Assessment of the Illinois DRIPE Proposal

Illinois Energy Efficiency Stakeholder Advisory Group

27 January 2015

NORTHBRIDGE

BACKGROUND

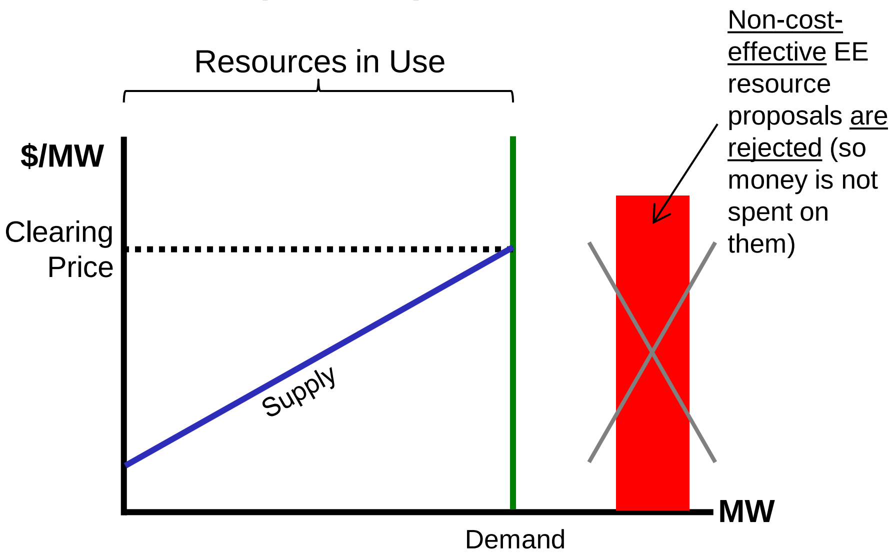
- The Illinois Commerce Commission (ICC) considers proposed energy efficiency (EE) measures as prescribed by Sections 8-103 and 16-111.5B of the Public Utilities Act.
- Such EE measures that are approved by the ICC are funded by Illinois electricity customers.
- Approval of such proposed EE measures is based on whether they satisfy the Total Resource Cost (TRC) Test, which is a determination of whether the EE measures' benefits exceed their costs.
- In the most recent IPA Procurement Plan docket (ICC Case No. 14-0588), the National Resources Defense Council (NRDC) introduced a proposal (DRIPE proposal) to change the calculation that is used when applying the TRC Test, and it relied upon a report issued by Resource Insight, Inc., to justify its proposal.
- Specifically, NRDC postulated that deployment of EE measures lowers market prices by reducing demand, so it proposed that an estimate of the resulting price suppression, or "DRIPE,"[1] for customers across the state be included as a "benefit" when evaluating EE measures for approval.
- Presumably, adoption of the DRIPE proposal would allow some EE measures, which currently would not pass the TRC Test, to pass the test and be approved.
- In its Final Order in that docket, the ICC determined that this issue should be addressed at workshops conducted by the Stakeholder Advisory Group.

[1] "DRIPE" is an acronym for "Demand Reduction Induced Price Effect."

