Reports & papers

Are customers of Northwest utilities likely to pay higher electricity rates due to competition?

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A common refrain heard in the Pacific Northwest is that because we have low retail electricity rates compared to other regions, California in particular, our rates are likely to increase as electricity markets become more competitive. This perception rests on the assumption that competitive electricity prices are likely to be an average of consumers? current electricity prices over a wider market area. This is not the case.

Electricity bills are for more than electricity

Most consumers? electricity bills include far more than the cost of electricity itself. Transmission and distribution, utility meter reading and billing, and other services are ?bundled? into one bill along with the cost of the electricity itself. For most consumers, the electricity commodity only accounts for about half of their monthly bill. In a competitive market, each element of electricity service is likely to be priced separately, or ?unbundled.? Many of these components ? at a minimum transmission and distribution ? will remain regulated and will not be directly affected by competition.

Competition won't affect existing transmission and distribution costs

The fear that rural areas will see higher costs as a result of deregulation is a good example of confusing electricity commodity costs with other components of electricity bills. Rural electricity bills tend to be higher because distribution costs are high, not because the electricity component of rural residents? bills is more expensive.

There is no reason to expect adverse effects from competition on rural customers unless those customers? transmission and distribution costs are currently subsidized by discounts on the price of their electricity. It will be difficult to sustain such subsidies in the electricity commodity price in a competitive market because it would mean other consumers would be paying more than the competitive price to support that subsidy. However, even if there are subsidies embedded in rural electricity prices now, some other mechanism could be created to help rural customers.

Competition will affect the price of the electricity commodity

Unlike transmission and distribution however, the price of the electricity commodity **will** be affected by competition. Competition will result in a fundamental change in the way electricity prices are determined. In regulated markets, prices are set to recover all utility costs, so prices are equal to **average** costs per kilowatt-hour. In a competitive market, the lowest cost plants would be used first to meet the demand for electricity. As demand increases, higher cost plants would be started until the last plant needed to meet demand is put on line. The variable operating cost of that last plant needed

last plant needed to meet demand is put on line. The variable operating cost of that last plant needed in any time period determines the electricity price in that period. This is referred to as *marginal* cost pricing.

This principle is illustrated by the fact that much of the Bonneville Power Administration?s competition is from generators in California, an area that has much higher consumer electricity prices than the Northwest. Here?s why:

When California generating plants are not needed to meet California demand, and their power can be

sold in the Northwest at a price that is greater than the plants? variable operating costs (fuel, etc.), the owners are better off selling at that price and recovering some contribution to the plant?s fixed capital costs than they would be leaving the plants shut down. Thus, these plants can undercut Bonneville?s average costs even if their total costs are higher. The result is that competition from California can lower wholesale electricity prices in the Northwest even though consumers? regulated electricity costs in California remain much higher than consumer prices in the Northwest.

Market prices may not cover all utility costs

In the past, a utility could set prices to recover the full cost of running its plants because its customers were captive; they could not buy power from anyone else. Marginal cost pricing in a competitive market may not allow electric utilities to completely recover their fixed costs? primarily their investments in existing generating plants. These unrecovered costs are referred to in the industry as? stranded costs.? Most of the difference between California and Northwest consumers? total electricity costs will become part of a higher stranded cost in California.

As policy-makers deal with the restructuring of the electricity industry, they likely will create provisions for current utilities to recover some portion of their stranded costs during a transition period. The stranded cost recovery charge likely will be attached to the components of electricity service that continue to be regulated (e.g. distribution wires). If these costs are recovered completely from all electricity consumers, the total cost of electricity service may not go down much initially with competition, but the price of the electricity commodity will.

If a utility?s average cost is below the market price of electricity? some Northwest utilities may be in this position, but many aren?t? the utility would earn an extra profit on its electricity sales in a competitive market. This? windfall? profit is the mirror image of stranded costs. It seems reasonable that if consumers are to share in paying stranded costs, they should also share, in a symmetrical way, in excess profits created by competition. This could be accomplished through a credit applied to the utility?s distribution charge, for example.

Higher average costs in California need not mean higher bills for the Northwest

The fear that low-cost Northwest generators will sell their electricity to more lucrative California markets leaving customers in the Northwest with higher electricity prices is not warranted. There are two reasons for this; one related to competitive electricity commodity pricing, and the other to stranded cost recovery policy.

- (1) A Northwest utility selling in a competitive wholesale market is likely to net about the same price for its power whether it sells it in California or in the Northwest. This is because there is already an active West Coast wholesale market for electricity. As long as competing generators can ship electricity north and south, significant differences between wholesale market prices in California and the Northwest cannot persist. Even when transmission lines are full, the last plant needed to meet demand in California may be a natural gas fueled generator that is similar in design and fuel costs to the last plant needed in the Northwest. As a result, wholesale market prices (determined by marginal cost) will tend to be nearly equal in California and the Northwest.
- (2) Any stranded costs that are created by the restructuring of the electricity market will be primarily the responsibility of the consumers originally served by the utility that experiences stranded costs. The stranded costs may be shared with the shareholders of the utility, but they will not be shared outside of the utility?s original jurisdiction. That is, California?s stranded costs will not be recovered from Northwest purchasers of California generation. Those stranded costs will be recovered through a transition charge to California users of the distribution system and paid to the owners of the generation resources whose costs are above the market price of electricity.