

**Municipal Electric Provider**

**Joint Submittal by the Michigan South Central Power Agency**

**Renewable Energy Plan - Biennial Filing  
Under PA 295**

**On Behalf of Its Members; the**

**Village of Clinton – MPSC Case No. U-16603,**

**City of Coldwater – MPSC Case No. U-16604,**

**City of Hillsdale – MPSC Case No. U-16616,**

**City of Marshall – MPSC Case No. U-16622, and the**

**Village of Union City – MPSC Case No. U-16636**

**July 1, 2013**

This joint filing by the Michigan South Central Power Agency (MSCPA) on behalf of its Members, the Village of Clinton, the City of Coldwater, the City of Hillsdale, the City of Marshall, and the Village of Union City, complies with Public Act 295 of 2008 (the Act), the related December 4, 2008 Michigan Public Service Commission Order (MPSC Case No. U-15800), and the related October 4, 2011 Michigan Public Service Commission Orders (MPSC Case No. U-16603, U-16604, U-16616, U-16622, U-16636).

Part 2, Section 25, of the Act requires municipal utilities to file a twenty year plan to achieve renewable energy credit portfolio standards that are specified in Section 27. The plan must be filed with the MPSC with 120 days of the MPSC's temporary order, issued pursuant to Section 191. Each electric providers plan must do the following:

- a) Describe how the provider will meet the RPS standards;
- b) Specify whether the number of megawatt hours of electricity used in the calculation of the renewable energy credit portfolio will be weather normalized or based on the average number of megawatt hours of electricity sold by the electric provider annually during the previous 3 years to retail customers in this state;
- c) Include the expected incremental cost of compliance with the renewable energy standards;
- d) Describe the manner in which the provider will allocate costs.

This document and its attachments satisfy all of the requirements of Section 25 (2) for the twenty year period running from 2009 through 2028.

**Section 25 (2) (a) “Describe how the provider will meet the renewable energy standards”**

The MSCPA, on behalf of its Members, will meet the renewable energy standards through the use of:

- a) Existing hydro resources for the City of Marshall and the Village of Union City; *(Section 11, (i), (iv), (B) of the Act)*
- b) New hydro resources under purchase power agreements with N.E.W. Hydro, LLC; *(Section 11, (i), (iv), (B) of the Act)*
- c) New hydro resources currently under development through AMP; *(Section 11, (i), (iv), (B) and Section 29, (2), (f) of the Act)*

The above described resources are further described in Attachment A.

**Section 25 (2) (b) “Specify whether the number of megawatt hours of electricity used in the calculation of the renewable energy credit portfolio will be weather normalized or based on the average number of megawatt hours of electricity sold by the electric provider annually during the previous 3 years to retail customers in this state”**

The MSCPAs, and each of its Members, will be calculating their renewable energy credit portfolio requirements based on the average number of megawatt hours of electricity sold by each member annually during the previous three years to retail customers in this state.

**Section 25 (2) (c) “Include the expected incremental cost of compliance with the renewable energy standards”**

Following the *Filing Requirements and Instructions for Renewable Energy Plans for Municipally-Owned Electric Utilities* provided in Attachment C of the MPSC Order to implement PA 295, we have provided *Attachment B – Renewable Energy Plan Surcharge Summary* which details the compliance cost for each MSCPAs Member. As shown in each Member’s *Attachment B*, MSCPAs Members do not anticipate any additional costs of compliance associated with the renewable energy standards. Production costs for both the current and future hydro are not expected to add to MSCPAs energy supply costs.

**Section 25 (2) (d) “Describe the manner in which the provider will allocate costs”**

Due to the fact that no additional cost of compliance is anticipated, there will be no charges allocated to MSCPAs Member customers.

## Attachment A – MSCPAs Member Renewable Energy Resources

### Existing Hydro Resources

City of Marshall – Owns and operates an existing run-of-the-river hydro facility consisting of two units with a combined capacity of 0.319 MW. During the past three years, this facility generated a total of 4,088 megawatt hours, an annual average of 1,363 megawatt hours, which equates to an average annual capacity factor of 55%.

Village of Union City – Owns and operates an existing run-of-the-river hydro facility consisting of two units with a combined capacity of 0.375 MW. During the past three years, this facility generated a total of 4,439 megawatt hours, an annual average of 1,480 megawatt hours, which equates to an average annual capacity factor of 50%.

### New Hydro Resources

The MSCPAs Members have committed to purchase 8.56 MW of two hydro units located at Menominee, Michigan and Oconto Falls, Wisconsin under a twenty-year PPA with N.E.W. Hydro, LLC. These units are currently in operation and MSCPAs will begin receiving power on July 1, 2013 from these units. The units have an installed capacity of 8.56 MW and an anticipated annual capacity factor of 55%.

