

MONTICELLO

APPENDIX 2.5-A

ANNUAL AND MONTHLY JOINT FREQUENCY DISTRIBUTIONS APPROPRIATE FOR SURFACE RELEASES AT MONTICELLO

The meteorological data presented are the frequency of the 10 m wind speed classes and the 10 m wind direction classes by atmospheric stability class. The stability class was determined by $\Delta T_{140 \text{ ft} - 10 \text{ m}}$ ($\Delta T_{43 - 10 \text{ m}}$). The data were collected on the Monticello meteorological tower from January 1, 1974 to December 31, 1974.

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 12/31/74

STABILITY CLASS A

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 21 | 47 | 13 | 2 | 0 | 83 |
| NNE | 2 | 6 | 22 | 5 | 0 | 0 | 35 |
| NE | 0 | 4 | 25 | 6 | 0 | 0 | 40 |
| ENE | 1 | 14 | 17 | 1 | 0 | 0 | 33 |
| E | 0 | 10 | 18 | 5 | 0 | 0 | 33 |
| ESE | 1 | 6 | 18 | 20 | 0 | 0 | 45 |
| SE | 1 | 12 | 24 | 58 | 2 | 0 | 97 |
| SSE | 0 | 4 | 38 | 19 | 20 | 2 | 134 |
| S | 2 | 12 | 47 | 111 | 25 | 3 | 201 |
| SSW | 2 | 20 | 32 | 50 | 6 | 0 | 110 |
| SW | 0 | 17 | 47 | 13 | 0 | 0 | 77 |
| WSW | 0 | 25 | 34 | 12 | 3 | 0 | 74 |
| W | 1 | 28 | 33 | 7 | 3 | 0 | 72 |
| WNW | 2 | 26 | 50 | 41 | 8 | 0 | 127 |
| NW | 0 | 30 | 62 | 52 | 14 | 0 | 158 |
| NNW | 0 | 15 | 50 | 48 | 11 | 0 | 124 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

1445
0

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SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 12/31/74

STABILITY CLASS B

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 13 | 10 | 4 | 0 | 0 | 27 |
| NNE | 2 | 7 | 15 | 1 | 0 | 0 | 25 |
| NE | 2 | 3 | 11 | 1 | 0 | 0 | 17 |
| ENE | 2 | 13 | 4 | 2 | 0 | 0 | 21 |
| E | 3 | 4 | 11 | 1 | 0 | 0 | 19 |
| ESE | 2 | 10 | 4 | 6 | 1 | 0 | 23 |
| SE | 2 | 7 | 7 | 6 | 0 | 0 | 22 |
| SSE | 2 | 5 | 11 | 4 | 1 | 0 | 23 |
| S | 4 | 12 | 19 | 6 | 2 | 0 | 44 |
| SSW | 1 | 4 | 17 | 2 | 1 | 0 | 30 |
| SW | 3 | 11 | 15 | 0 | 0 | 0 | 29 |
| WSW | 3 | 10 | 6 | 0 | 0 | 0 | 19 |
| W | 1 | 13 | 14 | 5 | 1 | 0 | 34 |
| WNW | 0 | 11 | 13 | 0 | 0 | 0 | 24 |
| NW | 1 | 13 | 18 | 0 | 4 | 0 | 36 |
| NNW | 0 | 5 | 18 | 14 | 1 | 0 | 41 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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472
0

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 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/1/74 THROUGH 12/31/74
 STABILITY CLASS C
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|----|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 3 | 2 | 8 | 5 | 0 | 0 | 18 | |
| NNE | 2 | 4 | 9 | 2 | 4 | 1 | 22 | |
| NF | 1 | 8 | 3 | 1 | 0 | 0 | 13 | |
| ENE | 3 | 3 | 6 | 3 | 0 | 0 | 15 | |
| E | 0 | 5 | 3 | 1 | 0 | 0 | 9 | |
| ESE | 0 | 6 | 6 | 3 | 0 | 0 | 15 | |
| SF | 1 | 5 | 4 | 4 | 0 | 0 | 14 | |
| SSE | 1 | 5 | 14 | 3 | 0 | 0 | 23 | |
| S | 1 | 5 | 10 | 6 | 2 | 0 | 24 | |
| SSW | 1 | 10 | 4 | 1 | 0 | 0 | 16 | |
| SW | 0 | 5 | 3 | 1 | 0 | 0 | 9 | |
| WSW | 4 | 7 | 2 | 2 | 1 | 0 | 16 | |
| W | 1 | 8 | 13 | 0 | 2 | 0 | 24 | |
| WNW | 2 | 6 | 14 | 14 | 2 | 0 | 38 | |
| NW | 0 | 7 | 18 | 12 | 6 | 0 | 43 | |
| NNW | 0 | 7 | 11 | 6 | 0 | 0 | 24 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

224
 0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 12/31/74

STABILITY CLASS D

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 19 | 55 | 63 | 59 | 2 | 1 | 199 |
| NNF | 15 | 44 | 59 | 17 | 6 | 2 | 143 |
| NE | 13 | 49 | 52 | 22 | 3 | 0 | 139 |
| ENE | 14 | 69 | 50 | 15 | 0 | 0 | 148 |
| E | 3 | 66 | 83 | 37 | 0 | 0 | 189 |
| ESE | 6 | 35 | 76 | 49 | 1 | 0 | 170 |
| SE | 7 | 57 | 95 | 49 | 3 | 0 | 191 |
| SSE | 4 | 36 | 73 | 30 | 6 | 0 | 150 |
| S | 4 | 43 | 70 | 26 | 4 | 2 | 150 |
| SSW | 4 | 26 | 40 | 16 | 2 | 0 | 82 |
| SW | 11 | 26 | 29 | 16 | 1 | 0 | 83 |
| WSW | 8 | 33 | 29 | 13 | 1 | 0 | 84 |
| W | 9 | 54 | 56 | 31 | 13 | 0 | 163 |
| WNW | 2 | 38 | 105 | 100 | 6 | 0 | 251 |
| NW | 8 | 60 | 134 | 112 | 17 | 1 | 332 |
| NNW | 7 | 73 | 105 | 63 | 8 | 0 | 256 |
| VAK | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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HOURS OF CALM THIS PAGE

2783
0

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SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 12/31/74

STABILITY CLASS F

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-----|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 7 | 46 | 18 | 8 | 0 | 0 | 79 | |
| NNE | 0 | 41 | 22 | 1 | 0 | 0 | 64 | |
| NE | 2 | 28 | 8 | 0 | 0 | 0 | 38 | |
| ENE | 4 | 20 | 5 | 0 | 0 | 0 | 24 | |
| E | 12 | 49 | 31 | 9 | 0 | 0 | 101 | |
| ESE | 6 | 46 | 21 | 1 | 0 | 0 | 74 | |
| SE | 16 | 56 | 74 | 12 | 0 | 0 | 158 | |
| SSE | 7 | 27 | 56 | 24 | 0 | 0 | 114 | |
| S | 11 | 24 | 94 | 45 | 13 | 1 | 188 | |
| SSW | 9 | 17 | 46 | 24 | 0 | 0 | 96 | |
| SW | 8 | 34 | 40 | 8 | 0 | 0 | 90 | |
| WSW | 8 | 42 | 24 | 5 | 0 | 0 | 79 | |
| W | 10 | 55 | 54 | 4 | 0 | 0 | 121 | |
| WNW | 4 | 40 | 52 | 18 | 0 | 0 | 114 | |
| NW | 14 | 61 | 63 | 7 | 0 | 0 | 145 | |
| NNW | 0 | 39 | 28 | 2 | 0 | 0 | 74 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

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HOURS OF CALM THIS PAGE

1574
0

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SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 12/31/74

STABILITY CLASS F

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 12 | 20 | 1 | 0 | 0 | 0 | 33 |
| NNE | 6 | 11 | 0 | 0 | 0 | 0 | 17 |
| NE | 9 | 18 | 1 | 0 | 0 | 0 | 28 |
| ENE | 9 | 12 | 0 | 0 | 0 | 0 | 21 |
| E | 8 | 34 | 2 | 0 | 0 | 0 | 44 |
| ESE | 10 | 32 | 4 | 0 | 0 | 0 | 46 |
| SE | 5 | 37 | 16 | 0 | 0 | 0 | 58 |
| SSE | 10 | 47 | 24 | 3 | 0 | 0 | 84 |
| S | 15 | 50 | 39 | 1 | 0 | 0 | 105 |
| SSW | 8 | 26 | 22 | 4 | 0 | 0 | 60 |
| SW | 12 | 28 | 11 | 0 | 0 | 0 | 51 |
| WSW | 12 | 28 | 4 | 0 | 0 | 0 | 44 |
| W | 17 | 51 | 8 | 1 | 0 | 0 | 77 |
| WNW | 7 | 30 | 3 | 0 | 0 | 0 | 40 |
| NW | 8 | 44 | 14 | 0 | 0 | 0 | 66 |
| NNW | 16 | 31 | 11 | 0 | 0 | 0 | 58 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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HOURS OF CALM THIS PAGE

645
0

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 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 12/31/74
 STABILITY CLASS G
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 9 | 9 | 0 | 0 | 0 | 0 | 18 |
| NNE | 7 | 4 | 1 | 0 | 0 | 0 | 12 |
| NE | 3 | 4 | 1 | 0 | 0 | 0 | 8 |
| NNE | 10 | 6 | 0 | 0 | 0 | 0 | 16 |
| E | 16 | 11 | 1 | 0 | 0 | 0 | 28 |
| ESE | 4 | 14 | 1 | 0 | 0 | 0 | 24 |
| SE | 15 | 26 | 1 | 0 | 0 | 0 | 42 |
| SSE | 26 | 53 | 2 | 0 | 0 | 0 | 81 |
| S | 25 | 60 | 13 | 0 | 0 | 0 | 98 |
| SSW | 14 | 17 | 2 | 0 | 0 | 0 | 33 |
| SW | 25 | 19 | 0 | 0 | 0 | 0 | 44 |
| WSW | 27 | 23 | 2 | 0 | 0 | 0 | 52 |
| W | 27 | 23 | 1 | 0 | 0 | 0 | 51 |
| WNW | 18 | 12 | 0 | 0 | 0 | 0 | 30 |
| NW | 16 | 29 | 10 | 0 | 0 | 0 | 54 |
| NNW | 10 | 29 | 3 | 0 | 0 | 0 | 42 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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 HOURS OF CALM THIS PAGE

642
 2

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SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/1/74 THROUGH 12/31/74

ALL CLASSES COMBINED

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 50 | 166 | 147 | 89 | 4 | 1 | 457 |
| NNE | 39 | 119 | 128 | 26 | 12 | 3 | 327 |
| NE | 30 | 119 | 101 | 30 | 5 | 0 | 285 |
| ENE | 52 | 137 | 82 | 21 | 0 | 0 | 292 |
| E | 42 | 179 | 149 | 53 | 0 | 0 | 423 |
| ESE | 34 | 152 | 150 | 79 | 2 | 0 | 397 |
| SE | 47 | 181 | 221 | 129 | 5 | 0 | 583 |
| SSE | 52 | 164 | 218 | 173 | 33 | 2 | 612 |
| S | 67 | 209 | 292 | 198 | 46 | 0 | 812 |
| SSW | 43 | 125 | 163 | 97 | 9 | 0 | 437 |
| SW | 59 | 140 | 145 | 40 | 1 | 0 | 385 |
| WSW | 72 | 168 | 101 | 32 | 5 | 0 | 378 |
| W | 66 | 220 | 186 | 46 | 19 | 0 | 544 |
| WNW | 39 | 172 | 237 | 190 | 11 | 0 | 649 |
| W | 47 | 273 | 319 | 201 | 46 | 1 | 887 |
| WNW | 58 | 202 | 226 | 133 | 20 | 0 | 619 |
| VA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 8092

HOURS OF CALM THIS PAGE 2

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.4 5.5 9.6 14.6 20.4 27.3

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 8760
HOURS OF BAD DATA 666
PERCENT DATA RECOVERY 92.40

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SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 1/31/74

STABILITY CLASS A

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ESE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SE | 0 | 2 | 0 | 1 | 0 | 0 | 3 |
| SSE | 0 | 0 | 1 | 4 | 0 | 0 | 5 |
| S | 0 | 2 | 1 | 0 | 0 | 0 | 3 |
| SSW | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

14
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 1/31/74

STABILITY CLASS B

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| ESE | 2 | 0 | 0 | 1 | 1 | 0 | 4 |
| SE | 1 | 1 | 1 | 0 | 0 | 0 | 3 |
| SSE | 1 | 0 | 1 | 0 | 0 | 0 | 2 |
| S | 2 | 2 | 2 | 0 | 0 | 0 | 6 |
| SSW | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| SW | 1 | 0 | 1 | 0 | 0 | 0 | 2 |
| WSW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| W | 0 | 1 | 2 | 2 | 0 | 0 | 5 |
| WNW | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| NW | 0 | 0 | 0 | 1 | 3 | 0 | 4 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

34
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 1/31/74

STABILITY CLASS C

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| SSE | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| S | 1 | 2 | 1 | 1 | 0 | 0 | 5 |
| SSW | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| SW | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| WSW | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| W | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| WNW | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| NW | 0 | 0 | 5 | 1 | 2 | 0 | 8 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

31
0

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SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 1/31/74
STABILITY CLASS D
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 5 | 0 | 0 | 0 | 0 | 6 |
| NNE | 2 | 5 | 1 | 0 | 0 | 0 | 8 |
| NE | 1 | 1 | 2 | 0 | 0 | 0 | 4 |
| ENE | 2 | 3 | 1 | 0 | 0 | 0 | 6 |
| E | 0 | 7 | 5 | 1 | 0 | 0 | 13 |
| ESE | 1 | 13 | 3 | 2 | 0 | 0 | 19 |
| SE | 0 | 14 | 14 | 3 | 0 | 0 | 31 |
| SSE | 3 | 10 | 17 | 1 | 1 | 0 | 32 |
| S | 2 | 9 | 6 | 5 | 1 | 0 | 25 |
| SSW | 0 | 4 | 5 | 0 | 0 | 0 | 9 |
| SW | 1 | 2 | 6 | 0 | 0 | 0 | 9 |
| WSW | 0 | 7 | 4 | 0 | 0 | 0 | 11 |
| W | 0 | 10 | 21 | 1 | 0 | 0 | 32 |
| WNW | 0 | 5 | 10 | 8 | 1 | 0 | 24 |
| NW | 3 | 17 | 14 | 5 | 0 | 0 | 39 |
| NNW | 0 | 7 | 0 | 1 | 1 | 0 | 9 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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HOURS OF CALM THIS PAGE

280
0

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 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 14C ST - 10 METER DELTA 1
 140 FT AND 300 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 1/31/74
 STABILITY CLASS E
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| NNE | 1 | 4 | 0 | 0 | 0 | 0 | 5 |
| NE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ENE | 1 | 2 | 1 | 0 | 0 | 0 | 4 |
| E | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| ESE | 1 | 7 | 1 | 0 | 0 | 0 | 9 |
| SE | 2 | 2 | 5 | 0 | 0 | 0 | 9 |
| SSE | 4 | 3 | 3 | 1 | 0 | 0 | 11 |
| S | 4 | 1 | 6 | 3 | 2 | 0 | 16 |
| SSW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SW | 0 | 5 | 4 | 0 | 0 | 0 | 9 |
| WSW | 0 | 6 | 5 | 0 | 0 | 0 | 11 |
| W | 0 | 3 | 6 | 0 | 0 | 0 | 11 |
| WNW | 0 | 4 | 0 | 12 | 0 | 0 | 22 |
| NW | 4 | 5 | 5 | 3 | 0 | 0 | 17 |
| NNW | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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 HOURS OF CALM THIS PAGE

135
 0

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 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 1/31/74
 STABILITY CLASS F
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| NE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| ENE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ESE | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| SE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| SSE | 2 | 3 | 1 | 2 | 0 | 0 | 6 |
| S | 1 | 6 | 4 | 0 | 0 | 0 | 11 |
| SSW | 0 | 4 | 0 | 1 | 0 | 0 | 5 |
| SW | 3 | 3 | 1 | 0 | 0 | 0 | 7 |
| WSW | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| W | 0 | 6 | 1 | 0 | 0 | 0 | 7 |
| WNW | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| NW | 2 | 8 | 2 | 0 | 0 | 0 | 12 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 64
 HOURS OF CALM THIS PAGE 0

PAGE 22

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 1/31/74

STABILITY CLASS G

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| E | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ESE | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| SE | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| SSE | 4 | 2 | 0 | 0 | 0 | 0 | 6 |
| S | 2 | 4 | 0 | 0 | 0 | 0 | 6 |
| SSW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| WNW | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| NW | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

25
0

PAGE 23

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 1/31/74
ALL CLASSES COMBINED
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 7 | 0 | 0 | 0 | 0 | 8 |
| NNE | 4 | 9 | 1 | 0 | 0 | 0 | 14 |
| NE | 2 | 2 | 2 | 0 | 0 | 0 | 6 |
| ENE | 6 | 5 | 2 | 0 | 0 | 0 | 13 |
| E | 0 | 14 | 8 | 1 | 0 | 0 | 23 |
| ESE | 9 | 20 | 4 | 4 | 1 | 0 | 38 |
| SE | 5 | 23 | 20 | 4 | 1 | 0 | 52 |
| SSE | 14 | 19 | 25 | 8 | 1 | 0 | 67 |
| S | 12 | 26 | 20 | 9 | 3 | 0 | 70 |
| SSW | 0 | 12 | 10 | 3 | 0 | 0 | 25 |
| SW | 6 | 11 | 14 | 0 | 0 | 0 | 30 |
| WSW | 1 | 16 | 10 | 0 | 0 | 0 | 27 |
| W | 1 | 21 | 35 | 3 | 0 | 0 | 60 |
| WNW | 2 | 12 | 16 | 24 | 1 | 0 | 55 |
| NW | 10 | 32 | 31 | 10 | 5 | 0 | 88 |
| NNW | 0 | 10 | 0 | 1 | 1 | 0 | 12 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

588
0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.4 5.4 9.4 14.5 20.9 0.0

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 744
HOURS OF BAD DATA 156
PERCENT DATA RECOVERY 79.03

PAGE 14

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/ 1/74 THROUGH 2/28/74
STABILITY CLASS A
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 14 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| NE | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| ENE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| SE | 1 | 0 | 3 | 1 | 0 | 0 | 4 |
| SSE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| S | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| SSW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

15
0

PAGE 16
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/ 1/74 THROUGH 2/28/74
 STABILITY CLASS B
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| NE | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| ENE | 0 | 1 | 3 | 1 | 0 | 0 | 5 |
| E | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ESE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SE | 1 | 1 | 3 | 1 | 0 | 0 | 6 |
| SSE | 0 | 2 | 1 | 0 | 0 | 0 | 3 |
| S | 0 | 2 | 0 | 1 | 0 | 0 | 3 |
| SSW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 28
 HOURS OF CALM THIS PAGE 0

PAGE 17

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/ 1/74 THROUGH 2/26/74

STABILITY CLASS C

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 1 | 5 | 0 | 0 | 0 | 6 |
| NE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ENE | 0 | 2 | 2 | 1 | 0 | 0 | 5 |
| E | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| ESE | 0 | 2 | 0 | 1 | 0 | 0 | 3 |
| SE | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| SSE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| S | 0 | 1 | 1 | 2 | 0 | 0 | 4 |
| SSW | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| NW | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAK | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

33
0

PAGE 18
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/ 1/74 THROUGH 2/28/74
 STABILITY CLASS D
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 17 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 6 | 0 | 0 | 0 | 8 |
| NNE | 0 | 5 | 12 | 0 | 0 | 0 | 17 |
| NE | 1 | 12 | 7 | 1 | 0 | 0 | 21 |
| ENE | 3 | 14 | 8 | 4 | 0 | 0 | 29 |
| E | 0 | 7 | 2 | 17 | 0 | 0 | 26 |
| ESE | 0 | 7 | 5 | 0 | 0 | 0 | 11 |
| SE | 1 | 6 | 4 | 0 | 0 | 0 | 11 |
| SSE | 0 | 2 | 4 | 0 | 0 | 0 | 6 |
| S | 1 | 4 | 2 | 2 | 0 | 0 | 9 |
| SSW | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| SW | 1 | 5 | 1 | 0 | 0 | 0 | 7 |
| WSW | 0 | 1 | 5 | 0 | 0 | 0 | 6 |
| W | 1 | 5 | 7 | 3 | 1 | 0 | 17 |
| WNW | 0 | 3 | 11 | 10 | 4 | 0 | 36 |
| NW | 0 | 11 | 16 | 10 | 5 | 1 | 45 |
| NNW | 0 | 4 | 3 | 2 | 0 | 0 | 9 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

256
 0

PAGE 19
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/ 1/74 THROUGH 2/28/74
 STABILITY CLASS F
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 1 | 0 | 0 | 0 | 3 |
| NNE | 0 | 3 | 1 | 1 | 0 | 0 | 5 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| E | 2 | 4 | 3 | 2 | 0 | 0 | 15 |
| ESE | 3 | 4 | 3 | 0 | 0 | 0 | 10 |
| SE | 0 | 3 | 1 | 0 | 0 | 0 | 4 |
| SSE | 1 | 4 | 0 | 0 | 0 | 0 | 5 |
| S | 1 | 3 | 4 | 1 | 0 | 0 | 9 |
| SSW | 0 | 3 | 1 | 3 | 0 | 0 | 7 |
| SW | 1 | 2 | 3 | 0 | 0 | 0 | 6 |
| WSW | 0 | 2 | 4 | 1 | 0 | 0 | 12 |
| W | 0 | 4 | 11 | 1 | 0 | 0 | 16 |
| WNW | 0 | 3 | 6 | 3 | 0 | 0 | 12 |
| NW | 0 | 4 | 11 | 1 | 0 | 0 | 17 |
| NNW | 1 | 3 | 2 | 0 | 0 | 0 | 6 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

129
 0

PAGE 20

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/ 1/74 THROUGH 2/28/74

STABILITY CLASS F

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 2 | 3 | 0 | 0 | 0 | 0 | 5 |
| NNE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| NE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| ENE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ESE | 2 | 2 | 1 | 0 | 0 | 0 | 5 |
| SE | 1 | 4 | 1 | 0 | 0 | 0 | 6 |
| SSE | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| S | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| SSW | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| SW | 2 | 2 | 1 | 0 | 0 | 0 | 5 |
| WSW | 1 | 4 | 0 | 0 | 0 | 0 | 5 |
| W | 2 | 4 | 0 | 0 | 0 | 0 | 6 |
| WNW | 1 | 4 | 0 | 0 | 0 | 0 | 5 |
| NW | 0 | 7 | 5 | 0 | 0 | 0 | 12 |
| NNW | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

65

0

PAGE 23

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/ 1/74 THROUGH 2/28/74
STABILITY CLASS G
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| ESE | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| SE | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| SSE | 3 | 2 | 0 | 0 | 0 | 0 | 5 |
| S | 3 | 1 | 0 | 0 | 0 | 0 | 4 |
| SSW | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| SW | 3 | 2 | 0 | 0 | 0 | 0 | 5 |
| WSW | 4 | 3 | 0 | 0 | 0 | 0 | 7 |
| W | 3 | 1 | 0 | 0 | 0 | 0 | 4 |
| WNW | 2 | 3 | 0 | 0 | 0 | 0 | 5 |
| NW | 1 | 8 | 5 | 0 | 0 | 0 | 14 |
| NNW | 1 | 5 | 1 | 0 | 0 | 0 | 7 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

64
0

PAGE 22

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/1/74 THROUGH 2/28/74

ALL CLASSES COMBINED

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 3 | 7 | 7 | 0 | 0 | 0 | 17 |
| NNE | 0 | 11 | 25 | 1 | 0 | 0 | 37 |
| NE | 3 | 13 | 10 | 2 | 0 | 0 | 28 |
| ENE | 4 | 18 | 15 | 6 | 0 | 0 | 43 |
| E | 4 | 16 | 7 | 20 | 0 | 0 | 47 |
| ESE | 6 | 14 | 10 | 4 | 0 | 0 | 34 |
| SE | 4 | 14 | 14 | 1 | 0 | 0 | 33 |
| SSE | 5 | 12 | 5 | 1 | 0 | 0 | 23 |
| S | 6 | 12 | 7 | 8 | 0 | 0 | 33 |
| SSW | 1 | 12 | 2 | 4 | 0 | 0 | 19 |
| SW | 7 | 11 | 5 | 0 | 0 | 0 | 23 |
| WSW | 5 | 14 | 9 | 1 | 0 | 0 | 31 |
| W | 6 | 16 | 12 | 4 | 1 | 0 | 40 |
| WNW | 3 | 13 | 17 | 23 | 4 | 0 | 60 |
| NW | 1 | 31 | 39 | 14 | 6 | 1 | 92 |
| NNW | 2 | 11 | 6 | 2 | 0 | 0 | 21 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 590

HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.4 6.3 9.4 13.9 20.8 32.0

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 672

HOURS OF BAD DATA 62

PERCENT DATA RECOVERY 87.50

PAGE 16

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/ 1/74 THROUGH 3/31/74

STABILITY CLASS A

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NNE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| NE | 0 | 1 | 4 | 1 | 0 | 0 | 6 |
| ENE | 0 | 4 | 1 | 0 | 0 | 0 | 5 |
| E | 0 | 0 | 4 | 2 | 0 | 0 | 6 |
| ESE | 0 | 1 | 2 | 4 | 0 | 0 | 7 |
| SE | 0 | 2 | 1 | 8 | 0 | 0 | 11 |
| SSE | 0 | 3 | 4 | 3 | 0 | 0 | 10 |
| S | 0 | 0 | 3 | 0 | 1 | 0 | 4 |
| SSW | 0 | 2 | 3 | 1 | 0 | 0 | 6 |
| SW | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| WSW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| W | 0 | 5 | 1 | 1 | 0 | 0 | 7 |
| WNW | 0 | 3 | 3 | 14 | 3 | 0 | 23 |
| NW | 0 | 8 | 8 | 16 | 6 | 0 | 38 |
| NNW | 0 | 2 | 3 | 0 | 0 | 0 | 5 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

135
0

PAGE 17

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/ 1/74 THROUGH 3/31/74
STABILITY CLASS B
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ENE | 0 | 4 | 1 | 1 | 0 | 0 | 5 |
| E | 0 | 1 | 4 | 0 | 0 | 0 | 5 |
| ESE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| SE | 0 | 1 | 1 | 2 | 0 | 0 | 4 |
| SSE | 0 | 1 | 0 | 0 | 1 | 0 | 2 |
| S | 1 | 2 | 0 | 0 | 1 | 0 | 4 |
| SSW | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 1 | 3 | 3 | 0 | 0 | 7 |
| NW | 0 | 2 | 3 | 5 | 2 | 0 | 10 |
| NNW | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 45
HOURS OF CALM THIS PAGE 0

PAGE 18

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/ 1/74 THROUGH 3/31/74

STABILITY CLASS C

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|---|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| NNE | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ENE | 0 | 0 | 0 | 1 | 0 | 0 | 1 | |
| E | 0 | 1 | 1 | 0 | 0 | 0 | 2 | |
| ESE | 0 | 1 | 3 | 1 | 0 | 0 | 5 | |
| SE | 0 | 1 | 1 | 1 | 0 | 0 | 3 | |
| SSE | 0 | 1 | 1 | 1 | 0 | 0 | 3 | |
| S | 0 | 1 | 1 | 0 | 0 | 0 | 2 | |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SW | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| W | 0 | 1 | 3 | 0 | 0 | 0 | 4 | |
| WNW | 0 | 0 | 4 | 1 | 0 | 0 | 5 | |
| NW | 0 | 1 | 0 | 7 | 0 | 0 | 8 | |
| NNW | 0 | 1 | 1 | 0 | 0 | 0 | 2 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

38
0

PAGE 19

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/ 1/74 THROUGH 3/31/74

STABILITY CLASS D

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 3 | 5 | 3 | 2 | 0 | 0 | 13 |
| NNE | 1 | 2 | 2 | 0 | 0 | 0 | 5 |
| NE | 3 | 11 | 7 | 0 | 0 | 0 | 27 |
| ENE | 2 | 17 | 10 | 3 | 0 | 0 | 32 |
| E | 1 | 17 | 28 | 7 | 0 | 0 | 48 |
| ESE | 0 | 3 | 14 | 6 | 0 | 0 | 23 |
| SE | 2 | 0 | 13 | 1 | 0 | 0 | 16 |
| SSE | 1 | 0 | 0 | 4 | 2 | 0 | 13 |
| S | 1 | 1 | 2 | 1 | 0 | 0 | 5 |
| SSW | 1 | 0 | 2 | 1 | 0 | 0 | 4 |
| SW | 2 | 3 | 0 | 4 | 0 | 0 | 15 |
| WSW | 0 | 3 | 5 | 2 | 0 | 0 | 10 |
| W | 0 | 1 | 7 | 2 | 4 | 0 | 14 |
| WNW | 0 | 4 | 20 | 20 | 0 | 0 | 44 |
| NW | 1 | 8 | 24 | 34 | 2 | 0 | 74 |
| NNW | 0 | 6 | 3 | 3 | 1 | 0 | 13 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

356
0

PAGE 20

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/ 1/74 THROUGH 3/31/74

STABILITY CLASS E

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 3 | 1 | 2 | 0 | 0 | 0 | 6 |
| NNE | 0 | 3 | 2 | 0 | 0 | 0 | 5 |
| NE | 0 | 4 | 1 | 0 | 0 | 0 | 10 |
| ENE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| E | 1 | 1 | 8 | 0 | 0 | 0 | 10 |
| ESE | 0 | 2 | 4 | 0 | 0 | 0 | 6 |
| SE | 1 | 2 | 6 | 0 | 0 | 0 | 9 |
| SSE | 0 | 2 | 4 | 0 | 0 | 0 | 6 |
| S | 0 | 1 | 1 | 2 | 0 | 0 | 4 |
| SSW | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| SW | 1 | 5 | 2 | 0 | 0 | 0 | 8 |
| WSW | 2 | 2 | 2 | 0 | 0 | 0 | 6 |
| W | 0 | 3 | 3 | 0 | 0 | 0 | 6 |
| WNW | 0 | 1 | 2 | 1 | 0 | 0 | 4 |
| NW | 2 | 4 | 3 | 1 | 0 | 0 | 10 |
| NNW | 1 | 4 | 2 | 0 | 0 | 0 | 7 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

102
0

PAGE 21

NORTHEAST STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/1/74 THROUGH 3/31/74

STABILITY CLASS F

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|----|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 17 TO 24 | ABOVE 24 | | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| NNE | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| NE | 0 | 2 | 0 | 0 | 0 | 0 | 2 | |
| ENE | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| E | 1 | 1 | 0 | 0 | 0 | 0 | 2 | |
| ESE | 0 | 3 | 0 | 0 | 0 | 0 | 3 | |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SSE | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| S | 0 | 2 | 4 | 1 | 0 | 0 | 6 | |
| SSW | 1 | 4 | 5 | 3 | 0 | 0 | 12 | |
| SW | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| WSW | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE

33

HOURS OF CALM THIS PAGE

0

PAGE 23
 NORTHERN STATE
 SITE METEOROLOGICAL
 10 METER STATION
 140 FT AND 100

COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 FREQUENCY DISTRIBUTION TABLES
 DATA DETERMINED USING 140 FT - 10 METER DELTA 1
 STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/1/74 THROUGH 3/31/74
 STABILITY CLASS G
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| E | 4 | 4 | 1 | 0 | 0 | 0 | 9 |
| ESE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| SE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| SSE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| S | 0 | 1 | 5 | 0 | 0 | 0 | 6 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

24
 0

PAGE 23

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/1/74 THROUGH 3/31/74

ALL CLASSES COMBINED

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 7 | 8 | 5 | 2 | 0 | 0 | 22 |
| NNE | 2 | 6 | 5 | 0 | 0 | 0 | 13 |
| NE | 3 | 24 | 12 | 7 | 0 | 0 | 46 |
| ENE | 4 | 29 | 12 | 5 | 0 | 0 | 50 |
| E | 7 | 20 | 46 | 9 | 0 | 0 | 82 |
| ESE | 0 | 11 | 25 | 11 | 0 | 0 | 47 |
| SE | 3 | 6 | 23 | 12 | 0 | 0 | 44 |
| SSE | 2 | 9 | 15 | 8 | 3 | 0 | 37 |
| S | 2 | 9 | 16 | 4 | 2 | 0 | 33 |
| SSW | 2 | 7 | 14 | 5 | 0 | 0 | 28 |
| SW | 3 | 10 | 12 | 4 | 0 | 0 | 29 |
| WSW | 2 | 7 | 7 | 2 | 0 | 0 | 18 |
| W | 0 | 10 | 14 | 3 | 4 | 0 | 31 |
| WNW | 0 | 9 | 32 | 39 | 3 | 0 | 83 |
| NW | 3 | 23 | 43 | 61 | 10 | 0 | 140 |
| NNW | 1 | 14 | 10 | 4 | 1 | 0 | 30 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 733

HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.5 5.6 9.6 14.5 20.7 0.0

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 744

HOURS OF BAD DATA 11

PERCENT DATA RECOVERY 98.52

PAGE 16
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 4/30/74

STABILITY CLASS A

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 3 | 3 | 2 | 0 | 10 |
| NNE | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| NE | 0 | 2 | 4 | 4 | 0 | 0 | 10 |
| ENE | 0 | 1 | 7 | 1 | 0 | 0 | 9 |
| E | 0 | 2 | 1 | 3 | 0 | 0 | 6 |
| ESE | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| SE | 0 | 2 | 3 | 12 | 1 | 0 | 18 |
| SSE | 0 | 3 | 1 | 10 | 7 | 1 | 22 |
| S | 0 | 1 | 3 | 5 | 2 | 1 | 12 |
| SSW | 1 | 0 | 2 | 2 | 0 | 0 | 5 |
| SW | 0 | 1 | 7 | 1 | 0 | 0 | 9 |
| WSW | 0 | 2 | 5 | 1 | 0 | 0 | 8 |
| W | 0 | 0 | 5 | 0 | 0 | 0 | 5 |
| WNW | 0 | 2 | 4 | 1 | 0 | 0 | 7 |
| NW | 0 | 2 | 3 | 6 | 0 | 0 | 11 |
| NNW | 0 | 1 | 3 | 5 | 4 | 0 | 13 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

160
 0

PAGE 17

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/1/74 THROUGH 4/30/74
STABILITY CLASS F
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|---|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 0 | 2 | 1 | 1 | 0 | 0 | 4 | |
| NNE | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| NE | 1 | 0 | 2 | 1 | 0 | 0 | 4 | |
| ENE | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| E | 0 | 1 | 1 | 1 | 0 | 0 | 3 | |
| ESE | 0 | 2 | 0 | 0 | 0 | 0 | 2 | |
| SE | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| SSE | 0 | 0 | 2 | 1 | 0 | 0 | 3 | |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SSW | 0 | 1 | 2 | 0 | 0 | 0 | 3 | |
| SW | 1 | 3 | 1 | 0 | 0 | 0 | 5 | |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| W | 0 | 1 | 1 | 0 | 0 | 0 | 2 | |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| NW | 0 | 1 | 1 | 2 | 3 | 0 | 7 | |
| NNW | 0 | 1 | 3 | 1 | 1 | 0 | 6 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE 42
HOURS OF CALM THIS PAGE 0

PAGE 16

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 4/30/74

STABILITY CLASS C

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| NNE | 0 | 0 | 1 | 0 | 1 | 1 | 3 |
| NE | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| ENE | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| E | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| ESE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| S | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| SSW | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| NW | 0 | 1 | 0 | 0 | 1 | 0 | 2 |
| NNW | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

23
0

PAGE 19

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 4/30/74
STABILITY CLASS D
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 2 | 2 | 10 | 17 | 0 | 0 | 31 |
| NNE | 0 | 3 | 9 | 5 | 8 | 2 | 27 |
| NE | 0 | 2 | 5 | 6 | 3 | 0 | 16 |
| ENE | 1 | 3 | 2 | 6 | 0 | 0 | 13 |
| E | 0 | 4 | 6 | 7 | 0 | 0 | 17 |
| ESE | 3 | 3 | 0 | 2 | 1 | 0 | 9 |
| SE | 0 | 1 | 4 | 1 | 0 | 0 | 6 |
| SSE | 0 | 1 | 3 | 6 | 2 | 0 | 12 |
| S | 1 | 0 | 0 | 1 | 3 | 0 | 5 |
| SSW | 1 | 0 | 1 | 2 | 0 | 0 | 4 |
| SW | 2 | 2 | 0 | 2 | 0 | 0 | 6 |
| WSW | 0 | 1 | 1 | 1 | 1 | 0 | 4 |
| W | 0 | 3 | 1 | 4 | 3 | 0 | 11 |
| WNW | 0 | 4 | 3 | 8 | 0 | 0 | 15 |
| NW | 1 | 13 | 5 | 6 | 1 | 0 | 26 |
| NNW | 0 | 5 | 3 | 8 | 2 | 0 | 18 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 220
HOURS OF CALM THIS PAGE 0

PAGE 20
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/1/74 THROUGH 4/30/74
 STABILITY CLASS E
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 2 | 3 | 0 | 0 | 0 | 6 |
| NNE | 0 | 4 | 11 | 0 | 0 | 0 | 15 |
| NE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| ENE | 1 | 3 | 1 | 0 | 0 | 0 | 5 |
| E | 0 | 8 | 14 | 7 | 0 | 0 | 29 |
| ESE | 0 | 6 | 2 | 0 | 0 | 0 | 8 |
| SE | 0 | 2 | 14 | 5 | 0 | 0 | 21 |
| SSE | 0 | 1 | 6 | 3 | 0 | 0 | 10 |
| S | 2 | 0 | 4 | 4 | 1 | 0 | 11 |
| SSW | 1 | 2 | 4 | 0 | 0 | 0 | 7 |
| SW | 1 | 7 | 1 | 0 | 0 | 0 | 4 |
| WSW | 2 | 4 | 0 | 0 | 0 | 0 | 6 |
| W | 0 | 4 | 1 | 3 | 0 | 0 | 8 |
| WNW | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| NW | 0 | 3 | 6 | 1 | 0 | 0 | 10 |
| NNW | 0 | 2 | 3 | 1 | 0 | 0 | 7 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

157
 0

PAGE 21

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 4/30/74

STABILITY CLASS F

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 1 | 3 | 0 | 0 | 0 | 0 | 4 |
| ENE | 2 | 4 | 0 | 0 | 0 | 0 | 6 |
| E | 1 | 6 | 0 | 0 | 0 | 0 | 7 |
| ESE | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| SE | 1 | 3 | 0 | 0 | 0 | 0 | 4 |
| SSE | 1 | 4 | 2 | 1 | 0 | 0 | 8 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 1 | 4 | 0 | 0 | 0 | 5 |
| SW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| WSW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| W | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| WNW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NW | 0 | 15 | 0 | 0 | 0 | 0 | 15 |
| NNW | 1 | 8 | 1 | 0 | 0 | 0 | 9 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

66
0

PAGE 22

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 4/30/74

STABILITY CLASS G

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 0 | 0 | 0 | 0 | 3 |
| NNE | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| NE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| ENE | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| E | 5 | 3 | 0 | 0 | 0 | 0 | 8 |
| ESE | 1 | 3 | 0 | 0 | 0 | 0 | 4 |
| SE | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| SSE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| S | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| SSW | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| SW | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| WSW | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| W | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| NNW | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE

39

HOURS OF CALM THIS PAGE

2

PAGE 23

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 4/30/74
ALL CLASSES COMBINED
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 3 | 12 | 19 | 21 | 2 | 0 | 57 |
| NNE | 2 | 7 | 24 | 5 | 9 | 3 | 50 |
| NE | 3 | 6 | 18 | 12 | 3 | 0 | 42 |
| ENE | 5 | 13 | 12 | 8 | 0 | 0 | 38 |
| E | 6 | 26 | 22 | 18 | 0 | 0 | 72 |
| ESE | 4 | 20 | 2 | 4 | 1 | 0 | 31 |
| SE | 3 | 10 | 21 | 18 | 1 | 0 | 53 |
| SSE | 1 | 11 | 15 | 21 | 9 | 1 | 58 |
| S | 3 | 6 | 8 | 11 | 6 | 1 | 35 |
| SSW | 3 | 6 | 14 | 4 | 0 | 0 | 27 |
| SW | 5 | 14 | 9 | 3 | 0 | 0 | 31 |
| WSW | 3 | 8 | 6 | 2 | 1 | 0 | 20 |
| W | 2 | 10 | 8 | 7 | 3 | 0 | 30 |
| WNW | 0 | 8 | 11 | 10 | 0 | 0 | 29 |
| NW | 2 | 37 | 15 | 15 | 5 | 0 | 74 |
| NNW | 1 | 16 | 17 | 16 | 12 | 0 | 58 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 707
HOURS OF CALM THIS PAGE 2

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.3 5.4 9.9 14.8 20.3 26.0

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 720
HOURS OF SAC DATA 11
PERCENT DATA RECOVERY 46.47

PAGE 16

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/1/74 THROUGH 5/31/74

STABILITY CLASS A

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 17 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 4 | 8 | 0 | 0 | 13 |
| NNE | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| NE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| ENE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| E | 0 | 1 | 3 | 0 | 0 | 0 | 4 |
| ESE | 0 | 0 | 1 | 7 | 0 | 0 | 8 |
| SE | 0 | 2 | 2 | 15 | 1 | 0 | 20 |
| SSF | 0 | 1 | 0 | 2 | 5 | 0 | 8 |
| S | 0 | 3 | 0 | 7 | 4 | 0 | 14 |
| SSW | 0 | 3 | 0 | 5 | 2 | 0 | 10 |
| SW | 0 | 3 | 3 | 0 | 0 | 0 | 6 |
| WSW | 0 | 3 | 3 | 2 | 3 | 0 | 11 |
| W | 0 | 1 | 1 | 3 | 3 | 0 | 8 |
| W'x | 0 | 1 | 1 | 1 | 3 | 0 | 6 |
| NW | 0 | 3 | 4 | 0 | 0 | 0 | 7 |
| NNW | 0 | 1 | 5 | 5 | 1 | 0 | 12 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

152
0

PAGE 17

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT = 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/1/74 THROUGH 5/31/74

STABILITY CLASS B

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|---|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 0 | 2 | 1 | 0 | 0 | 0 | 3 | |
| NNE | 0 | 2 | 2 | 0 | 0 | 0 | 4 | |
| NF | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| E | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| ESE | 0 | 1 | 0 | 3 | 0 | 0 | 4 | |
| SE | 0 | 1 | 0 | 2 | 0 | 0 | 3 | |
| SSE | 0 | 0 | 1 | 1 | 0 | 0 | 2 | |
| S | 0 | 2 | 3 | 1 | 0 | 0 | 6 | |
| SSW | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| SW | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| W | 1 | 1 | 0 | 1 | 1 | 0 | 4 | |
| WNW | 0 | 0 | 4 | 3 | 0 | 0 | 7 | |
| NW | 0 | 2 | 4 | 0 | 0 | 0 | 6 | |
| NNW | 0 | 0 | 2 | 0 | 0 | 0 | 2 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE

44

HOURS OF CALM THIS PAGE

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PAGE 1R
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/ 1/74 THROUGH 5/31/74
 STABILITY CLASS C
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 0 | 1 | 0 | 0 | 0 | 2 |
| NNF | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| FNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ESE | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| SE | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SSW | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 2 | 0 | 0 | 1 | 0 | 3 |
| W | 1 | 2 | 0 | 0 | 2 | 0 | 5 |
| WNW | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| NW | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| NNW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| VAF | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

27
 0

PAGE 19

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/ 1/74 THROUGH 5/31/74

STABILITY CLASS D

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 1 | 4 | 2 | 0 | 0 | 8 |
| NNE | 2 | 4 | 5 | 0 | 0 | 0 | 11 |
| NE | 3 | 4 | 3 | 2 | 0 | 0 | 12 |
| ENE | 2 | 2 | 4 | 1 | 0 | 0 | 9 |
| E | 1 | 4 | 9 | 4 | 0 | 0 | 18 |
| ESE | 1 | 2 | 21 | 27 | 0 | 0 | 51 |
| SE | 0 | 3 | 14 | 21 | 0 | 0 | 48 |
| SEF | 1 | 2 | 9 | 2 | 0 | 0 | 14 |
| S | 0 | 2 | 2 | 3 | 0 | 0 | 7 |
| SSW | 0 | 2 | 1 | 1 | 0 | 0 | 4 |
| SW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| WSW | 3 | 1 | 0 | 6 | 0 | 0 | 10 |
| W | 1 | 3 | 2 | 7 | 4 | 0 | 17 |
| WNW | 0 | 3 | 6 | 13 | 0 | 0 | 22 |
| NW | 1 | 9 | 13 | 10 | 3 | 0 | 36 |
| NNW | 0 | 4 | 11 | 4 | 0 | 0 | 24 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

268

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PAGE 20
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/ 1/74 THROUGH 5/31/74
 STABILITY CLASS E
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 17 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| NNE | 2 | 4 | 2 | 0 | 0 | 0 | 8 |
| NE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| ENE | 4 | 0 | 1 | 0 | 0 | 0 | 5 |
| E | 0 | 4 | 1 | 0 | 0 | 0 | 5 |
| ESE | 0 | 3 | 4 | 0 | 0 | 0 | 7 |
| SE | 4 | 4 | 3 | 2 | 0 | 0 | 13 |
| SSE | 0 | 5 | 3 | 7 | 0 | 0 | 15 |
| S | 1 | 3 | 1 | 2 | 10 | 0 | 18 |
| SSW | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| SW | 2 | 0 | 1 | 0 | 0 | 0 | 3 |
| WSW | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| W | 1 | 2 | 2 | 0 | 0 | 0 | 5 |
| WNW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| NW | 2 | 4 | 2 | 0 | 0 | 0 | 8 |
| NNW | 1 | 2 | 1 | 0 | 0 | 0 | 4 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

108
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PAGE 21

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/ 1/74 THROUGH 5/31/74

STABILITY CLASS F

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 17 TO 24 | ABOVE 24 | |
| N | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| ESE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SE | 2 | 4 | 0 | 0 | 0 | 0 | 6 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 2 | 4 | 0 | 0 | 0 | 0 | 6 |
| SSW | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| SW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| WSW | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| W | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| WNW | 3 | 3 | 0 | 0 | 0 | 0 | 6 |
| NW | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| NNW | 5 | 4 | 0 | 0 | 0 | 0 | 9 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE

43

HOURS OF CALM THIS PAGE

0

PAGE 22
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/ 1/74 THROUGH 5/31/74
 STABILITY CLASS G
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| E | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| ESE | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| SE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| SSE | 2 | 2 | 0 | 0 | 0 | 0 | 4 |
| S | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SSW | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| SW | 3 | 1 | 0 | 0 | 0 | 0 | 4 |
| WSW | 4 | 2 | 0 | 0 | 0 | 0 | 6 |
| W | 5 | 3 | 0 | 0 | 0 | 0 | 8 |
| WNW | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| NW | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| NNW | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

34
 0

PAGE 23

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/ 1/74 THROUGH 5/31/74
ALL CLASSES COMBINED
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 7 | 6 | 10 | 10 | 0 | 0 | 33 |
| NNE | 4 | 10 | 10 | 2 | 0 | 0 | 26 |
| NE | 3 | 9 | 4 | 2 | 0 | 0 | 18 |
| ENE | 7 | 3 | 6 | 1 | 0 | 0 | 17 |
| E | 3 | 14 | 13 | 4 | 0 | 0 | 34 |
| ESE | 2 | 8 | 28 | 38 | 0 | 0 | 76 |
| SE | 7 | 19 | 24 | 43 | 1 | 0 | 94 |
| SESE | 3 | 10 | 17 | 12 | 5 | 0 | 47 |
| S | 3 | 15 | 6 | 15 | 14 | 0 | 53 |
| SSW | 8 | 5 | 2 | 6 | 2 | 0 | 23 |
| SW | 5 | 6 | 6 | 0 | 0 | 0 | 17 |
| WSW | 8 | 8 | 6 | 8 | 4 | 0 | 34 |
| W | 11 | 13 | 5 | 11 | 10 | 0 | 50 |
| WNW | 5 | 10 | 17 | 23 | 3 | 0 | 58 |
| NW | 6 | 18 | 24 | 16 | 10 | 0 | 74 |
| NNW | 7 | 13 | 17 | 14 | 1 | 0 | 52 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 761
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.5 5.4 9.6 15.0 20.5 0.0

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 744
HOURS OF BAD DATA 42
PERCENT DATA RECOVERY 94.22

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 NORTHEAST STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/1/74 THROUGH 6/30/74
 STABILITY CLASS A
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| NNE | 1 | 0 | 7 | 1 | 0 | 0 | 9 |
| NE | 0 | 3 | 4 | 0 | 0 | 0 | 7 |
| ENE | 1 | 6 | 3 | 0 | 0 | 0 | 10 |
| E | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| ESE | 0 | 2 | 4 | 0 | 0 | 0 | 6 |
| SE | 0 | 3 | 2 | 3 | 0 | 0 | 8 |
| SSE | 0 | 0 | 8 | 7 | 5 | 0 | 20 |
| S | 0 | 1 | 22 | 20 | 2 | 0 | 45 |
| SSW | 0 | 4 | 1 | 3 | 0 | 0 | 8 |
| SW | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| WSW | 0 | 4 | 4 | 0 | 0 | 0 | 8 |
| W | 0 | 4 | 4 | 0 | 0 | 0 | 8 |
| WNW | 0 | 4 | 11 | 10 | 0 | 0 | 25 |
| NW | 0 | 0 | 0 | 8 | 0 | 0 | 8 |
| NNW | 0 | 0 | 4 | 4 | 0 | 0 | 8 |
| VAH | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

