BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

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IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF ITS 2007 COLORADO RESOURCE PLAN	)))))	**Docket No. 07A-447E**

PUBLIC SERVICE COMPANY TRANSMISSION SYSTEM INFORMATION

In a responsive pleading filed with the Commission on March 6, 2008, Public Service Company of Colorado offered to summarize the transmission information that is currently available on our OATT website to make it more "user-friendly" for bidders. We also offered to provide additional guidance to bidders as to the timing of proposed new transmission construction under SB07-100. We stated that we would estimate the approximate level of injection capability in the areas of these new lines.

This information is set forth in this pleading and will be placed on the Company's 2009 All Source RFP information web-site and on our OASIS web-site. This information consists, necessarily, of high level approximations. Public Service cannot guarantee that any specific generation portfolio can be accommodated without conducting power flow, stability, and other reliability and OATT-required studies that include the specifics of any proposed new generation. With that disclaimer, Public Service trusts that this summary will provide some direction to bidders as to where they should place their facilities to maximize selection of their bids. A map that shows the approximate locations of the facilities we discuss is attached.

EXISTING TRANSMISSION ACCESS BEFORE THE CONSTRUCTION OF SB-100 PROJECTS

Public Service has performed a number of transmission studies associated with the Large Generator Interconnect Agreement process ("LGIA") requests, which the Company posts on its OASIS web-site.[1] All bidders and other interested parties have access to these detailed study results. Based on our experience and the various study results, Public Service hereby summarizes existing transmission system locations that can accommodate potentially 1150 MW of new generation.

The generation injection values that we provide in this pleading are approximations based on stand-alone technical studies. These injection values may change once PSCo performs a cluster study or evaluates all the selected bidders in an aggregate study. The current studies being performed under the LGIA process indicate the cost of the interconnection as well as the schedule needed for Public Service to interconnect a facility to our transmission system. It normally takes 18 months to add an interconnection to Public Service transmission facilities following the authorization to proceed with construction. Each of these summarized interconnection capabilities should be considered potential and preliminary. Every interconnection must be studied through the FERC LGIA process to determine specific interconnection requirements and capabilities. This information is for guidance only. Detailed analyses will need to be performed once the entire generation portfolio is represented in the transmission study.

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[1] http://www.rmao.com/wtpp/PSCO_Studies.html

Keenesburg 230 kV

Transmission at the Keenesburg substation and Rocky Mountain Energy Center substation has been evaluated based on technical studies through the LGIA process. The study indicates that on a stand-alone basis during normal transmission operating conditions the Keenesburg 230 kV substation can accommodate approximately 250 MW of generation interconnection. The data that supports this transmission capability can be found on OASIS in the System Impact Study GI-2007-6 published on March 5, 2009. This report estimates the cost of interconnecting new generation at Keenesburg at $2.23 million. Public Service estimates the construction schedule associated with this interconnection would be 18 months after the authorization to proceed.

Jackson Fuller 230 kV

Transmission at the Jackson Fuller substation has been evaluated based on technical studies through the LGIA process. The studies indicate that on a stand-alone basis during normal transmission operating conditions the Jackson Fuller 230 kV substation can accommodate approximately 200 MW of generation interconnection. The data that supports this transmission capability can be found in the System Impact Study GI-2007-10 published November 2008. This report approximates the cost of interconnecting new generation at Jackson Fuller to be $4.0 million. Public Service estimates the construction schedule associated with this interconnection would be 18 months after the authorization to proceed.

Missile Site 230 kV

Transmission at the new Missile substation has been evaluated based on technical studies through the LGIA process. The studies indicate that on a stand-alone

basis during normal transmission operating conditions the Missile Site 230 kV substation can accommodate approximately 250 MW of generation interconnection once the 230 kV switching station is constructed. Public Service estimates construction of the Missile Site switching station will be completed by December 2010. The data that supports this transmission capability can be found in the System Impact Study GI-2007-13 published February 10, 2009. This report approximates the cost of interconnecting new generation at Missile Site to be in the range of $4.576 million.

