

Economic feasibility of a
Municipal Electric Utility to replace Unitil
in
Townsend, Ashby, Lunenburg, Fitchburg

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Can a municipal utility replace Unitil?

- economic model of a municipal electric utility (“muni”) to replace Unitil in:
 - Townsend, Ashby, Lunenburg and Fitchburg (“TALF”), or
 - Lunenburg only
 - for electricity distribution (Unitil remains the gas company)
- based on 2008 public information
 - FERC Form 1 (for Unitil-MA)
 - muni “Returns” filed with Mass DPU

Economics of a muni to replace Unitil

- muni costs
 - acquisition of Unitil's electricity distribution assets
 - with MassDevelopment financing
 - operating costs based on Hudson and Groton munis
- muni revenues
 - will muni charge **more** or **less** than Unitil to balance its budget?
- no impact on taxpayers
 - electric ratepayers alone fund the muni
 - muni pays PILOT equal to Unitil's local taxes

Key model assumptions

- Unital's assets, less accumulated depreciation – portion of assets' original cost already recovered from ratepayers – must be acquired
 - \$54.1 million for TALF (from Unital-MA's 2008 FERC Form 1)
 - detailed feasibility study needed to check this figure, and others
 - after legal obstacles to new munis are removed
- for Lunenburg
 - assets estimated at 20% of TALF assets
 - kWh by class of customers provided by Unital
- financing via a 30-year tax-exempt bond
 - @ General Obligation bond interest rate + 1%