200
 0

PAGE 17

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/ 1/74 THROUGH 5/30/74
STABILITY CLASS K
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| NNE | 1 | 1 | 0 | 1 | 0 | 0 | 3 |
| NE | 1 | 1 | 2 | 0 | 0 | 0 | 4 |
| ENE | 2 | 3 | 0 | 0 | 0 | 0 | 5 |
| E | 2 | 1 | 2 | 0 | 0 | 0 | 5 |
| ESE | 0 | 3 | 1 | 0 | 0 | 0 | 4 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 1 | 0 | 2 | 0 | 0 | 0 | 3 |
| S | 2 | 1 | 1 | 1 | 0 | 0 | 5 |
| SSW | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| SW | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| WSW | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| W | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| WNW | 0 | 2 | 1 | 3 | 0 | 0 | 6 |
| W | 0 | 1 | 0 | 3 | 1 | 0 | 5 |
| WNW | 0 | 0 | 1 | 3 | 0 | 0 | 4 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

57
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PAGE 18
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/1/74 THROUGH 8/30/74
 STABILITY CLASS C
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 0 | 0 | 1 | 0 | 0 | 2 |
| NNE | 1 | 0 | 1 | 0 | 3 | 0 | 5 |
| NE | 1 | 1 | 1 | 0 | 0 | 0 | 3 |
| NNE | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 1 | 1 | 1 | 0 | 0 | 0 | 3 |
| S | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| SSW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| W | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| WNW | 1 | 2 | 1 | 0 | 0 | 0 | 5 |
| W | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| NW | 0 | 1 | 1 | 2 | 0 | 0 | 4 |
| VAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS IF CALM THIS PAGE

23
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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER (DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 6/30/74
STABILITY CLASS D
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 1 | 1 | 5 | 0 | 1 | 13 |
| NNE | 1 | 4 | 1 | 2 | 0 | 0 | 8 |
| NE | 0 | 3 | 1 | 4 | 0 | 0 | 8 |
| ENE | 1 | 4 | 1 | 0 | 0 | 0 | 6 |
| E | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| ESE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SE | 3 | 3 | 7 | 1 | 0 | 0 | 14 |
| SSE | 0 | 2 | 1 | 1 | 1 | 0 | 5 |
| S | 1 | 1 | 3 | 1 | 0 | 2 | 8 |
| SSW | 2 | 4 | 1 | 0 | 0 | 0 | 7 |
| SW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| WSW | 1 | 2 | 1 | 0 | 0 | 0 | 4 |
| W | 1 | 0 | 1 | 0 | 0 | 0 | 2 |
| WNW | 2 | 1 | 6 | 1 | 0 | 0 | 10 |
| NW | 1 | 1 | 7 | 7 | 0 | 0 | 16 |
| NNW | 1 | 3 | 8 | 5 | 1 | 0 | 18 |
| VAF | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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HOURS OF CALM THIS PAGE

126
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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/1/74 THROUGH 6/30/74

STABILITY CLASS F

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 2 | 0 | 0 | 0 | 0 | 4 |
| NNW | 1 | 10 | 1 | 0 | 0 | 0 | 12 |
| NE | 1 | 4 | 2 | 0 | 0 | 0 | 11 |
| ENE | 1 | 0 | 0 | 0 | 0 | 0 | 7 |
| E | 4 | 5 | 2 | 0 | 0 | 0 | 7 |
| ESE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| SE | 1 | 1 | 4 | 3 | 0 | 0 | 10 |
| SSE | 1 | 4 | 13 | 2 | 0 | 0 | 21 |
| S | 0 | 4 | 7 | 2 | 0 | 0 | 13 |
| SSW | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| SW | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| WSW | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| W | 1 | 4 | 3 | 0 | 0 | 0 | 8 |
| WNW | 1 | 2 | 1 | 1 | 0 | 0 | 10 |
| NW | 1 | 0 | 4 | 0 | 0 | 0 | 11 |
| NNW | 1 | 1 | 2 | 0 | 0 | 0 | 4 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE

136

HOURS OF CALM THIS PAGE

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NORTHERN STATES POWER COMPANY - MONICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 6/30/74

STABILITY CLASS F

ELEVATION 10 METERS

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NE | 2 | 2 | 0 | 0 | 0 | 0 | 4 |
| ENE | 2 | 3 | 0 | 0 | 0 | 0 | 5 |
| E | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| ESE | 2 | 3 | 0 | 0 | 0 | 0 | 5 |
| SE | 1 | 7 | 4 | 0 | 0 | 0 | 12 |
| SSE | 0 | 3 | 4 | 0 | 0 | 0 | 7 |
| S | 6 | 5 | 8 | 0 | 0 | 0 | 19 |
| SSW | 3 | 1 | 0 | 0 | 0 | 0 | 4 |
| SW | 3 | 1 | 0 | 0 | 0 | 0 | 4 |
| WSW | 1 | 3 | 0 | 0 | 0 | 0 | 4 |
| W | 3 | 13 | 1 | 0 | 0 | 0 | 17 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NNW | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| VAF | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE

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HOURS OF CALM THIS PAGE

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PAGE 22
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/1/74 THROUGH 6/30/74
 STABILITY CLASS G
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 15 | 16 TO 24 | ABOVE 24 | |
| N | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| ESE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| SE | 6 | 2 | 0 | 0 | 0 | 0 | 8 |
| SSE | 2 | 5 | 0 | 0 | 0 | 0 | 7 |
| S | 7 | 10 | 1 | 0 | 0 | 0 | 18 |
| SSW | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| SW | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| WSW | 8 | 7 | 1 | 0 | 0 | 0 | 16 |
| W | 4 | 3 | 0 | 0 | 0 | 0 | 7 |
| WNW | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| NW | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

66
 0

PAGE 23

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/1/74 THROUGH 6/30/74
ALL CLASSES COMBINED
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 4 | 4 | 3 | 13 | 0 | 1 | 25 |
| NNE | 5 | 16 | 10 | 4 | 3 | 0 | 38 |
| NE | 5 | 18 | 10 | 4 | 0 | 0 | 37 |
| ENE | 9 | 22 | 4 | 0 | 0 | 0 | 35 |
| E | 8 | 9 | 7 | 0 | 0 | 0 | 24 |
| ESE | 2 | 14 | 4 | 0 | 0 | 0 | 21 |
| SE | 11 | 20 | 22 | 7 | 0 | 0 | 60 |
| SSE | 5 | 18 | 29 | 10 | 6 | 0 | 68 |
| S | 16 | 22 | 42 | 24 | 2 | 2 | 109 |
| SSW | 10 | 15 | 2 | 3 | 0 | 0 | 30 |
| SW | 5 | 10 | 5 | 0 | 0 | 0 | 20 |
| WSW | 14 | 15 | 6 | 0 | 0 | 0 | 35 |
| W | 9 | 25 | 12 | 0 | 0 | 0 | 46 |
| WNW | 6 | 17 | 25 | 15 | 0 | 0 | 63 |
| NW | 3 | 9 | 22 | 14 | 1 | 0 | 50 |
| WNW | 4 | 7 | 16 | 19 | 1 | 0 | 47 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 706
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.4 7.3 9.5 14.9 20.0 30.0

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 720
HOURS OF SAG DATA 14
PERCENT DATA RECOVERY 98.06

PAGE 16
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/ 1/74 THROUGH 7/31/74
 STABILITY CLASS A
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 9 | 12 | 0 | 0 | 0 | 21 |
| NNE | 0 | 5 | 1 | 0 | 0 | 0 | 6 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| E | 0 | 2 | 6 | 0 | 0 | 0 | 8 |
| ESE | 0 | 1 | 6 | 6 | 0 | 0 | 13 |
| SE | 0 | 0 | 6 | 8 | 0 | 0 | 14 |
| SSE | 0 | 0 | 7 | 12 | 0 | 0 | 19 |
| S | 0 | 1 | 5 | 24 | 7 | 0 | 34 |
| SSW | 1 | 4 | 6 | 10 | 0 | 0 | 21 |
| SW | 0 | 1 | 7 | 4 | 0 | 0 | 13 |
| WSW | 0 | 0 | 5 | 2 | 0 | 0 | 7 |
| W | 0 | 0 | 1 | 2 | 0 | 0 | 3 |
| WNW | 0 | 0 | 2 | 2 | 0 | 0 | 4 |
| NW | 0 | 2 | 0 | 5 | 0 | 0 | 7 |
| NNW | 0 | 2 | 15 | 12 | 1 | 0 | 28 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

415
 0

PAGE 17

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/1/74 THROUGH 7/31/74
STABILITY CLASS B
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|---|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 0 | 5 | 1 | 0 | 0 | 0 | 6 | |
| NNE | 1 | 3 | 0 | 0 | 0 | 0 | 4 | |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ENE | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| E | 0 | 1 | 1 | 0 | 0 | 0 | 2 | |
| ESE | 0 | 0 | 0 | 2 | 0 | 0 | 2 | |
| SE | 0 | 0 | 0 | 1 | 0 | 0 | 1 | |
| SSE | 0 | 1 | 1 | 0 | 0 | 0 | 2 | |
| S | 0 | 1 | 7 | 0 | 0 | 0 | 8 | |
| SSW | 0 | 2 | 0 | 0 | 0 | 0 | 2 | |
| SW | 1 | 1 | 3 | 0 | 0 | 0 | 5 | |
| WSW | 0 | 3 | 0 | 0 | 0 | 0 | 3 | |
| W | 0 | 2 | 2 | 0 | 0 | 0 | 4 | |
| WNW | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| NW | 0 | 1 | 0 | 1 | 0 | 0 | 2 | |
| NNW | 0 | 2 | 2 | 2 | 0 | 0 | 7 | |
| VAP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

50
0

PAGE 18

NORTHERN STATES POWER COMPANY - MULTICELL NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSIS DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/1/74 THROUGH 7/31/74

STABILITY CLASS C

ELEVATION 10 METERS

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 17 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NNE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ENE | 1 | 0 | 1 | 0 | 0 | 0 | 2 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| SE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SSE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 2 | 0 | 1 | 0 | 0 | 3 |
| SW | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

14
0

PAGE 19

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/ 1/74 THROUGH 7/31/74

STABILITY CLASS D

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 4 | 11 | 5 | 0 | 0 | 0 | 21 |
| NNE | 3 | 3 | 2 | 1 | 0 | 0 | 9 |
| NF | 0 | 5 | 4 | 0 | 0 | 0 | 9 |
| ENE | 0 | 0 | 7 | 0 | 0 | 0 | 15 |
| E | 0 | 0 | 4 | 0 | 0 | 0 | 5 |
| ESE | 0 | 0 | 8 | 2 | 0 | 0 | 10 |
| SE | 0 | 2 | 9 | 4 | 0 | 0 | 15 |
| SSE | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| S | 0 | 3 | 5 | 2 | 0 | 0 | 10 |
| SSW | 1 | 2 | 1 | 0 | 0 | 0 | 4 |
| SW | 2 | 3 | 3 | 1 | 0 | 0 | 9 |
| WSW | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| W | 1 | 4 | 1 | 1 | 0 | 0 | 7 |
| KNW | 0 | 1 | 3 | 0 | 0 | 0 | 4 |
| NW | 0 | 2 | 5 | 3 | 0 | 0 | 10 |
| NNW | 2 | 0 | 3 | 4 | 0 | 0 | 15 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

148
0

PAGE 20

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/ 1/74 THROUGH 7/31/74
STABILITY CLASS E
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| NNE | 0 | 2 | 1 | 0 | 0 | 0 | 3 |
| NE | 0 | 3 | 2 | 0 | 0 | 0 | 5 |
| NNE | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| E | 4 | 0 | 1 | 0 | 0 | 0 | 5 |
| ESE | 1 | 1 | 3 | 1 | 0 | 0 | 6 |
| SE | 1 | 7 | 7 | 1 | 0 | 0 | 16 |
| SSE | 0 | 7 | 4 | 2 | 0 | 0 | 13 |
| S | 2 | 2 | 17 | 9 | 0 | 0 | 30 |
| SSW | 0 | 0 | 3 | 1 | 0 | 0 | 4 |
| SW | 0 | 3 | 3 | 0 | 0 | 0 | 6 |
| WSW | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| W | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| WNW | 1 | 2 | 4 | 0 | 0 | 0 | 7 |
| NW | 1 | 9 | 6 | 0 | 0 | 0 | 16 |
| NNW | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

121
0

PAGE 21

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/ 1/74 THROUGH 7/31/74
STABILITY CLASS F
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| NNE | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| NE | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| ENE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| E | 2 | 7 | 0 | 0 | 0 | 0 | 9 |
| ESE | 0 | 4 | 2 | 0 | 0 | 0 | 7 |
| SE | 0 | 6 | 2 | 0 | 0 | 0 | 8 |
| SSE | 1 | 5 | 6 | 0 | 0 | 0 | 12 |
| S | 0 | 4 | 5 | 0 | 0 | 0 | 9 |
| SSW | 0 | 2 | 1 | 0 | 0 | 0 | 3 |
| SW | 0 | 4 | 2 | 0 | 0 | 0 | 6 |
| WSW | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| W | 2 | 2 | 0 | 0 | 0 | 0 | 4 |
| WNW | 1 | 3 | 1 | 0 | 0 | 0 | 5 |
| NW | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| NNW | 1 | 2 | 4 | 0 | 0 | 0 | 7 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

64
0

PAGE 22

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/ 1/74 THROUGH 7/31/74

STABILITY CLASS G

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| NNE | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| NE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ENE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 2 | 2 | 0 | 0 | 0 | 0 | 4 |
| SE | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| SSE | 4 | 7 | 1 | 0 | 0 | 0 | 12 |
| S | 3 | 6 | 1 | 0 | 0 | 0 | 9 |
| SSW | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| SW | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| WSW | 4 | 1 | 0 | 0 | 0 | 0 | 5 |
| W | 6 | 0 | 1 | 0 | 0 | 0 | 7 |
| WNW | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| NW | 0 | 4 | 1 | 0 | 0 | 0 | 5 |
| NNW | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE

52

HOURS OF CALM THIS PAGE

0

PAGE 23

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/ 1/74 THROUGH 7/31/74
ALL CLASSES COMBINED
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 6 | 31 | 21 | 1 | 0 | 0 | 59 |
| NNE | 8 | 14 | 4 | 1 | 0 | 0 | 27 |
| NE | 0 | 14 | 6 | 0 | 0 | 0 | 20 |
| ENE | 1 | 10 | 9 | 0 | 0 | 0 | 20 |
| E | 6 | 10 | 13 | 0 | 0 | 0 | 29 |
| ESE | 3 | 4 | 20 | 11 | 0 | 0 | 48 |
| SE | 2 | 17 | 24 | 14 | 0 | 0 | 57 |
| SSE | 5 | 16 | 20 | 15 | 0 | 0 | 56 |
| S | 5 | 16 | 46 | 30 | 7 | 0 | 104 |
| SSW | 5 | 16 | 11 | 12 | 0 | 0 | 44 |
| SW | 7 | 14 | 14 | 6 | 0 | 0 | 41 |
| WSW | 5 | 12 | 6 | 2 | 0 | 0 | 25 |
| W | 9 | 17 | 6 | 3 | 0 | 0 | 35 |
| WNW | 3 | 17 | 15 | 2 | 0 | 0 | 37 |
| NW | 1 | 21 | 18 | 10 | 0 | 0 | 49 |
| NNW | 4 | 14 | 27 | 18 | 1 | 0 | 64 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 716
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

7.6 7.4 9.5 14.7 19.4 C.C.

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 744
HOURS OF RAW DATA 28
PERCENT DATA RECOVERY 42.24

PAGE 16

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/1/74 THROUGH 8/31/74

STABILITY CLASS A

ELEVATION 10 METERS

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 6 | 0 | 0 | 6 |
| SSE | 0 | 1 | 4 | 3 | 2 | 1 | 11 |
| S | 0 | 1 | 3 | 18 | 6 | 2 | 30 |
| SSW | 0 | 0 | 2 | 2 | 2 | 0 | 6 |
| SW | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| WSW | 0 | 1 | 4 | 1 | 0 | 0 | 6 |
| W | 0 | 4 | 7 | 0 | 0 | 0 | 11 |
| WNW | 0 | 0 | 14 | 2 | 0 | 0 | 16 |
| NW | 0 | 4 | 14 | 3 | 0 | 0 | 21 |
| NNW | 0 | 3 | 10 | 2 | 0 | 0 | 15 |
| VAH | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE

135

HOURS OF CALM THIS PAGE

0

PAGE 17

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 8/1/74 THROUGH 8/31/74
STABILITY CLASS B
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|---|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SE | 0 | 1 | 1 | 0 | 0 | 0 | 2 | |
| SSE | 0 | 1 | 1 | 1 | 0 | 0 | 3 | |
| S | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| SSW | 0 | 0 | 3 | 0 | 0 | 0 | 3 | |
| SW | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| WSW | 0 | 1 | 1 | 0 | 0 | 0 | 2 | |
| W | 0 | 1 | 2 | 2 | 0 | 0 | 5 | |
| WNW | 0 | 1 | 2 | 2 | 0 | 0 | 5 | |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| NNW | 0 | 0 | 2 | 1 | 0 | 0 | 3 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

26
0

PAGE 18

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 8/ 1/74 THROUGH 8/31/74

STABILITY CLASS C

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|---|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 19 TO 24 | ABOVE 24 | | |
| N | 0 | 0 | 0 | 1 | 0 | 0 | 1 | |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| S | 0 | 0 | 1 | 0 | 1 | 0 | 2 | |
| SSW | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| SW | 0 | 2 | 0 | 0 | 0 | 0 | 2 | |
| WSW | 0 | 0 | 0 | 1 | 0 | 0 | 1 | |
| W | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| WNW | 0 | 1 | 1 | 1 | 1 | 0 | 4 | |
| NW | 0 | 1 | 1 | 0 | 0 | 0 | 2 | |
| NNW | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

17
0

PAGE 19

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/ 1/74 THROUGH 6/31/74

STABILITY CLASS D

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 3 | 5 | 9 | 2 | 0 | 19 |
| NNE | 0 | 0 | 1 | 3 | 0 | 0 | 4 |
| NE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| ENE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 2 | 9 | 1 | 0 | 0 | 12 |
| SE | 1 | 2 | 8 | 3 | 0 | 0 | 14 |
| SSE | 1 | 1 | 3 | 2 | 0 | 0 | 7 |
| S | 0 | 5 | 10 | 3 | 0 | 0 | 18 |
| SSW | 0 | 4 | 5 | 3 | 0 | 0 | 12 |
| SW | 1 | 3 | 1 | 7 | 0 | 0 | 12 |
| WSW | 1 | 0 | 7 | 2 | 0 | 0 | 10 |
| W | 0 | 4 | 2 | 3 | 1 | 0 | 10 |
| WNW | 0 | 6 | 5 | 4 | 0 | 0 | 15 |
| NW | 0 | 1 | 2 | 1 | 1 | 0 | 5 |
| NNW | 0 | 7 | 9 | 1 | 0 | 0 | 17 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

157
0

PAGE 20

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 8/ 1/74 THROUGH 8/31/74

STABILITY CLASS E

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 8 | 7 | 6 | 0 | 0 | 21 |
| NNW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| NE | 1 | 0 | 1 | 0 | 0 | 0 | 2 |
| NNE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| E | 0 | 13 | 3 | 0 | 0 | 0 | 16 |
| ESE | 0 | 11 | 3 | 0 | 0 | 0 | 14 |
| SE | 0 | 5 | 4 | 0 | 0 | 0 | 14 |
| SSE | 0 | 2 | 5 | 3 | 0 | 0 | 10 |
| S | 0 | 4 | 4 | 5 | 0 | 0 | 13 |
| SSW | 2 | 2 | 4 | 4 | 0 | 0 | 12 |
| SW | 0 | 1 | 11 | 3 | 0 | 0 | 15 |
| WSW | 0 | 0 | 3 | 1 | 0 | 0 | 4 |
| W | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| WNW | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| NW | 1 | 0 | 2 | 0 | 0 | 0 | 3 |
| NNW | 0 | 1 | 3 | 0 | 0 | 0 | 4 |
| VAR | 0 | 1 | 0 | 0 | 0 | 0 | 1 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

171
0

PAGE 21

NORTHEAST STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/1/74 THROUGH 6/31/74
STABILITY CLASS F
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 2 | 3 | 1 | 0 | 0 | 0 | 6 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| ENE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| E | 1 | 7 | 1 | 0 | 0 | 0 | 9 |
| ESE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| SE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SSE | 0 | 3 | 2 | 0 | 0 | 0 | 5 |
| S | 1 | 1 | 1 | 0 | 0 | 0 | 3 |
| SSW | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| SW | 1 | 0 | 3 | 0 | 0 | 0 | 4 |
| WSW | 4 | 4 | 0 | 0 | 0 | 0 | 8 |
| W | 2 | 9 | 0 | 1 | 0 | 0 | 12 |
| WNW | 0 | 5 | 1 | 0 | 0 | 0 | 6 |
| NW | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| NNW | 1 | 2 | 1 | 0 | 0 | 0 | 4 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 67
HOURS OF CALM THIS PAGE 0

PAGE 22

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/ 1/74 THROUGH 8/31/74
STABILITY CLASS G
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|----|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 2 | 1 | 0 | 0 | 0 | 0 | 3 | |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| NE | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SE | 2 | 6 | 0 | 0 | 0 | 0 | 8 | |
| SSE | 7 | 7 | 0 | 0 | 0 | 0 | 14 | |
| S | 4 | 13 | 0 | 0 | 0 | 0 | 17 | |
| SSW | 2 | 0 | 0 | 0 | 0 | 0 | 2 | |
| SW | 5 | 2 | 0 | 0 | 0 | 0 | 7 | |
| WSW | 0 | 3 | 0 | 0 | 0 | 0 | 3 | |
| W | 3 | 2 | 0 | 0 | 0 | 0 | 5 | |
| WNW | 2 | 1 | 0 | 0 | 0 | 0 | 3 | |
| NW | 2 | 2 | 0 | 0 | 0 | 0 | 4 | |
| NNW | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

73
0

PAGE 23

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 8/ 1/74 THROUGH 6/31/74
ALL CLASSES COMBINED
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 4 | 15 | 15 | 16 | 2 | 0 | 55 |
| NNE | 0 | 1 | 2 | 3 | 0 | 0 | 6 |
| NE | 2 | 1 | 1 | 1 | 0 | 0 | 5 |
| ENE | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| E | 1 | 20 | 4 | 0 | 0 | 0 | 25 |
| ESE | 0 | 16 | 12 | 1 | 0 | 0 | 29 |
| SE | 3 | 15 | 15 | 9 | 0 | 0 | 42 |
| SSE | 6 | 14 | 15 | 9 | 2 | 1 | 47 |
| S | 5 | 25 | 26 | 26 | 7 | 2 | 91 |
| SSW | 5 | 6 | 16 | 9 | 2 | 0 | 38 |
| SW | 7 | 8 | 18 | 10 | 0 | 0 | 43 |
| WSW | 10 | 15 | 15 | 5 | 0 | 0 | 45 |
| W | 5 | 26 | 18 | 6 | 1 | 0 | 56 |
| WNW | 2 | 20 | 29 | 9 | 1 | 0 | 61 |
| NW | 4 | 17 | 22 | 4 | 1 | 0 | 48 |
| NNW | 2 | 16 | 25 | 4 | 0 | 0 | 47 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 646
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.5 5.5 10.0 14.7 20.1 25.0

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 744
HOURS OF RAW DATA 96
PERCENT DATA RECOVERY 12.89

PAGE 16

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 9/ 1/74 THROUGH 9/30/74

STABILITY CLASS A

ELEVATION 10 METER

WIND SPEED (MPH) AT 10 METER LEVEL

| DIRECTION | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | TOTAL |
|-----------|--------|--------|---------|----------|----------|----------|-------|
| N | 0 | 5 | 20 | 1 | 0 | 0 | 27 |
| NNE | 0 | 2 | 4 | 2 | 0 | 0 | 8 |
| NE | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| SSE | 0 | 0 | 2 | 7 | 0 | 0 | 9 |
| S | 0 | 3 | 7 | 14 | 0 | 0 | 24 |
| SSW | 0 | 4 | 8 | 8 | 0 | 0 | 20 |
| SW | 0 | 4 | 9 | 5 | 0 | 0 | 18 |
| WSW | 0 | 7 | 4 | 0 | 0 | 0 | 17 |
| W | 0 | 5 | 3 | 1 | 0 | 0 | 12 |
| WNW | 0 | 3 | 8 | 3 | 1 | 0 | 15 |
| NW | 0 | 2 | 6 | 3 | 2 | 0 | 13 |
| NNW | 0 | 2 | 6 | 9 | 0 | 0 | 17 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE

184

HOURS OF CALM THIS PAGE

0

PAGE 17

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 9/1/74 THROUGH 9/30/74

STABILITY CLASS B

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 4 | 0 | 0 | 0 | 6 |
| NNE | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| NF | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| S | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| SSW | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| SW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| WSW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| W | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| WNW | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| NW | 1 | 1 | 2 | 0 | 0 | 0 | 4 |
| NNW | 0 | 2 | 1 | 3 | 0 | 0 | 6 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE

34

HOURS OF CALM THIS PAGE

0

PAGE 1P
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/1/74 THROUGH 9/30/74
 STABILITY CLASS C
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|---|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 0 | 0 | 2 | 0 | 0 | 0 | 2 | |
| NNE | 0 | 1 | 1 | 0 | 0 | 0 | 2 | |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ENE | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SSE | 0 | 0 | 0 | 2 | 0 | 0 | 2 | |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| WSW | 0 | 0 | 0 | 1 | 0 | 0 | 1 | |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| WNW | 0 | 0 | 3 | 0 | 0 | 0 | 3 | |
| NW | 0 | 0 | 2 | 1 | 0 | 0 | 3 | |
| NW | 0 | 0 | 2 | 0 | 0 | 0 | 2 | |
| VAR | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |

TOTAL HOURS THIS PAGE 17
 HOURS OF CALM THIS PAGE 0

PAGE 19

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 9/1/74 THROUGH 9/30/74

STABILITY CLASS D

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 11 | 2 | 0 | 0 | 14 |
| NNE | 0 | 2 | 10 | 2 | 0 | 0 | 14 |
| NE | 0 | 2 | 6 | 1 | 0 | 0 | 9 |
| ENE | 1 | 2 | 9 | 1 | 0 | 0 | 13 |
| E | 0 | 3 | 5 | 1 | 0 | 0 | 9 |
| ESE | 0 | 0 | 3 | 1 | 0 | 0 | 4 |
| SE | 0 | 2 | 3 | 1 | 0 | 0 | 6 |
| SSE | 0 | 0 | 2 | 2 | 0 | 0 | 4 |
| S | 0 | 4 | 6 | 3 | 0 | 0 | 13 |
| SSW | 1 | 2 | 1 | 0 | 0 | 0 | 4 |
| SW | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| WSW | 1 | 0 | 2 | 2 | 0 | 0 | 5 |
| W | 0 | 3 | 1 | 0 | 0 | 0 | 4 |
| WNW | 1 | 0 | 3 | 1 | 0 | 0 | 5 |
| NW | 0 | 7 | 8 | 9 | 4 | 0 | 28 |
| NNW | 1 | 3 | 17 | 3 | 1 | 0 | 25 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE

167

HOURS OF CALM THIS PAGE

0

PAGE 20
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/1/74 THROUGH 4/30/74
 STABILITY CLASS E
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|----|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 17 TO 24 | ABOVE 24 | | |
| N | 0 | 14 | 1 | 1 | 0 | 0 | 16 | |
| NNE | 0 | 2 | 2 | 0 | 0 | 0 | 5 | |
| NE | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| NNE | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ESE | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| SE | 0 | 7 | 4 | 0 | 0 | 0 | 11 | |
| SSE | 0 | 0 | 5 | 1 | 0 | 0 | 6 | |
| S | 0 | 1 | 18 | 2 | 0 | 0 | 21 | |
| SSW | 0 | 2 | 5 | 7 | 0 | 0 | 14 | |
| SW | 0 | 3 | 3 | 3 | 0 | 0 | 9 | |
| WSW | 1 | 0 | 0 | 1 | 0 | 0 | 5 | |
| W | 1 | 2 | 1 | 0 | 0 | 0 | 4 | |
| WNW | 0 | 12 | 3 | 0 | 0 | 0 | 15 | |
| NW | 2 | 6 | 6 | 0 | 0 | 0 | 14 | |
| NNW | 1 | 4 | 3 | 0 | 0 | 0 | 13 | |
| VAF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

156
 0

PAGE 21

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 9/1/74 THROUGH 9/30/74

STABILITY CLASS F

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|----|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 1 | 0 | 0 | 0 | 0 | 0 | 4 | |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| NE | 0 | 2 | 0 | 0 | 0 | 0 | 2 | |
| ENE | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ESE | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| SE | 0 | 2 | 0 | 0 | 0 | 0 | 2 | |
| SSE | 0 | 2 | 2 | 0 | 0 | 0 | 4 | |
| S | 0 | 7 | 5 | 0 | 0 | 0 | 10 | |
| SSW | 0 | 1 | 1 | 0 | 0 | 0 | 2 | |
| SW | 0 | 2 | 1 | 0 | 0 | 0 | 3 | |
| WSW | 1 | 1 | 2 | 0 | 0 | 0 | 4 | |
| W | 1 | 2 | 0 | 0 | 0 | 0 | 3 | |
| WNW | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| NW | 4 | 8 | 1 | 0 | 0 | 0 | 13 | |
| NNW | 3 | 10 | 2 | 0 | 0 | 0 | 15 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

72
0

PAGE 22

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 9/1/74 THROUGH 9/30/74
STABILITY CLASS G
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|---|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| NNE | 2 | 0 | 0 | 0 | 0 | 0 | 2 | |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| E | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| ESE | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| SE | 0 | 2 | 0 | 0 | 0 | 0 | 2 | |
| SSE | 0 | 4 | 1 | 0 | 0 | 0 | 5 | |
| S | 1 | 4 | 2 | 0 | 0 | 0 | 7 | |
| SSW | 1 | 1 | 1 | 0 | 0 | 0 | 3 | |
| SW | 3 | 2 | 0 | 0 | 0 | 0 | 5 | |
| WSW | 3 | 0 | 0 | 0 | 0 | 0 | 3 | |
| W | 3 | 2 | 0 | 0 | 0 | 0 | 5 | |
| WNW | 3 | 3 | 0 | 0 | 0 | 0 | 6 | |
| NW | 6 | 1 | 0 | 0 | 0 | 0 | 7 | |
| NNW | 4 | 3 | 0 | 0 | 0 | 0 | 7 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

02
0

PAGE 23

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/1/74 THROUGH 9/30/74
ALL CLASSES COMBINED
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 31 | 36 | 4 | 0 | 0 | 74 |
| NNE | 2 | 9 | 19 | 4 | 0 | 0 | 34 |
| NE | 0 | 0 | 9 | 1 | 0 | 0 | 10 |
| ENE | 2 | 2 | 11 | 1 | 0 | 0 | 16 |
| E | 1 | 5 | 5 | 1 | 0 | 0 | 12 |
| ESE | 2 | 1 | 3 | 1 | 0 | 0 | 7 |
| SE | 0 | 14 | 7 | 3 | 0 | 0 | 24 |
| SSE | 0 | 15 | 12 | 12 | 0 | 0 | 40 |
| S | 1 | 18 | 41 | 21 | 0 | 0 | 81 |
| SSW | 2 | 9 | 19 | 15 | 0 | 0 | 45 |
| SW | 3 | 12 | 16 | 9 | 0 | 0 | 40 |
| WSW | 6 | 9 | 12 | 10 | 0 | 0 | 37 |
| W | 1 | 18 | 5 | 1 | 0 | 0 | 24 |
| WNW | 6 | 21 | 18 | 5 | 1 | 0 | 51 |
| NW | 13 | 24 | 27 | 13 | 6 | 0 | 83 |
| NNW | 9 | 29 | 22 | 15 | 1 | 0 | 86 |
| VAP | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 678
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.4 3.7 5.0 14.4 19.9 0.0

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 720
HOURS OF BAD DATA 42
PERCENT DATA RECOVERY 94.17

PAGE 16

NORTHERN STATES POWER COMPANY - MCINTICHELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 10/ 1/74 THROUGH 10/31/74

STABILITY CLASS A

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|----|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 0 | 0 | 3 | 0 | 0 | 0 | 3 | |
| NNE | 0 | 1 | 4 | 1 | 0 | 0 | 6 | |
| NE | 0 | 1 | 3 | 0 | 0 | 0 | 4 | |
| ENE | 0 | 1 | 3 | 0 | 0 | 0 | 4 | |
| E | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| ESE | 1 | 1 | 0 | 0 | 0 | 0 | 2 | |
| SE | 0 | 0 | 4 | 3 | 0 | 0 | 7 | |
| SSE | 0 | 0 | 0 | 6 | 7 | 0 | 14 | |
| S | 2 | 0 | 3 | 17 | 3 | 0 | 25 | |
| SSW | 0 | 2 | 5 | 11 | 0 | 0 | 18 | |
| SW | 0 | 3 | 0 | 3 | 0 | 0 | 12 | |
| WSW | 0 | 2 | 5 | 0 | 0 | 0 | 7 | |
| W | 1 | 2 | 5 | 0 | 0 | 0 | 8 | |
| WNW | 1 | 2 | 1 | 1 | 0 | 0 | 5 | |
| W | 0 | 1 | 5 | 4 | 0 | 0 | 10 | |
| NNW | 0 | 1 | 3 | 3 | 0 | 0 | 7 | |
| VAF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

136
0

PAGE 17

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 10/ 1/74 THROUGH 10/31/74
STABILITY CLASS B
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 2 | 1 | 0 | 0 | 4 |
| NNE | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 1 | 1 | 2 | 1 | 0 | 5 |
| SSW | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| SW | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| WSW | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| W | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| WNW | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| NW | 0 | 2 | 3 | 1 | 0 | 0 | 7 |
| NNW | 0 | 0 | 5 | 0 | 0 | 0 | 5 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

36
0

PAGE 10
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 10/1/74 THROUGH 10/31/74
 STABILITY CLASS C
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 2 | 2 | 0 | 0 | 5 |
| NNE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| NE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| ENE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| SSE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| S | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| SSW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 1 | 0 | 1 | 3 | 1 | 0 | 6 |
| NW | 0 | 1 | 0 | 0 | 1 | 0 | 2 |
| NNW | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 26
 HOURS OF CALM THIS PAGE 0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 10/1/74 THROUGH 10/31/74

STABILITY CLASS D

ELEVATION 10 METERS

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 2 | 5 | 1 | 5 | 0 | 0 | 13 |
| NNE | 2 | 5 | 3 | 4 | 0 | 0 | 14 |
| NE | 2 | 5 | 0 | 0 | 0 | 0 | 7 |
| ENE | 2 | 4 | 4 | 0 | 0 | 0 | 10 |
| E | 1 | 6 | 11 | 0 | 0 | 0 | 20 |
| ESE | 0 | 4 | 2 | 0 | 0 | 0 | 6 |
| SE | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| SSE | 0 | 6 | 5 | 2 | 0 | 0 | 13 |
| S | 1 | 4 | 14 | 2 | 0 | 0 | 17 |
| SSW | 2 | 0 | 4 | 3 | 1 | 0 | 10 |
| SW | 0 | 1 | 2 | 1 | 1 | 0 | 5 |
| WSW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| W | 1 | 3 | 2 | 3 | 0 | 0 | 9 |
| WNW | 2 | 0 | 3 | 13 | 1 | 0 | 19 |
| NW | 0 | 3 | 4 | 5 | 1 | 0 | 13 |
| NNW | 1 | 7 | 5 | 2 | 0 | 0 | 15 |
| VAK | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

177
0

PAGE 20

NORTHEAST STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 10/1/74 THROUGH 10/31/74

STABILITY CLASS F

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 2 | 5 | 0 | 0 | 0 | 0 | 7 |
| NNE | 1 | 3 | 0 | 0 | 0 | 0 | 4 |
| NE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NNE | 2 | 2 | 0 | 0 | 0 | 0 | 4 |
| E | 1 | 4 | 1 | 0 | 0 | 0 | 6 |
| ESE | 0 | 2 | 1 | 0 | 0 | 0 | 3 |
| SE | 4 | 8 | 5 | 1 | 0 | 0 | 18 |
| SSE | 1 | 2 | 11 | 5 | 0 | 0 | 20 |
| S | 0 | 1 | 17 | 17 | 0 | 1 | 36 |
| SSW | 0 | 1 | 4 | 6 | 0 | 0 | 11 |
| SW | 2 | 0 | 6 | 1 | 0 | 0 | 9 |
| WSW | 1 | 1 | 1 | 1 | 0 | 0 | 4 |
| W | 0 | 1 | 3 | 0 | 0 | 0 | 4 |
| WNW | 1 | 2 | 5 | 1 | 0 | 0 | 12 |
| NW | 0 | 4 | 5 | 1 | 0 | 0 | 15 |
| NNW | 0 | 2 | 1 | 1 | 0 | 0 | 4 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

106
0

PAGE 21

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 10/1/74 THROUGH 10/31/74

STABILITY CLASS F

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| NNE | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| NE | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| ENE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| E | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| ESE | 2 | 8 | 1 | 0 | 0 | 0 | 11 |
| SE | 0 | 2 | 3 | 0 | 0 | 0 | 5 |
| SSE | 1 | 7 | 6 | 0 | 0 | 0 | 14 |
| S | 2 | 7 | 6 | 0 | 0 | 0 | 15 |
| SSW | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| SW | 2 | 1 | 1 | 0 | 0 | 0 | 4 |
| WSW | 1 | 2 | 1 | 0 | 0 | 0 | 4 |
| W | 1 | 5 | 0 | 0 | 0 | 0 | 6 |
| WNW | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| NW | 0 | 4 | 6 | 0 | 0 | 0 | 10 |
| NNW | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

45
0

PAGE 22

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 10/ 1/74 THROUGH 10/31/74

STABILITY CLASS G

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|----|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| NE | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| ENE | 3 | 0 | 0 | 0 | 0 | 0 | 3 | |
| E | 2 | 1 | 0 | 0 | 0 | 0 | 3 | |
| ESE | 1 | 1 | 0 | 0 | 0 | 0 | 2 | |
| SE | 0 | 6 | 0 | 0 | 0 | 0 | 6 | |
| SSE | 4 | 8 | 0 | 0 | 0 | 0 | 12 | |
| S | 2 | 5 | 1 | 0 | 0 | 0 | 8 | |
| SSW | 2 | 1 | 0 | 0 | 0 | 0 | 3 | |
| SW | 4 | 1 | 0 | 0 | 0 | 0 | 5 | |
| WSW | 7 | 2 | 0 | 0 | 0 | 0 | 9 | |
| W | 1 | 2 | 0 | 0 | 0 | 0 | 3 | |
| WNW | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| NW | 0 | 3 | 4 | 0 | 0 | 0 | 7 | |
| NNW | 1 | 4 | 0 | 0 | 0 | 0 | 5 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

69
0

PAGE 23

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 10/ 1/74 THROUGH 10/31/74
ALL CLASSES COMBINED
ELEVATION 10 METER

| WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | |
|------------------------------------|--------|--------|---------|----------|----------|----------|-------|
| DIRECTION | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | TOTAL |
| N | 5 | 15 | 8 | 8 | 0 | 0 | 36 |
| NNE | 6 | 10 | 9 | 5 | 0 | 0 | 30 |
| NE | 4 | 11 | 5 | 0 | 0 | 0 | 18 |
| ENE | 8 | 9 | 7 | 0 | 0 | 0 | 24 |
| E | 5 | 19 | 13 | 0 | 0 | 0 | 37 |
| ESE | 4 | 21 | 4 | 0 | 0 | 0 | 24 |
| SE | 4 | 19 | 15 | 4 | 0 | 0 | 42 |
| SSE | 6 | 24 | 30 | 13 | 7 | 0 | 80 |
| S | 7 | 18 | 38 | 39 | 5 | 1 | 108 |
| SSW | 5 | 8 | 15 | 20 | 1 | 0 | 49 |
| SW | 8 | 8 | 17 | 9 | 1 | 0 | 39 |
| WSW | 10 | 8 | 8 | 1 | 0 | 0 | 27 |
| W | 4 | 19 | 11 | 3 | 0 | 0 | 37 |
| WNW | 6 | 10 | 10 | 19 | 2 | 0 | 47 |
| NW | 0 | 24 | 27 | 11 | 2 | 0 | 64 |
| NNW | 2 | 15 | 16 | 7 | 0 | 0 | 40 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 707
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.3 5.6 9.7 14.9 20.6 27.3

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 744
HOURS OF BAD DATA 37
PERCENT DATA RECOVERY 95.03

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 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/30/74
 STABILITY CLASS A
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|---|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 17 TO 24 | ABOVE 24 | | |
| N | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ESE | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| SE | 0 | 1 | 3 | 0 | 0 | 0 | 4 | |
| SSE | 0 | 1 | 4 | 0 | 0 | 0 | 5 | |
| S | 0 | 0 | 0 | 3 | 0 | 0 | 3 | |
| SSW | 0 | 0 | 3 | 4 | 2 | 0 | 9 | |
| SW | 0 | 0 | 6 | 0 | 0 | 0 | 6 | |
| WSW | 0 | 1 | 4 | 0 | 0 | 0 | 5 | |
| W | 0 | 1 | 5 | 0 | 0 | 0 | 6 | |
| WNW | 0 | 0 | 1 | 2 | 1 | 0 | 4 | |
| NW | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| NNW | 0 | 0 | 1 | 3 | 0 | 0 | 4 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE 49
 HOURS OF CALM THIS PAGE 0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/30/74

STABILITY CLASS B

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NNE | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| NF | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| ENE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| SSF | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| S | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 3 | 3 | 0 | 0 | 0 | 6 |
| WSW | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| W | 0 | 2 | 6 | 0 | 0 | 0 | 8 |
| WNW | 0 | 4 | 2 | 2 | 0 | 0 | 8 |
| NW | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| NNW | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| VAK | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

44
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/30/74
STABILITY CLASS C
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|---|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 0 | 0 | 0 | 1 | 0 | 0 | 1 | |
| NNE | 0 | 1 | 0 | 1 | 0 | 0 | 2 | |
| NE | 0 | 2 | 1 | 0 | 0 | 0 | 3 | |
| ENE | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SSE | 0 | 0 | 3 | 0 | 0 | 0 | 3 | |
| S | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| WSW | 0 | 2 | 0 | 0 | 0 | 0 | 2 | |
| W | 0 | 2 | 2 | 0 | 0 | 0 | 4 | |
| WNW | 0 | 1 | 1 | 2 | 0 | 0 | 3 | |
| NW | 0 | 1 | 2 | 0 | 0 | 0 | 3 | |
| NNW | 0 | 0 | 2 | 1 | 0 | 0 | 3 | |
| VZR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

27
0

PAGE 19

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/30/74

STABILITY CLASS D

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 9 | 11 | 4 | 0 | 0 | 25 |
| NNE | 0 | 9 | 10 | 0 | 0 | 0 | 19 |
| NF | 1 | 1 | 9 | 0 | 0 | 0 | 11 |
| ENE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| SF | 0 | 1 | 8 | 7 | 3 | 0 | 19 |
| SSE | 0 | 2 | 13 | 5 | 0 | 0 | 20 |
| S | 1 | 4 | 4 | 0 | 0 | 0 | 9 |
| SSW | 0 | 2 | 7 | 1 | 1 | 0 | 11 |
| SW | 0 | 0 | 3 | 1 | 0 | 0 | 4 |
| WSW | 0 | 4 | 1 | 0 | 0 | 0 | 5 |
| W | 0 | 5 | 13 | 5 | 0 | 0 | 23 |
| WNW | 1 | 7 | 23 | 13 | 0 | 0 | 44 |
| NW | 0 | 3 | 14 | 16 | 0 | 0 | 33 |
| NNW | 0 | 5 | 22 | 12 | 1 | 0 | 41 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

267
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/30/74

STABILITY CLASS E

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 7 | 2 | 0 | 0 | 0 | 9 |
| NNE | 0 | 3 | 1 | 0 | 0 | 0 | 4 |
| NE | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| ENE | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SE | 3 | 4 | 9 | 0 | 0 | 0 | 16 |
| SSE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| S | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| SSW | 1 | 1 | 4 | 0 | 0 | 0 | 6 |
| SW | 0 | 2 | 4 | 0 | 0 | 0 | 6 |
| WSW | 1 | 4 | 1 | 0 | 0 | 0 | 6 |
| W | 0 | 4 | 10 | 0 | 0 | 0 | 14 |
| WW | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| NW | 0 | 2 | 10 | 0 | 0 | 0 | 12 |
| NNW | 0 | 5 | 2 | 0 | 0 | 0 | 7 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

98
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/30/74

STABILITY CLASS F

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 17 TO 24 | ABOVE 24 | |
| N | 1 | 3 | 0 | 0 | 0 | 0 | 4 |
| NNE | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| NE | 2 | 0 | 1 | 0 | 0 | 0 | 3 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| SEE | 1 | 5 | 1 | 0 | 0 | 0 | 7 |
| S | 1 | 14 | 2 | 0 | 0 | 0 | 17 |
| SSW | 1 | 4 | 5 | 0 | 0 | 0 | 10 |
| SW | 0 | 4 | 1 | 0 | 0 | 0 | 5 |
| WSW | 1 | 2 | 1 | 0 | 0 | 0 | 4 |
| W | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| WNW | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| VAK | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

66
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/20/74

STABILITY CLASS G

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|---|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 19 TO 24 | ABOVE 24 | | |
| N | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| NNE | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| NE | 0 | 3 | 0 | 0 | 0 | 0 | 3 | |
| ENE | 1 | 1 | 0 | 0 | 0 | 0 | 2 | |
| E | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| ESE | 0 | 2 | 0 | 0 | 0 | 0 | 2 | |
| SE | 1 | 2 | 0 | 0 | 0 | 0 | 3 | |
| SSE | 0 | 3 | 0 | 0 | 0 | 0 | 3 | |
| S | 0 | 5 | 2 | 0 | 0 | 0 | 7 | |
| SSW | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| WSW | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| W | 0 | 2 | 0 | 0 | 0 | 0 | 2 | |
| WNW | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| NW | 0 | 2 | 0 | 0 | 0 | 0 | 2 | |
| NNW | 1 | 4 | 0 | 0 | 0 | 0 | 5 | |
| VFH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

35
0

PAGE 23

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/30/74
ALL CLASSES COMBINED
ELEVATION 10 METER

| WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | |
|------------------------------------|--------|--------|---------|----------|----------|----------|-------|
| DIRECTION | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | TOTAL |
| N | 3 | 19 | 15 | 5 | 0 | 0 | 42 |
| NNE | 0 | 18 | 13 | 1 | 0 | 0 | 32 |
| NE | 3 | 8 | 17 | 0 | 0 | 0 | 28 |
| ENE | 1 | 4 | 1 | 0 | 0 | 0 | 6 |
| E | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ESE | 0 | 5 | 2 | 0 | 0 | 0 | 7 |
| SE | 4 | 10 | 23 | 7 | 3 | 0 | 47 |
| SSE | 1 | 13 | 21 | 6 | 0 | 0 | 41 |
| S | 2 | 25 | 9 | 5 | 0 | 0 | 41 |
| SSW | 2 | 8 | 19 | 5 | 3 | 0 | 37 |
| SW | 0 | 9 | 17 | 1 | 0 | 0 | 27 |
| WSW | 2 | 16 | 10 | 0 | 0 | 0 | 28 |
| W | 1 | 11 | 42 | 5 | 0 | 0 | 69 |
| WNW | 1 | 14 | 0 | 14 | 1 | 0 | 30 |
| NW | 0 | 8 | 28 | 17 | 0 | 0 | 53 |
| NNW | 1 | 16 | 28 | 16 | 1 | 0 | 62 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 568
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.2 4.7 9.3 14.6 19.5 0.0

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 720
HOURS OF GOOD DATA 122
PERCENT DATA RECOVERY 16.94

PAGE 14
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/1/74 THROUGH 12/31/74
 STABILITY CLASS A
 ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ESE | 0 | 1 | 3 | 0 | 0 | 0 | 4 |
| SE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SSE | 0 | 0 | 1 | 4 | 0 | 0 | 5 |
| S | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| SSW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 4 | 2 | 0 | 0 | 0 | 6 |
| NNW | 0 | 1 | 4 | 0 | 0 | 0 | 5 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

36
 0

PAGE 17

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/ 1/74 THROUGH 12/31/74

STABILITY CLASS B

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 15 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| SE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SSE | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| S | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| SSW | 0 | 1 | 5 | 1 | 1 | 0 | 8 |
| SW | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| WSW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| W | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| WNW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NW | 0 | 2 | 4 | 4 | 0 | 0 | 10 |
| NMW | 0 | 2 | 0 | 1 | 0 | 0 | 3 |
| VAF | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

