Public Meeting: Transmission Action Plan & Cost Allocation Methodologies

Whitefield, NH, June 24, 2010

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Agenda

- Welcome
- KEMA Introduction
- Opening Statements
- Project Background
- Request for Input
- Question & Answer Session

Introduction to Consultant KEMA Inc.

About Us

- U.S. HQ in Burlington, MA; and offices worldwide.
- Since 1928, focused exclusively on energy industry clients.

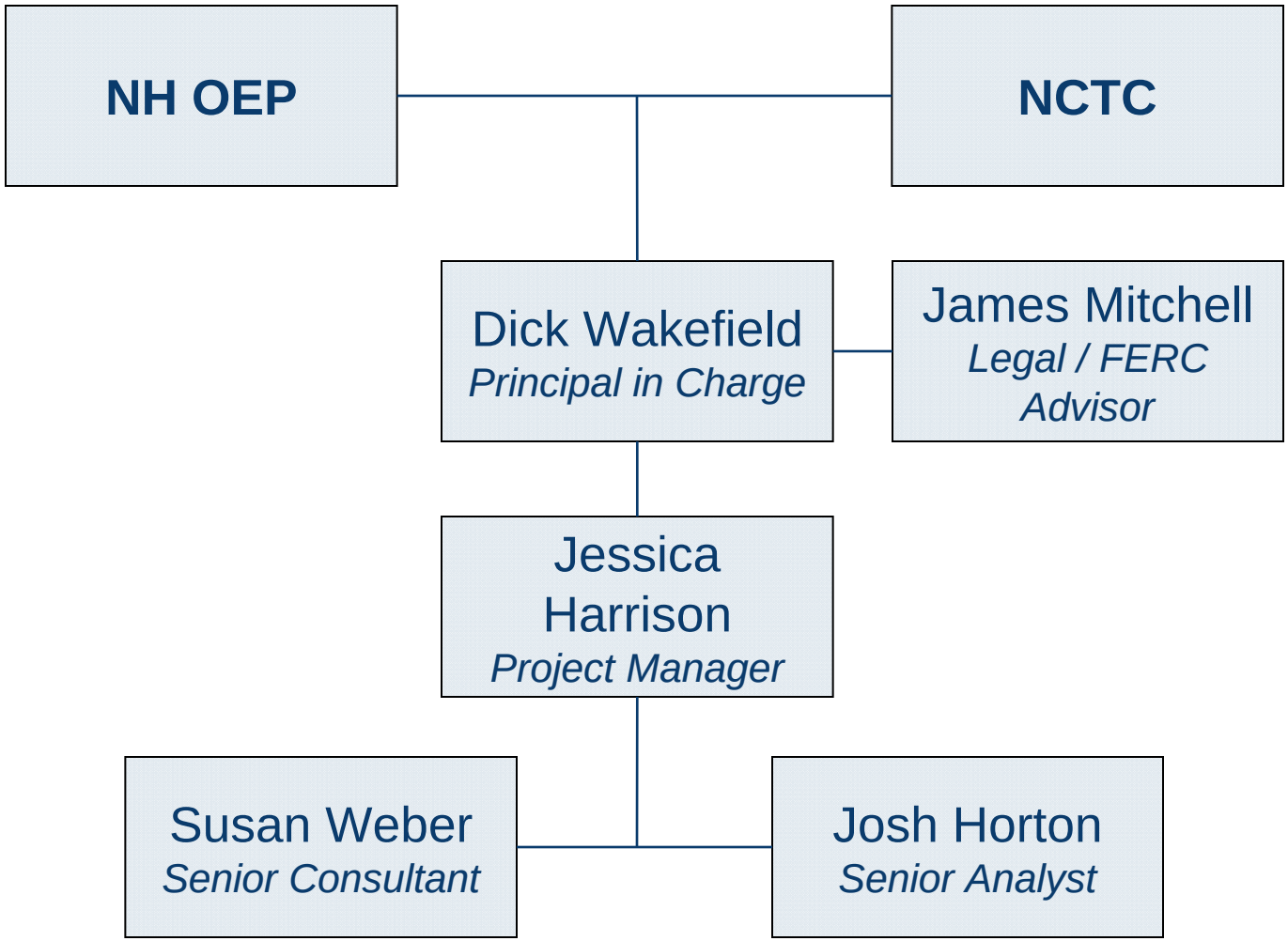
Our services

- Consulting services
- Technical & operational services
- Electrical equipment testing services