San Luis Valley 230 kV/115 kV

Transmission at the San Luis substation has been evaluated based on technical studies through internal planning studies. Our study indicates that on a stand-alone basis during normal transmission operating conditions the San Luis substation at 230 kV or 115 kV can accommodate approximately 125 MW of generation interconnection, prior to any new SB-100 projects being developed. No studies have been performed that would estimate the cost of interconnecting new generation at the San Luis Substation. The schedule to construct an interconnection would typically take approximately 18-24 months. Tri-State Generation and Transmission Association would be responsible for the design and construction of the facilities at this jointly-owned substation.

Pawnee Substation 230 kV

Transmission at the Pawnee substation has been evaluated based on technical studies through the LGIA process. The studies indicate that on a stand-alone basis during normal transmission operating conditions the Pawnee 230 kV substation can accommodate approximately 25 MW of generation interconnection. The data that

supports this transmission capability can be found in the System Impact Study GI-2006-2, published February 25, 2009. Interconnection cost estimates have not been developed at this time. Public Service estimates the construction time associated for a new interconnection would be 18 months after the authorization to proceed. Redispatch of existing coal, gas and wind generation at Pawnee would allow for additional generation to be added. The combined total of generation resources in the Pawnee area cannot exceed the total resources currently in service plus the additional 150 MW wind project (Northern Colorado Wind Energy LLC), which has a projected 2009 in-service date. In other words, prior to the construction of additional transmission facilities (see later discussion of Pawnee-Smoky Hill 345k Line), on a simultaneous basis the maximum amount of resources that can be injected into the Transmission system at Pawnee is the total generation that is currently under contract to Public Service or owned by Public Service.

Lamar Substation 230 kV

Transmission at the Lamar substation has been evaluated based on technical studies through the LGIA process. The study indicates that on a stand-alone basis during normal transmission operating conditions the Lamar 230 kV substation can accommodate approximately 0 MW of generation interconnection. Currently, there is no transmission capability to transmit additional resources to the Front Range from this substation. The data that supports this transmission capability can be found in the System Impact Study GI-2008-5 published February 23, 2009.

Ault Substation 230 kV

Transmission at the Ault substation has been evaluated based on technical studies through the LGIA process. The studies indicate that on a stand-alone basis during normal transmission operating conditions the Ault 230 kV substation can accommodate approximately 0 MW of generation interconnection. Currently, there is no transmission capability to transmit additional resources over the existing system. The data that supports this transmission capability can be found in the System Impact Study GI-2007-3 published July 2008.

TRANSMISSION ACCESS WITH THE MIDWAY TO WATERTON 345 KV PROJECT

Comanche 345 kV

Transmission at Comanche 345 kV substation has been evaluated based on technical studies through the LGIA process. The study indicates that on a stand-alone basis during normal transmission operating conditions the Comanche 345 kV substation can accommodate approximately 300 MW of generation interconnection. The data that supports this transmission capability can be found in the System Impact Study GI-2008-2 feasibility study dated Sept 9, 2008. This report approximates the cost of interconnecting new generation at Comanche 345 kV to be $3.4 million. Public Service estimates the construction time associated with this interconnection would be 18 months after the authorization to proceed. The feasibility study also indicated several projects would need to be completed prior to accepting the 300 MW at Comanche. The projects are the 1) Midway to Waterton 345 kv project, 2) the second Reader to Comanche 115 kV line, and 3) replacement of the 230/115 kV auto transformers at Comanche with larger ones and a few minor upgrades to transmission facilities.

TRANSMISSION PROJECTS THAT HAVE BEGUN THE IMPLEMENTATION PROCESS

Pawnee – Smoky Hill 345 kV

The Pawnee – Smoky Hill 345 kV Transmission Project was approved by the Commission on February 27, 2009. Public Service has already begun moving forward for the construction of this 92 mile long transmission expansion. The projected in-service date is scheduled for June 2013. Transmission at the Pawnee substation was evaluated for purposes of filing a Certificate of Public Convenience and Necessity ("CPCN"). The study indicates that on a stand-alone basis during normal transmission operating conditions the Pawnee substation can accommodate approximately 500 MW of generation interconnection. The data that supports this transmission capability can be found in Commission Docket No. 07A-421E.

