

**Explanation of Workpapers Spreadsheet**  
**(February 20, 2008)**

A Microsoft Excel spreadsheet entitled “Straw Proposal Workpapers 2-11-08” contains the calculations underlying the Straw Proposal Technical Appendix. The spreadsheet contains 40 tabs, including 30 worksheets and 10 charts.

Worksheets:

- |                                  |                                   |
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| 2. Pre-Planned NYSERDA (non-SBC) | 24. BASELINES & GOALS             |
| 3. Pre-Planned SBC               | 25. CEC NYSERDA Wedge Data Inputs |
| 4. Pre-Planned DHCR              | 26. OUTPUT TO MAPS                |
| 5. Pre-Planned NYSDEC            | 27. EMISSIONS CHANGES             |
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| 9. Incremental Utility-Authority |                                   |
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| 17. NYSEG                        |                                   |
| 18. Niagara Mohawk               |                                   |
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Charts:

1. Combined IOUs Wedges
2. Central Hudson Wedge Chart
3. Con Edison Wedge Chart
4. NYSEG Wedge Chart
5. Niagara Mohawk Wedge Chart
6. O&R Wedge Chart
7. RG&E Wedge Chart
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9. NYPA Wedge Chart
10. Chart Baseline Sendout

## **1. Pre-Planned UTILITY**

Identifies estimates of post-2006 energy efficiency gains expected from existing programs conducted directly by the utilities or authorities. The Con Edison numbers are for its targeted program as shown in the Working Group III “Option 2” worksheet. The Niagara Mohawk, LIPA and NYPA numbers are as shown in the Working Group III “Option 2” worksheet, less the year 2006 gains shown therein.

## **2. Pre-Planned NYSERDA (non-SBC)**

Identifies estimates of post-2006 energy efficiency gains expected from the existing Con Edison System Wide Program (SWP) being conducted by NYSERDA [source: NYSERDA].

## **3. Pre-Planned SBC**

Identifies estimates of post-2006 energy efficiency gains expected from the existing statewide SBC III program being conducted by NYSERDA [source: NYSERDA]. The allocations of energy efficiency gains by utility were made based on the methodology used in the SBC III program to allocate costs.

## **4. Pre-Planned DHCR**

Identifies estimates of post-2006 energy efficiency gains expected from existing activities of the New York State Division of Housing and Community Renewal (DHCR) [source: Clean Energy Collaborative, provided by NYSERDA]. The allocations of energy efficiency gains by utility/authority were made on a pro rata volumetric basis.

## **5. Pre-Planned NYSDEC**

Identifies estimates of post-2006 energy efficiency gains expected from existing activities of the New York State Department of Environmental Conservation (NYSDEC) [source: Clean Energy Collaborative, provided by NYSERDA]. The allocations of energy efficiency gains by utility/authority were made on a pro rata volumetric basis.

## **6. Codes**

Identifies estimates of post-2006 energy efficiency gains expected from the adoption and or implementation of stricter Federal and State building codes [source: Clean Energy Collaborative, provided by NYSERDA]. The allocations of energy efficiency gains by utility/authority were made on a pro rata volumetric basis. The numbers provided by NYSERDA were adjusted downward to avoid double-count by accounting for “interaction” with other programs. The

numbers provided by NYSERDA were also adjusted downward to be conservative in magnitude in providing estimates of generation efficiencies and T&D efficiencies, by treating such efficiencies as “overlap” to codes and standards efficiencies.

## **7. Standards**

Identifies estimates of post-2006 energy efficiency gains expected from the adoption and or implementation of stricter Federal and State appliance standards [source: Clean Energy Collaborative, provided by NYSERDA]. The allocations of energy efficiency gains by utility/authority were made on a pro rata volumetric basis. The numbers provided by NYSERDA were adjusted downward to avoid double-count by accounting for “interaction” with other programs. The numbers provided by NYSERDA were also adjusted downward to be conservative in magnitude in providing estimates of generation efficiencies and T&D efficiencies, by treating such efficiencies as “overlap” to codes and standards efficiencies.

## **8. Incremental SBC**

Assumes that 50% of the gap between the 15x15 Goal and the expected post-2006 energy efficiency gains from pre-planned programs, codes, standards, generation and T&D efficiencies will be made up by incremental SBC programs conducted by NYSERDA. The allocations of energy efficiency gains by utility depend on the gap identified for each specific utility. The resultant MWh targets by utility through 2015 have been leveled into a single annual MWh target.

## **9. Incremental Utility-Authority**

Assumes that 43.75% of the gap between the 15x15 Goal and the expected post-2006 energy efficiency gains from pre-planned programs, codes, standards, generation and T&D efficiencies will be made up by incremental programs conducted by the utilities. The allocations of energy efficiency gains by utility depend on the gap identified for each specific utility. The resultant MWh targets by utility through 2015 have been leveled into a single annual MWh target.