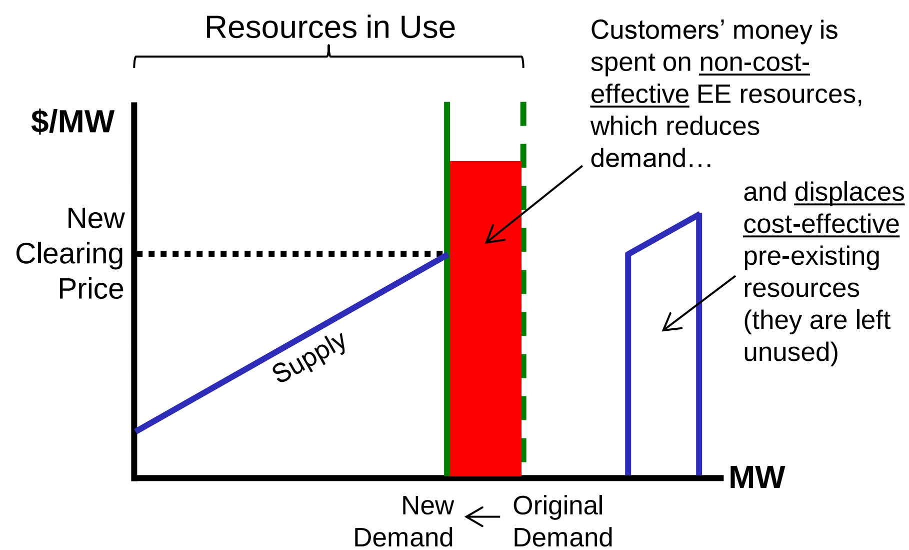
DRIPE PROPOSAL WOULD LEAD TO UNECONOMIC DECISIONS

Implementation of the DRIPE proposal would lead to economically inefficient resource decisions for society, as the new TRC Test would cause lower-cost resources to be replaced by higher-cost resources:

<u>Without</u> DRIPE Proposal Implementation



<u>With</u> DRIPE Proposal Implementation



- Without DRIPE proposal implementation, resources (including EE and other clean energy resources) compete on the basis of lowest cost, and the market price is set accordingly.
- This results in an efficient allocation of resources to serve the load.

- Implementation of the proposal would assign additional "benefit" to various contemplated EE resources, <u>not because they truly are cost-effective, but because increasing the quantity of resources in the market would temporarily suppress market prices</u>.
- This would result in an inefficient use and allocation of resources.

ANY INDUCED PRICE SUPPRESSION WOULD BE TEMPORARY

In assessing the effects of the DRIPE proposal, a key factor is the market's expected response, which would make any induced price suppression a temporary phenomenon:[1]

- The suppressed prices would have a detrimental effect on the economics of competitive resources, which in turn would accelerate resource retirements and/or defer new entry.

- This market response would reduce the amount of available resources in the system, offsetting the incremental quantity of the (more expensive) resources injected into the market by the DRIPE proposal and negating the price suppression induced by the DRIPE proposal.

- For various reasons, this market response could be swift:

  - Decisions to abstain from market entry or to retire existing resources can be made and executed by parties fairly quickly.

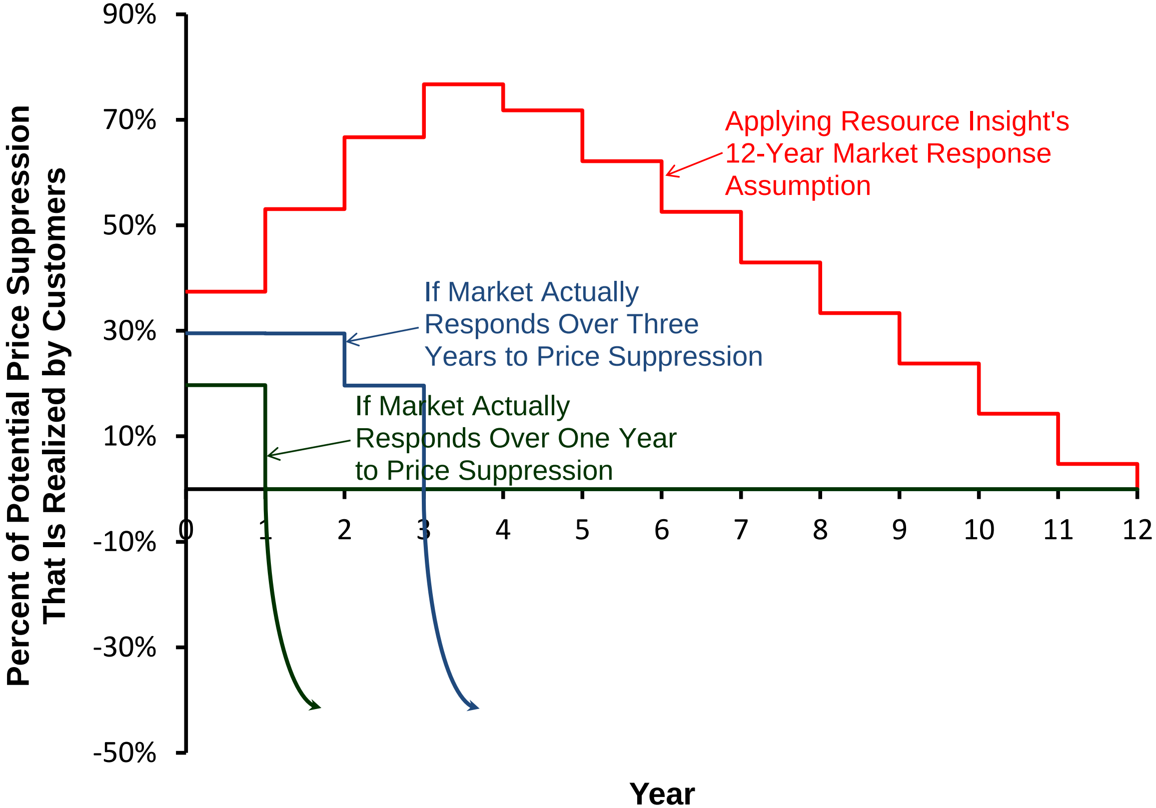
  - As recent public documents indicate,[2] there is a large amount of "at risk" capacity in the market that may not be able to withstand further reductions in market prices.

