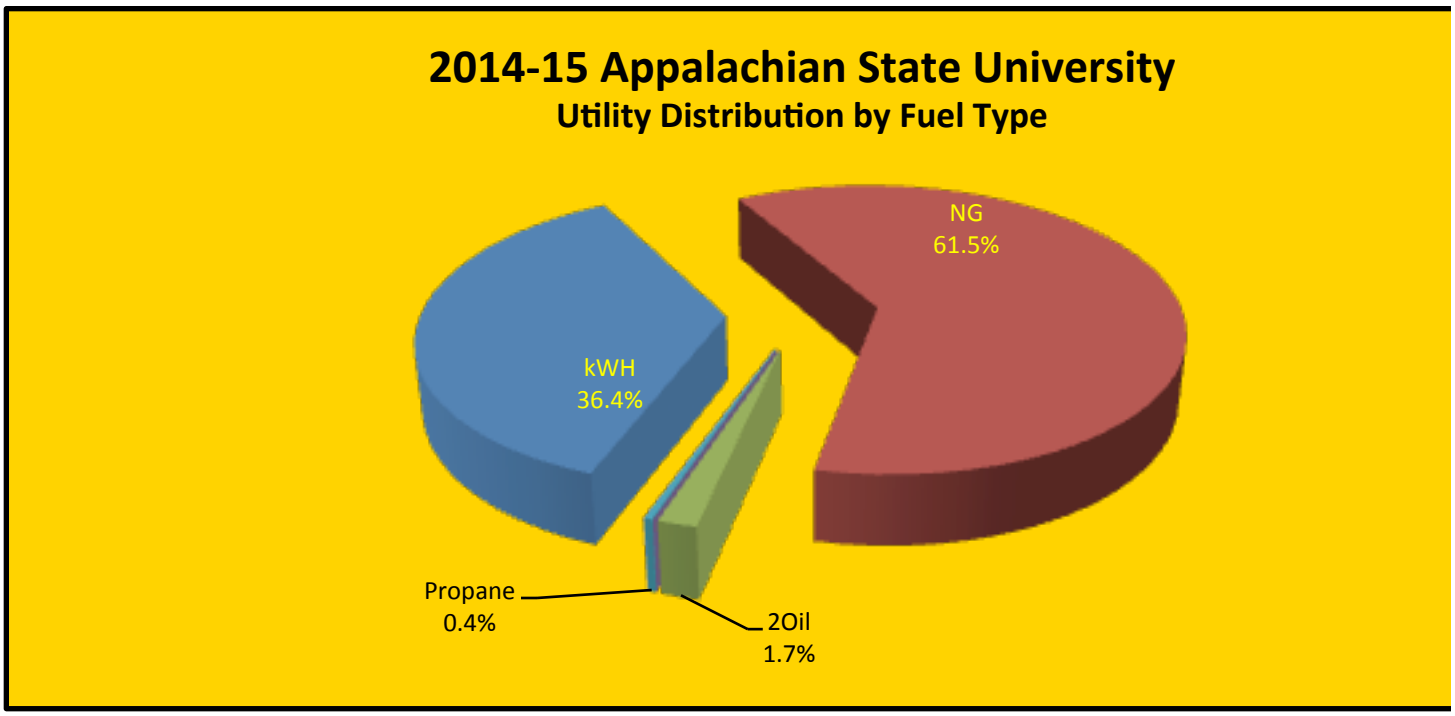
Year End Btu by Fuel Type for 2014-2015

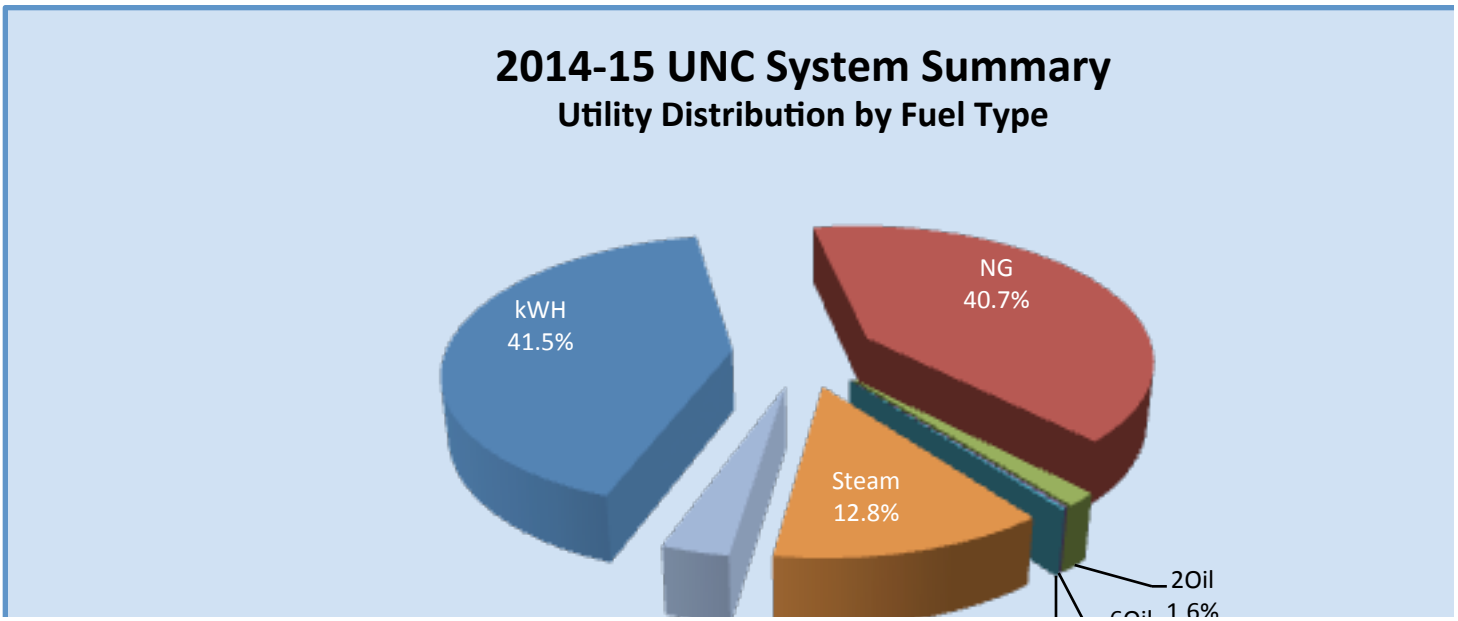
Appalachian Btu by Fuel Type 2014-2015

kWH	NG	2Oil	6Oil	Propane	Steam	CHW	Total Btu
195,113,838,140	330,157,017,560	9,389,208,160	0	1,912,253,850	0	0	536,572,317,709



UNC System Btu by Fuel Type 2014-15

