LOAD RETENTION RATES:  
A FRAMEWORK FOR REGULATORY EVALUATION

By John Wolfram

Since the U.S. economic downturn began in early 2008, many electric and gas utilities have experienced the loss of sizable commercial or industrial customers, either through consumption curtailments or outright closure of facilities. Because of the uncertainty surrounding economic recovery, utilities are asking, with increasing urgency, a fundamental question about how to address this business challenge. How can the utility find ways to shore up revenue from major customers while simultaneously supporting the community objective of retaining industry in the region?

One effective and practical answer to this question is Load Retention Rates. Load Retention Rates -- utility rates that typically provide discounts to particular customers -- are quite common in the electric and gas utility industry. Regulators in the U.S. have dealt with Load Retention Rates since at least the 1980s, when these rate structures became very prevalent. Interest in this type of incentive rate generally waned during the economic boom of the 1990s. However, the widespread decline of the global economy has stimulated a renewed interest in Load Retention Rates, and they are now returning to prominence across the country.

A general set of principles for the evaluation of Load Retention Rates has emerged from the broad body of regulatory deliberation spanning several decades. The purpose of this paper is to provide a summary of these well-established principles for utilities and regulators to use in evaluating these incentive rate tariffs. Such tariff offerings may also be generally referred to as "discount rates" for existing customers. Properly designed and administered discount rates can lead customers to make business decisions that are both financially attractive and economically efficient, providing advantages to the affected customer and other customers on the system. Utilities aiming to protect at-risk revenue streams should seriously consider the implementation of Load Retention Rates and take the factors noted here into account when doing so.

Load Retention Rates Defined

Generally, Load Retention Rates act as a vehicle for the utility to provide an economic incentive to large commercial or industrial customers to maintain a facility within the utility's service territory. The incentive is ordinarily provided in the form of a discount from the utility's standard tariff rates, terms or conditions.

Specifically, Load Retention Rates are rate structures aimed at persuading a customer to continue taking service from the utility when the customer is prepared to leave the system for economic
reasons. This applies both to customers considering relocation to another utility service territory and to those contemplating plant closure; the politics around each are quite different but the economics are largely the same. A rate discount lowers the operating costs of the business, which in theory should improve the customer's bottom line and thus help the utility to retain the load.

In the current economic climate, utilities are focusing their attention on Load Retention Rates, rather than on Economic Development Rates (which are rate structures aimed at attracting new industry to the service territory) in part because new projects are few and far between, but more so because almost all utilities have major commercial/industrial customers that provide a sizable revenue stream -- one that warrants additional protection in these uncertain times.

**Regulatory Criteria for Load Retention Rates**

When a utility is considering an incentive rate offering, several factors should be considered. The following inquiries address the key regulatory criteria that are pertinent to an efficient and effective rate design:

- Is the discount rate necessary?
- Is the discount rate sufficient?
- Does the discount rate exceed the marginal cost of providing service?
- Does the discount rate benefit all ratepayers?

*The discount must be necessary to retain the load.* It is important to make an objective determination of whether or not the discount is necessary to retain the load. The question is, absent a discount, will the customer locate somewhere else or otherwise leave the system? In order to verify that this requirement is met for existing customers, many utilities and/or regulators require a sworn affidavit from the customer confirming that absent the rate discount, the customer load would leave the system. Alternatively, further evidence that demonstrates the need for a rate discount may also be considered, including documented customer communications with neighboring utilities, financial and accounting reports of the customer demonstrating financial distress, requests for proposals, or forecasts showing the extent of the customer's financial risk on a prospective basis. It is also important to note that compliance with this criteria must be demonstrated by the customer, not by the utility; only the customer is properly positioned to provide adequate evidence that a potential discount is necessary for the customer to remain on the system.

