

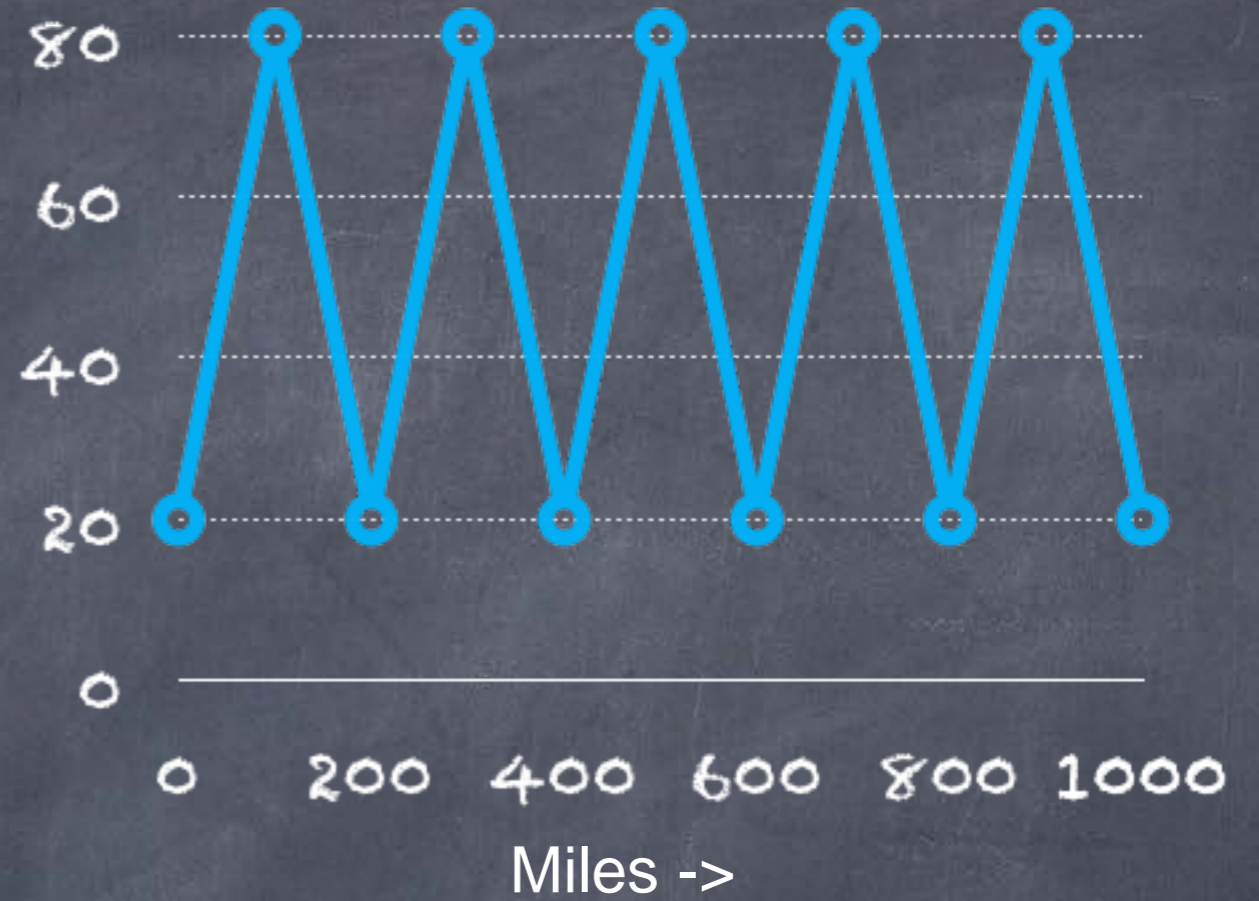


“A Day in Life of the Grid”



Car #1

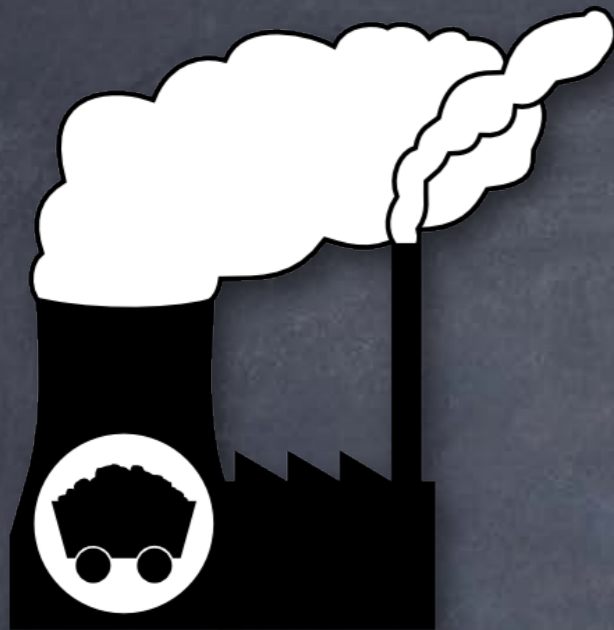
Speed



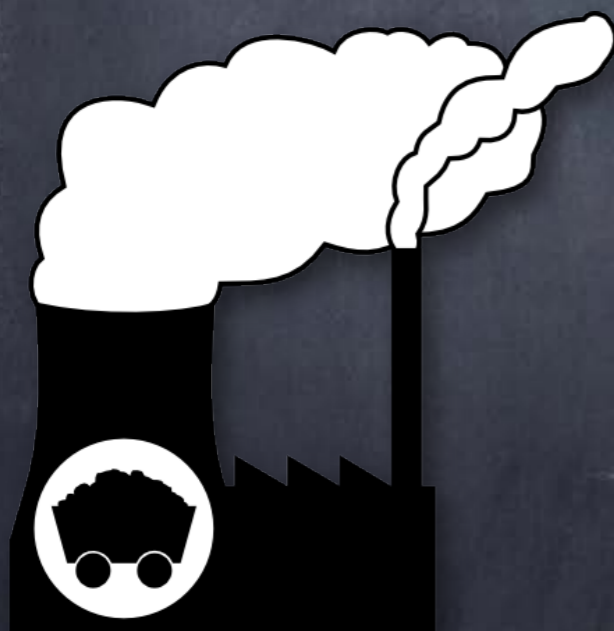
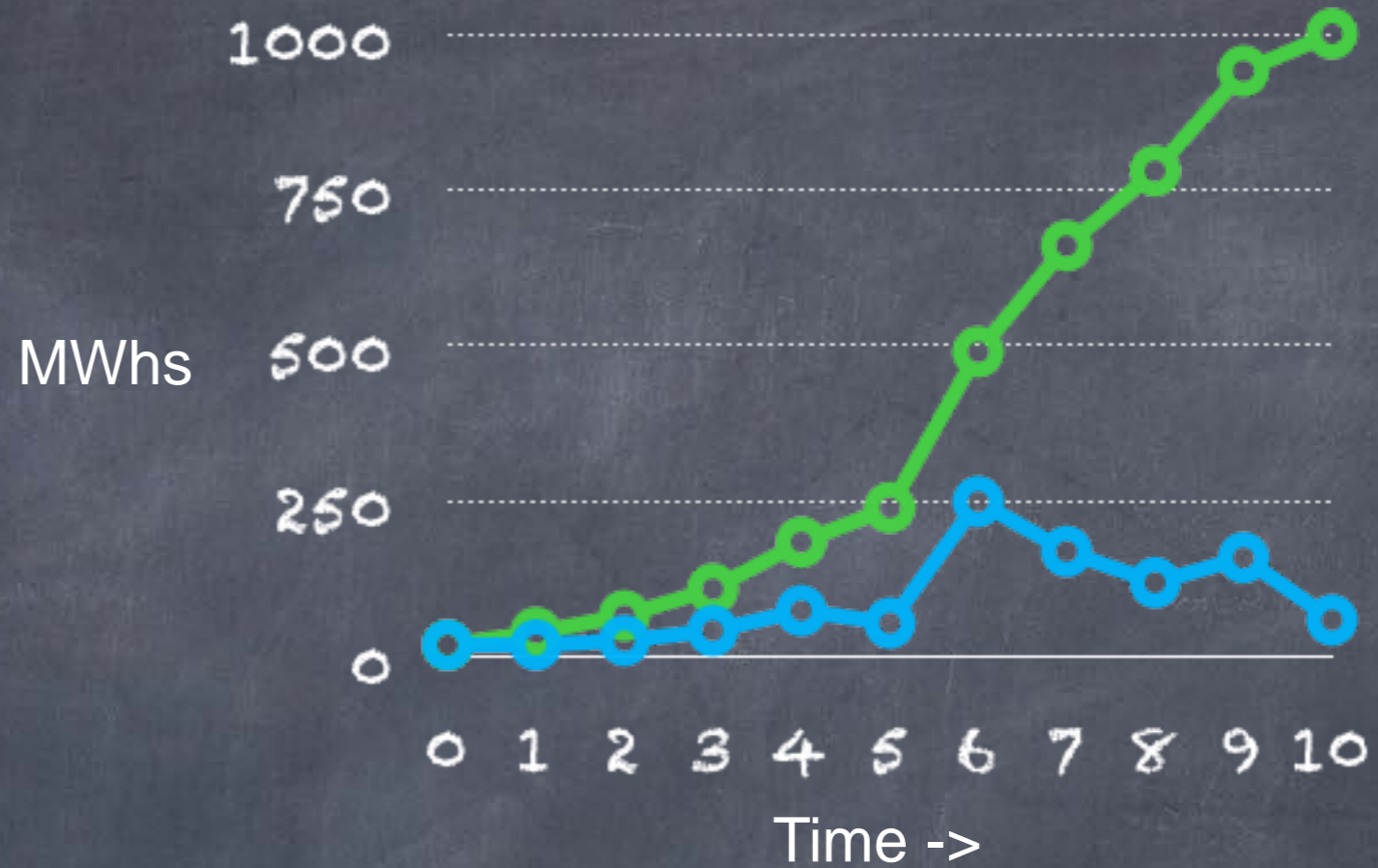
Car #2