kWH	NG	2Oil	6Oil	Propane	Steam	CHW	Total Btu
4,591,246,083,495	4,501,777,515,560	171,709,572,258	14,789,870,472	19,674,195,302	1,416,944,874,000	348,826,898,192	11,064,969,009,279



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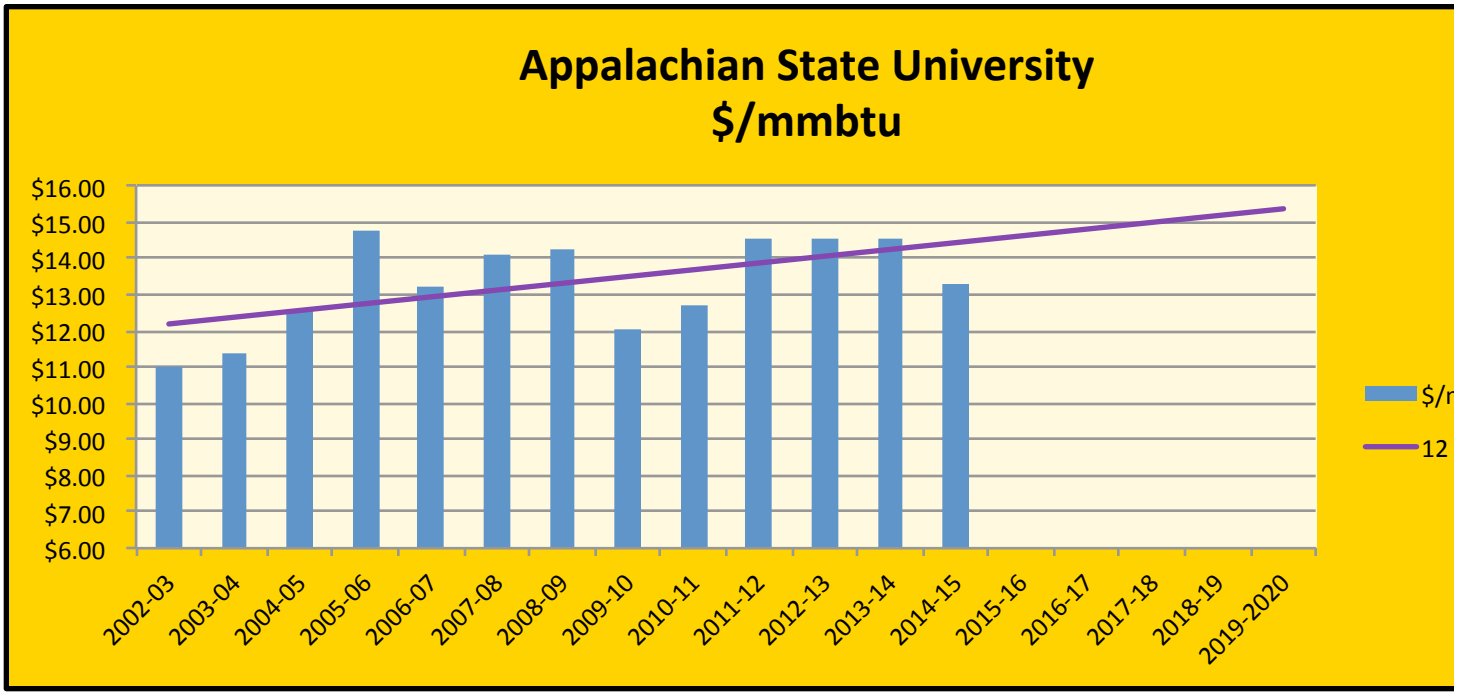
Energy/mmbtu Evaluation 2004-15 & Trend Through 2020

