

Exhibit No.:  
Issue: Transmission  
Witness: John R. Carlson  
Type of Exhibit: Direct Testimony  
Sponsoring Party: Kansas City Power & Light Company  
Case No.: ER-2012-0174  
Date Testimony Prepared: February 27, 2012

**MISSOURI PUBLIC SERVICE COMMISSION**

**CASE NO.: ER-2012-0174**

**DIRECT TESTIMONY**

**OF**

**JOHN R. CARLSON**

**ON BEHALF OF**

**KANSAS CITY POWER & LIGHT COMPANY**

**Kansas City, Missouri  
February 2012**

**DIRECT TESTIMONY**

**OF**

**JOHN R. CARLSON**

**Case No. ER-2012-0174**

1 **Q: Please state your name and business address.**

2 A: My name is John R. Carlson. My business address is 1200 Main Street, Kansas City,  
3 Missouri 64105.

4 **Q: By whom and in what capacity are you employed?**

5 A: I am employed by Kansas City Power & Light Company (“KCP&L” or the “Company”)  
6 as Originator, Supply Resources.

7 **Q: On whose behalf are you testifying?**

8 A: I am testifying on behalf of KCP&L.

9 **Q: What are your responsibilities?**

10 A: My primary responsibilities are to structure and market long-term power purchases and  
11 sales to meet the operational and wholesale needs of the Company. I also develop and  
12 manage the Company’s budget for RTO fees and transmission charges.

13 **Q: Please describe your education, experience and employment history.**

14 A: I received a Bachelor of Science degree in Architectural Engineering from the University  
15 of Kansas in 1997. In 2004, I received a Master of Business Administration from the  
16 University of Chicago Booth School of Business. From 1997 to 2001, I worked for  
17 Custom Energy and Enron Energy Services, companies focused on performance  
18 contracting and other energy efficiency project financing structures. In 2002, I stepped  
19 outside the energy industry and worked in financial services focusing on asset

1 management and risk management. I joined KCP&L in 2006 as an Energy Consultant in  
2 the Delivery Division. My responsibilities included managing all facets of the customer  
3 relationship for KCP&L's large industrial customers and developing solutions that met  
4 the customer's needs, to include demand response and energy efficiency opportunities.  
5 In 2007, I became Manager of Market Competitiveness where I was responsible for  
6 developing and implementing non-regulated products and services for residential,  
7 commercial and industrial customers. In 2010, I moved to the Supply Division at  
8 KCP&L and started work as an Originator of wholesale power transactions. Since that  
9 time I have also been assigned with developing and managing the Company's budget for  
10 RTO fees and transmission charges.

11 **Q: Have you previously testified in a proceeding at the Missouri Public Service**  
12 **Commission or before any other utility regulatory agency?**

13 A: I have not previously provided testimony to any regulatory commission.

14 **Q: On what subjects will you be testifying?**

15 A: My testimony will discuss (1) the Southwest Power Pool, Inc. ("SPP") administration  
16 charges for retail load and point-to-point transmission; (2) SPP transmission costs  
17 allocated to the Company; and (3) Schedule 12 fees. I also will explain why these costs  
18 are changing.

19 **SPP ADMINISTRATION CHARGES**

20 **Q: Please describe the SPP administration charge.**

21 A: SPP is a Regional Transmission Organization ("RTO") approved by the Federal Energy  
22 Regulatory Commission ("FERC"). As an RTO, SPP is a transmission provider currently  
23 administering transmission service over portions of Arkansas, Kansas, Louisiana,

1 Missouri, Nebraska, New Mexico, Oklahoma and Texas. KCP&L is a member of, and  
2 has transferred control over its transmission facilities to, SPP. With the exception of  
3 certain grandfathered agreements, transmission service over KCP&L's transmission  
4 facilities is provided pursuant to the SPP Open Access Transmission Tariff ("Tariff").  
5 SPP exercises functional control over all of KCP&L's transmission assets, and offers  
6 point-to-point and network integration transmission services and generator  
7 interconnections on KCP&L's transmission system pursuant to the Tariff.

