

***“Demand Response: Completing  
the Link Between Wholesale and  
Retail Pricing”***

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Response Programs”  
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- **Retail customers get better price signals regarding the market price of electricity**
- **Customers will incorporate this information into their electricity consumption decisions**
- **Economic efficiency is improved as customer's usage reflects actual market realities**

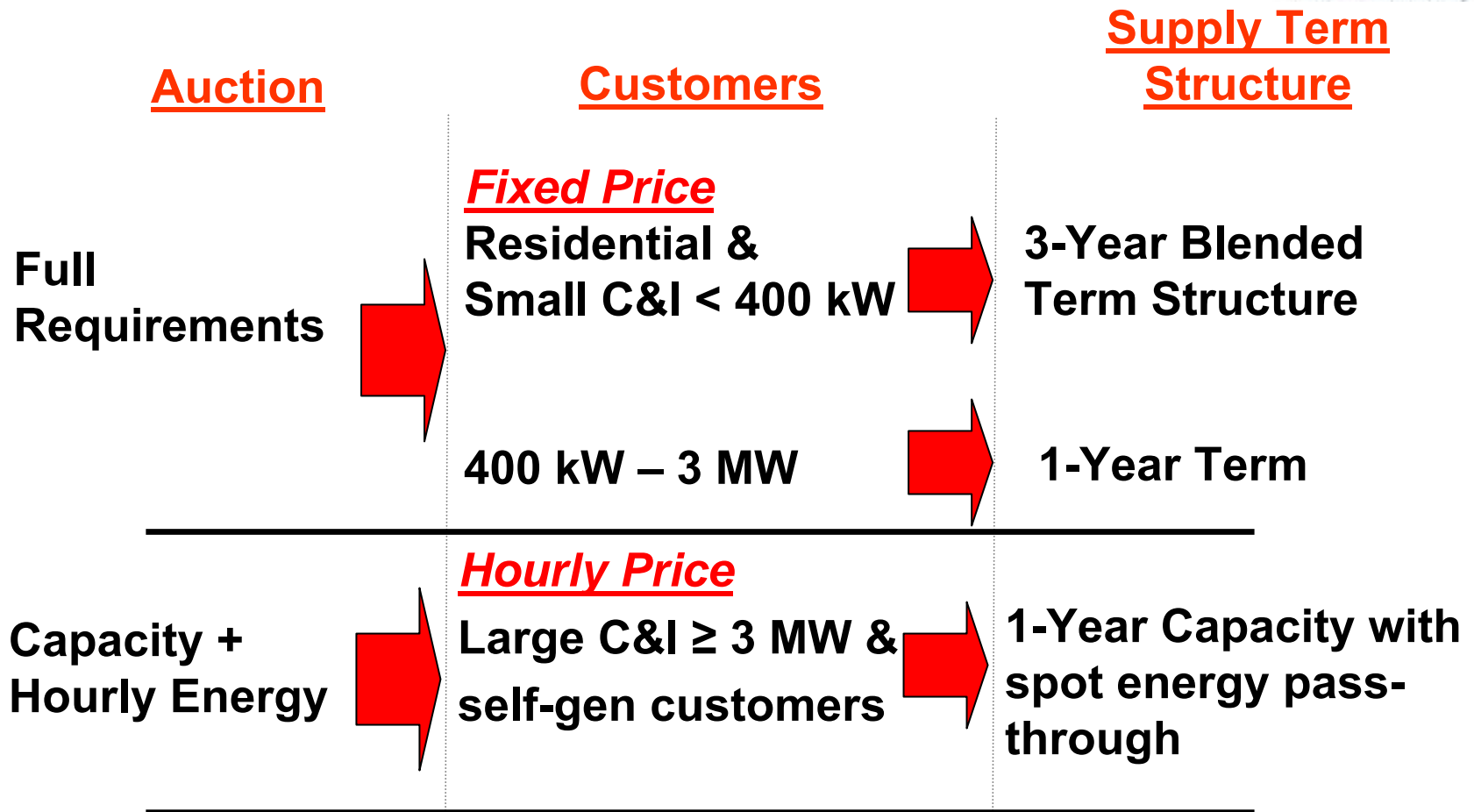
***“IT’S ALL ABOUT PRICE SIGNALS”***

- **Provide default service from wholesale procurement**
- **Offer hourly prices to all customers (*voluntary product*)**
- **Facilitate retail demand response programs**

