



Dora

Department of Regulatory Agencies

Public Utilities Commission

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December 1, 2011

To: Members of the Colorado General Assembly

The Task Force on Statewide Transmission Siting and Permitting hereby submits its report to the Governor and Legislature in compliance with Senate Bill 11-045. The Bill established a Task Force and required the Task Force to examine the advantages and disadvantages of a statewide transmission siting and permitting framework for electric transmission facilities. The Task Force was directed to issue a report and recommendations to the legislature by December 1, 2011.

The Task Force consisted of 17 appointed members, including representatives from electric utilities and power providers, consumers, agricultural interests, landowners and state and local governments. The Task Force conducted four public meetings, during which it received testimony and presentations from experts on various transmission issues. Significant public comment, both written and oral, also was received. In addition to two meetings in Denver, meetings were held in Burlington and Pueblo, to accommodate statewide public interest in transmission issues.

The attached Task Force report includes the following recommendations:

- The Task Force supports increased cooperation and collaboration among local governments that review transmission applications in Colorado.
- When local government land-use decisions on utility projects are appealed to the PUC, and the PUC's decision is subsequently appealed, cases should go directly to the Colorado Court of Appeals, rather than to a district court in order to achieve more efficient and timely review.
- The Task Force supports establishment of processes and provision of resources to resolve transmission siting and permitting disputes between local governments and transmission operators.

Sincerely,

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Report of the Task Force on Statewide Transmission Siting and Permitting

**Submitted to the Governor
and
Colorado General Assembly
in Compliance with
Senate Bill 11-045**

December 1, 2011

Report of the Task Force on Statewide Transmission Siting and Permitting

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Executive Summary

Pursuant to the requirements of Senate Bill 11-045, The Task Force on Statewide Transmission Siting and Permitting makes its report to the Governor and General Assembly of the State of Colorado.

Senate Bill 11-045 specified a comprehensive and ambitious scope of inquiry for the Task Force. The Task Force held four public meetings, during which it received testimony and presentations from experts on each of the topics specified in the statute. To encourage public comment, the Task Force held meetings in Burlington and Pueblo, which were chosen due to the interest in transmission issues in eastern and southern Colorado.

Electric transmission has an important role in connecting customers to generating sources, ensuring reliable service, and increasing access to a competitive mix of generation sources. Many recent studies have indicated the important role of increased electric transmission investments in unlocking the potential benefits of Colorado's renewable resources, such as wind and solar.

Construction of an electric transmission line in Colorado may require approvals from local governments, the Colorado Public Utilities Commission (PUC), and various other federal and state entities. A utility must obtain local government approval to construct transmission facilities, while the PUC determines the need for the line. Utilities are concerned that this system not only results in inconsistent processes and requirements among local governments, unnecessary delay, increased opportunity for litigation, increased costs, but also is inconsistent with the increasingly regional nature of the modern electric industry. In summary, the current system creates significant uncertainty for projects that are necessary for reliable service and to advance state [and regional] objectives. Local governments believe the current system generally is working well; their approach to transmission siting and permitting is based upon their obligation to serve both a broader set of values and the public interest.

Senate Bill 11-045 required the Task Force to examine the advantages and disadvantages of a statewide transmission siting and permitting framework for electric transmission facilities. The Task Force spent considerable time taking testimony, hearing presentations by experts and debating this issue. The Task Force recognized that creation of such a framework raised various questions concerning jurisdiction, structure, membership, organization, staffing and funding.

Discussions concerning a statewide framework evolved from creation of new entity with the authority to permit transmission projects regardless of their location in the state, to the possibility of having an entity that works within the current system. In all cases, the need to maintain adequate, appropriate and ample local government control and input in the process was emphasized. Based upon its investigation, the Task Force does not recommend establishment of a statewide transmission siting authority in Colorado at this time. Rather, the Task Force recommends the incremental improvements reflected in recommendations 1, 2 and 3, discussed below.

After consideration and discussion, the Task Force makes the following recommendations to the Governor and the General Assembly.

Recommendation 1: Increase local government cooperation and collaboration

The Task Force supports increased cooperation and collaboration among local governments that review transmission applications in Colorado. Therefore, Colorado Counties Inc. (CCI), the Colorado Municipal League (CML), and transmission owners and operators agree to meet and develop proposed improvements to the siting and permitting review process, with a focus on uniform application requirements, collaborative processes, and consistent, set timelines.

Recommendation 2: Appeal of PUC Backstop Decisions to the Court of Appeals

The Task Force supports efficient and timely judicial review of PUC decisions regarding utility appeals of local government decisions that deny or place conditions on transmission projects ("Backstop Decisions"). Therefore, the Task Force recommends that appeals of PUC Backstop Decisions go directly to the Colorado Court of Appeals, rather than to a district court.

Recommendation 3: Open a PUC docket to consider improvements to the backstop process and consider establishing a transmission siting and permitting resource center

The Task Force supports establishing processes and providing resources to resolve transmission siting and permitting disputes between local governments and transmission providers. Therefore, the Task Force recommends that the PUC open a docket to consider a range of backstop-related issues, including using mediation for dispute resolution, providing advice to the PUC, and considering the possibility of establishing a resource center for the benefit of local governments, transmission providers, the public and the PUC.

Organization of this report

This report is organized as follows.

- Section 1 introduces the role transmission facilities play in the overall electric industry.
- Section 2 reviews previous Colorado legislation and research projects involving electric transmission siting and permitting, thus providing context for the work of this Task Force.
- Section 3 provides an overview of the current transmission siting and permitting process in Colorado and highlights the role of local governments, the PUC, and other federal and state agencies.
- Section 4 discusses the background and provisions of SB 11-045, including Task Force membership, meetings and funding.
- Section 5 describes Task Force efforts to encourage public participation.
- Section 6 describes the Task Force investigation of transmission and siting issues and includes summaries and links to expert presentations, research papers and the issues discussed by members.
- Section 7 details the three Task Force recommendations and discusses two proposals the Task Force considered but ultimately not did recommend.
- Appendix A lists acronyms that appear in the report.

Finally, to make this report concise and readable, brief summaries of the various presentations and reports are provided. Links to these resources are included for the reader who desires greater detail.

Section 1: Introduction

Role of Electric Transmission

Colorado consumers expect electricity to be available whenever they plug in an appliance, turn on a computer or television set, flip on a light switch or open a refrigerator. Meeting these expectations requires that an uninterrupted flow of electricity be provided by Colorado's electric industry. This industry is generally divided into three components: generation, transmission and

distribution.¹ While the major focus of this report is on electricity transmission, a brief summary of these components follows.

Utilities and nonutility power producers operate several types of electric generating units driven by a wide range of fuel sources. In Colorado, the sources include fossil fuels (coal, natural gas and petroleum) and renewable fuels (water, geothermal, wind, biomass and solar). Policies such as Colorado's Renewable Energy Standard (RES) have emphasized the role of renewable resources such as solar and wind.²

High-voltage transmission lines allow electricity to be efficiently moved over long distances. In general, transmission lines are used to carry electricity at high voltages from generating units to substations or from one substation to another. High-voltage transmission systems have made it possible to supply electricity to homes and businesses that are located far from the electric generating unit.

The distribution system consists of all the facilities and equipment that connect the transmission system to the customer's home, business or facility. The components of the distribution system are those most familiar to the customer – the power lines running to the house, the pole in the backyard, and the “big green box” in the park or the alley. Distribution is the final component of delivery of electricity to the end user.

The transmission network provides the vital link between generation sources that produce electricity and distribution systems that deliver electricity to homes, businesses and industries that use it. High-voltage electric transmission lines in Colorado serve several primary purposes, described below.

Connecting Generators to Customers: The most basic function of high-voltage transmission lines is to connect remote generators to customers. Electricity that is transmitted at higher voltages can be moved greater distances with lower energy losses than with a lower voltage infrastructure.

¹ The Department of Energy's Energy Information Administration provides a good introduction and discussion of the electric industry; see http://www.eia.gov/kids/energy.cfm?page=electricity_in_the_united_states-basics.

² For the most current version of Colorado's Renewable Energy Standard, see http://www.leg.state.co.us/CLICS/CLICS2010A/csl.nsf/fsbillcont3/47C157B801F26204872576AA00697A3F?Open&file=1001_enr.pdf.

Increasing Reliability: Electric companies have found that interconnecting with neighboring utilities through a network of high-voltage lines allows utilities to receive power from neighbors in case of generator or transmission outages. Thus, interconnection allows utilities to provide higher levels of reliable service to customers without the need for individual utilities to bear the cost of excess back-up generation.

