NATURAL RESOURCES DEFENSE COUNCIL

August 29, 2008

Ms. Karen Webb
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

RE: Natural Resources Defense Council comments on Florida's Workshop on Utility Revenue Decoupling to develop a report and recommendations pursuant to the provisions of House Bill 7135

The Natural Resources Defense Council (NRDC) is once again thankful for the opportunity to present comments on Utility Revenue Decoupling in order to help generate a report and recommendations pursuant to House Bill 7135. NRDC is a national not-for-profit environmental organization, with over 1.2 million members and activists, and close to 30,000 members within the State of Florida. We work on all environmental issues and within our Energy Program, making energy efficiency a viable alternative to additional generation is our top priority. We believe Florida should make energy efficiency the favored resource to meet any increases in energy demand and that utility involvement in the delivery of energy efficiency programs is crucial to the success of this policy goal. In order to make utilities effective partners in the implementation and deployment of energy efficiency initiatives, revenue decoupling must be implemented to sever the link between volumetric sales and the recovery of approved revenue requirements. Attached you will find our comments on this matter.

Respectfully Sumitted,

Luis Martinez Marti
Staff Attorney
Natural Resources Defense Council

40 West 20 Street
New York, NY 10011
tel 212 727-2700 fax 212 727-1773

Discussion of the reasons for underinvestment in cost effective Energy Efficiency and the need for Decoupling:

Overwhelming evidence has been marshaled in recent years by the National Research Council of the National Academy of Sciences, the U.S. Congress's Office of Technology Assessment, the National Association of Regulatory Utility Commissioners, and the national laboratories, among many others. Although "[t]he efficiency of practically every end use of energy can be improved relatively inexpensively,"[1] "customers are generally not motivated to undertake investments in end-use efficiency unless the payback time is very short, six months to three years . . . The phenomenon is not only independent of the customer sector, but also is found irrespective of the particular end uses and technologies involved."[2] Typically, customers are demanding rates of return of 40-100+%, and such expectations differ sharply from those of investors in utility assets. Utilities' returns on capital average 12% or less. The imbalance between the perspectives of consumers and utilities invite large, relatively low-return investments in supplies that could be displaced with more lucrative energy efficiency. These widely documented market failures generate "systematic underinvestment in energy efficiency," resulting in energy consumption at least 20-40% higher than cost-minimizing levels.[3]

There are many explanations for the almost universal reluctance to make long-term energy efficiency investments.[4]

---

[1] U.S. National Academy of Sciences Committee on Science, Engineering and Public Policy, Policy Implications of Greenhouse Warming, p. 74 (1991). A more recent review of energy-efficiency opportunities and barriers appears in National Research Council, Energy Research at DOE: Was it Worth It? (September 2001).

[2] National Association of Regulatory Utility Commissioners, Least Cost Utility Planning Handbook, Vol. II, p. II-9 (December 1988).

[3] See M. Levine, J. Koomey, J. McMahon, A. Sanstad & E. Hirst, Energy Efficiency Policy and Market Failures, 20 Annual Review of Energy and the Environment 535, 536 & 547 (1995).

[4] An extensive assessment appears in U.S. Congress, Office of Technology Assessment, Building Energy Efficiency, at pp. 73-85

Decisions about efficiency levels often are made by people who will not be paying the utility bills, such as landlords or developers of commercial office space. Many buildings are occupied for their entire lives by very temporary owners or renters, each unwilling to make long-term improvements that would mostly reward subsequent users. And sometimes what looks like apathy about efficiency merely reflects inadequate information or time to evaluate it, as everyone knows who has rushed to replace a broken water heater or furnace.