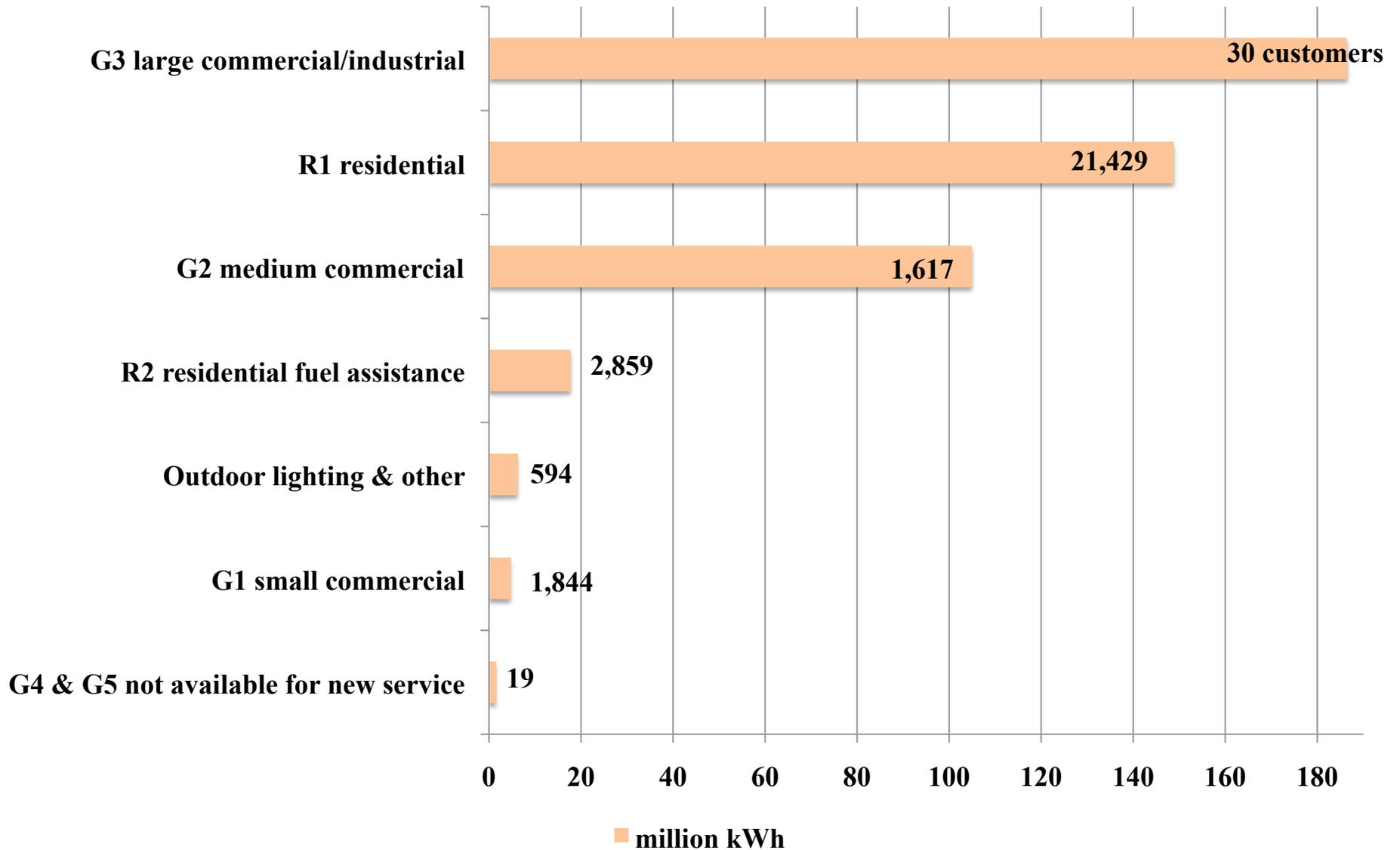
How the model works

- various **metrics** – population, square miles, miles of roads, # of poles, # of accounts, kWh usage – suggest “best fit” as:
 - TALF muni = $1.7 \times \text{Hudson muni} + 1.7 \times \text{Groton muni}$
 - Lunenburg muni = $0.02 \times \text{Hudson muni} + 0.8 \times \text{Groton muni}$
- muni’s operating costs based on Hudson and Groton munis
 - minus double-counting (e.g. 1 TALF General Manager only, not 3.4)
 - distribution losses – now 6%-7% with Unitil – to decline over time
- muni will charge for
 - generation, transmission, transition, energy conservation & renewables: same as Unitil
 - **distribution**: as needed to balance its budget