Our customers

- State and regional government Energy supply industry
- Regulators and Public Authorities
- Energy intensive users
- Power equipment manufacturers
- Financial institutions and development banks

KEMA Project Team



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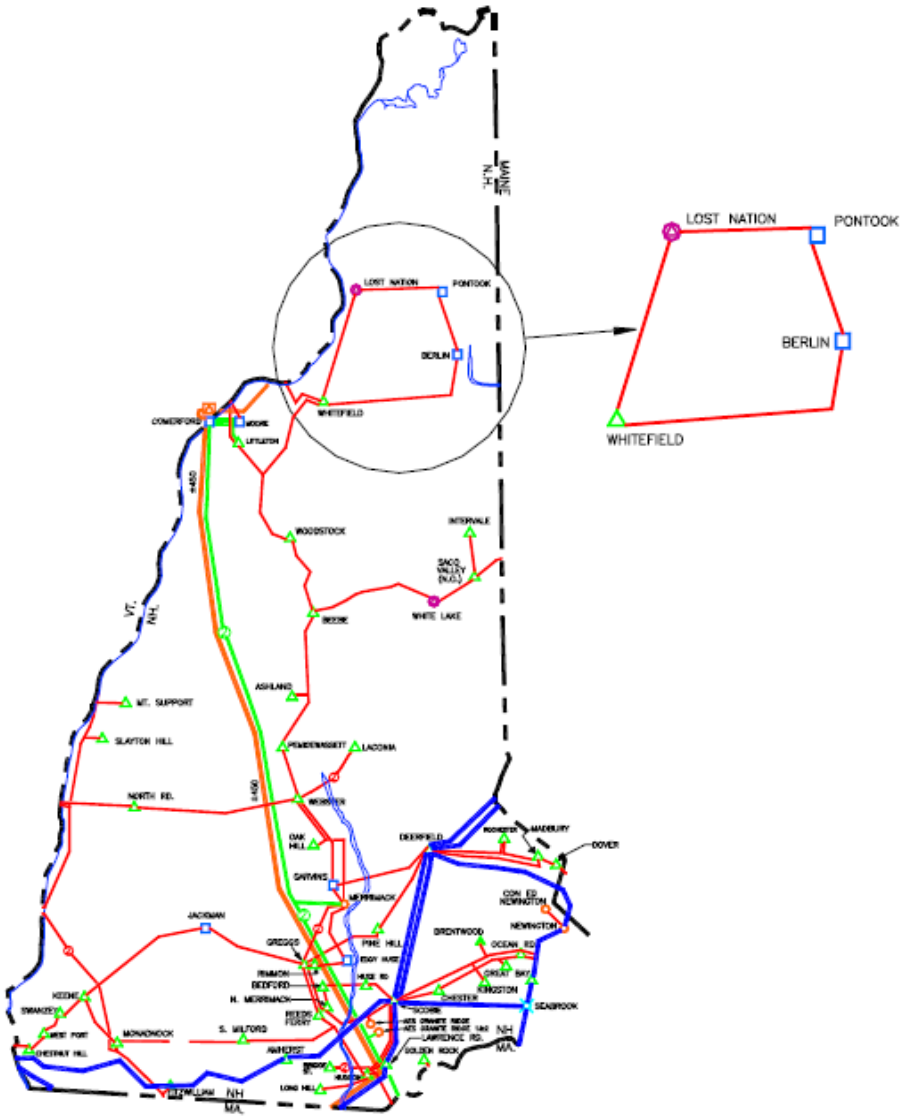
Problem Description

- The Coos County area presents a great opportunity for new generation with renewable resources.
- However, there's not enough "space" on the existing transmission line ("Coos Loop") for proposed projects.
- The solution to add more "space" could cost millions of dollars, and involve local, state, regional and national authorities.

