

**Dakota Valley Electric Cooperative**  
 Three Phase Large Commercial Rate Schedule  
 Commercial Incentive Rate Discount

	<u>Minn-Kota Ag</u> <u>Service Charges</u>	<u>DVEC Power</u> <u>Supplier Costs</u>	<u>DVEC</u> <u>Revenue</u>	<u>Minn-Kota Ag</u> <u>Service Charges</u>
Year 1	\$275,524.58	\$255,809.80	\$19,714.78	\$ 261,322.81
Year 2	\$275,524.58	\$255,809.80	\$19,714.78	\$ 261,322.81
Year 3	\$275,524.58	\$255,809.80	\$19,714.78	\$ 261,322.81
Year 4	\$275,524.58	\$255,809.80	\$19,714.78	\$ 261,322.81
Year 5	\$281,626.81	\$255,809.80	\$25,817.02	\$ 261,322.81
Year 6	\$281,626.81	\$255,809.80	\$25,817.02	\$ 261,322.81
Year 7	\$287,729.05	\$255,809.80	\$31,919.25	\$ 261,322.81
Year 8	\$287,729.05	\$255,809.80	\$31,919.25	\$ 261,322.81
Year 9	\$293,831.28	\$255,809.80	\$38,021.49	\$ 261,322.81
Year 10	\$306,035.75	\$255,809.80	\$50,225.96	\$ 261,322.81

**Otter Tail Power Company**  
 General Service Rate

Dakota Valley Electric Cooperative  
 Three Phase Large Commercial Service (56, 356)

Date Prepared: 10/10/2017

*This spreadsheet utilizes the demand & energy estimated to be used by Minn-Kota Ag service. The load factor was calculated from the provided demand & energy for each month.*

Estimate Assumptions and Considerations:

- Rate is standard Three Phase Large Commercial Service  
 Monthly Service Charge: \$ 77.00  
 Demand Charge of: \$ 10.80 per kW  
 1st Step Energy Charge of: \$ 0.0558 per kWh  
 2nd Step Energy Charge of: \$ 0.0528 per kWh  
 Excess Energy Charge of: \$ 0.0459 per kWh  
 Monthly demand and energy estimates are based on projected operation.  
 Transformer KVA: 1,500 kVA
- Commercial Incentive Rate Discount of 10% is applied (Years 1-4)  
 - Discount is applied to Demand and Energy

DATE	kw*	Calculated Load Factor	kWh*
Jan	1,056.00	40.6%	318,600
Feb	987.9	36.7%	243,600
Mar	1,019.10	31.8%	240,900
Apr	866.10	25.4%	158,400
May	843.00	27.1%	170,100
Jun	920.40	34.5%	228,600
Jul	939.30	24.8%	173,400
Aug	792.60	32.8%	193,200
Sep	614.70	33.6%	148,800
Oct	1,111.80	25.9%	214,200
Nov	1,110.00	43.2%	345,300
Dec	1,109.70	41.9%	345,900

\*Values can be modified to update the calculations below.

	Monthly Demand	Monthly Energy	Load Factor	Charge for		Basic Service Charge	Transformer Capacity Charge	Other Charges or Discounts	Total Charges	Cost per kWh
				Demand	Total Energy					
January	1,056.00	318,600	40.6%	\$ 11,404.80	\$ 17,289.61	\$ 77.00	\$ -	\$ -	\$ 28,771.41	\$ 0.09031
February	987.90	243,600	36.7%	\$ 10,669.32	\$ 13,309.50	\$ 77.00	\$ -	\$ -	\$ 24,055.82	\$ 0.09875
March	1,019.10	240,900	31.8%	\$ 11,006.28	\$ 13,180.76	\$ 77.00	\$ -	\$ -	\$ 24,264.04	\$ 0.10072
April	866.10	158,400	25.4%	\$ 9,353.88	\$ 8,754.12	\$ 77.00	\$ -	\$ -	\$ 18,185.00	\$ 0.11480
May	843.00	170,100	27.1%	\$ 9,104.40	\$ 9,361.94	\$ 77.00	\$ -	\$ -	\$ 18,543.34	\$ 0.10901
June	920.40	228,600	34.5%	\$ 9,940.32	\$ 12,486.98	\$ 77.00	\$ -	\$ -	\$ 22,504.30	\$ 0.09844
July	939.30	173,400	24.8%	\$ 10,144.44	\$ 9,579.18	\$ 77.00	\$ -	\$ -	\$ 19,800.62	\$ 0.11419
August	792.60	193,200	32.8%	\$ 8,560.08	\$ 10,559.86	\$ 77.00	\$ -	\$ -	\$ 19,196.94	\$ 0.09936
September	614.70	148,800	33.6%	\$ 6,638.76	\$ 8,134.95	\$ 77.00	\$ -	\$ -	\$ 14,850.71	\$ 0.09980
October	1,111.80	214,200	25.9%	\$ 12,007.44	\$ 11,811.49	\$ 77.00	\$ -	\$ -	\$ 23,895.93	\$ 0.11156
November	1,110.00	345,300	43.2%	\$ 11,988.00	\$ 18,651.47	\$ 77.00	\$ -	\$ -	\$ 30,716.47	\$ 0.08896
December	1,109.70	345,900	41.9%	\$ 11,984.76	\$ 18,678.25	\$ 77.00	\$ -	\$ -	\$ 30,740.01	\$ 0.08887
<b>Totals</b>	<b>11,371</b>	<b>2,781,000</b>	<b>33%</b>	<b>\$ 122,802.48</b>	<b>\$ 151,798.10</b>	<b>\$ 924.00</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 275,524.58</b>	<b>\$ 0.10123</b>