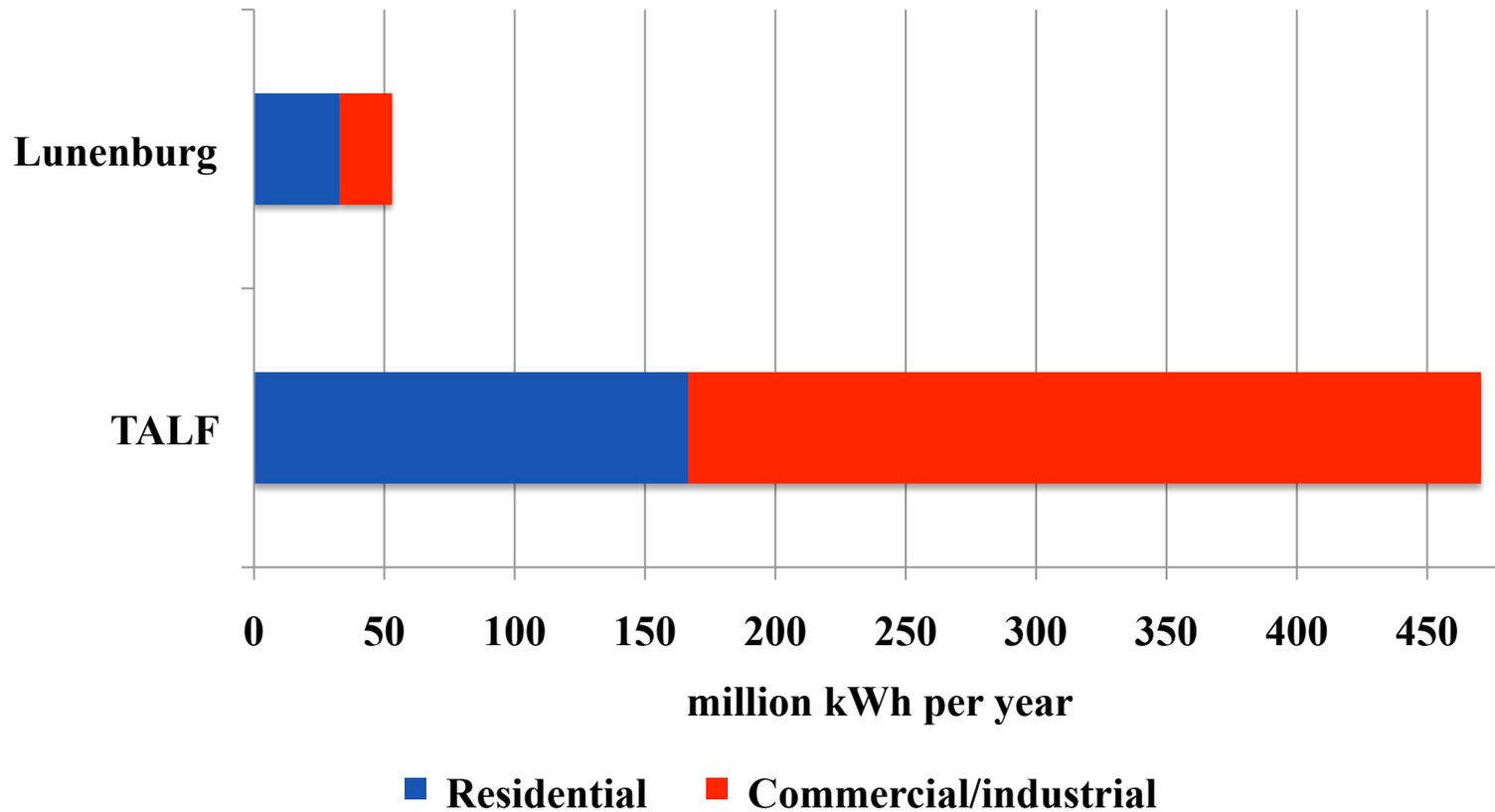
Metrics of a TALF or Lunenburg muni

	Hudson muni	Groton muni	TALF	Lunenburg	1.7 Hudson muni + 1.7 Groton muni = % over TALF	0.02 Hudson muni + 0.8 Groton muni = % over Lunenburg	Comment
Population (2008 estimated)	26,043	10,632	62,512	9,946	-0.3%	-9.2%	
Land area (square miles)	29	33	111	26	-5.1%	1.4%	
Total housing units	9,296	3,393	23,865	3,668	-9.6%	-20.9%	
# of Single Family parcels	6,386	3,058	13,634	3,413	17.8%	-24.6%	
2008 public road mileage	151	111	455	94	-2.0%	-2.1%	
# of poles	6,900	5,404	19,556	3,932	7.0%	13.5%	
# of subst. transformers	5	2	18	3	-33.9%	-43.3%	Unitil still has low voltage 4.16 kV circuits
Miles of circuits	254	153	671	174	3.2%	-26.6%	
All customers # accts	12,270	4,514	28,392		0.5%		
million kWh/year	202	72	471	53	-1.1%	15.9%	
Residential # accts	10,509	3,901	24,288		0.9%		
million kWh/year	96	40	167	33	38.0%	1.9%	Unitil = 6,859 kWh/yr/customer vs Hudson = 9,100 and Groton = 10,200
Commercial # accts	1,761	613	4,104		-1.7%		
million kWh/year	106	32	304	20	-22.6%	39.2%	average Unitil account uses 23% more than in Hudson, 41% more than in Groton

