



Roles and Responsibilities Regarding Clean, Renewable and Efficient Energy Optimization

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Public Act 295

- Public Act 295 was passed by both chambers of the Michigan Legislature on September 18th
 - Grew out of Michigan's 21st Century Energy Plan
 - Bipartisan support
- Was signed into law by Governor Granholm on October 6th
- The overall goal of an energy optimization plan shall be to reduce the future costs of provider service to customers

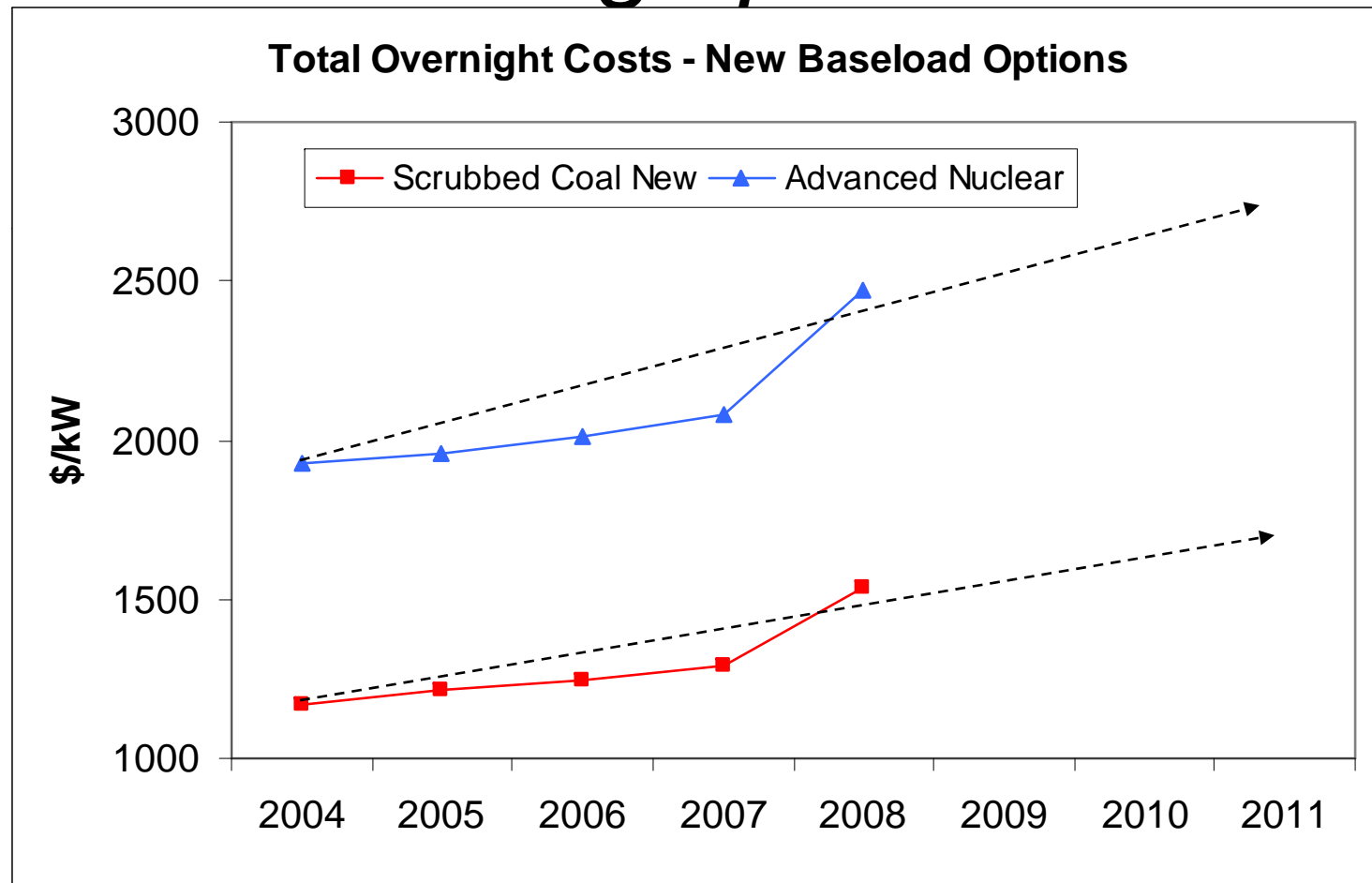
Definitions

“Energy Optimization” (EO) means all of the following:

