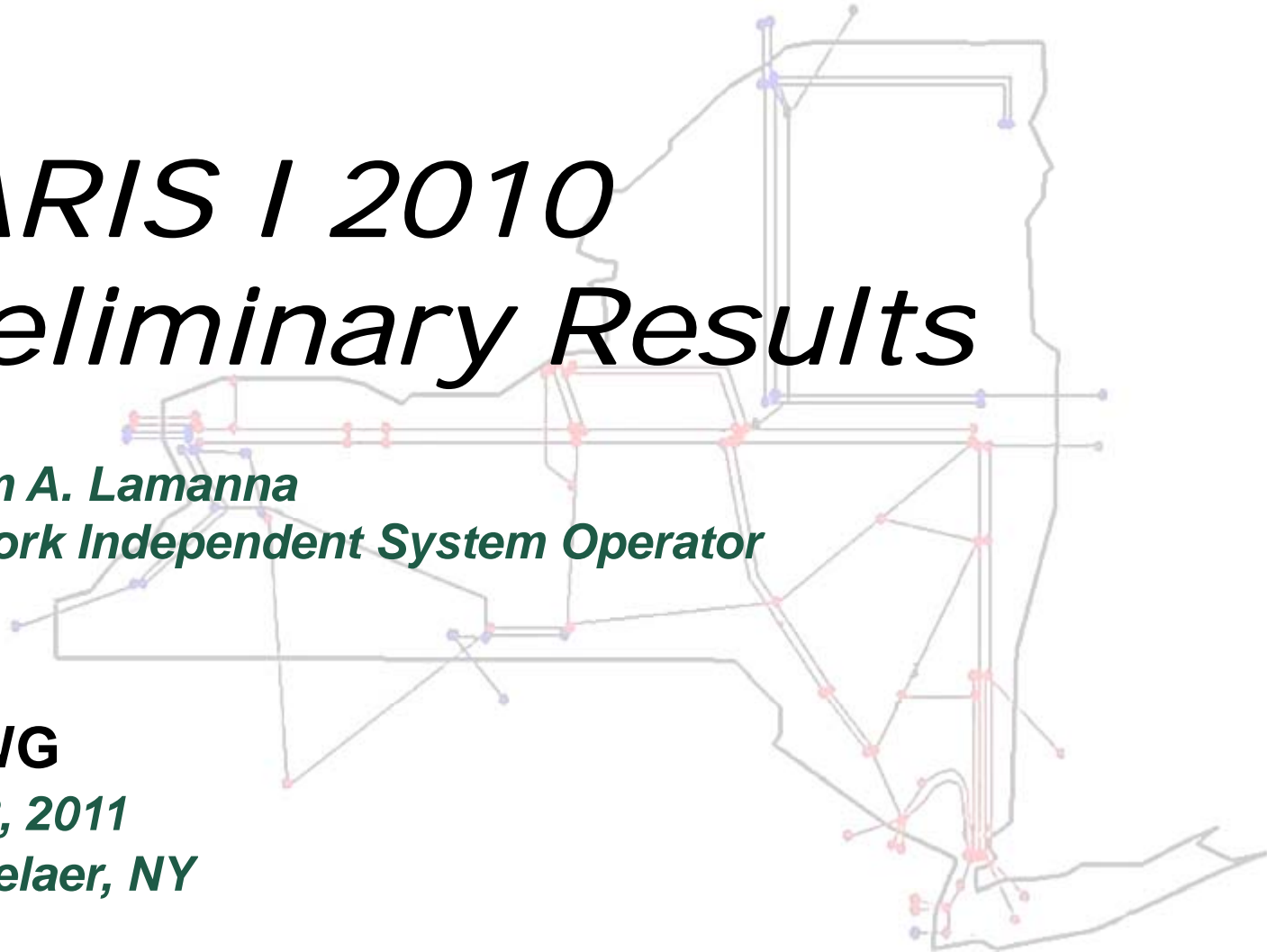


CARIS I 2010 Preliminary Results

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New York Independent System Operator*

ESPWG
*June 8, 2011
Rensselaer, NY*



Modeling Results vs 2010 Actual

- ◆ Imports are within ten percent
- ◆ Internal interface flows are within ten percent
- ◆ NYCA generation is within 5 percent
- ◆ Identified top two constraints –Central East, Leeds-PV fall within 20 percent of historic

