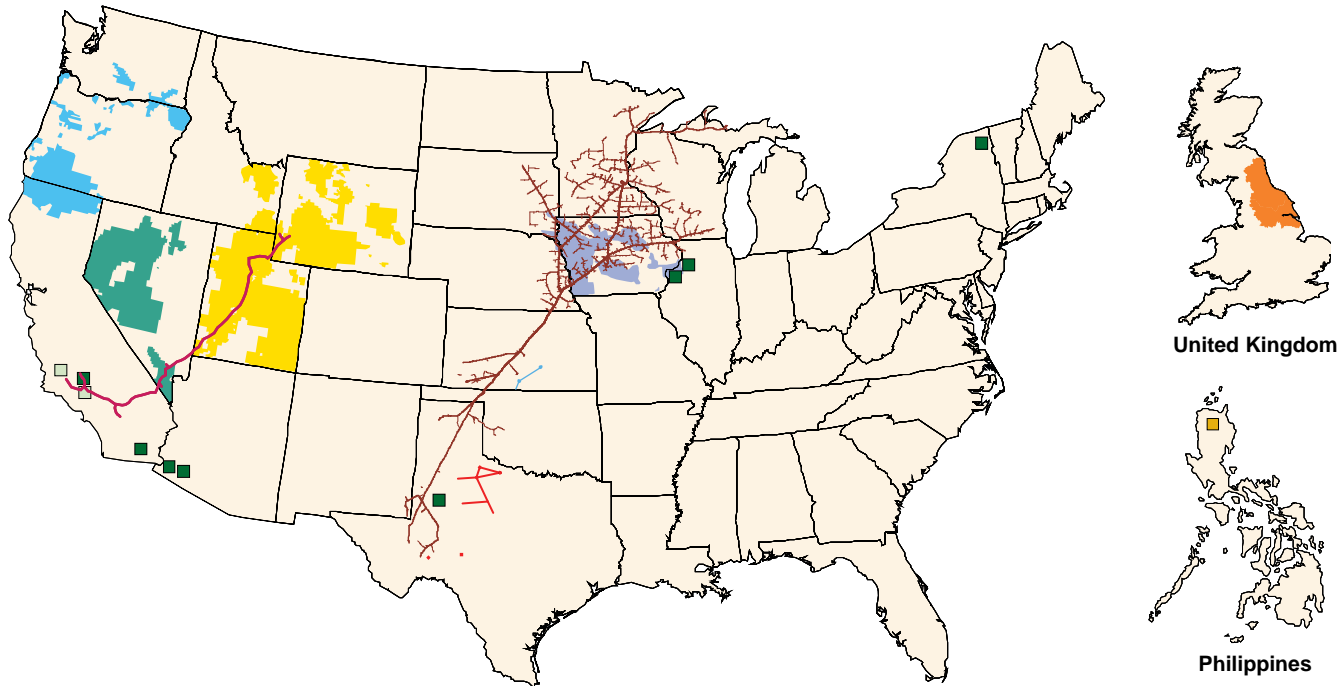




**Northern Natural Gas Company / MidAmerican Energy
Holdings Company**

**NAESB Gas-Electric Harmonization Forum
Houston, Texas
April 22-23, 2014**

MidAmerican Energy Holdings Company



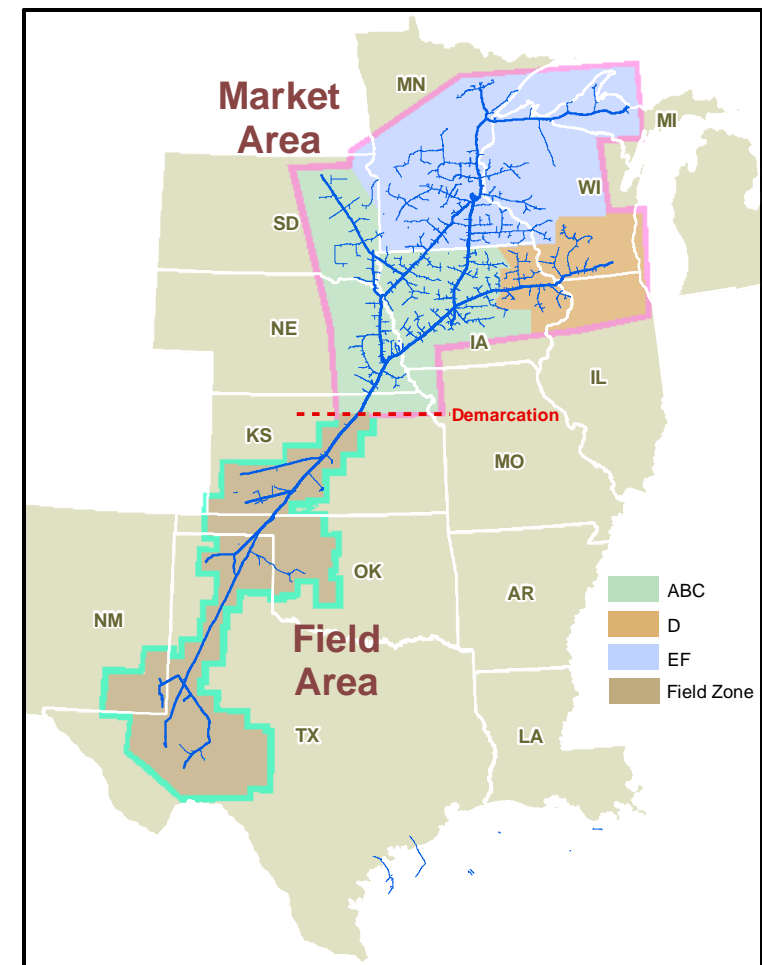
- \$70 billion of assets
- \$12.6 billion of revenue
- 8.4 million electric and natural gas customers worldwide
- 16,400 miles of natural gas pipeline
- 19,700 employees worldwide
- More than 35,000 MW of owned and contracted generation capacity
- 28% of owned and contracted generation capacity is renewable or noncarbon



 Pacific Power Service Territory	 Northern Natural Gas Pipeline	 Northern Powergrid Service Territory	 Operations Projects Under Construction	 NV Energy Service Territory
 Rocky Mountain Power Service Territory 	 Kern River Gas Transmission Pipeline	 MidAmerican Energy Company Service Territory	 Generation Operations (Philippines)	 Prairie Wind Transmission 345-kV Line Electric Transmission Texas