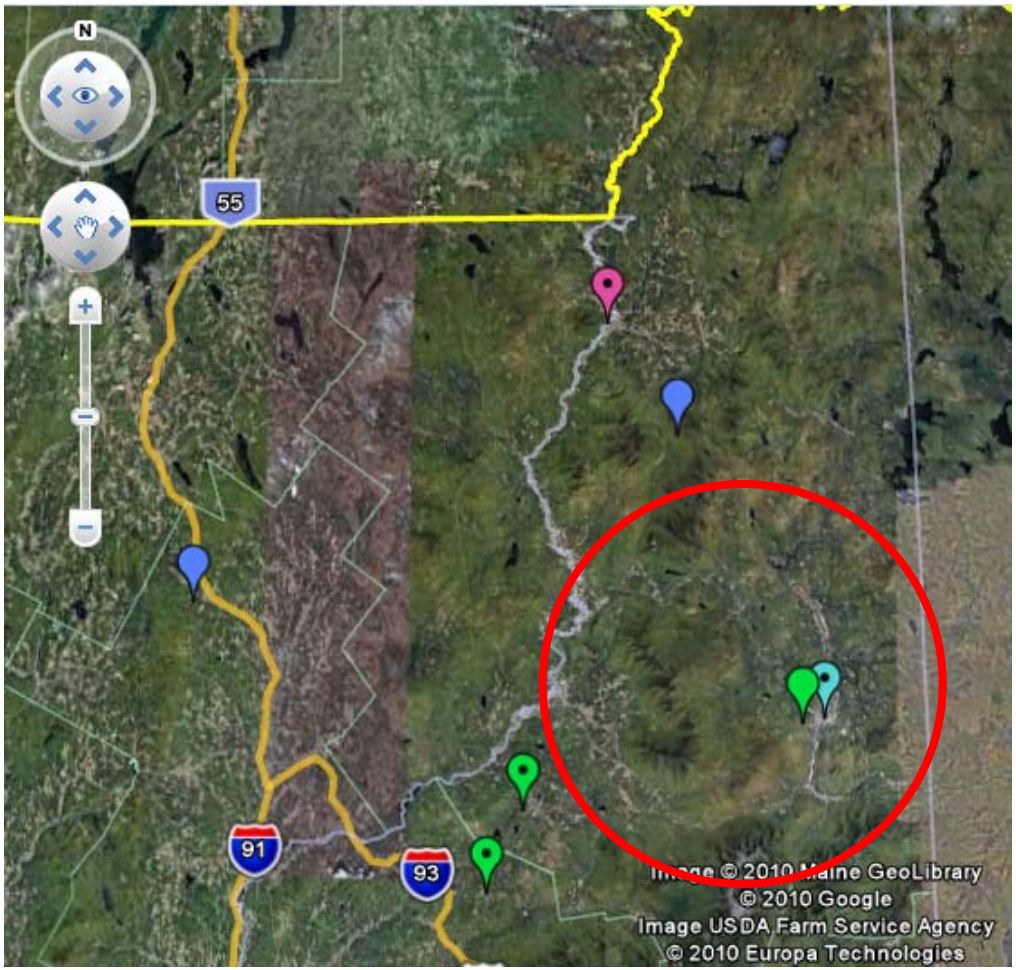
The Coos Loop

- The loop is “defined by the 115-kV transmission facilities between the Whitefield, Berlin and the Lost Nation Substations.”



Source: Northern New Hampshire New Resource Interconnection Options and Costs - NH Transmission Committee - November 24, 2008
http://puc.nh.gov/Transmission%20Commission/112408Meeting/Northern%20New%20Hampshire%20New%20Resource%20Interconnection%20Options%20and%20Costs%20-%2011-24-08.pdf

Sample Renewable Projects around the Coos Loop



Markers indicate some of the potential and existing renewable generation projects. (*It does not include several existing units or projects under consideration*).

More than 400 MW of renewable generation have been proposed in the North Country.

Having 'space' on the transmission lines is key to delivering power.