Midway – Waterton 345 kV Project

The Commission had approved the Midway – Waterton 345 kV Transmission Line CPCN based on the need to interconnect the 500 MW Squirrel Creek facility, which was subsequently terminated. Public Service is in the process of preparing a filing with the Commission justifying the continued need for this project. This project would be essential for developing resources in Energy Resource Zones 3, 4, and 5. This project is needed for the SB-100 projects (ERZ 3, 4, and 5) that Public Service proposed in our Nov 24, 2008 informational filing. The projected in-service date for this project depends on the Commission approval of the modified need. With expedient Commission approval, Public Service estimates this project will be in service in 2011.

Summary

Location	Generation	Timing
Pawnee 230 kV	25 MW	18 months for a new Interconnection
Missile Site 230 kV	250 MW	Dec. 2010
Keenesburg 230 kV	250 MW	18 months
Jackson Fuller 230 kV	200 MW	18 months
San Luis Valley 230/115 KV	125 MW	18 months
Comanche 345 kV	300 MW	18 months
Pawnee 345 kV	500 MW	June 2013
TOTAL	1650 MW	

Through stand-alone technical studies developed through the FERC LGIA process, PSCo has estimated transmission available for generation interconnection at the facility locations in the above chart. These values will have to be confirmed when all the generation projects are determined and a technical study is conducted using the aggregate generation on a simultaneous basis. Operating procedures may need to be developed to limit generation under certain abnormal operating conditions.

SENATE BILL 07-100 TRANSMISSION PROJECTS

The projects listed below are consistent with the projects described in the Company's November 24, 2008 SB07-100 Information Report. We have reviewed each SB07-100 project and we set forth below the soonest possible date that we estimate the transmission projects could be in service. Each of these dates is projected based on stand alone consideration. No cluster studies have been performed to evaluate the impact of all new generation to be added to the transmission system; once these cluster studies are conducted, the in-service dates for any or all of these new lines could be affected.

San Luis – Calumet – Comanche Line June 2013

This transmission project would be a new, double-circuit 230 kV transmission line from the San Luis Valley Substation to a new Calumet Substation, near Walsenburg, Colorado. From Calumet, a new, double-circuit 345 kV transmission line would be constructed to the Comanche Substation. The project is proposed in accord with SB07-100 to facilitate potential generation resources in Energy Resource Zones (ERZ) 4 and 5, while improving system reliability. This project is expected to accommodate approximately 800-1000 MW of resources interconnecting at or near the San Luis Valley Substation and/or the Calumet Substation. This project will provide access to both wind and solar generation development areas. This would be a joint project with Tri-State. The projected in-service date of this project is June 2013.

Lamar – Comanche and Lamar – Missile Site 345 kV Lines 2016

This is a very large major transmission projects that consists of two parts. First, approximately 210 miles of new 345kV transmission from Lamar to Missile Site would be constructed. Second, approximately 120 miles of new 345 kV transmission from Lamar to Comanche would be constructed. These projects are in response to Senate Bill 07-100, and would be designed to transport wind generation from Baca County or Zone 3 to the Denver Metro Area, with an available capacity of 800 – 1000 MW of transfer capability. Discussions have been held with Tri-State to determine possible interest in a joint project. The earliest projected in-service date is 2016. The schedule for this project will be complex because the scope will need to be developed with the potential stakeholders and joint participants, and siting and permitting will be challenging.

Lamar – Vilas 345 kV Line 2016

This transmission project would be a new 57 mile, 230/345kV transmission line from Lamar substation to Vilas substation. This will be a Colorado Senate Bill 07-100 project designed to transport wind generation from Baca County, Zone 3, to the Denver Metro Area. Discussions have been held with Tri-State Generation and Transmission to determine possible interest in a joint project in expanding the Vilas substation. The projected in service date is 2016. The schedule for this project is dependent upon completion of the Lamar – Front Range projects as well as the coordination with the potential partnership of Tri-State.