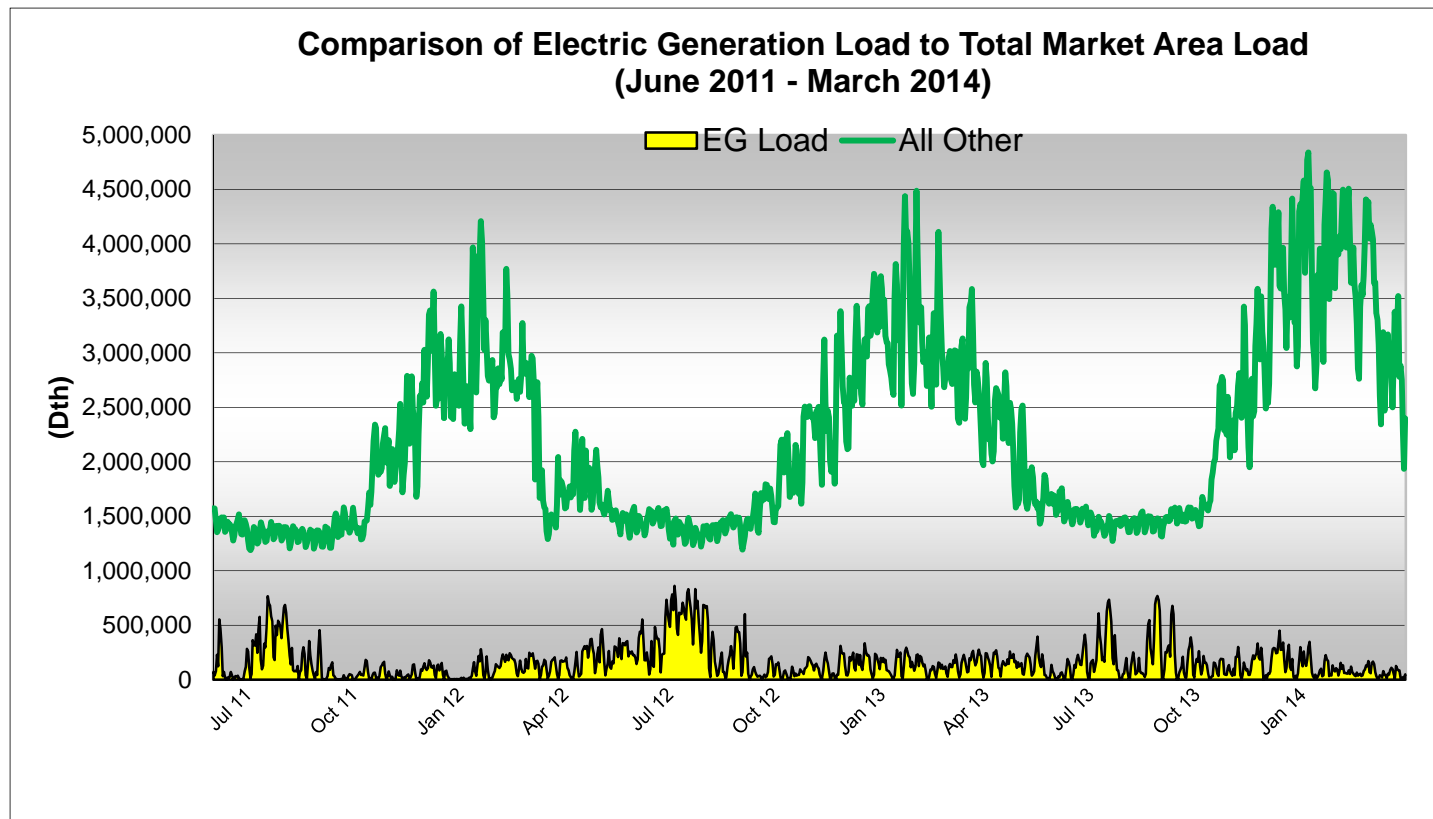
Northern Natural Gas System

- The system has two distinct rate areas
 - Market Area (zone nominations/group billing)
 - Field Area (mileage indicator districts MIDs)
- Northern operates a vast network
 - Miles of pipe 14,800
 - Compressor stations 49
 - Total units 182
 - Total horsepower 624,661
 - Number of shippers 325
 - Receipt and delivery points 2,150
 - Number of pipeline interconnects 139
- Northern owns and operates five storage facilities
 - Three underground storage fields
 - Two LNG peaking facilities
- Northern's market area peak day capacity is 5.5 Bcf/day
- Peak day delivery record of 5.14 Bcf set January 6, 2014
- Direct-connected power plants comprise 12% of Northern's annual throughput



Northern Natural Gas - Electric Generation Load

- Northern serves electric generation facilities directly and through utility distribution systems
 - Direct-connected plants – 39 plants with generating capacity of 11,673 MW - the majority of these hold firm transportation entitlement
 - Northern's gas control department communicates directly with the power plants



Gas-Electric Market Coordination – FERC NOPR (RM14-2)

