# OF THE STATE OF COLORADO

\* \* \* \* \*

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR A COMMISSION DECISION (1) APPROVING ITS STEAM RESOURCE PLAN, (2) CONDITIONALLY GRANTING IT A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT ONE OF TWO NEW BOILER PROJECTS COMMENCING IN 2016, AND (3) GRANTING SUCH OTHER AND FURTHER AUTHORIZATIONS AND	)	PROCEEDING NO. 14A	_ST
	) ) )		

## VERIFIED APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO

Pursuant to the Commission's authority to regulate the resource plans of steam utilities under the Colorado Public Utilities Law, including Article XXV of the Colorado Constitution and Colorado Revised Statues ("C.R.S.") §§ 40-3-101, 40-4-101 and 40-5-101, and the Commission's Decision No. C13-1549, mailed December 18, 2013, in Proceeding No. 12A-1264ST, Public Service Company of Colorado ("Public Service" or the "Company"), by and through its undersigned attorneys, hereby respectfully requests a Commission decision: (1) approving the major elements of the Company's Steam

Resource Plan, as detailed herein; (2) granting Public Service a Certificate of Public Convenience and Necessity ("CPCN") authorizing, on a conditional basis, the future construction and operation of one of two new boiler projects – a one-boiler facility to be located at the existing Denver Steam Plant or a two-boiler facility to be located at the existing Zuni Station plant site -- subject to the Company's determination of estimated peak load requirements supporting the construction of such option to be filed with the Commission on or before July 1, 2016; and (3) such other and further authorizations and relief the Commission may deem necessary for the Company to execute its Steam Resource Plan.

In Decision No. C13-1549, "Decision Denying Application Without Prejudice and Ordering Filing of Needs Assessment," issued exactly one year prior to the date of this filing in Proceeding No. 12A-1264ST, the Commission directed the Company to file a future needs assessment and plan to meet that need, and required that such assessment and plan include specific analyses and considerations.<sup>2</sup> The Steam Resource Plan, for which the Company seeks approval herein, is the Company's plan to meet its future steam system needs. As part of this Application, including the supporting Direct Testimony and Attachments submitted herewith, the Company is providing comprehensive information reflecting its compliance with the Commission's

-

<sup>&</sup>lt;sup>1</sup>The Company's filing herein includes a future needs assessment for its steam business as directed by Decision No. C13-1549 in Proceeding No. 12A-1264ST, and provides the additional information requested by the Commission in that decision. The Company describes how it will meet both short-term and long-term customer demand for its steam service. As such, this filing is in many ways similar to an electric resource plan ("ERP"), except that the Company provides information and detail that the Commission requested in Decision No. C13-1549, as opposed to information required by the Commission's rules specific to ERPs. Particularly given the Commission's express request for this information in Decision No. C13-1549, the Company believes it would be appropriate for the Commission to review and approve this Steam Resource Plan in this proceeding just as it approves ERPs.

<sup>&</sup>lt;sup>2</sup>The Commission initially directed that the needs assessment and business plan be filed within 180 days of Decision No. C13-1549, but subsequently granted Public Service an extension of time until one year from the date of Decision No. C13-1549, or December 18, 2014. Decision No. C14-0068, "Decision Granting Request for Rehearing, Reargument or Reconsideration," (mailed January 21, 2014). As such, this compliance filing in Proceeding No. 12A-1264ST is timely filed.

directives related to the future needs assessment of its steam system as set forth in Decision No. C13-1549. The Company is attaching an index, Appendix A, to this Application, identifying the locations within this Application, including the Direct Testimony and Attachments, where the information responsive to each of the particular directives and other informational requirements discussed by the Commission in Decision No. C13-1549 is provided.

In support of this Application, Public Service states as follows:

#### I. BACKGROUND

Public Service and its predecessors have provided steam utility services in the Downtown Denver area since 1879. As of December 18, 2014, the Company had 129 steam customers representing a variety of customer types, including commercial office buildings, residential buildings, hotels, retail establishments, restaurants, city, state and federal governmental buildings, including the State of Colorado's Capitol Complex, the City and County of Denver (including the Colorado Convention Center, Denver Art Museum, Webb Municipal Office Building and the new Denver Justice Center), and the campus of the Auraria Higher Education Center. The Company's district steam system consists of a delivery network of distribution mains, services, pumps, traps, valves and other appurtenant equipment located in an area in downtown Denver that extends roughly from Zuni Street to 20th Street and from Wewatta Street to 13th Avenue. The steam delivered to customers through this system is produced at three steam boiler plants: the Electric Department's Zuni Electric Generating Station ("Zuni Station"), the Denver Steam Plant ("DSP") located in the Central Platte Valley at the intersection of

Wewatta and 19th Streets, and the State Steam Plant ("SSP") located within the Capitol Complex.

Zuni Station is nearing the end of its useful service life and is being retired for electric operations at the end of 2015. As a result, the Company's steam utility business faces a dilemma. Without the steam sendout capacity provided by Zuni Station, Public Service will be unable to serve the steam requirements of its current customer base. Thus, in view of the impending retirement of Zuni Station, Public Service must find a solution to meeting its system requirements after 2015.

Given the small steam customer base currently being served, however, the impact on steam rates associated with significant capital investments could result in some steam customers discontinuing steam service. In addition, the Company will implement a change to its rate structure for steam service effective January 1, 2015 to introduce a new demand charge; this could also lead some steam customers to discontinue steam service, or modify their steam usage patterns. At the same time, this new rate structure could make steam service more attractive to many existing customers in the long-term, and could attract new customers as well. All of these considerations informed the Company's thinking on determining how to best meet customer demand in the future, as described herein and in the testimony of Company witnesses filed along with this Verified Application.

