From: John D. Wilson [wilson@cleanenergy.org]
Sent: Friday, August 29, 2008 3:17 PM
To: Karen Webb; Mark Futrell
Cc: George Cavros
Subject: SACE decoupling comments
Attachments: SACE Comments FLPSC Decoupling Workshop 082908.pdf

Karen and Mark,

Here you go and have a great Labor Day weekend!

John

****

John D. Wilson, MPP
Director of Research
cleanenergy.org
Southern Alliance for Clean Energy
Working for a clean energy future
Southern Alliance for Clean Energy
29 N. Market Street, Suite 409
Asheville, NC 28801
O) 828-254-6776
C) 828-337-8260
F) 828-254-5466
wilson@cleanenergy.org
www.cleanenergy.org
--

cleanenergy.org
Southern Alliance for Clean Energy

1.866.522.SACE
www.cleanenergy.org

P.O. Box 1842
Knoxville, TN 37901
865.637.6055

29 N. Market Street, Suite 409
Asheville, NC 28801
828.254.6776

250 Arizona Avenue, NE
Atlanta, GA 30307
404.659.5675

428 Bull Street, Suite 202
Savannah, GA 31401
912.201.0354

P.O. Box 1833
Pittsboro, NC 27312
919.545.2920

August 29, 2008

Ms. Karen Webb
Florida Public Service Commission
2540 Shumard Oak Blvd
Tallahassee, FL 32399

RE: August 7, 2008 Revenue Decoupling Workshop

Dear Ms. Webb:

Please accept the following additional comments by Southern Alliance for Clean Energy for the Florida Public Service Commission revenue decoupling workshop that was held on August 7, 2008. These comments supersede a preliminary version dated August 7 that was provided at request of Commission staff.

There were several questions and comments at the August 7th workshop focusing on the mechanics and benefits of revenue decoupling. Additionally, Susan Clark, appearing on behalf of Florida Power and Light, Progress Energy and TECO questioned the need for revenue decoupling based on "significant achievements" by Florida utilities in demand side management. We address those questions and comments below.

Flaws in Florida's Current Electric Rate Regulatory Framework
The current regulatory framework provides a disincentive to aggressive implementation of energy savings (conservation) measures. There was no dispute on this point at the workshop.

The basis for this disincentive is the conventional approach of authorizing electric utilities to recover the fixed costs of generation plants through a per kilowatt-hour rate. In addition to the fixed cost component of the rate, the rate of course also allows for recovery of the variable cost of producing that kilowatt hour. After approving a fixed cost revenue requirement, the Commission sets rates based on assumptions about the annual kilowatt hour sales. If sales lag below those assumptions, the company will not recover its approved fixed cost revenue requirement. Likewise, if sales exceed expectations, utility shareholders may earn a windfall in excess of the approved revenue requirement for fixed costs. Whether consumption ends up above or below expectations, every unexpected efficiency improvement that reduces energy sales yields a corresponding reduction in cost recovery, to the detriment of utility shareholders.

In contrast, the current regulatory framework may provide an incentive to another component of demand side management , namely demand reduction. Demand reduction (fewer MW) reduces the *number* of power plants, but energy savings (conservation, fewer MWh) reduces the *operation* of power plants. In the years between rate cases, a utility has a regulatory obligation to provide reliable electricity

services to meet whatever level of demand may occur. More demand means more power plants, and hence more costs. If demand (MW) goes up without a corresponding increase in energy sales (MWh), the utility faces escalating costs that are not matched by revenue growth, leading to lower profits.

For this reason, the current regulatory framework offers utilities a financial incentive to pursue demand reduction to the extent that it is a less expensive strategy to provide peak capacity. The size of this incentive depends on the particular characteristics of the utility and its customers.

In summary, utility regulatory theory would predict that Florida's utilities would perform well on demand reduction (fewer MW), but not so well on energy efficiency (MWh). The energy efficiency performance of Florida's investor-owned utilities illustrates precisely the performance predicted by theory.