[1] In addition, supply costs for many customers are hedged for a foreseeable period of time (e.g., customer contracts with competitive retail suppliers, Illinois Power Agency contracts for utility-retained customers, etc.). In these cases, the lower supply prices would be realized by the energy sellers instead of by customers, and this would come at the expense of customers who bear the excess cost burden of the out-of-market EE resources procured through DRIPE proposal implementation. Resource Insight indicated that there is significant uncertainty about its assumption regarding the extent of such hedging, as it stated that the lack of relevant available data "is a significant limitation in any analysis of the extent to which Illinois customers' energy supply is hedged."

[2] *See* Illinois House Resolution 1146, issued May 29, 2014. *See* "2013 State of the Market Report for PJM, Volume 2," Monitoring Analytics, LLC (Independent Market Monitor for PJM), March 13, 2014, pp. 1, 233.

MARKET RESPONSE INVALIDATES THE ESTIMATED "BENEFIT"

- Resource Insight based its DRIPE proposal modeling on an unsupported[1] and dubious assumption that a full market response would take 12 years.
- Even if all of its other quantitative assumptions are accepted, **if we consider a full market response over a time period that is shorter, but that is still more than enough time for entry/retirement decisions, we find that Resource Insight's estimate of the purported DRIPE proposal "benefit" is essentially wiped out**:



As shown by comparing the areas under the curves, a full market response over three years would result in a price suppression effect realized by customers that is <u>85% lower than Resource Insight's estimate</u>, and a response over one year would result in an effect for customers that is <u>96% lower than Resource Insight's estimate</u>.[2]

Furthermore, an important <u>additional</u> consideration overlooked by Resource Insight is that the market response may be "lumpy," in that it may involve relatively large discrete responses such as the closure of a large generating unit. This could cause an overcompensating market response, <u>raising prices for customers</u> for a period of time.

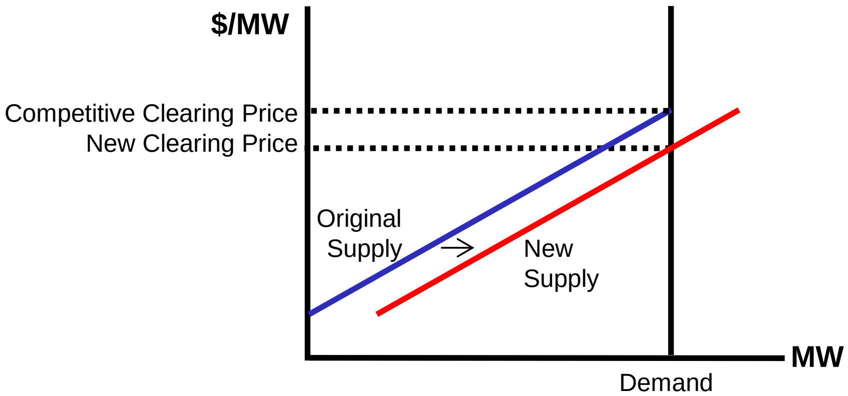
[1] Resource Insight simply claims: "[W]hile there are many uncertainties, [this assumption] may be reasonable." *(Analysis of Electric Energy DRIPE in Illinois," by Resource Insight, Inc., p. 18.)*

[2] Analysis of Electric Energy DRIPE in Illinois," by Resource Insight, Inc., p. 18.