## **10. Incremental TIP**

Assumes that 6.25% of the gap between the 15x15 Goal and the expected post-2006 energy efficiency gains from pre-planned programs, codes, standards, generation and T&D efficiencies will be made up by incremental on-bill financing programs [Tariffed Installation Program (TIP)] conducted by the utilities. The allocations of energy efficiency gains by utility depend on the gap identified for each specific utility. The resultant MWh targets by utility through 2015 have been leveled into a single annual MWh target.

## **11. Incremental Generation**

Assumes that 1,752,000 MWhs of efficiencies can be gained by 2015 due to increased generation efficiencies. Assumes the capacity factor of 1,000 MWs of generation can be improved from 40% to 60%. The efficiencies are ramped in over the three-year period 2013-2015. The allocations of energy efficiency gains by utility/authority were made on a pro rata volumetric basis.

## **12. Incremental T&D**

Assumes that 783,438 MWhs of efficiencies can be gained by 2015 due to increased transmission and distribution (T&D) efficiencies. Assumes line losses can be reduced by 6% of the currently projected level by 2015. The efficiencies are ramped in over the three-year period 2013-2015. The allocations of energy efficiency gains by utility/authority were made on a pro rata volumetric basis based on losses, not sales.

## **13. WGIII Option 2**

This Working Group III spreadsheet is provided for information purposes.

## **14. TABLE Baseline Sendout**

The primary purpose of this worksheet is to bring together data in a format that can be used to create many of the graphical charts set forth in the Technical Appendix.

## **15. Central Hudson**

Provides the 15x15 goals, “gap” analysis and targets for Central Hudson Gas & Electric Corporation, in both “sendout” and “sales” terms.

## **16. Con Edison**

Provides the 15x15 goals, “gap” analysis and targets for Consolidated Edison Company of New York, Inc., in both “sendout” and “sales” terms.

## **17. NYSEG**

Provides the 15x15 goals, “gap” analysis and targets for New York State Electric & Gas Corporation, in both “sendout” and “sales” terms.

**18. Niagara Mohawk**

Provides the 15x15 goals, “gap” analysis and targets for Niagara Mohawk Power Corporation, in both “sendout” and “sales” terms.

**19. O&R**

Provides the 15x15 goals, “gap” analysis and targets for Orange & Rockland Utilities, Inc., in both “sendout” and “sales” terms.

**20. RG&E**

Provides the 15x15 goals, “gap” analysis and targets for Rochester Gas and Electric Corporation, in both “sendout” and “sales” terms.

**21. LIPA**

Provides the 15x15 goals and “gap” analysis for the Long Island Power Authority, in both “sendout” and “sales” terms.

**22. NYPA**

Provides the 15x15 goals and “gap” analysis for the new York Power Authority, in both “sendout” and “sales” terms.

**23. SLOPE-CURVE FOR GOALS**

Provides a straight line slope for ramping up the efficiency savings needed to meet the 15x15 Goal by 2015 which is later used to calculate annual targets.

**24. BASELINES & GOALS**

Sets forth the Baseline forecast in both “sendout” and “sales” terms. Calculates the MWhs needed to reach the 15x15 Goal by 2015 in both “sendout” and “sales” terms. Calculates the resultant annual forecast if the 15x15 Goal by 2015 is met in both “sendout” and “sales” terms.

**25. CEC NYSERDA Wedge Data Inputs**

Data inputs of the Clean Energy Collaborative provided by NYSERDA.

**26. OUTPUT TO MAPS**

In “sendout” terms, provides a summary of the loads necessary for MAPS modeling for the Baseline and 15x15 Results Scenarios. MAPS is the computer model used to estimate generation production costs.

**27. EMISSIONS CHANGES**

Sets forth the MAPS outputs regarding emissions for the Baseline and 15x15 Results Scenarios.

**28. FUEL CHANGES**

Sets forth the MAPS outputs regarding fuel usage for the Baseline and 15x15 Results Scenarios.

**29. WHOLESALE CHANGES**

Sets forth the MAPS outputs regarding production cost and wholesale prices for the Baseline and 15x15 Results Scenarios.

**30. Program Costs Budgets**

Converts the levelized annual MWh targets for NYSERDA and the utilities into budgets for program costs, including administration and evaluation costs, to be collected through the System benefits Charge (SBC). An average program cost per MWh was calculated using information contained in the Staff Revised Proposal for Energy Efficiency Design filed in December. A 25% adder was applied to anticipate potentially higher costs due to the greater quantity of programs projected and to account for even-greater evaluation efforts.