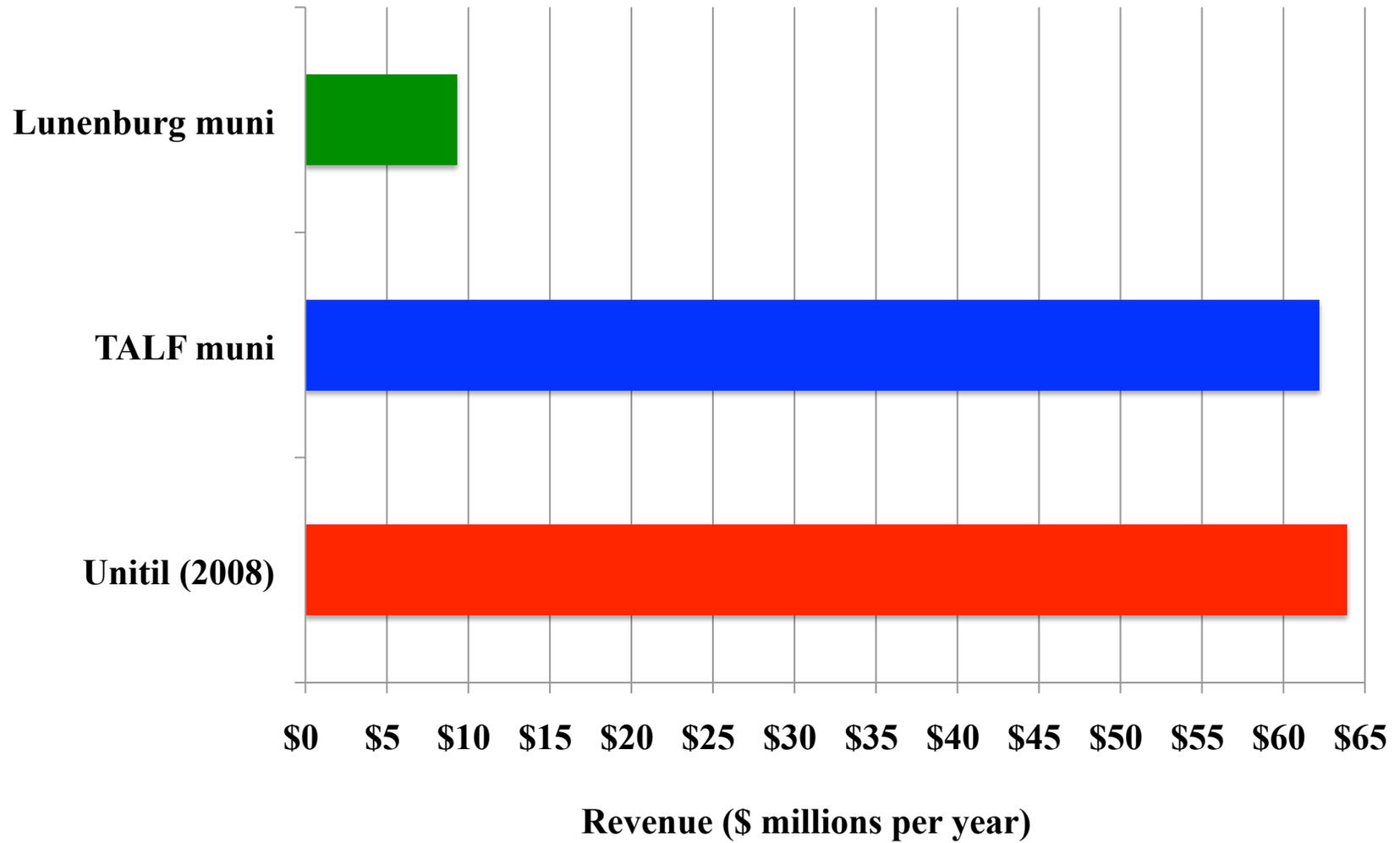
TALF: 28,392 customers use 471 million kWh per year