Among the 100 utilities with the largest sales in the country (see Table 1), only one Florida utility, FP&L, makes the top twenty in terms of its annual reductions in energy sales (GWh saved per GWh sold) due to its energy efficiency programs. FP&L deserves credit for being the only Florida utility to merit this recognition. Nevertheless, FP&L's performance is an order of magnitude lower than several large, investor-owned utilities in California, the Pacific Northwest, the Midwest, and the Northeast.

Table 1: Energy Savings (Conservation) Performance of Large Utilities, 2006

Utility	State	Ownership	Total Sales (GWh)	Annual Savings	
				(GWh)	(%)
Massachusetts Electric	MA	Investor Owned	12,990	257	1.98%
Connecticut Light & Power	CT	Investor Owned	22,109	265	1.20%
Pacific Gas & Electric	CA	Investor Owned	76,817	780	1.01%
Southern California Edison	CA	Investor Owned	78,863	788	1.00%
Interstate Power and Light	IA	Investor Owned	16,026	134	0.84%
Puget Sound Energy	WA	Investor Owned	21,092	166	0.79%
Sacramento Municipal Utility	CA	Municipal	10,799	79	0.73%
Northern States Power	MN	Investor Owned	35,923	258	0.72%
Nevada Power Company	NV	Investor Owned	21,101	146	0.69%
MidAmerican Energy	IL	Investor Owned	23,389	156	0.67%
Wisconsin Power & Light	WI	Investor Owned	10,580	66	0.63%
City of Seattle	WA	Municipal	9,455	52	0.55%
Idaho Power	OR	Investor Owned	13,939	71	0.51%
Long Island Power Authority	NY	State	18,354	92	0.50%
PacifiCorp	WY	Investor Owned	51,797	193	0.37%
Arizona Public Service	AZ	Investor Owned	27,970	80	0.29%
Wisconsin Electric Power	MI	Investor Owned	28,189	68	0.24%
Public Service Elec & Gas	NJ	Investor Owned	34,354	68	0.20%
Florida Power & Light	*FL*	*Investor Owned*	*103,653*	*200*	*0.19%*
Tennessee Valley Authority	TN	Federal	33,008	61	0.19%

Source: Energy Information Administration, Form 861 Database.
Note: Large utilities are defined as the 100 utilities with the largest total electricity sales. When compiled at the level of parent companies, Progress Energy and Southern Company, each with a Florida affiliate, join FPL among the 10 largest utility systems in the nation. However, neither holding company has a distinguished level of energy savings performance and thus their affiliates do not appear on this list. See Table 2 for further details regarding Florida utilities.

Ms. Clark stated that "there is no compelling need for decoupling in Florida at this time for the purpose of promoting energy efficiency. And, finally, the fact that Florida

has been and continues to be a leader in energy efficiency and DSM suggests that the Florida model has worked well."[1] To support this claim, Ms. Clark explains that FP&L and other investor-owned utilities in Florida are national leaders with respect to demand reduction. Demand reduction is a meaningful accomplishment, but it is not the correct measurement to apply in the context of demonstrating that Florida's investor-owned utilities have risen above the natural financial disincentive to aggressively pursue energy savings (conservation).

Energy Savings (Conservation) Compared to Demand Reduction

The most widely accepted benchmark for energy efficiency program performance is annual energy savings. For example, the *National Action Plan for Energy Efficiency* states that "well-designed energy efficiency programs are delivering annual energy savings on the order of 1 percent of electricity and natural gas sales" (page ES-4). With recent annual energy savings of approximately 0.10 - 0.20%, Florida utilities are well below the performance of the top investor owned utilities in the nation.

