



NRRI
in association with the
North Dakota Public Service Commission
presents

Transmission:
The Fundamentals, the Frontier, and Everything In Between
August 5-6, 2010 • Bismarck, North Dakota

A Law and Policy Seminar with
Scott Hempling, Esq., NRRI Executive Director

Register Now

"Transmission" now penetrates every electricity conversation. Who can build; what, when, and where they will build; what is the prudent cost level; should the owner receive "adders"; who can interconnect, when and under what terms. These questions are everywhere.

Until about 15 years ago, these questions arose at a single state commission—if they arose at all. Now they show up everywhere—at multiple state commissions, at FERC, in Congress—in proceedings whose timings and outcomes would not be confused with orderly decisionmaking.

Transmission is not the only confusion-contributor. Jurisdictional relationships are growing blurrier in the areas of smart grid development, generation mix, cost recovery, demand side management, and corporate restructuring. All these issues involve inter-jurisdictional overlaps and gear-grinding. The simple division of jurisdiction between federal and state, enacted in 1935, is no longer so simple. And every few years, Congress talks about changing the statute.

This 1.5-day (9-hour) seminar will help you master the transmission landscape. Designed for both beginners and advanced attendees (including advanced attendees who feel like beginners), we'll start with the definitions, the players, the acronyms, and the physical foundations. We'll then address transmission's transition from local monopoly to regional markets. Then we'll turn to today's friction points—prudence, cost allocation, siting, planning, congestion, RTO membership stability, and new "transcos" and "merchant owners."

Who Should Attend

Whether you're an attorney, economist, engineer, commissioner, legislator, or manager of a public or private entity—beginner or veteran—this seminar will strengthen your decisionmaking.

Join the ranks of the thousands of professionals from all 50 states and every industry sector, many of whom have returned repeatedly to hear Scott Hempling's seminars on the electricity industry. You'll gain the insights you need to better grasp the industry's ever-changing landscape.

What's more, you'll have plenty of opportunities to find new colleagues, share ideas, build your network, and strengthen your organization. Find out what your colleagues are doing—or will do—as they anticipate and adapt to the changing electric industry.

Program Information

Here's an outline of the topics we'll cover during this comprehensive 1.5-day workshop:

I. Transmission Fundamentals

- A. Terminology: What is "transmission"?
 - 1. Transmission facilities
 - 2. Transmission service
 - 3. Transmission owner
 - 4. Transmission operator
 - 5. Transmission provider
 - 6. Transmission regulator
 - 7. Transmission vs. distribution
 - 8. Transmission vs. interconnection

- B. The eleven features of transmission policy
 - 1. Obligation to serve
 - 2. Operational control

3. Reliability role
 4. Market-making role
 5. Ownership
 6. Cost recovery
 7. Cost allocation
 8. Siting
 9. Obligation to plan
 10. "Native load" vs. "competitive load"
 11. Regulatory jurisdiction
- C. Technical concepts
1. Asynchronous current vs. direct current
 2. Voltage
 3. Reactive power
 4. Loop flow or parallel flow
 5. Regulation service
 6. Congestion

II. The Transmission Transition: From Local Monopoly to Regional Markets

- A. Overview: How did we evolve from in-state service provided by a vertically integrated, for-profit utility, to multi-state regional service provided by an independent, nonprofit "regional transmission organization"?
- B. Origins
1. Transmission provider is a vertically integrated utility
 2. Utility owns and controls the assets
 3. Utility provided "bundled" generation and transmission to retail customers
- C. Transition Stage 1: Utility retains control, but "unbundles" transmission from generation
1. Vertically integrated utility still owns and controls the assets
 2. Vertically integrated utility still provides bundled service at retail
 3. "Functional" unbundling is required by FERC Orders 888 and 889 (1996)
 4. "Corporate" unbundling occurs via state divestiture orders or utility voluntarism
 5. FERC-state jurisdictional relationship
- D. Transition Stage 2: Regional transmission organizations receive operational control
1. Vertically integrated utility still owns the assets

2. RTO provides regional service, subject to Orders 888 and 889, over utility-owned assets
 3. Vertically integrated utility buys transmission service from RTO and then "rebundles" it with generation
 4. FERC-state jurisdictional relationship
- E. Policy forces stimulating the transition
1. Independence: for competitive neutrality
 2. Regionalization: for economics and reliability
 3. Market making: for competitive efficiency
- F. What's next?