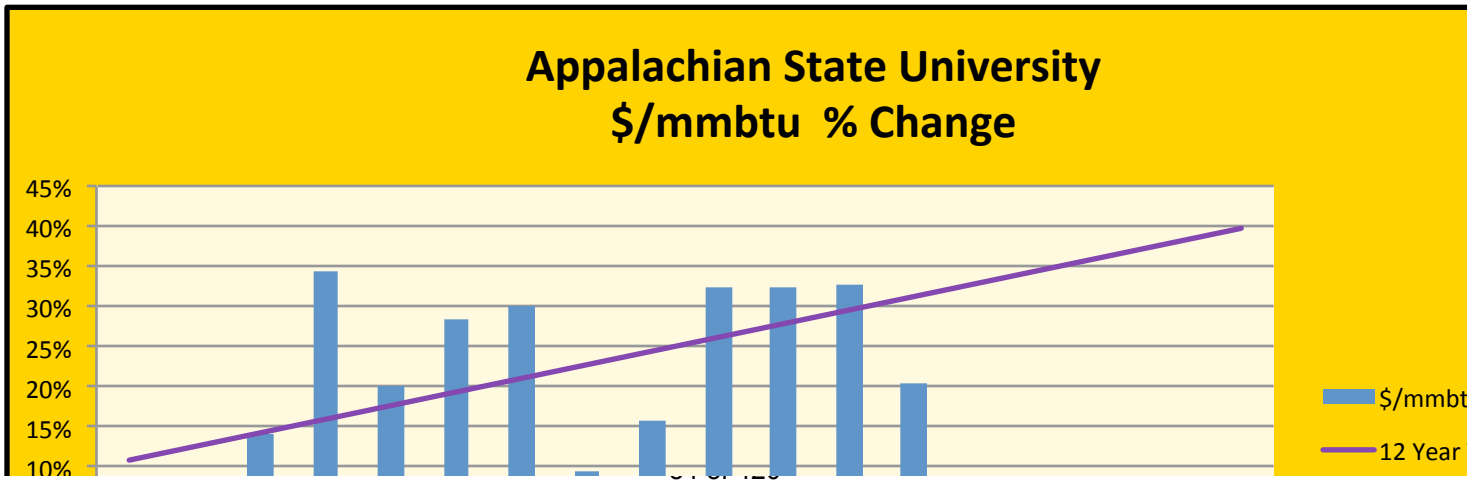
Appalachian Energy $/mmbtu

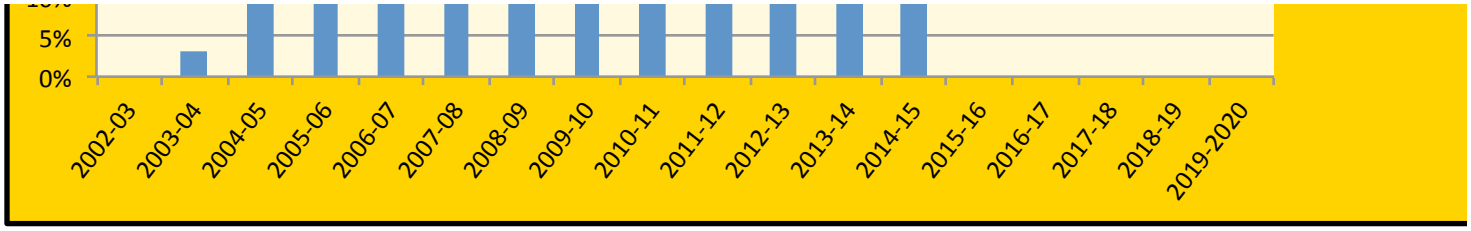
2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
$ 10.99	$ 11.35	$ 12.56	$ 14.78	$ 13.21	$ 14.13	$ 14.28	$ 12.05
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
$ 14.56	$ 14.56	$ 14.58	$ 13.26				



Appalachian Energy $/mmbtu % Change

2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
0%	3%	14%	34%	20%	29%	30%	10%
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
32%	32%	33%	21%				