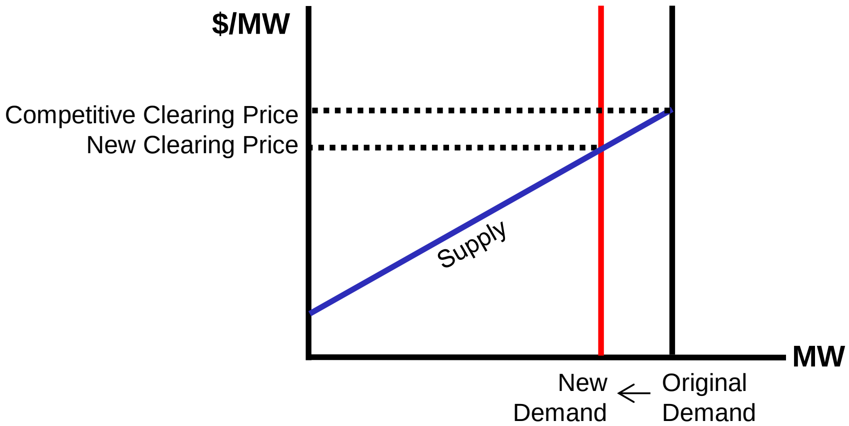
LONGER-TERM CONSEQUENCES MUST BE CONSIDERED

Price suppression can be attempted by subsidizing uneconomic supply projects (an approach garnering much attention in recent years, against which safeguards are being established by FERC) or by subsidizing uneconomic demand reduction projects (e.g., the DRIPE proposal). The choice of approach is immaterial – in either case, customers' money is spent on uneconomic projects with the intended purpose of suppressing market prices below competitive levels:

Subsidizing Uneconomic Generation to Suppress Prices



Subsidizing Uneconomic EE to Suppress Prices (DRIPE Proposal)



The detrimental longer-term consequences of such price suppression have been acknowledged by FERC as well as other experts, yet these effects are not reflected at all in Resource Insight's analysis:

- "Markets require appropriate price signals to alert investors when increased entry is needed. By allowing net buyers to artificially depress prices, these necessary price signals may never be seen. While a strategy of investing in uneconomic entry…may seem to be good for customers in the short-run, it can inhibit new entry, and thereby **raise price and harm reliability, in the long-run**." *122 FERC ¶ 61,211*
- "We caution that without real reform to limit the impact of state-led procurement activities, **credibility of investment prospects can be quickly eroded**…" *("Assessing the Effectiveness of US Capacity Markets," UBS Investment Research, September 10, 2013, submitted to FERC in Docket No. AD13-7-000)*

CONCLUSIONS

- Acceptance of the DRIPE proposal would not be in customers' best interests:
  - The proposal entails spending customers' money on resources that are not cost-competitive.
  - The proposal relies upon dubious and uncertain key assumptions (e.g., regarding the market response).
  - The proposal involves longer-term effects that raise (not lower) prices for customers in the long-run, and which Resource Insight has overlooked.
- In contrast, rejection of the DRIPE proposal will reassure parties that they will be able to compete in Illinois without the threat that their long-term investments will be devalued by regulatory market manipulation.
- This will better encourage innovation and competition across all resources on the basis of lowest cost, to the benefit of customers.
- This is critical, especially given the Public Utilities Act's guidance and mandates:
  - *Competition in the electric services market may create opportunities for new products and services for customers and lower costs for users of electricity.*
  - *A competitive wholesale and retail market must benefit all Illinois citizens. The Illinois Commerce Commission should act to promote the development of an effectively competitive electricity market that operates efficiently and is equitable to all consumers.*
  - *It is in the best interest of Illinois energy consumers to promote fair and open competition in the provision of electric power and energy and to prevent anticompetitive practices in the provision of electric power and energy."*

- (220 ILCS 5/) Public Utilities Act.