- Energy Efficiency – Reductions in energy use associated with measures or programs targeting customer behavior, equipment, devices or materials without reducing the quality of energy services.
- Load Management – Measures or programs targeting equipment or devices resulting in decreased peak electric demand.
- Energy Conservation - Reductions in energy use by the installation of measures or changes in energy usage behavior. Decreases must be measurable and attributable to an EO plan.

Energy Optimization does not include electric provider infrastructure projects.

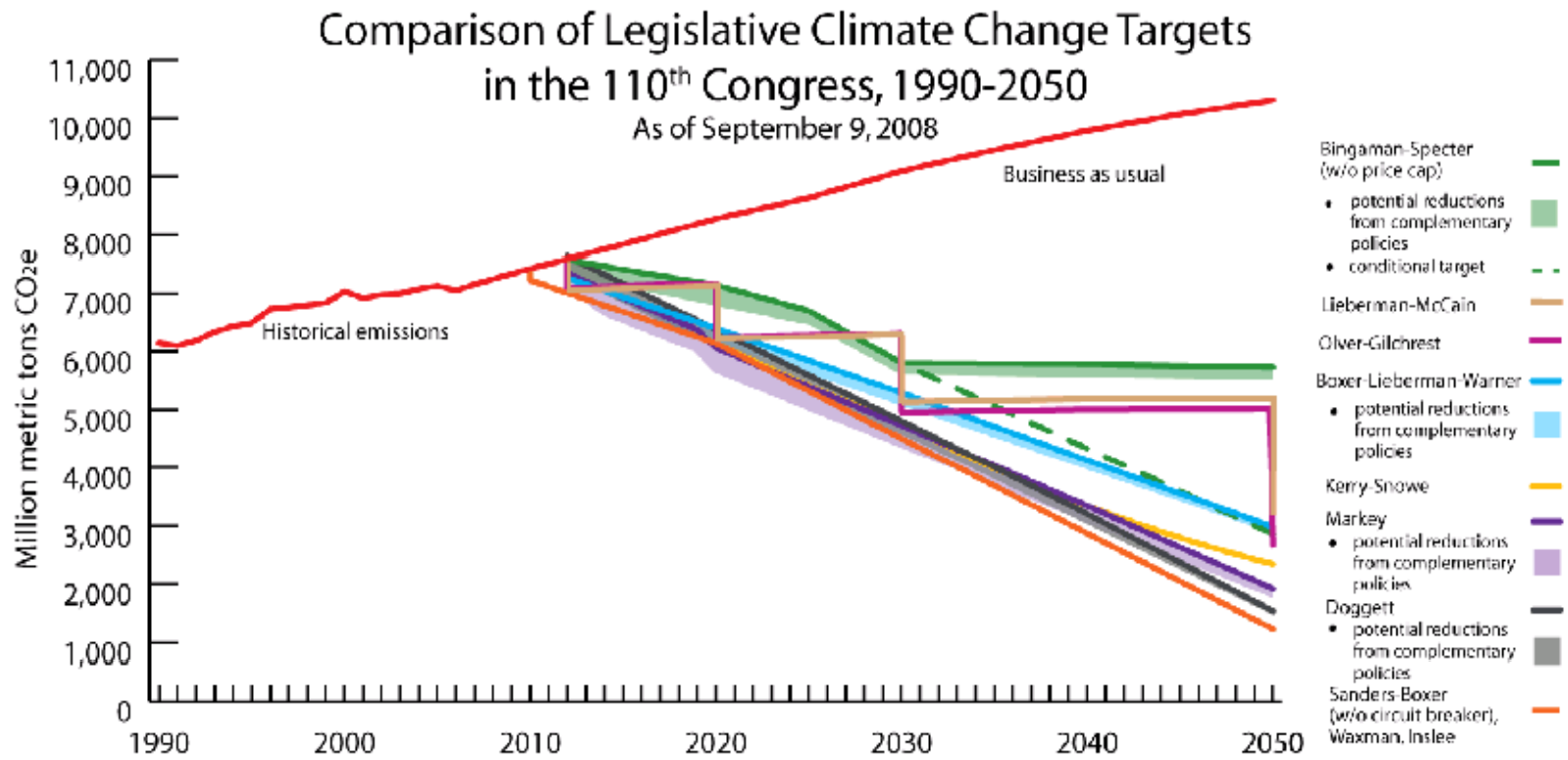
Construction Costs for new facilities are trending upwards



