Renewable Energy Standard
2008 PA 295

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Michigan Senate
Energy and Technology Committee
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MICHIGAN PUBLIC SERVICE COMMISSION

Renewable Energy Plans

- Subpart A of 2008 PA 295 requires providers of electric service to meet a 10 percent renewable energy standard based on retail sales by the end of 2015.
- Interim targets
- Capacity targets for large providers

Utilities with >1,000,000 Customers

- Consumers:
  - 200 MW renewable energy capacity portfolio by 2013
  - 500 MW by 2015
- Edison:
  - 300 MW renewable energy capacity portfolio by 2013
  - 600 MW by 2015
- Ownership limits – no more than 50% owned

Overall Goals

- Diversify Michigan's generation portfolio.
- Increase energy security through the use of Michigan based resources.
- Encourage private investment in renewable energy.
- Cost effectiveness.
- Provide environmental benefits.

What counts towards RPS?

- Generation from "renewable energy systems"
- Includes pre-existing capacity
  - plus new power purchase agreement contracts
  - plus new facilities owned by the utility
- Renewable Energy Credits (RECs) with or without associated energy
- Special details for biomass co-firing and pre-existing PURPA facilities

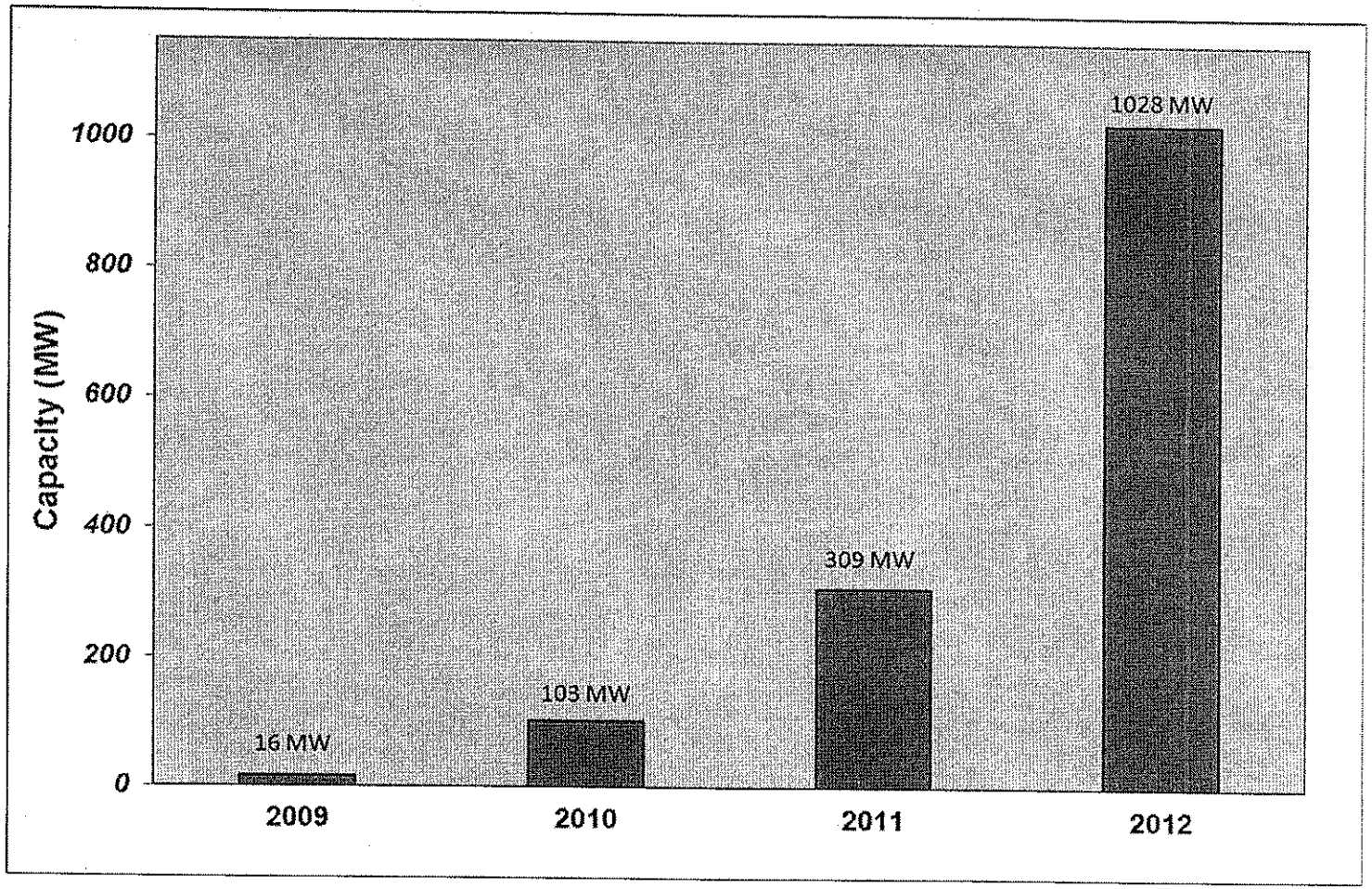
Initial Approval of RPS Plans

- The Commission approved 74 plans within the required 90 days.
- The approved plans included:
  - 9 investor owned utilities
  - 10 electric cooperatives
  - 41 municipal electric utilities
  - 14 alternative electric suppliers

Renewable Energy Credit Certification

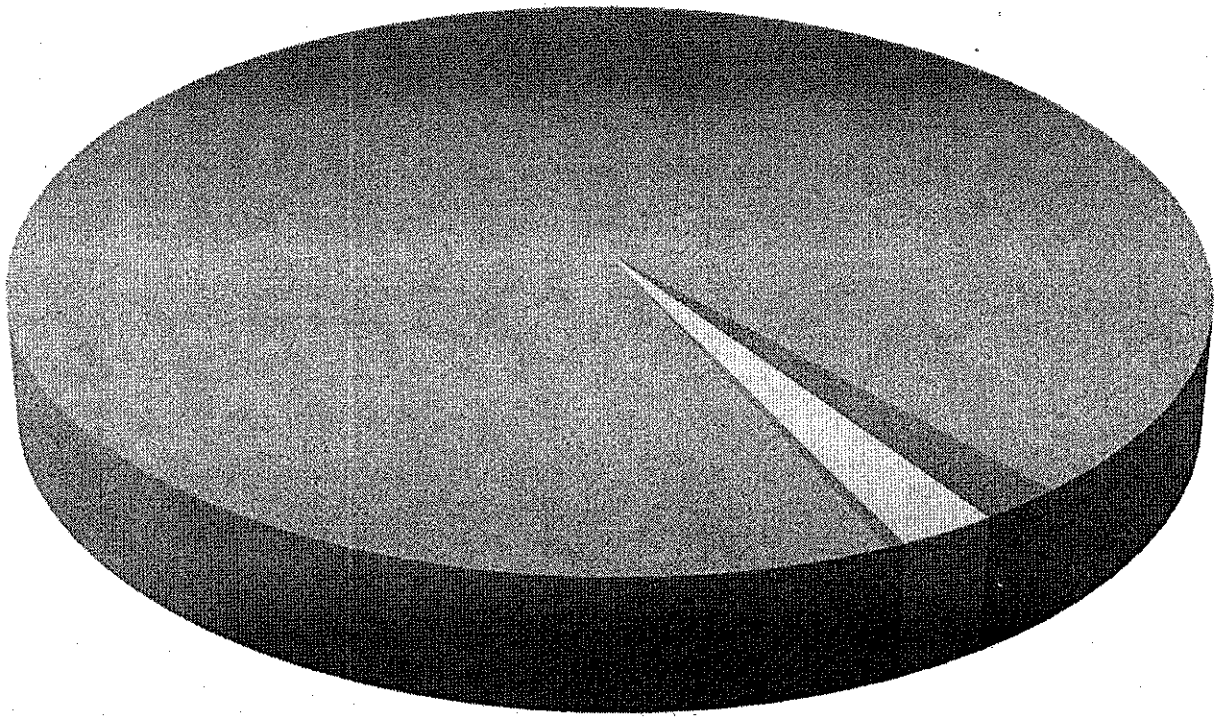
- Michigan Renewable Energy Certification System (MIRECS)
- Required by Section 41 of the Act
- Launched October 30, 2009 to certify and track all credits
  - Over 8 million credits have been issued

New Cumulative Capacity



Renewable Energy Implementation

New Capacity (MW) by Technology



- Wind
  966 MW ~95%
- Anaerobic Digester / Biomass 21 MW ~2%
- Landfill Gas
  24 MW ~2.4%
- Solar
  4.4 MW <1%