Dakota Valley Electric Cooperative  
 Three Phase Large Commercial Service (56, 356)

Date Prepared: 10/10/2017

*This spreadsheet utilizes the demand & energy estimated to be used by Minn-Kota Ag service. The load factor was calculated from the provided demand & energy for each month.*

Estimate Assumptions and Considerations:

- Rate is standard Three Phase Large Commercial Service  
 Monthly Service Charge: \$ 77.00  
 Demand Charge of: \$ 11.04 per kW  
 1st Step Energy Charge of: \$ 0.0570 per kWh  
 2nd Step Energy Charge of: \$ 0.0540 per kWh  
 Excess Energy Charge of: \$ 0.0469 per kWh
- Monthly demand and energy estimates are based on projected operation.  
 Transformer KVA: 1,500 kVA
- Commercial Incentive Rate Discount of 8% is applied (Years 5-6)  
 - Discount is applied to Demand and Energy

DATE	kW*	Calculated Load Factor	kWh*
Jan	1,056.00	40.6%	318,600
Feb	987.9	36.7%	243,600
Mar	1,019.10	31.8%	240,900
Apr	866.10	25.4%	158,400
May	843.00	27.1%	170,100
Jun	920.40	34.5%	228,600
Jul	939.30	24.8%	173,400
Aug	792.60	32.8%	193,200
Sep	614.70	33.6%	148,800
Oct	1,111.80	25.9%	214,200
Nov	1,109.70	43.2%	345,300
Dec	1,109.70	41.9%	345,900

\*Values can be modified to update the calculations below.

	Monthly Demand	Monthly Energy	Load Factor	Charge for		Basic Service Charge	Transformer Capacity Charge	Other Charges or Discounts	Total Charges	Cost per kWh
				Demand	Total Energy					
January	1,056.00	318,600	40.6%	\$ 11,658.24	\$ 17,673.83	\$ 77.00	\$ -	\$ -	\$ 29,409.07	\$ 0.09231
February	987.90	243,600	36.7%	\$ 10,906.42	\$ 13,605.26	\$ 77.00	\$ -	\$ -	\$ 24,588.68	\$ 0.10094
March	1,019.10	240,900	31.8%	\$ 11,250.86	\$ 13,473.66	\$ 77.00	\$ -	\$ -	\$ 24,801.53	\$ 0.10295
April	866.10	158,400	25.4%	\$ 9,561.74	\$ 8,948.66	\$ 77.00	\$ -	\$ -	\$ 18,587.40	\$ 0.11734
May	843.00	170,100	27.1%	\$ 9,306.72	\$ 9,569.98	\$ 77.00	\$ -	\$ -	\$ 18,953.70	\$ 0.11143
June	920.40	228,600	34.5%	\$ 10,161.22	\$ 12,764.46	\$ 77.00	\$ -	\$ -	\$ 23,002.68	\$ 0.10062
July	939.30	173,400	24.8%	\$ 10,369.87	\$ 9,792.05	\$ 77.00	\$ -	\$ -	\$ 20,238.92	\$ 0.11672
August	792.60	193,200	32.8%	\$ 8,750.30	\$ 10,794.52	\$ 77.00	\$ -	\$ -	\$ 19,621.83	\$ 0.10156
September	614.70	148,800	33.6%	\$ 6,786.29	\$ 8,315.73	\$ 77.00	\$ -	\$ -	\$ 15,179.02	\$ 0.10201
October	1,111.80	214,200	25.9%	\$ 12,274.27	\$ 12,073.97	\$ 77.00	\$ -	\$ -	\$ 24,425.24	\$ 0.11403
November	1,110.00	345,300	43.2%	\$ 12,254.40	\$ 19,065.94	\$ 77.00	\$ -	\$ -	\$ 31,397.34	\$ 0.09093
December	1,109.70	345,900	41.9%	\$ 12,251.09	\$ 19,093.32	\$ 77.00	\$ -	\$ -	\$ 31,421.41	\$ 0.09084
Totals	11,371	2,781,000	33%	\$ 125,531.42	\$ 155,171.39	\$ 924.00	\$ -	\$ -	\$ 281,626.81	\$ 0.10347

Dakota Valley Electric Cooperative  
 Three Phase Large Commercial Service (56, 356)

Date Prepared: 10/10/2017

This spreadsheet utilizes the demand & energy estimated to be used by Minn-Kota Ag service  
 The load factor was calculated from the provided demand & energy for each month.