38
0

PAGE 16

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/1/74 THROUGH 12/31/74

STABILITY CLASS C

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ESE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SSE | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| S | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 2 | 1 | 2 | 0 | 0 | 0 | 5 |
| W | 0 | 2 | 4 | 0 | 0 | 0 | 6 |
| WNW | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| NW | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| NNW | 0 | 1 | 3 | 1 | 0 | 0 | 5 |
| VAH | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

36
0

PAGE 19

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/ 1/74 THROUGH 12/31/74
STABILITY CLASS D
ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|----|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 0 | 5 | 5 | 9 | 0 | 0 | 29 | |
| NNE | 4 | 2 | 3 | 0 | 0 | 0 | 9 | |
| NE | 2 | 3 | 8 | 1 | 0 | 0 | 14 | |
| ENE | 4 | 10 | 3 | 0 | 0 | 0 | 17 | |
| E | 0 | 19 | 10 | 0 | 0 | 0 | 29 | |
| ESE | 1 | 6 | 10 | 5 | 0 | 0 | 22 | |
| SSE | 0 | 1 | 4 | 7 | 0 | 0 | 12 | |
| SSE | 0 | 11 | 10 | 4 | 0 | 0 | 25 | |
| S | 0 | 6 | 20 | 3 | 0 | 0 | 29 | |
| SSW | 0 | 5 | 11 | 4 | 0 | 0 | 20 | |
| SW | 2 | 5 | 3 | 1 | 0 | 0 | 11 | |
| WSW | 1 | 11 | 2 | 0 | 0 | 0 | 14 | |
| W | 4 | 13 | 5 | 2 | 0 | 0 | 24 | |
| WNW | 0 | 4 | 17 | 1 | 0 | 0 | 17 | |
| NW | 1 | 5 | 10 | 7 | 0 | 0 | 23 | |
| NNW | 2 | 15 | 21 | 13 | 1 | 0 | 52 | |
| VAK | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

341
0

PAGE 20

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/1/74 THROUGH 12/31/74

STABILITY CLASS E

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| ESE | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| SE | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| SSE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| S | 1 | 3 | 5 | 0 | 0 | 0 | 12 |
| SSW | 1 | 2 | 18 | 3 | 0 | 0 | 24 |
| SW | 1 | 4 | 2 | 1 | 0 | 0 | 8 |
| WSW | 0 | 5 | 2 | 1 | 0 | 0 | 8 |
| W | 7 | 7 | 7 | 0 | 0 | 0 | 21 |
| WNW | 1 | 4 | 4 | 0 | 0 | 0 | 9 |
| NW | 1 | 6 | 2 | 0 | 0 | 0 | 9 |
| NNW | 0 | 4 | 6 | 0 | 0 | 0 | 10 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

115
0

PAGE 21

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METERS DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/ 1/74 THROUGH 12/31/74

STABILITY CLASS F

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 3 | 0 | 0 | 0 | 0 | 4 |
| NNE | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| NE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| ENE | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| E | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| ESE | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| SE | 0 | 4 | 4 | 0 | 0 | 0 | 8 |
| SSE | 2 | 8 | 0 | 0 | 0 | 0 | 10 |
| S | 1 | 3 | 6 | 0 | 0 | 0 | 10 |
| SSW | 1 | 6 | 4 | 0 | 0 | 0 | 11 |
| SW | 1 | 9 | 0 | 0 | 0 | 0 | 10 |
| WSW | 2 | 5 | 0 | 0 | 0 | 0 | 7 |
| W | 2 | 6 | 0 | 0 | 0 | 0 | 8 |
| WNW | 2 | 4 | 0 | 0 | 0 | 0 | 6 |
| NW | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| NNW | 3 | 5 | 0 | 0 | 0 | 0 | 8 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

100
0

PAGE 22

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLE

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/ 1/74 THROUGH 12/31/74

STABILITY CLASS G

ELEVATION 10 METER

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| NNE | 1 | 3 | 1 | 0 | 0 | 0 | 5 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| SSE | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| S | 3 | 5 | 1 | 0 | 0 | 0 | 9 |
| SSW | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| SW | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| WSW | 1 | 10 | 0 | 0 | 0 | 0 | 11 |
| W | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| WNW | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| NW | 2 | 5 | 0 | 0 | 0 | 0 | 7 |
| NNW | 0 | 9 | 2 | 0 | 0 | 0 | 11 |
| VAK | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

64
0

PAGE 23

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/ 1/74 THROUGH 12/31/74
ALL CLASSES COMBINED
ELEVATION 16 METERS

| DIRECTION | WIND SPEED (MPH) AT 10 METER LEVEL | | | | | | TOTAL |
|-----------|------------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 6 | 8 | 6 | 9 | 0 | 0 | 24 |
| NNE | 0 | 8 | 6 | 0 | 0 | 0 | 20 |
| NF | 2 | 5 | 4 | 1 | 0 | 0 | 17 |
| ENE | 5 | 13 | 3 | 0 | 0 | 0 | 21 |
| E | 1 | 25 | 12 | 0 | 0 | 0 | 38 |
| ESE | 2 | 13 | 15 | 5 | 0 | 0 | 35 |
| SE | 1 | 6 | 10 | 7 | 0 | 0 | 27 |
| SSE | 2 | 22 | 16 | 8 | 0 | 0 | 51 |
| S | 5 | 17 | 42 | 6 | 0 | 0 | 70 |
| SSW | 2 | 14 | 39 | 11 | 1 | 0 | 72 |
| SW | 4 | 22 | 7 | 2 | 0 | 0 | 35 |
| WSW | 6 | 37 | 7 | 1 | 0 | 0 | 51 |
| W | 13 | 24 | 17 | 2 | 0 | 0 | 66 |
| WNW | 4 | 15 | 17 | 2 | 0 | 0 | 34 |
| NW | 4 | 29 | 23 | 11 | 0 | 0 | 67 |
| NNW | 4 | 37 | 36 | 15 | 1 | 0 | 94 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 732
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.3 5.4 9.5 14.3 19.3 0.0

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 744
HOURS OF BAD DATA 12
PERCENT DATA RECOVERY 98.39

MONTICELLO

APPENDIX 2.5-B

ANNUAL AND MONTHLY JOINT FREQUENCY DISTRIBUTIONS APPROPRIATE FOR ELEVATED RELEASES AT MONTICELLO

The meteorological data presented are the frequency of the 100 m wind speed classes and the 100 m wind direction classes by atmospheric stability class. The stability class was determined by $\Delta T_{100\text{ m} - 10\text{ m}}$ with substitution by $\Delta T_{140\text{ ft} - 10\text{ m}}$ ($\Delta T_{43\text{ m} - 10\text{ m}}$) for occasionally missing $\Delta T_{100 - 10\text{ m}}$. The data were collected on the Monticello meteorological tower from January 1, 1974 to December 31, 1974.

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 12/31/74

STABILITY CLASS A

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 3 | 10 | 3 | 3 | 19 |
| NNE | 0 | 0 | 0 | 2 | 2 | 0 | 4 |
| NE | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| ENE | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| E | 0 | 0 | 6 | 1 | 0 | 0 | 7 |
| ESE | 0 | 0 | 2 | 4 | 1 | 0 | 7 |
| SE | 0 | 2 | 6 | 4 | 16 | 0 | 28 |
| SSE | 0 | 1 | 0 | 12 | 21 | 16 | 50 |
| S | 0 | 1 | 3 | 22 | 58 | 29 | 113 |
| SSW | 0 | 4 | 4 | 9 | 7 | 4 | 28 |
| SW | 0 | 0 | 6 | 2 | 3 | 0 | 11 |
| WSW | 0 | 0 | 1 | 6 | 1 | 1 | 9 |
| W | 0 | 1 | 2 | 5 | 4 | 6 | 18 |
| WNW | 1 | 2 | 3 | 6 | 4 | 2 | 18 |
| NW | 0 | 1 | 6 | 12 | 4 | 8 | 31 |
| NNW | 0 | 2 | 3 | 5 | 5 | 6 | 21 |
| VAR. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE271
0

PAGE 194

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD: 1/ 1/74 THROUGH 12/31/74

STABILITY CLASS: B

ELEVATION: 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 3 | 3 | 8 | 4 | 0 | 0 | 15 |
| NNE | 0 | 0 | 0 | 3 | 4 | 0 | 7 |
| NE | 0 | 1 | 1 | 5 | 0 | 0 | 7 |
| ENE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| ESE | 0 | 0 | 4 | 1 | 1 | 0 | 6 |
| SE | 0 | 1 | 2 | 4 | 5 | 0 | 12 |
| SSE | 0 | 0 | 8 | 5 | 2 | 1 | 16 |
| S | 0 | 1 | 4 | 22 | 4 | 3 | 34 |
| SSW | 1 | 3 | 3 | 3 | 2 | 1 | 13 |
| SW | 0 | 1 | 6 | 5 | 3 | 0 | 15 |
| WSW | 0 | 4 | 5 | 3 | 3 | 0 | 15 |
| W | 0 | 2 | 1 | 5 | 5 | 0 | 13 |
| WNW | 0 | 2 | 6 | 13 | 8 | 0 | 29 |
| NW | 0 | 3 | 6 | 11 | 10 | 0 | 30 |
| NNW | 0 | 1 | 4 | 6 | 2 | 1 | 14 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

234
0

PAGE 195

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 12/31/74
STABILITY CLASS C
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 7 | 7 | 8 | 0 | 0 | 22 |
| NNE | 0 | 5 | 3 | 4 | 3 | 2 | 17 |
| NE | 0 | 2 | 5 | 12 | 2 | 0 | 21 |
| ENE | 0 | 1 | 5 | 5 | 0 | 0 | 11 |
| E | 0 | 1 | 5 | 0 | 1 | 0 | 7 |
| ESE | 0 | 1 | 3 | 3 | 1 | 0 | 8 |
| SE | 1 | 1 | 8 | 6 | 3 | 0 | 19 |
| SSE | 0 | 1 | 4 | 6 | 4 | 0 | 15 |
| S | 0 | 6 | 19 | 12 | 12 | 0 | 49 |
| SSW | 0 | 3 | 5 | 10 | 6 | 3 | 27 |
| SW | 0 | 7 | 18 | 8 | 3 | 1 | 37 |
| WSW | 0 | 5 | 8 | 1 | 0 | 1 | 15 |
| W | 0 | 7 | 9 | 12 | 0 | 3 | 31 |
| WNW | 0 | 3 | 8 | 27 | 7 | 5 | 50 |
| NW | 1 | 5 | 7 | 21 | 19 | 0 | 53 |
| NNW | 0 | 7 | 13 | 9 | 5 | 1 | 35 |
| VAK | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

417
0

PAGE 196

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 12/31/74

STABILITY CLASS D

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 7 | 25 | 51 | 41 | 35 | 22 | 181 |
| NNE | 9 | 16 | 25 | 35 | 22 | 18 | 125 |
| NE | 10 | 23 | 45 | 62 | 27 | 12 | 179 |
| ENE | 9 | 29 | 39 | 41 | 6 | 0 | 124 |
| E | 5 | 21 | 47 | 49 | 25 | 7 | 154 |
| ESE | 7 | 18 | 20 | 56 | 47 | 4 | 152 |
| SE | 8 | 25 | 28 | 59 | 41 | 9 | 160 |
| SSE | 2 | 21 | 47 | 48 | 28 | 14 | 160 |
| S | 3 | 25 | 56 | 77 | 46 | 24 | 231 |
| SSW | 10 | 19 | 46 | 25 | 23 | 12 | 135 |
| SW | 8 | 34 | 36 | 27 | 24 | 2 | 133 |
| WSW | 13 | 39 | 30 | 24 | 10 | 4 | 120 |
| W | 9 | 75 | 51 | 65 | 45 | 26 | 271 |
| WNW | 6 | 36 | 48 | 103 | 104 | 37 | 334 |
| NW | 7 | 56 | 70 | 146 | 160 | 30 | 469 |
| NNW | 10 | 34 | 38 | 66 | 53 | 46 | 247 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE

3195

HOURS OF CALM THIS PAGE

0

PAGE 197
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 12/31/74
 STABILITY CLASS E
 ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M | | | | | | TOTAL |
|-----------|---------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 4 | 11 | 23 | 28 | 10 | 5 | 81 |
| NNE | 4 | 9 | 1 | 26 | 14 | 2 | 68 |
| NE | 1 | 1 | 8 | 34 | 25 | 0 | 82 |
| ENE | 3 | 8 | 24 | 27 | 0 | 1 | 63 |
| E | 4 | 10 | 21 | 36 | 21 | 8 | 100 |
| ESE | 0 | 6 | 15 | 32 | 22 | 6 | 81 |
| - | 2 | 6 | 23 | 65 | 54 | 5 | 157 |
| SSE | 3 | 9 | 31 | 62 | 43 | 18 | 166 |
| S | 4 | 15 | 26 | 66 | 137 | 31 | 279 |
| SSW | 2 | 9 | 23 | 39 | 65 | 24 | 162 |
| SW | 5 | 17 | 17 | 38 | 39 | 4 | 118 |
| WSW | 1 | 12 | 10 | 38 | 26 | 7 | 94 |
| W | 3 | 19 | 28 | 57 | 35 | 1 | 143 |
| WNW | 4 | 13 | 28 | 65 | 54 | 4 | 173 |
| NW | 4 | 11 | 26 | 62 | 71 | 3 | 178 |
| NNW | 2 | 5 | 7 | 33 | 36 | 16 | 99 |
| VAK | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

2044
 0

PAGE 198

NORTHEAST STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 12/31/74

STABILITY CLASS F

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|-------------------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 ABOVE 24 | |
| N | 1 | 6 | 14 | 24 | 12 | 57 |
| NNE | 3 | 3 | 9 | 8 | 6 | 29 |
| NE | 2 | 11 | 7 | 15 | 5 | 40 |
| ENE | 6 | 9 | 11 | 9 | 2 | 37 |
| E | 7 | 5 | 10 | 7 | 2 | 31 |
| ESE | 6 | 5 | 12 | 13 | 6 | 36 |
| SE | 2 | 7 | 11 | 20 | 10 | 50 |
| SSE | 3 | 12 | 14 | 16 | 25 | 70 |
| S | 0 | 6 | 11 | 32 | 33 | 85 |
| SSW | 1 | 6 | 16 | 22 | 41 | 90 |
| SW | 3 | 7 | 14 | 25 | 32 | 84 |
| WSW | 3 | 7 | 13 | 24 | 12 | 59 |
| W | 1 | 6 | 9 | 21 | 27 | 65 |
| WNW | 2 | 4 | 14 | 30 | 16 | 67 |
| NW | 3 | 7 | 13 | 27 | 7 | 57 |
| NNW | 2 | 6 | 12 | 21 | 23 | 63 |
| VAF | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

920
0

PAGE 199

NORTHERN STATES POWER COMPANY - MOYICELCO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 12/31/74

STABILITY CLASS G

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 7 | 7 | 7 | 1 | 0 | 22 |
| NNE | 0 | 5 | 1 | 3 | 4 | 0 | 13 |
| NE | 1 | 2 | 0 | 3 | 1 | 0 | 7 |
| ENE | 1 | 3 | 3 | 0 | 0 | 0 | 7 |
| E | 1 | 3 | 6 | 6 | 1 | 0 | 17 |
| ESE | 1 | 0 | 1 | 4 | 3 | 0 | 9 |
| SE | 0 | 3 | 6 | 7 | 8 | 0 | 24 |
| SSE | 0 | 2 | 3 | 9 | 2 | 0 | 16 |
| S | 0 | 4 | 6 | 9 | 6 | 0 | 27 |
| SSW | 3 | 2 | 3 | 14 | 18 | 1 | 41 |
| SW | 1 | 4 | 3 | 15 | 12 | 0 | 35 |
| WSW | 0 | 0 | 6 | 14 | 2 | 0 | 22 |
| W | 2 | 3 | 4 | 12 | 3 | 0 | 24 |
| WNW | 0 | 3 | 9 | 11 | 1 | 0 | 24 |
| NW | 0 | 1 | 11 | 3 | 0 | 1 | 16 |
| NNW | 0 | 3 | 5 | 4 | 0 | 0 | 12 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

316
0

PAGE 200

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 12/31/74

ALL CLASSES COMBINED

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 12 | 59 | 113 | 122 | 61 | 30 | 397 |
| NNE | 12 | 38 | 51 | 81 | 55 | 22 | 263 |
| NE | 18 | 50 | 67 | 132 | 60 | 12 | 339 |
| ENE | 14 | 50 | 87 | 82 | 8 | 1 | 247 |
| E | 17 | 40 | 96 | 100 | 50 | 15 | 316 |
| ESE | 8 | 30 | 57 | 113 | 81 | 10 | 299 |
| SE | 13 | 47 | 84 | 175 | 137 | 14 | 470 |
| SSE | 8 | 46 | 107 | 158 | 125 | 49 | 493 |
| S | 7 | 58 | 125 | 240 | 303 | 90 | 823 |
| SSW | 17 | 46 | 100 | 122 | 162 | 49 | 496 |
| SW | 17 | 68 | 102 | 120 | 116 | 10 | 433 |
| WSW | 17 | 67 | 73 | 110 | 54 | 13 | 334 |
| W | 15 | 113 | 104 | 177 | 119 | 37 | 565 |
| WNW | 13 | 53 | 116 | 255 | 199 | 49 | 695 |
| NW | 16 | 84 | 139 | 282 | 271 | 42 | 834 |
| NNW | 14 | 52 | 82 | 144 | 124 | 75 | 491 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 7497
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.5 5.5 10.0 15.5 20.9 27.8

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 8760
HOURS OF BAD DATA 1263
PERCENT DATA RECOVERY 85.58

PAGE 32

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 1/31/74
STABILITY CLASS A
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 2
HOURS OF CALM THIS PAGE 0

PAGE 33

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 1/31/74

STABILITY CLASS B

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M | | | | | | TOTAL |
|-----------|---------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| S | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SSW | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| SW | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

5
0

PAGE 34

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 1/31/74
STABILITY CLASS C
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 1 | 1 | 0 | 1 |
| S | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 3
HOURS OF CALM THIS PAGE 0

PAGE 35

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 1/31/74
STABILITY CLASS D
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M | | | | | LEVEL ABOVE 74 | TOTAL |
|-----------|---------------------------|--------|---------|----------|----------|-------------------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | | |
| N | 1 | 1 | 0 | 0 | 1 | 0 | 3 |
| NNE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NE | 0 | 5 | 3 | 0 | 0 | 0 | 8 |
| ENE | 1 | 0 | 1 | 2 | 0 | 0 | 4 |
| E | 0 | 1 | 0 | 2 | 2 | 0 | 5 |
| ESE | 0 | 7 | 4 | 1 | 1 | 0 | 13 |
| SE | 2 | 4 | 8 | 8 | 0 | 0 | 22 |
| SSE | 0 | 2 | 7 | 6 | 2 | 0 | 17 |
| S | 0 | 5 | 6 | 8 | 2 | 4 | 25 |
| SSW | 1 | 4 | 9 | 3 | 1 | 0 | 18 |
| SW | 2 | 9 | 6 | 7 | 4 | 0 | 26 |
| WSW | 1 | 10 | 5 | 4 | 0 | 0 | 20 |
| W | 0 | 6 | 16 | 22 | 0 | 2 | 46 |
| WNW | 1 | 5 | 8 | 8 | 5 | 2 | 29 |
| NW | 1 | 15 | 7 | 22 | 13 | 3 | 61 |
| NNW | 2 | 9 | 1 | 3 | 1 | 0 | 16 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

316
0

PAGE 36

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLE
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 1/31/74

STABILITY CLASS E

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 0 | 1 | 2 | 1 | 0 | 5 |
| NNE | 0 | 0 | 3 | 1 | 0 | 0 | 4 |
| NE | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| ENE | 0 | 0 | 3 | 5 | 0 | 0 | 8 |
| E | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| ESE | 0 | 1 | 2 | 1 | 0 | 0 | 4 |
| SE | 0 | 3 | 6 | 3 | 2 | 0 | 14 |
| SSE | 0 | 3 | 11 | 10 | 3 | 0 | 27 |
| S | 2 | 5 | 6 | 8 | 5 | 1 | 27 |
| SSW | 1 | 3 | 3 | 7 | 4 | 1 | 19 |
| SW | 0 | 3 | 1 | 8 | 6 | 1 | 19 |
| WSW | 0 | 1 | 2 | 10 | 6 | 4 | 23 |
| W | 0 | 1 | 6 | 8 | 7 | 0 | 22 |
| WNW | 0 | 0 | 4 | 17 | 2 | 0 | 23 |
| NW | 0 | 2 | 1 | 6 | 0 | 0 | 11 |
| NNW | 0 | 1 | 1 | 4 | 1 | 0 | 7 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

218
0

PAGE 37

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 1/31/74

STABILITY CLASS F

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 1 | 3 | 1 | 0 | 5 |
| NNE | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| NE | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| ENE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| E | 2 | 1 | 0 | 1 | 0 | 0 | 4 |
| ESE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SE | 0 | 1 | 3 | 1 | 1 | 0 | 6 |
| SSE | 1 | 2 | 3 | 0 | 0 | 0 | 6 |
| S | 0 | 2 | 5 | 0 | 0 | 0 | 7 |
| SSW | 0 | 2 | 3 | 5 | 3 | 0 | 13 |
| SW | 0 | 1 | 4 | 8 | 4 | 0 | 17 |
| WSW | 0 | 0 | 1 | 8 | 8 | 0 | 17 |
| W | 0 | 0 | 1 | 3 | 4 | 0 | 8 |
| WNW | 0 | 0 | 4 | 8 | 0 | 0 | 12 |
| NW | 0 | 1 | 1 | 1 | 1 | 0 | 4 |
| NNW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

108
0

PAGE 38
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/ 1/74 THROUGH 1/31/74
 STABILITY CLASS G
 ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 19 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NNE | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| SEF | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 1 | 2 | 0 | 4 |
| WSW | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| W | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 14
 HOURS OF CALM THIS PAGE 0

PAGE 29

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 1/1/74 THROUGH 1/31/74
ALL CLASSES COMBINED
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 2 | 1 | 2 | 7 | 3 | 0 | 15 |
| NNE | 0 | 0 | 4 | 3 | 2 | 0 | 9 |
| NE | 0 | 5 | 6 | 1 | 0 | 0 | 12 |
| ENE | 1 | 1 | 5 | 7 | 0 | 0 | 14 |
| E | 2 | 3 | 1 | 4 | 2 | 0 | 12 |
| ESE | 0 | 9 | 6 | 2 | 1 | 0 | 18 |
| SE | 2 | 5 | 18 | 12 | 3 | 0 | 43 |
| SSE | 1 | 7 | 21 | 18 | 5 | 0 | 52 |
| S | 2 | 12 | 19 | 17 | 7 | 5 | 62 |
| SSW | 2 | 9 | 16 | 15 | 8 | 1 | 51 |
| SW | 2 | 13 | 11 | 24 | 18 | 1 | 69 |
| WSW | 1 | 11 | 8 | 24 | 15 | 4 | 63 |
| W | 0 | 8 | 23 | 35 | 11 | 2 | 79 |
| WNW | 1 | 5 | 16 | 33 | 7 | 2 | 64 |
| NW | 1 | 18 | 10 | 31 | 14 | 3 | 77 |
| NNW | 2 | 11 | 3 | 8 | 2 | 0 | 26 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 666
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.7 5.5 10.0 15.4 20.2 29.0

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 744
HOURS OF BAD DATA 78
PERCENT DATA RECOVERY 89.52

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/ 1/74 THROUGH 2/28/74
STABILITY CLASS A
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 0
HOURS OF CALM THIS PAGE 0

PAGE 32
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/ 1/74 THROUGH 2/28/74
 STABILITY CLASS B
 ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAK | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 0
 HOURS OF CALM THIS PAGE 0

PAGE 33
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/ 1/74 THROUGH 2/28/74
 STABILITY CLASS C
 ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNL | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 1
 HOURS OF CALM THIS PAGE 0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/ 1/74 THROUGH 2/28/74

STABILITY CLASS D

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 19 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 5 | 9 | 0 | 0 | 16 |
| NNE | 0 | 1 | 9 | 7 | 4 | 3 | 24 |
| NE | 0 | 1 | 17 | 7 | 1 | 1 | 27 |
| ENE | 0 | 1 | 8 | 9 | 0 | 0 | 18 |
| E | 0 | 3 | 16 | 7 | 6 | 0 | 32 |
| ESE | 0 | 1 | 3 | 5 | 13 | 0 | 22 |
| SE | 1 | 2 | 3 | 8 | 1 | 0 | 15 |
| SSE | 0 | 1 | 5 | 4 | 4 | 0 | 14 |
| S | 0 | 4 | 1 | 3 | 2 | 0 | 10 |
| SSW | 1 | 2 | 4 | 0 | 4 | 0 | 11 |
| SW | 1 | 3 | 3 | 2 | 2 | 0 | 11 |
| WSW | 0 | 1 | 0 | 3 | 0 | 0 | 4 |
| W | 1 | 2 | 1 | 6 | 5 | 2 | 17 |
| WNW | 0 | 1 | 5 | 7 | 14 | 3 | 30 |
| NW | 0 | 0 | 0 | 10 | 8 | 2 | 20 |
| NNW | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