Facilitating Wholesale Competition: Beginning in the 1970s, the federal government undertook a series of initiatives to promote wholesale electric supply competition. High-voltage transmission lines make it possible for utilities to engage in wholesale (for resale) electric power trades. Wholesale trades historically have been an important tool for utilities, allowing them to reduce power costs and increase power supply options. Implementing the changes made by Congress, the Federal Energy Regulatory Commission (FERC) has taken steps to open transmission access to facilitate wholesale power transactions.

Expand Access to Renewable Resources: Colorado is rich in renewable energy resources. Without transmission investment and development, however, the potential of wind, solar, hydroelectric, geothermal and biomass resources may not be realized. In general, Colorado's renewable resources are located in remote locations and require additional transmission facilities to bring the electricity to customers in high population areas such as Colorado's Front Range. Additional transmission lines also provide greater access to expanded export markets for Colorado generators.

Need for Electric Transmission in Colorado

Many recent studies and reports have concluded that Colorado needs additional transmission investment. Several are reviewed in Section 2 below.

As discussed earlier, Colorado needs additional transmission to connect generators to customers, increase electric reliability, facilitate wholesale competition, and expand access to renewable resource. Several planning and reporting mechanisms have been put in place to ensure that necessary transmission projects are being built.

PUC rules³ require certain Colorado electric utilities to file, no later than April 30 of each year, information on proposed new construction or extension of transmission facilities for the next three calendar years. After providing notice of the filings to interested parties, the PUC

^{3 3} 4 COLO. CODE REGS. §723-3-3206(d).

determines which projects do not require a Certificate of Public Convenience and Necessity (CPCN), which projects require the utility to file an application for a CPCN, or which projects will require the utility to file for a formal determination that a certificate is not required.

Senate Bill 07-100 established requirements for certain jurisdictional utilities to periodically evaluate and, if necessary, improve electric transmission facilities to meet the state's existing and future energy needs. Senate Bill 07-100 requires designation of Energy Resource Zones (ERZs) where transmission constraints adversely affect the ability to develop new generation resources; development interest has been shown in the past, and significant renewable generation potential exists for wind and solar resources.

Senate Bill 07-100 also requires Colorado electric utilities that are subject to rate regulation by the Colorado Public Utilities Commission to file biennial transmission development plans by October 31. The plan must consist of the following:

- Designation of energy resource zones;
- Development of plans for construction or expansion of transmission facilities necessary to deliver power consistent with the timing of energy resources located in or near such zones;
- Consideration of how transmission can be provided to encourage local ownership of renewable energy facilities; and
- Submission of proposed plans and applications for a CPCN to the PUC for review.

Finally, the PUC's transmission planning rules require that, by February 1, 2012, and each even year thereafter, each electric utility (Public Service Company of Colorado, Tri-State Generation and Transmission Association, and Black Hills Energy) file a 10-year transmission plan and supporting documentation pursuant to this rule. In addition, by February 1, 2014, and each even year thereafter, each utility must file conceptual long-range scenarios that look 20 years into the future. (For further information, see Section 3.)

Section 2: Previous Legislation and Related Studies

In addition to the Senate Bill 07-100 process discussed above, several other transmission-related legislation initiatives have occurred since 2000.

Senate Bill 00-197

The Colorado General Assembly created the existing statutory framework for siting of major electrical and natural gas facilities, including high-voltage transmission lines, in two pieces of legislation: S.B. 00-197 and H.B. 01-1195. In S.B. 00-197, the legislature created deadlines for local government action on utility applications to construct these types of facilities. The bill (codified at §29-20-108 (1), C.R.S.) requires final local government action on utility applications within 120 days after submission of a preliminary application (if the local government requires a preliminary application) or within 90 days after submission of a final application. The statute provides that, if the local government does not take final action within these deadlines, the application is deemed approved.

House Bill 01-1195

H.B. 01-1195 created a process for appealing decisions of local governments with respect to the siting of major utility facilities. This bill allows utilities to appeal local government decisions to the Colorado PUC if the conditions imposed by the local government would “unreasonably impair the ability of the public utility... to provide safe, reliable, and economical service to the public...”. (§29-20-108 (5), C.R.S.) When it considers appeals under this statute, the Commission is required to balance local government interests with statewide interests in locating the utility facilities

House Bill 06-1325

House Bill 06-1325 created the Task Force on Reliable Electricity Infrastructure (Reliability Task Force).⁴ Its purpose was to examine technical issues associated with electric infrastructure and to “engage affected stakeholders to develop a comprehensive plan that addresses the state’s future electric infrastructure needs for the benefit of Colorado and its citizens.” The Reliability Task Force was comprised of 15 members designated by the legislation or appointed by the Governor and legislative leaders. In its November 1, 2006, report, the Task Force stated:

“The subject matter of electric transmission infrastructure is complex and highly technical, but the basic problem is simple and straightforward: without enough transmission lines in the right places the lights won’t stay on. In addition,

⁴ Report of the Electricity Reliability Task Force:
<http://www.dora.state.co.us/puc/projects/ReliableInfrastructure/FinalTFReport11-01-2006.pdf>.

Colorado’s ability to ensure continued affordable, reliable electricity and to build a vibrant economy depends on sufficient transmission capability. Today the system is strained and, if current trends continue, there will not be adequate transmission to meet the needs.”

The Reliability Task Force made the following specific recommendations to the Governor and General Assembly:

1. Improve transmission cost recovery mechanisms;
2. Identify renewable generation resource development areas;
3. Increase local governmental involvement with organizations like the Colorado Coordinated Planning Group;
4. Increase funding for PUC participation in regional electricity transmission planning, reliability and regulatory forums; and
5. Increase training of specialized and highly trained workers to accomplish infrastructure development.

The Reliability Task Force’s third recommendation is relevant to this report. It expressed support for increased communication with local government officials concerning electric transmission activities. The Reliability Task Force supported municipal and county government involvement with organizations such as the Colorado Coordinated Planning Group (CCPG) that focus on transmission activities throughout the state.

Regarding this recommendation, the Reliability Task Force observed:

It is in the State’s best interest and the best interest of the cities and counties throughout the State to maintain an open dialogue regarding where load growth is taking place, where new generation is likely to be located to meet that load growth, and what the utility transmission plans are for projects that support this growth in demand.

Finally, the Reliability Task Force considered a proposal to establish a single point of contact for transmission permitting at the state level. This was not included in the final recommendations, since recommendation number three made it unnecessary.

Senate Bill 07-091

Senate Bill 07-091 created the Task Force on Renewable Resource Generation Development Areas (GDA Task Force). This group was charged with mapping the renewable resources in Colorado. The Senate Bill 07-091 final report⁵ contains maps of these resources and identifies “Generation Development Areas (GDA),” defined as areas where resources can be developed with competition among developers for utility-scale wind and solar projects. The report also identifies development opportunities for geothermal, hydroelectric power, biomass and ethanol. The maps identify both existing generation and areas where high-voltage transmission is needed to bring renewable resources to markets.

The GDA Task Force identified eight GDAs for wind and two for central solar power (CSP). The eight wind GDAs are located on the Front Range and Eastern Plains, and the two CSP GDAs are located in the San Luis Valley and south and southeast of Pueblo.

The Senate Bill 07-091 final report summarized the role of transmission investment and renewable resource development:

Perhaps foremost among the challenges are the unique transmission capacity constraints that exist in Colorado. These constraints have already prevented cost effective Colorado wind projects from being built and from delivering their full value of benefits to Colorado electric customers.

Renewable Energy Development Infrastructure (REDI) Report

The Governor’s Energy Office (GEO) has undertaken several detailed studies concerning the role of transmission investment in renewable energy development. The Renewable Energy Development Infrastructure (REDI) Report,⁶ released in December 2009, is characterized as a sequel to the Senate Bill 07-91 report. It addresses several issues that the legislature did not direct the Senate Bill 07-91 Task Force to examine.

⁵ Report of the SB 07-091 Task Force, <http://rechargecolorado.org/images/uploads/pdfs/23158d65cf0c2de7be220e35d1f7b72a.pdf>.

⁶ Final REDI report: [http://www.colorado.gov/cs/Satellite?blobcol=urldata&blobheadername1=Content-Disposition&blobheadername2=Content-Type&blobheadervalue1=inline%3B+filename%3D%22REDI+Report+\(Full+Version\).pdf%22&blobheadervalue2=application%2Fpdf&blobkey=id&blobtable=MungoBlobs&blobwhere=1251746588129&ssbinary=true](http://www.colorado.gov/cs/Satellite?blobcol=urldata&blobheadername1=Content-Disposition&blobheadername2=Content-Type&blobheadervalue1=inline%3B+filename%3D%22REDI+Report+(Full+Version).pdf%22&blobheadervalue2=application%2Fpdf&blobkey=id&blobtable=MungoBlobs&blobwhere=1251746588129&ssbinary=true).

The report considers how Colorado's electricity sector can reduce its CO₂ emissions by 20 percent by 2020 from its 2005 level. The REDI report sets forth several options that would help accomplish this goal.