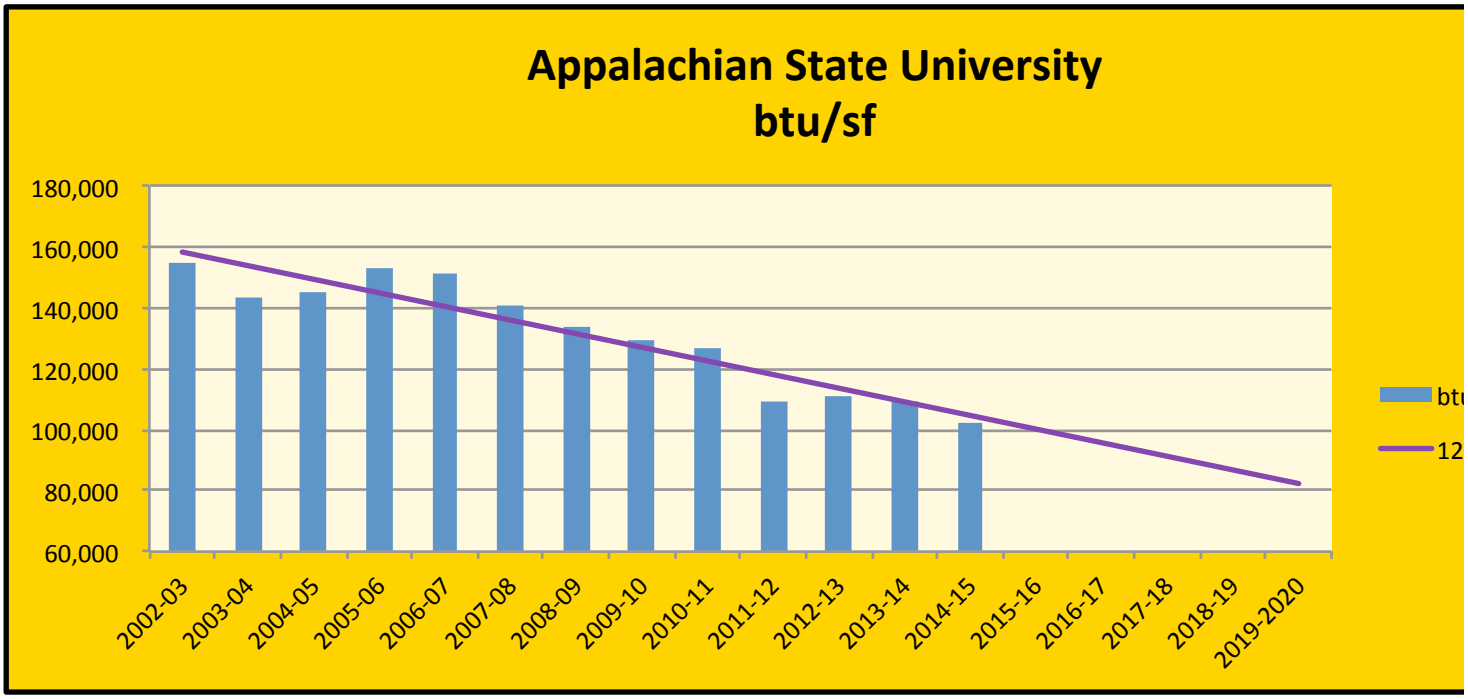


Appalachian State University

Energy btu/sf Evaluation 2003-15 & Trend Through 2020

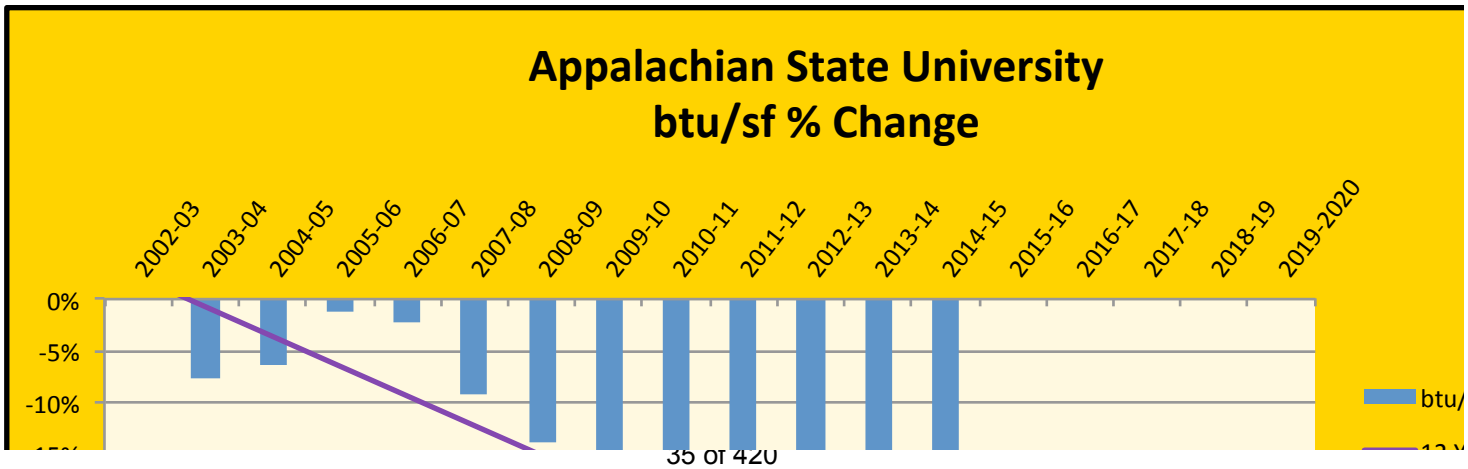
Appalachian Energy btu/sf

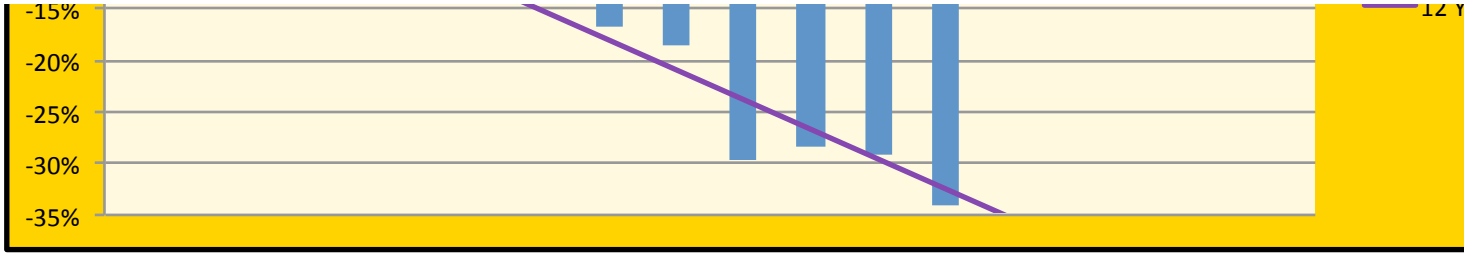
2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
155,016	143,259	144,929	153,187	151,712	140,609	133,366	129,053
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
109,112	111,079	109,628	102,387				



Appalachian Energy btu/sf % Change

2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
0%	-8%	-7%	-1%	-2%	-9%	-14%	-17%
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
-30%	-28%	-29%	-34%				



