



# Preliminary Recommended Zero Crossing Points for the 2014 -17 New York ISO Demand Curves

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# Introduction

- The MMU is responsible for reviewing the assumptions and methodologies used to update the capacity demand curves.
- One of the key parameters that define the demand curves is the “zero crossing point”.
  - ✓ This point is the amount of excess capacity that would cause the market to clear at zero.
  - ✓ It is important because it, along with the reference point, determines the slope of the demand curve.
- The presentation:
  - ✓ Summarizes a methodology we recommend for determining the zero crossing points;
  - ✓ Shows preliminary results consistent with this methodology
  - ✓ Recommends the zero-crossing points that the results would indicate



## Methodology

- The demand curves should represent the marginal value of capacity in improving reliability, best measured by the loss of load expectation (LOLE).
- The slope of the demand curve should, therefore, be consistent with the marginal effect of capacity in improving New York's LOLE.
- The FTI capacity study employed a similar methodology.
  - ✓ However, it employed a methodology for local areas where capacity was "shifted" from the ROS area to the local zone.
  - ✓ NERA relied on these results in making their recommendations.
- A more correct methodology for establishing the zero crossing point is:
  - ✓ Estimate the marginal effect of *adding* capacity at varying levels of surplus on the NYCA LOLE;
  - ✓ Identify these values for the range of excess capacity levels over which the market will likely clear over the long run (we propose 1% to 12%).
  - ✓ Fit a line to these points and find where the line crosses zero.
- This methodology ensures that prices will reasonably reflect its marginal reliability value.

