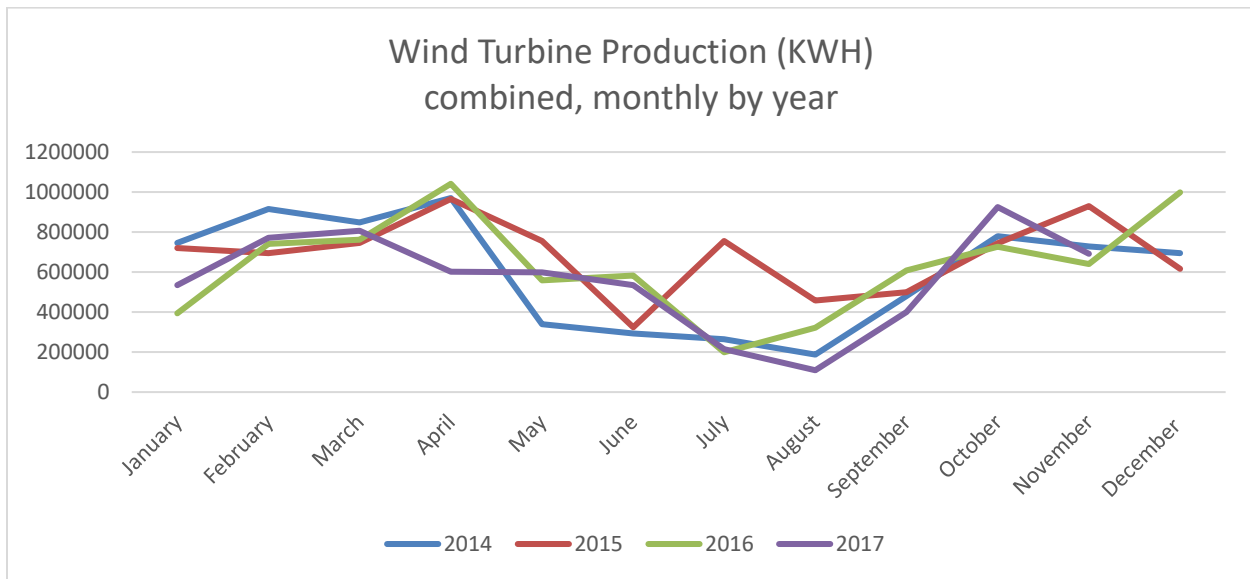




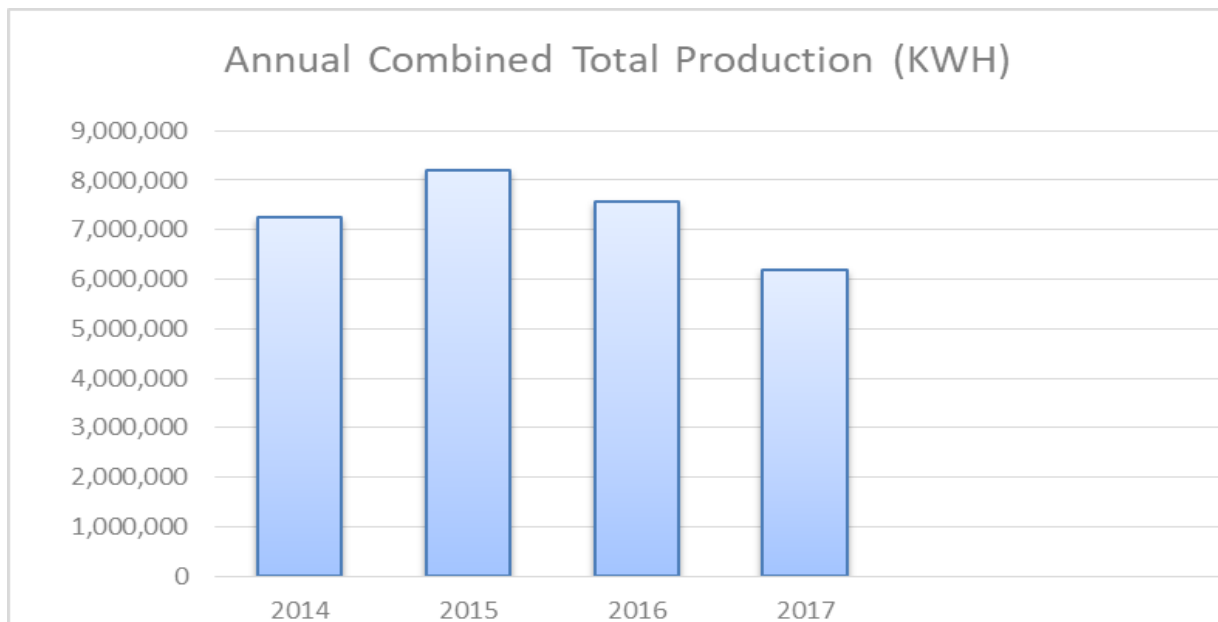
WILLMAR MUNICIPAL UTILITIES

November 2017 Wind Turbine Report



| | Production (KWH) | | Availability (%) | | Total KWH | Major Outages |
|-------------------|------------------|------------------|------------------|------|------------------|---|
| | #3 | #4 | #3 | #4 | | |
| Nov. 2017 | 404,496 | 286,351 | 94.7 | 73.7 | 690,847 | |
| Oct. 2017 | 468,821 | 456,179 | 97.8 | 92.7 | 925,000 | |
| Sep. 2017 | 192,873 | 207,337 | 62.2 | 67.4 | 400,210 | #3 Control Software Malfunction #4 Hydraulic System Overheated |
| Aug. 2017 | 109,215 | - | 66.0 | 0.0 | 109,215 | #3 Control Software Malfunction #4 Hydraulic System Overheated |
| July 2017 | 91,860 | 122,444 | 61.8 | 93.2 | 214,304 | #3 Control Software Malfunction |
| June 2017 | 257,597 | 277,065 | 98.0 | 97.6 | 534,662 | |
| May 2017 | 294,078 | 304,030 | 94.2 | 99.0 | 598,108 | |
| Apr. 2017 | 299,044 | 302,779 | 86.8 | 86.3 | 601,823 | |
| Mar. 2017 | 409,026 | 397,910 | 88.0 | 91.3 | 806,936 | |
| Feb. 2017 | 385,543 | 385,684 | 94.5 | 95.8 | 771,227 | |