4/12/2010

Source: Assumptions to EIA's Annual Energy Outlook

Carbon Regulation is Expected...



WORLD RESOURCES INSTITUTE

For a full discussion of underlying methodology, assumptions and references, please see <http://www.wri.org/usclimatetargets>. WRI does not endorse any of these bills. This analysis is intended to fairly and accurately compare explicit carbon caps in Congressional climate proposals and uses underlying data that may differ from other analyses. Price caps, circuit breakers and other cost-containment mechanisms contained in some bills may allow emissions to deviate from the pathways depicted in this analysis.

4/12/21

Source: <http://www.wri.org/chart/comparison-legislative-climate-change-targets-110th-congress-1990-2050>

The Carbon Principles

- Uncertainty over carbon regulation, and upward pressure on construction costs have led the world's leading financial institutions to develop the ***Carbon Principles***. The principles are:
 - **Energy Efficiency:** An effective way to limit CO2 emissions is not to produce them.
 - **Renewable and low carbon distributed energy technologies:** The value of avoided CO2 emissions should be considered when investments are being proposed.
 - **Conventional and advanced generation:** Financial, regulatory, and

Actual Electric Energy Savings

Table 3. Electricity Savings Achieved Per Year in Leading States.

	Year	Annual Incremental GWh Savings	kWh Sales	Savings/Year (%)
California	2001	4760	239,654	2.0%
	2002	[still getting #]	235,249	[to be calculated]
Connecticut	2001	314	30,000	1.0%
	2002	246	31,000	0.8%
Massachusetts	2000	273	51,773	0.5%
	2001	309	52,092	0.6%
Rhode Island	2001	61	7,341	0.8%
	2002	51	7,516	0.7%
Vermont (Efficiency VT only)	2001	37	5,051	0.7%
	2002	41	5,077	0.8%
	2003	54	5,127	1.1%

Source: Data provided to ACEEE by officials in each state.

<http://www.aceee.org/conf/04ss/rnemeta.pdf>

EO Plan Approval Process

- Temporary order issued by the MPSC by December 5, 2008, to give providers rules and guidelines for submitting their EO plans
 - Providers whose rates are regulated by the Commission file EO plans within 90 days
 - Cooperatives and Municipal's file EO plans with 120 days
 - Final rules for Public Act 295 completed by October 5, 2009
- EO plans are subject to approval in the same manner, and may be combined with the provider's Renewable Energy plan
- Commission will conduct a contested case hearing for each filed plan and approve; approve with changes agreed to by the provider; or reject the plan within 90 days
- Commission will review plans every 2 years

Scope

- Commission reviews all EO plans to ensure they:
 - Contain reasonable assumptions and provide a credible opportunity to achieve the mandated energy savings targets
 - Include programs for all customer classes, including low income residential customers
 - Avoid cross-class subsidization
 - Meet the Utility System Resource Cost Test and are collectively cost-effective