The allocation of interest in these projects for the participating MSCPAs members is as follows:

Member	Capacity (MW)	Expected Annual Energy (MWh)
Village of Clinton	0.56	2,197
City of Coldwater	3.43	13,523
City of Hillsdale	2.18	8,621
City of Marshall	2.06	8,114
Village of Union City	.34	1,353

Four of the five MSCPAs Members have also committed to purchase 13.4 MW of a hydro development project through AMP, an Ohio corporation that provides energy related services to, at present, 130 municipal members located in seven states. The original hydro project consists of the development of three hydro generation stations at existing lock and dam facilities located on the Ohio River. The units were originally scheduled to be online in 2012, but with construction delays the first project is now scheduled to be on line by late-2014 with the final two units to be on line in 2015. Collectively, these units are expected to have an installed capacity of 206 MW, with an anticipated annual capacity factor of 55%.

The allocation of interest in this project for the participating MSCPAs members is as follows:

Member	Capacity (MW)	Expected Annual Energy (MWh)
Village of Clinton	0.7	3,373
City of Coldwater	6.5	31,317
City of Hillsdale	3.4	16,381
City of Marshall	2.8	13,490

**MUNICIPALLY OWNED ELECTRIC UTILITIES - RENEWABLE ENERGY PLAN SURCHARGE AND COMPLIANCE SUMMARY**

**Attachment B - Renewable Energy Plan Surcharge Summary**

Village of Union City - MPSC Case U-16636

	Units	2009	2010	2011	2012	2013	2014	2015	2016
	MWH	14,232	15,412	15,851	16,131	16,212	16,293		
<b>Annual Retail Sales (Actual/Forecast 2011-2029)</b>									
<b>Sales Forecast (3-yr running average)</b>									
	MWH				15,165	15,798	16,065	16,212	
<b>RPS Renewable Energy Credit Compliance Requirement</b>									
RE Portfolio (Sales Forecast Multiplied by 10%)	REC				1,517	1,580	1,607	1,621	1,621
Baseline (REC from existing RE Supply (Pre RPS))	REC				1,625	1,625	1,625	1,625	1,625
Additional REC necessary to meet Compliance (RE Portfolio Less Baseline)	REC				(108)	(45)	(18)	(4)	(4)
RPS Requirements Adder (2012: 20%, 2013: 33%, 2014: 50%, 2015: 100%) (ie: 20% of Additional REC necessary)	REC	0%	0%	0%	20%	33%	50%	100%	100%
REC's Required due to RPS Requirements Adder	REC	-	-	-	(108)	(45)	(18)	(4)	(4)
Compliance Requirement (Sum of RPS Requirements Adder above and Baseline)	REC	-	-	-	1,517	1,580	1,607	1,621	1,621

**REC Inventory**

REC Obtained:

Generation Based

Banked from Prior Year	REC	1,856	3,696	5,399	6,792	-	-	-	-
Future Year REC's (up to 120 days)	REC								
Future Year Incentive REC's (up to 120 days)	REC								
Less: REC's Allocated to Prior Year	REC								
Less: Incentive REC's Allocated to Prior Year	REC								
Build/BOT	REC	1,698	1,681	1,555	1,203	1,655	1,655	1,655	1,655
PPA N.E.W. Hydro, LLC	REC	-	-	-	-	535	1,352	1,352	1,352
PPA AMP Hydros	REC	-	-	-	-	-	-	-	-
<i>Subtotal (1)</i>	REC	1,698	3,537	5,251	6,602	8,982	3,007	3,007	3,007
Purchase	REC	-	-	-	3,042	-	-	-	-
Incentive (SB 213 Sec 39 (2))	REC	158	159	148	113	145	145	145	145
<i>Subtotal (2)</i>	REC	1,856	3,696	5,399	9,757	9,127	3,152	3,152	3,152
Less: Sold	REC	-	-	-	(1,448)	(7,547)	(1,545)	(1,531)	(1,531)
Less: Retired for Compliance	REC	-	-	-	(1,517)	(1,580)	(1,607)	(1,621)	(1,621)
Less: Expired	REC	-	-	-	-	-	-	-	-
Year-End REC Balance	REC	1,856	3,696	5,399	6,792	-	-	-	-

**RPS Renewable Energy Credit Compliance Requirement**

Compliance Requirement	REC			1,517	1,580	1,607	1,621	1,621
Retired for Compliance	REC			1,517	1,580	1,607	1,621	1,621
REC Compliance Percentage (Retired for Compliance/Sales Forecast)	%			10.00%	10.00%	10.00%	10.00%	10.00%

