2017 e21 Forum Series

Toward a 21st C. Electric System in Minnesota

Friday, September 8th, 2017
The Saint Paul Hotel







Today's Agenda

1:30 – 1:45 pm Welcome, Meeting Overview

1:45 – 2:15 pm Background on Xcel Energy's Pilot Projects

2:15 – 3:30pm Xcel Energy's Draft TOU Pilot Design (incl. 15-min. Intermission)

3:30 – 4:30 pm Q&A and Discussion

4:30 – 6:00 pm Networking Reception made possible by the McKnight Foundation



The Electric Sector is Changing

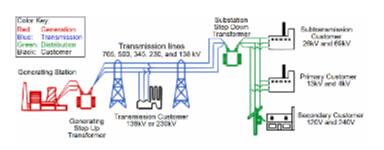


Analog & Manual





Digital & Automated





Centralized. One-way flow



Cleaner. More Distributed. Two-way flow



Little consumer choice



CHOICES

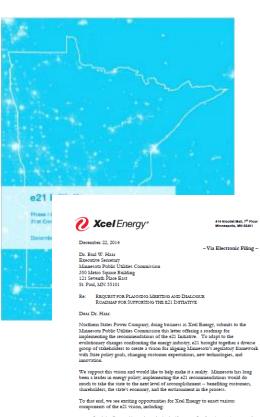
More consumer choice



e21 Phase I: Resulted in a Consensus on. . .

Evolving the utility business model & regulations to:

- 1) Provide more consumer choices.
- 1) Better align utility financial incentives with outcomes consumers care about.



• Last the effort to athew carbon reduction 9 + 40 person. Confronting environmental challenges in the most recommical way in one of the most significant challenges facing our industry. In our upcoming Resource Plan, we provide a path that could con-reflectively achieve a 40 persons or gentar reduction in carbon emissions by 2000. Importantly, this path preserves and enhances the beautiful of a diverse supply portfolio, thus offering significant prize and this miligation that will benefit and protect customers during this period of capid industry change.





e21 Phase 2:

From "Blueprint" to "Building the House"

Developed next level of detail necessary to implement Phase I recommendations, including White Papers on:

- 1. Integrated System Planning
- 2. Performance-Based Utility Compensation
- 3. Grid Modernization

http://www.betterenergy.org/e21-Phasell







e21 Phase 3: From Ideas to Action

Phase 3 Has Two Main Elements:

e21 Forums (2-3 per year):

- Provide on-going platform for interested parties to learn about issues relevant to MN's changing electric sector and proposed pilots projects.
- Hear from utilities and other entities about their pilots and projects.
- Flag issues that require deeper investigation.

Specific Pilots/Projects:

• GPI/CEE will coordinate and facilitate stakeholder engagement that assists pilot/project leaders in shaping and refining their projects.

Goal: To reduce transaction costs & improve outcomes for all.





e21 Phase 3: Current Pilots

GPI/CEE are assisting with stakeholder engagement for two projects to date:

- Xcel Energy's Time of Use rate design pilot
- 2. Seventhwave/LBNL's project to model implications of performance-based utility compensation options.



Other potential projects under discussion.



Xcel Rate Design Pilot:

3 Forums + 2 Intensive Rounds of Stakeholder Input

May

- e21 Stakeholder Forum on May 5th √
- Convened small group of stakeholders for 3 meetings in May

July

– e21 Stakeholder Forum on July 14th



- September & October
 - e21 Stakeholder Forum on September 8
 - Reconvene core stakeholder group for 3 meetings to refine suggestions for pilot design



Xcel TOU Stakeholder Working Group

- Ryan Barlow, Office of the MN Attorney General
- Sara Bergan, Stoel Rives
- Holly Hinman, Xcel Energy
- Lon Huber, Strategen Consulting
- Annie Levenson-Falk, Citizens Utility Board of MN
- Amy Liberkowski, Xcel Energy
- Ron Nelson, Office of the MN Attorney General
- Will Nissen, Fresh Energy
- Susan Peirce, MN Department of Commerce





Outcomes of May Meetings

Summary Notes to be filed early next week re:

- 1. Objectives...
 - a) For a TOU rate in general
 - b) For this Pilot ("must Have" and "nice to have")
- 2. Identification of key issues that advocates are likely to haggle over
- 3. Pilot Design Suggestions
- 4. Metering Q&A
- 5. Requests for additional information





Questions?