Modeling Results vs 2010 Actual

| | <u>2010 Actuals</u> | MAPS |
|---|-------------------------------------|--------------------------------|
| NYISO-PJM_SOFT (GWH) | 7,466.6 | 7,365.1 |
| Neptune HVDC (GWH) | 4,765.8 | 4,898.2 |
| ISONE-NYISO_SOFT (GWH) | 1,483.8 | 517.8 |
| LIPA Cable (GWh) | 533.5 | 714.6 |
| NYISO-IESO (GWH) | 2,572.8 | 2,424.6 |
| NYISO-HQ (GWH) | 4,863.0 | 4,263.6 |
| Cross Sound Cable (GWH) | <u>2,403.5</u> | <u>1,621.7</u> |
| Total Imported (GWH) | 24,089.0 | 21,805.6 |
| Total NYCA Generation | 139,554.0 | 142,299.1 |
| TOTAL | 163,643.0 | 164,104.7 |
| | | |
| ZONE | <u>2010 GBook</u> | <u>2010 0510 - 0511</u> |
| SuperZone-1 | 68,568.0 | 68,670.5 |
| SuperZone-2 | 35,936.0 | 38,319.2 |
| SuperZone-3 | <u>35,050.0</u> | <u>35,309.4</u> |
| | 139,554.0 | 142,299.1 |
| SuperZone-1 = West + Genessee + Central + North + Mohawk Valley | | |
| SuperZone-2 = Capital + Hudson Valley + Millwood | | |
| SuperZone-3 = Dunwoodi + NYC + Long Island | | |
| | | |
| | MAPS Demand Congestion Tot | 1,008,760,177 |
| | Actual Demand Congestion Tot | 1,155,417,853 |

Modeling Results (Generation) for 2011

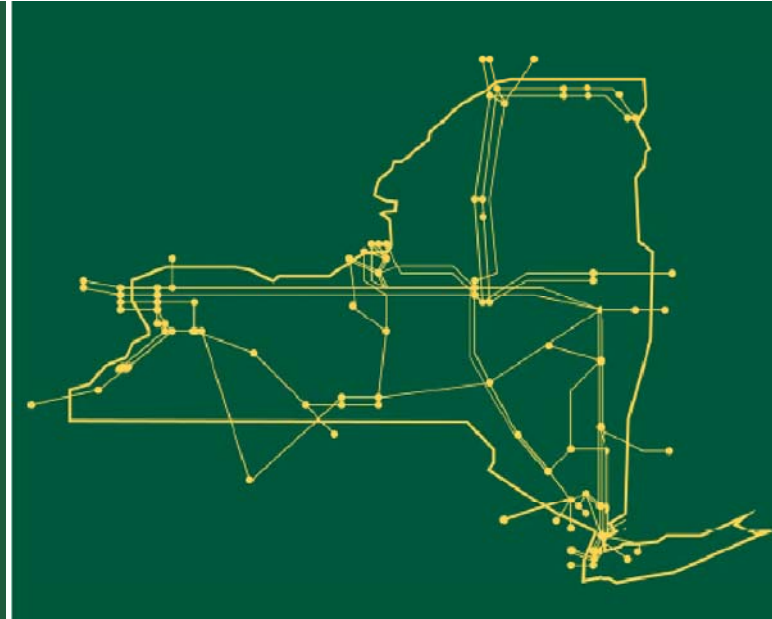
| <u>ZONE</u> | <u>2010 GBook</u> | <u>2010 MAPS</u> | <u>2011 MAPS</u> |
|---|-----------------------|----------------------|----------------------|
| SuperZone-1 | 68,568.0 | 68,670.5 | 67,835.3 |
| SuperZone-2 | 35,936.0 | 38,319.2 | 38,573.3 |
| SuperZone-3 | 35,050.0 | 35,309.4 | 31,970.5 |
| | 139,554.0 | 142,299.1 | 138,379.1 |
| SuperZone-1 = West + Genessee + Central + North + Mohawk Valley | | | |
| SuperZone-2 = Capital + Hudson Valley + Millwood | | | |
| SuperZone-3 = Dunwoodi + NYC + Long Island | | | |

- Identified top two constraints –Central East, Leeds-PV

Next Steps

- ◆ **Discussion of work in progress**
- ◆ **Items for next meeting**

The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



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