*The discount must be sufficient to retain the load.* In other words, the rate discount must be set so that the rate benefit to the customer is enough to offset any economic incentive for the customer to close its operations or to be served by another utility. A corollary to this requirement is that the discount be minimized; in other words, the discount must not be any larger than required to achieve the objective. Any discount beyond the minimum necessary to secure the load is superfluous -- it is simply a contribution to the customer. Thus the discount must be sufficient -- but not more than sufficient. Regulators have recognized a balance between the need to offer a
discount to retain the load and not offering a discount that is larger than necessary to prevent the loss of a major utility customer and regional employer.

*The discounted rate must exceed the marginal cost of providing service.* This is so because it is not efficient to charge less than marginal cost for marginal usage. Thus the utility that implements an incentive rate will incur lost revenues (i.e. the difference in revenues between the standard rate and the discount rate) but will not incur negative margins by serving the load in question. This is an essential element of an efficient rate design.

*The discounted rate must benefit all ratepayers.* In many jurisdictions, there is a requirement that the discounted rate must benefit all ratepayers. There is no industry-wide consensus around this criteria. Some regulators require only that other rate classes are *made no worse off* by the offering of an incentive rate. Often, the requirement for "benefits" is interpreted to mean that the discounted rate should provide some contribution toward the utility's fixed costs -- an amount less than the contribution to fixed costs that is embedded in the standard tariff, but greater than zero. In this way, the other ratepayers benefit because this recovery of some utility fixed costs would not occur if the load were not served by the utility. Thus the discounted rate benefits other ratepayers by reducing the contributions required from them to cover the utility's fixed costs.

**Other Regulatory Considerations**

Incentive rates can benefit customers in a number of ways. Retention of a major customer through an incentive rate can keep a significant industry in the region, with direct, indirect, and induced economic effects that benefit the entire region. By retaining the load, the utility's costs are higher, but the revenues from the retained customer more than cover the added costs. As a result, the utility earnings are higher than they would otherwise have been (although not as high as if the customer were on the system under full standard rates).

An important feature of a Load Retention Rate tariff is whether the tariff sufficiently protects against "free riders." A free rider is a customer who receives the benefit of a rate discount but who has no actual need for the incentive -- in other words, an existing customer with no real intention of leaving the system. A generally available incentive rate, by itself, does not sufficiently protect against free riders. However, a Load Retention Rate built into a *special contract*, subject to approval by the regulator, is a standard approach for protecting against free riders. This allows for the individual consideration of each application of an incentive rate, and permits an individual customer demonstration of the requirements outlined above (i.e. that the discounted rate is necessary, is sufficient, exceeds marginal costs, and benefits all ratepayers).

Some utilities design discount rates such that the discount shrinks over time and is phased out by the end of a set period (e.g. a discount of 50% that declines by 10% each year so that after five years there is no discount). This design is more common among Economic Development Rates than among Load Retention Rates. While the temporary discount may be valuable for attracting load, the rate requirements for retaining load are not likely to differ in the future than they are today. In other words, a declining discount for a Load Retention Rate only serves to shift the risk of losing the load in question from today to the point in time at which the discounts expire.
If a customer remains on the system today because of the discount rate, there is no guarantee that it will do so in the future as the discounts are phased out. Thus, the phase out of discounts in a Load Retention Rate typically does not provide any advantage in the long term.

Finally, when the utility regulator evaluates the overall appropriateness of a Load Retention Rate, it is not merely appropriate but imperative for the regulator to consider the effects of the potential loss of a significant business in the community. The potential impacts of the decision regarding a Load Retention Rate have a legitimate and serious relevance to the public interest, so the regulator should give due consideration not only to ratemaking practice and precedent but also to the specific circumstances of the case. Many factors warrant review, including whether the customer is a major employer in the area, whether the business creates related employment and business opportunities for supporting industries in the region, whether the loss of the business leaves a void that cannot otherwise be filled, whether the business supports the community at large in other beneficial ways, and any other circumstances or facts unique to the particular proposal before the regulator. As long as the regulator evaluates the discount rate first by applying the proper criteria outlined in the framework provided here, all of these other factors should be given the appropriate weight by the regulator in its deliberations on the matter at large.