Speed

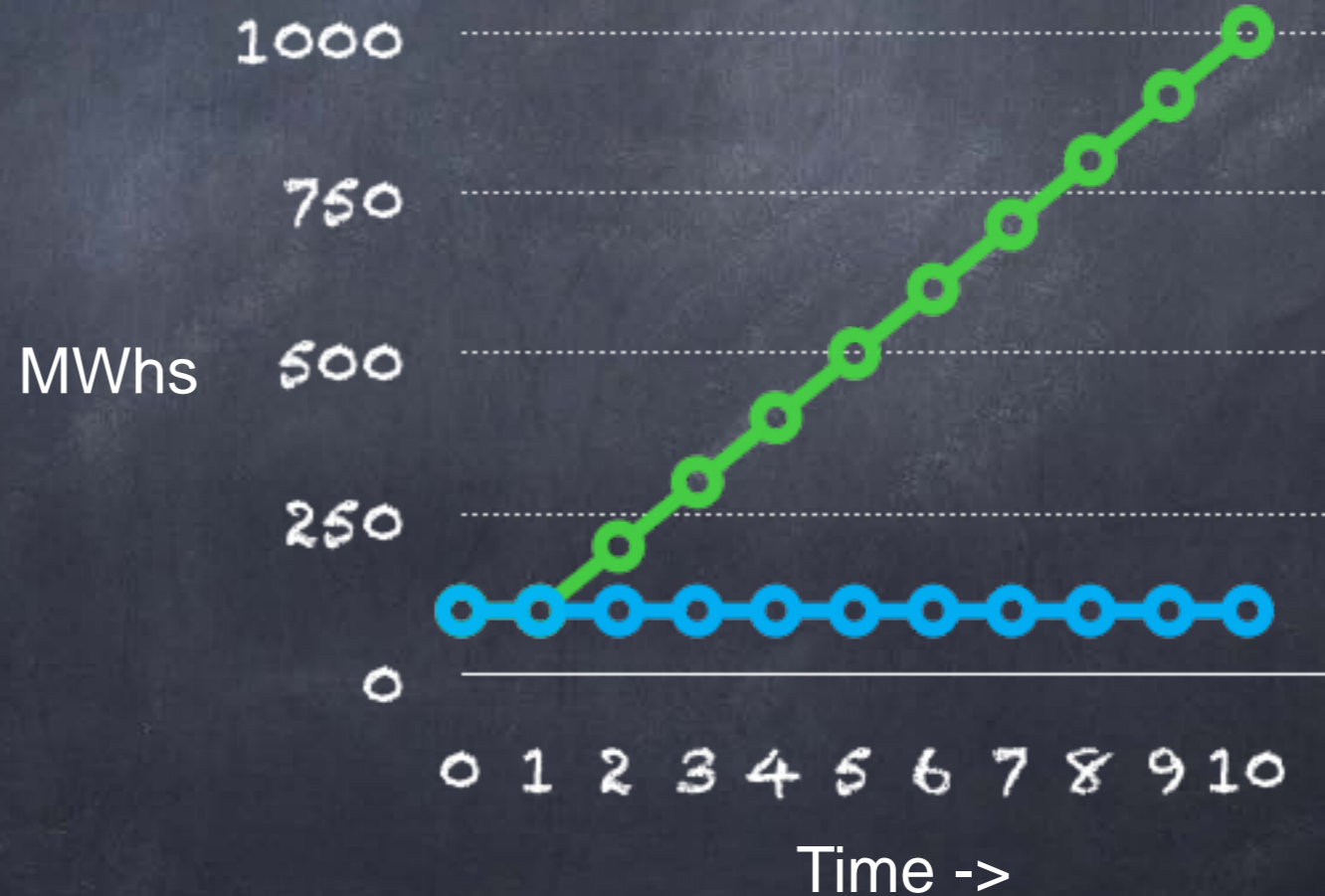


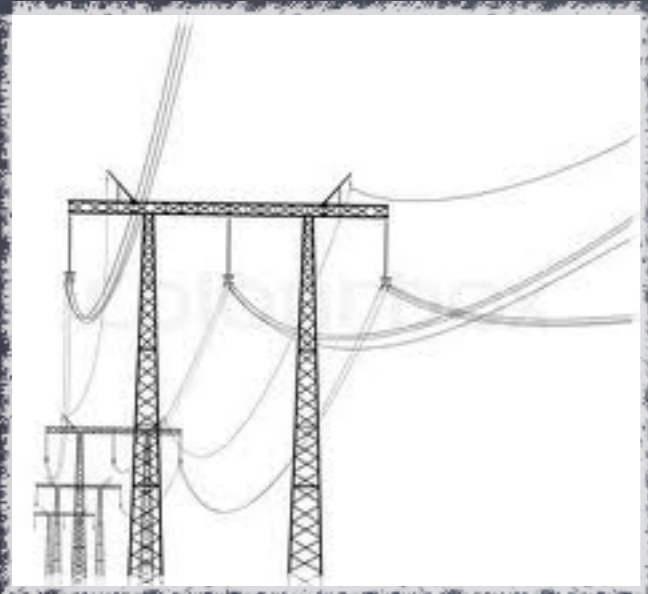


Power Plant
w/o IE



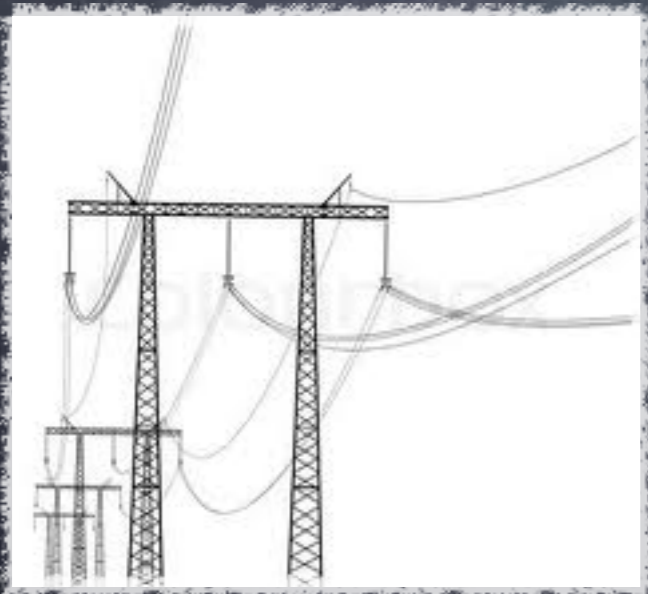
Power Plant
w/ IE





Line Losses?
w/o IE

?



Line Losses?
w/ IE

?



7/21/2011 1:00 EST

PMVP Projects

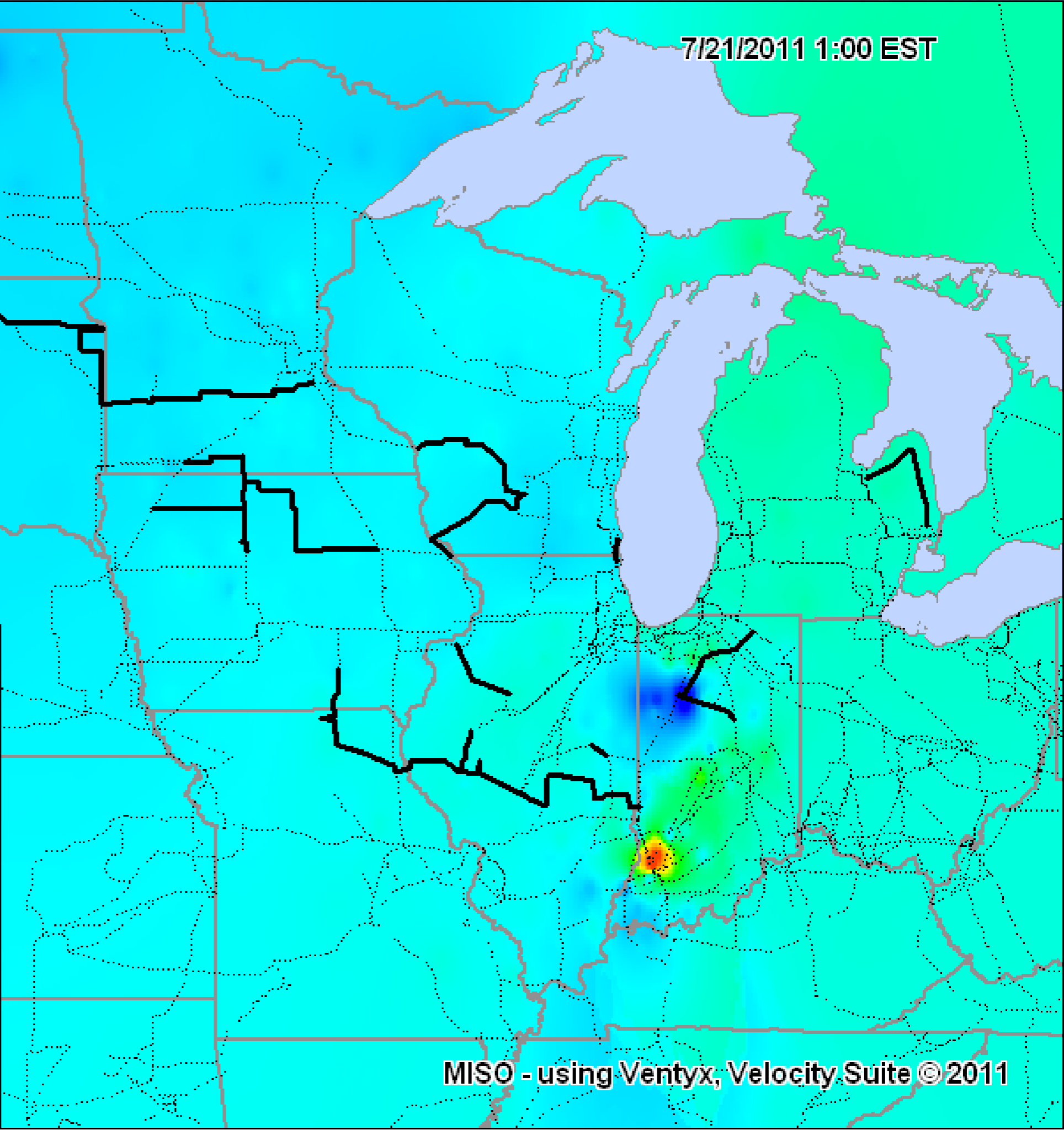
— PMVP Projects

Existing Transmission and Planned 345 kV+

..... Existing Transmission 345 kV+

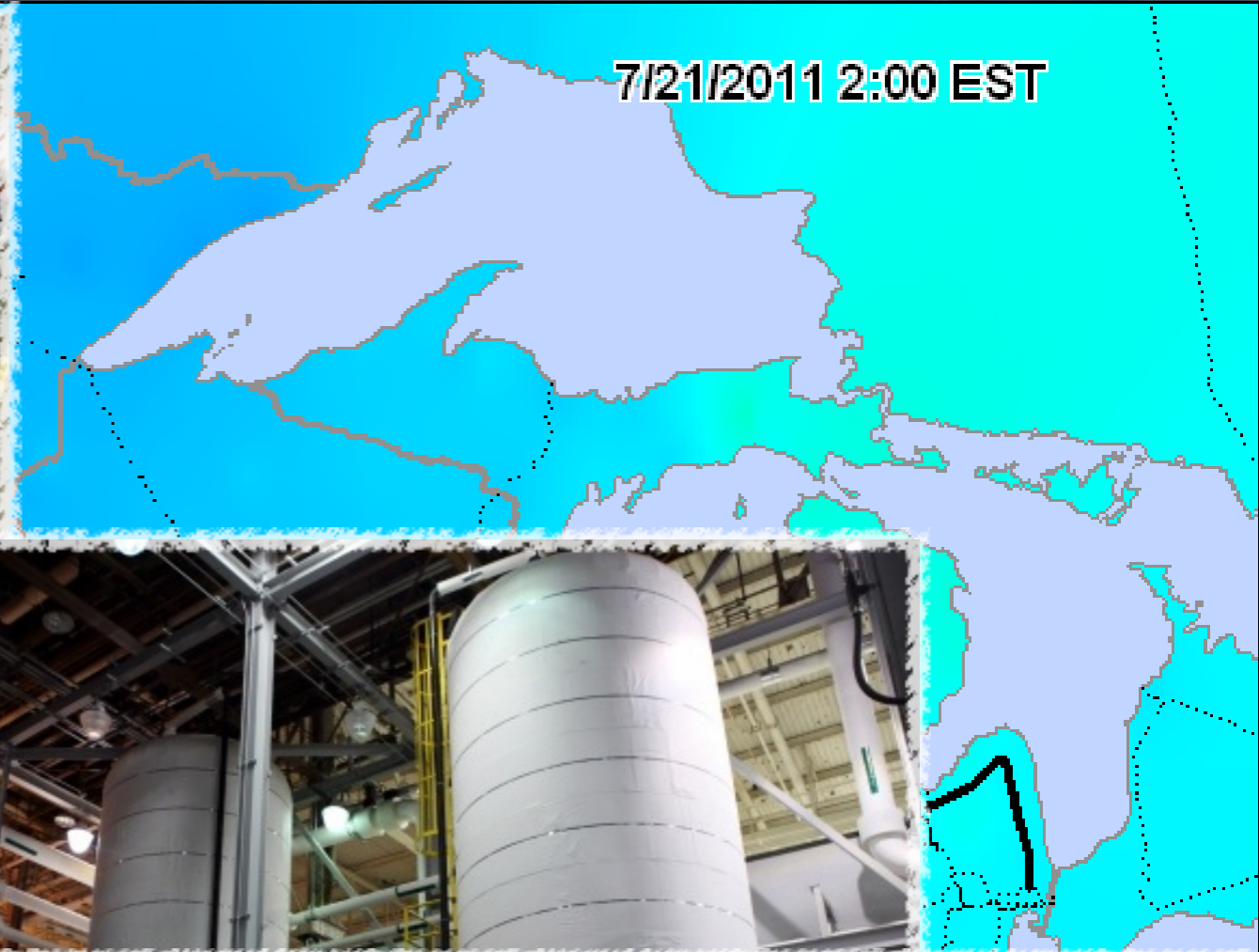
LMP (\$/MWh)