Estimate Assumptions and Considerations:

1. Rate is standard Three Phase Large Commercial Service

Monthly Service Charge: \$ 77.00

Demand Charge of: \$ 11.28 per kW

1st Step Energy Charge of: \$ 0.0583 per kWh

2nd Step Energy Charge of: \$ 0.0552 per kWh

Excess Energy Charge of: \$ 0.0479 per kWh

2. Monthly demand and energy estimates are based on projected operation.

Transformer KVA: 1,500

Commercial Incentive Rate Discount of 6% is applied (Years 7-8)

- Discount is applied to Demand and Energy

DATE	kW*	Calculated Load Factor	kWh*
Jan	1,056.00	40.6%	318,600
Feb	987.9	36.7%	243,600
Mar	1,019.10	31.8%	240,900
Apr	866.10	25.4%	158,400
May	843.00	27.1%	170,100
Jun	920.40	34.5%	228,600
Jul	939.30	24.8%	173,400
Aug	792.60	32.8%	193,200
Sep	614.70	33.6%	148,800
Oct	1,111.80	25.9%	214,200
Nov	1,110.00	43.2%	345,300
Dec	1,109.70	41.9%	345,900

\*Values can be modified to update the calculations below.

	Monthly Demand	Monthly Energy	Load Factor	Charge for		Basic Service Charge	Transformer Capacity Charge	Other Charges or Discounts	Total Charges	Cost per kWh
				Demand	Total Energy					
January	1,056.00	318,600	40.6%	\$ 11,911.68	\$ 18,058.04	\$ 77.00	\$ -	\$ -	\$ 30,046.72	\$ 0.09431
February	987.90	243,600	36.7%	\$ 11,143.51	\$ 13,901.03	\$ 77.00	\$ -	\$ -	\$ 25,121.54	\$ 0.10313
March	1,019.10	240,900	31.8%	\$ 11,495.45	\$ 13,766.57	\$ 77.00	\$ -	\$ -	\$ 25,339.02	\$ 0.10518
April	866.10	158,400	25.4%	\$ 9,769.61	\$ 9,143.19	\$ 77.00	\$ -	\$ -	\$ 18,989.80	\$ 0.11989
May	843.00	170,100	27.1%	\$ 9,509.04	\$ 9,778.03	\$ 77.00	\$ -	\$ -	\$ 19,364.07	\$ 0.11384
June	920.40	228,600	34.5%	\$ 10,382.11	\$ 13,041.95	\$ 77.00	\$ -	\$ -	\$ 23,501.06	\$ 0.10280
July	939.30	173,400	24.8%	\$ 10,595.30	\$ 10,004.92	\$ 77.00	\$ -	\$ -	\$ 20,677.23	\$ 0.11925
August	792.60	193,200	32.8%	\$ 8,940.53	\$ 11,029.19	\$ 77.00	\$ -	\$ -	\$ 20,046.71	\$ 0.10376
September	614.70	148,800	33.6%	\$ 6,933.82	\$ 8,496.51	\$ 77.00	\$ -	\$ -	\$ 15,507.32	\$ 0.10422
October	1,111.80	214,200	25.9%	\$ 12,541.10	\$ 12,336.45	\$ 77.00	\$ -	\$ -	\$ 24,954.55	\$ 0.11650
November	1,110.00	345,300	43.2%	\$ 12,520.80	\$ 19,480.42	\$ 77.00	\$ -	\$ -	\$ 32,078.22	\$ 0.09290
December	1,109.70	345,900	41.9%	\$ 12,517.42	\$ 19,508.39	\$ 77.00	\$ -	\$ -	\$ 32,102.81	\$ 0.09281
Totals	11,371	2,781,000	33%	\$ 128,260.37	\$ 158,544.68	\$ 924.00	\$ -	\$ -	\$ 287,729.05	\$ 0.10572

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Dakota Valley Electric Cooperative  
 Three Phase Large Commercial Service (56, 356)

Date Prepared: 10/10/2017

*This spreadsheet utilizes the demand & energy estimated to be used by Minn-Kota Ag service. The load factor was calculated from the provided demand & energy for each month.*

Estimate Assumptions and Considerations:

- Rate is standard Three Phase Large Commercial Service  
 Monthly Service Charge: \$ 77.00  
 Demand Charge of: \$ 11.52 per kW  
 1st Step Energy Charge of: \$ 0.0595 per kWh  
 2nd Step Energy Charge of: \$ 0.0564 per kWh  
 Excess Energy Charge of: \$ 0.0490 per kWh  
 Monthly demand and energy estimates are based on projected operation.  
 Transformer KVA: 1,500 kVA
- Commercial Incentive Rate Discount of 4% is applied (Year 9)  
 - Discount is applied to Demand and Energy

DATE	KW*	Calculated Load Factor	kWh*
Jan	1,056.00	40.6%	318,600
Feb	987.9	36.7%	243,600
Mar	1,019.10	31.8%	240,900
Apr	866.10	25.4%	158,400
May	843.00	27.1%	170,100
Jun	920.40	34.5%	228,600
Jul	939.30	24.8%	173,400
Aug	792.60	32.8%	193,200
Sep	614.70	33.6%	148,800
Oct	1,111.80	25.9%	214,200
Nov	1,110.00	43.2%	345,300
Dec	1,109.70	41.9%	345,900

\*Values can be modified to update the calculations below.