With regard to transmission issues, the REDI report concludes that stakeholders should examine:

- The benefits, feasibility and possible procedures for developing a long-range transmission master plan;
- The most effective means to secure robust participation from a diverse set of stakeholders to ensure that Colorado's lands, wildlife, scenic, and other natural resources are adequately considered; and
- Whether a process should be initiated to determine the merits of creating a statewide transmission siting authority.

The Strategic Transmission and Renewables (STAR) Report

The Strategic Transmission and Renewables (STAR) Report⁷ was released by the GEO in December 2010. In its 16 chapters, this report addresses a wide array of subjects, resulting in a series of recommendations regarding how Colorado can create a productive, reliable electricity sector that is economically and environmentally sustainable. Chapter 15 of the STAR report examines transmission permitting challenges. The chapter concludes:

The issue of siting and permitting for new transmission is viewed by many as being as difficult as transmission planning and financing. There is a growing understanding that Colorado's transmission permitting system may need to be more streamlined and better coordinated. Effective transmission siting and permitting addresses protection of many interests, including concerns of property owners, environmental considerations, and local governments. Input from these concerns should be addressed in a more timely fashion to ensure that progress occurs; protracted litigation has proven that it can stymie expansion of the state's high-voltage transmission infrastructure.

Section 3: The Current Colorado Siting and Permitting Process

⁷ Final STAR report: http://rechargecolorado.org/images/uploads/pdfs/STAR_Report_12-10.pdf.

Colorado's current transmission facility permitting process involves roles for both local governments and the PUC. SB 11-45 directs the Task Force to make recommendations regarding Colorado's existing statutory and regulatory framework applicable to the siting and permitting of electric transmission facilities, and also to identify or recommend opportunities to improve that framework. In this section, permitting refers broadly to all necessary approvals a utility must obtain to build new transmission lines. This section describes Colorado's existing statutory and regulatory framework. Recommendations for improvements are discussed in Section 6.

Local Government Permitting Processes

Colorado's process is characterized by strong local government involvement. According to Colorado law, no public utility may construct electric transmission facilities within the boundaries of any local government unless the utility complies with the local government's zoning rules.⁸ In addition, a utility must notify the affected local government of its plans to site a major electrical or natural gas facility before filing a request for a certificate of public convenience and necessity or before any annual filing with the public utilities commission that proposes or recognizes the need for construction of a new facility.⁹ Colorado law requires local governments to make their decisions regarding major electric facilities within specified time periods. Local governments must make final decisions within 120 days of the utility's submission of a preliminary application, if a preliminary application is required, or within 90 days after submission of a final application. The 120- or 90-day time periods commence when the submission is deemed complete. Within 28 days of a utility's application, the local government must notify the utility of any additional information that must be supplied by the utility or authority to complete the application. If the local government does not take final action within the applicable decision time frames, the application shall be deemed approved.¹⁰

Local government permitting requirements may take several forms:¹¹ 1041 permits, special use permits, conditional use permits, or some other mechanism. Colorado law allows cities and counties to regulate certain activities that are designated as matters of state interest.¹² The 1041

⁸ COLO. REV. STAT. § 40-5-101(3)

⁹ COLO. REV. STAT. §29-20-108(4)(a).

¹⁰ COLO. REV. STAT. §29-20-108(2).

¹¹ Tri-State Generation and Transmission Association, *Permitting of High Voltage Transmission Lines: An Overview of Colorado Counties' Requirements and Other States Processes* (Tri-State Generation and Transmission Association, August 2011) 3-5.

¹² These types of permits are referred to as 1041 permits because the statute authorizing them was H.B. 1041, which was passed in 1974.

permitting process involves a pre-application meeting, public notice, submittal of the permit application, public hearing, approval, and post-approval requirements. Sixteen Colorado counties currently have 1041 regulations for utility transmission facilities. In nine counties, the 1041 requirements are in addition to the county special use permits, and are in addition to conditional use permits in four counties. Nine of the 16 counties with 1041 regulations use a two-step process in which the application is first reviewed by a planning commission and then by the Board of County Commissioners.

Special use and conditional use permits generally involve a pre-application meeting, public notice, submittal of the permit application, public hearing, approval, and post-approval requirements. Special use and conditional use applications are generally less extensive than 1041 applications. In Colorado, 24 counties (not including those with 1041 regulations) require special use permits for the construction of electric transmission facilities. Half of these special use counties employ a one-step review process with either the planning commission or Board of County Commissioners making the final decision. Twelve Colorado counties require conditional use permits, with about half employing a two-step process. Most counties require some type of environmental impact statement as part of the permit application, but they are not required to be as extensive as those required under the 1041 process.

Ten counties have permitting requirements other than 1041, special use or conditional use. These include: right-of-way permits, major development or major impact review permits, land development agreements, and limited review permits. Kiowa and Mineral counties appear to have no specific permitting requirements for transmission facilities.

Colorado County Transmission Line Permitting Requirements

Permitting Requirements	Number of Counties
1041 Regulations Only	3
1041 Regulations and Special Use Permit	9
1041 Regulations and Conditional Use Permit	4
Special Use Permit	24
Conditional Use Permit	12
Other Land Use Permits	10
No Requirements	2

Public Utilities Commission Processes

As stated earlier, the PUC determines the need for transmission facilities through the CPCN process. In addition, the PUC hears utility appeals of local government decisions and oversees transmission planning.

Colorado law prohibits a utility from building a new electric facility, plant or system until it first obtains “from the commission a certificate that the present or future public convenience and necessity requires or will require such construction”¹³ or a determination that a certificate is not required for construction, operation or extension of a facility “in the ordinary course of business.”

If a local government entity denies an application of a public utility relating to the location, construction or improvement of a major electrical transmission facility, or if the local government imposes requirements or conditions upon such permit or application that the utility alleges will unreasonably impair its ability to provide safe, reliable and economical service, the utility may appeal the local government action to the PUC (referred to as “backstop” authority).¹⁴ When ruling on such an appeal, the PUC not only must balance broader statewide needs for additional transmission investment with local land use concerns, but also must consider a number of statutorily prescribed factors. In particular, the PUC is required to consider the demonstrated need for the facility; the extent that it is inconsistent with local land use plans and ordinances; whether it would “exacerbate” a natural hazard; applicable engineering standards; the merits of feasible alternatives proposed by the applicant or the local government; the basis for the local government’s decision; the impact on local residents; and the safety of the public.¹⁵ Such decisions by the PUC are appealable to a Colorado district court. One Task Force recommendation concerns these appeals.

In addition to considering CPCN applications and exercising its backstop authority, the PUC coordinates transmission planning by regulated utilities. The Commission endorses the concept that planning should be a comprehensive, transparent statewide process that takes into account the needs of all stakeholders. The PUC’s transmission planning rules require that, by February 1, 2012, and each even year thereafter, each electric utility (Public Service Company of Colorado, Tri-State Generation and Transmission Association, and Black Hills Energy) must file a 10-year transmission plan and supporting documentation pursuant to this rule. In addition, by February 1, 2014, and each even year thereafter, each utility must file conceptual long-range scenarios that

¹³ COLO. REV. STAT. §40-5-101(1)

¹⁴ COLO. REV. STAT. §29-20-108.

¹⁵ 4 COLO. CODE REGS. §723-3-3703.

look 20 years into the future.¹⁶ These conceptual long-range scenarios are to analyze projected system needs for various credible alternatives. The PUC's transmission rules require utilities to notify local government agencies and other stakeholders of transmission plans and provide an opportunity for meaningful participation in the planning process.

Other Agencies Involved in Transmission Siting and Permitting

In addition to complying with the requirements of local governments and the PUC (discussed above), siting of transmission lines is affected by various federal and state regulatory and permitting requirements and the presence of ecologically sensitive areas, or federal and state protected species and lands. Although a full discussion of these issues is beyond the scope of this report, several are noted below.¹⁷

Transmission line projects involving the Western Area Power Administration (WAPA), which is part of the Department of Energy (DOE), must comply with the agency's National Environmental Policy Act (NEPA) regulations. Tri-State Generation and Transmission Association, which obtains loans through the U.S. Department of Agriculture's (USDA) Rural Utilities Services (RUS) for many of its projects, must comply with the RUS NEPA regulations in order to receive these loans. If a transmission line crosses federal land, other agencies such as the U.S. Forest Service, Bureau of Land Management, or U.S. Fish and Wildlife Service may become involved. If multiple federal agencies are involved, interagency coordination is important to fulfill each agency's NEPA requirements.