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Energy Savings Targets

- Electric provider minimum energy savings (MWh)
 - 2008-09 equal to 0.3% of 2007 total annual retail sales
 - 2010 equal to 0.5% of 2009 total annual retail sales
 - 2011 equal to 0.75% of 2010 total annual retail sales
 - 2012 and each year thereafter equal to 1.0% of previous years total annual retail sales
- Natural gas provider minimum energy savings (decatherms or Mcf)
 - 2008-09 equal to 0.1% of 2007 total annual retail sales
 - 2010 equal to 0.25% of 2009 total annual retail sales
 - 2011 equal to 0.5% of 2010 total annual retail sales
 - 2012 and each year thereafter equal to 0.75% of previous years total annual retail sales
- Providers serving 200,000 customers or less and having residential rates less than 75% of the state average may petition the Commission for alternative standards after running EO programs for 2 years

Energy Savings Targets (continued)

- MPSC reviews and rules on any weather normalization methodologies that providers use to calculate energy savings targets
- MPSC reviews and rules on any proposals to substitute renewable energy (RE) credits, advanced cleaner energy credits, or load management (which reduces overall energy sales) toward electric savings targets

Actual Spending

2004 Electricity Funding and Savings for PG&E, SCE and SDG&E

	GWh	% of Total GWh	MW	% of Total MW	Funding (\$000)	% of Total Revenue
PG&E	623	0.8%	141	0.6%	\$132,752	1.3%
SCE	984	1.2%	185	0.9%	\$146,763	1.5%
SDG&E	236	1.4%	51	1.4%	\$37,828	1.5%
Total	1,843	1.0%	377	0.8%	\$317,343	1.4%

4/12/2005 Source: <http://www.energy.ca.gov/2005publications/CEC-400-2005-042/CEC-400-2005-042-REV.PDF>

Energy Optimization Senate Bill No. 213

- Spending Limits:
 - 2009: 0.75% of total retail sales revenues for 2007.
 - 2010: 1.0% of total retail sales revenues for 2008.
 - 2011: 1.5% of total retail sales revenues for 2009.
 - 2012+: 1.75 – 2.0% of total retail sales revenues for the 2 years preceding.

Administrative EO Plan Options

- Coordination and collaboration between providers should be encouraged wherever possible to lessen confusion among trade allies and customers
- A provider choosing not to run its own EO programs makes alternative compliance payments to an independent non-profit energy optimization program administrator selected by the Commission in a competitive bidding process
- The Commission is responsible for arranging a biennial independent audit of the EO program administrator

Provider Surcharges

- MPSC reviews and approves proposed surcharge design which is applied to bills as an itemized charge
 - Costs recovered from natural gas and residential electric customer by volumetric charges
 - Costs recovered from all other metered electric customers by per-meter charges and,
 - From unmetered electric customers by an appropriate charge

Provider Cost Recovery

- Are allowed to recover the actual costs of implementing approved EO plans
- May capitalize all equipment, materials, and installation costs with an expected economic life >1 year incurred in implementing EO plans, including costs paid to third parties, such as customer rebates and customer incentives
- Must propose depreciation treatment with respect to capitalized costs
- Commission will rule on any provider proposal to capitalize other costs and will order reasonable depreciation treatment

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Provider Revenue Recovery

- Gas decoupling can be implemented if a provider spends a minimum of 0.5% of total natural gas revenues in a year, including natural gas commodity costs, on an approved gas EO plan.
- No electric decoupling.

Provider Performance Incentives

- MPSC *may* allow a financial incentive if EO savings results in a given year exceed that year's energy savings target.
- Incentive is limited to lesser of 25% of the net cost reductions experienced by customers or 15% of actual EO plan expenditures.