277
0

PAGE 35
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/ 1/74 THROUGH 2/26/74
 STABILITY CLASS E
 ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 1 | 0 | 1 | 2 | 6 |
| NNE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| NE | 0 | 1 | 2 | 2 | 1 | 0 | 6 |
| ENE | 0 | 1 | 5 | 0 | 0 | 0 | 6 |
| E | 0 | 7 | 6 | 5 | 5 | 1 | 24 |
| ESE | 0 | 3 | 3 | 5 | 6 | 0 | 17 |
| SE | 0 | 1 | 7 | 4 | 1 | 0 | 13 |
| SSE | 0 | 0 | 3 | 2 | 1 | 0 | 6 |
| S | 0 | 0 | 3 | 2 | 0 | 0 | 5 |
| SSW | 0 | 0 | 1 | 3 | 4 | 0 | 8 |
| SW | 0 | 1 | 3 | 5 | 4 | 2 | 15 |
| WSW | 0 | 2 | 1 | 3 | 6 | 1 | 13 |
| W | 1 | 1 | 1 | 6 | 5 | 0 | 14 |
| WNW | 0 | 0 | 1 | 5 | 4 | 1 | 11 |
| NW | 0 | 1 | 0 | 6 | 15 | 0 | 22 |
| NNW | 0 | 0 | 1 | 1 | 2 | 4 | 8 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 181
 HOURS OF CALM THIS PAGE 0

PAGE 36

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 MET. STABILITY CLASSES DETERMINED USING 140 FT - 10 METEF DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/ 1/74 THROUGH 2/28/74

STABILITY CLASS F

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 2 | 0 | 1 | 0 | 3 |
| NNE | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| NE | 0 | 1 | 0 | 6 | 0 | 0 | 7 |
| ENE | 0 | 4 | 1 | 1 | 0 | 0 | 6 |
| E | 0 | 3 | 1 | 1 | 0 | 0 | 5 |
| ESE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 1 | 1 | 1 | 0 | 3 |
| S | 0 | 0 | 1 | 2 | 1 | 0 | 4 |
| SSW | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| SW | 0 | 2 | 2 | 1 | 0 | 0 | 5 |
| WSW | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| W | 1 | 1 | 0 | 1 | 0 | 0 | 3 |
| WNW | 1 | 1 | 1 | 1 | 0 | 0 | 4 |
| NW | 1 | 0 | 2 | 2 | 1 | 0 | 6 |
| NNW | 0 | 0 | 2 | 5 | 3 | 0 | 10 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

66
0

PAGE 37

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/ 1/74 THROUGH 2/28/74

STABILITY CLASS G

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 2 | 1 | 1 | 0 | 0 | 4 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SE | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 1 | 1 | 0 | 2 | 0 | 4 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 3 | 1 | 0 | 4 |
| WSW | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| W | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| WNW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| NW | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| NNW | 0 | 1 | 1 | 0 | 0 | 0 | 3 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

25
0

PAGE 38

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 2/ 1/74 THROUGH 2/28/74
ALL CLASSES COMBINED
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 4 | 8 | 9 | 2 | 2 | 25 |
| NNE | 0 | 4 | 12 | 9 | 9 | 3 | 37 |
| NE | 0 | 3 | 19 | 15 | 2 | 1 | 40 |
| ENE | 0 | 6 | 14 | 20 | 0 | 0 | 30 |
| E | 0 | 12 | 23 | 13 | 11 | 1 | 61 |
| ESE | 0 | 6 | 6 | 11 | 19 | 0 | 42 |
| SE | 1 | 3 | 12 | 12 | 2 | 0 | 30 |
| SSE | 0 | 1 | 4 | 7 | 7 | 0 | 24 |
| S | 0 | 5 | 6 | 7 | 5 | 0 | 23 |
| SSW | 1 | 3 | 7 | 3 | 8 | 0 | 22 |
| SW | 1 | 6 | 8 | 11 | 7 | 2 | 35 |
| WSW | 0 | 3 | 5 | 7 | 6 | 1 | 22 |
| W | 3 | 5 | 2 | 13 | 10 | 2 | 35 |
| WNW | 1 | 3 | 8 | 13 | 18 | 4 | 47 |
| NW | 1 | 1 | 4 | 18 | 24 | 2 | 50 |
| NNW | 1 | 2 | 5 | 8 | 6 | 5 | 27 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 550
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.5 5.6 10.1 15.2 20.9 26.9

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 172
HOURS OF BAD DATA 122
PERCENT DATA RECOVERY 81.85

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/ 1/74 THROUGH 3/31/74
STABILITY CLASS A
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 1 | 2 | 0 | 3 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

3
0

PAGE 33

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/1/74 THROUGH 3/31/74
STABILITY CLASS B
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| SSE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| NW | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 7
HOURS OF CALM THIS PAGE 0

PAGE 34

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METEN DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/ 1/74 THROUGH 3/31/74
STABILITY CLASS C
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| SE | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| SSE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| S | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| SSW | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 5 | 0 | 0 | 5 |
| NW | 0 | 0 | 1 | 4 | 8 | 0 | 13 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

28
0

PAGE 35

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/ 1/74 THROUGH 3/31/74
STABILITY CLASS D
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 2 | 3 | 1 | 0 | 8 |
| NNE | 0 | 2 | 0 | 3 | 0 | 0 | 5 |
| NE | 0 | 2 | 4 | 8 | 5 | 0 | 19 |
| ENE | 0 | 5 | 9 | 11 | 5 | 0 | 30 |
| E | 0 | 4 | 12 | 12 | 3 | 0 | 31 |
| ESE | 0 | 0 | 1 | 5 | 3 | 0 | 9 |
| SE | 1 | 0 | 4 | 10 | 6 | 2 | 23 |
| SSE | 0 | 0 | 5 | 4 | 1 | 5 | 20 |
| S | 0 | 2 | 3 | 2 | 2 | 1 | 10 |
| SSW | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| SW | 0 | 0 | 1 | 4 | 3 | 0 | 8 |
| WSW | 0 | 1 | 3 | 3 | 0 | 0 | 7 |
| W | 0 | 0 | 2 | 8 | 7 | 5 | 22 |
| WNW | 0 | 0 | 5 | 14 | 21 | 12 | 52 |
| NW | 0 | 3 | 11 | 26 | 29 | 4 | 73 |
| NNW | 0 | 4 | 5 | 9 | 3 | 0 | 21 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

343
0

PAGE 36

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/ 1/74 THROUGH 3/31/74

STABILITY CLASS E

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 1 | 2 | 1 | 0 | 4 |
| NNE | 1 | 1 | 3 | 2 | 0 | 0 | 7 |
| NE | 0 | 0 | 0 | 9 | 1 | 0 | 10 |
| ENE | 0 | 1 | 6 | 3 | 0 | 0 | 10 |
| E | 0 | 0 | 2 | 6 | 2 | 0 | 10 |
| ESE | 0 | 1 | 2 | 4 | 1 | 0 | 8 |
| SE | 0 | 0 | 0 | 9 | 7 | 0 | 16 |
| SSE | 0 | 1 | 0 | 1 | 3 | 0 | 5 |
| S | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| SSW | 0 | 0 | 1 | 1 | 2 | 8 | 12 |
| SW | 0 | 0 | 1 | 6 | 4 | 0 | 11 |
| WSW | 0 | 0 | 0 | 8 | 0 | 0 | 8 |
| W | 0 | 0 | 0 | 6 | 2 | 0 | 8 |
| WNW | 1 | 0 | 1 | 1 | 2 | 0 | 5 |
| NW | 1 | 0 | 4 | 5 | 7 | 2 | 19 |
| NNW | 0 | 0 | 1 | 2 | 3 | 0 | 6 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

142
0

PAGE 37

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING 95% AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/ 1/74 THROUGH 3/31/74

STABILITY CLASS -

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NNE | 2 | 0 | 0 | 1 | 0 | 0 | 3 |
| NE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ENE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 1 | 2 | 2 | 0 | 5 |
| SE | 0 | 2 | 0 | 0 | 1 | 0 | 3 |
| SSE | 0 | 0 | 1 | 0 | 2 | 0 | 3 |
| S | 0 | 0 | 0 | 2 | 2 | 1 | 5 |
| SSW | 0 | 0 | 2 | 0 | 8 | 2 | 12 |
| SW | 0 | 0 | 0 | 0 | 4 | 0 | 4 |
| WSW | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NW | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 41

HOURS OF CALM THIS PAGE 0

PAGE 38

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/ 1/74 THROUGH 3/31/74
STABILITY CLASS G
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| SE | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| SSE | 0 | 0 | 0 | 2 | 2 | 0 | 4 |
| S | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SSW | 0 | 0 | 0 | 1 | 1 | 1 | 3 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

12
0

PAGE 34

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 3/ 1/74 THROUGH 3/31/74
ALL CLASSES COMBINED
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 3 | 3 | 5 | 2 | 0 | 13 |
| NNE | 3 | 3 | 3 | 6 | 0 | 0 | 15 |
| NE | 0 | 2 | 5 | 17 | 6 | 0 | 30 |
| ENE | 0 | 7 | 16 | 14 | 5 | 0 | 42 |
| E | 0 | 4 | 14 | 18 | 5 | 0 | 41 |
| ESE | 0 | 1 | 4 | 11 | 6 | 0 | 24 |
| SE | 1 | 2 | 6 | 26 | 17 | 2 | 54 |
| SSE | 0 | 3 | 7 | 13 | 8 | 5 | 34 |
| S | 0 | 3 | 5 | 6 | 5 | 2 | 21 |
| SSW | 0 | 0 | 3 | 6 | 11 | 12 | 32 |
| SW | 0 | 0 | 2 | 10 | 11 | 0 | 23 |
| WSW | 0 | 1 | 3 | 11 | 1 | 0 | 16 |
| W | 0 | 0 | 2 | 14 | 9 | 5 | 30 |
| WNW | 1 | 0 | 7 | 21 | 24 | 12 | 65 |
| NW | 1 | 3 | 17 | 37 | 45 | 6 | 109 |
| NNW | 0 | 4 | 6 | 11 | 6 | 0 | 27 |
| VAZ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 576
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.3 5.7 9.9 15.5 20.9 28.0

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 744
HOURS OF BAD DATA 105
PERCENT DATA RECOVERY 77.42

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 4/30/74
STABILITY CLASS A
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 1 | 3 | 0 | 0 | 4 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| ENE | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 2 | 3 | 1 | 7 | 0 | 13 |
| SSE | 0 | 1 | 0 | 3 | 3 | 6 | 13 |
| S | 0 | 0 | 1 | 5 | 1 | 1 | 8 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| W | 0 | 0 | 1 | 4 | 0 | 0 | 5 |
| WNW | 0 | 0 | 1 | 2 | 0 | 0 | 3 |
| NW | 0 | 0 | 1 | 3 | 1 | 0 | 5 |
| NNW | 0 | 0 | 0 | 1 | 0 | 6 | 7 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

64
0

PAGE 33

NORTHERN STATES POWER COMPANY - MONTICELLI NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/1/74 THROUGH 4/30/74
STABILITY CLASS B
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| SE | 0 | 1 | 1 | 2 | 1 | 0 | 5 |
| SSE | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| S | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 2 | 1 | 0 | 0 | 0 | 3 |
| W | 0 | 0 | 1 | 3 | 0 | 0 | 4 |
| WNW | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

18
0

PAGE 34
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 4/30/74
 STABILITY CLASS C
 ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NNE | 0 | 2 | 3 | 1 | 0 | 2 | 8 |
| NE | 0 | 0 | 1 | 6 | 2 | 0 | 9 |
| ENE | 0 | 0 | 1 | 3 | 0 | 0 | 4 |
| E | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| SW | 0 | 1 | 3 | 3 | 0 | 0 | 7 |
| WSW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| W | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| WNW | 0 | 0 | 0 | 2 | 1 | 3 | 6 |
| NW | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| NNW | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

49
 0

PAGE 35

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 4/30/74

STABILITY CLASS D

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 3 | 5 | 6 | 4 | 4 | 32 |
| NNE | 0 | 3 | 2 | 4 | 5 | 6 | 22 |
| NE | 1 | 0 | 2 | 5 | 4 | 6 | 25 |
| ENE | 0 | 2 | 2 | 6 | 0 | 0 | 10 |
| E | 0 | 0 | 2 | 4 | 5 | 7 | 18 |
| ESE | 0 | 4 | 0 | 3 | 3 | 0 | 10 |
| SE | 0 | 2 | 0 | 1 | 4 | 0 | 7 |
| SSE | 0 | 2 | 2 | 4 | 4 | 4 | 16 |
| S | 0 | 0 | 3 | 2 | 0 | 4 | 9 |
| SSW | 0 | 0 | 1 | 0 | 1 | 3 | 5 |
| SW | 0 | 0 | 3 | 0 | 1 | 1 | 5 |
| WSW | 0 | 0 | 1 | 1 | 0 | 2 | 4 |
| W | 0 | 3 | 2 | 0 | 8 | 2 | 15 |
| WNW | 0 | 1 | 1 | 1 | 5 | 6 | 14 |
| NW | 0 | 2 | 8 | 5 | 4 | 1 | 20 |
| NNW | 0 | 1 | 4 | 1 | 7 | 6 | 19 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

231
0

PAGE 36

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 4/30/74

STABILITY CLASS E

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 2 | 5 | 3 | 3 | 15 |
| NNE | 0 | 0 | 0 | 11 | 7 | 1 | 19 |
| NE | 0 | 0 | 1 | 5 | 8 | 0 | 14 |
| ENE | 0 | 0 | 1 | 5 | 0 | 0 | 6 |
| E | 0 | 0 | 0 | 2 | 4 | 7 | 13 |
| ESE | 0 | 0 | 0 | 2 | 7 | 5 | 14 |
| SE | 0 | 0 | 2 | 2 | 12 | 2 | 18 |
| SSE | 0 | 0 | 1 | 3 | 8 | 9 | 21 |
| S | 0 | 0 | 0 | 1 | 5 | 7 | 13 |
| SSW | 0 | 0 | 0 | 3 | 3 | 0 | 6 |
| SW | 0 | 0 | 1 | 0 | 6 | 0 | 7 |
| WSW | 0 | 0 | 1 | 5 | 3 | 0 | 9 |
| W | 0 | 1 | 2 | 4 | 3 | 1 | 11 |
| WNW | 0 | 0 | 0 | 3 | 3 | 1 | 7 |
| NW | 0 | 0 | 3 | 4 | 4 | 1 | 12 |
| NNW | 0 | 0 | 2 | 2 | 5 | 6 | 15 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

200
0

PAGE 37

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 4/30/74

STABILITY CLASS F

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 17 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 1 | 5 | 6 | 0 | 12 |
| NNE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NE | 1 | 0 | 1 | 1 | 0 | 0 | 3 |
| ENE | 1 | 0 | 2 | 3 | 0 | 0 | 6 |
| E | 0 | 0 | 0 | 3 | 2 | 0 | 5 |
| FSE | 0 | 0 | 1 | 3 | 4 | 0 | 8 |
| SE | 0 | 1 | 1 | 5 | 6 | 0 | 13 |
| SSE | 0 | 2 | 2 | 3 | 2 | 0 | 9 |
| S | 0 | 0 | 0 | 2 | 2 | 1 | 5 |
| SSW | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| SW | 0 | 0 | 0 | 0 | 1 | 2 | 3 |
| WSW | 0 | 2 | 1 | 1 | 0 | 0 | 4 |
| W | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| WNW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NW | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NNW | 0 | 0 | 4 | 3 | 7 | 0 | 14 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

88
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 4/30/74

STABILITY CLASS G

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| NNE | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| NE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ENE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 2 | 0 | 2 | 1 | 0 | 5 |
| ESE | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| SF | 0 | 0 | 2 | 3 | 6 | 0 | 11 |
| SSE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| S | 0 | 1 | 0 | 0 | 1 | 0 | 2 |
| SSW | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| SW | 0 | 2 | 1 | 1 | 2 | 0 | 6 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

39
0

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 4/30/74
 ALL CLASSES COMBINED
 ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 5 | 9 | 22 | 19 | 12 | 67 |
| NNE | 0 | 5 | 5 | 18 | 13 | 11 | 52 |
| NE | 2 | 1 | 5 | 18 | 19 | 8 | 53 |
| ENE | 1 | 3 | 9 | 17 | 0 | 0 | 30 |
| E | 0 | 2 | 3 | 11 | 13 | 14 | 43 |
| ESE | 0 | 4 | 1 | 11 | 15 | 5 | 36 |
| SE | 0 | 6 | 9 | 16 | 37 | 2 | 70 |
| SSE | 0 | 6 | 6 | 14 | 17 | 20 | 63 |
| S | 0 | 1 | 4 | 10 | 10 | 13 | 38 |
| SSW | 0 | 0 | 1 | 7 | 4 | 4 | 16 |
| SW | 0 | 3 | 8 | 4 | 10 | 3 | 28 |
| WSW | 0 | 5 | 4 | 9 | 3 | 2 | 23 |
| W | 0 | 4 | 8 | 13 | 11 | 3 | 39 |
| WNW | 0 | 1 | 3 | 9 | 9 | 10 | 32 |
| NW | 0 | 2 | 15 | 13 | 9 | 2 | 41 |
| NNW | 0 | 1 | 10 | 8 | 19 | 20 | 58 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 689
 HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.7 5.9 10.2 15.6 21.5 28.2

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 720
 HOURS OF BAD DATA 31
 PERCENT DATA RECOVERY 95.69

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/ 1/74 THROUGH 5/31/74

STABILITY CLASS A

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 6 | 3 | 3 | 12 |
| NNE | 0 | 0 | 0 | 1 | 2 | 0 | 3 |
| NE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| ENE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| ESE | 0 | 0 | 2 | 4 | 1 | 0 | 7 |
| SE | 0 | 0 | 3 | 1 | 7 | 0 | 11 |
| SSE | 0 | 0 | 0 | 0 | 7 | 3 | 10 |
| S | 0 | 1 | 1 | 2 | 5 | 3 | 12 |
| SSW | 0 | 4 | 2 | 0 | 2 | 1 | 9 |
| SW | 0 | 0 | 5 | 0 | 0 | 0 | 5 |
| WSW | 0 | 0 | 1 | 1 | 0 | 1 | 3 |
| W | 0 | 0 | 1 | 1 | 3 | 4 | 9 |
| WNW | 0 | 2 | 2 | 0 | 3 | 2 | 9 |
| NW | 0 | 1 | 4 | 5 | 0 | 6 | 16 |
| NNW | 0 | 1 | 2 | 3 | 3 | 0 | 9 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

124
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/ 1/74 THROUGH 5/31/74
STABILITY CLASS B
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| SSE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| S | 0 | 1 | 0 | 1 | 0 | 2 | 4 |
| SSW | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| SW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 1 | 0 | 2 | 0 | 3 |
| NW | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| NNW | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| VAP | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

21
0

PAGE 34
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/ 1/74 THROUGH 5/31/74
 STABILITY CLASS C
 ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| NNE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NE | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ESE | 0 | 1 | 0 | 2 | 0 | 0 | 3 |
| SE | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| SSE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| S | 0 | 2 | 1 | 2 | 0 | 0 | 5 |
| SSW | 0 | 2 | 0 | 0 | 1 | 0 | 3 |
| SW | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| WSW | 0 | 1 | 0 | 0 | 0 | 1 | 2 |
| W | 0 | 1 | 2 | 0 | 0 | 3 | 6 |
| WNW | 0 | 1 | 1 | 1 | 1 | 1 | 5 |
| NW | 1 | 1 | 1 | 2 | 1 | 0 | 6 |
| NNW | 0 | 1 | 3 | 0 | 0 | 0 | 4 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 45
 HOURS OF CALM THIS PAGE 0

PAGE 25

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/ 1/74 THROUGH 5/31/74
STABILITY CLASS D
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 3 | 1 | 1 | 3 | 3 | 11 |
| NNE | 0 | 0 | 4 | 4 | 0 | 0 | 8 |
| NE | 1 | 2 | 2 | 4 | 2 | 0 | 11 |
| ENE | 1 | 1 | 1 | 0 | 0 | 0 | 3 |
| E | 0 | 3 | 1 | 7 | 1 | 0 | 12 |
| ESE | 0 | 0 | 1 | 24 | 23 | 4 | 52 |
| SE | 1 | 2 | 4 | 27 | 14 | 0 | 48 |
| SSE | 0 | 0 | 2 | 4 | 5 | 1 | 12 |
| S | 0 | 0 | 2 | 3 | 2 | 3 | 10 |
| SSW | 1 | 1 | 2 | 1 | 1 | 0 | 6 |
| SW | 0 | 1 | 1 | 1 | 1 | 0 | 4 |
| WSW | 1 | 1 | 0 | 1 | 2 | 2 | 7 |
| W | 0 | 3 | 1 | 6 | 7 | 10 | 27 |
| WNW | 0 | 1 | 3 | 6 | 9 | 6 | 27 |
| NW | 0 | 2 | 5 | 14 | 9 | 1 | 31 |
| NNW | 0 | 3 | 1 | 10 | 7 | 4 | 25 |
| VAK | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

294
0

PAGE 36
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/ 1/74 THROUGH 5/31/74
 STABILITY CLASS E
 ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| NNE | 0 | 1 | 1 | 3 | 2 | 0 | 7 |
| NE | 0 | 1 | 0 | 2 | 3 | 0 | 6 |
| ENE | 0 | 0 | 3 | 8 | 0 | 0 | 11 |
| E | 0 | 1 | 4 | 1 | 2 | 0 | 8 |
| ESE | 0 | 1 | 2 | 3 | 4 | 0 | 10 |
| SE | 0 | 0 | 3 | 5 | 12 | 1 | 21 |
| SSE | 0 | 1 | 6 | 4 | 2 | 5 | 18 |
| S | 0 | 1 | 5 | 5 | 1 | 13 | 25 |
| SSW | 0 | 0 | 1 | 0 | 0 | 1 | 2 |
| SW | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| WSW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| W | 0 | 0 | 0 | 1 | 4 | 0 | 5 |
| WNW | 0 | 0 | 2 | 1 | 1 | 0 | 4 |
| NW | 0 | 1 | 2 | 1 | 1 | 0 | 5 |
| NNW | 0 | 1 | 0 | 2 | 1 | 0 | 4 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

133
 0

PAGE 27

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/ 1/74 THROUGH 5/31/74
STABILITY CLASS F
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| NNE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NE | 0 | 3 | 1 | 0 | 0 | 0 | 4 |
| ENE | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| E | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| ESE | 0 | 0 | 3 | 1 | 0 | 0 | 4 |
| SE | 1 | 0 | 1 | 2 | 1 | 0 | 5 |
| SSE | 0 | 1 | 0 | 2 | 0 | 0 | 3 |
| S | 0 | 0 | 2 | 2 | 0 | 0 | 4 |
| SSW | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| W | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| WNW | 0 | 0 | 1 | 3 | 0 | 0 | 4 |
| NW | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| NNW | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| VAC. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

43
0

PAGE 38
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/ 1/74 THROUGH 5/31/74
 STABILITY CLASS G
 ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| NNE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NE | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| SSW | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| SW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| WSW | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| W | 2 | 2 | 2 | 0 | 0 | 0 | 6 |
| WNW | 0 | 1 | 4 | 2 | 0 | 0 | 7 |
| NW | 0 | 1 | 1 | 2 | 0 | 0 | 4 |
| NNW | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

35
 0

PAGE 39

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 5/ 1/74 THROUGH 5/31/74

ALL CLASSES COMBINED

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 5 | 3 | 12 | 7 | 6 | 33 |
| NNE | 0 | 3 | 6 | 8 | 4 | 0 | 21 |
| NE | 2 | 8 | 7 | 7 | 5 | 0 | 29 |
| ENE | 1 | 2 | 7 | 8 | 0 | 0 | 18 |
| E | 1 | 4 | 13 | 8 | 3 | 0 | 29 |
| ESE | 0 | 2 | 8 | 34 | 26 | 4 | 76 |
| SE | 2 | 2 | 12 | 36 | 39 | 1 | 92 |
| SSE | 0 | 3 | 8 | 11 | 14 | 9 | 45 |
| S | 0 | 5 | 11 | 16 | 9 | 21 | 62 |
| SSW | 4 | 7 | 6 | 1 | 5 | 2 | 25 |
| SW | 0 | 5 | 9 | 2 | 1 | 0 | 17 |
| WSW | 1 | 2 | 2 | 5 | 2 | 4 | 16 |
| W | 2 | 6 | 8 | 8 | 14 | 17 | 55 |
| WNW | 0 | 5 | 14 | 13 | 16 | 11 | 59 |
| NW | 1 | 6 | 16 | 24 | 12 | 4 | 64 |
| NNW | 0 | 6 | 9 | 17 | 14 | 4 | 50 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 695
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.6 5.8 9.8 15.5 21.0 28.3