**Ratemaking Considerations**

The central ratemaking issue for approved load retention rates is whether the shareholders or the other ratepayers pay for the discount. In other words, during a rate proceeding, should the utility recover from other customers the difference in revenues between the discount rate and the standard tariff rate? Alternatively, will the regulator require the utility shareholders to absorb the "lost revenues" associated with the rate discount, by requiring that the utility impute revenues associated with the discount in the determination of the revenue requirement?

The answer varies by jurisdiction. Regulators in certain states have required shareholders to absorb the discount from standard tariff rates. Other regulators have authorized a sharing of lost revenues between the utility customers and shareholders. Typically, the argument for sharing says that because serving the customer load offers economic advantages both to utility customers (via a contribution to the utility's fixed costs) and to utility shareholders (via a contribution to utility earnings), the revenue loss stemming from the discount should also be shared. Simply put, if the utility customers are better off with the load than without it, then the shareholders are similarly better off with the load than without it, and thus should share in the lost revenue burden. In this case, the utility must impute the discount in test period revenues in a rate case when establishing the revenue requirement -- effectively setting rates for other customers as if the incentive rate customer had paid a "full fare" and letting shareholders absorb the difference.

Regulators in other jurisdictions, however, allow utilities to allocate the lost revenues to other rate classes for ratemaking purposes. The basis for doing so is the regulatory compact, which essentially grants utilities the right to earn a reasonable rate of return on investment in return for providing energy services with its service territory. Regulated utilities are entitled to a reasonable opportunity to recover their prudently-incurred costs. This principle was established in the landmark U.S. Supreme Court case, *Federal Power Commission et al v. Hope Natural Gas*
Regulated utilities are also entitled to earn a fair and reasonable rate of return on their capital investments. This principle was established in another landmark U.S. Supreme Court case, *Bluefield Water Works and Improvement Co. v. Public Service Commission of West Virginia* ("Bluefield"), 262 U.S. 679 (1923). Hope and Bluefield are cited almost universally by regulated utilities in the U.S. as a basis for setting rates that are fair, just and reasonable. At bottom, the question of whether a utility benefits from serving a particular load does not diminish the right of the utility to recover its prudently-incurred costs from customers and to earn a fair rate of return on its investment.

Continuing this argument, the only instance in which the utility shareholders would legitimately face exposure to lost revenues due to the implementation of an incentive rate is between rate cases. If an incentive rate is placed into effect between rate cases, the utility would be responsible for lost margins until the reduced revenues could be incorporated into base rates in the next rate case. This is no different from what would happen if a large customer were to close or curtail its operations; in that case, the fixed costs that were formerly recovered from the departing customer could then be recovered from the remaining customers in the utility's next general rate case proceeding. This is consistent with standard ratemaking principles.

**Conclusion**

During economic downturns, electric and gas utilities turn to Load Retention Rates as a ratemaking tool to help firm up revenues from at-risk large commercial and industrial customers. Load Retention Rate tariffs help the utility to keep major customers by providing the customer with a discount from the standard tariff rates, terms or conditions.

Utility regulators typically expect Load Retention Rates to be necessary, to be sufficient, to exceed marginal costs, and to benefit all utility customers. Offering such discounts between rate cases can expose utility shareholders to lost revenues, but many utility regulators will allow the utility to recover the discounts from other customers in the next rate case if the incentive rate offering meets the aforementioned four criteria.

Properly designed and administered Load Retention Rates can lead customers to make business decisions that are both financially attractive and economically efficient. Such decision-making provides an advantage to the utility, to the customer taking service under the incentive rate, to the other rate classes of the utility, and to the region as a whole. Utilities should thoroughly investigate and pursue the implementation of Load Retention Rates to help enhance and protect the revenue streams from large customers, especially during periods of widespread economic uncertainty.

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