The key factor in determining whether a transmission line project will require an Environmental Assessment (EA) or Environmental Impact Statement (EIS) is whether significant environmental effects could or will occur. If the environmental analyses show that no significant effects are anticipated, an EA would be sufficient. Generally, EAs can be completed in one year. If significant effects are anticipated, an EIS would be required. A non-controversial EIS can be completed in a minimum of 18 months, whereas an EIS for a large, complex project can require up to three years. Longer time frames may be needed for when new transmission corridors are involved.

¹⁶ 4 COLO. CODE REGS. §723-3-3627.

¹⁷ See Renewable Energy Development Infrastructure (REDI) Project, *Environmental, Siting, and Land Use Issues* (PLACE: Worley Parsons, July 20, 2009); http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SitingDocuments/EnvironmentSitingLanduse_REDIPROJECT_GEO07-20-2009.pdf.

Overhead clearances of transmission lines also are an issue in Colorado. The Federal Aviation Administration conducts aeronautical studies to determine if proposed facilities pose a hazard to air traffic and safety. Eastern Colorado and the San Luis Valley also are used by the U.S. military for Special Use Airspace (SUA) and Military Training Routes (MTRs). Colorado law¹⁸ requires each local government with territorial boundaries within two miles of a military installation to notify the installation commander of proposed zoning changes and amendments to its comprehensive plan or land development regulations that, if approved, would affect the use of any area within two miles of the installation. In addition, the Department of Defense (DoD) requests notice of plans to develop new or extend existing transmission lines, allowing DoD to review, determine mission impact and provide timely feedback. (For more information about this issue, see the link to the Department of Defense presentation in Section 6).

Siting of transmission lines is affected by the presence of ecologically sensitive areas and federal and state protected species and lands. It is important to take these ecological constraints into account during the siting process. (For more information about this issue, refer to the Western Resource Advocates' Oct. 19, 2011, presentation to the Task Force)

Electric transmission line projects also may require review by and approvals from a variety of state agencies such as the Colorado Department of Transportation, the Colorado Division of Wildlife, and the Colorado State Land Board (CSLB).

Section 4: Task Force Background and Membership

Background and Provisions of Senate Bill 11-45

As originally introduced, Senate Bill 11-45 would have created a seven-member electric transmission facility siting commission consisting of three utility regulators, three members representing the local governments in which a planned facility is proposed to be located, and one member representing the public at large.¹⁹ If multiple facility applications are before the siting commission, separate local government representatives would be appointed for each application. Under this version of the bill, if an electric utility proposed a transmission facility that is listed in a current statewide long-range plan adopted by the PUC, the utility may submit an application to

¹⁸ COLO. REV. STAT. §29-20-105.6.

¹⁹ The original version of Senate Bill 11-45 is available at http://www.leg.state.co.us/clics/clics2011a/csl.nsf/fsbillcont3/98D5ACA772AF76E28725780800803DAD?open&file=045_01.pdf.

the facility siting commission for approval. The siting commission must act within 180 days of the filing of a complete application, or the application is deemed to have been approved. The utility still would be required to obtain a CPCN from the PUC, but would not require siting review by local governments. Decisions of both the PUC and the siting commission would go directly to the Colorado Court of Appeals.

The original version of Senate Bill 11-45 was significantly modified during the legislative process. Rather than establishing a transmission siting commission, the final version of the bill established the Task Force on Statewide Transmission Siting and Permitting. This Task Force is to make recommendations to the Governor and General Assembly regarding the existing Colorado statutory and regulatory framework applicable to electric transmission facility siting and permitting and identify or recommend opportunities to improve that framework. The Task Force must report its work and recommendations by December 1, 2011. The specific scope of work is described later in this report.

Task Force Appointments and Proxies

Section 3 of Senate Bill 11-045 specified that the Task Force consist of 17 members, appointed by as follows:

The Director of the Commission, or his or her designee, who shall convene the Task Force:

James Tarpey (Colorado Public Utilities Commission)

Ten members appointed by the Governor:

- One member representing cooperative electric associations that distribute electricity:
Kent Singer (Colorado Rural Electric Association)
- One member representing cooperative electric associations that generate and transmit electricity:
Rick Thompson (Tri-State Generation and Transmission Association, Inc.)
- Two members representing investor-owned electric utilities:
John Lupo (Xcel Energy)
Heidi Wagner²⁰ (Black Hills Energy)
- Two members representing municipally owned electric utilities:

²⁰ Black Hills Energy requested and received approval from the Governor's Office for David Atwood to replace Heidi Wagner as a member of the Task Force.

Brian Moeck (Platte River Power Authority)

James Rosintoski (Colorado Springs Utilities)

- One member representing renewable energy electric generation interests:
Lisa Hickey (Alpern Myers Stuart, LLC)
- One member representing large commercial consumers of electricity:
Thor Nelson (Holland and Hart)
- Two landowners representing agricultural interests who reside in different geographic areas of the State:
Chris Rundell
Kenneth Helling

One member appointed by the President of the Senate:

TJ Deora (Governor's Energy Office)

One member appointed by the Speaker of the House of Representatives:

Jim Hackstaff (Hackstaff Law Group)

Two members representing the interests of Colorado Municipalities, appointed by the Executive Director of the Colorado Municipal League or its successor organization:

Geoff Wilson (Colorado Municipal League)

Carrie Daggett (Deputy City Attorney, Fort Collins)

Two members representing the interests of Colorado Counties, appointed by the Executive Director of Colorado Counties Incorporated, or its successor organization:

Darius Allen (Alamosa County Commissioner)

Ben Pearlman (Boulder County Commissioner)

Task Force Meetings

The Task Force met four times as required by Senate Bill 11-045. A list of the discussion and presentations made at each Task Force meeting follows. (A link to the detailed meeting summary for each Task Force meeting is provided. Links to the presentations are provided in the next section.)

Meeting One: August 18, 2011, 9:30 a.m. – 4:30 p.m.

- Introduction of Task Force members - Elect Chairman (James K. Tarpey) and Vice-Chairman (Thor Nelson)
- Presentation: Discussion of Goals and Responsibility of the Task Force
- Administrative Issues
- Presentation: Review of Siting and Permitting Framework in Colorado
- Presentation: Review of Local Government Requirements for Transmission Development
- Presentation: Review of Key Points from the Nucla – Sunshine 115 kV Transmission Project located in San Miguel County and the United Power System Improvement, Phase II 115 kV Transmission Project located in Commerce City and Adams County
- Presentation: Review of PUC Transmission Planning Rules and CPCN Rules
- Initial Discussion of Issues Related to Electric Transmission Siting and Permitting
- Public Comment

Link to Meeting Summary:

[http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SB11-45TFmeetings/SB11-45TF_08-18-11MtgSummary\(1stMtg\).pdf](http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SB11-45TFmeetings/SB11-45TF_08-18-11MtgSummary(1stMtg).pdf)

Meeting Two: September 7, 2011, 9:30 a.m. – 6:15 p.m.

- Presentation: Developing Transmission Facilities on the Eastern Plains - Experiences of a Private Transmission Developer
- Presentation: A National Perspective on Approaches to Permitting and Siting Electric Transmission Facilities (ETFs)
- Presentation: Mid-West Models for Permitting and Siting ETFs
- Presentation Western Models for Permitting and Siting ETFs
- Discussion: Potential Federal Oversight and Involvement
- Moderated Discussion of Issues and Solutions to Permitting and Siting Electric Transmission Facilities
- Public Comment

Link to Meeting Summary:

[http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SB11-45TFmeetings/SB11-45TF_09-07-11MtgSummary\(2ndMtg\).pdf](http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SB11-45TFmeetings/SB11-45TF_09-07-11MtgSummary(2ndMtg).pdf)

Meeting Three: October 6, 2011, 9:30 a.m. – 6:00 p.m.

- Administrative Issues: Open Meetings Act
- Presentation: Siting and Permitting: The Utility Perspective
- Presentation: Power Plant and Transmission Line Siting in Arizona
- Moderated Discussion of Issues and Solutions to Permitting and Siting Electric Transmission Facilities
- Public Comment

Link to Meeting Summary:

[http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SB11-45TFmeetings/SB11-45TF_10-06-11MtgSummary\(3rdMtg\).pdf](http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SB11-45TFmeetings/SB11-45TF_10-06-11MtgSummary(3rdMtg).pdf)

Meeting Four: October 19, 2011, 9:30 a.m. – 7:00 p.m.

- Presentation: Effectively Working with Department of Defense on Transmission Line Siting
- Presentation: Western Resource Advocates Environmental Recommendations for SB11-45 Task Force
- Task Force Discussion of Concepts and Proposed Ideas for Transmission Permitting and Siting

Link to Meeting Summary:

[http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SB11-45TFmeetings/SB11-45TF_10-19-11MtgSummary\(4thMtg\).pdf](http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SB11-45TFmeetings/SB11-45TF_10-19-11MtgSummary(4thMtg).pdf)

Task Force Consultant

Section 3 of Senate Bill 11-045 specified that the Director of the Commission, or his or her designee, shall convene the Task Force and is authorized to contract with a mediator or other third party to facilitate accomplishment of Task Force duties. The Task Force contracted with Schmitz Consulting LLC to help the Task Force carry out its duties and to prepare the Task Force's final report.

