



Austin Energy's Cool Roof Rebate Program

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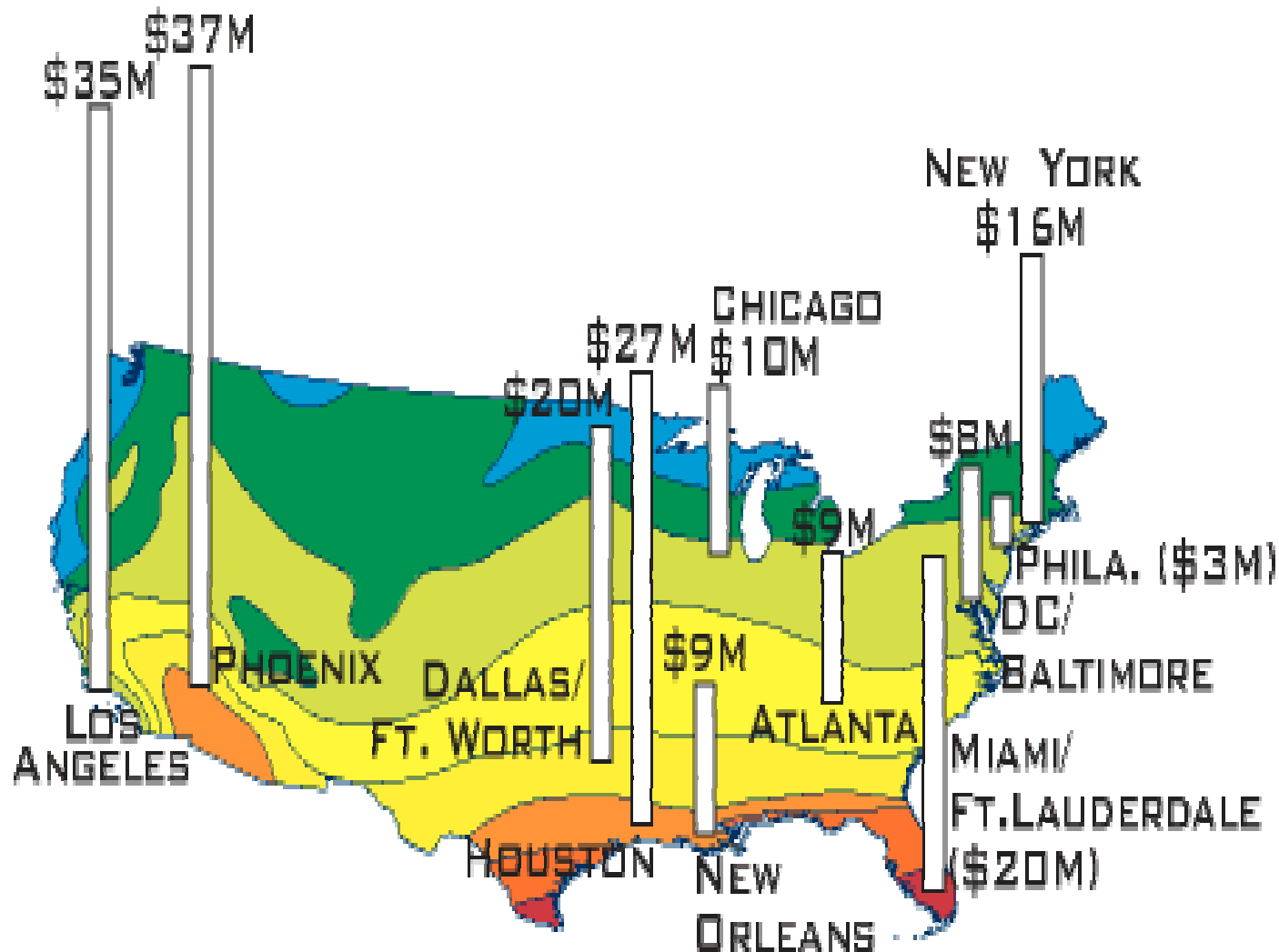
512-482-5323

<http://www.austinenergy.com>

Heat Island Teleconference

October 27, 2005

Austin/Hstn -Potential Energy Savings



Rebates: Heat Island Mitigation



Reflective Roof + Tree Planting

- **Reduce Peak Demand** – (4 to 8 PM)
Avoid Constructing **power plants**
- **Economic Development** – Reduce
energy cost = Increase **jobs + taxes**
- **Environmental** – Smog
non-attainment costs



AE Cool Roof Program

Year	Rebate (\$)	Demand (kW)	Energy (kWh)	(\$/kW)	Sq. Ft.
2001	-	-	-	-	-
2002	\$ 8,300	29	77,052	\$ 291	83,000
2003	\$ 50,442	243	528,118	\$ 207	504,423
2004	\$ 68,539	298	491,103	\$ 230	685,394
2005	\$ 37,015	110	159,392	\$ 337	340,684
TOTAL	\$164,297	680	1,255,665	\$ 266	1,613,501