	Monthly Demand	Monthly Energy	Load Factor	Charge for Demand	Charge for Total Energy	Basic Service Charge	Transformer Capacity Charge	Other Charges or Discounts	Total Charges	Cost per kWh
January	1,056.00	318,600	40.6%	\$ 12,165.12	\$ 18,442.25	\$ 77.00	\$ -	\$ -	\$ 30,684.37	\$ 0.09631
February	987.90	243,600	36.7%	\$ 11,380.61	\$ 14,196.80	\$ 77.00	\$ -	\$ -	\$ 25,654.41	\$ 0.10531
March	1,019.10	240,900	31.8%	\$ 11,740.03	\$ 14,059.47	\$ 77.00	\$ -	\$ -	\$ 25,876.51	\$ 0.10742
April	866.10	158,400	25.4%	\$ 9,977.47	\$ 9,337.73	\$ 77.00	\$ -	\$ -	\$ 19,392.20	\$ 0.12243
May	843.00	170,100	27.1%	\$ 9,711.36	\$ 9,986.07	\$ 77.00	\$ -	\$ -	\$ 19,774.43	\$ 0.11625
June	920.40	228,600	34.5%	\$ 10,603.01	\$ 13,319.44	\$ 77.00	\$ -	\$ -	\$ 23,999.45	\$ 0.10498
July	939.30	173,400	24.8%	\$ 10,820.74	\$ 10,217.79	\$ 77.00	\$ -	\$ -	\$ 21,115.53	\$ 0.12177
August	792.60	193,200	32.8%	\$ 9,130.75	\$ 11,263.85	\$ 77.00	\$ -	\$ -	\$ 20,471.60	\$ 0.10596
September	614.70	148,800	33.6%	\$ 7,081.34	\$ 8,677.28	\$ 77.00	\$ -	\$ -	\$ 15,835.63	\$ 0.10642
October	1,111.80	214,200	25.9%	\$ 12,807.94	\$ 12,598.93	\$ 77.00	\$ -	\$ -	\$ 25,483.86	\$ 0.11897
November	1,110.00	345,300	43.2%	\$ 12,787.20	\$ 19,894.90	\$ 77.00	\$ -	\$ -	\$ 32,759.10	\$ 0.09487
December	1,109.70	345,900	41.9%	\$ 12,783.74	\$ 19,923.46	\$ 77.00	\$ -	\$ -	\$ 32,784.21	\$ 0.09478
Totals	11,371	2,781,000	33%	\$ 130,989.31	\$ 161,917.97	\$ 924.00	\$ -	\$ -	\$ 293,831.28	\$ 0.10796

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Dakota Valley Electric Cooperative  
 Three Phase Large Commercial Service (56, 356)

Date Prepared: 10/10/2017

*This spreadsheet utilizes the demand & energy estimated to be used by Minn-Kota Ag service. The load factor was calculated from the provided demand & energy for each month.*

**Estimate Assumptions and Considerations:**

1. Rate is standard Three Phase Large Commercial Service

Monthly Service Charge: \$ 77.00

Demand Charge of: \$ 12.00 per kW

1st Step Energy Charge of: \$ 0.0620 per kWh

2nd Step Energy Charge of: \$ 0.0587 per kWh

Excess Energy Charge of: \$ 0.0510 per kWh

2. Monthly demand and energy estimates are based on projected operation.

Transformer KVA: 1,500 kVA

DATE	KW*	Calculated Load Factor	kWh*
Jan	1,056.00	40.6%	318,600
Feb	987.9	36.7%	243,600
Mar	1,019.10	31.8%	240,900
Apr	866.10	25.4%	158,400
May	843.00	27.1%	170,100
Jun	920.40	34.5%	228,600
Jul	939.30	24.8%	173,400
Aug	792.60	32.8%	193,200
Sep	614.70	33.6%	148,800
Oct	1,111.80	25.9%	214,200
Nov	1,110.00	43.2%	345,300
Dec	1,109.70	41.9%	345,900

\*Values can be modified to update the calculations below.