- Northern's Perspective
 - Gas Day and nomination cycle timelines proposed in the NOPR will not significantly improve reliability, increase transportation capacity or ensure supply availability for the power sector
 - National consequences for a regional issue
 - Perceived benefits of such changes
 - Do not outweigh the costs of implementing the changes
 - Proposed changes to the Gas Day can be managed by pipeline no-notice service
 - Current NAESB process allows pipelines to add additional cycles and services
 - » Northern has two additional cycles above NAESB standards
 - Changes must result in improvements for the power sector without detriment to the majority of natural gas customers
- Impacts to Customers
 - Condensed nomination and scheduling timelines result in less time to resolve nomination and scheduling issues and provide for extensions of nomination deadlines
 - Increased costs will be reflected in increased rates for pipelines and customers – the costs will be borne by everyone in the industry

General Principles - Gas Day and Nomination Cycles

- Northern is not making a specific alternative proposal
 - Focused on identifying principles that need to be maintained for a consistent, reliable and cost effective process that is beneficial to all customers
 - MidAmerican Energy Holding Company platforms are in agreement with the principles
- Eight general principles to maintain when determining the start of the Gas Day and nomination cycle timelines
 1. Nomination processing time of 4 hours is required for all cycles
 2. 60 minutes between cycles
 3. Unique nomination deadlines
 4. Latest evening cycle concludes by 10:00 p.m.
 5. EDI and online nomination simultaneous
 6. Three intraday cycles are adequate
 7. Northern's final cycle occurs during normal working hours
 8. An adequate computer system maintenance window is required

General Principles (continued)

General Principles

1. Nomination processing time of 4 hours is required for all cycles

- *A minimum of four hours processing time, which begins with the nomination deadline and ends with the posting of scheduled quantities, is required for any cycle*
 - *Consideration must be given to the number of shippers, extensive use of pools, and the evaluation of constraints, which increases the time required for the allocation processes*
 - *Realistic timelines that allow for unexpected customer and technical issues*
 - *NOPR proposed processing times are inadequate and inconsistent; 2 hours is not sufficient and these compressed timelines will negatively impact customers*

2. 60 minutes between cycles
3. Unique nomination deadlines
4. Latest evening cycle concludes by 10:00 p.m.
5. EDI and Online nomination simultaneous
6. Three intraday cycles are adequate
7. Northern's final cycle occurs during normal working hours
8. An adequate computer system maintenance window is required

General Principles (continued)

General Principles

1. Nomination processing time of 4 hours is required for all cycles
- 2. 60 minutes between cycles**
 - *A minimum of 60 minutes is required between the posting of scheduled quantities for one cycle and the nomination deadline for the next cycle*
 - *Shippers must be allowed adequate time to review the scheduled quantities, determine supply needs, transact the required business, and nominate the volumes on the respective upstream and downstream pipelines*
3. Unique nomination deadlines
4. Latest evening cycle concludes by 10:00 p.m.
5. EDI and Online nomination simultaneous
6. Three intraday cycles are adequate
7. Northern's final cycle occurs during normal working hours
8. An adequate computer system maintenance window is required

General Principles (continued)

General Principles

1. Nomination processing time of 4 hours is required for all cycles
2. 60 minutes between cycles
3. **Unique nomination deadlines**
 - *There must be unique nomination deadlines for each cycle, with a minimum of 30 minutes between any two cycles*
 - *Shippers must be allowed adequate time to complete the nominations for one cycle before moving on to another cycle; the nomination process would be unduly complicated if more than one cycle has the same nomination deadline*
4. Latest evening cycle concludes by 10:00 p.m.
5. EDI and Online nomination simultaneous
6. Three intraday cycles are adequate
7. Northern's final cycle occurs during normal working hours
8. An adequate computer system maintenance window is required

General Principles (continued)

General Principles

1. Nomination processing time of 4 hours is required for all cycles
2. 60 minutes between cycles
3. Unique nomination deadlines
4. **Latest evening cycle concludes by 10:00 p.m.**
 - *The latest time in the evening that scheduled quantities are posted for any of the cycles should remain at 10:00 p.m.*
 - *Limits the negative impact to shippers and limits staffing changes for the industry*
 - *Provides shippers the ability to view scheduling information prior to computer system maintenance period*
5. EDI and Online nomination simultaneous
6. Three intraday cycles are adequate
7. Northern's final cycle occurs during normal working hours
8. An adequate computer system maintenance window is required