| |
|------|
| 200+ |
| 100 |
| 90 |
| 76 |
| 62 |
| 50 |
| 30 |
| 0 |
| -999 |

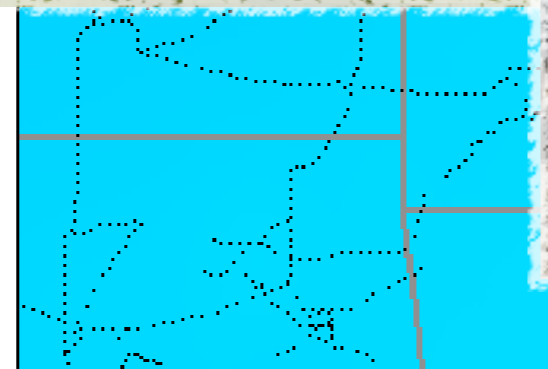


MISO - using Ventyx, Velocity Suite © 2011

7/21/2011 2:00 EST

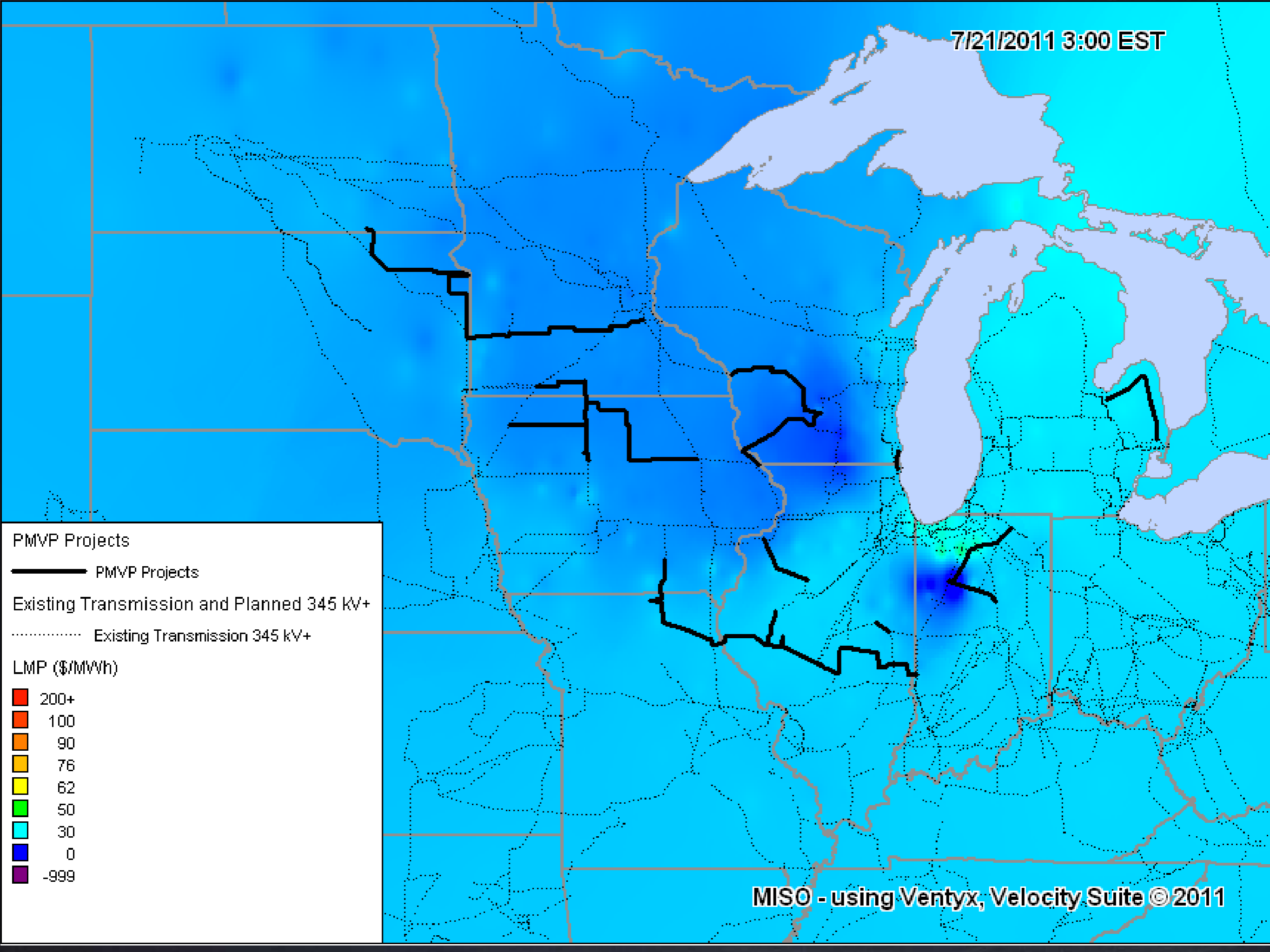


- PM
- Ex
- LM
- 62
- 50
- 30
- 0
- 999



... using ...

7/21/2011 3:00 EST



PMVP Projects

— PMVP Projects

Existing Transmission and Planned 345 kV+

..... Existing Transmission 345 kV+

LMP (\$/MWh)

- 200+
- 100
- 90
- 76
- 62
- 50
- 30
- 0
- 999

7/21/2011 4:00 EST

PMVP Projects

— PMVP Projects

Existing Transmission and Planned 345 kV+

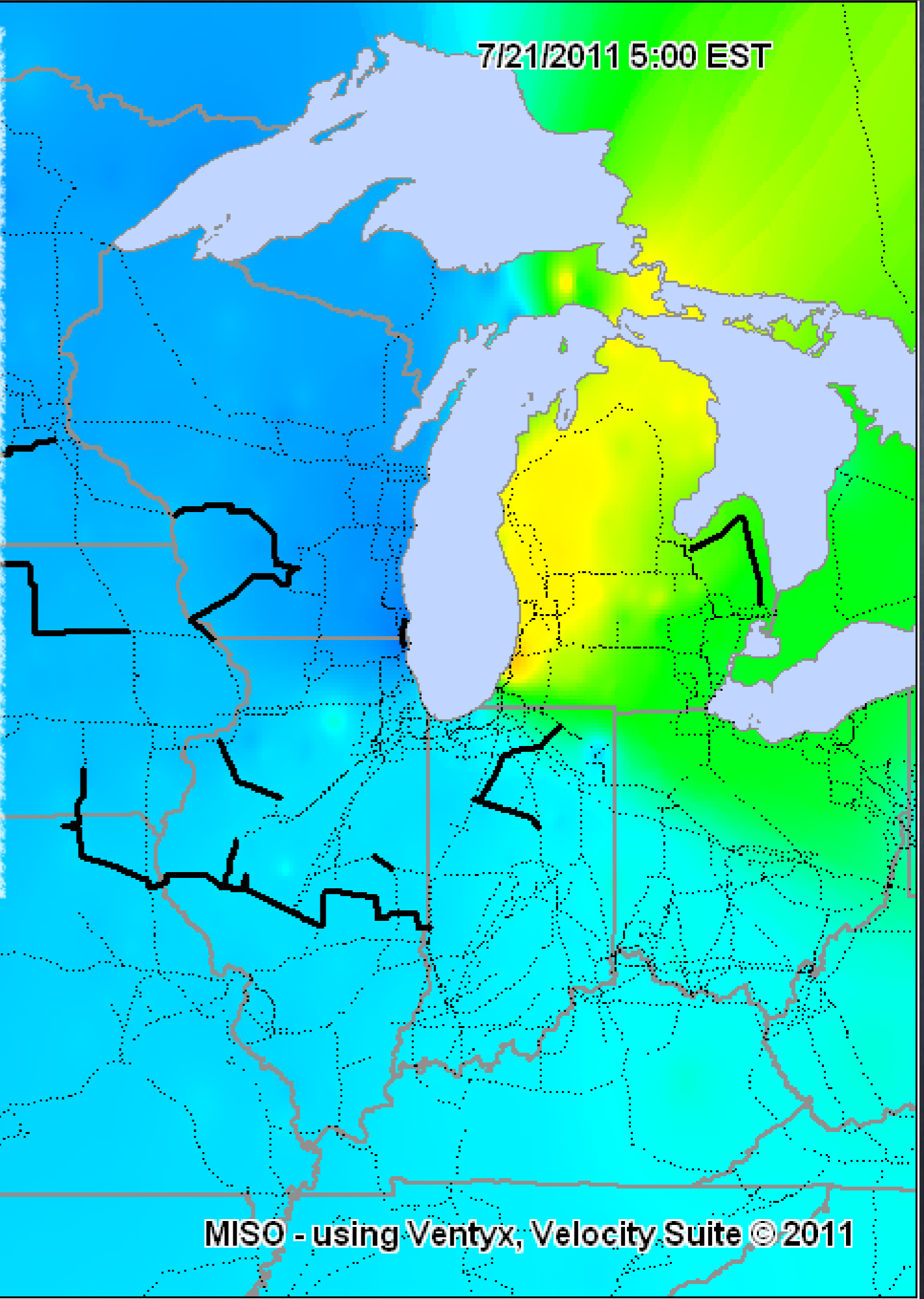
..... Existing Transmission 345 kV+

LMP (\$/MWh)

| |
|------|
| 200+ |
| 100 |
| 90 |
| 76 |
| 62 |
| 50 |
| 30 |
| 0 |
| -999 |



7/21/2011 5:00 EST



PMVP Projects
— PMVP
Existing Transm
..... Existir

LMP (\$/MWh)
200+
100
90
76
62
50
30
0
-999

MISO - using Ventyx, Velocity Suite © 2011

7/21/2011 6:00 EST

PMVP Projects

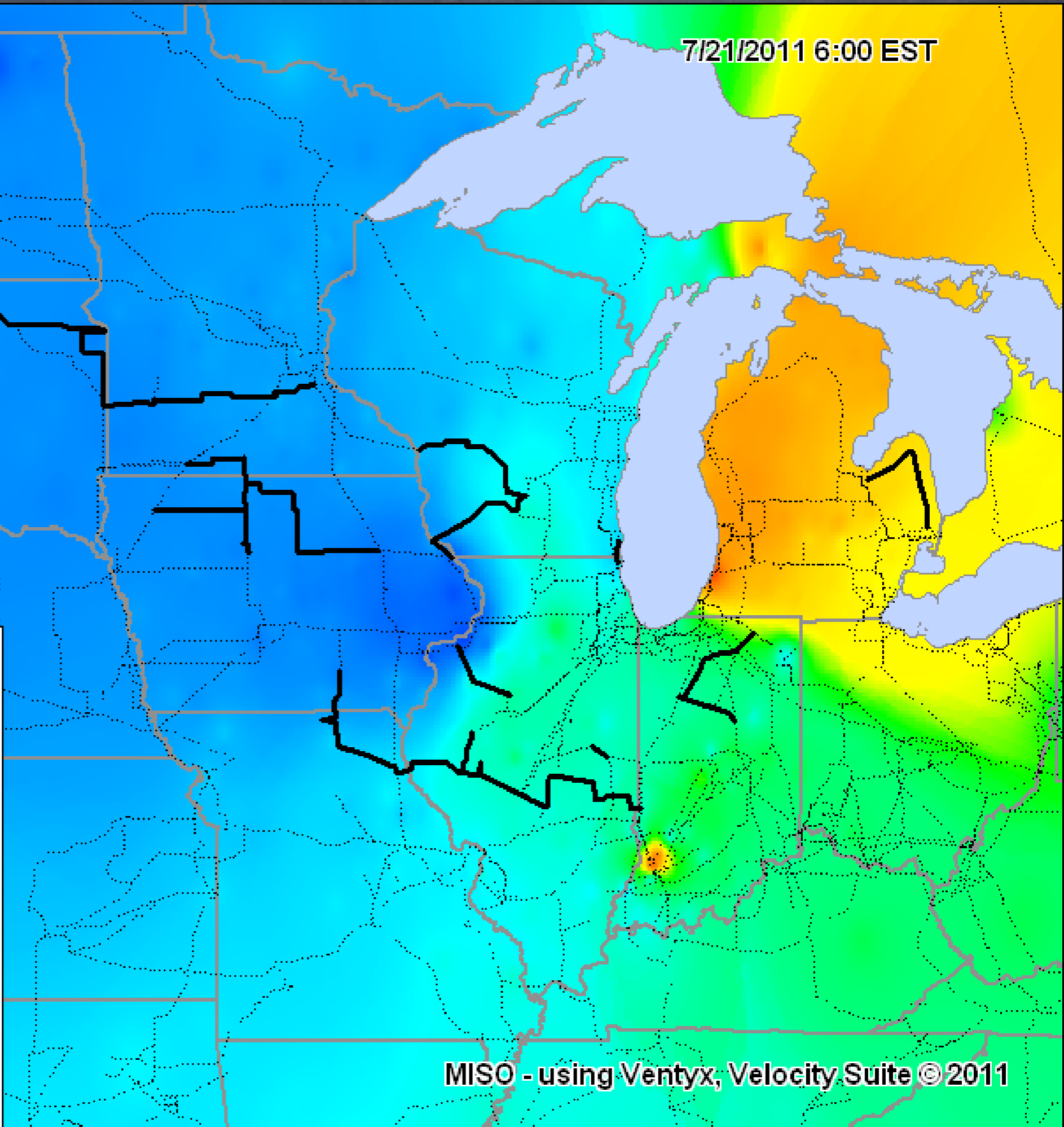
— PMVP Projects

Existing Transmission and Planned 345 kV+

..... Existing Transmission 345 kV+

LMP (\$/MWh)

| |
|------|
| 200+ |
| 100 |
| 90 |
| 76 |
| 62 |
| 50 |
| 30 |
| 0 |
| -999 |



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7/21/2011 7:00 EST

PMVP Projects

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Existing Transmission and Planned 345 kV+