	Monthly Demand	Monthly Energy	Load Factor	Charge for Demand	Charge for Total Energy	Basic Service Charge	Transformer Capacity Charge	Other Charges or Discounts	Total Charges	Cost per kWh
January	1,056.00	318,600	40.6%	\$ 12,672.00	\$ 19,210.68	\$ 77.00	\$ -	\$ -	\$ 31,959.68	\$ 0.10031
February	987.90	243,600	36.7%	\$ 11,854.80	\$ 14,788.33	\$ 77.00	\$ -	\$ -	\$ 26,720.13	\$ 0.10969
March	1,019.10	240,900	31.8%	\$ 12,229.20	\$ 14,645.28	\$ 77.00	\$ -	\$ -	\$ 26,951.48	\$ 0.11188
April	866.10	158,400	25.4%	\$ 10,393.20	\$ 9,726.80	\$ 77.00	\$ -	\$ -	\$ 20,197.00	\$ 0.12751
May	843.00	170,100	27.1%	\$ 10,116.00	\$ 10,402.16	\$ 77.00	\$ -	\$ -	\$ 20,595.16	\$ 0.12108
June	920.40	228,600	34.5%	\$ 11,044.80	\$ 13,874.42	\$ 77.00	\$ -	\$ -	\$ 24,996.22	\$ 0.10934
July	939.30	173,400	24.8%	\$ 11,271.60	\$ 10,643.53	\$ 77.00	\$ -	\$ -	\$ 21,992.13	\$ 0.12683
August	792.60	193,200	32.8%	\$ 9,511.20	\$ 11,733.18	\$ 77.00	\$ -	\$ -	\$ 21,321.38	\$ 0.11036
September	614.70	148,800	33.6%	\$ 7,376.40	\$ 9,038.84	\$ 77.00	\$ -	\$ -	\$ 16,492.24	\$ 0.11083
October	1,111.80	214,200	25.9%	\$ 13,341.60	\$ 13,123.88	\$ 77.00	\$ -	\$ -	\$ 26,542.48	\$ 0.12391
November	1,110.00	345,300	43.2%	\$ 13,320.00	\$ 20,723.85	\$ 77.00	\$ -	\$ -	\$ 34,120.85	\$ 0.09882
December	1,109.70	345,900	41.9%	\$ 13,316.40	\$ 20,753.61	\$ 77.00	\$ -	\$ -	\$ 34,147.01	\$ 0.09872
<b>Totals</b>	11,371	2,781,000	33%	\$ 136,447.20	\$ 168,664.55	\$ 924.00	\$ -	\$ -	\$ 306,035.75	\$ 0.11244

9-6

Dakota Valley Electric Cooperative  
 Three Phase Large Commercial Service (56, 356)

Date Prepared: 10/10/2017

*This spreadsheet utilizes the demand & energy estimated to be used by Minn-Kota Ag service. The load factor was calculated from the provided demand & energy for each month.*

Estimate Assumptions and Considerations:

- Rate is standard Three Phase Large Commercial Service  
 Monthly Service Charge: \$ 77.00  
 Demand Charge of: \$ 12.00 per kW  
 1st Step Energy Charge of: \$ 0.0620 per kWh  
 2nd Step Energy Charge of: \$ 0.0587 per kWh  
 Excess Energy Charge of: \$ 0.0510 per kWh
- Monthly demand and energy estimates are based on projected operation.
- Power Supply Charges:  
 Demand Charge of: \$ 20.65 per kW  
 Energy Charge of: \$ 0.033090 per kWh

DATE	kW*	Calculated Load Factor	kWh*
Jan	1,056.00	40.6%	318,600
Feb	987.9	36.7%	243,600
Mar	1,019.10	31.8%	240,900
Apr	866.10	25.4%	158,400
May	843.00	27.1%	170,100
Jun	920.40	34.5%	228,600
Jul	939.30	24.8%	173,400
Aug	792.60	32.8%	193,200
Sep	614.70	33.6%	148,800
Oct	1,111.80	25.9%	214,200
Nov	1,110.00	43.2%	345,300
Dec	1,109.70	41.9%	345,900

\*Values can be modified to update the calculations below.

	Monthly Demand	Monthly Energy	Load Factor	Power Supply Demand Charge	Power Supply Energy Charge	Total Power Supply Costs
January	1,056.00	318,600	40.6%	\$ 16,354.80	\$ 10,542.47	\$ 26,897.27
February	987.90	243,600	36.7%	\$ 13,260.09	\$ 8,060.72	\$ 21,320.81
March	1,019.10	240,900	31.8%	\$ 15,783.31	\$ 7,971.38	\$ 23,754.69
April	866.10	158,400	25.4%	\$ 11,625.23	\$ 5,241.46	\$ 16,866.68
May	843.00	170,100	27.1%	\$ 11,315.17	\$ 5,628.61	\$ 16,943.78
June	920.40	228,600	34.5%	\$ 12,354.07	\$ 7,564.37	\$ 19,918.44
July	939.30	173,400	24.8%	\$ 12,607.75	\$ 5,737.81	\$ 18,345.56
August	792.60	193,200	32.8%	\$ 10,638.67	\$ 6,392.99	\$ 17,031.66
September	614.70	148,800	33.6%	\$ 8,250.81	\$ 4,923.79	\$ 13,174.60
October	1,111.80	214,200	25.9%	\$ 17,219.00	\$ 7,087.88	\$ 24,306.88
November	1,110.00	345,300	43.2%	\$ 17,191.13	\$ 11,425.98	\$ 28,617.10
December	1,109.70	345,900	41.9%	\$ 17,186.48	\$ 11,445.83	\$ 28,632.31
<b>Totals</b>	<b>11,371</b>	<b>2,781,000</b>	<b>33%</b>	<b>\$ 163,786.51</b>	<b>\$ 92,023.29</b>	<b>\$ 255,809.80</b>

Total Cost for DVEC to build into the site for Minn-Kota Ag: **\$93,640.00**  
 - Includes cost for cable installation and on-site facilities (transformer, metering)

9-7

Dakota Valley Electric Cooperative  
 Three Phase Large Commercial Service (56, 356)

Date Prepared: 10/10/2017

This spreadsheet utilizes the demand & energy estimated to be used by Minn-Kota Ag service  
 The load factor was calculated from the provided demand & energy for each month.