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

| | |
|-----------------------|-------|
| TOTAL HOURS | 744 |
| HOURS OF BAD DATA | 44 |
| PERCENT DATA RECOVERY | 93.41 |

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/ 1/74 THROUGH 6/30/74
STABILITY CLASS A
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSF | 0 | 0 | 0 | 0 | 0 | 5 | 5 |
| S | 0 | 0 | 0 | 2 | 13 | 4 | 19 |
| SSW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| NNW | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

24
0

PAGE 33

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/ 1/74 THROUGH 6/30/74
STABILITY CLASS B
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NNE | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| NE | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 3 | 0 | 1 | 0 | 4 |
| S | 0 | 0 | 0 | 9 | 3 | 0 | 12 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| W | 0 | 0 | 0 | 0 | 4 | 0 | 4 |
| WNW | 0 | 0 | 0 | 3 | 2 | 0 | 5 |
| NW | 0 | 0 | 0 | 1 | 5 | 0 | 6 |
| NNW | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

40
0

PAGE 34

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/ 1/74 THROUGH 6/30/74

STABILITY CLASS C

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NNE | 0 | 0 | 0 | 1 | 3 | 0 | 4 |
| NE | 0 | 1 | 0 | 4 | 0 | 0 | 5 |
| ENE | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| E | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| SSE | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| S | 0 | 0 | 8 | 2 | 4 | 0 | 14 |
| SSW | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| SW | 0 | 0 | 2 | 2 | 0 | 0 | 4 |
| WSW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| W | 0 | 0 | 1 | 2 | 0 | 0 | 3 |
| WNW | 0 | 0 | 0 | 8 | 1 | 0 | 9 |
| NW | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| NNW | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

55
0

PAGE 35

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/ 1/74 THROUGH 6/30/74
STABILITY CLASS D
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 1 | 1 | 1 | 5 | 8 |
| NNE | 1 | 1 | 0 | 3 | 2 | 7 | 14 |
| NE | 0 | 0 | 0 | 8 | 5 | 2 | 15 |
| ENE | 3 | 3 | 0 | 6 | 1 | 0 | 13 |
| E | 1 | 2 | 0 | 2 | 4 | 0 | 9 |
| ESE | 1 | 1 | 1 | 0 | 0 | 0 | 3 |
| SE | 0 | 1 | 1 | 4 | 2 | 0 | 8 |
| SSE | 0 | 2 | 1 | 2 | 5 | 1 | 11 |
| S | 0 | 1 | 6 | 5 | 9 | 2 | 23 |
| SSW | 0 | 2 | 6 | 2 | 1 | 0 | 11 |
| SW | 0 | 5 | 2 | 0 | 0 | 0 | 7 |
| WSW | 0 | 3 | 3 | 4 | 0 | 0 | 10 |
| W | 0 | 9 | 2 | 3 | 1 | 0 | 15 |
| WNW | 0 | 1 | 3 | 12 | 10 | 1 | 27 |
| NW | 0 | 0 | 0 | 8 | 18 | 6 | 32 |
| NNW | 0 | 0 | 0 | 4 | 15 | 13 | 32 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

238
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/ 1/74 THROUGH 6/30/74

STABILITY CLASS F

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NE | 0 | 1 | 0 | 4 | 10 | 0 | 15 |
| ENE | 0 | 0 | 0 | 5 | 0 | 1 | 6 |
| E | 0 | 0 | 1 | 6 | 5 | 0 | 12 |
| ESE | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| SE | 0 | 1 | 1 | 3 | 7 | 1 | 13 |
| SSE | 1 | 1 | 1 | 3 | 5 | 2 | 13 |
| S | 0 | 1 | 0 | 8 | 23 | 3 | 35 |
| SSW | 0 | 1 | 2 | 4 | 3 | 0 | 10 |
| SW | 0 | 2 | 0 | 2 | 0 | 0 | 4 |
| WSW | 0 | 2 | 1 | 2 | 0 | 0 | 5 |
| W | 0 | 0 | 1 | 3 | 4 | 0 | 8 |
| WNW | 0 | 0 | 0 | 7 | 7 | 1 | 15 |
| NW | 0 | 0 | 0 | 3 | 9 | 0 | 12 |
| NNW | 0 | 0 | 0 | 0 | 4 | 2 | 6 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

157
0

PAGE 37

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/ 1/74 THROUGH 6/30/74
STABILITY CLASS F
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M | | | | | | TOTAL |
|-----------|---------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| NE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| ENE | 0 | 0 | 0 | 3 | 1 | 0 | 4 |
| E | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 1 | 3 | 0 | 0 | 4 |
| SSF | 0 | 1 | 0 | 1 | 7 | 0 | 9 |
| S | 0 | 1 | 0 | 2 | 10 | 0 | 13 |
| SSW | 1 | 1 | 1 | 1 | 3 | 0 | 7 |
| SW | 0 | 1 | 0 | 1 | 1 | 0 | 3 |
| WSW | 0 | 0 | 2 | 3 | 1 | 0 | 6 |
| W | 0 | 0 | 0 | 2 | 7 | 0 | 9 |
| WNW | 0 | 0 | 1 | 5 | 7 | 1 | 14 |
| NW | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

76
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/ 1/74 THROUGH 6/30/74
STABILITY CLASS G
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| S | 0 | 0 | 0 | 1 | 2 | 0 | 3 |
| SSW | 0 | 0 | 3 | 1 | 0 | 0 | 4 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 1 | 2 | 0 | 0 | 3 |
| W | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| WNW | 0 | 0 | 1 | 3 | 0 | 0 | 4 |
| NW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

19
0

PAGE 39

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 6/1/74 THROUGH 6/30/74
ALL CLASSES COMBINED
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 1 | 3 | 1 | 5 | 10 |
| NNF | 1 | 2 | 1 | 4 | 4 | 7 | 24 |
| NE | 0 | 2 | 1 | 18 | 15 | 2 | 38 |
| ENE | 3 | 3 | 0 | 16 | 2 | 1 | 25 |
| E | 1 | 2 | 5 | 6 | 9 | 0 | 25 |
| ESE | 1 | 1 | 2 | 1 | 1 | 0 | 6 |
| SE | 0 | 2 | 5 | 10 | 4 | 1 | 27 |
| SSE | 1 | 4 | 6 | 4 | 19 | 8 | 47 |
| S | 0 | 0 | 14 | 24 | 24 | 4 | 114 |
| SSW | 1 | 4 | 12 | 10 | 8 | 0 | 35 |
| SW | 0 | 8 | 4 | 5 | 1 | 0 | 18 |
| WSW | 0 | 5 | 8 | 12 | 1 | 0 | 26 |
| W | 0 | 4 | 4 | 11 | 16 | 0 | 40 |
| WNW | 0 | 1 | 5 | 38 | 27 | 3 | 74 |
| NW | 0 | 0 | 0 | 16 | 36 | 6 | 58 |
| NNW | 0 | 0 | 0 | 5 | 22 | 15 | 42 |
| VAP | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 614
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.7 5.5 10.4 16.2 20.7 28.7

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

| | |
|-----------------------|-------|
| TOTAL HOURS | 720 |
| HOURS OF BAD DATA | 106 |
| PERCENT DATA RECOVERY | 85.2% |

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/ 1/74 THROUGH 7/31/74
STABILITY CLASS A
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SSE | 0 | 0 | 0 | 0 | 6 | 0 | 6 |
| S | 0 | 0 | 0 | 4 | 16 | 5 | 25 |
| SSW | 0 | 0 | 1 | 1 | 4 | 0 | 6 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| W | 0 | 0 | 0 | 0 | 1 | 2 | 3 |
| WNW | 1 | 0 | 0 | 1 | 0 | 0 | 2 |
| NW | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| NNW | 0 | 1 | 1 | 0 | 1 | 0 | 3 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

52
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/ 1/74 THROUGH 7/31/74
STABILITY CLASS B
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 3 | 1 | 0 | 0 | 6 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| ESE | 0 | 0 | 3 | 1 | 0 | 0 | 4 |
| SE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| SSE | 0 | 0 | 4 | 0 | 1 | 0 | 5 |
| S | 0 | 0 | 1 | 1 | 1 | 1 | 4 |
| SSW | 0 | 1 | 0 | 2 | 0 | 0 | 3 |
| SW | 0 | 0 | 1 | 2 | 1 | 0 | 4 |
| WSW | 0 | 0 | 1 | 2 | 1 | 0 | 4 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 2 | 1 | 1 | 1 | 0 | 5 |
| NW | 0 | 1 | 4 | 0 | 2 | 0 | 7 |
| NNW | 0 | 0 | 1 | 2 | 1 | 0 | 4 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

44
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/ 1/74 THROUGH 7/31/74

STABILITY CLASS C

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 5 | 1 | 1 | 0 | 0 | 7 |
| NNE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| ESE | 0 | 0 | 3 | 1 | 0 | 0 | 4 |
| E | 0 | 1 | 1 | 1 | 1 | 0 | 4 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 1 | 1 | 2 | 2 | 0 | 6 |
| SSW | 0 | 0 | 0 | 5 | 2 | 0 | 7 |
| SW | 0 | 1 | 4 | 1 | 1 | 0 | 7 |
| WSW | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 2 | 0 | 1 | 1 | 1 | 5 |
| NW | 0 | 1 | 1 | 2 | 5 | 0 | 8 |
| NNW | 0 | 4 | 2 | 2 | 0 | 0 | 8 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

62
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/ 1/74 THROUGH 7/31/74
STABILITY CLASS D
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M | | | | | | TOTAL |
|-----------|---------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 3 | 4 | 0 | 4 | 0 | 0 | 20 |
| NNE | 4 | 1 | 0 | 2 | 0 | 0 | 7 |
| NE | 1 | 3 | 2 | 1 | 0 | 0 | 7 |
| NNE | 0 | 4 | 8 | 1 | 0 | 0 | 13 |
| E | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| ESE | 1 | 0 | 1 | 0 | 1 | 0 | 4 |
| SE | 0 | 3 | 1 | 0 | 3 | 1 | 8 |
| SSE | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| S | 0 | 4 | 1 | 4 | 10 | 1 | 20 |
| SSW | 1 | 1 | 2 | 3 | 3 | 0 | 10 |
| SW | 1 | 5 | 4 | 1 | 2 | 0 | 15 |
| WSW | 2 | 3 | 4 | 1 | 0 | 0 | 10 |
| W | 1 | 3 | 3 | 0 | 0 | 1 | 8 |
| WNW | 0 | 3 | 2 | 2 | 4 | 0 | 11 |
| NW | 1 | 3 | 0 | 7 | 15 | 0 | 26 |
| NNW | 1 | 4 | 2 | 5 | 1 | 0 | 13 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

182
0

PAGE 36
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/ 1/74 THROUGH 7/31/74
 STABILITY CLASS F
 ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| NNE | 0 | 0 | 1 | 2 | 0 | 1 | 4 |
| NE | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| ENE | 0 | 1 | 4 | 0 | 0 | 0 | 5 |
| E | 0 | 1 | 3 | 4 | 0 | 0 | 8 |
| ESE | 0 | 0 | 2 | 3 | 0 | 0 | 5 |
| SE | 0 | 1 | 0 | 11 | 1 | 1 | 14 |
| SSE | 0 | 0 | 1 | 1 | 2 | 1 | 5 |
| S | 0 | 1 | 2 | 8 | 3 | 2 | 44 |
| SSW | 0 | 1 | 2 | 3 | 3 | 1 | 10 |
| SW | 0 | 0 | 3 | 2 | 3 | 0 | 8 |
| WSW | 0 | 1 | 1 | 4 | 0 | 0 | 6 |
| W | 0 | 0 | 3 | 3 | 0 | 0 | 6 |
| WNW | 0 | 1 | 1 | 3 | 6 | 0 | 11 |
| NW | 1 | 1 | 6 | 7 | 7 | 0 | 22 |
| NNW | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

153
 0

PAGE 37

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/ 1/74 THROUGH 7/31/74
STABILITY CLASS F
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M | | | | | LEVEL | | TOTAL |
|-----------|---------------------------|--------|---------|----------|----------|----------|----|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 0 | 1 | 0 | 4 | 1 | 0 | 5 | |
| NNE | 0 | 0 | 2 | 1 | 0 | 0 | 3 | |
| NE | 0 | 0 | 0 | 3 | 0 | 0 | 3 | |
| ENE | 0 | 0 | 3 | 0 | 0 | 0 | 3 | |
| E | 0 | 0 | 3 | 1 | 0 | 0 | 4 | |
| ESE | 0 | 0 | 5 | 2 | 0 | 0 | 7 | |
| SE | 0 | 1 | 1 | 3 | 1 | 0 | 6 | |
| SSE | 0 | 1 | 4 | 1 | 1 | 0 | 7 | |
| S | 0 | 0 | 0 | 6 | 1 | 1 | 12 | |
| SSW | 0 | 0 | 1 | 2 | 2 | 1 | 6 | |
| SW | 1 | 2 | 4 | 4 | 2 | 0 | 13 | |
| WSW | 0 | 2 | 2 | 3 | 0 | 0 | 7 | |
| W | 0 | 1 | 0 | 1 | 1 | 0 | 3 | |
| WNW | 0 | 1 | 0 | 2 | 1 | 0 | 4 | |
| NW | 0 | 0 | 2 | 6 | 0 | 0 | 8 | |
| NNW | 1 | 0 | 1 | 6 | 2 | 0 | 10 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

101
0

PAGE 30
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/ 1/74 THROUGH 7/31/74
 STABILITY CLASS G
 ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 17 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| ESE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 1 | 2 | 0 | 0 | 3 |
| S | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| SSW | 0 | 0 | 0 | 1 | 5 | 0 | 6 |
| SW | 0 | 0 | 1 | 0 | 2 | 0 | 3 |
| WSW | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| W | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| WNW | 0 | 1 | 3 | 1 | 0 | 0 | 5 |
| NW | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| NNW | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
 HOURS OF CALM THIS PAGE

34
 0

PAGE 39

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 7/ 1/74 THROUGH 7/31/74
ALL CLASSES COMBINED
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 3 | 14 | 14 | 11 | 0 | 0 | 42 |
| NNE | 4 | 3 | 3 | 5 | 0 | 1 | 16 |
| NE | 1 | 4 | 2 | 5 | 0 | 0 | 12 |
| ENE | 0 | 6 | 15 | 1 | 0 | 0 | 22 |
| E | 0 | 2 | 15 | 7 | 0 | 0 | 24 |
| ESE | 1 | 0 | 15 | 11 | 1 | 0 | 30 |
| SE | 0 | 6 | 4 | 10 | 6 | 2 | 34 |
| SSE | 0 | 1 | 11 | 5 | 10 | 1 | 28 |
| S | 0 | 5 | 6 | 26 | 25 | 10 | 113 |
| SSW | 1 | 3 | 6 | 17 | 19 | 2 | 48 |
| SW | 2 | 8 | 14 | 10 | 11 | 0 | 50 |
| WSW | 2 | 6 | 10 | 12 | 2 | 0 | 38 |
| W | 1 | 4 | 7 | 4 | 2 | 3 | 21 |
| WNW | 1 | 10 | 7 | 11 | 13 | 1 | 43 |
| NW | 2 | 6 | 15 | 22 | 31 | 0 | 76 |
| NNW | 2 | 4 | 8 | 16 | 5 | 1 | 41 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 633
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.3 5.5 10.2 15.3 20.6 27.0

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 744
HOURS OF BAD DATA 111
PERCENT DATA RECOVERY 85.08

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 8/ 1/74 THROUGH 8/31/74

STABILITY CLASS A

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 2 | 1 | 2 | 5 |
| S | 0 | 0 | 0 | 5 | 11 | 4 | 25 |
| SSW | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| NW | 0 | 0 | 1 | 3 | 0 | 0 | 4 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

39
0

PAGE 23

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 8/ 1/74 THROUGH 8/31/74

STABILITY CLASS B

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|---|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| S | 0 | 0 | 0 | 1 | 1 | 0 | 2 | |
| SSW | 0 | 0 | 0 | 0 | 0 | 1 | 1 | |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| WSW | 0 | 0 | 2 | 1 | 0 | 0 | 3 | |
| W | 0 | 1 | 0 | 1 | 0 | 0 | 2 | |
| WNW | 0 | 0 | 2 | 5 | 0 | 0 | 7 | |
| NW | 0 | 1 | 0 | 7 | 0 | 0 | 8 | |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE

23

HOURS LF CALM THIS PAGE

0

PAGE 34

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 8/ 1/74 THROUGH 8/31/74
STABILITY CLASS C
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| S | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 1 | 0 | 0 | 1 | 0 | 2 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 3 | 0 | 5 | 0 | 0 | 8 |
| WNW | 0 | 0 | 5 | 8 | 0 | 0 | 13 |
| NW | 0 | 1 | 4 | 5 | 0 | 0 | 10 |
| NNW | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

39
0

PAGE 35

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 8/1/74 THROUGH 8/31/74

STABILITY CLASS D

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 2 | 1 | 2 | 5 | 10 |
| NNE | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 2 | 1 | 0 | 2 | 0 | 5 |
| S | 1 | 3 | 2 | 7 | 6 | 4 | 23 |
| SSW | 0 | 0 | 0 | 5 | 3 | 6 | 14 |
| SW | 0 | 1 | 2 | 0 | 2 | 1 | 6 |
| WSW | 0 | 1 | 3 | 1 | 3 | 0 | 8 |
| W | 0 | 1 | 3 | 4 | 0 | 4 | 12 |
| WNW | 0 | 1 | 3 | 4 | 0 | 1 | 9 |
| NW | 0 | 2 | 4 | 14 | 1 | 0 | 21 |
| NNW | 0 | 0 | 0 | 4 | 1 | 0 | 5 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

141
0

PAGE 36

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 8/ 1/74 THROUGH 8/31/74

STABILITY CLASS E

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| NNE | 0 | 0 | 1 | 2 | 0 | 0 | 3 |
| NE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 1 | 0 | 0 | 2 | 1 | 0 | 4 |
| ESE | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| SE | 0 | 2 | 0 | 2 | 1 | 0 | 5 |
| SSE | 0 | 0 | 0 | 4 | 7 | 1 | 12 |
| S | 0 | 1 | 1 | 3 | 12 | 2 | 19 |
| SSW | 0 | 1 | 2 | 1 | 3 | 4 | 11 |
| SW | 0 | 0 | 2 | 0 | 1 | 0 | 3 |
| WSW | 0 | 1 | 0 | 3 | 0 | 0 | 4 |
| W | 0 | 1 | 2 | 7 | 0 | 0 | 10 |
| WNW | 0 | 0 | 2 | 6 | 3 | 0 | 11 |
| NW | 0 | 0 | 3 | 6 | 1 | 0 | 12 |
| NNW | 0 | 0 | 1 | 5 | 3 | 0 | 9 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

107
0

PAGE 37

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 8/ 1/74 THROUGH 8/31/74
STABILITY CLASS F
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 2 | 1 | 0 | 0 | 4 |
| NNE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NE | 0 | 3 | 1 | 0 | 0 | 0 | 4 |
| ENE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| SE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SSW | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| SW | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 2 | 2 | 2 | 2 | 0 | 6 |
| WNW | 0 | 1 | 3 | 4 | 0 | 0 | 6 |
| NW | 0 | 1 | 0 | 3 | 0 | 0 | 4 |
| NNW | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

42
0

PAGE 38

NORTHERN STATES POWER COMPANY - MONTECELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 8/ 1/74 THROUGH 8/31/74

STABILITY CLASS G

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 3 | 0 | 0 | 0 | 4 |
| NNE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| SSE | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| S | 0 | 0 | 1 | 2 | 0 | 0 | 3 |
| SSW | 1 | 2 | 0 | 1 | 2 | 0 | 6 |
| SW | 0 | 1 | 0 | 4 | 0 | 0 | 5 |
| WSW | 0 | 0 | 1 | 3 | 0 | 0 | 4 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

27
0

PAGE 29

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 8/1/74 THROUGH 8/31/74
ALL CLASSES COMBINED
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 8 | 4 | 2 | 5 | 21 |
| NNE | 0 | 2 | 1 | 2 | 2 | 0 | 7 |
| NE | 0 | 4 | 1 | 0 | 0 | 0 | 5 |
| ENE | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| E | 1 | 0 | 0 | 2 | 1 | 0 | 4 |
| ESE | 0 | 1 | 0 | 1 | 1 | 0 | 3 |
| SE | 0 | 4 | 0 | 2 | 1 | 0 | 7 |
| SSE | 0 | 2 | 7 | 7 | 10 | 3 | 25 |
| S | 1 | 4 | 7 | 20 | 31 | 15 | 78 |
| SSW | 1 | 3 | 9 | 7 | 9 | 12 | 41 |
| SW | 0 | 5 | 4 | 7 | 4 | 1 | 19 |
| WSW | 0 | 2 | 6 | 9 | 5 | 0 | 22 |
| W | 0 | 8 | 7 | 19 | 2 | 4 | 40 |
| WNW | 0 | 2 | 15 | 34 | 4 | 1 | 56 |
| NW | 0 | 5 | 14 | 38 | 2 | 0 | 59 |
| NNW | 0 | 1 | 2 | 11 | 5 | 9 | 28 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 418
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.0 5.9 10.0 15.4 21.2 27.8

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 744
HOURS OF BAD DATA 326
PERCENT DATA RECOVERY 56.1P

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 9/ 1/74 THROUGH 9/30/74
STABILITY CLASS A
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| NNE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 3 | 1 | 0 | 4 |
| S | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| SSW | 0 | 0 | 1 | 7 | 0 | 0 | 8 |
| SW | 0 | 0 | 1 | 2 | 3 | 0 | 6 |
| WSW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

29
0

PAGE 33

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 9/ 1/74 THROUGH 9/30/74
STABILITY CLASS B
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 16 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 4 | 2 | 0 | 0 | 7 |
| NNE | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| NE | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| S | 0 | 0 | 2 | 4 | 0 | 0 | 6 |
| SSW | 0 | 2 | 2 | 1 | 0 | 0 | 5 |
| SW | 0 | 0 | 1 | 2 | 0 | 0 | 3 |
| WSW | 0 | 2 | 0 | 0 | 2 | 0 | 4 |
| W | 0 | 1 | 0 | 1 | 1 | 0 | 3 |
| WNW | 0 | 0 | 1 | 2 | 2 | 0 | 5 |
| NW | 0 | 1 | 0 | 2 | 2 | 0 | 5 |
| NNW | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 45
HOURS OF CALM THIS PAGE 0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 9/ 1/74 THROUGH 9/30/74

STABILITY CLASS C

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 3 | 3 | 0 | 0 | 8 |
| NNE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| SSE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| S | 0 | 3 | 2 | 1 | 0 | 0 | 6 |
| SSW | 0 | 1 | 4 | 2 | 1 | 0 | 8 |
| SW | 0 | 2 | 1 | 2 | 1 | 0 | 6 |
| WSW | 0 | 2 | 4 | 0 | 0 | 0 | 6 |
| W | 0 | 2 | 3 | 3 | 0 | 0 | 8 |
| WNW | 0 | 0 | 1 | 1 | 2 | 0 | 4 |
| NW | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| NNW | 0 | 0 | 3 | 4 | 4 | 0 | 11 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

62
0

PAGE 35

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 9/ 1/74 THROUGH 9/30/74

STABILITY CLASS D

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M | | | | | LEVEL | | TOTAL |
|-----------|---------------------------|--------|---------|----------|----------|----------|----|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | | |
| N | 0 | 2 | 12 | 10 | 6 | 0 | 30 | |
| NNE | 0 | 0 | 4 | 3 | 1 | 0 | 8 | |
| NE | 1 | 0 | 0 | 7 | 0 | 1 | 9 | |
| ENE | 0 | 0 | 0 | 3 | 0 | 0 | 3 | |
| E | 1 | 0 | 0 | 0 | 1 | 0 | 2 | |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SE | 0 | 0 | 0 | 1 | 1 | 0 | 2 | |
| SSE | 1 | 1 | 0 | 1 | 1 | 0 | 4 | |
| S | 0 | 1 | 3 | 2 | 1 | 0 | 7 | |
| SSW | 1 | 1 | 0 | 2 | 1 | 0 | 5 | |
| SW | 0 | 0 | 2 | 2 | 3 | 0 | 7 | |
| WSW | 0 | 4 | 2 | 1 | 1 | 0 | 8 | |
| W | 1 | 1 | 0 | 0 | 1 | 0 | 3 | |
| WNW | 0 | 0 | 4 | 3 | 2 | 1 | 10 | |
| NW | 0 | 3 | 6 | 5 | 4 | 0 | 18 | |
| NNW | 0 | 3 | 6 | 6 | 0 | 1 | 16 | |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