We have reviewed many of the energy efficiency programs across the country that deliver annual energy savings on the order of 1 percent of electric sales. Most of these programs meet one of the following criteria:

- Public utility
- Deregulated investor-owned utility (few or no power plants, primarily "load serving")
- Vertically integrated investor-owned utility with lost revenue recovery, decoupling, or a very strong financial performance incentive
- Third-party administrator

Notably, high electric rates are not as consistent a predictor of performance as many utilities suggest. Although many strong programs are operated in California or the Northeast (where electric rates are high), strong programs are operated in several states with rates comparable to or lower than Florida – and two relatively small municipal utilities in Florida have demonstrated strong performance (see Table 2 below).

The need to emphasize energy savings, following national practice, rather than Ms. Clark's claims regarding demand reduction, is central to the issue of decoupling in the context of a vertically integrated investor-owned utility. As discussed above, theory suggests that when such utilities pursue "energy efficiency," they tend to focus more intensely on demand reduction programs that improve shareholder earnings.

A related issue is that until the 2008 Florida energy bill (HB 7135) was passed, Florida's energy savings performance was constrained by a second factor in Commission policy that reinforced the "natural" emphasis on demand reduction. Use of the rate impact measure (RIM) test as the basis for identifying "cost-effective energy efficiency" programs has resulted in setting Florida's energy efficiency goals in a manner that favors demand reduction over energy savings. This matter will be addressed in the FEECA proceedings, but by not including lost revenues as a cost for the purposes of defining cost-effectiveness of energy efficiency programs, the legislature has reduced the policy bias against energy savings.

[1] Transcript: In the Matter of Revenue Decoupling, Staff Workshop, August 7, 2008, Pg 34.

The expanded statutory direction to focus on energy savings is also supported by the energy bill's direction to address global warming pollution. The legislation establishes the Florida Energy and Climate Commission, whose responsibilities include implementing broad Legislative intent and state policy. The new state policy (which encompasses all state activities) includes several provisions that affect how the Commission should regulate electric rates in the future, as follows.

- Legislative intent that "there is significant value to Florida consumers that comes from investment in Florida's energy infrastructure that increases system reliability, enhances energy independence and diversification, stabilizes energy costs, and reduces greenhouse gas emissions."[2]

- Policy direction to "recognize and address the potential of global climate change wherever possible."[3]

- Policy direction to "[c]onsider, in [the state of Florida's] decisionmaking, the social, economic, and environmental impacts of energy-related activities, including the whole-life-cycle impacts of any potential energy use choices, so that detrimental effects of these activities are understood and minimized."[4]

Thus, the energy bill instructs the Commission to factor in the importance of reducing global warming pollution when evaluating regulatory issues. As noted above, Florida's investor-owned utilities have offered strong demand reduction (fewer MW) performance, thus reducing the *number* of power plants, but have not performed as well at achieving energy savings (conservation, fewer MWh) to reduce the *operation* of power plants. **Energy savings, not demand reduction, is the path to reduced global warming pollution from the electric utility sector.**

Energy Savings (Conservation) Performance of Florida Utilities

One common industry benchmark to evaluate the character of an energy efficiency program is to compare the ratio of energy savings to demand reduction (GWh/MW). For the 20 utilities listed above (Table 1), the GWh/MW energy savings ratio is approximately 0.54.[5] In contrast, of the 15 largest utilities in Florida (Table 2, selected by total utility sales), only two have large GWh/MW ratios that demonstrate a focus on energy savings. It is no accident that these two municipal utilities are not subject to the structural disincentive to conservation that the current regulatory system favors.

[2] §377.601(1), Fla. Stat. (2008)

[3] §377.601(2)(a), Fla. Stat. (2008)

[4] §377.601(2)(j), Fla. Stat. (2008)

[5] One utility, PacificCorp does not report peak demand reduction in 2006 and is excluded from the calculation. Note that only one utility, Wisconsin Electric Power, had a similarly low GWh/MW ratio to FPL. Other utilities score was at least double that of FPL.