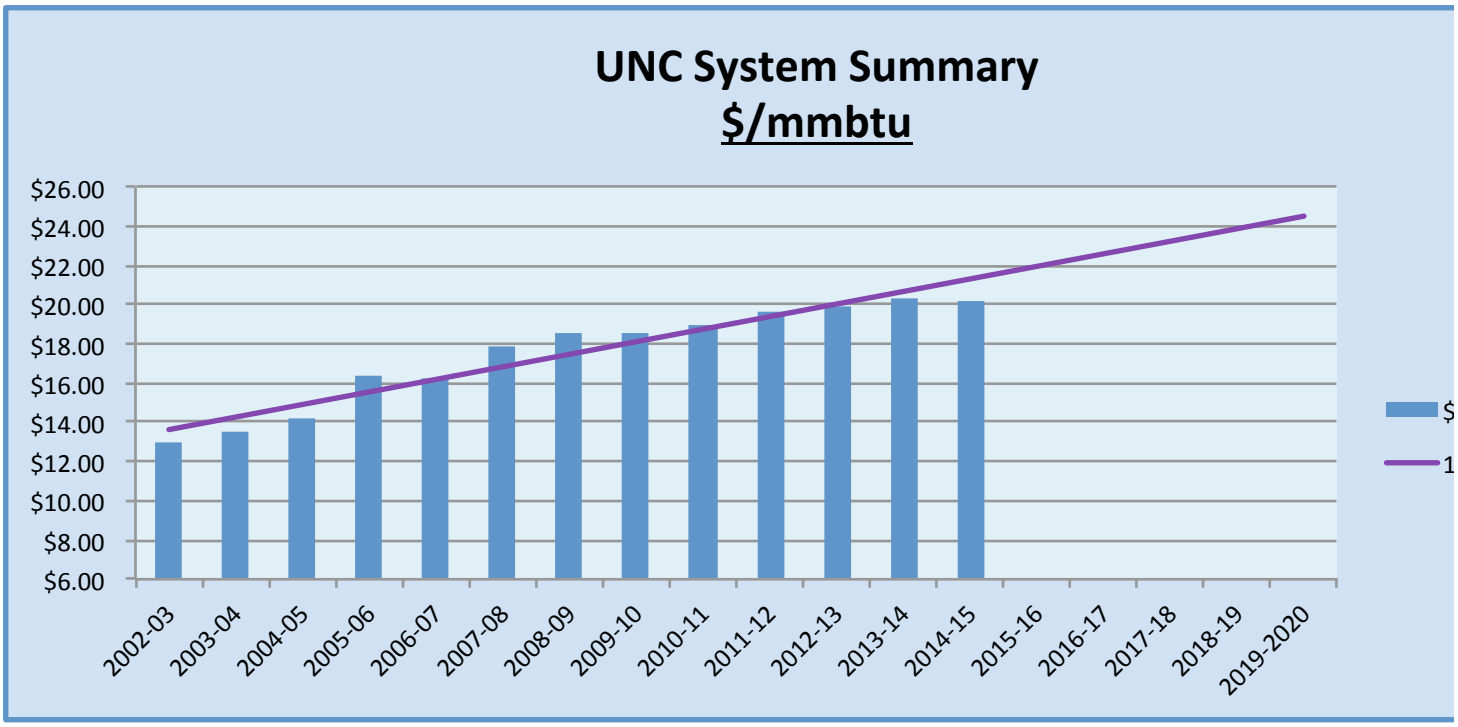


UNC System Summary

Energy $/mmbtu Evaluation 2003-2015 & Trend Through 2020

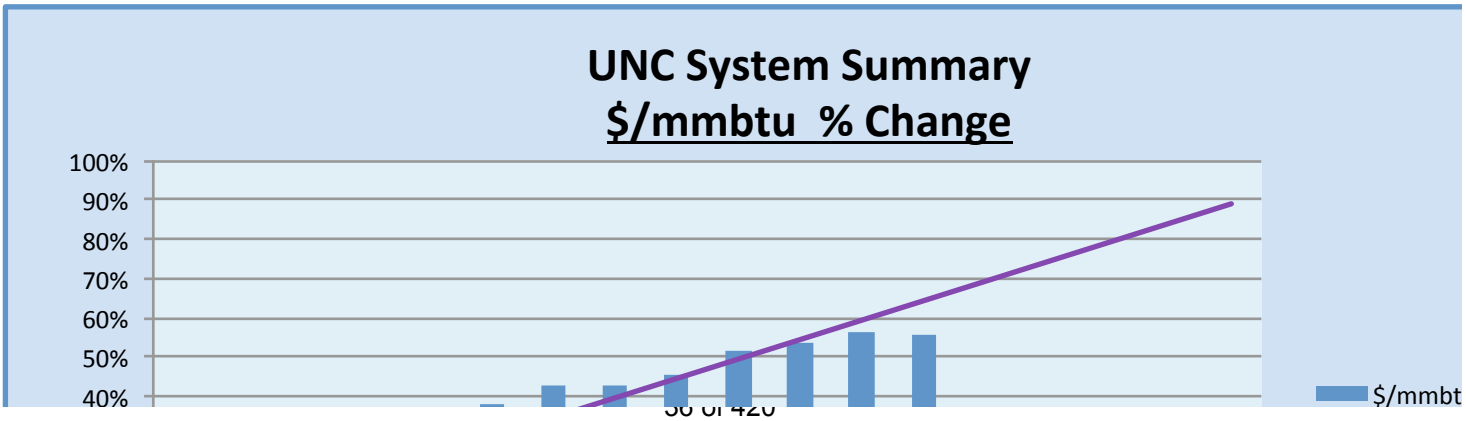
UNC System Energy $/mmbtu

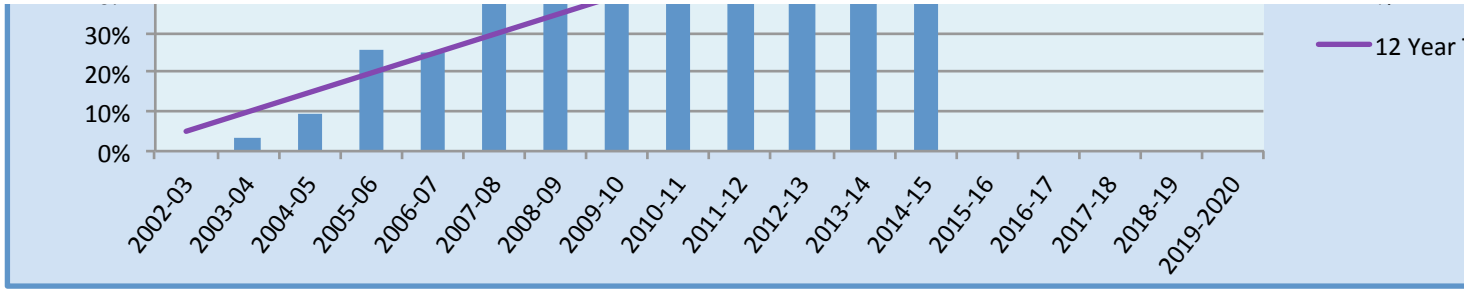
2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
$ 12.98	$ 13.45	$ 14.19	$ 16.34	$ 16.23	$ 17.88	$ 18.51	$ 18.54
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
$ 19.68	$ 19.93	$ 20.32	$ 20.17				



UNC System Energy $/mmbtu % Change

2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
0%	4%	9%	26%	25%	38%	43%	43%
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
52%	54%	57%	55%				