Source: Google Earth, "Alternative Energy Plants"

Proposed Approach

- Upgrade Coos Loop transmission facilities. Various upgrades to the existing 115-kilovolt Coos Loop are being considered.
- No agreement has yet been reached on how associated costs will be shared among parties.
- NH Legislature mandated a study to develop an action plan that identifies potential methods to allocate associated costs.
- KEMA is assisting the New Hampshire Office of Energy & Planning (NHOEP) and the North Country Transmission Commission (NCTC).

KEMA's Study Objectives

- Gather input from stakeholders
- Review cost allocation methodologies
- Review or develop financial study & analyses
- Develop an action plan framework
- Draft a project report

Study completion date: October 1, 2010

NH OEP Study Objective

To assist the New Hampshire Office of Energy and Planning (NH OEP) and the North Country Transmission Commission (NCTC) to develop an action plan for expansion, upgrade, and/or replacement of the Coos County electric transmission line loop.

This includes reviewing challenges and opportunities regarding transmission cost allocation, and propose cost allocation solutions

Study Objectives (cont'd)

- Seek stakeholder input from:
  - NCTC, electric utility companies, legislators and other policymakers, Coos County Commission, ISO-NE, FERC, energy developers, energy generators and distributors, the general public, representatives of State agencies and other State officials, the consumer advocate, the North Country Council, and the Coos Economic Development Corporation
- Review existing or develop financial studies and analyses

Study Objectives (cont'd)

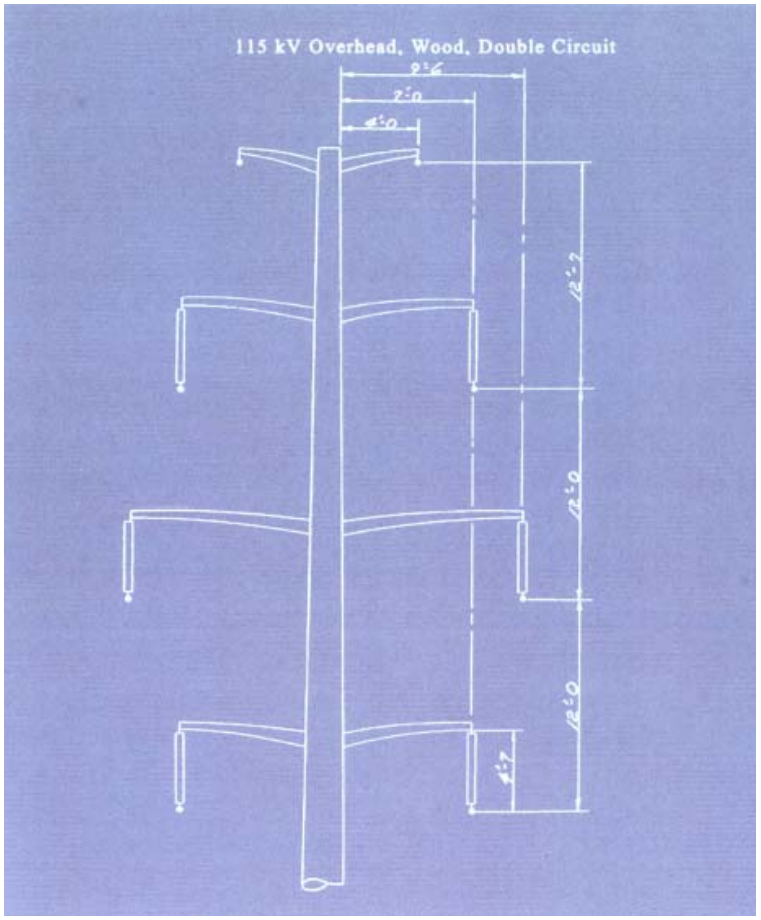
- Develop the framework of an action plan to pay for the upgrade of the transmission system in the North Country:
  - This framework should be based on the assumption that the transmission upgrades to integrate an additional 400 MW of new generation on the Coos Loop will cost [an estimated] $150 million. As a sensitivity, the framework should also explain how the suggested party's cost allocation would change if the upgrades were ten or twenty percent above or below this amount.
    [*Source: Proposal issued by the New Hampshire Office of Energy & Planning]*
  - KEMA was not tasked with reviewing the estimated transmission cost upgrade.

What Could Transmission Upgrades Look Like?