*As approved in contracts by the MPSC as of 9/30/11

All MW expected to be operational by 12/31/12

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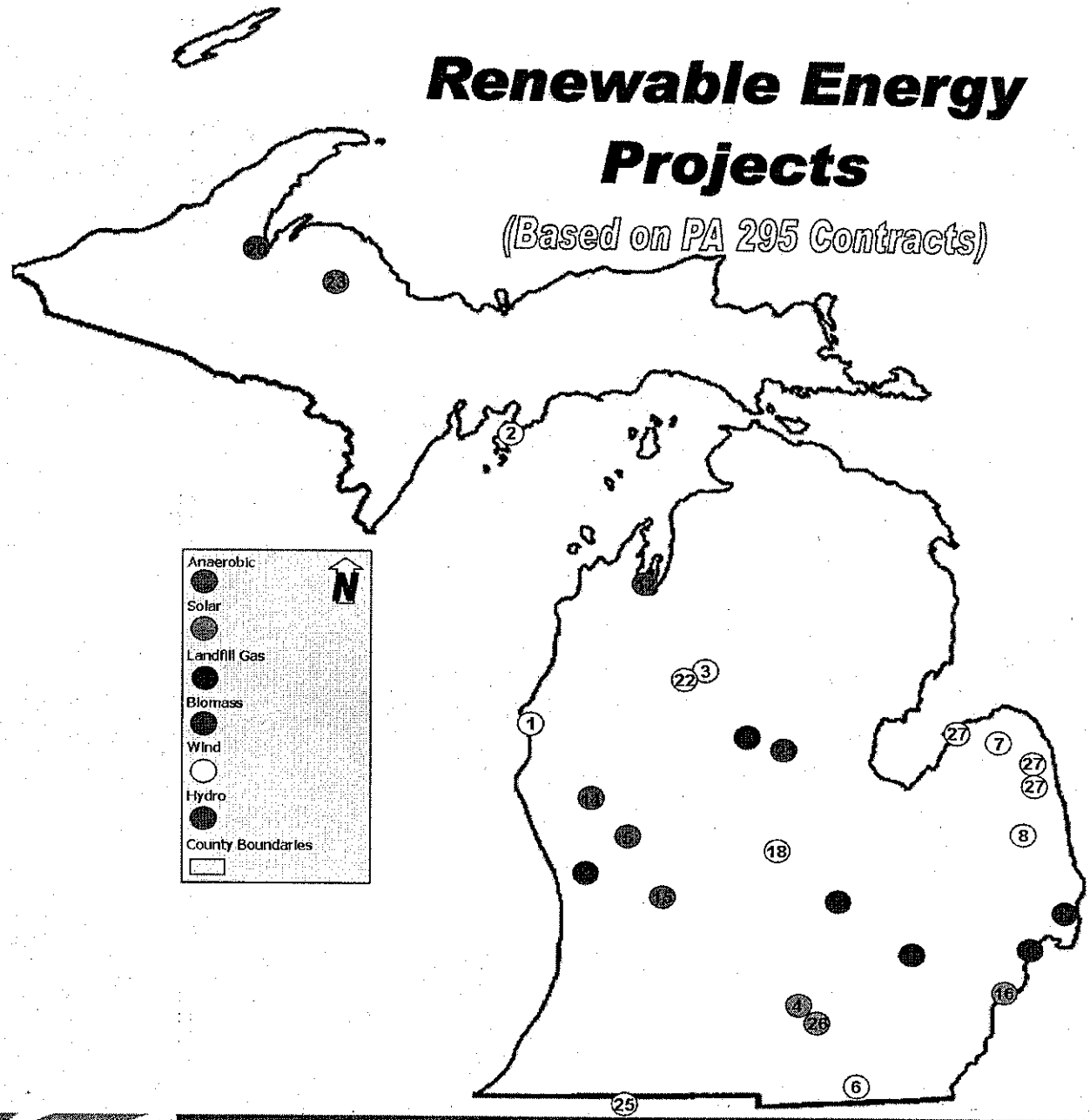
Renewable Energy Projects

(Based on PA 295 Contracts)