Market failures like these mean that energy prices alone are a grossly insufficient incentive to exploit even the most inexpensive savings: NARUC analysts have determined, for example, that electricity customers who insist on two-year paybacks and see average rates of 7 cents/kWh "can be expected to forego demand-side measures with costs of conserved energy of more than 0.9 cents/kWh."[5] That is, energy prices would have to increase about eightfold to overcome the gap that typically emerges in practice between the perspectives of investors in energy efficiency and production, respectively. Revenue decoupling removes the disincentive for utilities to support energy efficiency and thereby aligns shareholder interests with those of consumers in order to (i) promote investments that reduce energy costs as well as the environmental and public health impacts of energy use, and (ii) prevent either over- or under-recovery of approved fixed costs. Over the long-term, all customers will benefit from decoupling, combined with ambitious energy efficiency targets, through reduced costs and improved reliability.

Moreover, to reduce global warming pollution on the scale and timeframe needed to avoid potentially catastrophic impacts, and to do so at minimal cost, it is essential for states to craft energy policies that will drive investment in all cost-effective energy

(..continued)
(1992).

[5] National Association of Regulatory Utility Commissioners, note 7 above, p. II-10.

efficiency, which means every avoided kilowatt-hour or therm that one can procure for less than it costs to generate and deliver a kilowatt-hour or therm. Numerous independent and state-sponsored analyses show that enormous quantities of energy efficiency are available at costs substantially below those of supply, in many cases enough to meet all projected demand growth.[6]

Role for Utilities in Energy Efficiency:

While NRDC supports a variety of delivery methods for energy efficiency, including state authorities such as the New York State Energy Research and Development Authority (NYSERDA) and energy efficiency utilities such as Efficiency Vermont, we believe that utilities are essential to any strategy that seeks an order of magnitude increase in efficiency investments. This will require federal appliance and equipment efficiency standards, state appliance and efficiency standards and building codes, and targeted market transformation programs, but it will also require procurement standards, such as California's loading order, which requires utilities to purchase all cost-effective energy efficiency first, or an Energy Efficiency Resource Standard (EERS), which would require all utilities to meet their load with a minimum percentage of energy efficiency.

Utilities have a significant role to play in supporting and implementing all of these policies. They have a detailed knowledge of their customers' patterns of energy use, unparalleled access to customers, name recognition and a long-standing presence in the communities they serve. As a result of this existing infrastructure and information base, they are uniquely positioned to help secure and implement energy efficiency policies. NRDC is convinced that states will be able to meet their efficiency goals more quickly and at lower cost if utilities play an active role in

[6] See e.g., Nadel, Steve, Anna Shipley and Neal Elliott, *The Technical, Economic and Achievable Potential for Energy-Efficiency*

this arena, but they can only do so under regulations that decouple profits from sales.

Intention of Utility Revenue Decoupling:

Electric or Gas utilities almost always recover most of their fixed costs through the rates they charge per kilowatt-hour or per therm. In other words, a part of the cost of every kWh o Therm represents the system's fixed costs of existing plant and equipment, while the rest of the charge collects the variable cost of producing that kilowatt-hour or delivering that Therm. After approving a fixed-cost revenue requirement, the Commission sets rates based on assumptions about annual sales. If sales lag below those assumptions, the company will not recover its approved fixed-cost revenue requirement. By contrast, if the companies were successful in promoting consumption above regulators' expectations, shareholders would earn a windfall in the form of cost recovery that exceeded the approved revenue requirement. And whether consumption ends up above or below regulators' expectations, every reduction in sales from efficiency improvements yields a corresponding reduction in cost recovery, to the detriment of shareholders.

This existing method for ratemaking creates a direct financial disincentive for utilities to support energy efficiency and clean distributed generation such as solar photovoltaics, small wind turbines, fuel cells and combined heat and power (CHP). The purpose of a decoupling mechanism is to remove this disincentive, and thereby align shareholder interests with those of consumers in order to (i) promote investments that reduce energy costs as well as the environmental and public health impacts of energy use, and (ii) prevent either over- or under-recovery of approved fixed costs.

(..continued)
in the U.S. – A Meta-Analysis of Recent Studies, published by the American Consortium for an Energy Efficiency Economy (2004).