Not this.

But, upgrade might include a single pole, double circuit line.

Sample Transmission Configurations: Single Pole, Double Circuit



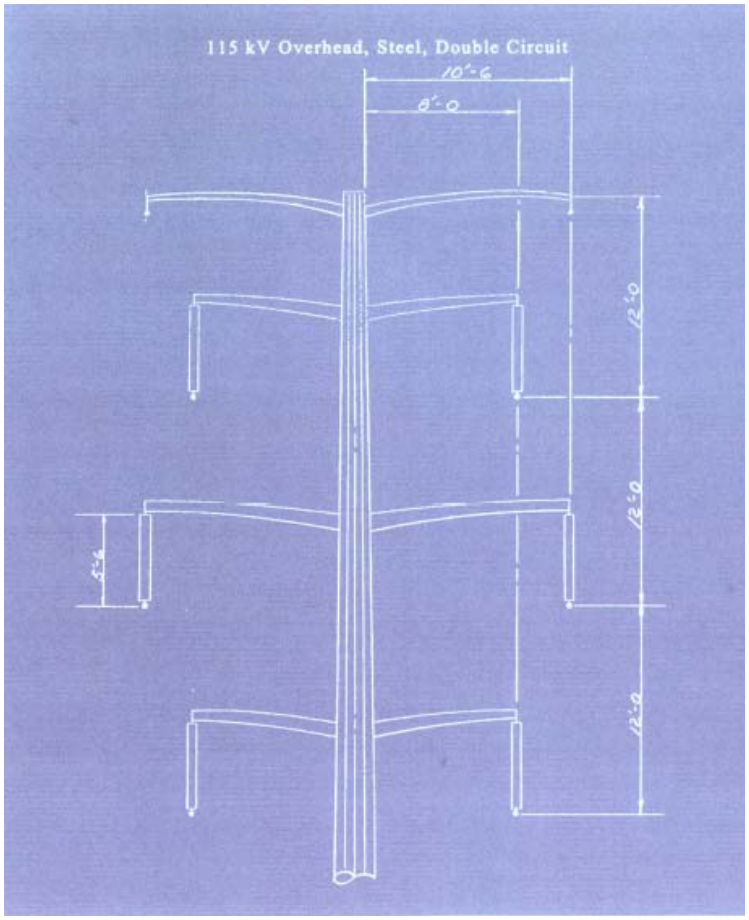


Image Source: Connecticut Siting Council. Life Cycle 2007. 2007.

Agencies Responsible for Transmission

- Federal Energy Regulatory Commission (FERC)
  - Independent agency
  - Regulates transmission line use and charges
  - Cost Allocation Approval

- Independent System Operator - New England (ISO-NE)
  - Independent non-profit company
  - Operates and plans the electric transmission system for six New England states (NH, ME, VT, MA, CT, RI)
  - An ISO-NE tariff provides the rates, terms and conditions for transmission, market and other services provided by ISO-NE.
    - The tariff contains procedures to access the transmission system to transport electricity throughout New England.
    - Generation connection, merchant transmission, and local benefits upgrades are generally not funded regionally.
    - Regional funding is available where *reliability* and *market efficiency* upgrades exist.

FERC is currently considering changes to its rules on transmission cost allocation.

- FERC has invited interested parties to file written comments regarding transmission cost allocation

- Notice of Proposed Rulemaking (NOPR):
  - **FERC Docket Number RM10-23-000**: Transmission Planning and Cost Allocation
  - 60 days to respond as of June 17, 2010

- Comments can be submitted electronically or by mail. See NOPR for instructions.
  - Electronically: http://www.ferc.gov/docs-filing/efiling.asp
  - Mail: Federal Energy Regulatory Commission, Office of the Secretary, 888 First Street, NE, Washington, DC 20426 (send 14 copies with original)

FERC's Preliminary Finding

- *Existing methods for allocating the costs of new transmission may not be just and reasonable because they may inhibit the development of efficient, cost-effective transmission facilities necessary to produce just and reasonable rates* (¶ 40).

*preliminary finding as Notice of Proposed Rulemaking (NOPR)

Question & Answer Session

Input from the Public