#### A. <u>CPCN Application Filed in Proceeding No. 12A-1264ST</u>

In Proceeding No. 12A-1264ST, Public Service filed an application pursuant to § 40-5-101, C.R.S., for a CPCN authorizing it to construct, own and operate a proposed new steam plant, the Sun Valley Steam Center or "SVSC", consisting of two package

boilers with steam production capacity of 300 thousand pounds per hour ("pph" or "Mlbs/hr") to be located at the current Zuni Station plant site, to replace the steam production capacity currently being provided by Zuni Station, which is now planned for retirement as to electric operations in 2015.3 In conjunction with its request for a CPCN, the Company also requested, as a condition of going forward with construction that the Commission approve a proposed regulatory plan to stabilize steam rates in the long term based upon the proposed in-service date of the Sun Valley Steam Center. Under that proposed regulatory plan, future steam service and natural gas service rates would be determined by pooling the distribution capacity costs and overhead costs from both the steam and gas utilities and allocating the aggregate of these costs based on the peak load requirements of the Company's steam and gas customers. The purpose of the regulatory plan was to mitigate the rate impact of the Sun Valley Steam Center on steam customers and stabilize steam rates at a level that would allow the Company to preserve its steam customer base and minimize load erosion, while having only a very small impact on the rates paid by the Company's natural gas customers.

After the filing of several rounds of testimony, full discovery and a two-day evidentiary hearing on the merits before the Commission *en banc*, the Commission issued Decision No. C13-1549 denying the application and directing the filing of a needs assessment and a plan to meet that need. In denying the requested CPCN, the Commission held as follows:

<sup>&</sup>lt;sup>3</sup>With respect to the Zuni Station, the Company plans to file an application in 2015 for approval of an interim decommissioning plan to allow for limited decommissioning of specified electric-only components and related land to the extent necessary to comply with anticipated requests of local governmental authorities acting in pursuit of redevelopment plans for the Sun Valley area. Before fully decommissioning the site after cessation of continuing steam operations, the Company will seek whatever Commission approvals are necessary to pursue a comprehensive decommissioning plan for Zuni Station, including the remediation, removal, and restoration of the site, consistent with the process approved by the Commission in Proceeding No. 09AL-299E.

22. ...Public Service has not shown that there is a present or future need for the proposed size of the facility, particularly given the uncertainty of the viability of the steam utility in the future. SVSC's proposed costs and potential rate increases for steam customers, even accounting for a subsidy under the Regulatory Plan, are material and not supported by the purported benefits of the new facility. Public Service also has not demonstrated an adequate substantive analysis of the options available to both the Company and its customers, and we conclude that a more informed assessment of the needs of its steam customers is needed to support a project of this scale.<sup>4</sup>

Given the Commission's decision to deny the CPCN, the Commission also rejected the proposed regulatory plan without addressing its merits. In discussing what should be included in the needs assessment and related business plan, the Commission offered the following:

- A more thorough investigation of alternatives to the SVSC is also necessary. These alternatives, as suggested by the parties, may include: adding capacity at other existing facilities; investigating building lease options; working with the Denver Redevelopment Authority or other customers to provide space for a boiler; and potential distributed steam generation and co-location We require Public Service to submit an analysis to determine the correct boiler sizes and capacities, and their associated costs, for a range of customer attrition and growth possibilities. An assessment of how the steam system may operate at a substantially reduced level, perhaps utilizing only the remaining boilers at other Company facilities, after the Zuni Station is closed, should also be considered, as advocated by Staff. Public Service is directed to complete a future needs assessment and a plan to meet those needs. The Company shall assess scenarios in which some steam customers transition to gas utility service and in which the Company exits from the steam business.
- 30. The Company must provide the Commission a thorough analysis of the causal relationship between increased steam rates and customer erosion. Therefore, as part of the required future needs assessment, Public Service shall conduct a detailed survey of its steam customers addressing their needs, options, and preferences for utility service. The Company also shall assess the potential for stabilizing customer load through long-term

<sup>&</sup>lt;sup>4</sup>Decision No. C13-1549, ¶ 22, p.7

commitments from customers in exchange for specific rate arrangements or other commitments. We also require the Company to analyze the value of rate discounts and to recommend whether such discounts should continue or whether different discounts should be offered in the future.

The Company addresses each of these compliance requirements in this Application through its supporting Direct Testimony and Attachments. A reference table indicating where the Company provides information in compliance with the above directives, as well as other informational requirements discussed in Decision No. C13-1549, is contained in Appendix A hereto.

#### B. <u>Intervening Steam Rate Cases</u>

On December 12, 2012, the same day that Public Service filed its application for a CPCN for the Sun Valley Steam Center and approval of its regulatory plan, Public Service also filed Advice Letter No. 119-Steam to initiate a Phase I steam rate case, proposing to implement a series of General Rate Schedule Adjustment ("GRSA") riders in conjunction with a Multi-Year Rate Plan ("MYP"). By Decision No. C13-0068, mailed January 11, 2013, in Proceeding No. 12AL-1269ST, the Commission suspended the advice letter filing and set the matter for hearing before an administrative law judge. Pursuant to a settlement agreed to by all parties in Proceeding No. 12AL-1269ST, and approved by the Commission in Decision No. R13-1388 (issued November 6, 2013),<sup>5</sup> revised GRSAs were placed into effect on January 1, 2014 and February 1, 2014, effecting an overall base rate increase of 27.24 percent. This represented a \$2,300,065 increase in the Company's annual base rate steam revenues to reflect the

<sup>&</sup>lt;sup>5</sup> In the Matter of Advice Letter No. 119 - Steam of Public Service Company of Colorado, Proceeding No. 12AL-1269ST, "Recommended Decision of Administrative Law Judge Mana L. Jennings-Fader Granting Joint Motion, Approving Amended Settlement Agreement, Ordering Compliance Filing, Addressing Tariff Filing, and Addressing Motions," Decision No. R13-1388 (Nov. 6, 2013). In accordance with C.R.S. § 40-6-109(2), Recommended Decision No. R13-1388 became a decision of the Commission on November 26, 2013.

approved base rate revenue requirement of \$10,742,640, based on the twelve-month period ending September 30, 2012.