Program Structure

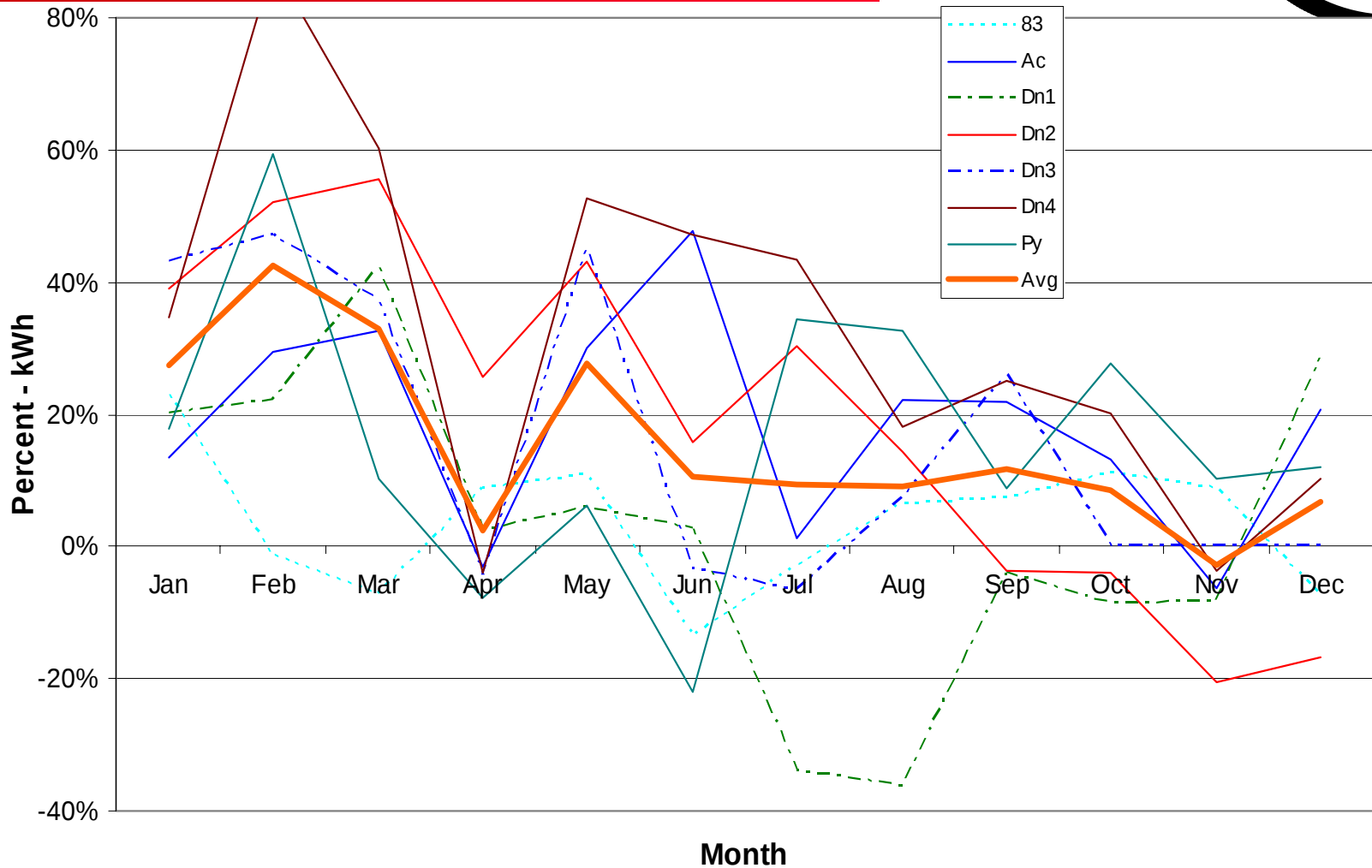
- Minimum: 75% reflectance
Energy Star: 65% initial
- Rebates \$0.10/SF
- Cost benefit analysis - pass
- AE Inspect @ completion



Rebates

- \$165,000 for 680 kW
- Analysis – 0.1 - 0.3 kWh/SF
DOE residence – 1.1 kW/SF
- Rebates: Ref. Roof - 87%
Insulation 13%
- New constr. bldg. envelope
– only Ref. Roof

Energy Decrease



Results: KWh/SF Summer



Facility	Billing	Equation	Equest	On-line
Ac	6.90	0.52	0.10	0.69
Dn1	(0.33)	0.34	0.16	0.44
Dn2	0.27	0.34	0.16	0.44
Dn3	0.11	0.34	0.16	0.44
Dn4	0.63	0.34	0.16	0.44
Py	2.71	0.31	0.05	0.23

Lessons Learned



- Educate vendors with bonus
- Leaky roof repairs
- Emotional appeal: 40-70°F cooler
- Success: market transformation



Future Directions

- Increase Rebate: \$0.15/SF
- Rebate sloped roofs
- Solar PV + Ref Roof