Estimate Assumptions and Considerations:

- Rate is standard Three Phase Large Commercial Service  
 Monthly Service Charge: \$ 77.00  
 Demand Charge of: \$ 12.00 per kW  
 1st Step Energy Charge of: \$ 0.0620 per kWh  
 2nd Step Energy Charge of: \$ 0.0587 per kWh  
 Excess Energy Charge of: \$ 0.0510 per kWh
- Monthly demand and energy estimates are based on projected operation.
- Power Supply Charges:  
 Demand Charge of: \$ 20.65 per kW  
 Energy Charge of: \$ 0.033090 per kWh

DATE	kW*	Calculated Load Factor	kWh*
Jan	1,056.00	40.6%	318,600
Feb	987.9	36.7%	243,600
Mar	1,019.10	31.8%	240,900
Apr	866.10	25.4%	158,400
May	843.00	27.1%	170,100
Jun	920.40	34.5%	228,600
Jul	939.30	24.8%	173,400
Aug	792.60	32.8%	193,200
Sep	614.70	33.6%	148,800
Oct	1,111.80	25.9%	214,200
Nov	1,110.00	43.2%	345,300
Dec	1,109.70	41.9%	345,900

\*Values can be modified to update the calculations below.

Month	Monthly Demand	Monthly Energy	Load Factor	Charge for Demand	Charge for Total Energy	Power Supply Demand Charge	Power Supply Energy Charge	Basic Service Charge	Other Charges or Discounts	Total Revenue
January	1,056.00	318,600	40.6%	\$ 12,672.00	\$ 19,210.68	\$ 16,354.80	\$ 10,542.47	\$ 77.00	\$ -	\$ 5,062.41
February	987.90	243,600	36.7%	\$ 11,854.80	\$ 14,788.33	\$ 13,260.09	\$ 8,060.72	\$ 77.00	\$ -	\$ 5,399.32
March	1,019.10	240,900	31.8%	\$ 12,229.20	\$ 14,645.28	\$ 15,783.31	\$ 7,971.38	\$ 77.00	\$ -	\$ 3,196.79
April	866.10	158,400	25.4%	\$ 10,393.20	\$ 9,726.80	\$ 11,625.23	\$ 5,241.46	\$ 77.00	\$ -	\$ 3,330.32
May	843.00	170,100	27.1%	\$ 10,116.00	\$ 10,402.16	\$ 11,315.17	\$ 5,628.61	\$ 77.00	\$ -	\$ 3,651.38
June	920.40	228,600	34.5%	\$ 11,044.80	\$ 13,874.42	\$ 12,354.07	\$ 7,564.37	\$ 77.00	\$ -	\$ 5,077.78
July	939.30	173,400	24.8%	\$ 11,271.60	\$ 10,643.53	\$ 12,607.75	\$ 5,737.81	\$ 77.00	\$ -	\$ 3,646.57
August	792.60	193,200	32.8%	\$ 9,511.20	\$ 11,733.18	\$ 10,638.67	\$ 6,392.99	\$ 77.00	\$ -	\$ 4,289.72
September	614.70	148,800	33.6%	\$ 7,376.40	\$ 9,038.84	\$ 8,250.81	\$ 4,923.79	\$ 77.00	\$ -	\$ 3,317.63
October	1,111.80	214,200	25.9%	\$ 13,341.60	\$ 13,123.88	\$ 17,219.00	\$ 7,087.88	\$ 77.00	\$ -	\$ 2,235.60
November	1,110.00	345,300	43.2%	\$ 13,320.00	\$ 20,723.85	\$ 17,191.13	\$ 11,425.98	\$ 77.00	\$ -	\$ 5,503.75
December	1,109.70	345,900	41.9%	\$ 13,316.40	\$ 20,753.61	\$ 17,186.48	\$ 11,445.83	\$ 77.00	\$ -	\$ 5,514.70
<b>Totals</b>	<b>11,371</b>	<b>2,781,000</b>	<b>33%</b>	<b>\$ 136,447.20</b>	<b>\$ 168,664.55</b>	<b>\$ 163,786.51</b>	<b>\$ 92,023.29</b>	<b>\$ 924.00</b>	<b>\$ -</b>	<b>\$ 50,225.96</b>

\$93,640.00

Total Cost for DVEC to build into the site for Minn-Kota Ag:  
 - Includes cost for cable installation and on-site facilities (transformer, metering)

9-8

Dakota Valley Electric Cooperative  
 Three Phase Large Commercial Service (56, 356)

Date Prepared: 3/13/2017

This spreadsheet utilizes the demand & energy estimated to be used by Minn-Kota Ag service  
 The load factor was calculated from the provided demand & energy for each month.