On June 26, 2014, Public Service filed Advice Letter No. 124-Steam to initiate its Phase II rate case. In that filing, the Company proposed to (1) eliminate the 27.24 percent GRSA approved in Proceeding No. 12AL-1269ST and to place into effect revised base rates reflecting a change in rate design from two-part rates to three-part rates that included the introduction of a new demand charge; (2) allow for certain customers who decide to exit the steam system on or before October 1, 2015, to be eligible to continue steam service during the remaining period at the currently effective two-part rates; (3) revise the Steam Cost Adjustment ("SCA") clause to provide for quarterly SCA revisions, as compared to annual revisions under the current SCA clause; and (4) implement other conforming changes to the Company's steam tariff. By Decision No. C14-0877, mailed July 25, 2014, in Proceeding No. 14AL-0710ST, the Commission suspended the advice letter filing and set the matter for hearing before an administrative law judge. Pursuant to a settlement agreed to by all parties in Proceeding No. 14AL-0710ST, and approved by the Commission in Decision No. R14-1217 (issued October 6, 2014), the Company's proposed rate and tariff changes were approved, to be effective January 1, 2015.6

### C. Company Compliance Activities in 2014

Based on the Commission-identified deficiencies in our prior CPCN application, the explicit directives in Decision No. C13-1549, as well as the comments and

\_

<sup>&</sup>lt;sup>6</sup>In the Matter of Advice Letter No. 124-Steam Filed by Public Service Company of Colorado to Revise its Colorado PUC No. 1 Steam Tariff to Become Effective July 27, 2014, Proceeding No. 14AL-0710ST, "Recommended Decision of Administrative Law Judge Robert L. Garvey Accepting Stipulation, Vacating Hearing, Permanently Suspending Tariffs, and Requiring the Filing of New Tariffs," Decision No. R14-1217 (Oct. 6, 2014). In accordance with C.R.S. § 40-6-109(2), Recommended Decision No. R14-1217 became a decision of the Commission on October 26, 2014.

suggestions of Staff and the other intervenors in Proceeding No. 12A-1264ST and subsequent meetings with our steam customers, the Company has assessed the future needs of its steam system and has developed a plan to meet those needs – the Steam Resource Plan.

As detailed in the direct testimonies of Mr. Farmer and Mr. Brockett, the Company evaluated a number of potential options to meet customer demand in the short-term and the long-term, distilling those preliminary options to the specific subset of options presented in this Application. The specific options that the Company proposes here were selected based on a number of factors, including likely rate impacts for each option, engineering reports, feasibility studies, site issues, peak load and reliability considerations.

As detailed in the Direct Testimony of Mr. Brockett, given the significant rate and tariff changes recently implemented by the Company, it is too soon to determine which long-term supply option to implement. The Company needs time to assess how customers will respond to these recent rate changes in order to accurately project the specific maximum production sendout that will be required after 2015. To accommodate this timing problem, the Steam Resource Plan provides for a two-pronged approach – one that addresses the immediate, short-term needs of the system, and a long-term solution implemented in approximately 3-5 years that addresses the needs of the system based on capacity requirements under three different potential scenarios.

The available data suggests that demand for our steam service will continue, and as such we will continue to provide steam service for the long-term consistent with our

obligations as a public utility. Accordingly, our planning does not include any scenario where we exit the business, at least in the foreseeable future.

In order to develop this two-pronged plan, we:

- Completed a customer survey as directed by the Commission;
- Analyzed how best to meet demand and provide reliable service in the short term, given the reality of Zuni Station's age, and developed a shortterm solution:
- Considered how demand side management tools, long-term contracts, customer discounts, etc., could affect/optimize load;
- Met with many customers to discuss their needs going forward, particularly in light of upcoming change to our rate design;
- Investigated other sites to locate facilities by engaging customers and other stakeholders;
- Analyzed a large number of supply-side alternatives to meet long-term demand, ultimately distilling this analysis to three potential long-term solutions;
- Evaluated the projected customer financial impacts of the capital and operation and maintenance ("O&M") expenditures for each of the three long-term options; and
- Evaluated likely customer response, including changes in usage patterns, or possible migration off steam based on each financial case, and the associated impacts to our steam business, with the understanding that we will have better data to do a more robust analysis once we see customer response to Phase II pricing, demand-side management, and other actions.

Based on this work and the results, we do not anticipate leaving the steam business, and therefore a stranded cost analysis is not included with this Application. We believe this approach best serves our customers, and will best position us to continue to provide reliable and cost-effective service in the future.

## II. REQUEST FOR COMMISSION APPROVAL OF STEAM RESOURCE PLAN AND GRANT OF CONDITIONAL CPCN

The Company requests that the Commission approve the major elements of the Steam Resource Plan. The short-term plan is to: (1) upgrade a portion of the steam distribution system connected to the Company's State Steam Plant located at the Capitol Complex to provide higher pressure service; this will give us operational flexibility and effectively create additional dispatch capability from the State Steam Plant, which currently functions as a peaking facility; and (2) convert Zuni Station from electric operations to steam-only operations effective January 1, 2016 and to begin investing capital and making significant operations and maintenance ("O&M") expenditures to allow the plant to continue producing steam reliably for the next 3-5 years. This will also allow the Company to continue to provide reliable service in the short-term, and provide an opportunity to evaluate customer reaction to the rate design and tariff changes that will become effective January 1, 2015. That will allow us to better understand the likely future demand on our steam system, and make a much more informed decision as to whether we need to add any long-term generation capacity, and if so, the appropriate facility to meet that demand.