132
0

PAGE 36

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEORLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 9/ 1/74 THROUGH 9/30/74

STABILITY CLASS E

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 2 | 0 | 4 | 10 | 2 | 0 | 18 |
| NNE | 0 | 2 | 0 | 3 | 0 | 0 | 5 |
| NE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| SF | 0 | 0 | 0 | 2 | 2 | 0 | 4 |
| SSE | 0 | 1 | 3 | 6 | 2 | 0 | 12 |
| S | 0 | 0 | 1 | 3 | 9 | 0 | 13 |
| SSW | 0 | 0 | 3 | 2 | 4 | 3 | 12 |
| SW | 0 | 1 | 0 | 2 | 5 | 0 | 8 |
| WSW | 1 | 0 | 1 | 0 | 6 | 0 | 8 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 6 | 7 | 7 | 0 | 20 |
| NW | 0 | 2 | 3 | 6 | 5 | 0 | 16 |
| NNW | 0 | 0 | 1 | 2 | 3 | 0 | 6 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

124
0

PAGE 37

NORTHERN STATE POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/1/74 THROUGH 9/30/74

STABILITY CLASS F

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 6 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 3 | 3 | 4 | 2 | 0 | 13 |
| NNE | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| NE | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| NNE | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| E | 3 | 1 | 1 | 0 | 0 | 0 | 5 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| SSE | 0 | 1 | 1 | 2 | 2 | 0 | 7 |
| S | 0 | 1 | 1 | 3 | 5 | 0 | 10 |
| SSW | 0 | 0 | 0 | 4 | 3 | 1 | 8 |
| SW | 0 | 0 | 1 | 2 | 5 | 0 | 8 |
| WSW | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| W | 0 | 0 | 2 | 1 | 2 | 0 | 5 |
| WNW | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NW | 0 | 1 | 2 | 3 | 3 | 0 | 14 |
| NNW | 1 | 0 | 4 | 2 | 0 | 0 | 7 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

88
0

PAGE 38

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 4/ 1/74 THROUGH 4/30/74
STABILITY CLASS G
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 3 | 0 | 0 | 0 | 5 |
| NNE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| E | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| ESE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| SE | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 1 | 3 | 2 | 0 | 6 |
| SSW | 0 | 0 | 0 | 2 | 6 | 0 | 8 |
| SW | 1 | 0 | 0 | 2 | 1 | 0 | 4 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NW | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| NNW | 0 | 2 | 2 | 0 | 0 | 0 | 4 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

38
0

PAGE 39

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 9/ 1/74 THROUGH 9/30/74

ALL CLASSES COMBINED

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M | | | | | | TOTAL |
|-----------|---------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 6 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 3 | 10 | 31 | 29 | 10 | 0 | 83 |
| NNE | 0 | 5 | 6 | 9 | 2 | 0 | 22 |
| NE | 2 | 0 | 1 | 10 | 0 | 1 | 14 |
| ENE | 2 | 1 | 1 | 3 | 0 | 0 | 7 |
| E | 4 | 2 | 1 | 0 | 1 | 0 | 8 |
| ESE | 1 | 0 | 0 | 0 | 0 | 1 | 2 |
| SE | 2 | 2 | 0 | 3 | 3 | 0 | 10 |
| SSE | 1 | 3 | 4 | 14 | 7 | 0 | 29 |
| S | 0 | 5 | 11 | 17 | 22 | 0 | 55 |
| SSW | 1 | 4 | 10 | 20 | 15 | 4 | 54 |
| SW | 1 | 3 | 6 | 14 | 16 | 0 | 42 |
| WSW | 2 | 8 | 7 | 2 | 9 | 0 | 28 |
| W | 1 | 4 | 5 | 5 | 4 | 0 | 19 |
| WNW | 0 | 0 | 13 | 14 | 13 | 1 | 41 |
| NW | 0 | 7 | 14 | 23 | 14 | 0 | 58 |
| NNW | 1 | 5 | 17 | 15 | 7 | 1 | 46 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 518
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.5 5.8 10.0 15.5 21.0 24.9

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

| | |
|-----------------------|-------|
| TOTAL HOURS | 720 |
| HOURS OF BAL DATA | 202 |
| PERCENT DATA RECOVERY | 71.04 |

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 10/ 1/74 THROUGH 10/31/74

STABILITY CLASS A

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 3 | 3 | 0 | 6 |
| S | 0 | 0 | 0 | 3 | 7 | 7 | 17 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

25

0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD : 10/ 1/74 THROUGH 10/31/74

STABILITY CLASS B

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| NE | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| ENE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| S | 0 | 0 | 1 | 4 | 2 | 0 | 7 |
| SSW | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| SW | 0 | 0 | 3 | 1 | 1 | 0 | 5 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NNW | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

24
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 10/ 1/74 THROUGH 10/31/74

STABILITY CLASS C

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| NNE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NF | 0 | 1 | 2 | 1 | 0 | 0 | 4 |
| ENE | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SF | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| SSE | 0 | 0 | 1 | 1 | 1 | 0 | 3 |
| S | 0 | 0 | 3 | 1 | 4 | 0 | 8 |
| SSW | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| SW | 0 | 0 | 7 | 0 | 0 | 1 | 8 |
| WSW | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| W | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 3 | 1 | 0 | 4 |
| NNW | 0 | 1 | 3 | 1 | 0 | 0 | 5 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

51
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 10/ 1/74 THROUGH 10/31/74

STABILITY CLASS D

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 3 | 12 | 1 | 5 | 0 | 22 |
| NNE | 0 | 2 | 1 | 2 | 7 | 0 | 12 |
| NE | 1 | 3 | 5 | 1 | 0 | 0 | 10 |
| ENE | 2 | 4 | 2 | 0 | 0 | 0 | 8 |
| E | 0 | 2 | 1 | 5 | 1 | 0 | 9 |
| ESE | 4 | 0 | 3 | 4 | 0 | 0 | 11 |
| SE | 2 | 0 | 5 | 1 | 0 | 0 | 8 |
| SSE | 1 | 0 | 3 | 4 | 0 | 0 | 8 |
| S | 1 | 3 | 4 | 15 | 8 | 3 | 34 |
| SSW | 3 | 2 | 2 | 2 | 6 | 3 | 18 |
| SW | 2 | 3 | 4 | 3 | 4 | 0 | 16 |
| WSW | 3 | 4 | 2 | 1 | 1 | 0 | 11 |
| W | 2 | 5 | 0 | 2 | 7 | 0 | 16 |
| WNW | 3 | 3 | 2 | 9 | 10 | 0 | 27 |
| NW | 1 | 4 | 6 | 5 | 8 | 1 | 25 |
| NNW | 1 | 6 | 6 | 1 | 4 | 0 | 18 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE

256

HOURS OF CALM THIS PAGE

0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 10/ 1/74 THROUGH 10/31/74

STABILITY CLASS E

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 1 | 1 | 3 | 2 | 0 | 0 | 7 |
| NNE | 1 | 0 | 1 | 1 | 0 | 0 | 3 |
| NE | 4 | 3 | 0 | 1 | 0 | 0 | 8 |
| ENE | 3 | 1 | 0 | 1 | 0 | 0 | 5 |
| E | 2 | 0 | 2 | 6 | 0 | 0 | 10 |
| ESE | 0 | 0 | 3 | 7 | 0 | 0 | 10 |
| SE | 2 | 0 | 1 | 16 | 2 | 0 | 21 |
| SSE | 2 | 0 | 2 | 8 | 7 | 0 | 19 |
| S | 0 | 2 | 6 | 7 | 31 | 3 | 49 |
| SSW | 1 | 1 | 4 | 4 | 6 | 6 | 25 |
| SW | 2 | 3 | 1 | 1 | 8 | 1 | 16 |
| WSW | 0 | 2 | 1 | 0 | 2 | 1 | 6 |
| W | 0 | 3 | 2 | 1 | 0 | 0 | 6 |
| WNW | 2 | 1 | 2 | 2 | 5 | 1 | 14 |
| NW | 0 | 0 | 1 | 5 | 9 | 0 | 15 |
| NNW | 1 | 2 | 0 | 2 | 7 | 3 | 15 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

229
0

PAGE 37

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 10/1/74 THROUGH 10/31/74

STABILITY CLASS F

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| NNE | 1 | 0 | 1 | 1 | 3 | 0 | 6 |
| NE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| ENE | 2 | 0 | 1 | 0 | 0 | 0 | 3 |
| E | 1 | 0 | 0 | 1 | 0 | 0 | 2 |
| ESE | 0 | 1 | 2 | 0 | 0 | 0 | 3 |
| SE | 0 | 1 | 2 | 2 | 0 | 0 | 5 |
| SSE | 1 | 2 | 1 | 3 | 3 | 0 | 10 |
| S | 0 | 0 | 0 | 4 | 2 | 0 | 6 |
| SSW | 0 | 0 | 1 | 3 | 6 | 0 | 10 |
| SW | 1 | 0 | 0 | 1 | 6 | 0 | 8 |
| WSW | 1 | 0 | 3 | 3 | 0 | 0 | 7 |
| W | 0 | 0 | 2 | 2 | 1 | 0 | 5 |
| WNW | 1 | 1 | 1 | 2 | 3 | 0 | 8 |
| NW | 1 | 0 | 0 | 3 | 0 | 0 | 4 |
| NNW | 0 | 0 | 0 | 0 | 6 | 2 | 8 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

97

0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 10/ 1/74 THROUGH 10/31/74

STABILITY CLASS G

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| ENE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| SSE | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| S | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| SSW | 0 | 0 | 0 | 3 | 4 | 0 | 7 |
| SW | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| WSW | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| W | 0 | 0 | 0 | 7 | 0 | 0 | 7 |
| WNW | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAK | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

29
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 10/ 1/74 THROUGH 10/31/74
ALL CLASSES COMBINED
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 2 | 4 | 17 | 6 | 1 | 0 | 34 |
| NNE | 2 | 2 | 3 | 7 | 10 | 0 | 24 |
| NE | 6 | 12 | 7 | 1 | 0 | 0 | 31 |
| ENE | 7 | 7 | 9 | 1 | 0 | 0 | 24 |
| E | 2 | 2 | 3 | 12 | 1 | 0 | 21 |
| ESE | 4 | 1 | 8 | 11 | 0 | 0 | 24 |
| SE | 4 | 1 | 6 | 21 | 3 | 0 | 37 |
| SSE | 4 | 3 | 6 | 20 | 14 | 0 | 44 |
| S | 1 | 6 | 20 | 35 | 54 | 13 | 129 |
| SSW | 4 | 3 | 7 | 12 | 28 | 9 | 63 |
| SW | 5 | 6 | 15 | 6 | 23 | 2 | 57 |
| WSW | 4 | 7 | 8 | 5 | 4 | 1 | 29 |
| W | 2 | 0 | 5 | 13 | 8 | 0 | 37 |
| WNW | 0 | 0 | 6 | 17 | 18 | 1 | 53 |
| NW | 2 | 6 | 7 | 17 | 15 | 1 | 51 |
| NNW | 2 | 9 | 9 | 6 | 17 | 5 | 48 |
| VAK | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 711
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.3 5.4 9.9 15.6 21.0 26.3

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 744
HOURS OF BAD DATA 23
PERCENT DATA RECOVERY 95.56

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/30/74

STABILITY CLASS A

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M | | | | | | LEVEL ABOVE 24 | TOTAL |
|-----------|---------------------------|--------|---------|----------|----------|----|----------------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | 24 | | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

3
0

PAGE 33

NORTHERN S - S POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOR - Y - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/30/74

STABILITY CLASS B

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

1
0

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/30/74

STABILITY CLASS C

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|-------------------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 1 | 0 | 0 | 1 |
| SSE | 0 | 0 | 0 | 2 | 0 | 2 |
| S | 0 | 0 | 1 | 2 | 0 | 3 |
| SSW | 0 | 0 | 1 | 1 | 0 | 2 |
| SW | 0 | 1 | 1 | 0 | 0 | 2 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 1 | 1 | 1 | 3 |
| NW | 0 | 0 | 0 | 2 | 1 | 3 |
| NNW | 0 | 0 | 0 | 1 | 0 | 1 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE18
0

PAGE 35

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/30/74
STABILITY CLASS D
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M | | | | | | TOTAL |
|-----------|---------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 4 | 1 | 2 | 7 | 0 | 14 |
| NNE | 3 | 6 | 4 | 4 | 0 | 0 | 17 |
| NE | 3 | 5 | 7 | 18 | 0 | 0 | 33 |
| ENE | 1 | 3 | 3 | 0 | 0 | 0 | 7 |
| E | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| ESE | 1 | 2 | 1 | 0 | 0 | 0 | 4 |
| SE | 1 | 10 | 3 | 1 | 5 | 0 | 20 |
| SSE | 0 | 3 | 7 | 6 | 3 | 3 | 22 |
| S | 1 | 1 | 4 | 6 | 1 | 1 | 14 |
| SSW | 0 | 3 | 8 | 3 | 1 | 0 | 15 |
| SW | 0 | 2 | 5 | 6 | 2 | 0 | 15 |
| WSW | 3 | 5 | 3 | 0 | 0 | 0 | 11 |
| W | 2 | 25 | 20 | 7 | 8 | 0 | 62 |
| WNW | 1 | 10 | 6 | 20 | 24 | 3 | 64 |
| NW | 2 | 0 | 5 | 14 | 32 | 10 | 63 |
| NNW | 2 | 1 | 8 | 13 | 10 | 0 | 34 |
| VAH | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

410
0

PAGE 34

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/30/74

STABILITY CLASS E

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 1 | 5 | 4 | 2 | 0 | 15 |
| NNE | 1 | 3 | 2 | 1 | 0 | 0 | 7 |
| NE | 0 | 0 | 0 | 9 | 2 | 0 | 11 |
| ENE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| E | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 2 | 5 | 5 | 0 | 12 |
| SSE | 0 | 2 | 2 | 15 | 1 | 0 | 20 |
| S | 1 | 2 | 1 | 6 | 5 | 0 | 15 |
| SSW | 0 | 0 | 2 | 5 | 10 | 0 | 17 |
| SW | 1 | 1 | 3 | 2 | 0 | 0 | 7 |
| WSW | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| W | 1 | 6 | 6 | 10 | 7 | 0 | 32 |
| WNW | 1 | 3 | 4 | 5 | 12 | 0 | 25 |
| NW | 0 | 0 | 0 | 8 | 8 | 0 | 16 |
| NNW | 0 | 0 | 0 | 7 | 3 | 0 | 10 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

191
0

PAGE 37

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/30/74
STABILITY CLASS F
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| NNE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| NE | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| ENE | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| E | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| SSE | 1 | 1 | 0 | 1 | 4 | 0 | 7 |
| S | 0 | 2 | 1 | 7 | 6 | 0 | 16 |
| SSW | 0 | 1 | 2 | 3 | 11 | 0 | 17 |
| SW | 0 | 0 | 0 | 1 | 5 | 1 | 7 |
| WSW | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| W | 0 | 0 | 0 | 0 | 4 | 1 | 5 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

66
0

PAGE 38
 NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/30/74
 STABILITY CLASS G
 ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M | | | | | | TOTAL |
|-----------|---------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| NNE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| NE | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| ENE | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 1 | 2 | 0 | 0 | 3 |
| ESE | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 35
 HOURS OF CALM THIS PAGE 0

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
 SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
 10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA 1
 140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA 1

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 11/ 1/74 THROUGH 11/30/74
 ALL CLASSES COMBINED
 ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M | | | | | LEVEL ABOVE 24 | TOTAL |
|-----------|---------------------------|--------|---------|----------|----------|----------------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | | |
| N | 0 | 5 | 9 | 10 | 10 | 0 | 34 |
| NNE | 4 | 9 | 7 | 6 | 0 | 0 | 26 |
| NE | 3 | 5 | 7 | 29 | 4 | 0 | 48 |
| ENE | 1 | 5 | 4 | 0 | 0 | 0 | 10 |
| E | 5 | 0 | 1 | 2 | 0 | 0 | 8 |
| ESE | 1 | 2 | 1 | 0 | 2 | 0 | 6 |
| SE | 1 | 10 | 7 | 7 | 10 | 6 | 41 |
| SSE | 1 | 6 | 9 | 24 | 8 | 3 | 51 |
| S | 2 | 5 | 7 | 22 | 12 | 1 | 49 |
| SSW | 0 | 4 | 13 | 15 | 23 | 3 | 58 |
| SW | 1 | 4 | 9 | 9 | 7 | 1 | 31 |
| WSW | 3 | 9 | 3 | 0 | 0 | 0 | 15 |
| W | 5 | 33 | 26 | 17 | 19 | 1 | 99 |
| WNW | 2 | 13 | 11 | 26 | 37 | 3 | 92 |
| NW | 2 | 4 | 5 | 24 | 41 | 10 | 90 |
| NNW | 2 | 1 | 8 | 22 | 13 | 0 | 46 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 704
 HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.7 4.4 6.7 15.6 20.9 26.5

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 720
 HOURS OF BAD DATA 10
 PERCENT DATA RECOVERY 97.78

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/ 1/74 THROUGH 12/31/74

STABILITY CLASS A

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE

1

HOURS OF CALM THIS PAGE

0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/ 1/74 THROUGH 12/31/74
STABILITY CLASS B
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 1
HOURS OF CALM THIS PAGE 0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/ 1/74 THROUGH 12/31/74

STABILITY CLASS C

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| S | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

4
0

PAGE 35

NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASS DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METERS STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/1/74 THROUGH 12/31/74
STABILITY CLASS D
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 2 | 1 | 1 | 3 | 0 | 0 | 7 |
| NNE | 1 | 0 | 0 | 3 | 1 | 0 | 5 |
| NE | 2 | 2 | 3 | 3 | 5 | 0 | 15 |
| ENE | 1 | 5 | 3 | 3 | 0 | 0 | 14 |
| E | 0 | 6 | 12 | 10 | 2 | 0 | 30 |
| ESE | 0 | 3 | 5 | 8 | 3 | 0 | 19 |
| SE | 0 | 1 | 1 | 8 | 5 | 0 | 15 |
| SSE | 0 | 8 | 13 | 7 | 1 | 0 | 29 |
| S | 0 | 1 | 13 | 20 | 3 | 1 | 38 |
| SSW | 2 | 3 | 6 | 1 | 1 | 0 | 13 |
| SW | 2 | 5 | 3 | 1 | 0 | 0 | 11 |
| WSW | 3 | 0 | 4 | 4 | 1 | 0 | 18 |
| W | 2 | 17 | 1 | 7 | 1 | 0 | 28 |
| WNW | 1 | 10 | 6 | 12 | 0 | 0 | 29 |
| NW | 2 | 16 | 18 | 14 | 19 | 2 | 71 |
| NNW | 3 | 2 | 4 | 9 | 3 | 12 | 33 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

375
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT

SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES

10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T

140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/ 1/74 THROUGH 12/31/74

STABILITY CLASS E

ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 3 | 1 | 0 | 0 | 0 | 4 |
| NNE | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| NE | 0 | 2 | 3 | 1 | 0 | 0 | 6 |
| ENE | 0 | 3 | 2 | 0 | 0 | 0 | 5 |
| E | 0 | 0 | 2 | 3 | 2 | 0 | 7 |
| ESE | 0 | 0 | 1 | 6 | 2 | 0 | 9 |
| SE | 0 | 0 | 1 | 3 | 2 | 0 | 6 |
| SSE | 0 | 0 | 1 | 5 | 2 | 0 | 8 |
| S | 1 | 2 | 1 | 13 | 14 | 0 | 31 |
| SSW | 0 | 2 | 2 | 6 | 20 | 0 | 30 |
| SW | 2 | 3 | 1 | 9 | 2 | 0 | 17 |
| WSW | 0 | 1 | 2 | 2 | 3 | 1 | 9 |
| W | 1 | 4 | 5 | 8 | 3 | 0 | 21 |
| WNW | 0 | 4 | 4 | 8 | 7 | 0 | 27 |
| NW | 3 | 4 | 1 | 3 | 5 | 0 | 16 |
| NNW | 1 | 1 | 0 | 6 | 4 | 0 | 12 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

209
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/ 1/74 THROUGH 12/31/74
STABILITY CLASS F
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M | | | | | | TOTAL |
|-----------|---------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 0 | 5 | 1 | 0 | 0 | 6 |
| NNE | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| NE | 0 | 0 | 0 | 2 | 4 | 0 | 6 |
| ENE | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| E | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ESE | 0 | 0 | 0 | 4 | 0 | 0 | 4 |
| SE | 0 | 0 | 1 | 3 | 0 | 0 | 4 |
| SSE | 0 | 1 | 1 | 2 | 2 | 0 | 6 |
| S | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| SSW | 0 | 1 | 2 | 2 | 3 | 0 | 8 |
| SW | 1 | 1 | 3 | 4 | 2 | 0 | 11 |
| WSW | 1 | 1 | 2 | 4 | 2 | 0 | 10 |
| W | 0 | 2 | 0 | 8 | 6 | 0 | 16 |
| WNW | 0 | 0 | 1 | 4 | 5 | 0 | 10 |
| NW | 1 | 2 | 3 | 2 | 1 | 0 | 9 |
| NNW | 0 | 0 | 1 | 2 | 1 | 3 | 7 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

104
0

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NORTHERN STATES POWER COMPANY - MONTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/ 1/74 THROUGH 12/31/74
STABILITY CLASS G
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 0 | 2 | 1 | 0 | 0 | 0 | 3 |
| NNE | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| NE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ENE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E | 0 | 0 | 3 | 2 | 0 | 0 | 5 |
| ESE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SSW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 0 | 0 | 0 | 4 | 1 | 0 | 5 |
| WSW | 0 | 0 | 1 | 3 | 0 | 0 | 4 |
| W | 0 | 0 | 1 | 2 | 3 | 0 | 6 |
| WNW | 0 | 0 | 0 | 2 | 1 | 0 | 3 |
| NW | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| NNW | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE
HOURS OF CALM THIS PAGE

29
0

PAGE 34

NORTHERN STATES POWER COMPANY - MLNTICELLO NUCLEAR GENERATING PLANT
SITE METEOROLOGY - FREQUENCY DISTRIBUTION TABLES
10 METER STABILITY CLASSES DETERMINED USING 140 FT - 10 METER DELTA T
140 FT AND 100 METER STABILITY CLASSES DETERMINED USING BEST AVAILABLE DELTA T

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD 12/ 1/74 THROUGH 12/31/74
ALL CLASSES COMBINED
ELEVATION 100 M

| DIRECTION | WIND SPEED (MPH) AT 100 M LEVEL | | | | | | TOTAL |
|-----------|---------------------------------|--------|---------|----------|----------|----------|-------|
| | 1 TO 3 | 4 TO 7 | 8 TO 12 | 13 TO 18 | 19 TO 24 | ABOVE 24 | |
| N | 2 | 6 | 8 | 4 | 0 | 0 | 20 |
| NNE | 2 | 0 | 0 | 4 | 4 | 0 | 10 |
| NE | 2 | 4 | 6 | 6 | 9 | 0 | 27 |
| ENE | 1 | 8 | 7 | 5 | 1 | 0 | 22 |
| E | 0 | 6 | 17 | 15 | 4 | 0 | 42 |
| ESE | 0 | 3 | 6 | 16 | 5 | 0 | 30 |
| SE | 0 | 1 | 3 | 14 | 7 | 0 | 25 |
| SSE | 0 | 4 | 15 | 16 | 6 | 0 | 41 |
| S | 1 | 2 | 15 | 35 | 19 | 1 | 73 |
| SSW | 2 | 6 | 10 | 9 | 24 | 0 | 51 |
| SW | 5 | 9 | 7 | 18 | 5 | 0 | 44 |
| WSW | 4 | 8 | 9 | 13 | 6 | 1 | 41 |
| W | 3 | 23 | 7 | 25 | 13 | 0 | 71 |
| WNW | 1 | 18 | 11 | 26 | 15 | 0 | 61 |
| NW | 6 | 22 | 22 | 19 | 25 | 3 | 97 |
| NNW | 4 | 3 | 5 | 17 | 8 | 15 | 52 |
| VAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL HOURS THIS PAGE 723
HOURS OF CALM THIS PAGE 0

AVERAGE WIND SPEED FOR EACH WIND CATEGORY

2.5 5.4 9.7 15.5 20.8 27.1

DATA RECOVERY SUMMARY FOR PERIOD OF RECORD

TOTAL HOURS 744
HOURS OF BAD DATA 21
PERCENT DATA RECOVERY 97.18