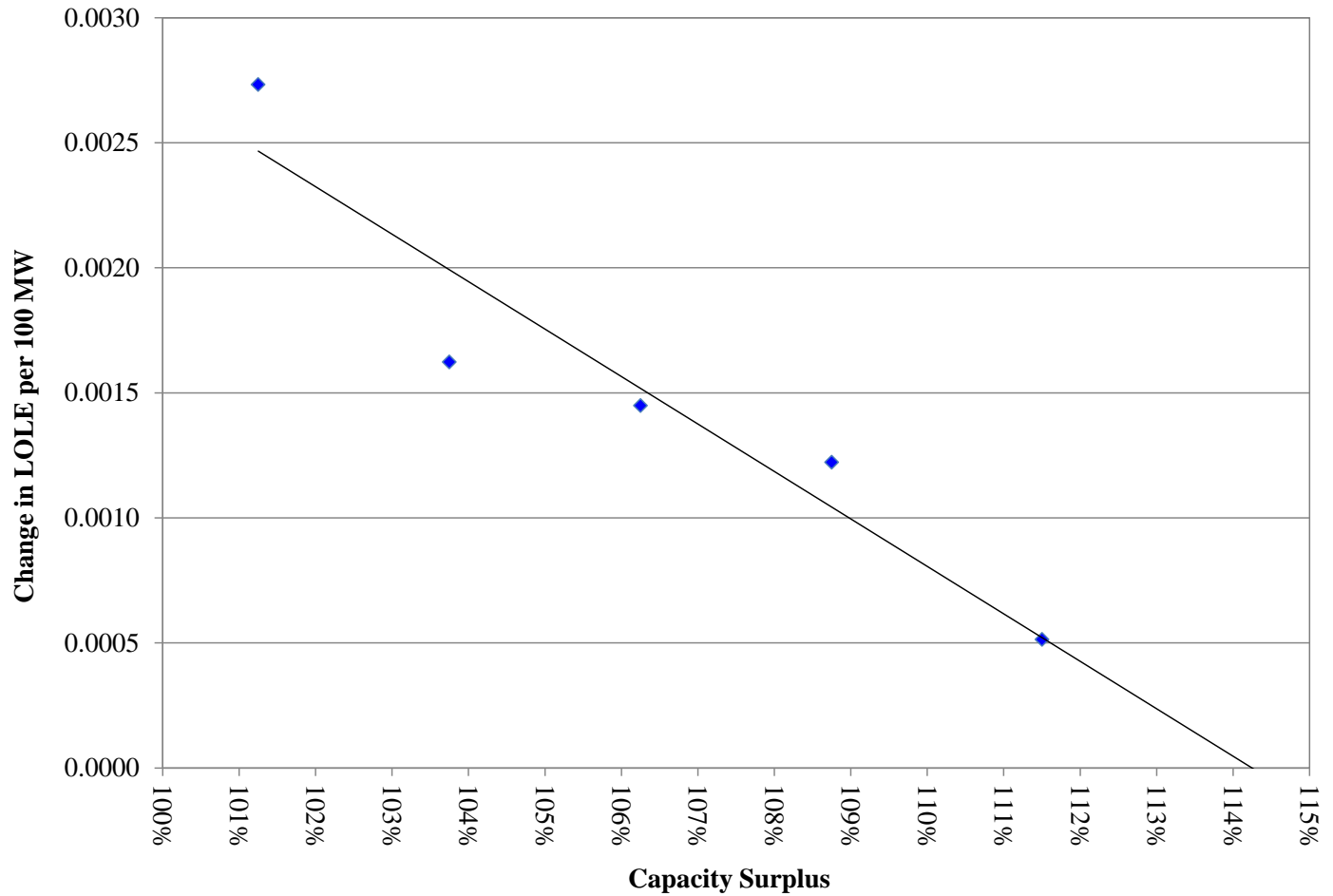


## Results

- At the MMU's request NYISO performed a number of MARS runs to produce results consistent with our recommended methodology.
- The following four figures show the results of these cases.
- These results are preliminary – ideally, a larger number of points should be produced to ensure that the estimated slopes are accurate.
- The table following these figures shows the zero crossing points that this preliminary analysis support.
  - ✓ These levels are relatively consistent with NERA's recommendations, but are based on a different methodology.
- In addition to establishing the zero crossing points for this reset process, we recommend the NYISO establish this as the methodology that will be employed in future DC resets and for new capacity zones.
  - ✓ This will provide stability to this aspect of the reset process; and
  - ✓ Allow participants to form expectations regarding the likely change in the demand curves in the future when making investments.