As for the long-term plan, we have identified three scenarios for our steam business, depending on how we assess future demand after having an opportunity to evaluate data generated during the 2015 and 2016 heating seasons. At that point, we

will be better situated to determine the appropriate size of our system for the long-term. Those three long-term scenarios are: 1) operate a system significantly smaller than our current system, sized to meet a projected peak production capacity requirement of less than 380 Mlb/hr, where no new generation capacity would be needed; 2) operate a system somewhat smaller than our current system, sized to meet a projected peak production capacity requirement of between 380 Mlb/hr and 540 Mlb/hr, where we would need to add one new boiler to meet demand; and 3) operate a system equivalent to the size of our current system, sized to meet a projected peak production capacity in excess of 540 Mlb/hr, where we would need to add two boilers to meet demand.

As detailed in Mr. Farmer's Direct Testimony, under the single new boiler scenario, the Company would install and operate a new 160 Mlb/hr boiler at its existing Denver Steam Plant ("One New Boiler Option" or "DSP Expansion"). Under the two new additional boilers scenario, the Company will construct and operate a new steam facility on the Zuni Station grounds at the same site proposed for the Sun Valley Steam Center, significantly reduced in scope from the original proposal in Proceeding No. 12A-1264ST ("Two New Boilers Option" or "Reduced Scope SVSC"). Mr. Farmer describes the specifics of each of these potential projects.

Because we need to review the customer response data from the next two heating seasons (after new rates take effect January 1, 2015) to determine which long-term supply solution of the three scenarios above will best meet the future needs of our steam customers, we are asking for a conditional CPCN for the potential future construction of a one- or two-boiler project subject to the Company's future determination. It is also possible that we will determine that there is no need to build

any new steam generation capacity; that is, long-term scenario (1) above or the "No New Boiler Option." We do not seek conditional CPCN authority with regard to that alternative, because we believe that a CPCN will be required only if we determine the need to construct new generation facilities. We will determine which long-term scenario to execute based on a number of factors described by Mr. Brockett, primarily based on projected future peak system demand requirements. We propose to make this election through a compliance filing to be made on or before July 1, 2016, as discussed in more detail below.

We believe it is appropriate, and indeed prudent, to defer this long-term supply side decision, including potential capital investment in new capacity, until we can better understand how recent rate increases and the introduction of the new demand charge and rate structure will impact peak system requirements. By the same token, the Company believes it is appropriate, and indeed, prudent, to request conditional CPCN approval now, in this proceeding, in the event that it may need to respond quickly with one of the long-term plans for the construction of either one or two boilers. Conditional CPCN approval in this proceeding will allow us to more quickly implement the appropriate long-term solution once we make our 2016 compliance filling. A full scope follow-on CPCN proceeding in 2016 would significantly delay our ability to implement the appropriate long-term supply solution. That in turn would delay our ability to decommission Zuni Station from steam generation; we will be required to keep Zuni in service until any required new generation capacity is constructed and online. This is important because the Zuni boilers have been in operation for more than 60 years, and

Zuni Station has reached the end of its useful life, as detailed in the Direct Testimony of Mr. Farmer.

Under our Steam Resource Plan, we propose capital investment and increased O&M expense to keep Zuni operational for the next 3-5 years, as this is the best and most cost-effective short-term supply solution. We have a reasonable level of confidence that, with these upgrades and repairs, we can continue to reliably operate Zuni for the next 3-5 years. That said we believe that the risk of significant equipment failure is greater once that equipment reaches the end of its useful life; that is true here for our equipment at Zuni, even with the repairs and capital upgrades we intend to make.

In addition, the risk of a significant failure event at Zuni in the next 5 years is not a constant, linear risk; rather, that risk increases exponentially as we advance toward the end of the maximum five-year period for which we propose to continue to operate Zuni. A significant failure event at Zuni could require us to make extremely expensive repairs to keep Zuni in service. It is also possible that Zuni could completely fail, and compromise our ability to meet peak winter demand for steam. Either of these scenarios would be very detrimental to our customers. For this reason, the sooner we can migrate to our long-term supply solution and cease operations at Zuni, the better. Mr. Farmer discusses these issues in greater detail in his Direct Testimony. We believe this unique situation makes it appropriate for the Commission to grant a conditional CPCN, as requested herein, to allow us to move forward with the appropriate long-term supply solution as expeditiously as possible. A protracted CPCN proceeding along the lines experienced in Proceeding No. 12A-1264ST, especially after the Commission's

consideration and approval of the Company's Steam Resource Plan submitted herein, is unnecessary and may compromise the Company's ability to take the necessary steps to assure reliable steam service. It is most efficient from an administrative resources and engineering perspective to grant the CPCN now.

Such CPCN will be conditional upon the Commission's acceptance of the Company's July 1, 2016 filing setting forth our projection of future peak load requirements for the steam system, with supporting data and analysis, and formally indicating which of the three long-term options set forth in the approved Steam Resource Plan the Company therefore applies. To the extent that construction of either the one-boiler DSP Expansion project or the two-boiler Reduced Scope SVSC is indicated, the Company requests the Commission approve a process by which, unless the Company's projected peak load requirements so filed is seriously challenged through comments of parties to this application proceeding, any remaining condition to the grant of the conditional CPCN requested herein would be removed and such construction authorized. To the extent no additional boilers are indicated by the projected peak system demand set forth in the compliance filing, no grant of a CPCN would result or be required.