Section 5: Public Participation

SB 11-45 directs the Task Force to solicit and receive comments from members of the public, which must include an opportunity for Colorado residents to submit written comments to the Task Force. The Task Force used a variety of methods to encourage public comment.

Internet Web Site

The Task Force established a presence on the PUC Web site at

<http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SB11-45.htm>.

This link will remain active and allow access to the following material:

- Notices of meetings;
- Press releases concerning future Task Force meetings;
- Meeting agendas;
- Meeting summaries;
- Presentations to the Task Force;
- Task Force member contact information (addresses, phone numbers and e-mail addresses);
- Access to webcasts of Task Force meetings;
- A link to submit written comments;
- A link to SB 11-0145;
- A link to previous transmission related studies; and
- The final Task Force report;

Meetings Outside of Denver

To make it easier for the public to attend Task Force meetings and to further encourage public comment, the Task Force held its second and third meetings outside the Denver metropolitan area. The second meeting was held in Burlington on September 7, 2011, and the third meeting was held in Pueblo on October 6, 2011. These locations were chosen due to the interest in transmission issues in the eastern and southern areas of Colorado. The PUC issued press releases on behalf of the Task Force in order to advise the public of these meetings and to solicit public input. The meetings included a call-in number so interested parties could participate via conference call, and in one instance a webcast was used.

Public Comment Received

The Task Force received oral public comment²¹ from 14 people during its four public meetings. As expected, more people provided public comments at the Burlington and Pueblo meetings than at the meetings in Denver. The number of public comments at each meeting is shown below.

Meeting Date	Location	Public Comments
August 18, 2011	Denver	1
September 7, 2011	Burlington	7
October 6, 2011	Pueblo	5
October 19, 2011	Denver	1

In addition, the Task Force received 33 written public comments. These comments can be viewed at the Task Force Web site:

<http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45Comments/SB11-45comments10-13thru11-10-2011.pdf>.

Section 6: Task Force Investigation

Section 4 of SB 11-045 specifies the Task Force scope of inquiry. A brief summary follows of presentations, research papers and Task Force discussions that address each of these areas. The link to the original document or presentation is included where applicable.

An inventory and evaluation of Colorado's current siting and permitting framework for electric transmission facilities, including its benefits and shortcomings

The Task Force received several presentations and reviewed several research papers examining Colorado's current siting and permitting framework. (For a summary of Colorado's siting and permitting framework, see Section 3 of this report.)

²¹ A summary of public comments received is contained in the meeting summaries that are available on the Force Web site.

Presentation: Juan Altamirano, Alamosa County, “A review of local government requirements for transmission development” (Presented at the August 18, 2011, Task Force Meeting)

Mr. Altamirano presented a review of local government requirements for siting and permitting transmission projects. His presentation covered how Alamosa County would view a transmission application if generation were not in the county; how Alamosa’s regulations compared to other counties; the review of transmission lines built by a developer to link generation projects to the grid; the cost and length of time for the county review; public outreach; and the attractiveness of solar projects in Alamosa County.

Presentation: John Lupo, Xcel Energy, “Energy Siting and Permitting Framework in Colorado” (Presented at the August 18, 2011, Task Force Meeting)

Mr. Lupo’s presentation included an overview of Colorado’s electric transmission system, electric resource planning and the requirements of the Commission’s current resource planning rules; the generation and transmission development process and timelines; siting and environmental planning; public and state agency input; siting decision factors; and local land use permitting and challenges with the current processes.

Mr. Lupo concluded that the current siting and permitting system precludes a holistic review; poses risks and uncertainty for utilities; is out of sync with today’s energy markets; is impractical for networked facilities; and is hampered by local government planners’ limited experience with energy development. He discussed the gap between generation development that can take two to four years and transmission development that can take four to seven years or longer.

http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SitingPresentations/TF08-18-11mtg_Siting-Permitting_STF-Lupo.ppt

Presentation: Thomas J. Dougherty, Esq., Rothgerber Johnson & Lyons LLP, “Colorado Transmission Project Case Studies” (Presented at the August 18, 2011, Task Force Meeting)

Mr. Dougherty’s presentation provided an in-depth review of the process and problems encountered with two recent transmission projects, the Nucla-Sunshine 115 KV transmission project and United Power System Improvement Project. Tri-State Generation and Transmission requested a permit from San Miguel County for the Nucla to Sunshine 115 kV transmission project in May 2001. San Miguel County approved the permit with the condition that Tri-State install the transmission line underground on private land. This led to the first use of the backstop

appeal to the PUC, which reversed the County's permitting condition. The PUC's Backstop Decision was appealed to the district court, and the dispute was ultimately settled in May 2010.

In the second project, in December 2005, Tri-State Generation and Transmission requested permits from Adams County and Commerce City for the second phase of a 115 kV transmission project to serve its member, United Power. One year later, Commerce City and Adams County both issued permits that included the condition that Tri-State install the transmission line underground in certain areas. After appeal to the PUC, a settlement agreement in February 2010 eliminated the undergrounding requirement.

http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SitingPresentations/TF08-18-11mtg_COTransmissionProjectCaseStudies_Dougherty_prs.ppt

Presentation: Cory Blair, Transmission Development Manager for RES Americas
“Transmission Siting in Colorado: Successes and Challenges” (Presented at the September 7, 2011, Task Force Meeting)

RES Americas has completed solar and wind projects totaling 5,200 MW to date, including 27 transmission gen-ties²² with aggregate lengths of more than 300 miles. RES has five Colorado projects involving gen-ties: three of approximately 40 miles, and two of approximately 75 miles; they often span multiple counties.

Mr. Blair pointed out several challenges that arise because of Colorado’s fragmented transmission permitting process: lack of uniform permitting guidelines; multiple permits can increase permitting timelines; lack of permitting standards; lack of local government knowledge concerning transmission development; unmanageable financial demands; and tax treatment of transmission.

Mr. Blair stated that RES would prefer a statewide siting authority with county involvement. The benefits include a single permit resulting in cost savings and more timely construction of transmission infrastructure. If a statewide authority is not created, Mr. Blair suggests streamlining the current process so that the developer and all counties affected by a transmission line enter into a memorandum of understanding in which the counties agree on one permit application for all jurisdictions, including pre-established processes and costs.

²² Gen-ties are radial transmission lines constructed by a project developer that link a generation facility to the regional transmission system. Project developers need to use gen-ties to bring location-constrained resources such as wind or solar to consumers.

http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SitingPresentations/TF09-07-11mtg_SitingInCO-SuccessChallenges_RES-Blair_prs.pdf

Research Paper: Tri-State Generation and Transmission Association Inc.; *Permitting of High Voltage Electric Transmission Lines - An Overview of Colorado Counties' Requirements and Other States' Processes*. (Summarized by Thomas J. Dougherty, Esq. at the September 7, 2011, Task Force Meeting)

Part I of this research paper provides an overview of county permitting processes and authorities in Colorado. The paper describes 1041 permits, special use and conditional use permits, and other land use permits. This section of the paper concludes that, due to varying county requirements and time frames, coordination of a major multi-county transmission project can be difficult. Significant permitting and project delays may result, which can be further complicated by additional municipal permitting requirements.

Appendix I of this research paper provides detailed information concerning Colorado county permitting processes. For each Colorado county, Appendix I shows whether the county uses the 1041 process, special use permit, conditional use permit or other process; whether the review is a one-step or two-step process; details of permitting requirements; and reference to the source of the county's regulatory authority.

http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SitingDocuments/PermittingHighVoltageTransmissionLines_3State08-2011.pdf

Presentation: Park Haney, U.S. Army Regional Environmental and Energy Office-Western, "Effectively Working with Department of Defense (DoD) on Transmission Line Siting" (Presented at the October 19, 2011, Task Force Meeting)

Mr. Haney discussed DoD's transmission line concerns, including low-level aviation testing and training; special use airspace; military training routes, helicopter training routes; electromagnetic interference; communications equipment; and radar. The DoD has established a siting clearinghouse to allow the DoD to speak with a single voice and to develop a process that promotes compatibility between energy independence and military capabilities. It is expected that most projects will be reviewed and cleared in 30 to 45 days; only those projects with significant impacts or that need multi-service coordination will receive full clearinghouse attention. The DoD requests notice concerning plans for developing new or extending existing

transmission lines, allowing DoD to review, determine mission impact, and provide feedback in a timely manner.

http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SitingPresentations/TF10-19-11mtg_DoD_TransmissionLineSiting.pdf

Presentation: Gary Graham, Western Resource Advocates, “SB11-45 Task Force Environmental Recommendations” (Presented at the October 19, 2011, Task Force Meeting)

Mr. Graham discussed the Environmental Data Task Force’s (EDTF) report to the Western Electricity Coordinating Council. EDTF’s goal is to develop recommendations to incorporate information on land, wildlife, cultural, historical, archaeological and water resources into the transmission planning process. Mr. Graham made three recommendations to the Task Force. If a Colorado transmission siting authority is created, it should 1) use the EDTF-accepted recommendations to guide siting of transmission to avoid or minimize impacts; 2) include environmental representation; 3) give counties, other government agencies, environmental organizations and other stakeholders ample opportunity to participate in discussions regarding how the authority would function.

http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SitingPresentations/TF10-19-11mtg_WRA_EnvironmentalRecommendations.pdf

Research into examples of how other states approach siting and permitting of electric transmission facilities

The following research papers and presentations address other states’ approaches to siting and permitting electric transmission facilities.