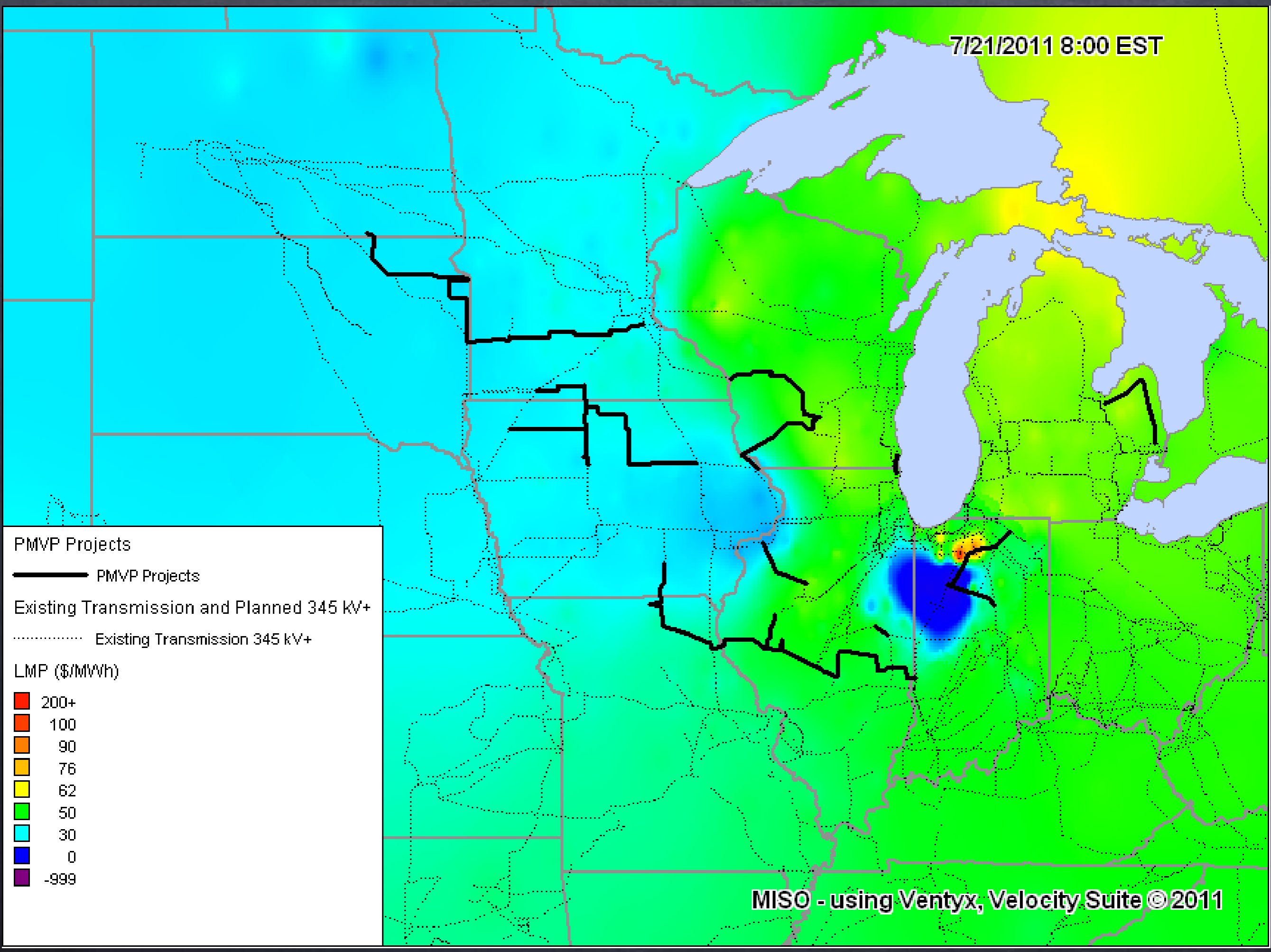
..... Existing Transmission 345 kV+

LMP (\$/MWh)

| |
|------|
| 200+ |
| 100 |
| 90 |
| 76 |
| 62 |
| 50 |
| 30 |
| 0 |
| -999 |

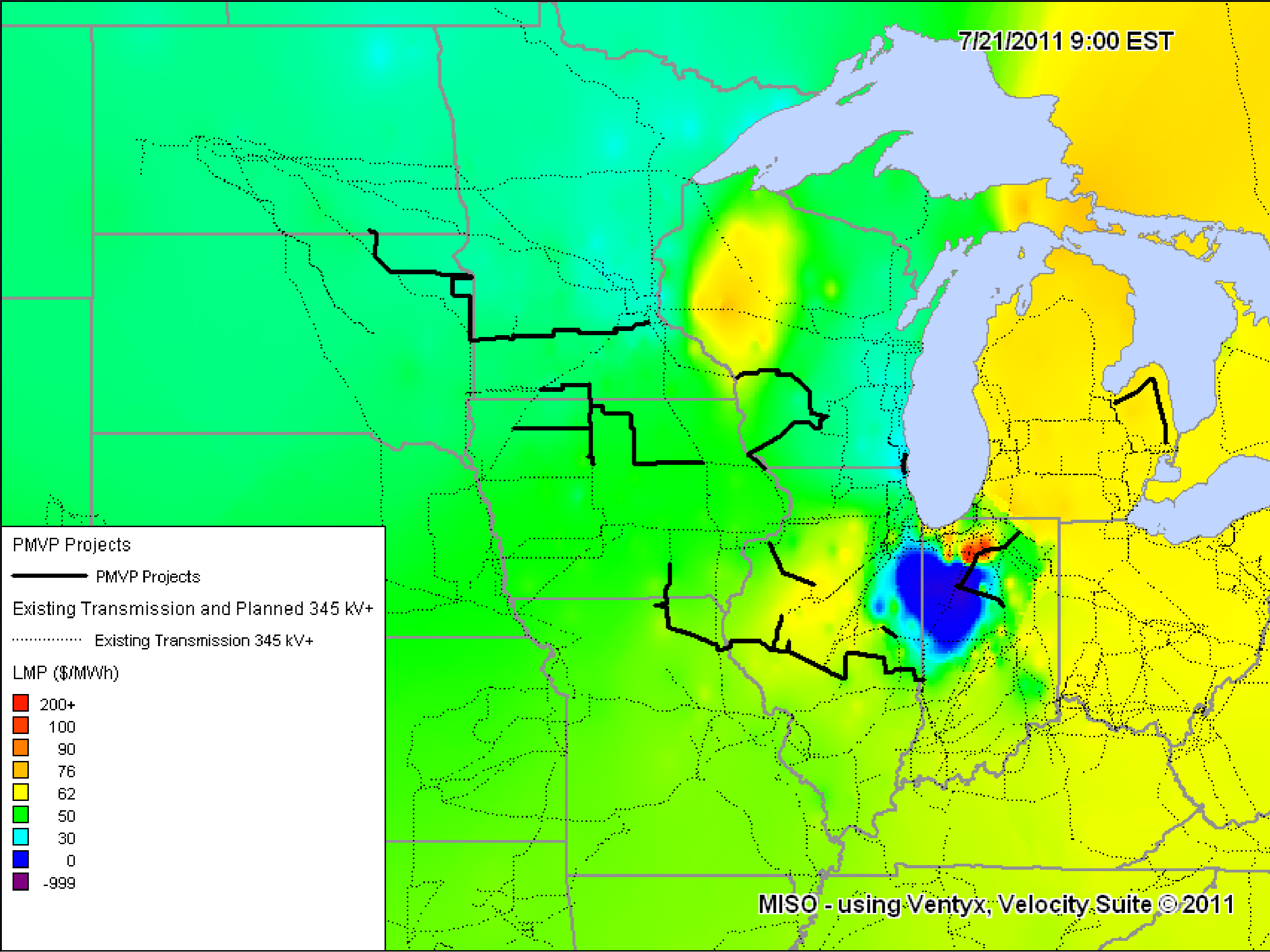
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7/21/2011 8:00 EST



MISO - using Ventyx, Velocity Suite ©2011

7/21/2011 9:00 EST



PMVP Projects

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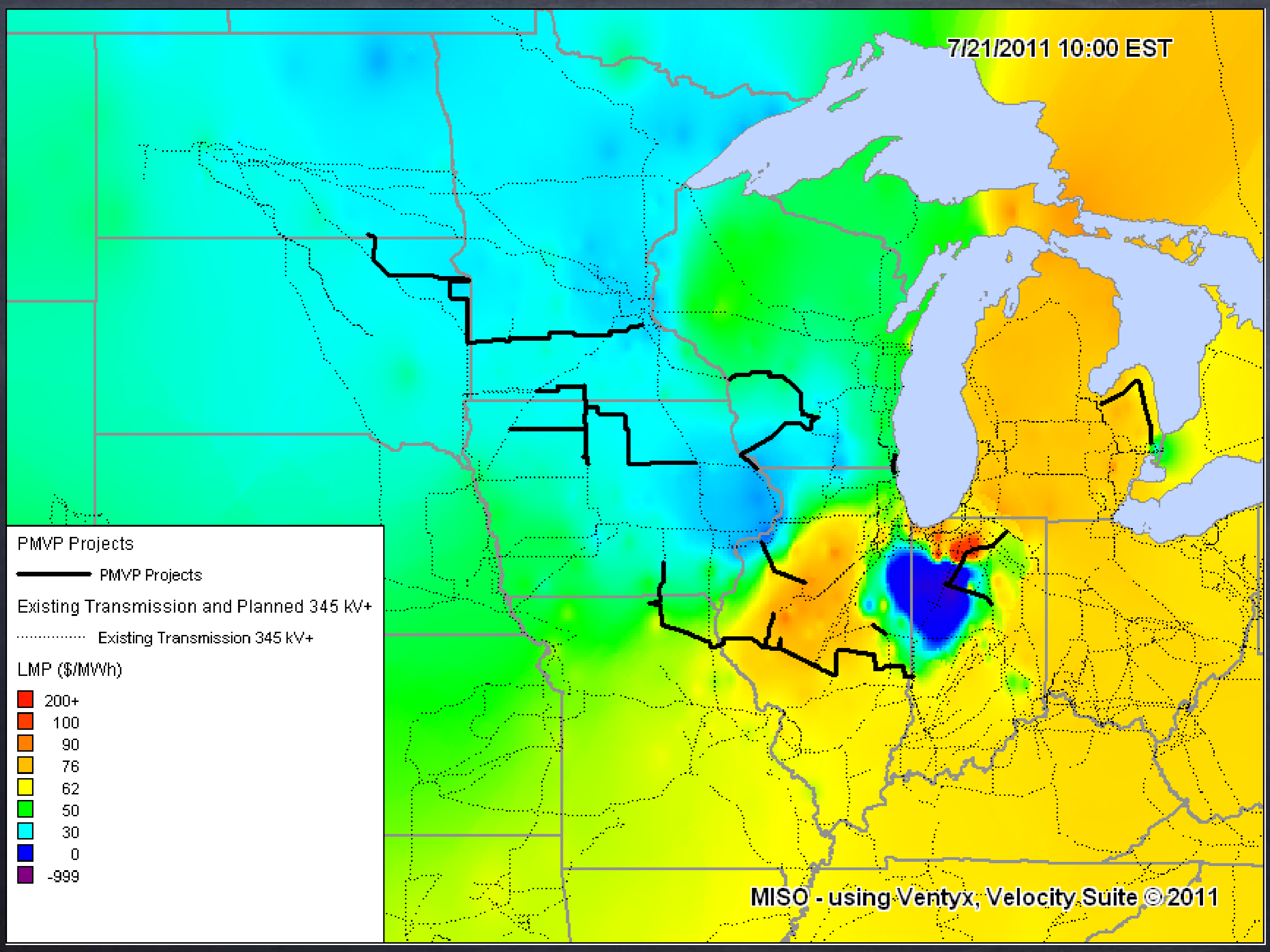
Existing Transmission and Planned 345 kV+