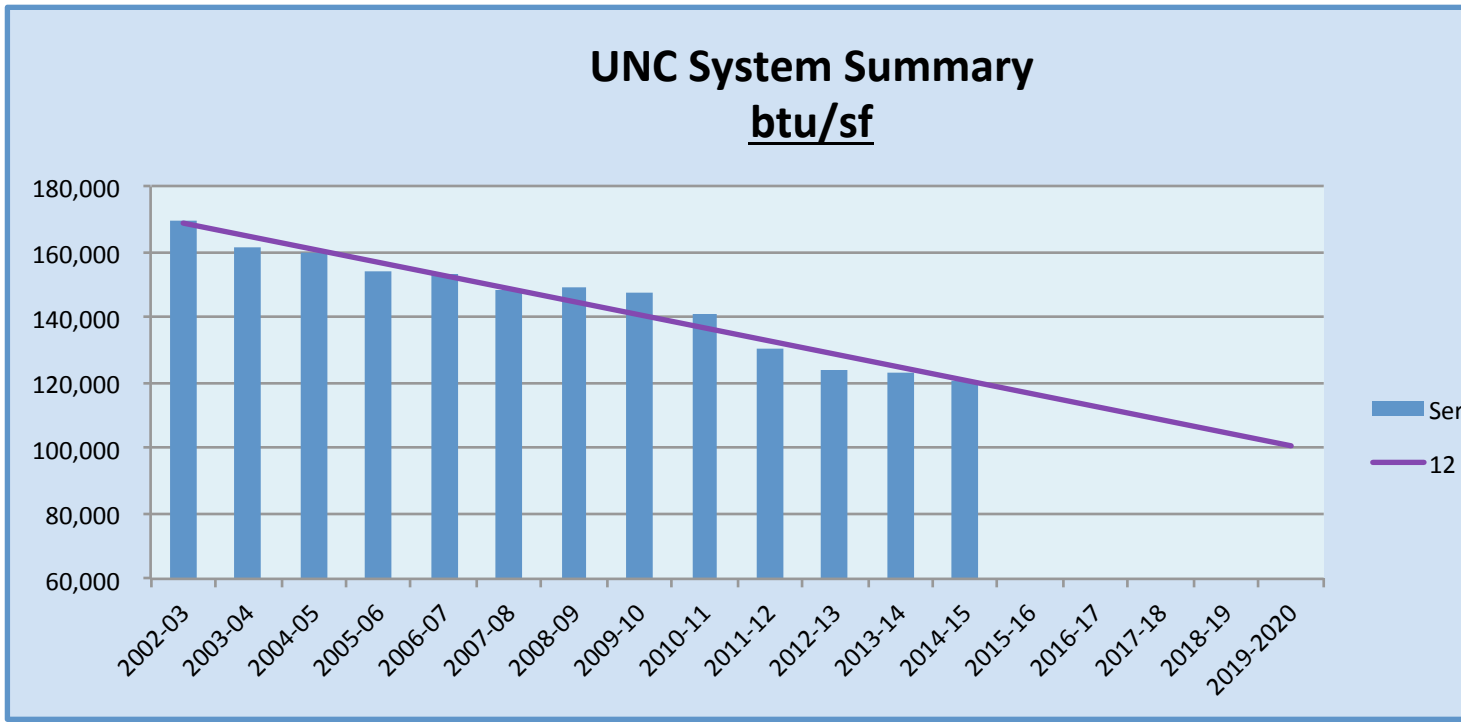


UNC System Summary

Energy Btu/sf Evaluation 2003-2015 & Trend Through 2020

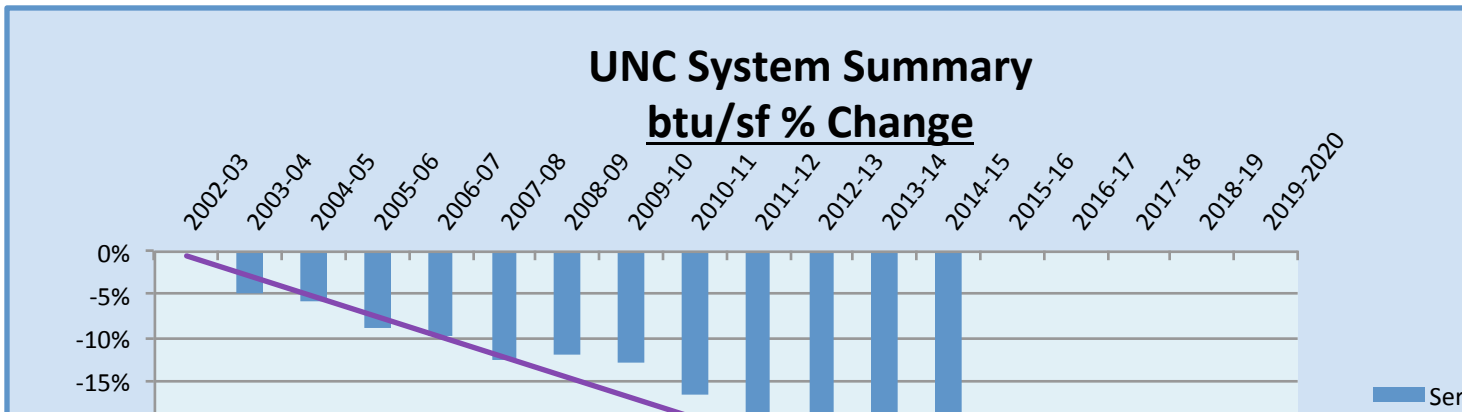
UNC System Energy Btu/sf

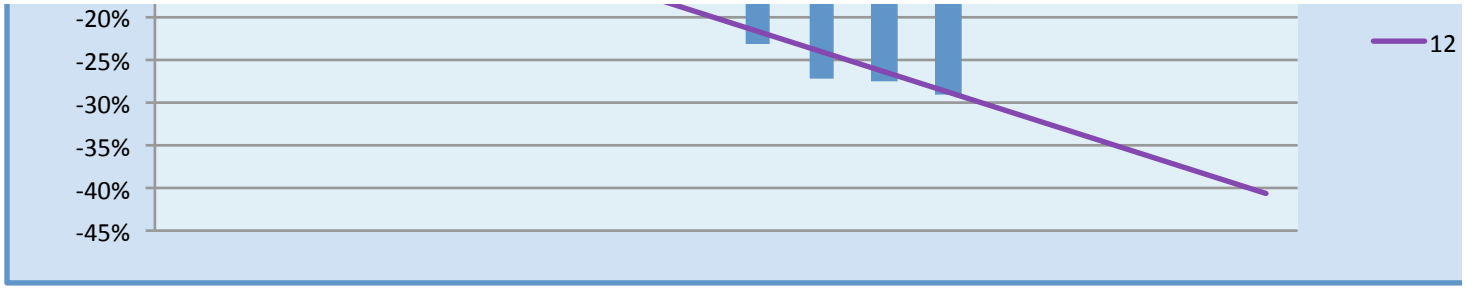
2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
169,641	161,422	159,774	154,418	153,235	148,154	149,352	147,583
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
130,266	123,665	122,926	120,407				



UNC System Energy Btu/sf % Change

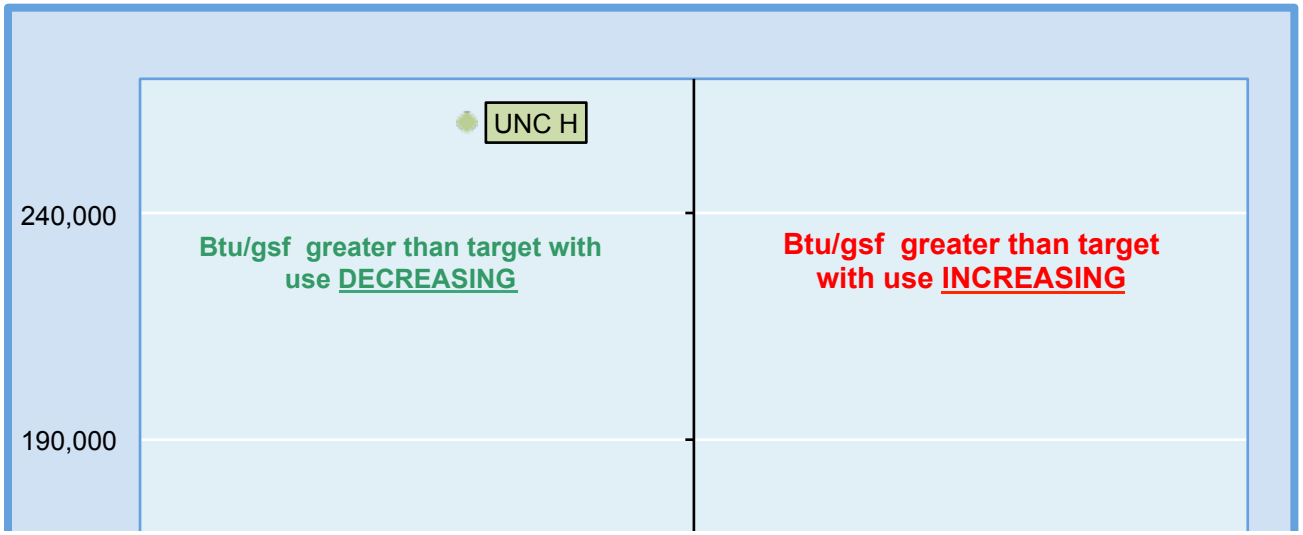
2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
0%	-5%	-6%	-9%	-10%	-13%	-12%	-13%
2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
-23%	-27%	-28%	-29%				





UNC System Summary

Btu/gsf and % Reduction



Total Utility $
$ 8,155,133

Total Utility $
$ 231,264,670

2010-11
$ 12.72
2019-2020

mmbtu

Year Trend

2010-11
16%
2019-2020

u %change

Trend

2010-11
126,437
2019-2020

u/sf

Year Trend

2010-11
-18%
2019-2020

/sf %change

Year Trend

ear Trend

2010-11
$ 18.90
2019-2020

/mmbtu

2 Year Trend

2010-11
46%
2019-2020

u %change

Trend

2010-11
141,239
2019-2020

ries1

Year Trend

2010-11
-17%
2019-2020

ries1

Year Trend