In connection with the proposed extension of the service life of Zuni for the limited purposes of continued steam operations, the capital expenditures related to the necessary capital upgrades will be accounted for as steam utility plant. As explained by Mr. Farmer in his Direct Testimony, these upgrades include stack recoating, additional roof repairs, boiler refractory, feed water heater, condensate piping repairs, an upgraded sewer connection, and instruments and control systems. Due to the

cessation of electric operations at Zuni Station and the complete operational control of Zuni's steam production facilities by the Company's steam utility after December 31, 2015, the Company will account for these upgrades, to the extent they must be recorded as capital costs and not O&M expenses, on the books of the steam utility. Given the limited steam production service life of Zuni based on its existing condition, the Company's long-term plan to complete of construction of a replacement boiler facility within the next 3-5 years, and the Company's proposal to recover these capital costs over a period of five years, as detailed by Mr. Brockett in his Direct Testimony, the Company requests express Commission approval to depreciate these capital upgrades over a period of five years. Accordingly, Public Service respectfully requests that a Commission decision granting this Application also expressly approve a depreciation rate of 20 percent for any and all capital upgrades at Zuni Station as part of the Steam Resource Plan.

The Commission has asserted regulatory jurisdiction over the Company's Steam Resource Plan by directing in Decision No. C13-1549 that this proceeding be prepared and filed. Moreover, the Commission has the authority to approve the major elements of the plan in the same manner as the Commission approves ERPs filed by electric utilities filed pursuant to Rules 3600 through 3627 of the Commission's Rules Regulating Electric Utilities, the purpose of which according to Rule 3601 is "to establish a process to determine the need for additional electric resources by electric utilities subject to the Commission's jurisdiction and to develop cost-effective resource portfolios to meet such need reliably." Such authority derives from the Commission's constitutional power to regulate public utilities under Article XXV of the Colorado

Constitution and its delegated authority to regulate the facilities of public utilities pursuant to §§ 40-3-101, 40-4-101 and 40-5-101, C.R.S. The Company does not believe that it is necessary for the Commission to waive any of its rules in order to grant the relief requested in the Application. However, to the extent the Commission deems it necessary to do so, the Company also seeks approval of any required waivers of Commission rules.

In support of this Application, Public Service is offering the testimony of the following witnesses:

Mr. Scott B. Brockett, Director Regulatory Administration and Compliance, provides the background and policy basis for the Company's plan to address the future needs of its steam business as well the related regulatory approvals that the Company requests. Mr. Brockett provides details regarding the Company's actions to thoroughly identify and then evaluate multiple supply-side options to determine which of these options can best ensure reliable and cost-effective steam service over the long term. Mr. Brockett also discusses the interim plan that the Company has developed to ensure that the steam system continues to operate reliably until the appropriate long-term supply-side option determination is made. In addition, he summarizes how the Company will assess our long-term peak system demands over the next 18 months and all of the available demand-side tools that the Company can employ to support that endeavor. Mr. Brockett will discuss how the estimated long-term revenue requirements and rates under each of the potential long-term options influence the potential risk of load erosion as well as how to mitigate such risks. Finally, Mr. Brockett discusses how

the Company has addressed the issues specifically identified by the Commission in the previous Order and introduces the other Company witnesses in this proceeding.

Mr. Tim M. Farmer, Manager of Engineering, provides testimony regarding the Company's assessment of the best means to meet the needs of our district steam customers, both in the short-term and on a going forward basis. Mr. Farmer provides details on the capital costs associated with all of the options that the Company identified as well as the methodology used to select the best option(s) going forward.

Mr. Stephen P. Kutska, Thermal Energy Development Manager, discusses the future operational needs of the steam business as a whole. In doing so, several of the compliance items in the prior order are addressed in Mr. Kutska's Testimony. Mr. Kutska discusses the plan for evaluating steam peak loads as a result of the various demand side initiatives to maintain or optimize load, and combined with rate changes, how the Company will determine the amount of required maximum steam sendout it needs to ensure reliable service over the long term. Mr. Kutska also supports the estimates of O&M expenses used to evaluate various supply-side options. Finally Mr. Kutska discusses the interaction that the Company has had with customers and other stakeholders in an effort to make the best decision regarding the future needs for the steam business.

Ms. Jennifer Wozniak, Manager, Strategic Communications, provides an overview of the detailed survey that Public Service conducted with its steam customers undertaken in response to the Commission's prior order and the results of that survey.

### IV. INFORMATION REQUIRED BY RULE 31027

- 1. Facts Relied Upon to Show that the Public Convenience and Necessity Require Granting this Application. The above discussion sets forth the basic facts that demonstrate that the public convenience and necessity require granting this application to allow Public Service to proceed on a conditional basis subject to the results of its determination of the peak capacity system needs to be filed on or before July 1, 2016, to construct, own and operate the one-boiler DSP Expansion project or the two-boiler Reduced Scope SVSC. These facts are explained in much more detail in the supporting Direct Testimony and Attachments submitted herewith.
- 2. <u>Estimated Project Costs.</u> The capital cost of the one-boiler DSP Expansion project is expected to be \$17.8 million plus or minus 20 percent. The capital cost of the Reduced-Scope SVSC project is expected to be \$26.0 million plus or minus 20 percent. The plus or minus 20 percent figure is consistent with the typical level of accuracy in Company electric plant cost forecasts at the time it files applications for CPCNs.
- 3. <u>Schedule for Construction</u>. In light of the concern for the continued reliability of at the Zuni plant, following the necessary capital and O&M expenditures, the Company is proposing shut down the Zuni Station boilers and commence operating either the one-boiler DSP Expansion project or the two-boiler Reduced Scope SVSC project (if new boiler capacity is required) by the 2017-18 heating season. To meet this in-service date, the Company has established the following milestones.