..... Existing Transmission 345 kV+

LMP (\$/MWh)

- 200+
- 100
- 90
- 76
- 62
- 50
- 30
- 0
- 999

7/21/2011 10:00 EST



PMVP Projects

— PMVP Projects

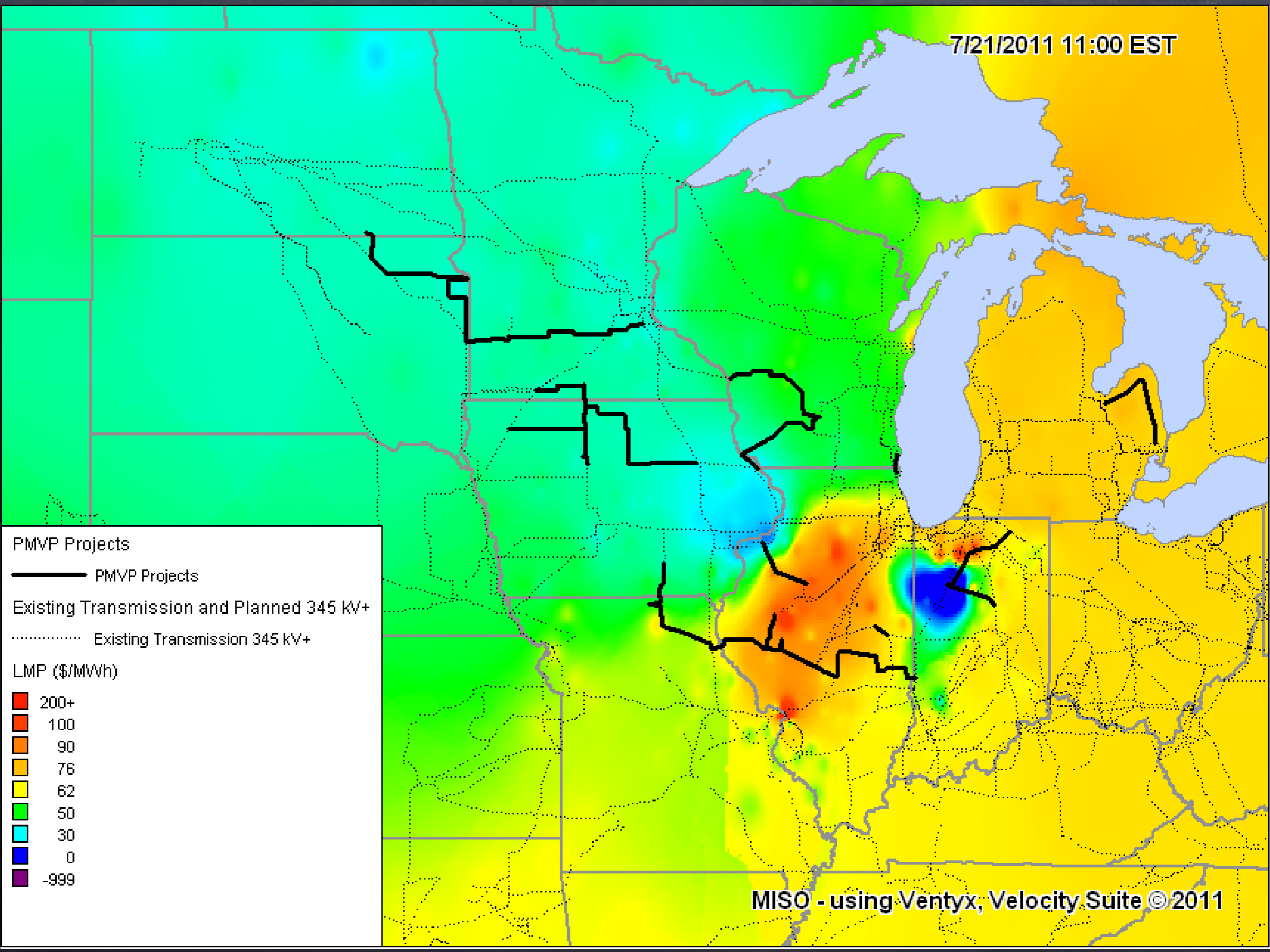
Existing Transmission and Planned 345 kV+

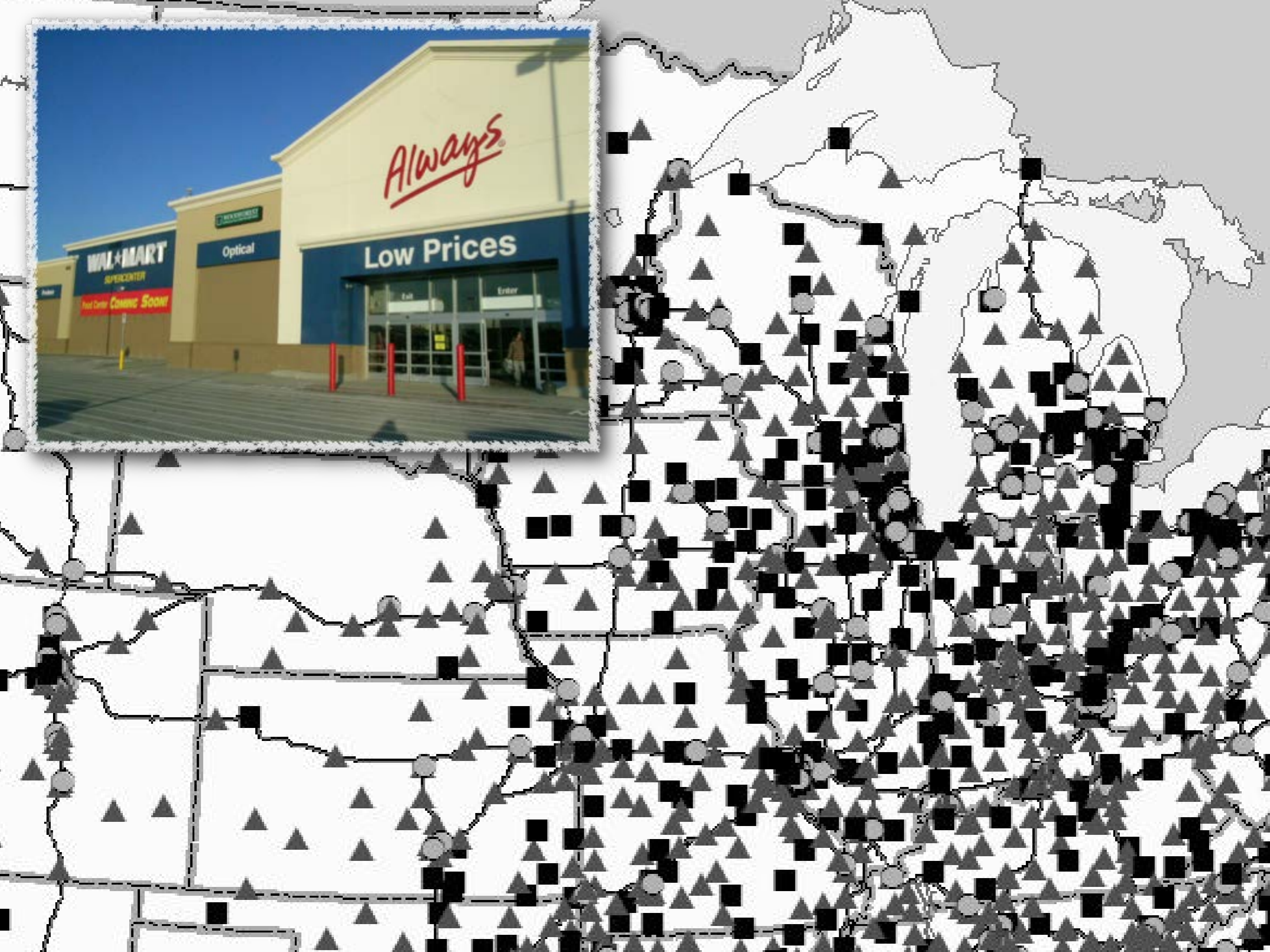
..... Existing Transmission 345 kV+

LMP (\$/MWh)

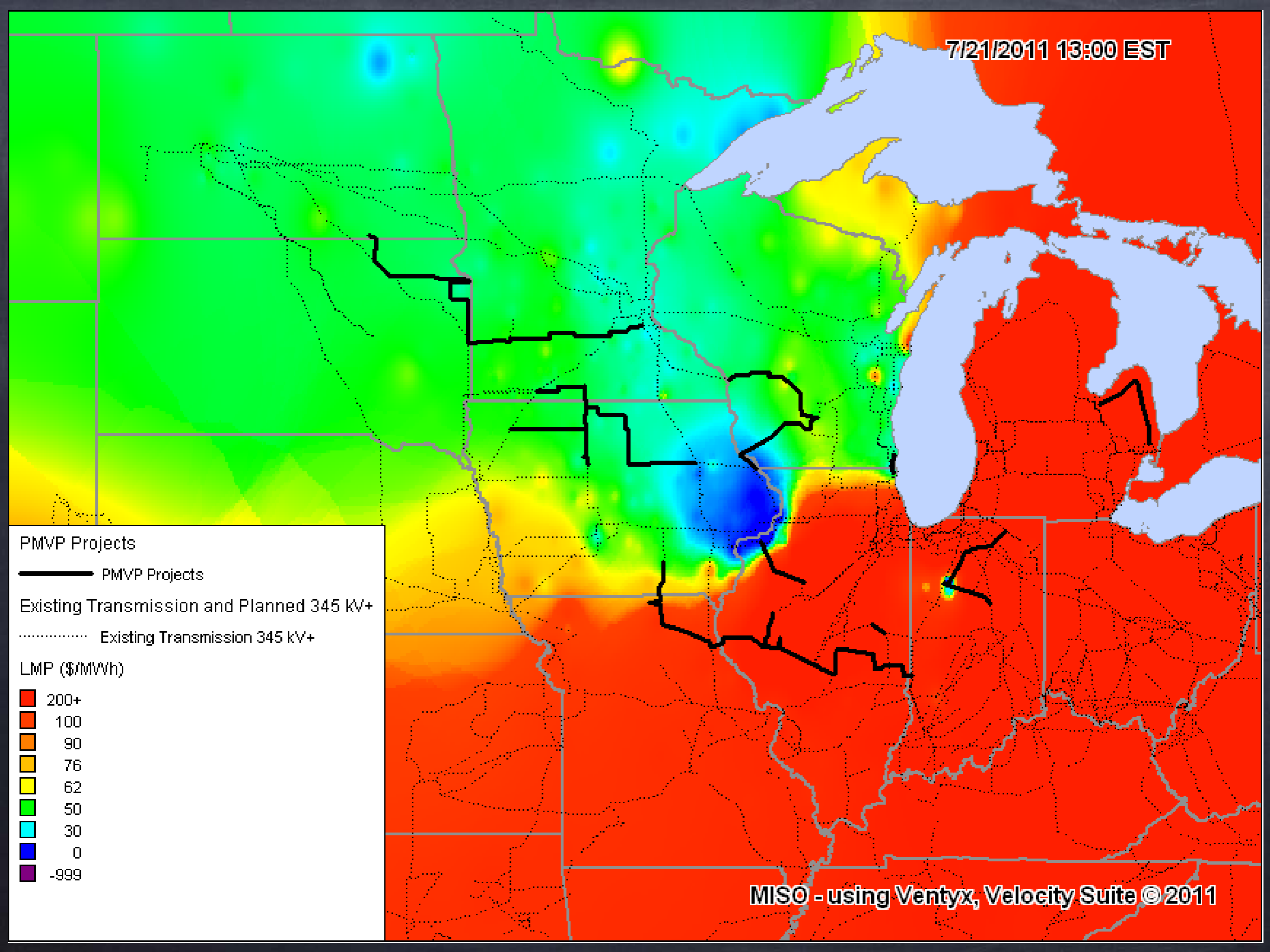
- 200+
- 100
- 90
- 76
- 62
- 50
- 30
- 0
- 999