# The Illinois Auction Will Reflect Market Price



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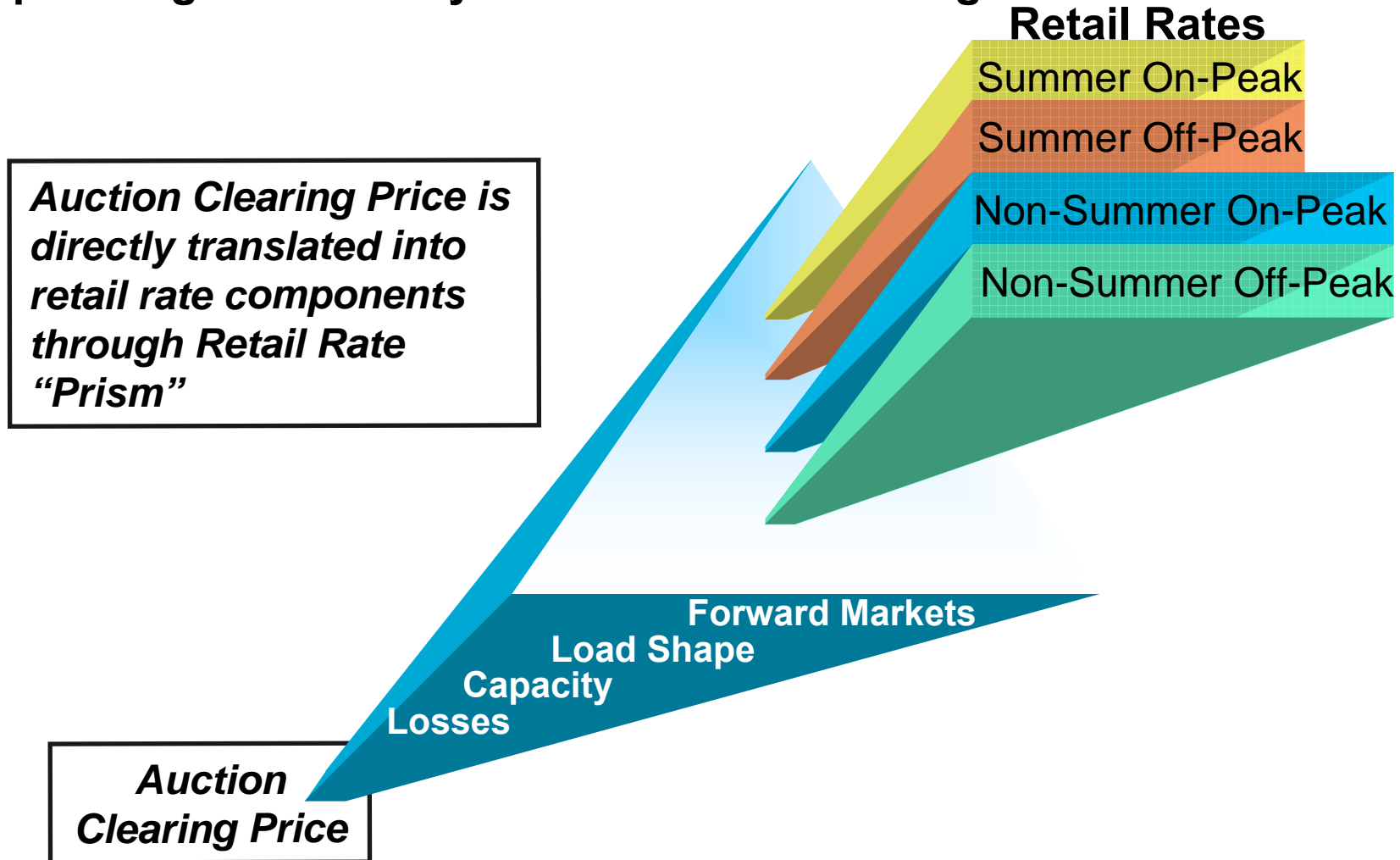


