Peak Demand Impacts of Energy Efficiency Programs

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Peak Demand Impacts

- **Downstate Zones: Based on LIPA & Con-Ed forecasts. NYISO reviewed their peak-energy relationship.**
- **Upstate Zones**
  - ***Peak impacts are based on normal weather and typical summer levels of load diversity.***
  - ***Two alternative approaches to peak demands***
    - **Use upstate zonal load factors applied to zonal energy impacts (about 65% in most zones).**
    - **Build up impacts by program type; apply a diversity factor to account for non-coincidence of Transmission District peaks**
  - ***Results are nearly identical; pros & cons exist for each approach***

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Load Factors for A Typical Energy Efficiency Program

Program	Cumulative MWh	Cumulative kW	Load Factor
Residential Air Conditioners	757	505	17%
Residential Energy Star	3,944	495	91%
Multi-Family	1,137	242	54%
Small Business	66,418	20,383	37%
Midsize Commercial	9,427	3,674	29%
Large Industrial	3,138	2,325	15%
Total	81,682	25,300	37%

Results are based on January Scorecard report to DPS.

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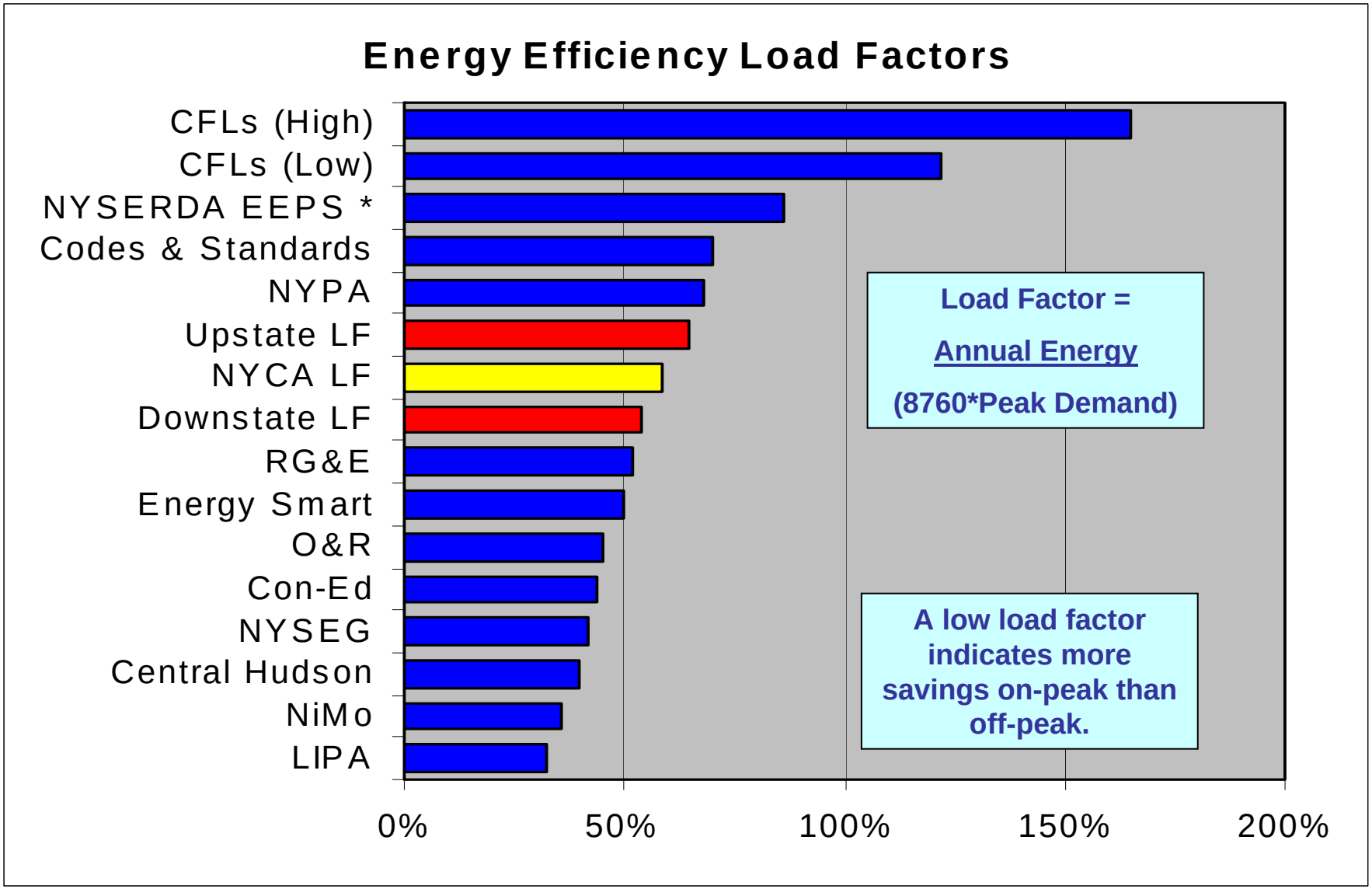

*** Aggregate load factor for NYSERDA's non-CFL programs.**

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Peak Impacts for an Upstate Zone:
Elements of Many Statewide Programs

Program Components	Program Composition	Annual MWh	Load Factor	TD Peak MW
Utility's Program	33%	165	53%	35.5
CFL Programs	5%	25	165%	1.7
NYSERDA-EEPS	15%	75	70%	12.2
NYSERDA Energy Smart	10%	50	53%	10.8
Codes & Standards	25%	125	70%	20.4
NYPA	12%	60	68%	10.1
Total Transmission District	100%	500	62.9%	90.7
NYCA Coincident Peak			64.8%	88.1

Zonal diversity factors Upstate are on the order of 3%

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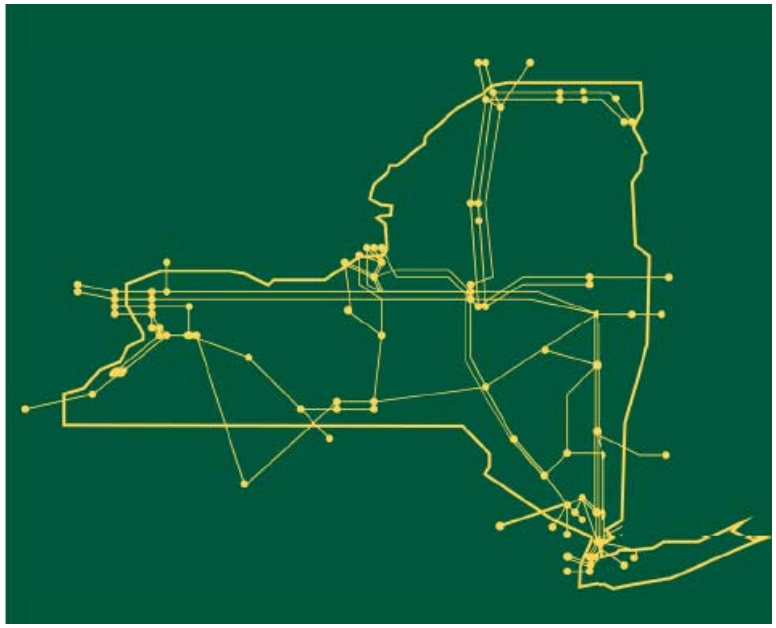

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