7/21/2011 11:00 EST





7/21/2011 13:00 EST



PMVP Projects

— PMVP Projects

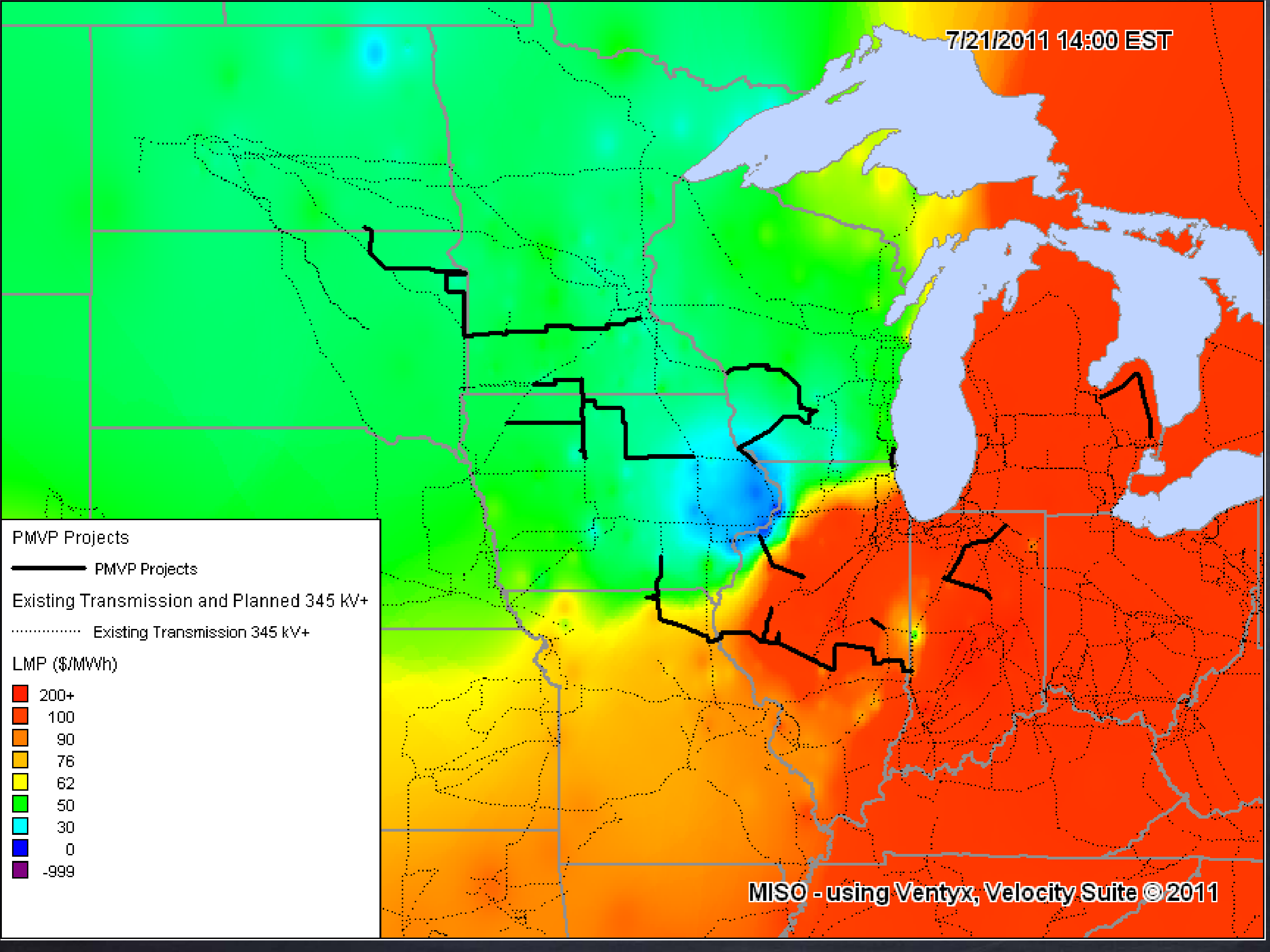
Existing Transmission and Planned 345 kV+

..... Existing Transmission 345 kV+

LMP (\$/MWh)

- 200+
- 100
- 90
- 76
- 62
- 50
- 30
- 0
- 999

7/21/2011 14:00 EST



PMVP Projects

— PMVP Projects

Existing Transmission and Planned 345 kV+

..... Existing Transmission 345 kV+

LMP (\$/MWh)

| | |
|------|---------------|
| 200+ | Dark Red |
| 100 | Red |
| 90 | Orange-Red |
| 76 | Orange |
| 62 | Yellow-Orange |
| 50 | Yellow |
| 30 | Cyan |
| 0 | Blue |
| -999 | Dark Purple |

MISO - using Ventyx, Velocity Suite ©2011

7/21/2011 15:00 EST

PMVP Projects

— PMVP Projects

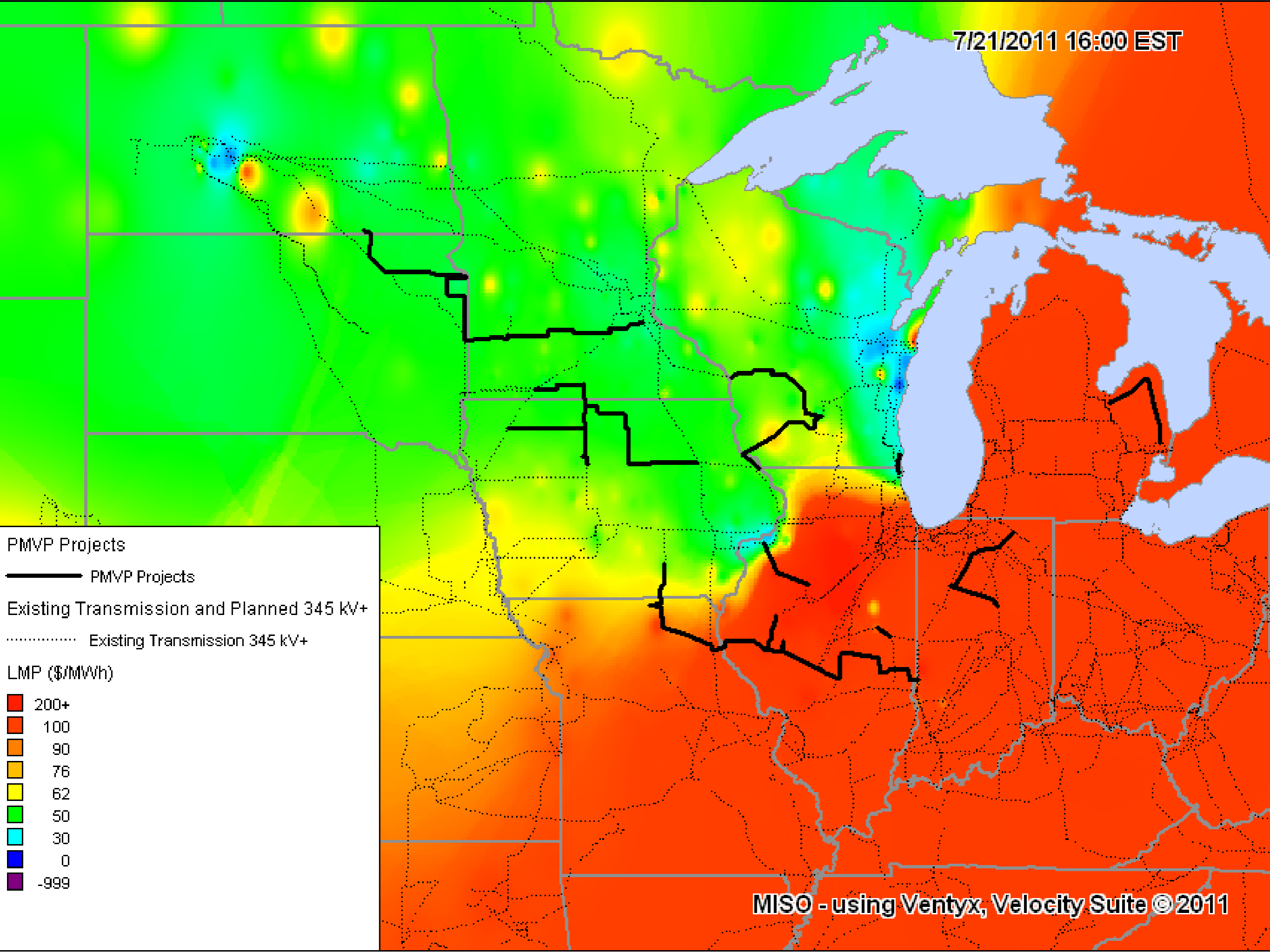
Existing Transmission and Planned 345 kV+

..... Existing Transmission 345 kV+

LMP (\$/MWh)

| |
|------|
| 200+ |
| 100 |
| 90 |
| 76 |
| 62 |
| 50 |
| 30 |
| 0 |
| -999 |

7/21/2011 16:00 EST



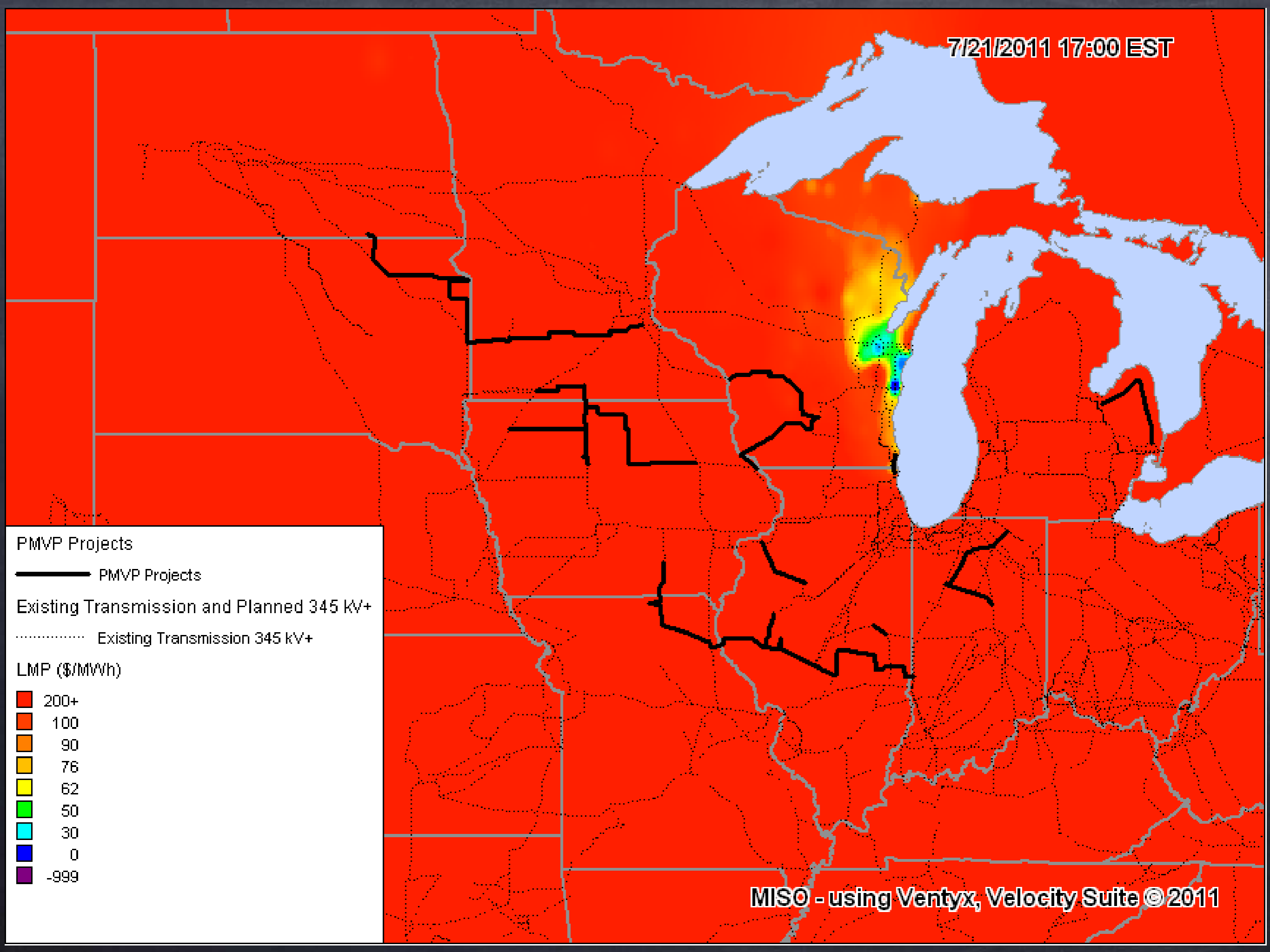
PMVP Projects
—— PMVP Projects

Existing Transmission and Planned 345 kV+
..... Existing Transmission 345 kV+

LMP (\$/MWh)

| |
|------|
| 200+ |
| 100 |
| 90 |
| 76 |
| 62 |
| 50 |
| 30 |
| 0 |
| -999 |

7/21/2011 17:00 EST



PMVP Projects

— PMVP Projects

Existing Transmission and Planned 345 kV+

..... Existing Transmission 345 kV+

LMP (\$/MWh)