A large number of Public Utility Commissions around the country are studying the benefits of implementing revenue decoupling mechanisms. A recent study performed by the Regulatory Assistance Project[7] for the Minnesota Public Utilities Commission, available at http://www.raponline.org/Pubs/MN-RAP_Decoupling_Rpt_6-2008.pdf and also attached clarified that:

> [D]ecoupling takes aim at one of the critical barriers to increased investment in cost-effective energy efficiency and other clean energy resources located "behind the customer's meter"— namely, the potentially deleterious impacts that such investment can have on utility finances under traditional cost-of-service regulation. Traditional regulation, which is an exercise in price-setting, creates an environment in which revenue levels are a function of sales—kilowatts, kilowatt-hours, or therms. Consequently, a utility's profitability depends on maintaining or, more often, increasing sales, even though such sales may be, from a broader societal perspective, economically inefficient or environmentally harmful.
>
> All regulation is, in one way or another, incentive regulation. A question all policymakers should ask is: how does a regulated company make money? What are the incentives it faces and do they cause it to act in a manner that is most consistent with, and most able to advance, the state's public policy objectives? And, if not, how should regulatory methods be reformed to correct such deficiencies?
>
> Traditional regulation does not set a utility's revenues, only its prices. Once prices are set, the utility's financial performance depends on two factors: its levels of electricity sales and its ability to manage its costs. Because, under most circumstances, a utility's marginal revenue (i.e., price) significantly exceeds its short-run marginal costs, the impacts on profits from changes in sales can be profound. Moreover, the change in profits is disproportionately greater than the change in revenues. A utility therefore typically has a very strong incentive to increase sales and, conversely, an equally strong incentive to protect against decreases in sales.[2] This is referred to as the "throughput incentive," and it inhibits a company from supporting investment in and use of least-cost energy resources, when they are most efficient, and it encourages the company to promote incremental sales, even when they are wasteful.

[7] The Regulatory Assistance Project (RAP) is a non-profit organization, formed in 1992 by experienced utility regulators, that provides research, analysis, and educational assistance to public officials on electric utility regulation. www.raponline.org

> The solution to the throughput problem is to adopt a means of collecting a utility's revenue needs that is not related to its actual volumes of sales. Decoupling, whereby the mathematical link between sales volumes and revenues is broken, eliminates the throughput incentive and focuses a utility's attention on its customers' energy service requirements and the economic efficiency of its own operations.[3] It renders revenue levels immune to changes in sales. Of equal importance, decoupling allows for the retention of volumetric, unit-based pricing structures that reflect the long-term economic costs of serving demand and preserves the linkage between consumers' energy costs and their levels of consumption.

Previous Experience with Revenue Decoupling:

Many states such as California, New York, New Jersey, Maryland and Massachusetts have implemented revenue decoupling mechanisms for both their gas and electric utilities. A large number of other states have implemented revenue decoupling mechanisms for either their gas or electric service or are considering doing so and we have attached an updated map which we produce that tracks the jurisdictions that have implemented this approach as of August 2008.

Method for Decoupling Revenues from Sales:

Decoupling mechanisms introduce modest, regular true-ups in rates to ensure that any fixed costs recovered through volumetric charges are not held hostage to sales volumes. The state regulatory community has more than two decades of experience with such mechanisms, which involve a simple comparison of actual fixed cost revenues to authorized revenues, followed by an equally simple true-up calculation to reconcile the difference. The result is then either refunded to customers or restored to the Company. Note that the true-up can go in either direction, depending on whether actual fixed-cost revenues are above or below the authorized level, and typically these rate impacts are in the range of two percent or less. This will correct for disparities

between the utility's actual fixed cost recoveries and the revenue requirements approved by the Commission. Thus, revenue 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. Instead of increasing profits by increasing sales, utilities are only able to increase profits by improving performance, specifically by reducing total energy costs and improving reliability and service.