III. Transmission Friction Points: Challenges and Solutions

- A. Cost recovery
1. What are the relative state and federal roles?
 2. Prudence: What is it and who determines?
 3. "Incentives" (e.g., ROE adders, CWIP, recovery of abandoned plant, and hypothetical capital structures): When are they necessary?
 4. Cost allocation: What principles, what evidence?
- B. Planning
1. Who has responsibility, and who has jurisdiction?
 2. Remote generation: Who pays for the transmission?
 3. Intermittent generation: How do we integrate it?
- C. Siting: Who has jurisdiction?
- D. Reliability: Who has responsibility, and who has jurisdiction?
- E. Congestion: What pricing?
- F. RTO membership stability: Who decides entries and exits?
- G. New forms of transmission ownership: "transco" or "merchant" owners

Date/Time

Thursday, August 5: 8:00 a.m. registration; 8:30 a.m. – 4:30 p.m.
Friday, August 6: 9:00 a.m. – 12 noon

Location

Bismarck State College

Student Union
Prairie Room
1425 Schafer St.
Bismarck, ND 58501
701-224-5600

** A campus map is available online at
<http://www.bismarckstate.edu/newstudents/CampusMap.pdf>.*

Parking is available in the lot east of the student union.

Accommodations

Kelly Inn

1800 North 12th Street
Bismarck, ND 58501
701-223-8001
www.kellyinnbismarck.com

Radisson Hotel Bismarck

605 East Broadway Avenue
Bismarck, ND 58501
701-255-6000
www.radisson.com

Cost

\$395 nonprofit organizations (except for those that represent for-profit entities)
\$695 all others

CLE Credit

CLE credit is being applied for. All prior in-person seminars by Scott Hempling or NRRI have been approved for CLE credit. We will provide proof of attendance, resume, class schedule, and all other materials traditionally required for CLE credit. This 1.5-day seminar is designed to offer 9 hours of CLE credit.

How to Register

[Click here](#) to register. For more information, please email nrri.seminars@nrri.org.

Seminar Leader

Scott Hempling, Esq. became the Executive Director of the National Regulatory Research Institute in October 2006. He has taught electricity law to thousands of regulators and practitioners from all U.S. jurisdictions. Prior to October 2006, Mr. Hempling was the principal in a national law practice advising state commissions, state legislatures, municipal power systems, marketers, and independent power producers on legal issues affecting the electric industry. He has advised the state commissions of Arizona, Arkansas, Connecticut, Delaware, District of Columbia, Hawaii, Indiana, Kansas, Massachusetts, Michigan, Missouri, Nevada, New Hampshire, Ohio, Oklahoma, Rhode Island, South Carolina, and Virginia; the Organization of MISO states (14 state commissions in the Midwest); the consumer counsels of Connecticut, Nevada, Pennsylvania, and Texas; municipal systems in Connecticut and Iowa; investor-owned utilities; independent marketers; and public interest organizations.

Mr. Hempling has testified numerous times before the U.S. Congress and the state legislatures of Arkansas, California, Maryland, Minnesota, Nevada, North Carolina, South Carolina, Vermont, and Virginia. He has published articles in *The Electricity Journal* and *Public Utilities Fortnightly*, and speaks frequently at industry conferences.

Mr. Hempling received a B.A. with honors from Yale University (Economics and Political Science, Music), and a J.D. with high honors from Georgetown University Law Center.

Register Now

The National Regulatory Research Institute is a section 501(c)(3) corporation established by the National Association of Regulatory Utility Commissioners (NARUC).

NRRI
8730 Georgia Avenue, Suite 201
Silver Spring, MD 20910
301-588-5385
www.nrri.org