Hourly product is also available to all customers on a voluntary basis

\* - *The Customer Class Breakdown is applicable to the ComEd Service territory.*

# Retail Rate Design

Illinois Auction will provide a foundation built on market-based price signals in utility default service offerings.





*Increasing Degree of Granularity in Prices*

- All of these mechanisms provide price signals
- *“Consumer Preference” + “Cost of Implementing Technologies”* play a role in developing the rate structure
- Rate design must balance competing interests, yet provide effective price signals

- According to DOE, Demand Response is -

**“ Changes in electric usage by end-use customers from their normal consumption patterns in response to changes in the price of electricity over time, or to incentive payments designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized.”** - *U.S. Department of Energy, Benefits of Demand Response in Electricity Markets and Recommendations for Achieving Them, February 2006*

***ISSUE: “Incentives” vs. Market-Based Price Signals***

## The Department of Energy\* lists Demand Response Benefits as -

- **Benefits to Participants**

- Financial – Bill savings, Incentive payments
- Reliability – Opportunity to assist in reducing risk of system outages, Reduced exposure to rolling brownouts / blackouts

- **Potential Collateral Benefits**

- Market Impacts
  - Short-term – Reduced volatility of market prices during events
  - Long-term – Avoided / deferred capacity costs & T&D infrastructure upgrades
- Reliability – Reduced likelihood / consequences of rolling brownouts / blackouts, diversification of resources

***ISSUE: How to effectively pass through price signals from wholesale market?***

\* -U.S. Department of Energy, *Benefits of Demand Response in Electricity Markets and Recommendations for Achieving Them*, February 2006



## **Traditional Interruptible / Curtailable Programs**

- Structured for a vertically-integrated utility
- Do not make sense with ComEd's new role in marketplace

## **Market Based Approaches**

- Replaces the traditional programs, providing products for current participants to transition to
- Fits with the PJM structure
- Market value of resource is passed through to participants

