



# City of Hastings Solar Farm

## Board Meeting Update

June 13, 2019





## Solar Farm Review

- Eligibility – Current Electric Hastings Utilities Customers
- Participation options – Installed panels, solar shares, or a combination of both up to 80% of a customers annual usage. New customers will be based off of Utility estimates
- Program length – Minimum of 1 month and maximum is 30 years from completion of construction
- Enrollment Fee - \$50 due at time of application, refundable as a credit to the account if on the plan for at least one (1) year.



## Solar Farm Rate & Billing

- Standard retail rate schedule still applies to all customers
- 1 solar share will equal 150 kWh
  - \$0.0301/kWh or \$4.52 per share each month.
- 1 installed panel is expected to average 48 kWh a month (Year 1 average: 52 kWh, Year 30 average: 45 kWh)
  - 1 time cost per installed panel is \$384
- Solar O&M charge = \$0.0062/kwh (applies to installed panels)
- Base Energy Credit = \$0.0213/kwh
  - will be adjusted annually



## Solar Option Bill Examples

### Assumptions

- Residential customer that uses 1,000 kWh per month
- ≈30% of the usage is covered by the purchase of solar shares, installed solar panels, or combination of both
  - Solar shares at 150 kWh each = 2 shares
  - Installed panels at Year 1 avg: 52 kWh each = 6 installed panels (total purchase price of \$2,304, \$1,612.80 after tax credit\*)
  - Combo = 1 solar share and 3 installed panels (total purchase price for installed panels of \$1,152, \$806.40 after tax credit\*)

\*Installed panel purchase may be eligible for a 30% ITC, please consult your tax advisor

## Comparison- Solar Share

	Current - Without Solar			With Solar Share		
	kWh	Rate	Amount	kWh	Rate	Amount
Customer charge			4.83			4.83
Energy charge	1,000	0.0769	76.90	1,000	0.0769	76.90
Fuel adjustment charge		0.0258	25.80		0.0258	25.80
Base energy credit				(300)	0.0213	(6.40)
Solar energy charge				300	0.0301	9.03
<b>Total monthly bill</b>	<u>1,000</u>		<u>107.53</u>	<u>1,000</u>		<u>110.16</u>
<b>Cost (Savings) per month compared to without solar</b>						<u>2.63</u>

## Comparison- Installed Panel

	Current - Without Solar			With Installed Panel		
	kWh	Rate	Amount	kWh	Rate	Amount
Customer charge			4.83			4.83
Energy charge	1,000	0.0769	76.90	1,000	0.0769	76.90
Fuel adjustment charge		0.0258	25.80		0.0258	25.80
Base energy credit				(312)	0.0213	(6.65)
Solar O&M charge				312	0.0062	1.93
<b>Total monthly bill</b>	<u>1,000</u>		<u>107.53</u>	<u>1,000</u>		<u>102.81</u>
<b>Cost (Savings) per month compared to without solar</b>						<u>(4.72)</u>

avg production 52 kWh per installed panel = 6 panels; 1 panel cost \$384\*

\*Installed panel purchase may be eligible for a 30% ITC, please consult your tax advisor

## Comparison- Combo

	Current - Without Solar			With Combo		
	kWh	Rate	Amount	kWh	Rate	Amount
Customer charge			4.83			4.83
Energy charge	1,000	0.0769	76.90	1,000	0.0769	76.90
Fuel adjustment charge		0.0258	25.80		0.0258	25.80
Base energy credit				(306)	0.0213	(6.52)
Solar energy charge (shares)				150	0.0301	4.52
Solar O&M charge (panels)				156	0.0062	0.97
<b>Total monthly bill</b>	<u>1,000</u>		<u>107.53</u>	<u>1,000</u>		<u>106.49</u>

**Cost (Savings) per month compared to without solar (1.04)**

avg production 52 kWh per installed panel = 3 panels plus 1 solar share

\*Installed panel purchase may be eligible for a 30% ITC, please consult your tax advisor

# Option Summary

	Rate	Current		Solar Share		Installed Panel		With Combo	
		kWh	Amount	kWh	Amount	kWh	Amount	kWh	Amount
Customer charge	4.83		4.83		4.83		4.83		4.83
Energy charge	0.0769	1,000	76.90	1,000	76.90	1,000	76.90	1,000	76.90
Fuel adjustment charge	0.0258		25.80		25.80		25.80		25.80
Base energy credit	0.0213			(300)	(6.40)	(312)	(6.65)	(306)	(6.52)
Solar energy charge (shares)	0.0301			300	9.03			150	4.52
Solar O&M charge (panels)	0.0062					312	1.93	156	0.97
<b>Total monthly bill</b>		<u>1,000</u>	<u>107.53</u>	<u>1,000</u>	<u>110.16</u>	<u>1,000</u>	<u>102.81</u>	<u>1,000</u>	<u>106.49</u>
<b>Difference</b>					<u>2.63</u>		<u>(4.72)</u>		<u>(1.04)</u>





Questions?