Therefore a well designed decoupling mechanism does not shift risks from utilities to consumers, but rather shifts the variables that determine utilities' financial health. Instead of increasing profits by increasing sales, utilities will only be able to increase profits by improving performance, specifically by reducing total energy costs and/or improving reliability and service. Additionally, many jurisdictions are mandating the implementation of demand side energy efficiency measures and allowing utilities to earn a profit by meeting or exceeding performance goals. While it is true that such a decoupling mechanism avoids the risk of under-recovery of fixed costs for utilities (currently prevalent in the gas sector), it also avoids the risk to consumers of over-recovery (currently prevalent in the electric sector).

Application of Decoupling:

A good RDM should meet the following criteria:

- Decoupling must break the link between profits and sales.
    - Set allowed revenue and true-up actual revenues to allowed revenues.
    - Incentives for reliability (or anything else) and collection of deferred revenue should not be tied to sales.

- Allowed revenues should be adjusted for desirable or unexpected and unavoidable factors that increase or decrease costs.
    - Growth in customers, jobs and businesses are all desirable factors that might drive up costs.
        - If these factors go down, costs should go down, as should allowed revenues.
    - Extreme storms or weather events are factors that might unexpectedly and unavoidably drive up costs.
    - Allowed revenues should be adjusted on a customer class basis if there are significant factors unique to each class.
- Adjustments to revenue, actual revenues, and true-ups should be calculated in a transparent way.
    - Any factors used to adjust allowed or actual revenue should be outside of the utilities' control.
    - Any adjustment formulas should be simple and readily replicable by any active party.
    - Adjustments based on number of customers and customer class should be carefully reviewed to avoid incentives for gaming.
    - Actual revenues can be weather normalized before being compared to allowed revenues as long as the weather normalization does not require overly complex calculations.
- Deferrals of rebates or surcharges should be avoided to the greatest extent possible.

- Adjustments and true-ups should be done as often as practical without creating overly complex calculations.
- Limits on true-ups to avoid rate volatility or rate increases during economic down-turns may be appropriate, but the need for such limits should be determined with consideration of the deferral costs they impose.
- Frequent true-ups keep rates more in-line with average short-term costs.

Comparison of Revenue Decoupling to other mechanisms:

We do not believe that other mechanisms create comparable incentives that will maximize investment in cost-effective energy efficiency. For example, lost revenue recovery only avoids the financial loss to the utility of specific efficiency programs. It does not cover losses associated with broader policies, such as efficiency standards and carbon caps. And it does nothing to reduce the harm to consumers that results from utility over-recovery of fixed costs. Fixed customer charges similarly remedy the problem of utility fixed cost recovery without providing comparable benefits for consumers, with the added disadvantage that they diminish the price signal and the economic benefit for consumers who reduce their energy consumption by improving efficiency. They are also more disruptive to current rate structures than the modest true-ups that decoupling requires. Codes and standards and energy efficiency programs supported by system benefit charges are important components of a comprehensive strategy to secure all cost-effective energy efficiency, but current regulation discourages utilities from supporting either of these, and neither is sufficient to deliver all cost-effective energy efficiency continuously over the long term.

Conclusion:

As discussed above, NRDC supports a variety of delivery mechanisms for energy efficiency, but we are convinced that utilities should be involved in at least some elements of efficiency policy due to their intimate knowledge of customer energy use, their unparalleled access to customers and customer information and, quite frankly, the political power they can exert in favor of, or in opposition to, clean energy policies. In order to make utilities effective partners in the implementation and deployment of energy efficiency initiatives, revenue decoupling must be implemented to sever the link between volumetric sales and the recovery of approved revenue requirements. Finally, while revenue decoupling removes the disincentive it does not provide an incentive for utility delivered energy efficiency. We urge the commission to also consider establishing efficiency savings targets and possibly awarding performance based financial incentives.