Research Paper: Prepared for Xcel Energy by Faegre & Benson, Denver, Colorado; *Electric Transmission Siting Processes in Selected Western and Midwestern States - October 2010.* (Summarized by Jack Sperber at the September 7, 2011, Task Force Meeting)

Mr. Sperber presented a summary of this research paper for the Task Force. The purpose of the presentation was to discuss trends observed in western and Midwestern states, discuss how they fit into wider national picture, and suggest ideas for the Task Force’s consideration. The study examined nine states: Iowa, Kansas, Michigan, Minnesota, North Dakota, Oklahoma, South Dakota, Texas and Wisconsin. Oklahoma is considered an outlier since it has no state-level

transmission line permitting. Of the remaining eight, all have exclusive and primary state jurisdiction, in which the route and need are determined at the state level. This model is followed by most states in the country, but differs from the current Colorado system. The procedures, criteria, agencies involved, and details vary greatly among the eight states.

It should be noted that the states with exclusive statewide jurisdiction specify a role for local government involvement and input. In Wisconsin, for example, siting decisions for major transmission projects are made by the Wisconsin Public Service Commission, which requires local government input into the decision-making process. California, Oregon and Montana have similar state siting agencies that are required to consult with local land use agencies when siting projects.

http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SitingDocuments/FaegreBenson-MidwestStatesSitingProcesses_10-2010.pdf

Research Paper: Tri-State Generation and Transmission Association, Inc.; *Permitting of High Voltage Electric Transmission Lines - An Overview of Colorado Counties' Requirements and Other States' Processes*. (Summarized by Thomas J. Dougherty, Esq. at the September 7, 2011, Task Force Meeting)

Part II of this research paper discusses permitting processes in other states. Mr. Dougherty presented a summary of this paper for the Task Force. Permitting processes in most other states generally fall into one of three categories: state agency with exclusive jurisdiction, all siting at local level, or something in between.

Twenty-seven of the 50 states use a statewide siting authority with exclusive jurisdiction over transmission lines. These statewide siting authorities have two general forms: a standing agency with dedicated staff and decision makers who are responsible for these decisions on a regular basis, or an *ad hoc* committee that is constituted periodically for specific projects and that relies on representatives from both other agencies with functional expertise and from local government to ensure interests are represented. Local government participation and input are important in the states. The processes in many of these states require or strongly suggest that utilities work with local governments to develop consensus before applying for a permit from the statewide authority

In 14 states concurrent jurisdiction is shared between the state agency responsible for one aspect (i.e., need) and the local agency responsible for another aspect (i.e., siting/permitting). Colorado

is included in this group; the PUC has jurisdiction over determining system need and local governments approve siting/permitting/location decisions. Eight of the 14 states (including Colorado) have provisions that allow state agencies to preempt local government decisions in certain situations. In seven states, most of the primary authority over transmission line siting is handled at the local level. There is typically an appellate process to a relevant state agency in the case of unreasonable conditions or denial of the proposed transmission line. Georgia and Tennessee do not fall into any of these three categories.

http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SitingDocuments/PermittingHighVoltageTransmissionLines_3State08-2011.pdf

Research Paper: Holland & Hart; *Transmission Siting in the Western United States: Overview and Recommendations*, Prepared as Information to the Western Interstate Energy Board (August 2009).

This paper surveys various state and local requirements that apply to siting a major transmission project in the western United States and analyzes how the processes could be changed to accommodate the growing appetite for low-carbon, efficiently generated, reasonably priced electric energy. The paper discusses the 11 contiguous western states of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming. The paper also discusses siting of interstate power lines.

The paper concludes by identifying “best practices” that could serve as integral elements of a regional siting regime. Relevant “best practices” include the following.

- State siting agency preemption of conflicting local decisions, while using a process to ensure that local community concerns are considered and that a local decision is overridden only if the broader public interest is compelling.
- A centralized siting agency with jurisdiction over transmission projects proposed by any entity, whether or not the proponent is a regulated public utility.
- A definition of “need” that recognizes the critical public interest in reliable, efficient electricity transmission.
- Regular, periodic planning to assess strategic needs for transmission infrastructure.
- Timelines that are long enough to ensure thorough review of a proposal, but short enough to ensure that a decision is issued within a reasonable period of time.

http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SitingDocuments/TransmissionSitingWesternUS_forWIEB08-2009.pdf

Presentation: Task Force Chairman Tarpey summarized the transmission siting process in 11 western states. (Presented at the September 7, 2011, Task Force Meeting)

Task Force Chairman Tarpey pointed out that six of the 11 western states have exclusive state jurisdiction over transmission siting, with varying degrees of local government involvement, while the other five have concurrent jurisdiction or rely primarily upon local authority. Chairman Tarpey then raised a number of legal, organizational, jurisdictional and procedural decision points that need to be addressed should the Task Force consider establishing a statewide authority. (These issues are discussed later in this section.)

Identification of possible models for improving Colorado's existing siting and permitting processes applicable to electric transmission facilities

In the process of investigating the scope of work specified by SB 11-45, the Task Force identified two broad models for improving Colorado's existing siting and permitting process:

1. Retain the existing siting and permitting process with recommended actions to streamline the process and make it more effective; and
2. Consider adopting some form of statewide transmission siting and permitting framework that would ensure a significant role and meaningful input by local governments.

Task Force identification of methods to streamline the existing process is described further later in this section. The following models of statewide transmission siting and permitting frameworks were identified by the Task Force.

Presentation: Task Force Chairman Tarpey summarized the transmission siting process in Arizona. (Presented at the September 7, 2011, Task Force Meeting)

The Arizona Corporation Commission (ACC) is similar to the Colorado PUC; both are recognized in their respective state constitutions. The ACC has five elected members, while the PUC has three appointed members. The ACC has a planning rule and an approach to transmission planning similar to that recently adopted by Colorado.

The ACC requires each utility to annually file a 10-year transmission plan reporting expected transmission needs. The ACC biennially reviews the filings to determine if utilities are adequately planning for transmission needs 10 years into the future. If the ACC agrees with the utility plan, it so indicates. If not, the ACC indicates its concerns and directs the utility to address them in its next filing.

If the utility is planning to build a 15kV or larger transmission line, it must apply to the ACC for a CPCN. The ACC refers the application to the Arizona Transmission Line Siting Committee (ATLSC) for review and decision. The ATLSC consists of members from the attorney general's office; state agencies that deal with environmental, water and energy issues; the ACC; and members from the public, local government and agricultural interests. This entity is to consider environmental, noise, recreational, scenic and technical issues, as well as costs. The ATLSC has 180 days to issue a decision; the matter then is referred to the ACC, which has up to 60 days to reach its decision. If neither meets its respective deadline, the applicant can construct the proposed project. The ACC takes the ATLSC report and balances the need for an adequate, economical and reliable energy supply with a desire to minimize the impact on the environment. If the ACC issues a certificate, it is conditioned upon compliance with all master plans, regulations and permit requirements with local governments where the facility will be located. The ACC has authority to preempt local government decisions and requirements that it determines would be unreasonable.