Estimate Assumptions and Considerations:

- Rate is standard Three Phase Large Commercial Service  
 Monthly Service Charge: \$ 77.00 per kW  
 Demand Charge of: \$ 12.00 per kWh  
 1st Step Energy Charge of: \$ 0.0620 per kWh  
 2nd Step Energy Charge of: \$ 0.0587 per kWh  
 Excess Energy Charge of: \$ 0.0510 per kWh  
 Monthly demand and energy estimates are based on projected operation.  
 Transformer KVA: 1,500 kVA  
 Line Extension Charges: 50.00
- Commercial Incentive Rate Discount identified in Columns R through U  
 - Discount is applied to Demand and Energy

DATE	kWh*	Calculated Load Factor	kWh*
Jan	1,056.00	40.6%	318,600
Feb	987.9	36.7%	243,600
Mar	1,025.00	31.6%	240,900
Apr	866.10	25.4%	158,400
May	843.00	27.1%	170,100
Jun	920.40	34.5%	228,600
Jul	939.40	24.8%	173,400
Aug	792.60	32.8%	193,200
Sep	1,111.80	26.8%	214,200
Oct	1,111.80	25.9%	214,200
Nov	1,110.00	43.2%	345,300
Dec	1,109.70	41.9%	345,900

\*Values can be modified to update the calculations below.

	Monthly Demand	Monthly Energy	Load Factor	Charge for Demand	Charge for Total Energy	Basic Service Charge	Transformer Capacity Charge	Other Charges or Discounts	Total Charges	Cost per kWh	Year 1-4		Year 5-6		Year 7-8		Year 9	
											Incentive Rate	Discount	Incentive Rate	Discount	Incentive Rate	Discount	Incentive Rate	Discount
January	1,056.00	318,600	40.6%	\$ 12,672.00	\$ 19,210.68	\$ 77.00	\$ -	\$ -	\$ 31,959.68	\$ 0.10031	\$ 3,188.27	\$ 2,550.61	\$ 1,912.96	\$ 1,275.31				
February	987.90	243,600	36.7%	\$ 11,854.80	\$ 14,788.33	\$ 77.00	\$ -	\$ -	\$ 26,720.13	\$ 0.10969	\$ 2,664.31	\$ 2,131.45	\$ 1,598.59	\$ 1,065.73				
March	1,025.00	240,900	31.6%	\$ 12,300.00	\$ 14,648.21	\$ 77.00	\$ -	\$ -	\$ 27,025.21	\$ 0.11218	\$ 2,694.82	\$ 2,155.86	\$ 1,616.89	\$ 1,077.93				
April	866.10	158,400	25.4%	\$ 10,393.20	\$ 9,726.80	\$ 77.00	\$ -	\$ -	\$ 20,197.00	\$ 0.12751	\$ 2,012.00	\$ 1,609.60	\$ 1,207.20	\$ 804.80				
May	843.00	170,100	27.1%	\$ 10,116.00	\$ 10,402.16	\$ 77.00	\$ -	\$ -	\$ 20,595.16	\$ 0.12108	\$ 2,051.82	\$ 1,641.45	\$ 1,231.09	\$ 820.73				
June	920.40	228,600	34.5%	\$ 11,044.80	\$ 13,874.42	\$ 77.00	\$ -	\$ -	\$ 24,996.22	\$ 0.10934	\$ 2,491.92	\$ 1,993.54	\$ 1,495.15	\$ 996.77				
July	939.40	173,400	24.8%	\$ 11,272.80	\$ 10,643.58	\$ 77.00	\$ -	\$ -	\$ 21,993.38	\$ 0.12684	\$ 2,191.64	\$ 1,753.31	\$ 1,314.98	\$ 876.66				
August	792.60	193,200	32.8%	\$ 9,511.20	\$ 11,733.18	\$ 77.00	\$ -	\$ -	\$ 21,311.38	\$ 0.11036	\$ 2,124.44	\$ 1,699.55	\$ 1,274.66	\$ 849.78				
September	1,111.80	214,200	26.8%	\$ 13,341.60	\$ 13,123.88	\$ 77.00	\$ -	\$ -	\$ 26,542.48	\$ 0.12391	\$ 2,646.55	\$ 2,117.24	\$ 1,587.93	\$ 1,058.62				
October	1,111.80	214,200	25.9%	\$ 13,341.60	\$ 13,123.88	\$ 77.00	\$ -	\$ -	\$ 26,542.48	\$ 0.12391	\$ 2,646.55	\$ 2,117.24	\$ 1,587.93	\$ 1,058.62				
November	1,110.00	345,300	43.2%	\$ 13,320.00	\$ 20,723.85	\$ 77.00	\$ -	\$ -	\$ 34,120.85	\$ 0.09882	\$ 3,404.39	\$ 2,723.51	\$ 2,042.63	\$ 1,361.75				
December	1,109.70	345,900	41.9%	\$ 13,316.40	\$ 20,753.61	\$ 77.00	\$ -	\$ -	\$ 34,147.01	\$ 0.09872	\$ 3,407.00	\$ 2,725.60	\$ 2,044.20	\$ 1,362.80				
Totals	11,874	2,846,400	33%	\$ 142,484.40	\$ 172,752.57	\$ 924.00	\$ -	\$ -	\$ 316,160.97	\$ 0.11356	\$ 31,523.70	\$ 25,218.96	\$ 18,914.22	\$ 12,609.48				
											per year	per year	per year	per year				
											\$ 126,094.79	\$ 50,437.91	\$ 37,828.44	\$ 12,609.48				
											4 year total	2 year total	2 year total	1 year total				
											0.097373006	0.099529147	0.101685287	0.103841428				
											Discounted Rate (kWh)							

