Midwest Renewable Energy Tracking System, Inc.

The Role of Tracking Systems in the Clean Power Plan

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Iowa 111(d) Stakeholder Meeting

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Background

• **Mission:** M-RETS efficiently tracks and verifies renewable energy generation in collaboration with stakeholders, facilitating renewable energy development in the public interest

• Independent non-profit

• Developed out of stakeholder process with regulators, RE advocates, generators & utilities similar to 111(d) stakeholder conversations
What is a Renewable Energy Certificate (REC)

• [https://youtu.be/opJMrzNauFQ](https://youtu.be/opJMrzNauFQ)

• This short animated video illustrates how RECs are created, tracked, traded, and finally sold to end users.


Animated by Brian Stegall, www.bsteegs.com

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Primary Stakeholders

• State and provincial government renewable program administrators (regulators)
• Voluntary program administrators
• Renewable energy advocates
• Account Holders (fees paid for annual subscription and $0.006/REC to issue, $0.016/REC to retire)
  – Electric providers (muni, co-op and IOU)
  – Environmental Commodities/REC Brokers
  – Independent Power Producers or other large generators
  – Distributed generators and/or aggregators
  – Qualified Reporting Entities (data reporting)
Regional Footprint

- M-RETS primarily operates in the MISO footprint
- In response to stakeholder request, recently approved tracking of generation in AR, LA, KY, MO, MS, and TX
- M-RETS is regional, spreads costs over many users, results in efficient use of ratepayer dollars
Renewable Energy Certificates

1 MWh Renewable Energy = 1 Whole Certificate

Certificate No. 999-MN-01-2013-XXX-1-45,000
- Certificate Type
- Fuel Type
- Location
- Vintage

Renewable Portfolio
Standard Markets
Voluntary Markets
Power Markets (ISOs)
Policy Driven and Position Neutral

• M-RETS does not determine eligibility for state, federal or voluntary programs
  – A generating unit is considered “renewable” if the energy generated is considered renewable by jurisdiction
  – Services are tailored to each state’s RPS compliance, all with their own definitions of eligible renewable energy
  – M-RETS does not determine REC shelf life or geographic eligibility

• M-RETS exists to facilitate and enable the most effective policy pathways for stakeholders
<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.</td>
<td>Generation of Renewable Energy</td>
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<tr>
<td>2.</td>
<td>Registration with M-RETS</td>
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<tr>
<td>3.</td>
<td>Digital Certificate or REC Issued</td>
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<td>4.</td>
<td>Determine Market for REC</td>
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<tr>
<td>5.</td>
<td>Retirement of REC-State Obligation or Marketing Claim</td>
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*Deals occur bilaterally, through brokers and bulletin boards*
Basics of REC Tracking Systems

• In last 15-20 years, 10 tracking systems were created through state action (either individually or as consortium)

• Existing tool used in Renewable Energy markets to ensure that energy is metered, tracked and accounted in robust, safe repository

• Designated to independently issue RECs for production of RE by MWh with unique id #’s

• Use data supplied directly by transmission control areas, thereby assuring accurate data
2014 Renewable Generator and Certification Profile
REC Retirements
RPS and Compliance Roots

**Renewable portfolio standard**

**Renewable portfolio goal**

**Solar water heating eligible**

*Extra credit for solar or customer-sited renewables*

†Includes non-renewable alternative resources

[29 states + Washington DC + 2 territories have a renewable portfolio standard](#)

(9 states and 2 territories have renewable portfolio goals)
Future with the Clean Power Plan

Diagram showing the future with the Clean Power Plan, detailing different strategies and requirements for emissions standards and trading options.
Highlights of 111 (d) Efforts

To answer stakeholder questions, we conducted an extensive interview process and are examining potential roles M-RETS could play in helping states measure, verify and track reductions in carbon intensity.

Areas of exploration include:
- Tracking all power generation
- Carbon reporting
- Tracking ERCs
How M-RETS Can Support Clean Power Plan Compliance Pathways

<table>
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<tr>
<th>Compliance Approaches</th>
<th>State Policy Choice</th>
<th>Accountable Entities, Accountability Metric</th>
<th>How M-RETS Could Support</th>
</tr>
</thead>
</table>
|                       | MASS-BASED: Utility- or Plant-level emissions budget, possibly with trading | • Utilities or affected EGUs  
• CO2 emissions (tons) | • Tracking CO2 emissions and allowances, including trading activity  
• Issuing ERCs in the limited set of situations where ERCs can be generated in mass-based states for use in rate-based  
• Issuing RECs and EECs as long as separate functions continue to exist for these instruments |
|                       | RATE-BASED: Utility- or Plant-level emissions rates, possibly with trading | • Utilities or affected EGUs  
• CO2 emissions rate (lbs/MWh) | • Tracking all EGU generation (or affected EGUs only) and emissions to establish emission rates  
• Issuing and tracking ERCs  
• Issuing RECs and EECs as long as separate functions continue to exist for these instruments |
More info and Public Reports Available at mrets.org
Conclusion

• We understand the uncertainty around the CPP and are closely following the legal challenges

• We have a long history of working with states to ensure our system grants them the flexibility they need to achieve their specific policy objectives, we also see this as our role in assisting states with CPP compliance

• Please use M-RETS as a resource
Thanks and Contact Information

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