

Targeted Area Planning in Wisconsin

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Historical Overview

- Through mid 1990s, Wisconsin focused on using DSM to avoid system peak demand (traditional integrated resource planning)
- Analysis was on aggregate demand reduction based on systemwide or utility specific avoided costs

Historical Overview

- To improve energy efficiency program delivery capability, Wisconsin in the early 1990s implemented several “community based” energy efficiency projects
- In two of these communities, the utility was planning for a need to upgrade the existing T&D facilities due to area load growth
- The bottom line was that in two communities energy efficiency savings were sufficient to defer the T&D upgrades by at least two years

Rise of the “Distributed Utility” Concept

- In the mid 1990s in addition to the ability to defer T&D upgrades, the rise of the “distributed utility” concept increased interest in T&D planning
- As a result of a collaborative effort, a targeted area planning process and methodology was adopted by the PSCW in Advance Plan 7 (1997)
- All T&D new construction, upgrades and replacements were to be analyzed using ITARP

Integrated Target Area Resource Planning

- ITARP is a systematic process and methodology to analyze and evaluate “least cost” alternatives to T&D construction
- It is premised on the recognition that systemwide avoided costs do not typically reflect the potentially higher costs that arise in certain T&D locations and/or at certain time
- Advance Plan 8 (late 1990s) was to be the first systematic application of ITARP

ITARP becomes a concept before its time

- In reaction to a supply crisis in 1997 and potential industry restructuring, the Wisconsin legislature abolishes the Advance Plan process
- The legislature also creates a for-profit entity (the American Transmission Company) to consolidate all transmission facilities out of the vertically integrated utilities for planning and operations
- Supply crisis puts focus on 345kV lines to other states to increase reliability

ITARP today

- Commission finds ITARP not applicable to proposed 345kV line proposed to increase transfer capacity into Wisconsin and for reliability/system security
- ITARP is not applied to T&D planning in practice although alternatives to proposed T&D applications are always stated as an issue

“Lessons Learned” on what it will take to make ITARP work

- There are bigger issues on everyone’s plate
- Uncertainty and “crisis” support the status quo (tested reliable solutions)
- Regulatory support and practical oversight needed
- A high coincidence of public/private benefits for T&D owner/planner (like DSM)
- Acquired experience about how to best implement targeted area planning in a practical manner (the perfect should not be the enemy of the good)

What is driving the return of ITARP in practice in Wisconsin

- Return of integrated public planning (regulatory support)
- Growth of distributed resource applications (experience and need focused on T&D location and time of use)
- Special cases: very high cost or very environmental sensitive situations (clear public/utility benefits)
- Public opposition to new T&D lines

Wisconsin Context

- “Transition” problems have led to move to restore planning
- Wisconsin Distributed Resource Collaborative (effort to find practical application of targeted area planning to facilitate growth of clean distributed resources)
- Need for new T&D construction, upgrades and replacements in light of siting opposition
- FEREC’s SMD White Paper and achieving effective regional/local transmission planning

SUMMARY

- Targeted area planning holds significant value
- But the process would best be a cooperative development based on shared interests to implement a practical, workable process that accommodates other compelling needs
- We don't know the best way yet (need effective process and method but also experience, comfort and ability to make good judgments)
- Wisconsin adopted ITARP for all the right reasons but it could not pass the "Orson Welles" test