Presentation: Laurie A. Woodall, J.D., K.R. Sabine & Associates, "Power Plant & Transmission Line Siting in Arizona" (Presented at the October 6, 2011, Task Force Meeting)

Ms. Woodall's presentation explained the purpose, history, membership, staffing, funding and operations of the Arizona Power Plant and Transmission Line Siting Committee.

http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SitingPresentations/TF10-06-11mtg_LineSiting-Arizona_JTcomments.pdf

Presentation: John Lupo, Xcel Energy, and Rick Thompson, Tri-State Generation and Transmission Association, Inc., "Siting and Permitting, A Utility Perspective" (Presented at the October 6, 2011, Task Force Meeting)

The presentations of Mr. Lupo and Mr. Thompson provided extensive recommendations concerning uniform requirements and review; consistent rules for all entities; permitting decisions that reflect local, state and federal energy development policies; goals and directives;

timelines; exemptions; regional siting boards; transmission permitting and siting framework; planning; state siting; CPCN; and appeals processes. The recommendations preserve local government control of siting and permitting decisions and build upon these processes to make them more efficient and supportive of state and regional planning. The utilities' presentation outlined a comprehensive framework that included early utility engagement with affected local governments as part of the transmission planning process; built upon and complemented the PUC's recently enacted transmission planning rules; combined existing Colorado statutory and procedural elements with characteristics of "best practices" from other states to create a joint state and local government committee that would review local government permitting decisions and make recommendations to the PUC for final decisions consistent with its existing backstop authority; and supported the PUC's CPCN process.

http://www.dora.state.co.us/puc/projects/TransmissionSiting/SB11-45/SitingPresentations/TF10-06-11mtg_Xcel_Tri-State_SitingPermitting-UtilityPerspective.pdf

Recommended actions to streamline siting and permitting processes applicable to electric transmission facilities, including a balancing of environmental, land use, and community effects with transmission project costs and schedule risks

In the process of investigating the scope of work specified by SB 11-45, the Task Force identified several possible actions to streamline the existing siting and permitting process. It should be emphasized that these are not Task Force recommendations, but were considered during the Task Force's investigation and discussions. Task Force recommendations are discussed in Section 7.

- Consider methods to increase cooperation and collaboration among government entities that are reviewing a particular transmission project. (Element of Task Force Recommendation 1)
- Consider methods to establish more uniform, clear and consistent pre-application and application requirements for all local government entities that are reviewing transmission projects. (Element of Task Force Recommendation 1)
- Consider modifying timelines for local governments to deem a transmission application complete and to process applications for transmission projects. (Element of Task Force Recommendation 1)

- Consider a joint review process involving government entities that are reviewing a particular transmission project. (Element of Task Force Recommendation 1)
- Consider methods to provide more helpful information to local governments earlier under the notification required by C.R.S. 29-20-108(4)(a). (Element of Task Force Recommendation 1)
- Encourage local government siting and permitting processes to be undertaken in parallel timeline with the Colorado PUC's CPCN process. (Element of Task Force Recommendation 1)
- Consider shortening the appellate processes of transmission projects by bypassing the district court step and proceeding directly to the court of appeals. (Element of Task Force Recommendation 2)
- Consider establishing an impartial state-level organization to act as a resource for landowners who have been approached about locating a transmission facility on their property. (Element of Task Force Recommendation 3)
- Consider incorporating information about land, wildlife, cultural, historical, archaeological and water resources into the transmission planning process. (Element of Task Force Recommendation 3)
- Consider whether local review could be reduced or eliminated if local government entities participate in the Colorado PUC's CPCN process. (Discussed by the Task Force, resolved by Task Force Recommendation 1)
- Consider whether Colorado should develop a comprehensive, statewide master plan for transmission projects. (Discussed by the Task Force, resolved by the PUC recent transmission planning rules)
- Consider legislation requiring any local government that requires a utility to place transmission projects underground to be required to pay the incremental cost of undergrounding. (Issue discussed by the Task Force, but no consensus reached. See Section 7)

Examine the advantages and disadvantages of a statewide transmission siting and permitting framework for electric transmission facilities

Possible advantages of some form of a statewide transmission siting and permitting framework discussed by the Task Force include the following.

More timely and efficient development of new transmission investments. Utilities express concern that, due to varying requirements and time frames, coordination of a major multi-jurisdictional transmission project can be difficult, resulting in significant permitting and project delays. The effect of these delays is magnified by the gap between generation development that can take two to four years and transmission development that can take four to seven years or longer.

Ensure the reliability of Colorado's electricity supply and promote economic development within the state. Colorado is rich in renewable energy resources. In general, Colorado's renewable resources are located in remote locations and require additional transmission facilities to bring the electricity to customers in high population areas such as Colorado's Front Range. Proponents of a statewide framework argue that the current local permitting system is ill-suited to meet the increased demand for transmission.

Many transmission projects serve statewide needs. The transmission system is an interconnected network requiring a broader statewide (or perhaps regional) perspective that is not consistent with the existing permitting system.

Possible disadvantages of some form of a statewide transmission siting and permitting framework discussed by the Task Force include the following.

The diminishment of local government ability to reflect the broad public interest of its constituents. Local constituents have interests as taxpayers, property owners, business owners and community residents. Local government is particularly well-suited to solicit and respond to local concerns. While most proposals for a statewide siting framework envision a role for local governments, this would result in loss of local input and control.

The need to answer "start-up" questions concerning the jurisdictional authority, structure, membership, organization and procedures for such an entity. Creation of a new system

requires either incremental or fundamental changes that will need to be negotiated and implemented. (Some of these are discussed below.)

The need to provide expertise and funding for the new entity. A statewide entity will need to address a broad range of issues and must have the expertise to carry out its new responsibility. Expertise must either be “borrowed” from existing organizations or new staffing will be required. This will be difficult in the current budget environment.

An examination of the political acceptability of, and potential strategies for, creating a state-level siting entity

In the Task Force’s investigation of examples of state-level transmission siting entities, it became clear that, to achieve a minimum level of political acceptability, any such entity must include a meaningful role for local government representation. During the second Task Force meeting, Chairman Tarpey pointed out that most states with a single statewide authority have a defined role for local government representatives. This role may take the form of one or more seats for local representatives on the authority; it does not matter whether the siting entity is a permanent agency or an *ad hoc* situation where local representatives are selected from the anticipated local impact areas. In those states where there are not local seats, opportunity exists for input through referral to the local government.

During its second meeting, the Task Force considered a variety of potential issues associated with creation of a state-level siting entity. If such an entity were created:

1. Should this responsibility be assigned to an existing state agency or should a new agency be created? Should that be a standing agency, with budget and staff, or an *ad hoc* agency that is activated for specific projects?
2. Would members of the entity be appointed for a fixed term or would membership vary, depending on the particular project being proposed? Who would appoint the members of the authority, or would it be by statute? How would the entity be staffed, and what is the fiscal impact in light of Colorado’s budget challenges?
3. What would be the role for local government representatives? This role may take the form of a seat for a local representative on the authority (whether a permanent agency or in an *ad hoc* situation where local representatives are chosen from anticipated local impact areas).

4. Should time limits be set within which decisions must to be made? What should be the consequences if those time lines are not met (e.g., automatic approval of the application)? Would there be an application and formal evidentiary hearings? How would public comment and input be received and would it be written? What decision-making and voting process would the authority use? Would the authority issue written decisions with full detail and an explanation of what is being done? Would there be a full written record that allows for an appeal as in any other state agency?
5. What types of entities would be covered by the authority? Would it be limited to Public Service Company of Colorado, Tri-State Generation and Transmission Association, and Black Hills Energy, or would it apply more broadly to include Independent Transmission Companies?
6. What changes would be necessary with respect to Colorado laws and regulations?

Section 7: Task Force Recommendations

SB 11-45 directs the Task Force to make recommendations regarding Colorado's existing statutory and regulatory framework applicable to the siting and permitting of electric transmission facilities as well as opportunities to improve that framework. After completing its investigation into the scope of inquiry as described in Section 5, the Task Force devoted most of its fourth meeting to a lengthy and comprehensive discussion and evaluation of the various ideas and proposals that were brought forward during the Task Force process.

The most significant challenge for the Task Force concerned an evaluation of the advantages and disadvantages of establishing some form of a statewide transmission siting authority. The Task Force recognized that creation of such an entity raised a variety of questions concerning jurisdiction, structure, membership, organization, staffing, funding, and the role of local governments in a statewide authority. The Task Force spent considerable time taking testimony, hearing presentations by experts, and debating this issue. Based upon its investigation, the Task Force does not recommend establishment of a statewide transmission siting authority in Colorado at this time (see the discussion below in the category "Issues Discussed - No Recommendation"). Rather, the Task Force recommends the incremental improvements reflected in recommendations 1, 2 and 3 below.

Therefore, after consideration and discussion the Task Force makes the following recommendations to the Governor and the General Assembly.

Recommendation 1: Increase local government cooperation and collaboration

The Task Force supports increased cooperation and collaboration among local governments that review transmission applications in Colorado. Therefore, Colorado Counties Inc. (CCI), the Colorado Municipal League (CML), and transmission owners and operators agree to meet and develop proposed improvements to the siting and permitting review process for multi-jurisdictional transmission projects and to report the results to the PUC. The topics to be discussed during these meetings include:

1. Convene an initial meeting that includes all local government entities that will review the project;
2. Consider the merits of and how best to provide local governments with greater access to resources with which to review transmission applications, such as information sources and consultants;
3. Consider methods to improve the usefulness of information provided by utilities to local governments concerning transmission projects;
4. Encourage transmission developers to file all necessary local government applications during a consistent time frame;
5. Investigate the best practices concerning siting and permitting transmission projects; and
6. Develop uniform application requirements; collaborative processes; and consistent, set timelines.