**Revenue Requirement (Renewable only)**

Build/BOT	\$'			96,240	132,400	132,400	132,400	132,400
PPA	\$'			-	26,215	66,248	66,248	66,248
REC Purchases (Sales) 2012 Actual, Remainder @ \$3 Estimated per REC	\$'			506	(22,641)	(4,635)	(4,593)	(4,593)
<b>Total</b>	\$'			96,746	135,974	194,013	194,055	194,055

**\$ Per MWH/ (\$ Per REC if no Build/BOT or PPA for that year)**

**Forecasted Transfer Price**

**Amount recovered through PSCR (transfer price \* volume of energy or REC's)**

**Incremental Cost of Compliance**

**MUNICIPALLY OWNED ELECTRIC UTILITIES - RENEWABLE ENERGY PLAN SURCHARGE AND COMPLIANCE SUMMARY**

**Attachment B - Renewable Energy Plan Surcharge Summary**

Village of Union City - MPSC Case U-16636

	Units MWH	2017	2018	2019	2020	2021	2022	2023
<b>Annual Retail Sales (Actual/Forecast 2011-2029)</b>								
<b>Sales Forecast (3-yr running average)</b>	MWH							
<b>RPS Renewable Energy Credit Compliance Requirement</b>								
RE Portfolio (Sales Forecast Multiplied by 10%)	REC	1,621	1,621	1,621	1,621	1,621	1,621	1,621
Baseline (REC from existing RE Supply (Pre RPS))	REC	1,625	1,625	1,625	1,625	1,625	1,625	1,625
Additional REC necessary to meet Compliance (RE Portfolio Less Baseline)	REC	(4)	(4)	(4)	(4)	(4)	(4)	(4)
RPS Requirements Adder (2012: 20%, 2013: 33%, 2014: 50%, 2015: 100%) (ie: 20% of Additional REC necessary)	REC	100%	100%	100%	100%	100%	100%	100%
REC's Required due to RPS Requirements Adder	REC	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Compliance Requirement (Sum of RPS Requirements Adder above and Baseline)	REC	1,621	1,621	1,621	1,621	1,621	1,621	1,621
<b>REC Inventory</b>								
REC Obtained:								
<u>Generation Based</u>								
Banked from Prior Year	REC	-	-	-	-	-	-	-
Future Year REC's (up to 120 days)	REC	-	-	-	-	-	-	-
Future Year Incentive REC's (up to 120 days)	REC	-	-	-	-	-	-	-
Less: REC's Allocated to Prior Year	REC	-	-	-	-	-	-	-
Less: Incentive REC's Allocated to Prior Year	REC	-	-	-	-	-	-	-
Build/BOT	REC	1,655	1,655	1,655	1,655	1,655	1,655	1,655
PPA N.E.W. Hydro, LLC	REC	1,352	1,352	1,352	1,352	1,352	1,352	1,352
PPA AMP Hydros	REC	-	-	-	-	-	-	-
<i>Subtotal (1)</i>	REC	3,007	3,007	3,007	3,007	3,007	3,007	3,007
Purchase	REC	-	-	-	-	-	-	-
Incentive (SB 213 Sec 39 (2))	REC	145	145	145	145	145	145	145
<i>Subtotal (2)</i>	REC	3,152	3,152	3,152	3,152	3,152	3,152	3,152
Less: Sold	REC	(1,531)	(1,531)	(1,531)	(1,531)	(1,531)	(1,531)	(1,531)
Less: Retired for Compliance	REC	(1,621)	(1,621)	(1,621)	(1,621)	(1,621)	(1,621)	(1,621)
Less: Expired	REC	-	-	-	-	-	-	-
Year-End REC Balance	REC	-	-	-	-	-	-	-
<b>RPS Renewable Energy Credit Compliance Requirement</b>								
Compliance Requirement	REC	1,621	1,621	1,621	1,621	1,621	1,621	1,621
Retired for Compliance	REC	1,621	1,621	1,621	1,621	1,621	1,621	1,621
REC Compliance Percentage (Retired for Compliance/Sales Forecast)	%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
<b>Revenue Requirement (Renewable only)</b>								
Build/BOT	\$'s	132,400	132,400	132,400	132,400	132,400	132,400	132,400
PPA	\$'s	66,248	66,248	66,248	66,248	66,248	66,248	66,248
REC Purchases (Sales) 2012 Actual, Remainder @ \$3 Estimated per REC	\$'s	(4,593)	(4,593)	(4,593)	(4,593)	(4,593)	(4,593)	(4,593)
<b>Total</b>	\$'s	194,055	194,055	194,055	194,055	194,055	194,055	194,055
<b>\$ Per MWH/ (\$ Per REC if no Build/BOT or PPA for that year)</b>	\$/MWH or \$/REC	62	62	62	62	62	62	62
<b>Forecasted Transfer Price</b>	\$/MWH	133	133	133	133	133	133	133
<b>Amount recovered through PSCR (transfer price * volume of energy or REC's)</b>	\$'s	399,931	399,931	399,931	399,931	399,931	399,931	399,931
<b>Incremental Cost of Compliance</b>	\$'s	-	-	-	-	-	-	-