Provider Reporting Requirements

- Periodically file a new EO plan with the MPSC
- Annually submit in residential customer bills:
 - The total reduction in electricity or natural gas usage attributed to the act
 - A notification of possible income tax credit
 - Website address with the Commission's annual EO report
 - Etc, Page 14
- Submit annual reports to MPSC providing information on activities taken to comply with EO standards
 - Number of energy optimization credits generated
 - Incurred and expected costs to comply with the EO standards

Large Customer Self-Directed Option

- Eligibility in 2009-10 is 2 MW at each site (10 MW aggregated). Drops to 1 MW/5 MW in 2011-2013. Drops to 1 MW aggregate in 2014 and beyond
- Customers submit their multiyear, ongoing EO plans to provider
 - Customers < 2 MW (10 MW aggregate) must use an energy optimization service company to develop and implement plans
 - Submit update report every 2 years to provider
 - Failure to meet targets may result in penalty payment to the State
- MPSC establishes rates, terms and conditions to recover costs for low income programs, provider review and evaluation
- Projected energy savings incorporated into provider's EO plan
- Providers submit a report annually to MPSC identifying customers on self-directed plans and summarizing results

Large Customer Self-Directed

Option (continued)

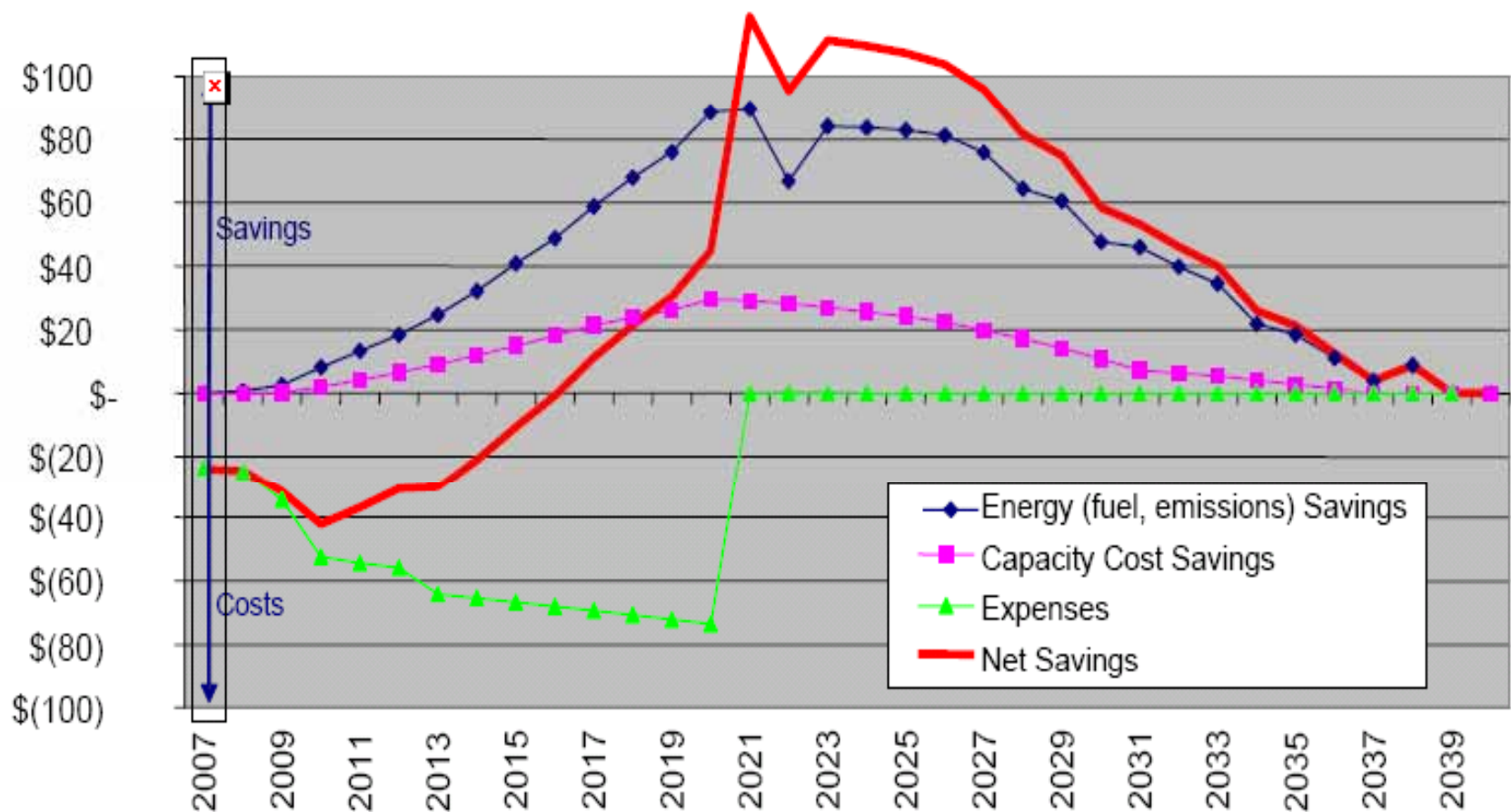
- Commission is responsible for establishing an approval process for energy optimization service companies by September 1, 2010
 - To ensure companies have the expertise, resources and business practices to reliably provide EO services in MI
 - May adopt national or regional certification/licensing standards
 - Include adherence to a code of conduct governing the relationship between energy optimization service companies and providers
- 4/12/2010 – Department of Labor & Economic Growth required to maintain a list of approved Energy