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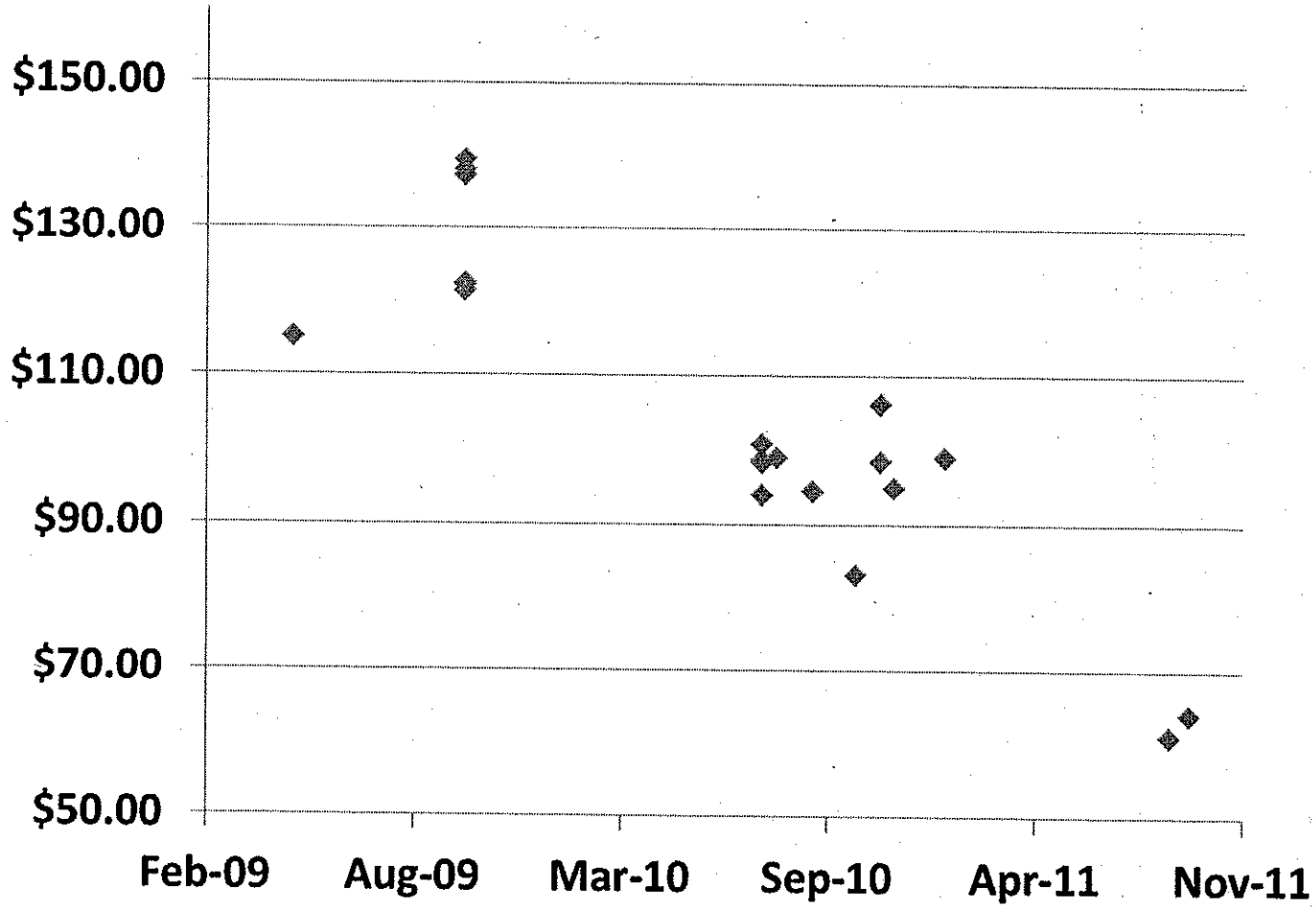
Levelized Cost ($/MWh) of MPSC Approved Renewable Energy Contracts Over Time



Weighted Average
Renewable Energy Cost Trend

- February 15, 2011 Report: **$98.68**
  - Based on 698 MW of Commission Approved Contracts

- As of September 13, 2011: **$89.53**
  - Based on 1028 MW of Commission Approved Contracts

Renewable Energy Standard Annual Reporting

- All electric providers file an annual report with information relating to the actions taken to comply with the renewable energy standard.
  - Both 2009 and 2010 annual reports have been filed.
- The Commission issued its first Renewable Energy Standard annual report on February 15, 2011.

Renewable Energy Standard Results

- The Renewable Energy Standard provided a clear and consistent policy that resulted in over 1000 MW of new renewable energy projects in Michigan.
- Renewable energy costs are less than initially expected and steeply decreasing as development progresses.
- 74 of 76 electric providers expect to meet the 10% standard.
- Standard resulted in significant private investment in renewable energy projects.

Questions?

www.michigan.gov/mpsc