- 200+
- 100
- 90
- 76
- 62
- 50
- 30
- 0
- 999

7/21/2011 18:00 EST

PMVP Projects

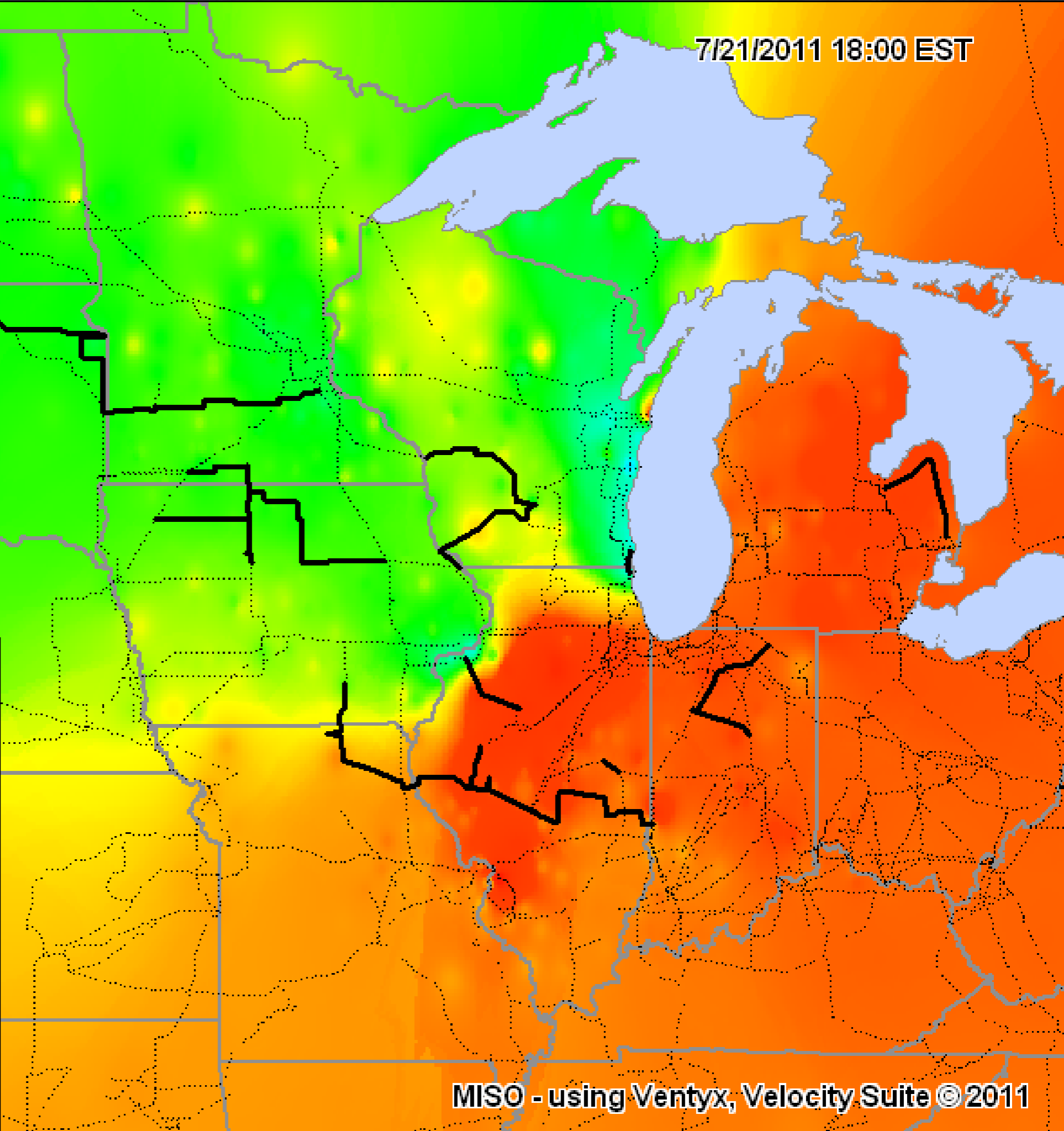
— PMVP Projects

Existing Transmission and Planned 345 kV+

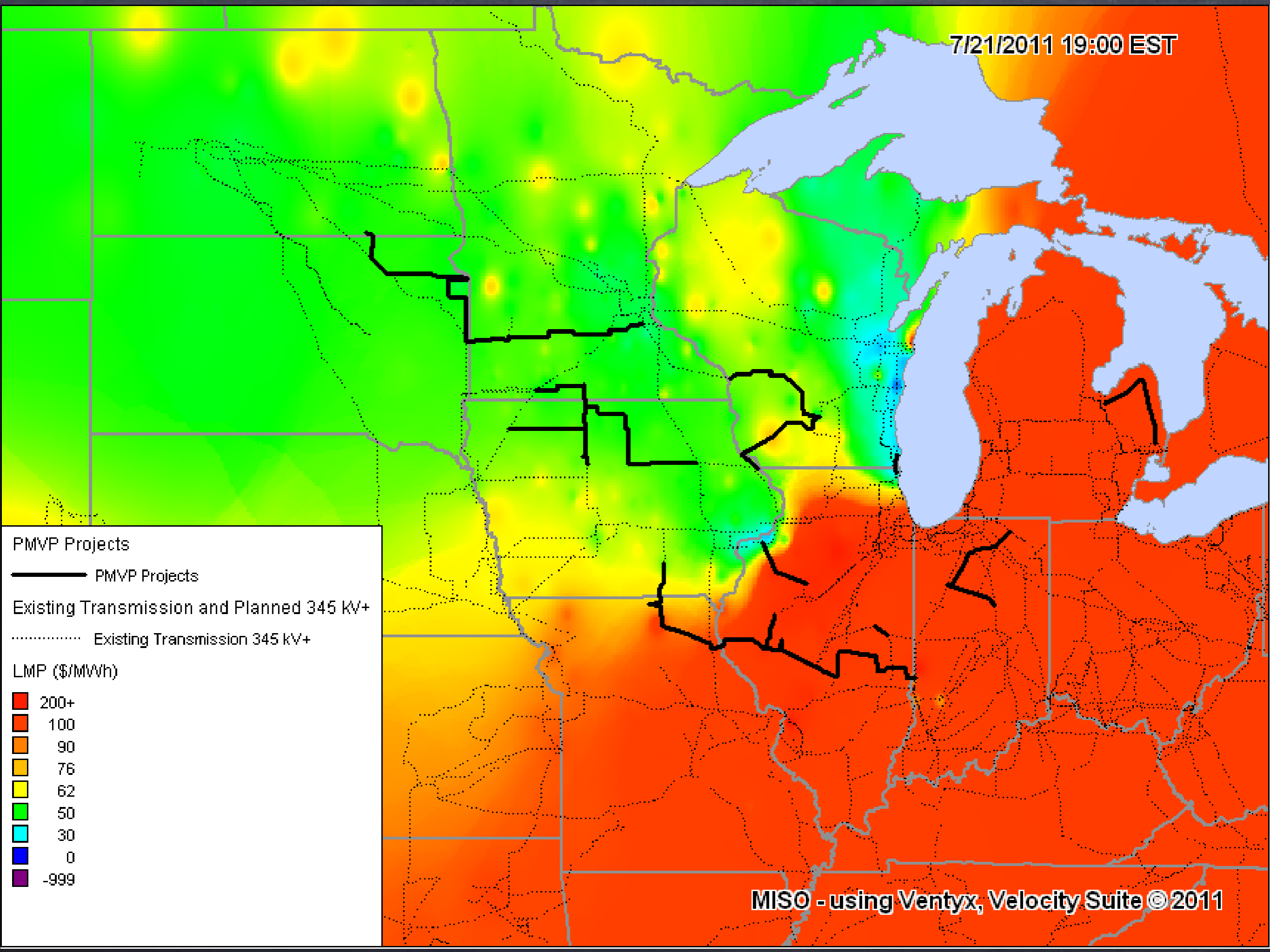
..... Existing Transmission 345 kV+

LMP (\$/MWh)

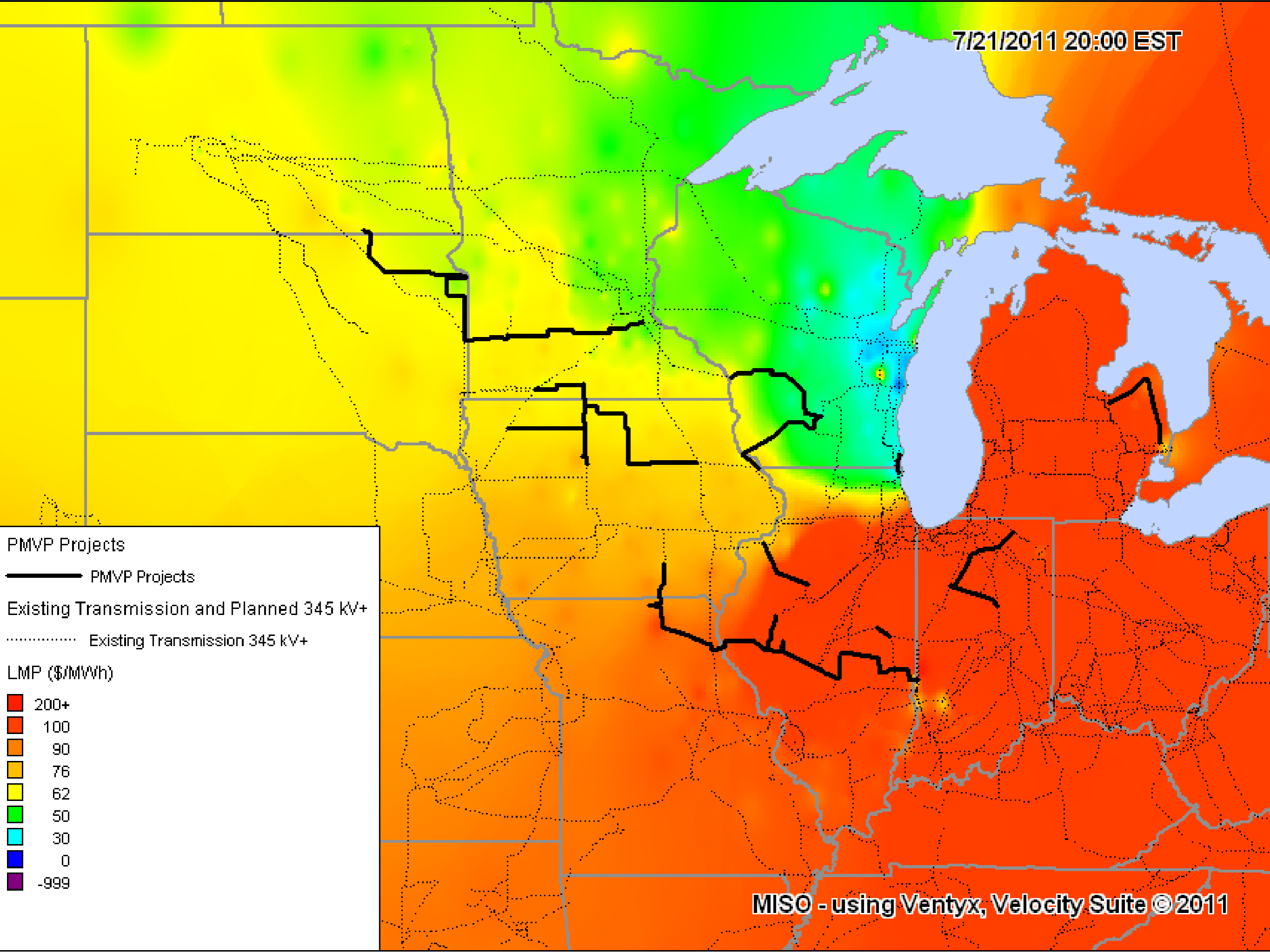
| |
|------|
| 200+ |
| 100 |
| 90 |
| 76 |
| 62 |
| 50 |
| 30 |
| 0 |
| -999 |