**MUNICIPALLY OWNED ELECTRIC UTILITIES - RENEWABLE ENERGY PLAN SURCHARGE AND COMPLIANCE SUMMARY**

**Attachment B - Renewable Energy Plan Surcharge Summary**

Village of Union City - MPSC Case U-16636

	Units MWH	2024	2025	2026	2027	2028	2029	Total/Plan to Date
<b>Annual Retail Sales (Actual/Forecast 2011-2029)</b>								
<b>Sales Forecast (3-yr running average)</b>	MWH							
<b>RPS Renewable Energy Credit Compliance Requirement</b>								
RE Portfolio (Sales Forecast Multiplied by 10%)	REC	1,621	1,621	1,621	1,621	1,621	1,621	
Baseline (REC from existing RE Supply (Pre RPS))	REC	1,625	1,625	1,625	1,625	1,625	1,625	
Additional REC necessary to meet Compliance (RE Portfolio Less Baseline)	REC	(4)	(4)	(4)	(4)	(4)	(4)	
RPS Requirements Adder (2012: 20%, 2013: 33%, 2014: 50%, 2015: 100%) (ie: 20% of Additional REC necessary)	REC	100%	100%	100%	100%	100%	100%	
REC's Required due to RPS Requirements Adder	REC	(4)	(4)	(4)	(4)	(4)	(4)	
Compliance Requirement (Sum of RPS Requirements Adder above and Baseline)	REC	1,621	1,621	1,621	1,621	1,621	1,621	29,019
<b>REC Inventory</b>								
REC Obtained:								
<u>Generation Based</u>								
Banked from Prior Year	REC	-	-	-	-	-	-	
Future Year REC's (up to 120 days)	REC							
Future Year Incentive REC's (up to 120 days)	REC							
Less: REC's Allocated to Prior Year	REC							
Less: Incentive REC's Allocated to Prior Year	REC							
Build/BOT	REC	1,655	1,655	1,655	1,655	1,655	1,655	34,272
PPA N.E.W. Hydro, LLC	REC	1,352	1,352	1,352	1,352	1,352	1,352	22,167
PPA AMP Hydros	REC	-	-	-	-	-	-	
<i>Subtotal (1)</i>	REC	3,007	3,007	3,007	3,007	3,007	3,007	56,439
Purchase	REC	-	-	-	-	-	-	3,042
Incentive (SB 213 Sec 39 (2))	REC	145	145	145	145	145	145	3,043
<i>Subtotal (2)</i>	REC	3,152	3,152	3,152	3,152	3,152	3,152	62,524
Less: Sold	REC	(1,531)	(1,531)	(1,531)	(1,531)	(1,531)	(1,531)	(33,505)
Less: Retired for Compliance	REC	(1,621)	(1,621)	(1,621)	(1,621)	(1,621)	(1,621)	(29,019)
Less: Expired	REC	-	-	-	-	-	-	(62,524)
Year-End REC Balance	REC	-	-	-	-	-	-	
<b>RPS Renewable Energy Credit Compliance Requirement</b>								
Compliance Requirement	REC	1,621	1,621	1,621	1,621	1,621	1,621	
Retired for Compliance	REC	1,621	1,621	1,621	1,621	1,621	1,621	29,019
REC Compliance Percentage (Retired for Compliance/Sales Forecast)	%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	
<b>Revenue Requirement (Renewable only)</b>								
Build/BOT	\$'s	132,400	132,400	132,400	132,400	132,400	132,400	2,347,040
PPA	\$'s	66,248	66,248	66,248	66,248	66,248	66,248	1,086,183
REC Purchases (Sales) 2012 Actual, Remainder @ \$3 Estimated per REC	\$'s	(4,593)	(4,593)	(4,593)	(4,593)	(4,593)	(4,593)	(95,665)
<b>Total</b>	\$'s	194,055	194,055	194,055	194,055	194,055	194,055	3,337,558
<b>\$ Per MWH/ (\$ Per REC if no Build/BOT or PPA for that year)</b>	\$MWH or \$REC	62	62	62	62	62	62	
<b>Forecasted Transfer Price</b>	\$/MWH	133	133	133	133	133	133	
<b>Amount recovered through PSCR (transfer price * volume of energy or REC's)</b>	\$'s	399,931	399,931	399,931	399,931	399,931	399,931	7,254,751
<b>Incremental Cost of Compliance</b>	\$'s	-	-	-	-	-	-	506