NATURAL RESOURCES DEFENSE COUNCIL

August 29, 2008

Ms. Karen Webb
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

RE: Natural Resources Defense Council comments on Florida's Workshop on Utility Revenue Decoupling to develop a report and recommendations pursuant to the provisions of House Bill 7135

The Natural Resources Defense Council (NRDC) is once again thankful for the opportunity to present comments on Utility Revenue Decoupling in order to help generate a report and recommendations pursuant to House Bill 7135. NRDC is a national not-for-profit environmental organization, with over 1.2 million members and activists, and close to 30,000 members within the State of Florida. We work on all environmental issues and within our Energy Program, making energy efficiency a viable alternative to additional generation is our top priority. We believe Florida should make energy efficiency the favored resource to meet any increases in energy demand and that utility involvement in the delivery of energy efficiency programs is crucial to the success of this policy goal. In order to make utilities effective partners in the implementation and deployment of energy efficiency initiatives, revenue decoupling must be implemented to sever the link between volumetric sales and the recovery of approved revenue requirements. Attached you will find our comments on this matter.

Respectfully Sumitted,

Luis Martinez Marti
Staff Attorney
Natural Resources Defense Council

40 West 20 Street
New York, NY 10011
tel 212 727-2700 fax 212 727-1773

Discussion of the reasons for underinvestment in cost effective Energy Efficiency and the need for Decoupling:

Overwhelming evidence has been marshaled in recent years by the National Research Council of the National Academy of Sciences, the U.S. Congress's Office of Technology Assessment, the National Association of Regulatory Utility Commissioners, and the national laboratories, among many others. Although "[t]he efficiency of practically every end use of energy can be improved relatively inexpensively,"[1] "customers are generally not motivated to undertake investments in end-use efficiency unless the payback time is very short, six months to three years . . . The phenomenon is not only independent of the customer sector, but also is found irrespective of the particular end uses and technologies involved."[2] Typically, customers are demanding rates of return of 40-100+%, and such expectations differ sharply from those of investors in utility assets. Utilities' returns on capital average 12% or less. The imbalance between the perspectives of consumers and utilities invite large, relatively low-return investments in supplies that could be displaced with more lucrative energy efficiency. These widely documented market failures generate "systematic underinvestment in energy efficiency," resulting in energy consumption at least 20-40% higher than cost-minimizing levels.[3]

There are many explanations for the almost universal reluctance to make long-term energy efficiency investments.[4]

---

[1] U.S. National Academy of Sciences Committee on Science, Engineering and Public Policy, Policy Implications of Greenhouse Warming, p. 74 (1991). A more recent review of energy-efficiency opportunities and barriers appears in National Research Council, Energy Research at DOE: Was it Worth It? (September 2001).

[2] National Association of Regulatory Utility Commissioners, Least Cost Utility Planning Handbook, Vol. II, p. II-9 (December 1988).

[3] See M. Levine, J. Koomey, J. McMahon, A. Sanstad & E. Hirst, Energy Efficiency Policy and Market Failures, 20 Annual Review of Energy and the Environment 535, 536 & 547 (1995).

[4] An extensive assessment appears in U.S. Congress, Office of Technology Assessment, Building Energy Efficiency, at pp. 73-85

Decisions about efficiency levels often are made by people who will not be paying the utility bills, such as landlords or developers of commercial office space. Many buildings are occupied for their entire lives by very temporary owners or renters, each unwilling to make long-term improvements that would mostly reward subsequent users. And sometimes what looks like apathy about efficiency merely reflects inadequate information or time to evaluate it, as everyone knows who has rushed to replace a broken water heater or furnace.