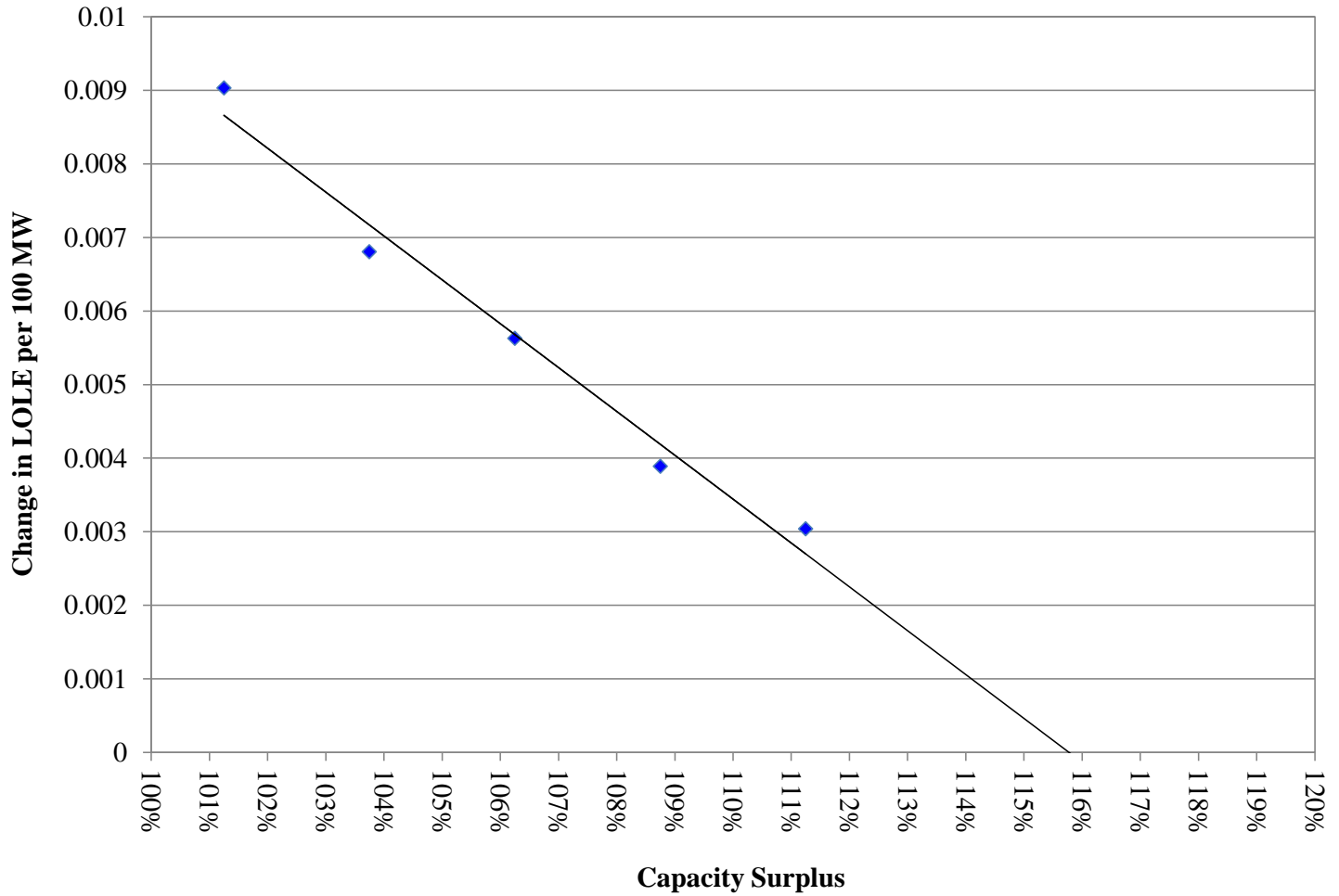


# NYCA Results



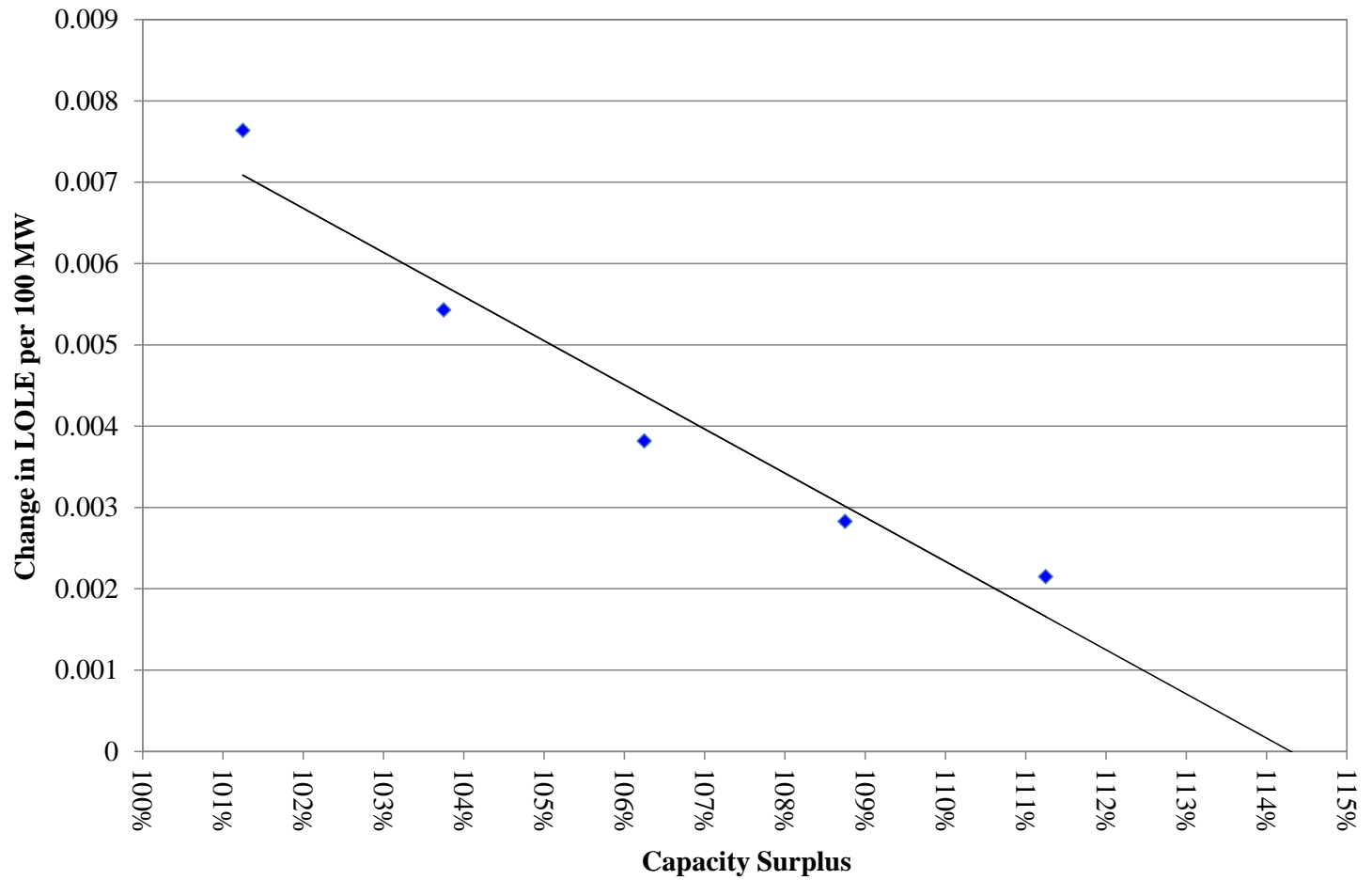


# NYC Results



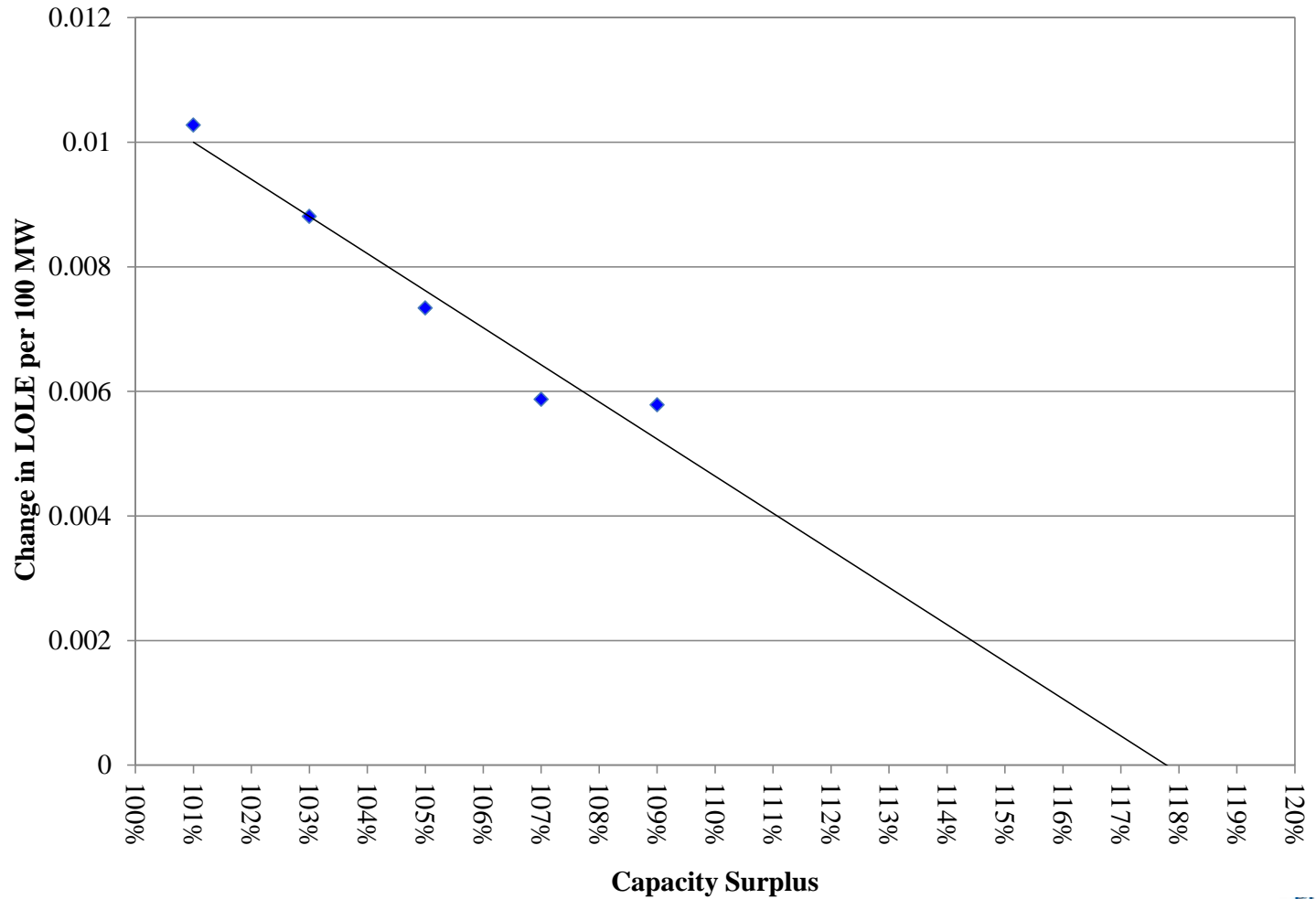


# NCZ (GHIJ) Results





## LI Results





## Preliminary Recommended Zero Crossing Points for 2014 -17 Demand Curves

Capacity Zone	MMU's Recommendations
NYCA	114%
NYC	116%
NCZ (G-J)	114%
LI	118%