7/21/2011 19:00 EST



7/21/2011 20:00 EST



7/21/2011 21:00 EST



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PMVP Projects

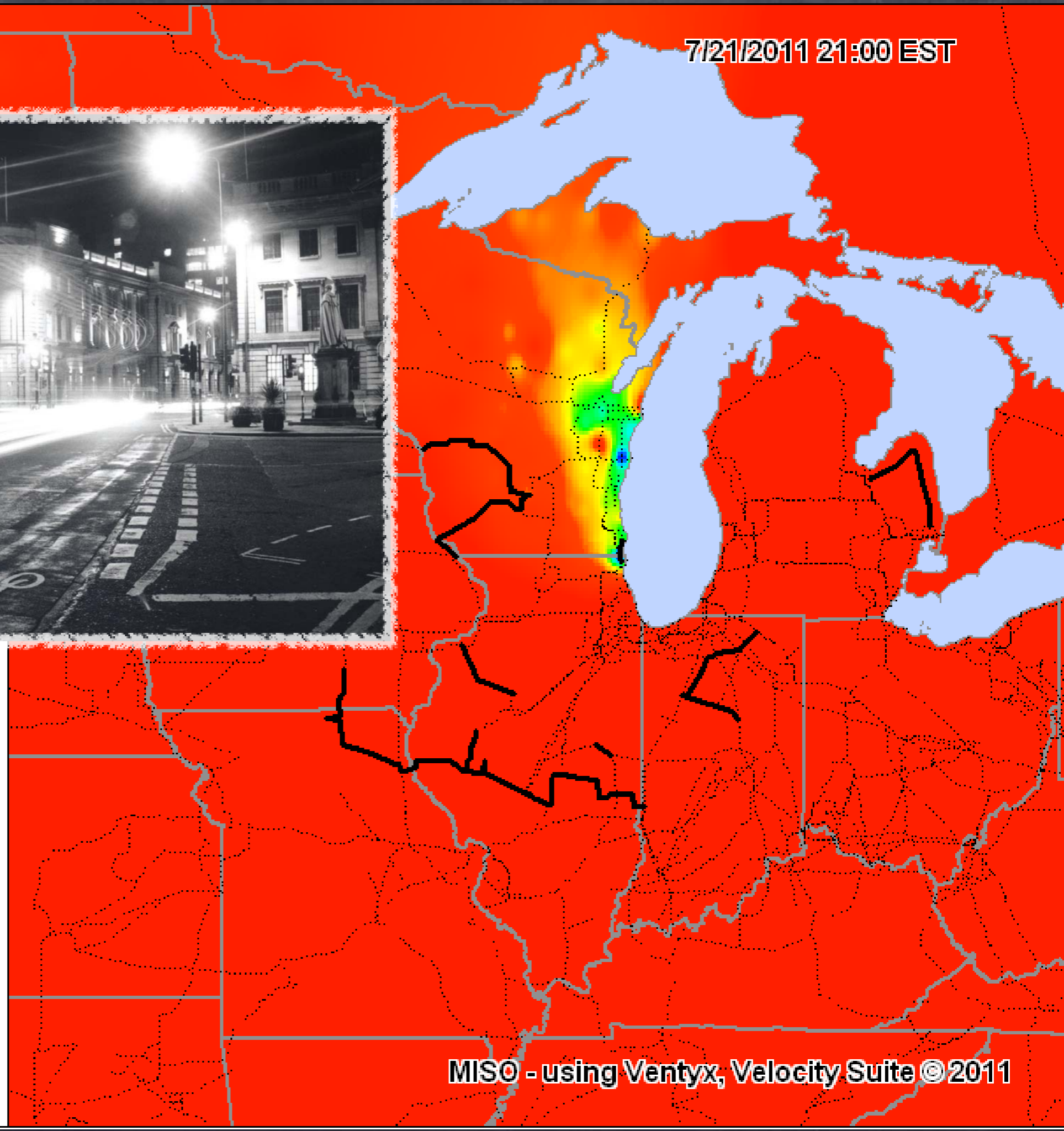
— PMVP Projects

Existing Transmission and Planned 345 kV+

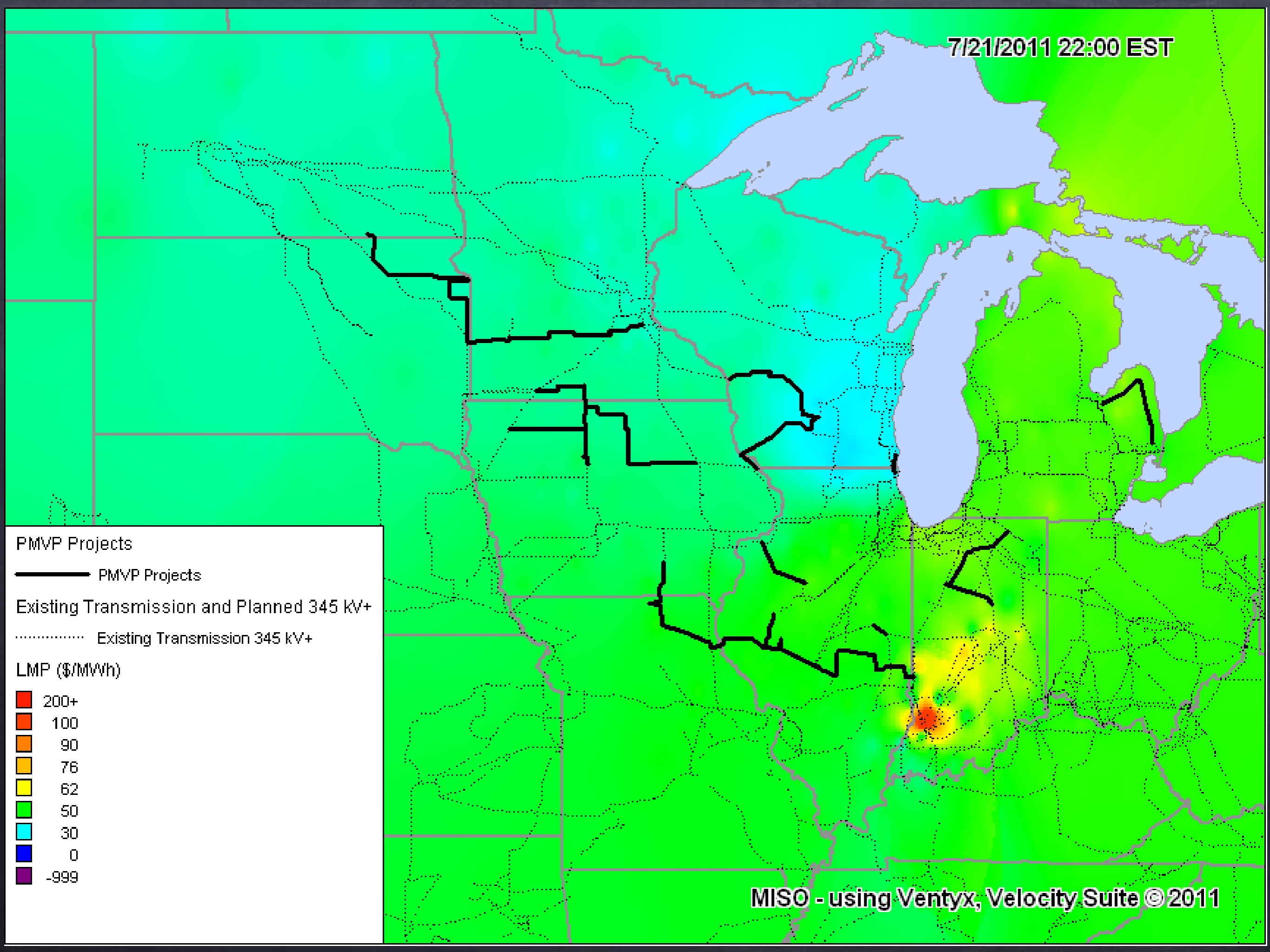
..... Existing Transmission 345 kV+

LMP (\$/MWh)

- 200+
- 100
- 90
- 76
- 62
- 50
- 30
- 0
- 999



7/21/2011 22:00 EST



PMVP Projects

— PMVP Projects

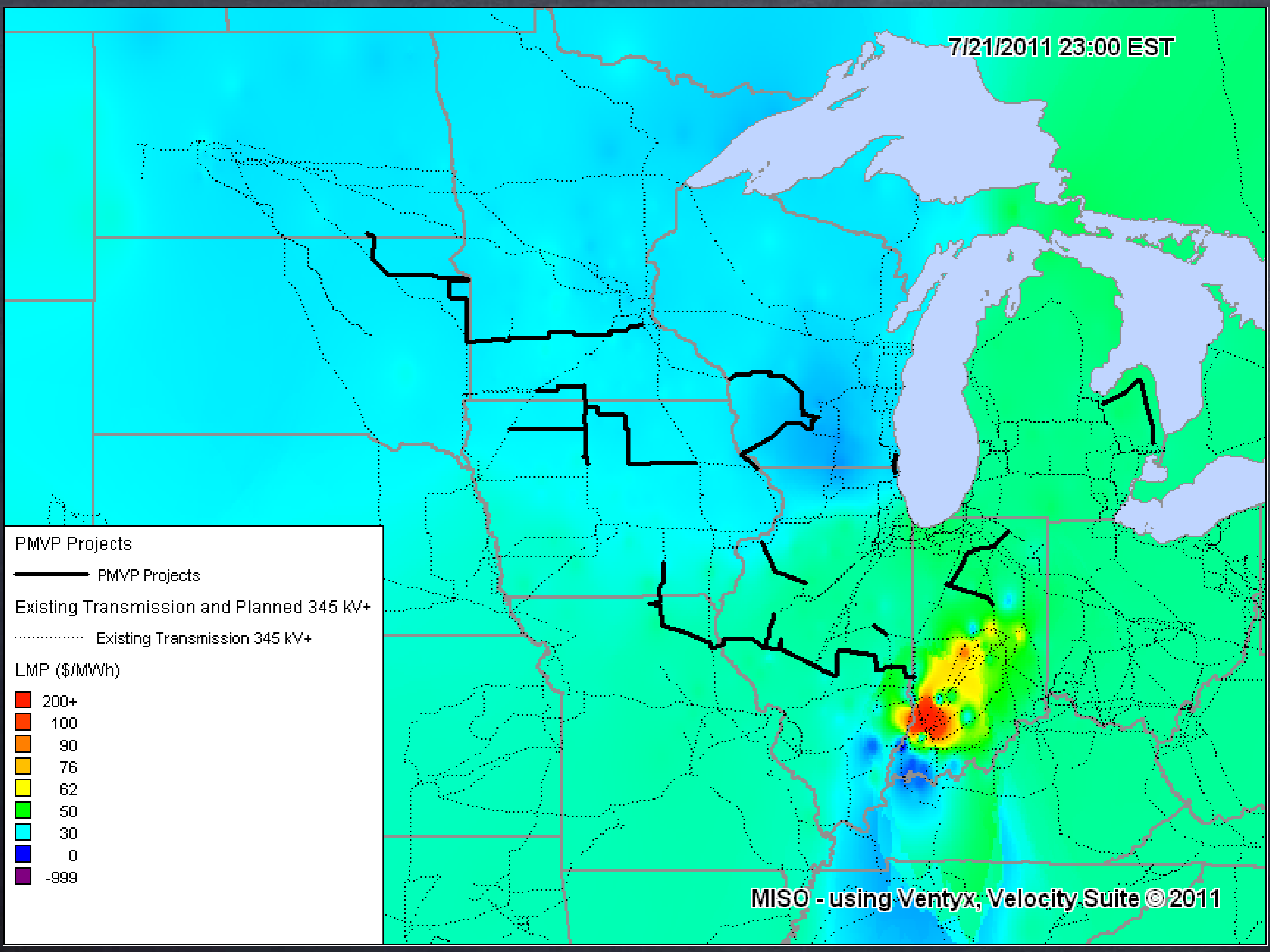
Existing Transmission and Planned 345 kV+

..... Existing Transmission 345 kV+

LMP (\$/MWh)

- 200+
- 100
- 90
- 76
- 62
- 50
- 30
- 0
- 999

7/21/2011 23:00 EST



PMVP Projects

— PMVP Projects

Existing Transmission and Planned 345 kV+

..... Existing Transmission 345 kV+

LMP (\$/MWh)

- 200+
- 100
- 90
- 76
- 62
- 50
- 30
- 0
- 999

7/21/2011 24:00 EST

PMVP Projects

—— PMVP Projects

Existing Transmission and Planned 345 kV+

..... Existing Transmission 345 kV+

LMP (\$/MWh)

| |
|------|
| 200+ |
| 100 |
| 90 |
| 76 |
| 62 |
| 50 |
| 30 |
| 0 |
| -999 |