Market failures like these mean that energy prices alone are a grossly insufficient incentive to exploit even the most inexpensive savings: NARUC analysts have determined, for example, that electricity customers who insist on two-year paybacks and see average rates of 7 cents/kWh "can be expected to forego demand-side measures with costs of conserved energy of more than 0.9 cents/kWh."[5] That is, energy prices would have to increase about eightfold to overcome the gap that typically emerges in practice between the perspectives of investors in energy efficiency and production, respectively. Revenue decoupling removes the disincentive for utilities to support energy efficiency and thereby aligns shareholder interests with those of consumers in order to (i) promote investments that reduce energy costs as well as the environmental and public health impacts of energy use, and (ii) prevent either over- or under-recovery of approved fixed costs. Over the long-term, all customers will benefit from decoupling, combined with ambitious energy efficiency targets, through reduced costs and improved reliability.

Moreover, to reduce global warming pollution on the scale and timeframe needed to avoid potentially catastrophic impacts, and to do so at minimal cost, it is essential for states to craft energy policies that will drive investment in all cost-effective energy

(..continued)
(1992).

[5] National Association of Regulatory Utility Commissioners, note 7 above, p. II-10.

efficiency, which means every avoided kilowatt-hour or therm that one can procure for less than it costs to generate and deliver a kilowatt-hour or therm. Numerous independent and state-sponsored analyses show that enormous quantities of energy efficiency are available at costs substantially below those of supply, in many cases enough to meet all projected demand growth.[6]

Role for Utilities in Energy Efficiency:

While NRDC supports a variety of delivery methods for energy efficiency, including state authorities such as the New York State Energy Research and Development Authority (NYSERDA) and energy efficiency utilities such as Efficiency Vermont, we believe that utilities are essential to any strategy that seeks an order of magnitude increase in efficiency investments. This will require federal appliance and equipment efficiency standards, state appliance and efficiency standards and building codes, and targeted market transformation programs, but it will also require procurement standards, such as California's loading order, which requires utilities to purchase all cost-effective energy efficiency first, or an Energy Efficiency Resource Standard (EERS), which would require all utilities to meet their load with a minimum percentage of energy efficiency.

Utilities have a significant role to play in supporting and implementing all of these policies. They have a detailed knowledge of their customers' patterns of energy use, unparalleled access to customers, name recognition and a long-standing presence in the communities they serve. As a result of this existing infrastructure and information base, they are uniquely positioned to help secure and implement energy efficiency policies. NRDC is convinced that states will be able to meet their efficiency goals more quickly and at lower cost if utilities play an active role in

[6] See e.g., Nadel, Steve, Anna Shipley and Neal Elliott, *The Technical, Economic and Achievable Potential for Energy-Efficiency*

this arena, but they can only do so under regulations that decouple profits from sales.

Intention of Utility Revenue Decoupling:

Electric or Gas utilities almost always recover most of their fixed costs through the rates they charge per kilowatt-hour or per therm. In other words, a part of the cost of every kWh o Therm represents the system's fixed costs of existing plant and equipment, while the rest of the charge collects the variable cost of producing that kilowatt-hour or delivering that Therm. After approving a fixed-cost revenue requirement, the Commission sets rates based on assumptions about annual sales. If sales lag below those assumptions, the company will not recover its approved fixed-cost revenue requirement. By contrast, if the companies were successful in promoting consumption above regulators' expectations, shareholders would earn a windfall in the form of cost recovery that exceeded the approved revenue requirement. And whether consumption ends up above or below regulators' expectations, every reduction in sales from efficiency improvements yields a corresponding reduction in cost recovery, to the detriment of shareholders.

This existing method for ratemaking creates a direct financial disincentive for utilities to support energy efficiency and clean distributed generation such as solar photovoltaics, small wind turbines, fuel cells and combined heat and power (CHP). The purpose of a decoupling mechanism is to remove this disincentive, and thereby align shareholder interests with those of consumers in order to (i) promote investments that reduce energy costs as well as the environmental and public health impacts of energy use, and (ii) prevent either over- or under-recovery of approved fixed costs.

(..continued)
in the U.S. – A Meta-Analysis of Recent Studies, published by the American Consortium for an Energy Efficiency Economy (2004).