Table 2: Energy Savings (Conservation) Performance of Florida Utilities, 2006

Utility	Ownership	Total Sales (GWh 2006)	Annual Energy Savings			Demand Reduction (MW 2006)	GWh/MW
			GWh 2006	% 2006	% 2007		
City of Tallahassee	Municipal	2,714	11	0.40%	0.33%	1	10.79
Florida Power & Light	Investor Owned	103,653	200	0.19%	0.21%	1,385	0.14
Gainesville Regional Utilities	Municipal	1,849	3	0.18%	0.75%	-	0.00
Tampa Electric	Investor Owned	19,025	26	0.14%	0.11%	166	0.15
Gulf Power	Investor Owned	11,429	12	0.11%	0.12%	47	0.26
Progress Energy Florida	Investor Owned	39,432	38	0.10%	0.11%	1,253	0.03
JEA	Municipal	12,800	13	0.10%	†	1	12.70
Lee County Electric Coop	Cooperative	3,505	4	0.10%	†	46	0.08
Sumter Electric Coop	Cooperative	2,571	3	0.10%	†	51	0.05
Orlando Utilities Commission	Municipal	5,465	†	0.00%	†	†	0.00
Withlacoochee River Electric Coop	Cooperative	3,571	0	0.00%	†	55	0.00
Clay Electric Cooperative	Cooperative	3,155	†	0.00%	†	†	0.00
City of Lakeland	Municipal	2,883	0	0.00%	†	†	0.00
City of Ocala	Municipal	1,380	-	0.00%	†	-	0.00
Kissimmee Utility Authority	Municipal	1,357	-	0.00%	†	-	0.00

Source: Energy Information Administration, Form 861 Database, except that 2007 data are per Florida Public Service Commission.
† - No data reported.
‡ - Demand reduction is calculated to include the actual demand reduction associated with energy efficiency measures installed in 2006 and the potential demand reduction associated with demand response measures operational in 2006.

Because Florida's utilities have not been driven to achieve high levels of energy savings, investor-owned utilities in other states have outperformed Florida's utilities in providing energy savings at high, sustained levels (see Table 1). Furthermore, because *costs decline as energy savings performance increases*, Florida's customers have not benefitted at the same level as customers of industry-leading utilities.[6]

In response to inadequate (or nonexistent) energy savings performance, some states have dismantled utility-led energy efficiency programs in favor of third-party administrators. Third-party administrators have achieved excellent results in many states, notably Efficiency Vermont, NYSERDA, and the Energy Trust of Oregon. Nevertheless, they do have some drawbacks compared to utility-led energy efficiency. The system benefits fund used to finance third-party administrators is subject to a "legislative raid" at any time, utilities often resist sharing customer use and billing data with the administrator, and the oversight responsibility of the PUC is retained and

[6] Takahashi, K and D Nichols, "The Sustainability and Costs of Increasing Efficiency Impacts: Evidence from Experience to Date," presentation to the 2008 ACEEE Summer Conference, August 2008.

may be more complex. For these reasons, the Commission may consider it advisable to adopt policies and recommend legislation that will lead to higher energy savings performance by Florida's investor-owned utilities.

Benefits of Decoupling

Decoupling is a proven, effective practice that removes the disincentive to aggressive implementation of energy savings (conservation) measures created under the current regulatory framework. Decoupling mechanisms introduce modest regular rate adjustments to ensure that any fixed costs recovered in kilowatt-hour charges are not held hostage to sales volume. The state regulatory community has more than two decades of experience with such mechanisms and such mechanisms are completely consistent with the Florida regulatory structure. Decoupling involves a simple comparison of actual fixed cost revenues to authorized revenues, followed by a simple true-up calculation to reconcile the difference.

The true-up calculation can result in either decreases or increases in revenues to the utility through the modest rate adjustments. Therefore, decoupling removes the risk to utilities that they will under-recover fixed costs at the same time it removes the risk to consumers that utilities will over-recover.