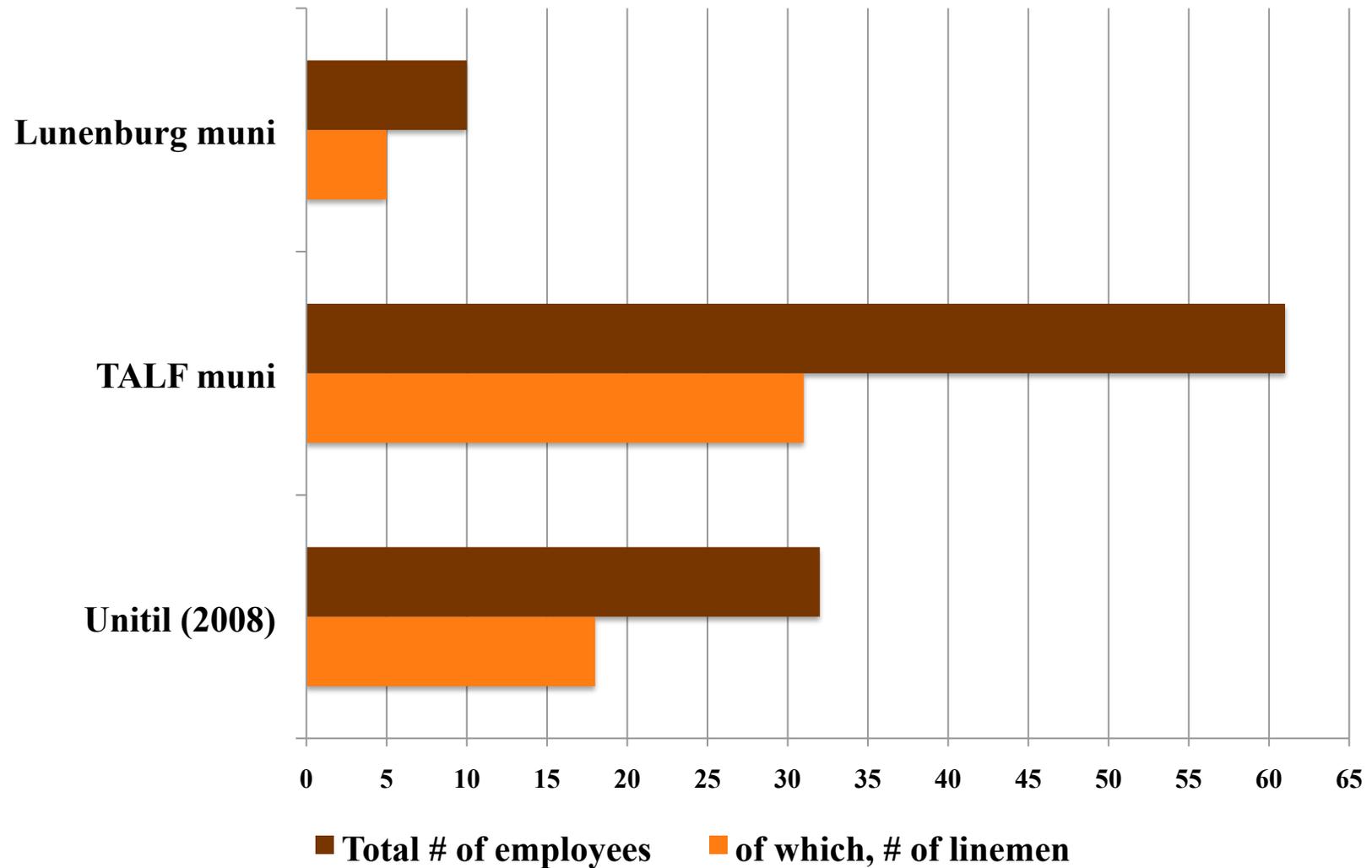
TALF is larger and has more commercial/industrial customers than Lunenburg