19

<sup>&</sup>lt;sup>7</sup>The Commission has not promulgated rules governing an Application for a CPCN filing seeking authority to construct new steam facilities pursuant to § 40-5-101, C.R.S. Accordingly, the Company used Rule 4 CCR 723-3-3102 pertaining to the construction of electric generation facilities as a guideline for the content of the CPCN portion of this Application.

- Award of the Engineering; Procurement of Materials and Equipment and;
   Construction Agreements ("EPC") August 2, 2016
- Award of the Boiler Contract August 2, 2016
- Commence Construction June 2, 2017/July 5, 2017 (DSP Expansion)
- In-Service Date October 1, 2018

Mr. Farmer includes detailed construction project plans for the DSP Expansion and Reduced Scope SVSC projects as Attachment Nos. TMF-11 and TMF-16, respectively, to his Direct Testimony.

- 4. <u>Maps</u>. A site map, aerial photo of the site, and layout rendering of the DSP Expansion are contained in Attachment No. TMF-5 to the Direct Testimony of Mr. Farmer. A site map, aerial photo of the site, and layout rendering of the Reduced Scope SVSC are contained in Attachment Nos. TMF-12, 13, 14 and 15 to the Direct Testimony of Mr. Farmer.
- Attachments of Mr. Farmer, the Company explored fifteen potentially feasible alternatives (4 short-term options and 11 long-term options) to meet future steam demand. It also preliminarily evaluated a other alternatives that were not financially viable and therefore were not part of the final evaluation process, including a Combined Heat and Power option and the possibility of a steam peaking boiler. From the 11 long-term supply options, the Company determined that the DSP one-boiler expansion project and two-boiler reduced scope SVSC project present the best alternatives to meet potential future demand on the system. As described previously, the Company requests conditional CPCNs for both of these projects in this Application.

As Mr. Brockett, Mr. Farmer and Mr. Kutska show in their direct testimonies, the One New Boiler Option and Two New Boiler Options proposed in this Application represent the most cost-effective long-term solutions for meeting the future steam capacity needs based on the two alternative scenarios where the ultimate projected peak production capacity falls within the respective supporting ranges – *i.e.*, greater than 380 Mlb/hr and less than or equal to 540 Mlb/hr for the One New Boiler Option and greater than 540 Mlb/hr for the Two New Boiler Option. If the peak production capacity requirements are below 380 Mlb/hr, then no additional facilities will be constructed, and as indicated, the Company is not requesting any CPCN approval for that situation.

- 6. <u>Prudent Avoidance Measures</u>. Not applicable.
- 7. <u>Information required by Paragraph C of the Rule</u>. This information is not required for this application.
- 8. <u>Information regarding short-term upgrade projects</u>. As explained above, as part of the Company's Steam Resource Plan, the Company proposes to upgrade its low-pressure steam distribution system connecting the State Steam Plant to convert it to intermediate pressure service and to upgrade the Unit 1A boiler facilities and balance of plant equipment at Zuni Station to allow for continued steam operations. These upgrades are intended to help the Company bridge the gap in terms of meeting system capacity needs until the time when the long-term solution can be implemented; *i.e.*, either the DSP Expansion or Reduced-Scope SVSC projects are completed, or the decision is made that no additional steam production capacity is necessary following the cessation of steam operations at Zuni Station. Considering the nature of these upgrades, replacements and betterments to the existing steam distribution system and

existing Zuni Unit 1A boiler and related equipment, the Company does not believe a CPCN is necessary to perform these upgrades. However, to the extent the Commission disagrees and believes the Company requires a CPCN to perform these upgrades, the Company: (1) requests the Commission grant such CPCN; (2) hereby incorporates by reference the necessary information from the supporting testimony and attachments as may be required by Rule 3102 to be included in this Application; and (3) to the extent the Commission deems it necessary to do so, the Company also requests approval of any required waivers of Commission rules.

### V. NOTICE

9. In compliance with the Commission's directives set forth in Decision No. C13-1549, Public Service has filed a copy of this Application, together with the index of compliance with the above referenced order attached as Appendix A hereto, in Proceeding No. 12A-1264ST, and has served a copy of this Application, including the supporting Direct Testimony and Attachments submitted herewith, on all parties of record in that proceeding in accordance with the most recent service list in the proceeding.

# VI. INFORMATION REQUIRED BY RULE 8002(b) AND (c) OF THE COMMISSION'S RULES REGULATING STEAM UTILITIES

10. Name and Address of Applicant (Rule 8002(b)(I)):

Public Service Company of Colorado 1800 Larimer Street, Suite 1100 Denver. CO 80202

11. <u>Name under which Applicant provides service in (Rule 8002(b)(II))</u>: The Company conducts its operations in Colorado under the trade name of Xcel Energy.