General Principles (continued)

General Principles

1. Nomination processing time of 4 hours is required for all cycles
2. 60 minutes between cycles
3. Unique nomination deadlines
4. Latest evening cycle concludes by 10:00 p.m.
- 5. EDI and Online nomination simultaneous**
 - *Online nomination deadline and EDI nomination deadline should be identical (EDI nomination deadlines are currently 15 minutes after the online nomination deadlines)*
 - *With the additional cycles and the reduction in proposed cycle processing times, the commencement of processing needs to be simultaneous for all nominations, including EDI nominations, in order to comply with the compressed timelines*
6. Three intraday cycles are adequate
7. Northern's final cycle occurs during normal working hours
8. An adequate computer system maintenance window is required

General Principles (continued)

General Principles

1. Nomination processing time of 4 hours is required for all cycles
2. 60 minutes between cycles
3. Unique nomination deadlines
4. Latest evening cycle concludes by 10:00 p.m.
5. EDI and Online nomination simultaneous
- 6. Three intraday cycles are adequate**
 - *Addition of one new intraday cycle is sufficient to address needs for nomination flexibility*
 - *Minimal intraday nomination activity exists during the two current intraday cycles*
 - *Develop alternate timelines for Intraday 3 cycle that result in similar hours of remaining flow as the NOPR-proposed Intraday 4 cycle*
7. Northern's final cycle occurs during normal working hours
8. An adequate computer system maintenance window is required

General Principles (continued)

General Principles

1. Nomination processing time of 4 hours is required for all cycles
2. 60 minutes between cycles
3. Unique nomination deadlines
4. Latest evening cycle concludes by 10:00 p.m.
5. EDI and Online nomination simultaneous
6. Three intraday cycles are adequate
7. **Northern's final cycle occurs during normal working hours**
 - *Northern's final cycle, which allows shippers to make nomination changes 23 hours into the Gas Day, occurs prior to the end of the Gas Day*
 - *The proposed end of the Gas Day (4:00 a.m.) is outside of the normal business day, which would result in shippers making final cycle nominations prior to 3:00 a.m., which is well outside of the normal business hours*
 - *Computer system maintenance window may create conflicts with early morning nominations*
8. An adequate computer system maintenance window is required

General Principles (continued)

General Principles

1. Nomination processing time of 4 hours is required for all cycles
2. 60 minutes between cycles
3. Unique nomination deadlines
4. Latest evening cycle concludes by 10:00 p.m.
5. EDI and Online nomination simultaneous
6. Three intraday cycles are adequate
7. Northern's final cycle occurs during normal working hours
- 8. An adequate computer system maintenance window is required**
 - *Northern performs system maintenance nightly from 10:30 p.m. to 3 a.m.*
 - *Shippers are unable to access the system and no cycles can be run during the maintenance period*

Implementation Costs

- Implementation Costs
 - Exact cost of the system modifications required to implement the proposed changes and the additional staffing costs required to manage the activities processed outside of normal working hours are unknown at this time
 - Cost estimate provided in the NOPR does not appear to be reasonable for the aggregate of the pipelines
 - Costs are likely to be significant for all parties
 - Costs will ultimately be reflected in the rates of Northern and the downstream customers and will be borne by all shippers

Conclusions

- Gas Day and nomination cycle timelines proposed in the NOPR will not significantly improve reliability, increase transportation capacity or ensure supply availability for the power sector
 - National consequences for a regional issue
- Northern is flexible regarding the specific timing of the beginning of the Gas Day and nomination cycles
- Any changes to the current Gas Day and nomination process and timelines must
 - Address principles outlined by Northern and agreed to by the other MidAmerican Energy Holdings Company platforms
 - Result in improvements for the power sector without detriment to the majority of natural gas customers
 - Provide clearly identifiable benefits to the customers that exceed the industry's costs required to make the changes