A large number of Public Utility Commissions around the country are studying the benefits of implementing revenue decoupling mechanisms. A recent study performed by the Regulatory Assistance Project[7] for the Minnesota Public Utilities Commission, available at http://www.raponline.org/Pubs/MN-RAP_Decoupling_Rpt_6-2008.pdf and also attached clarified that:

> [D]ecoupling takes aim at one of the critical barriers to increased investment in cost-effective energy efficiency and other clean energy resources located "behind the customer's meter"— namely, the potentially deleterious impacts that such investment can have on utility finances under traditional cost-of-service regulation. Traditional regulation, which is an exercise in price-setting, creates an environment in which revenue levels are a function of sales—kilowatts, kilowatt-hours, or therms. Consequently, a utility's profitability depends on maintaining or, more often, increasing sales, even though such sales may be, from a broader societal perspective, economically inefficient or environmentally harmful.
>
> All regulation is, in one way or another, incentive regulation. A question all policymakers should ask is: how does a regulated company make money? What are the incentives it faces and do they cause it to act in a manner that is most consistent with, and most able to advance, the state's public policy objectives? And, if not, how should regulatory methods be reformed to correct such deficiencies?
>
> Traditional regulation does not set a utility's revenues, only its prices. Once prices are set, the utility's financial performance depends on two factors: its levels of electricity sales and its ability to manage its costs. Because, under most circumstances, a utility's marginal revenue (i.e., price) significantly exceeds its short-run marginal costs, the impacts on profits from changes in sales can be profound. Moreover, the change in profits is disproportionately greater than the change in revenues. A utility therefore typically has a very strong incentive to increase sales and, conversely, an equally strong incentive to protect against decreases in sales.[2] This is referred to as the "throughput incentive," and it inhibits a company from supporting investment in and use of least-cost energy resources, when they are most efficient, and it encourages the company to promote incremental sales, even when they are wasteful.

[7] The Regulatory Assistance Project (RAP) is a non-profit organization, formed in 1992 by experienced utility regulators, that provides research, analysis, and educational assistance to public officials on electric utility regulation. www.raponline.org

> The solution to the throughput problem is to adopt a means of collecting a utility's revenue needs that is not related to its actual volumes of sales. Decoupling, whereby the mathematical link between sales volumes and revenues is broken, eliminates the throughput incentive and focuses a utility's attention on its customers' energy service requirements and the economic efficiency of its own operations.[3] It renders revenue levels immune to changes in sales. Of equal importance, decoupling allows for the retention of volumetric, unit-based pricing structures that reflect the long-term economic costs of serving demand and preserves the linkage between consumers' energy costs and their levels of consumption.

Previous Experience with Revenue Decoupling:

Many states such as California, New York, New Jersey, Maryland and Massachusetts have implemented revenue decoupling mechanisms for both their gas and electric utilities. A large number of other states have implemented revenue decoupling mechanisms for either their gas or electric service or are considering doing so and we have attached an updated map which we produce that tracks the jurisdictions that have implemented this approach as of August 2008.

Method for Decoupling Revenues from Sales:

Decoupling mechanisms introduce modest, regular true-ups in rates to ensure that any fixed costs recovered through volumetric charges are not held hostage to sales volumes. The state regulatory community has more than two decades of experience with such mechanisms, which involve a simple comparison of actual fixed cost revenues to authorized revenues, followed by an equally simple true-up calculation to reconcile the difference. The result is then either refunded to customers or restored to the Company. Note that the true-up can go in either direction, depending on whether actual fixed-cost revenues are above or below the authorized level, and typically these rate impacts are in the range of two percent or less. This will correct for disparities

between the utility's actual fixed cost recoveries and the revenue requirements approved by the Commission. Thus, revenue 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. Instead of increasing profits by increasing sales, utilities are only able to increase profits by improving performance, specifically by reducing total energy costs and improving reliability and service.