12. Representatives to whom inquiries concerning the Application should be made (Rule 8002(b)(III)): Please send copies of all inquiries, notices, pleadings, correspondence, and other documents regarding this filing to:

Scott B. Brockett
Director, Regulatory Administration and Compliance
Xcel Energy Services Inc.
1800 Larimer Street, Suite 1400
Denver, CO 80202
Phone: (303) 294-2164

Phone: (303) 294-2164 Facsimile: 303-294-2329

E-mail: scott.b.brockett@xcelenergy.com

Victoria R. Mandell, #17900 Assistant General Counsel Xcel Energy Services Inc. 1800 Larimer Street, Suite 1100 Denver, Colorado 80202 Telephone: (303) 294-2268

Fax: (303) 294-2988

Email: victoria.r.mandell@xcelenergy.com

and

James D. Albright, #18685 Wilkinson Barker Knauer, LLP 1755 Blake Street, Suite 470 Denver, CO 80202 Phone: (303) 626-2325

Fax: (303) 626-2351

E-mail: jalbright@wbklaw.com

- 13. Agreement to comply with Rule 8002(b)(IV)-(VI) (Rule 8002(b)(VII)): Public Service has read and agrees to abide by the provisions of subparagraphs (b)(IV) through (VI) of Commission Rule 8002(b) of the Commission's Rules Regulating Steam Utilities.
- 14. <u>Description of existing operations and general Colorado service area</u> (Rule 8002(b)(VIII)): Public Service provides electric and gas public utility service in

numerous areas throughout the State of Colorado. The Company also provides steam utility service within the downtown area of Denver. A full listing of Public Service's existing operations and service area is set forth in Public Service's tariffs on file with the Commission.

- 15. <u>Financial information (Rule 8002(b)(IX))</u>: A copy of Public Service's most recent audited balance sheet, income statement, and statement of retained earnings was last filed on March 17, 2014 in Proceeding No. 06M-525EG.
- 16. <u>Location of hearing (Rule 8002(b)(X))</u>: If the Commission sets this application for hearing, Public Service requests that the hearing be held at the Commission's offices in Denver, Colorado.
- 17. Acknowledgement required by Rule 8002(b)(XI): Public Service acknowledges that the Company has read and agrees to abide by the provisions of Rule 8002(b)(XI) (A) through (C) of the Commission's Rules Regulating Steam Utilities.
- 18. <u>Statement under oath (Rule 8002(b)(XII))</u>: Scott B. Brockett states under penalty of perjury that the contents of the Application are true, accurate, and correct to the best of his knowledge. Mr. Brockett's affidavit is attached to this Application.
- 19. <u>Information required by Rule 8002(c)</u>: Pursuant to Rule 8002(c) of the Commission's Rules Regulating Steam Utilities, Public Service hereby incorporates by reference the following information, which is on file with the Commission in Proceeding No. 06M-525EG.
- a. A copy of Public Service's Amended Articles of Incorporation, as last filed on October 3, 2006.

b. The name, business address and title of each of Public Service's

officers and directors, as last filed on March 17, 2014.

c. The names and addresses of affiliated companies that conduct

business with Public Service, as last filed on March 17, 2014.

d. The name and address of Public Service's agent for service of

process, as last filed on October 3, 2006.

CONCLUSION

WHEREFORE, Public Service requests that the Commission approve the major

elements of the Company's Steam Resource Plan, as detailed herein, granting Public

Service a CPCN authorizing, on a conditional basis, the future construction and

operation of either the One New Boiler Option (DSP Expansion) or the Two New Boiler

Option (Reduced-Scope SVSC projects), subject to the results of the Company's

determination of peak system requirements, to be filed on or before July 1, 2016, and

granting such other and further authorizations, waivers and relief the Commission may

deem necessary for the Company to execute its Steam Resource Plan.

Dated this 18<sup>th</sup> day of December, 2014.

Respectfully submitted,

By: \_/s/ Victoria R. Mandell\_

Victoria R. Mandell, #17900

Assistant General Counsel

Xcel Energy Services Inc.

1800 Larimer Street, Suite 1100

Denver, Colorado 80202

Telephone: (303) 294-2268

Fax: (303) 294-2988

Email: victoria.r.mandell@xcelenergy.com

Wilkinson Barker Knauer, LLP

James D. Albright, #18685 Phillip J. Roselli, # 20963 1755 Blake Street, Suite 470

Denver, CO 80202

Phone: (303) 626-2325 (Mr. Albright) Phone: (303) 626-2321 (Mr. Roselli)

Fax: (303) 626-2351

E-mail: jalbright@wbklaw.com and

proselli@wbklaw.com

# ATTORNEYS FOR PUBLIC SERVICE COMPANY OF COLORADO

## BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

* * * *	*
IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR A COMMISSION DECISION (1) APPROVING ITS STEAM RESOURCE PLAN, (2) CONDITIONALLY GRANTING IT A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT ONE OF TWO NEW BOILER PROJECTS COMMENCING IN 2016, AND (3) GRANTING SUCH OTHER AND FURTHER AUTHORIZATIONS AND WAIVERS AS THE COMMISSION MAY DEEM NECESSARY.	) ) ) ) ) ) PROCEEDING NO. 14AST ) ) ) )
VERIFICAT	TION
STATE OF COLORADO ) CITY AND COUNTY OF DENVER )	SS:
I, Scott B. Brockett, being duly sworn, of Director, Regulatory Administration and Complian Public Service Company of Colorado, Applicant authorized agent for Public Service Company of the above Application; that I have read the foreforth therein are true and correct to the best of more than the state of the state o	ince, Xcel Energy Services Inc., agent for in the foregoing Application; that I am an of Colorado for the purposes of verifying egoing Application; and that the facts set

Scott B. Brockett

Director, Regulatory Administration and Compliance

1800 Larimer Street, Suite 1400 Denver, Colorado 80202

Subscribed and sworn to before me this 18<sup>th</sup> day of December 2014.

