

Agenda Item 2.0

PSPC Meeting 271

January 14, 2010

Results of Voltage Reduction Tests for use in ICR and OP #4

Recommendation for use of 1.5% beginning 2010

Kathleen Goodman

Results for the last Eight Years

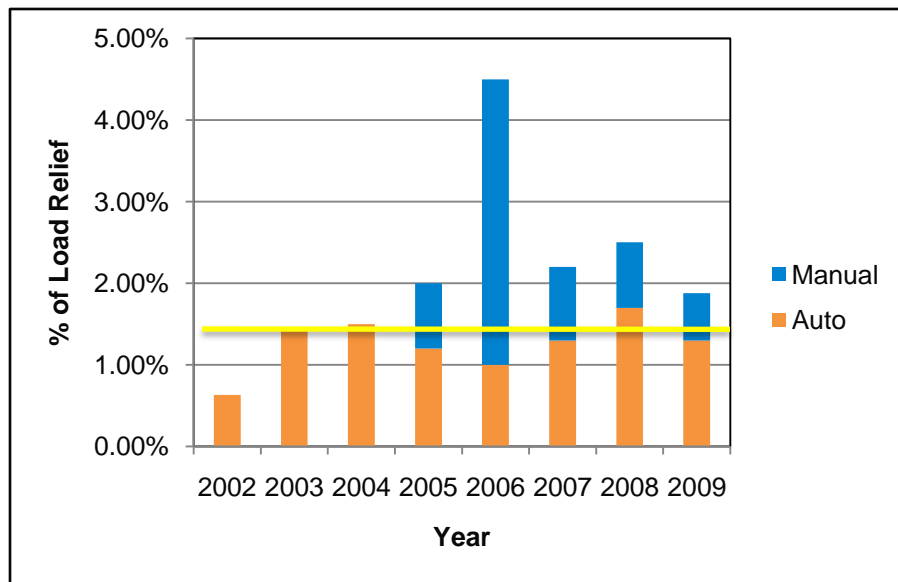
YEAR	SPRING TEST			FALL TEST		
	AM	PM	TOTAL	AM	PM	TOTAL
2002	0.63%	0	0.63%	N/A	N/A	N/A
2003	1.42%	0	1.42%	N/A	N/A	N/A
2004	1.50%	0	1.50%	N/A	N/A	N/A
2005	1.20%	0.80%	2.00%	1.00%	0.60%	1.60%
2006	1.00%	3.50%	4.50%	1.20%	0.65%	1.85%
2007	1.30%	0.90%	2.20%	0.95%	1.00%	1.95%
2008	1.70%	0.80%	2.50%	1.80%	1.00%	2.80%
2009	1.30%	0.58%	1.88%	1.31%	0.89%	2.20%
	1.26%	0.44%	1.73%	1.25%	0.83%	2.08%

YEAR	SPRING TEST			FALL TEST		
	AM	PM	TOTAL	AM	PM	TOTAL
2002						
2003						
2004	Results not available					
2005						
2006						
2007	200	140	340	150	165	315
2008	250	120	370	310	167	477
2009	214	51	265	200	132	332
	221	104	325	230	166	396

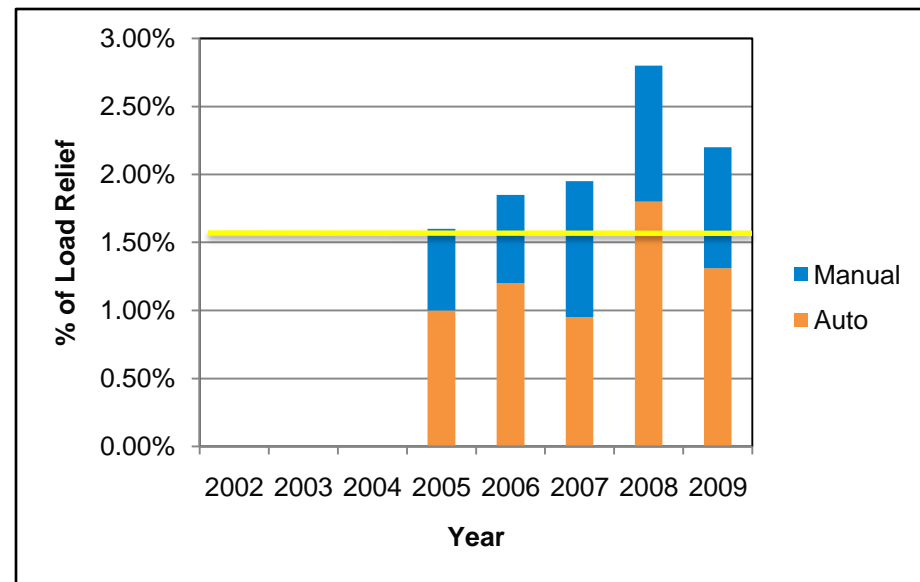
Results for the last Eight Years

Graphical Depiction

Spring Tests



Fall Tests



Review of Results

- Spring 2006 tests results proved inaccurate due to data anomalies
- Clearly dependent on load composition at time of test
 - Depends on month of test
 - Depends on weather during test
 - Depends on types of load during test
- Will result in overestimation of actual relief
 - Test done in shoulder months
 - Test done in non-peak daily hours
- Results in inconsistent results, both at the Participant level and System-wide
- Implementation not coincident

Review of Future Results

- Will be dependent on load growth, or lack thereof, as the case may be
- With new technologies being deployed in the field, test results will vary more significantly
 - Demand response resources
 - Energy efficiency paraphernalia
 - So-called “green” resources and demands
- Actual implementation is not intended to be, nor will it result in long-term load curtailment
 - Short-term measure in times of tight supply in real-time
- No guarantees

Recommendation

- ISO New England Operating Procedure No. 13 requires only a 1.5% reduction in load at the Participant level for a 5% voltage reduction
 - There is no requirement to realize any additional relief
- ISO New England Operating Procedure No. 4 will only “count” 1.5% beginning in 2010 to accurately capture the requirements and the reality of what can be counted on
 - The data indicates an approximate 70/30 split between 10-minute implementation and 30-minute implementation; this is also what will be captured in OP #4, Appendix A
- ISO New England personnel believes that the ICR calculation should also only “count” 1.5% relief beginning in 2010