Additional Energy Optimization Responsibilities

- The MPSC will promote energy efficiency and energy conservation and actively pursue increasing public awareness of energy conservation and energy efficiency
- Actively engage in energy conservation and energy efficiency efforts with providers
- Engage in regional efforts to reduce demand for energy through energy conservation and energy efficiency

Example - Economics of Energy Efficiency

DSM Program Savings & Cost Recovery Illustration



Additional Load Management Responsibilities

- The MPSC will promote load management in the appropriate circumstances and actively pursue increasing public awareness of load management techniques
- Engage in regional load management efforts to reduce the annual demand for energy
- Work with all customers to reduce annual demand and conserve energy through load management techniques and other appropriate activities

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• May allow a provider to recover

EO Credit Certification & Tracking Program

- Commission is responsible for establishing the certification and tracking program
- The certification and tracking program must include:
 - Eligibility date for EO credits
 - Method for tracking energy optimization and renewable energy credit substitutions
 - Allowance for issuance and use in an electronic format (if established by the

MPSC Legislative Reporting Requirements

- Potential rate impacts of electric decoupling – within one year
- EO implementation efforts and recommendations - by November 30, 2009, and each year thereafter
- Recommendations on EO savings standards - by October 1, 2010
- Efforts to reduce peak demand and any other recommendations concerning load management - by December 31, 2010
- Evaluation of the cost-effectiveness of EO plans - by February 15, 2011, and annually thereafter
- By September 30, 2015, a report
 - Reviewing opportunities for additional cost-effective EO programs
 - Recommendations for the continuation, expansion, or reduction of EO standards
 - Percentage of total energy savings actually achieved by EO programs
 - Cost effectiveness of each provider's programs

Energy Optimization – Implementation Challenges

- The Energy Independence and Security Act of 2007 includes federal efficiency standards that will need to be exceeded by Michigan's Energy Optimization programming:
 - In 2012 – 2014, light bulbs need to use 20% to 30% less energy than most current incandescent bulbs.
 - In 2010, a dishwasher standard will go into effect that reduces energy consumption by 7%.

PA 286 Section 10a

Electric Retail Choice

- Cap at 10% of previous year sales (weather adjusted)
- Existing choice customers favored in allocation priority (expansions) + Cleveland Cliffs exception – no limit to choice for Cliffs
- Return to service via current procedures in tariff that can be amended
- Assure full recovery of restructuring costs

PA 295

Renewable Energy Plans Electric

- RE plans due in 90 days after MPSC temporary order – electric utilities (include AES, co-op, muni)
- Contested cases for regulated electrics – order in 90 days; biennial reviews
- Notice and comment process for AES, unregulated co-ops and municipals
- One AES member will be appointed to the Commission's Wind Energy Resource

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Zone Board

Questions ?