Pawnee – Daniels Park 345 kV Line 2016

The Pawnee – Daniels Park 345 kV Transmission Project consists of building 345 kV transmission from the Pawnee Substation to the Daniels Park Substation, south of the Denver-metro area. The project will also result in a new Smoky Hill – Daniels Park 345 kV line. The project is proposed under SB07-100 to facilitate potential generation resources in Energy Resource Zones 1 and 2, while improving system reliability. This project is expected to accommodate approximately 300-500 MW of resources interconnecting at or near the Pawnee Substation and/or the projected Missile Site Substation. The projected in-service date is 2016.

Ault – Cherokee 230 kV Line 2015

This transmission project would be a new 85-mile 230kV transmission line from the Ault Substation to Cherokee Substation. This will consist of a single 59-mile line from Ault to just outside of Ft. Lupton. From this point the line will become a 26-mile double circuit line by rebuilding the existing 115kV line from Ft. Lupton to Cherokee,

where one side will remain operation at 115kV for Tri-State load and the other side will be operated at 230kV, completing the Ault-Cherokee 230kV circuit. This project is a SB-07-100 project built in Energy Resource Zone 1, capable of 300 – 600 MW of capacity. The projected in service date is 2015.

Project	Description	Generation Injection	Tenative ISD	Energy Zone
Pawnee - Daniels Park 345 kV Line	Second circuit 345 kV line in Energy Resource Zone 1	300 - 500 MW	2016	1
Ault - Cherokee 230 kV Line	New 230 kV line in Energy Resource Zone 1	300 - 600 MW	2015	1
Missile Site	345/230 kV switching station on the Pawnee - Daniels Park line in Energy Resource Zone 2	200 - 500 MW	2010 (230 kV) - 2013 (345 kV)	2
Lamar - Comanche and Lamar - Missile Site 345 kV Lines	New 345 kV lines to access Energy Resource Zone 3	800 - 1000 MW	2016	3
Lamar - Vilas 345 kV Line	New 345 kV line In Energy Resource Zone 3 to access wind rich area		2016	3
San Luis - Calumet - Comanche Line	Double circuit 230 kV line (SLV to Calumet) and double circuit 345 kV line (Calumet to Comanche)	600 - 1000 MW	2013	4&5
Midway - Waterton 345 kV Line	Needed for system reliability and utilization resources in Energy Resource Zones 3,4 and 5. Must file modification to CPCN received 9/07 in order to construct.		2011	3&4&5
Pawnee - Smoky Hill 345 kV Line	345 kV line from Pawnee to the Denver load center. Received CPCN in January 2009.	500 MW	2013	1
	*Generation values are not simultaneous			

Project schedule risk factors

There is schedule risk associated with all of the SB07-100 proposed projects. The following matters can delay the in-service dates of each of these projects: CPCN

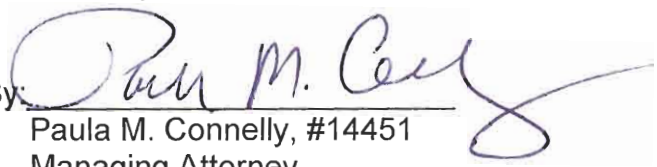
approval times, siting and land permitting, coordinating construction outages, and material delivery times.

CONCLUSION

Public Service has summarized the existing and proposed transmission to provide guidance to bidders responding to our All-Source RFP. Public Service believes that the proposals made in response to the All-Source RFP should inform the final scheduling of new transmission projects. In fact, Public Service developed the Energy Resource Zones and the SB07-100 projects set forth above based upon the last All Source solicitation and subsequent specific generation interconnection requests. Public Service believes there is ample transmission capacity to cost-effectively meet the requirements of the All Source solicitation under the constraints that affect the estimated in-service dates of these projects.

Dated this 13th day of March 2009.