Therefore a well designed decoupling mechanism does not shift risks from utilities to consumers, but rather shifts the variables that determine utilities' financial health. Instead of increasing profits by increasing sales, utilities will only be able to increase profits by improving performance, specifically by reducing total energy costs and/or improving reliability and service. Additionally, many jurisdictions are mandating the implementation of demand side energy efficiency measures and allowing utilities to earn a profit by meeting or exceeding performance goals. While it is true that such a decoupling mechanism avoids the risk of under-recovery of fixed costs for utilities (currently prevalent in the gas sector), it also avoids the risk to consumers of over-recovery (currently prevalent in the electric sector).

Application of Decoupling:

A good RDM should meet the following criteria:

- Decoupling must break the link between profits and sales.
    - Set allowed revenue and true-up actual revenues to allowed revenues.
    - Incentives for reliability (or anything else) and collection of deferred revenue should not be tied to sales.

- Allowed revenues should be adjusted for desirable or unexpected and unavoidable factors that increase or decrease costs.
    - Growth in customers, jobs and businesses are all desirable factors that might drive up costs.
        - If these factors go down, costs should go down, as should allowed revenues.
    - Extreme storms or weather events are factors that might unexpectedly and unavoidably drive up costs.
    - Allowed revenues should be adjusted on a customer class basis if there are significant factors unique to each class.
- Adjustments to revenue, actual revenues, and true-ups should be calculated in a transparent way.
    - Any factors used to adjust allowed or actual revenue should be outside of the utilities' control.
    - Any adjustment formulas should be simple and readily replicable by any active party.
    - Adjustments based on number of customers and customer class should be carefully reviewed to avoid incentives for gaming.
    - Actual revenues can be weather normalized before being compared to allowed revenues as long as the weather normalization does not require overly complex calculations.
- Deferrals of rebates or surcharges should be avoided to the greatest extent possible.

- Adjustments and true-ups should be done as often as practical without creating overly complex calculations.
- Limits on true-ups to avoid rate volatility or rate increases during economic down-turns may be appropriate, but the need for such limits should be determined with consideration of the deferral costs they impose.
- Frequent true-ups keep rates more in-line with average short-term costs.

Comparison of Revenue Decoupling to other mechanisms:

We do not believe that other mechanisms create comparable incentives that will maximize investment in cost-effective energy efficiency. For example, lost revenue recovery only avoids the financial loss to the utility of specific efficiency programs. It does not cover losses associated with broader policies, such as efficiency standards and carbon caps. And it does nothing to reduce the harm to consumers that results from utility over-recovery of fixed costs. Fixed customer charges similarly remedy the problem of utility fixed cost recovery without providing comparable benefits for consumers, with the added disadvantage that they diminish the price signal and the economic benefit for consumers who reduce their energy consumption by improving efficiency. They are also more disruptive to current rate structures than the modest true-ups that decoupling requires. Codes and standards and energy efficiency programs supported by system benefit charges are important components of a comprehensive strategy to secure all cost-effective energy efficiency, but current regulation discourages utilities from supporting either of these, and neither is sufficient to deliver all cost-effective energy efficiency continuously over the long term.

Conclusion:

As discussed above, NRDC supports a variety of delivery mechanisms for energy efficiency, but we are convinced that utilities should be involved in at least some elements of efficiency policy due to their intimate knowledge of customer energy use, their unparalleled access to customers and customer information and, quite frankly, the political power they can exert in favor of, or in opposition to, clean energy policies. In order to make utilities effective partners in the implementation and deployment of energy efficiency initiatives, revenue decoupling must be implemented to sever the link between volumetric sales and the recovery of approved revenue requirements. Finally, while revenue decoupling removes the disincentive it does not provide an incentive for utility delivered energy efficiency. We urge the commission to also consider establishing efficiency savings targets and possibly awarding performance based financial incentives.

Gas and Electric Decoupling in the US

August 2008