Response to Critiques of Decoupling

Some critics contend that decoupling rates effectively compensate utilities for lack of use of their products. This view of decoupling rates illustrates an unfortunate assumption about the nature of utilities' "products." Regulated utilities do not operate in the "free market." Instead, they provide a resource and a service within a regulatory framework.

Regulation inherently creates financial incentives that encourage utilities to invest in certain resources and discourage them from investing in others. Thus, utilities should not be viewed as simply providers of as many kilowatt-hours (or therms) as possible. Instead, utilities should be viewed as providers of safe, reliable energy services at least cost and with minimal environmental impact. This view makes energy efficiency the most profitable investment for utilities and results in the most overall benefits for the state economy, consumers, public health and the environment. Decoupling is consistent with this view and can result in the delivery of better quality, lower cost resources and services to utility customers.

Susan Clark stated that potential "confusion" surrounding decoupling might lead to customer resistance.[7] It should be noted that customer outcry and resistance to massive rate impacts from new costly nuclear power plants and fossil fuel charges have been well documented. Revenue decoupling with aggressive energy efficiency goals and incentives will defer new power plant construction and place downward pressure on utility bills. In the context of massive new rate increases, it is likely that customers would welcome a policy aimed at encouraging energy efficiency implementation that insulates them from such price shocks.

[7] Transcript: In the Matter of Revenue Decoupling, Staff Workshop, August 7, 2008, Pg 30

Similarly, some critics of decoupling mischaracterize decoupling as "guaranteeing a utility a revenue stream paid by consumers regardless of how much power they use. This effectively guarantees a utility's profits and eliminates business risks because customer rates are adjusted automatically to hold utility earnings harmless from fluctuations in consumer consumption."[8] This is an obvious mischaracterization, as the author states that the "revenue stream" and "utility earnings" are both guaranteed. Only in the theoretical case where costs are certain and not subject to control can this statement be true. However, decoupling provides an even greater cost-control incentive because the effects of poor cost-control are not masked by growth-driven revenue increases. In fact, the current regulatory structure imposes unfair costs on customers.

The use of growth as a rate-mitigation tool results in higher total costs for consumers and increased environmental harm from energy use. The benefits are illusory: delaying rate adjustments to allow the recovery of *approved* fixed costs is not cost savings but cost deferral. Over the long term, all customers will benefit from decoupling combined with ambitious energy efficiency requirements, through reduced costs and improved reliability.

Depending on the nature and pace of the energy efficiency procured, it is possible that some consumers will see short-term increases in their rates. We consider this rate adjustment effect acceptable, however, for several reasons. First, regulators are likely to adjust rates to allow the recovery of *approved* fixed costs with or without decoupling; with decoupling they do so through modest, periodic true ups; under traditional regulation they do so through more dramatic, less frequent rate adjustments. Second, with decoupling, total energy costs decline and, over time, all energy bills will decline. Third, decoupling mechanisms protect consumers from utility over-recovery of fixed costs. Finally, it is possible to target efficiency programs to serve low-income consumers and to increase low-income protection programs to ensure that any short-term increase in rates does not result in a decline in service.

There are some critics who oppose the isolation of utility revenues from other factors such as the normal business risk associated with weather. In fact, mechanisms to account for weather fluctuation are used in both decoupling and other regulatory circumstances. These well-established methods are routinely used in decoupling mechanisms to avoid reallocation of weather risk by using weather-adjusted retail sales rather than actual sales to calculate appropriate rate true-ups.[9] Regulators will be able to make weather-related adjustments before determining whether or not utilities have met specified efficiency targets.

Some critics prefer to limit decoupling to residential and commercial customer service classes. We disagree with this approach. The reductions in annual energy use that

---

[8] Kowalczyk, I, "Additional Comments in PUE-2007-00049," MeadWestvaco Corporation letter to Virginia State Corporation Commission, August 21, 2007.