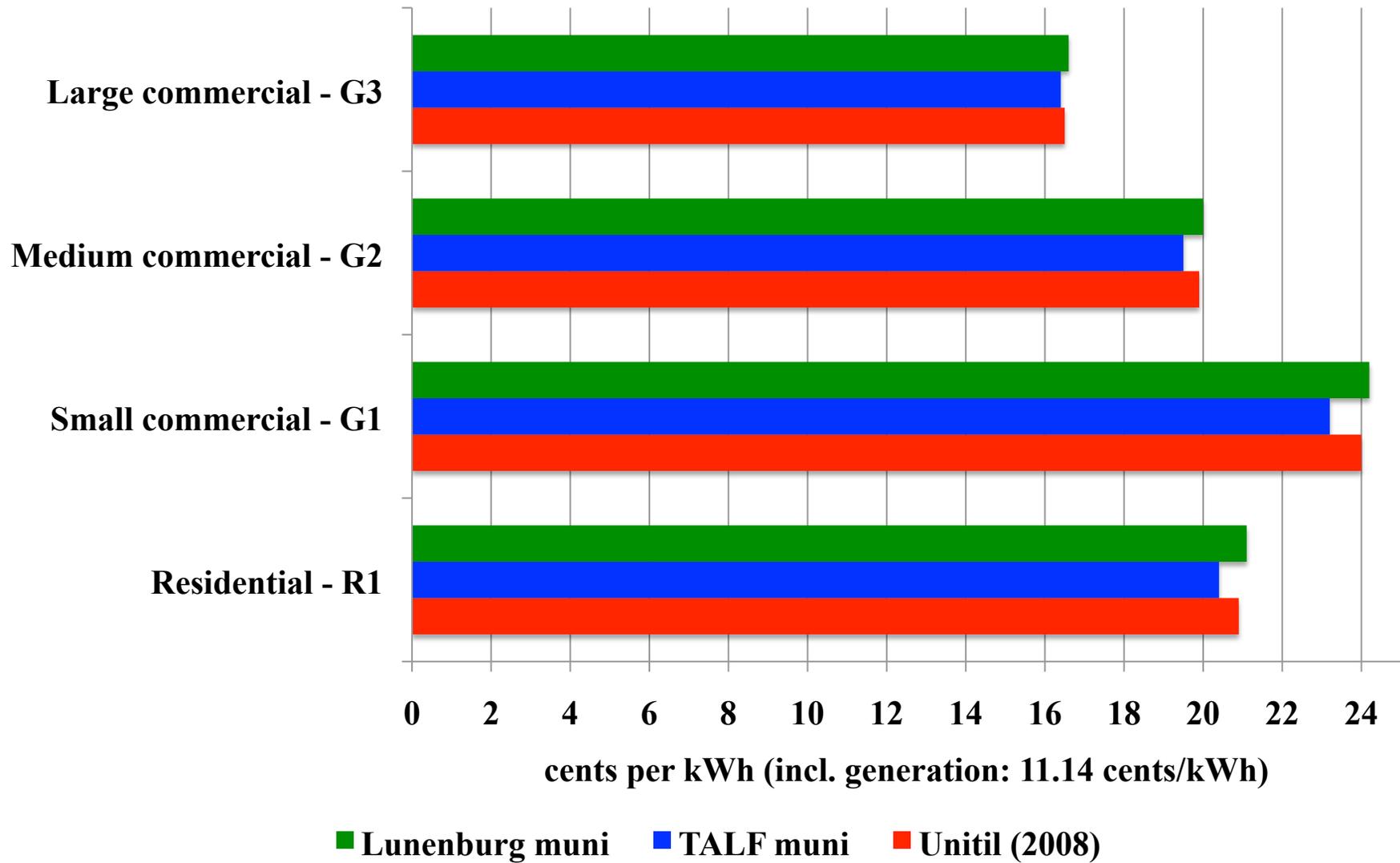
Annual revenues



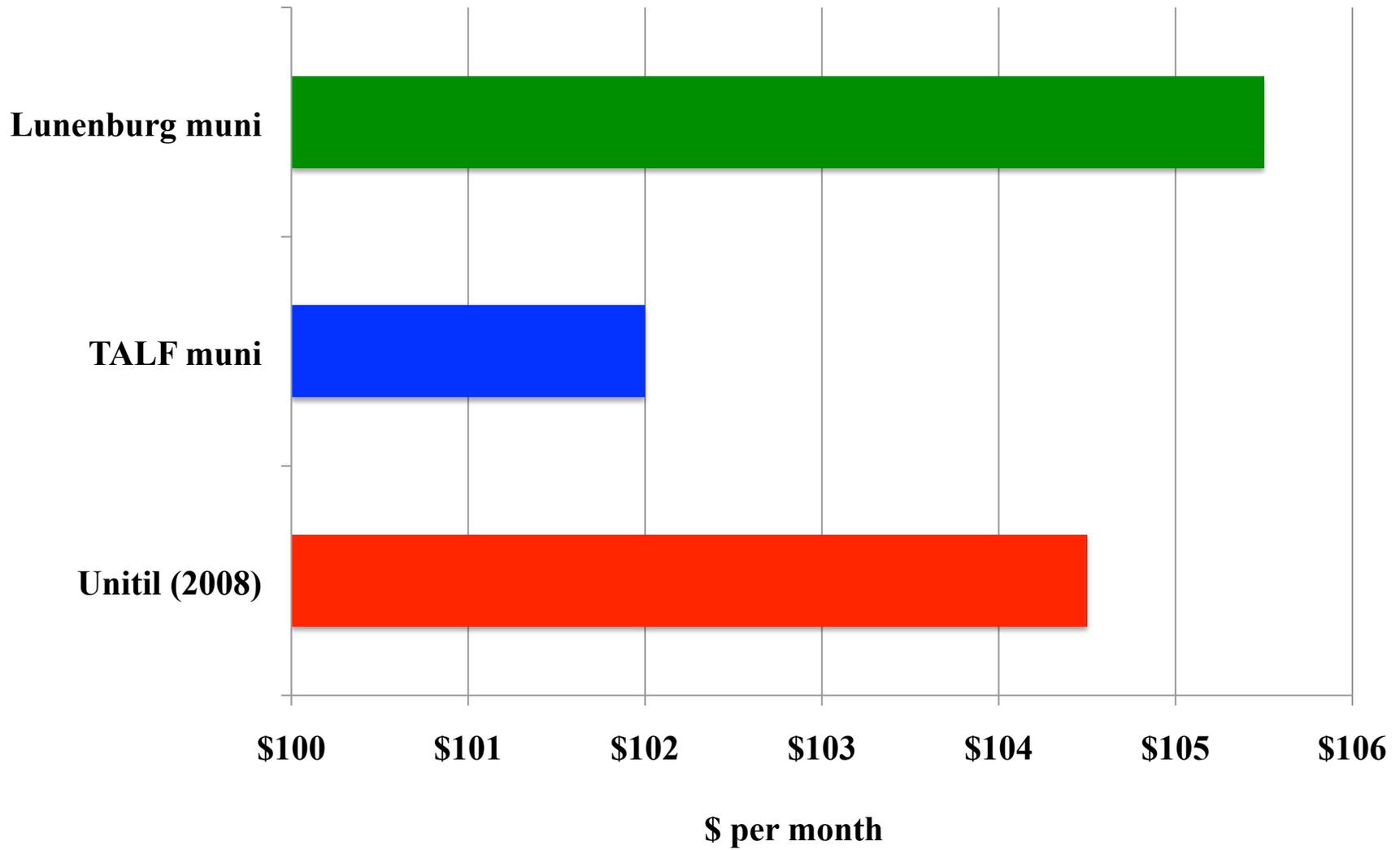
Munis and Unutil (John Fitch Hwy facility) staffing



Rates (including generation)



Electric bill for residential customers
(typical usage of 500 kWh per month)



Conclusions

- a muni can replace Unitil
 - more economically for TALF than for Lunenburg, due to:
 - better scale
 - more commercial/industrial electric load
- a TALF muni would charge **1%-3% less** than Unitil
- a Lunenburg muni would charge **0.5%-1% more** than Unitil
- a muni would improve service reliability and address local needs