| Jan. 2017 | 236,582 | 298,285 | 77.4 | 91.3 | 534,867 | |
| Dec. 2016 | 467,905 | 531,073 | 92.9 | 93.4 | 998,977 | |
| Nov. 2016 | 289,656 | 350,866 | 87.4 | 98.7 | 640,522 | |
| 2017 Total | 3,149,135 | 3,038,064 | | | 6,187,199 | |

| Month | 2014 | 2015 | 2016 | 2017 | | |
|--------------|------------------|------------------|------------------|------------------|--|--|
| January | 745643 | 720369 | 393,477 | 534,867 | | |
| February | 916093 | 695143 | 740,655 | 771,227 | | |
| March | 848017 | 746045 | 761,028 | 806,936 | | |
| April | 970215 | 965530 | 1,041,382 | 601,823 | | |
| May | 340154 | 755889 | 557,947 | 598,108 | | |
| June | 292744 | 324005 | 583,043 | 534,662 | | |
| July | 264420 | 755889 | 199,043 | 214,304 | | |
| August | 187490 | 457386 | 321,326 | 109,215 | | |
| September | 480586 | 499215 | 609,004 | 400,210 | | |
| October | 779328 | 744572 | 727,379 | 925,000 | | |
| November | 728534 | 929609 | 640,522 | 690,847 | | |
| December | 694570 | 616700 | 998,977 | | | |
| Total | 7,247,794 | 8,210,352 | 7,573,783 | 6,187,199 | | |



Fun fact: Wind turbines create electricity while wind mills produce mechanical energy.