## **Dispatched to Relieve Local Delivery Constraints**

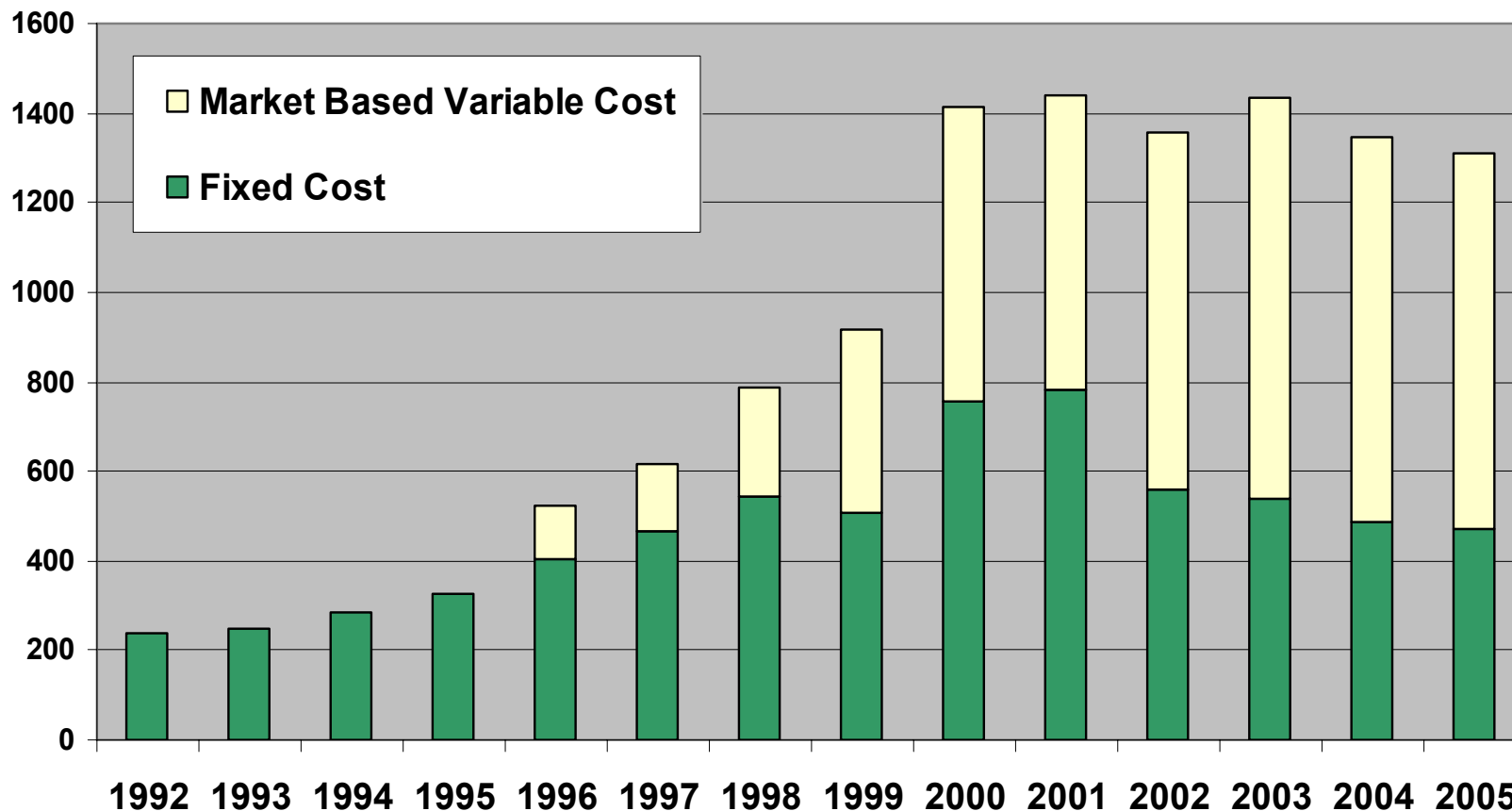
- Local deployment of demand response resources has provided operating flexibility and enhanced reliability

# ComEd's Demand Response Program



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In recent years, ComEd has had one of the largest load response programs in the nation.



*Note - 1994-99 are actual peak demand reductions during interruption / curtailment.  
Not all demand response loads were called in the other years.*

## Capacity

- Currently have 350 MWs
- Transition customers from traditional to market-based products
- Maintain, and potentially expand, direct load control product

## Energy (Emergency / Economic)

- Emergency: 580 MWs peak reduction
- Economic: Offer default and optional hourly rates
  - Support other Curtailment Service Providers by providing optional back office assistance and meter data services

## Ancillary Services

- PJM just opening non-synchronous reserve resources to demand response
- ComEd is in process of evaluating its role

- **ComEd's pricing has evolved over time, using the market place and technologies to send price signals to the customer**
- **ComEd expects its' pricing to continue to evolve, even as an IDC –**
  - The Illinois Auction links the wholesale price to the retail price, without a mark-up to the customer
  - Traditional Demand Response programs have evolved in to market-priced Demand Response program, making the linkage to PJM
- **From a vertically integrated to distribution company, prices have changed to reflect the new marketplace, but the price signals have remained a constant force throughout the change.**

***“It’s all about Price  
Signals”***