Otter Tail Power  
Minn-Kota Ag Service

Date Prepared: 10/10/2017

Estimate Assumptions and Considerations:

1. Published ND General Service - Secondary Service (50-401) Rate - Secondary Service

Monthly Service Charge:	\$ 12.00								
Energy Charge of:	\$ 0.08213	per kWh summer	\$ 0.07492	per kWh winter					
Excess Charge of:	\$ 0.08213	per kWh summer	\$ 0.07492	per kWh winter					
<b>Energy Adjustment Rider:</b>	\$ (0.00213)	per kWh	October 1 2017						
<b>Renewable Resource Rider:</b>	\$ 0.07005	% Service Charges	after March 16, 2017						
<b>Economic Development Rider:</b>	\$ (0.00025)	per kWh	January 1, 2011						
<b>Transmission Cost Recovery:</b>	\$ 0.00475	per kWh	January 1, 2017						
<b>Environmental Cost Recovery:</b>	\$ 0.07633	% Service Charges	Does not include Riders, sales tax						
<b>Environmental Cost Recovery:</b>	\$ 0.00058	per kWh	October 1, 2017						

Summer: June 1 - September 30

Winter: October 1 - May 31

2. Monthly demand and energy estimates are based on projected operation

3. Facilities Charge

Monthly Charges: \$0.52 per kW (Max Annual Demand)

	Monthly Demand	Monthly Energy	Load Factor	Charge for Demand	Charge for Total Energy	Facilities Charge	Monthly Service Charge	Service Charges	Riders			Total Charges	Cost per kWh
									Energy & Renewable Adj	Environmental Cost Recovery	Cost Recovery		
January	1,056.00	318,600	41%	\$	23,869.51	\$578.14	\$ 12.00	\$ 24,459.65	\$ 2,468.48	\$ 2,051.79	\$	\$ 28,979.92	\$ 0.09096
February	987.90	243,600	37%	\$	18,250.51	578.136	\$ 12.00	\$ 18,840.65	\$ 1,897.12	\$ 1,579.39	\$	\$ 22,317.16	\$ 0.09161
March	1,019.10	240,900	32%	\$	18,048.23	578.136	\$ 12.00	\$ 18,638.36	\$ 1,876.55	\$ 1,562.39	\$	\$ 22,077.30	\$ 0.09165
April	866.10	158,400	25%	\$	11,867.33	578.136	\$ 12.00	\$ 12,457.46	\$ 1,248.05	\$ 1,042.75	\$	\$ 14,748.27	\$ 0.09311
May	843.00	170,100	27%	\$	12,743.89	578.136	\$ 12.00	\$ 13,334.03	\$ 1,337.19	\$ 1,116.44	\$	\$ 15,787.66	\$ 0.09281
June	920.40	228,600	34%	\$	18,774.92	578.136	\$ 12.00	\$ 19,365.05	\$ 1,898.30	\$ 1,610.72	\$	\$ 22,874.08	\$ 0.10006
July	939.30	173,400	25%	\$	14,241.34	578.136	\$ 12.00	\$ 14,831.48	\$ 1,449.90	\$ 1,232.66	\$	\$ 17,514.04	\$ 0.10100
August	792.60	193,200	33%	\$	15,867.52	578.136	\$ 12.00	\$ 16,457.65	\$ 1,610.74	\$ 1,368.27	\$	\$ 19,436.66	\$ 0.10060
September	614.70	148,800	34%	\$	12,220.94	578.136	\$ 12.00	\$ 12,811.08	\$ 1,250.07	\$ 1,064.17	\$	\$ 15,125.33	\$ 0.10165
October	1,111.80	214,200	26%	\$	16,047.86	578.136	\$ 12.00	\$ 16,638.00	\$ 1,673.15	\$ 1,394.21	\$	\$ 19,705.36	\$ 0.09200
November	1,110.00	345,300	43%	\$	25,869.88	578.136	\$ 12.00	\$ 26,460.01	\$ 2,671.88	\$ 2,219.97	\$	\$ 31,351.86	\$ 0.09080
December	1,109.70	345,900	42%	\$	25,914.83	578.136	\$ 12.00	\$ 26,504.96	\$ 2,676.46	\$ 2,223.75	\$	\$ 31,405.17	\$ 0.09079
<b>Totals</b>	11,371	2,781,000	33%	\$	213,716.76	\$6,937.63	\$ 144.00	\$ 220,798.39	\$ 22,057.90	\$ 18,466.52	\$	\$ 261,322.81	\$ 0.09475