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Economic Consulting

Regulated Support for Generation in Deregulated Markets

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How Markets Work℠

The Transition to Deregulated Markets is Not Complete

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- The transition is the change from having new generation which is planned and built with an explicit or implicit assurance of long term customer financial support to having new generation which is planned and built with generation owners responsible for long term economic risks
- Other aspects of deregulation – e.g., wholesale markets, transmission access and retail choice -- are tools to enable the end state whereby new generation is developed at the owner's risk

Upon Commencement of Deregulation a Generation Construction Boom Started

- The boom was fueled by merchant development with no customer backing
- The boom was not limited to areas where retail markets were deregulated and was in fact at its height in non retail deregulated areas
- The boom occurred in large part as a result of wholesale market spot price spikes which led to high forward prices
- The boom rapidly turned to a bust as a result of over development

After the First Round of Construction Merchant Construction Appetite Virtually Disappeared

- New plants were worth much less than investment
- Some plants had difficulty making debt payments
- Major players changed business strategy and abandoned merchant generation investment
- Current collective wisdom is that generation will be difficult to develop on a merchant basis

The Reluctance to Develop on a Merchant Basis Has Several Possible Causes

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- Energy price caps make new generation unprofitable
- Unwillingness of political system to let prices rise or supply shortages develop makes recovery of costs by merchants unlikely as the investment cycle will be biased toward excess capacity
- Returns are too volatile and depend on occurrence of low probability events making financing difficult
- In most areas surpluses exist and there is no immediate need for new generation
- Fear that the playing field is not level and uneconomic generation intended to crash the market will be encouraged and supported by states

  In reality all are true to a degree. The path forward depends on what problem is in most need of a solution.

The Desirability of the Transition's End State is Being Questioned

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- The issue has become as much whether to proceed to the end of the transition as how to proceed
- It is not clear that policy makers understood that transferring risks to generation owners also meant transferring rewards -- while new generation was financially devastated, the new owners of existing generation are prospering as prices increase
- Concerns have been expressed over fuel diversity and environmental impacts prompting calls for state planning
- Policy makers have not come to understand that supply shortages are shortages at a price and that price as well as construction can be used to alleviate the need for curtailments and show no sign of thinking that way
- Intervention by distribution utilities or states to support selective new construction is becoming more common

Transferring Long Term Ownership Risks from Customers to Investors Makes Sense but Faces Hurdles

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- From an economic perspective having those who make multi billion dollar investment decision bear the consequences should lead to more efficient decisions
- Customers will be exposed to pricing at the margin which will reflect current natural gas prices
- The idea that customers will enter long term contracts does not appear practical or realistic
- Deregulated states seem intent on state energy planning
- In the US many states which have not yet deregulated and almost all public power entities seem dead set against going in that direction
- Unlike Europe, where the EU can mandate market opening, no such power exists in the US

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Forward Capacity Markets (FCMs) Are a Possible Way Out

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- In an FCM the Market Operator holds capacity procurements with sufficient lead time to allow for new entry
- Winners sign binding contract to develop plant and receive a capacity payment that will supplement energy market earnings
- Losers will be discouraged from construction avoiding large surpluses
- Contracts will be for several years at most limiting customer long term risk
- All customers will pay the capacity payments made by the Market Operator
- All generators including existing generators receive payments
- FCM details are important and controversial

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Forward Capacity Markets Solve Many of the Issues Discouraging Merchant Investment

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- These markets can supplement revenues missing from capped energy markets
- These markets can reduce government intervention or state sponsored construction by assuring that sufficient supplies will be in place
- These markets can reduce investor perception of cash flow volatility by helping control over development – assuming only those winning in forward capacity procurements are likely to build
- In sum forward capacity markets solve many of the issue that are discouraging merchant investment and make a transition to merchant development possible

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There Is However No Guarantee that an FCM Will Satisfy Policy Makers

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- The FCM does not tackle fuel diversity or environmental concerns
- The FCM protects customers against the risks of long term ownership but also the benefits
- The jury is still out on whether state political forces will be swayed by concerns over customers bearing long term risks or will react to a desire to exercise greater control over supply sourcing

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FCMs Will Not Work if They Are Subject to Manipulation

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- NE LICAP proposal had a fatal flaw – it provided a very strong incentive for demand side manipulation through construction of uneconomic capacity
- The ability to reach agreement on an FCM proposal was critically dependent upon mechanisms to insulate the FCM from the impact of uneconomic ratepayer supported entry
- Using the regulated entry option to artificially lower prices would destroy the market
- At the same time the option, unexercised, can serve as potential competition and limit the incentive to take full advantage of short run price inelasticity of electric demand