Recommendation 2: Appeal of PUC Backstop Decisions to the Court of Appeals

The Task Force supports efficient, timely judicial review of PUC decisions regarding utility appeals of local government decisions that deny or place conditions on transmission projects (Backstop Decisions). Therefore, the Task Force recommends that appeals of PUC Backstop Decisions go directly to the Colorado Court of Appeals rather than to the district court level.

If a local government denies the application of a public utility relating to the location, construction or improvement of major electrical transmission facility, or if the local government imposes requirements or conditions upon such permit or application that will unreasonably

impair the ability of the public utility to provide safe, reliable and economical service, the utility may appeal the local government action to the PUC (§29-20-108, C.R.S.). Under current law, the PUC's backstop decisions are appealable to a Colorado district court.

This recommendation may lead to a reduction in the total time necessary to reach a final decision concerning these cases. In one of the two cases brought to the PUC under the backstop authority, for example, Tri-State Generation and Transmission requested a permit from San Miguel County for the Nucla-Sunshine 115 kV transmission project in May 2001. San Miguel County approved the permit in April 2002, with the condition that Tri-State install the transmission line underground on private land. Tri-State filed its backstop appeal, and the PUC issued its final decision on November 1, 2005. San Miguel County filed for judicial review in San Miguel County District Court on December 1, 2005. The case was settled in May 2010, with no District Court decision. Tri-State faced similar procedural and appellate issues in connection with its United Power System Improvement Project.

The initial review of Backstop Decisions by the Colorado Court of Appeals provides better use of judicial resources, since appellate courts have more experience conducting appellate review; district courts are not accustomed to this role.

Recommendation 3: Open a PUC docket to consider improvements to the backstop process and the possible establishment of a transmission siting and permitting resource center

For those instances where the proponent of a transmission project and the relevant local government have been unable to resolve their differences concerning the necessary land use approvals, the Task Force supports establishment of processes and provision of resources to resolve transmission siting and permitting disputes between local governments and transmission operators. Therefore, the Task Force recommends that the PUC open an investigatory docket to consider a range of backstop-related issues, including use of voluntary mediation for dispute resolution, provision of advice to the Commission, and establishment of a resource center for the benefit of local governments, transmission operators, the public and the PUC.

By the time that local governments and utilities begin litigation of transmission-related disputes through a backstop case at the PUC, involved parties' positions often are unyielding. This situation may lead to expensive litigation at the PUC, followed by a potentially lengthy appeal process. Mediation may offer a more efficient method (both from the perspective of time and legal fees) for resolving transmission disputes.

A resource center could provide expert, unbiased information for the benefit of those involved in the transmission siting and permitting process. Individual local governments would have access to the best practices of other local governments, broad information concerning utility resource plans, and a central information source. Transmission operators would benefit from the information concerning local government siting and permitting processes and inventory of ecologically sensitive areas. Landowners who have been approached about locating a transmission facility on their property could benefit from a source of basic, unbiased information. The PUC could benefit if transmission disputes were resolved before backstop appeals become necessary and through mediation of any appeals that are filed.

The Task Force recommends that the PUC open an investigatory docket to consider these issues. The scope of the docket should include:

1. Continued monitoring of best practices for transmission permitting and siting;
2. Determining the best practices for providing advisory services to the PUC during backstop appeal cases;
3. Establishing a transmission permitting and siting resource center for the benefit of local governments, transmission operators, the public and the PUC;
4. Determining whether a resource center would be helpful and, if so, whether it should be located within the PUC, a Department of Local Government, or some other entity; and
5. Establishing a procedure for the PUC to receive reports from those participating in the collaborative effort discussed in Recommendation 1.

Issues Discussed - No Recommendation

In addition to the three recommendations discussed above, the Task Force considered, but did not reach consensus on, two other proposals.

SB 11-45 contains a provision for minority reports, as appropriate. While there are no minority reports, the subsection “Issues Discussed - No Recommendation.” includes a description of two issues that were discussed for which the task force made no recommendations. The two issues concern 1) establishment of a statewide siting authority and 2) payment by local governments for the incremental costs of undergrounding transmission lines.

Issue Discussed - No Recommendation: Establish a statewide siting authority

Based upon its investigation, the Task Force does not recommend establishment of a statewide transmission siting authority in Colorado at this time. Rather, the Task Force recommends the incremental improvements reflected in recommendations 1, 2 and 3 above. This was the most difficult and controversial topic considered by the Task Force.

Utility representatives suggested that the current transmission siting and permitting system suffers from lack of consistency among the various jurisdictions; inconsistent time frames required by multiple cities and counties; and variations between staff and decision makers. Utilities believe the current system produces unnecessary delay, with many applications continuing for years. These delays, combined with attrition at the staff and decision-maker levels, mean that utilities may begin pre-application meetings with staff and decision-makers who are gone by the time an application is filed, resulting in loss of continuity. In some cases, local governments require utilities to waive statutory decision deadlines as a part of the application process. Utilities are concerned that the modern electric industry is increasingly regional in nature and that Colorado should be prepared if the federal government attempts to impose a new transmission siting process. Although they support some form of statewide authority, utilities proposed to retain as much of the current system as possible and to maintain adequate, appropriate and ample local government control and input.

Representatives of local governments expressed skepticism concerning the need for a statewide siting agency in Colorado. They contend that local governments are obligated to serve both a broader set of values and the public interest. They point out that many elements of the current Colorado siting law, added in 2000, include the deadlines and appeal of local decisions to the PUC. Local governments suggest that, rather than reinventing the wheel, the Task Force focus on addressing any perceived weakness in the 2000 legislation. Local governments are willing to improve the current statute with focused, specific improvements to address any demonstrated weaknesses. In summary, local governments believe the current law balances the obligations of local government to serve the “local public interest” with the state’s and utilities’ interests in seeing more expeditious approval of needed projects that benefit large segments of the public.

Issue Discussed - No Recommendation: Payment for transmission undergrounding

The Task Force did not reach consensus concerning a proposal to require any local government to pay the incremental cost of undergrounding a transmission project if the local government imposes that condition. The Task Force noted that the only two transmission projects in which a

utility appealed to the PUC under the backstop provision involved the issue of undergrounding transmission lines.

Tri-State Generation and Transmission requested a permit from San Miguel County for the Nucla- Sunshine 115 kV transmission project in May 2001. San Miguel County approved the permit in April 2002, with the condition that Tri-State install the transmission line underground on private land. Tri-State then filed the first-ever backstop appeal with the PUC and requested that the underground construction condition be overturned. In May 2010, a Settlement Agreement provided that the underground portion of the project would be paid for by a combination of Tri-State's contribution of avoided overhead construction cost, a \$1.2 million contribution from a homeowners' coalition, and a surcharge imposed upon those customers whose local governments identified would benefit from undergrounding.

In the only other case appealed to the PUC, Tri-State Generation and Transmission requested a permit from Adams County and Commerce City for a United Power transmission project in December 2005. One year later, Adams County and Commerce City issued permits that included the condition that Tri-State install the transmission line underground in certain areas. After an appeal to the PUC, a settlement agreement in February 2010 eliminated the undergrounding requirement.

Although some Task Force members assert that this recommendation is consistent with how most other U.S. jurisdictions treat this issue and some Task Force members believed it may have merit, others thought it was overly restrictive. A utility may want to install a transmission line underground for technical reasons or in congested areas, for example. The Task Force did not receive or review evidence related to the current statutory and legal framework related to undergrounding or any proposed approach to undergrounding, and did not consider advantages and disadvantages associated with approaches to the undergrounding issue. This recommendation was withdrawn from final consideration.

Appendix. Acronyms

ACC	Arizona Corporation Commission
ATLSC	Arizona Transmission Line Siting Committee
CCI	Colorado Counties Inc.
CCPG	Colorado Coordinated Planning Group
CML	Colorado Municipal League
CPCN	Certificate of Public Convenience and Necessity
CIM	Commission Information Meeting
DoD	Department of Defense
EA	Environmental Assessment
EDTF	Environmental Data Task Force
EIS	Environmental Impact Statement
ETF	Electric Transmission Facilities
ERZ	Energy Resource Zone
FERC	Federal Energy Regulatory Commission
GDA	Generation Development Areas
GEO	Governor's Energy Office
kV	Kilovolt
NEPA	National Environmental Policy Act
mG	MilliGauss
PSCo	Public Service Company of Colorado
PUC	Public Utilities Commission
REDI	Renewable Energy Development Infrastructure report
RES	Renewable Energy Standard
STAR	Strategic Transmission and Renewables
WAPA	Western Areas Power Administration