[9] Idaho Power (2006). *Idaho Power's Application to Implement a Rate Mechanism to Mitigate Financial Disincentives to Investment in Energy Efficiency,* Case No. IPC-E-04-15.

Idaho Public Utilities Commission (2007). *Order No 30215 in the Matter of the Petition of Idaho Power Company for Modification of the Load Growth Adjustment Factor within the Power Cost Adjustment (PCA) Methodology,* Case No. IPC-E-06-08.

result from energy efficiency will benefit customers in all classes. Moreover, some of the most cost-effective efficiency opportunities lie with industrial customers. However, it may be appropriate to design the decoupling mechanism to ensure that there is no unjustified shifting of recovery of revenues from one class of customers to another.

Some other critics are concerned that decoupling sends an inappropriate price signal to customers when a portion of their bill goes up even though they are making the effort to conserve. Although this effect is real, it is insignificant. Consumers who invest in energy efficiency can reduce their energy bills by as much as 30 percent, perhaps more. In contrast, the modest adjustments to their bill due to decoupling are unlikely to fluctuate more than a few percentage points, and the fluctuations can go in either direction. Given the relative size of bill savings and rate adjustments, we do not believe that the rate adjustments will discourage consumers from improving efficiency. In addition, as utilities increase their investments and efforts, a much larger number of consumers will have the opportunity to participate in energy efficiency programs, thereby increasing awareness among consumers of the potential scale of bill savings that efficiency can deliver.

It is important to note that while revenue decoupling removes the disincentive for energy efficiency implementation, it does not provide an incentive for the aggressive pursuit of energy efficiency measures. A revenue decoupling policy, in combination with energy efficiency incentives, can significantly improve utility energy efficiency and demand side renewable energy performance in Florida. Putting a priority on energy efficiency and renewable energy means that the Commission should *at least* level the financial "playing field." Therefore, it may be appropriate for a utility to receive financial incentives if it performs well in achieving energy efficiency goals. Penalties for poor performance may also be appropriate. The incentives used in other jurisdictions include shared savings; performance targets, which may include energy savings goals, cost-effectiveness goals, and other factors; and a rate of return adder.[10]

Conclusion

In summary, our impression of Florida's track record with respect to energy efficiency is not as rosy as expressed by Ms. Clark. We are not unique in this perspective. The 2008 energy bill (HB 7135) shows the Florida Legislature's intent to address barriers to greater efficiency as it tasked the Florida Public Service Commission to evaluate utility revenue decoupling, and make recommendations to the Governor, the legislature by January 1, 2009, as a potentially powerful tool to unleash greater energy efficiency in Florida.

Electricity consumers in Florida look to our utility regulators to best manage their electricity cost, risks and opportunities, to obtain reasonable value while assuring access to safe, reliable energy for everyday life, now and in the future. Decoupling is especially needed to help smaller consumers in dealing with capital costs vs. fuel

[10] Rate of return adders are sometimes also considered a method for addressing the utility disincentive to energy efficiency. If a given performance incentive is large enough and structured properly, it can serve dual purposes in an indirect fashion. However, we note that it is possible to structure a performance incentive in such a way that it overcompensates for some energy efficiency programs even as it creates a disincentive for other programs.

costs. The basis for the rate structure and the rate-setting process in Florida has a lot to do with who bears the risks, the customer or the utility.

In short, Florida has not adopted key best practices that lead utilities to perform at high levels of energy efficiency, and the lack of performance is evident. Exaggerated claims about performance and limited results help show why the FL Legislature was correct to direct the PSC to replace the RIM test and develop a replacement that captures more energy efficiency, such as the Total Resource Cost test.

We're looking for energy efficiency in Florida, to reduce consumer electric bills, avoid unnecessary capital investment, promote economic security and substantially reduce production of dangerous global warming pollution.

Sincerely,

John D. Wilson
Director of Research