Respectfully submitted,

By: 

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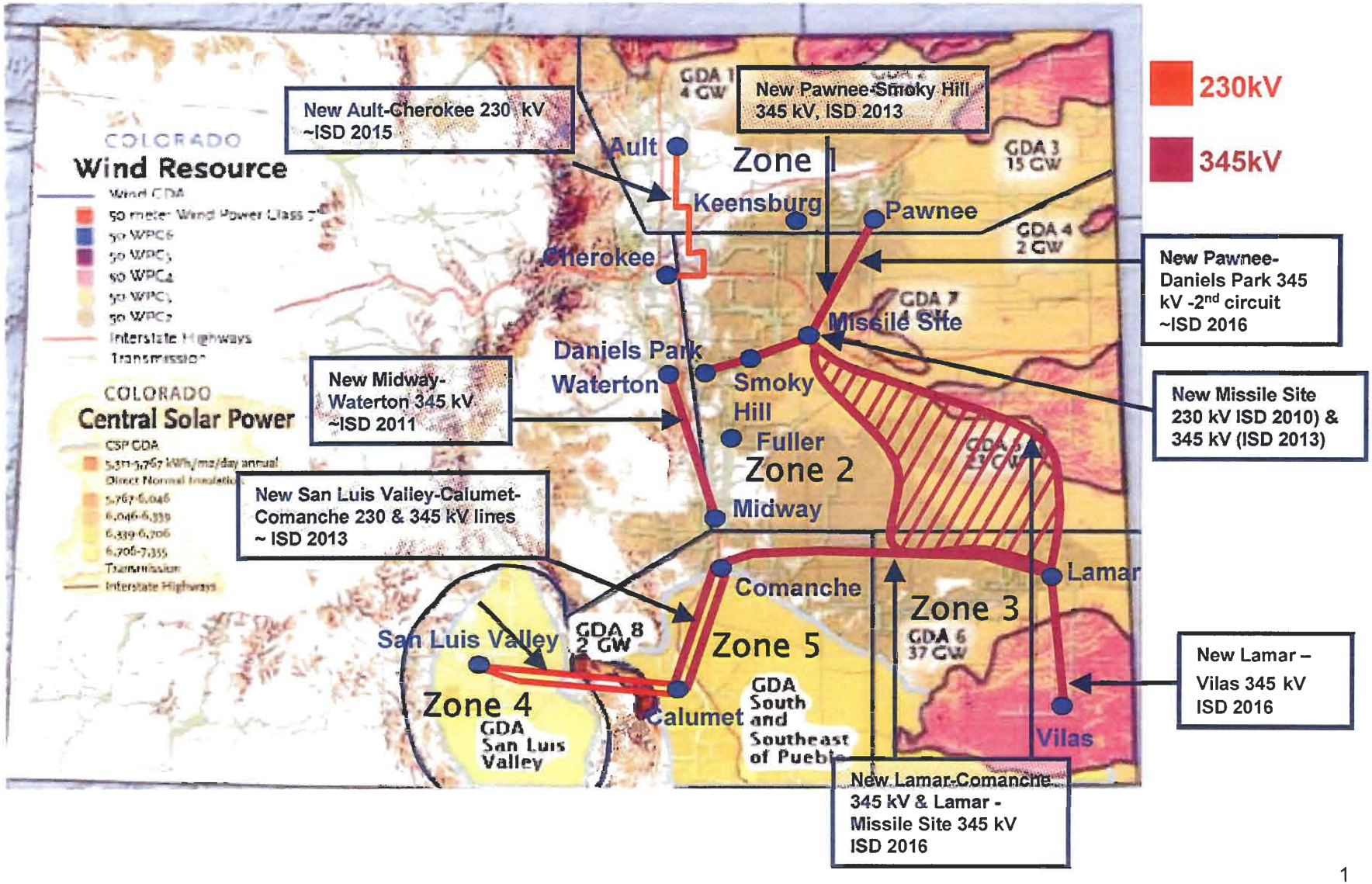
Current SB-100 Transmission Plan

3-13-2009



CERTIFICATE OF SERVICE

07A-447E

I hereby certify that on this, the 13th day of March 2009, an original and seven (7) copies of the foregoing **PUBLIC SERVICE COMPANY OF COLORADO TRANSMISSION SYSTEM INFORMATION** were served via hand delivery on:

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