JENNIFER D. AUGUSTINE
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20064006595
MY COMMISSION EXPIRES 02/16/2018

My Commission expires:

Notary Public

Public Service's Compliance Index with Commission Decision No. C13-1549 as modified by Commission Decision No. C14-0068 in Proceeding No. 12A-1264ST – Specifically Ordering  $\P$  22 through  $\P$  32 – as Applicable to Public Service's New Application

Decision / Order	Witness and Attachments addressing each Order
1. Establish by preponderance of the evidence a present or future need for the facility. Such need means that its presence will be an improvement that justifies its costs [Decision No. C13-1549, ¶22]	The Direct Testimonies of Mr. Scott Brocket, Mr. Steve Kutska and Mr. Tim Farmer (along with Attachment No. TMF-1, CONFIDENTIAL Attachment No. TMF-2A, CONFIDENTIAL Attachment No. TMF-3A and CONFIDENTIAL Attachment No. TMF-4A) address the future long-term needs of the steam business along with the associated costs.
2. Establish by preponderance of the evidence that existing facilities are not reasonably adequate and available to meet that need [Decision No. C13-1549, ¶22]	Mr. Tim Farmer through his Direct Testimony and Attachment No. TMF-1 discusses the current status of the Zuni equipment. Mr. Steve Kutska through his Direct Testimony discusses the impact on the steam system if Zuni fails.
3. Establish by preponderance of the evidence that the utility has evaluated alternatives to the proposed facility. All feasible as opposed to all conceivable alternatives should be evaluated [Decision No. C13-1549, ¶22]	Mr. Tim Farmer provides information throughout his Direct Testimony and in CONFIDENTIAL Attachment Nos. TMF-2A, TMF-3A and TMF-4A regarding the alternatives that the Company evaluated.
<b>4.</b> Additional analysis of the efficacy of a smaller plant or facilities is required [Decision No. C13-1549, ¶25]	See #3 above.

<b>5.</b> Adding capacity at other existing facilities Decision No. C13-1549, ¶29]	Mr. Tim Farmer provides information throughout his Direct Testimony and in CONFIDENTIAL Attachment Nos. TMF-2A, TMF-3A and TMF-4A regarding the alternatives that the Company studied. In addition, Mr. Steve Kutska sponsors the updated Siting and Land Rights report documenting the Company's efforts to find other sites or facilities for a boiler.
<b>6.</b> Investigating building lease options Decision No. C13-1549, ¶29]	See #3 above.
7. Working with the Denver Redevelopment Authority or other customers to provide space for a boiler [Decision No. C13-1549, ¶29]	The Company has interpreted that by this requirement as directing the Company to work with various housing or redevelopment entities that might have space for a boiler. Mr. Steve Kutska discusses the interaction that the Company has had with other Stakeholders in his Direct Testimony.
8. Investigate potential distributed steam generation and co-location options [Decision No. C13-1549, ¶29]	See #3 and #7 above.
9. Submit an analysis to determine the correct boiler sizes and capacities and the associated costs for a range of customer attrition and growth possibilities [Decision No. C13-1549, ¶29]	Mr. Scott Brocket discusses the Company's approach to managing its steam business in the long-term as well as the range of customer attrition possibilities associated with the capacity options available to the Company in his Direct Testimony. Mr. Steve Kutska also supplements this information in his Direct Testimony.
10. Assessment of how the steam system may operate at a substantially reduced level, potentially by utilizing only the remaining boilers at other Company facilities after Zuni is closed [Decision No. C13-1549, ¶29]	Mr. Scott Brocket discusses the Company's approach to managing its steam business in the long-term including the option where no new facilities would be constructed. Mr. Steve Kutska discusses how the Company will plan for and determine its long-term production capacity requirements.

11. Assess scenarios in which some steam customers transition to gas utility service and in which the Company exits from the steam business [Decision No. C13-1549, ¶29]	Mr. Scott Brockett discusses the long-term plans that the Company has for its steam business in his Direct Testimony.
12. Assess the potential for stabilizing customer load through long-term commitments from customers in exchange for specific rate arrangements or other commitments [Decision No. C13-1549, ¶ 30]	Mr. Scott Brockett discusses the Company's current plans to pursue demand-side options in his Direct Testimony.
13. Analyze the value of rate discounts and recommend whether such discounts should continue or whether different discounts should be offered in the future [Decision No. C13-1549, ¶ 30]	See #12 above.
<b>14.</b> Conduct a detailed survey of its steam customers addressing their needs, options and preferences for utility service [Decision No. C13-1549, ¶ 30]	Ms. Jennifer Wozniak sponsors the survey and related attachments in her Direct Testimony. Mr. Scott Brockett discusses how the Company has used the results of the survey in its long-term plans for its steam business.
<b>15.</b> Provide the Commission with a thorough analysis of the causal relationship between increased steam rates and customer erosion [Decision No. C13-1549, ¶ 30]	Ms. Jennifer Wozniak provides testimony about the results of the survey and what customers espouse that they will do when faced with increased steam rates. Mr. Scott Brockett provides an update to the Customer Driver Analysis, which objectively assesses the relationship between customer erosion and increased steam rates.
<b>16.</b> Delineate the impact on utility rates [Decision No. C13-1549, ¶ 30]	Mr. Scott Brockett delineates the impact of the Company's proposal on rates in his Direct Testimony and Attachments.

17. Delineate the magnitude of the underlying operating maintenance and capital costs [Decision No. C13-1549, ¶23]	Mr. Tim Farmer sponsors CONFIDENTIAL Attachment No. TMF-3A and TMF-4, which provide the Company's estimates of the capital costs and the operating and maintenance cost estimates respectively for all of the options that the Company evaluated.
<b>18.</b> A determination of stranded costs is an issue that needs to be addressed in any future filing of a regulatory plan if any Decision No. C13-1549, ¶27]	See #11 above.
19. If a future regulatory proposal is filed, it should address the equitable balance of risks and benefits among steam customers, other customers subsidizing steam rates and Public Service's shareholders given the potential for customer attrition caused by an associated rate increase for service [Decision No. C13-1549, ¶ 32]	Not applicable; the Company is not seeking approval of a regulatory plan impacting natural gas or electric service customers.