8 The SPP is a not-for-profit entity that must remain revenue neutral; its costs must  
9 be recovered from its users (transmission customers). Consequently, KCP&L pays SPP  
10 an administration charge for performing the aforementioned RTO functions on its behalf.  
11 Pursuant to the Tariff, SPP collects the costs of conducting its RTO functions from its  
12 transmission service customers under Schedule 1-A.<sup>1</sup> The administration charge is  
13 assessed per MWh for all capacity reserved on a point-to-point basis. For network  
14 integration transmission service, the administration charge is determined using a  
15 customer's coincident peak demands. The charge per MWh is the same for both network  
16 and point-to-point service. SPP's administration charge is used to recover expenses  
17 associated with scheduling, system control, dispatching, transmission system planning,  
18 reliability coordination, standards development, congestion management, market  
19 facilitation, monitoring and compliance services.

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<sup>1</sup> Southwest Power Pool, Inc., Open Access Transmission Tariff, Sixth Rev. Vol. 1, Schedule 1-A available at [http://www.spp.org/publications/SPP\\_Tariff.pdf](http://www.spp.org/publications/SPP_Tariff.pdf).

1 **Q: How does SPP calculate the administration charge?**

2 A: Pursuant to Schedule 1-A of the Tariff, SPP is required to establish a rate for its  
3 administration charge annually that enables it to recover 100% of its total annual costs for  
4 RTO functions, subject to a rate cap. SPP's administration charge is set each year based  
5 on projected costs and revenues for that year. The rate cap serves as a limit on the annual  
6 administration charge in order to provide SPP customers a level of certainty and  
7 predictability regarding SPP's year-to-year administrative costs.

8 **Q: Why is SPP's administration charge increasing?**

9 A: SPP has sought, and obtained, FERC approval to increase the rate cap on its  
10 administration charges from \$0.225/MWh to \$0.35/MWh. Since 2008, the administration  
11 charge rate cap was set at \$0.225/MWh and SPP was able to fully recover its expenses  
12 and remain under this cap through 2011. However, due to increases in expenses  
13 primarily associated with the ongoing development and implementation of the upcoming  
14 Integrated Marketplace (*i.e.*, the more comprehensive power market that SPP is planning  
15 to implement in 2014), SPP requested and received FERC approval to raise the  
16 administration charge cap to \$0.35/MWh effective January 1, 2012.<sup>2</sup> Consequently, the  
17 administration charge set forth in Schedule 1-A increased to \$0.255/MWh beginning  
18 January 1, 2012, as approved by the SPP Board of Directors at its October 25, 2011,  
19 meeting.<sup>3</sup> As implied by the \$0.35/MWh rate cap, further escalation of the administration  
20 charge above the current \$0.255/MWh level is anticipated subsequent to 2012 as SPP  
21 moves forward with implementing the Integrated Marketplace.

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<sup>2</sup> *Southwest Power Pool, Inc.*, FERC Docket No. ER12-277-000, Letter Order (issued Dec. 14, 2011) (accepting SPP's proposed tariff changes).

<sup>3</sup> Southwest Power Pool Board of Directors/Members Committee Meeting, Oct. 25, 2011, Meeting minutes available at <http://www.spp.org/publications/BOD102511.pdf>.

1 **SPP TRANSMISSION COSTS**

2 **Q: Please describe the transmission planning and cost recovery used by KCP&L in the**  
3 **years before SPP became an RTO.**

4 A: Before SPP became an RTO, KCP&L planned its transmission system to serve retail  
5 customers within its franchised service territory as well as interconnected wholesale  
6 customers. The cost of KCP&L's transmission system was borne primarily by these  
7 same retail and wholesale customers for which the system was planned.

8 **Q: How did the cost allocation method change once SPP became an RTO?**

9 A: Before SPP received RTO status, SPP customers in the Zone (*e.g.*, KCP&L is one of the  
10 seventeen transmission pricing Zones currently under the SPP Tariff) where a new  
11 transmission facility was located would be allocated costs associated with that facility.  
12 This zonal methodology is consistent with the utility-specific transmission planning that  
13 occurred prior to SPP becoming an RTO.

14 After receiving RTO status, SPP worked with the Regional State Committee, a  
15 committee comprised of retail regulatory commissioners from agencies in the states SPP  
16 administers transmission service, to develop and implement a cost allocation  
17 methodology that allocates one-third of the costs of SPP-approved projects to the entire  
18 region based on load ratio share and two-thirds of those costs to specific zones based on  
19 megawatt-mile impacts. This transmission cost allocation methodology was for upgrades  
20 supporting reliability and transmission service from long-term power resources, and was  
21 commonly known as Base Plan funding. This is the first occurrence of a "highway" rate,  
22 allocating costs regionally, within the SPP.

1 **Q: How has SPP’s cost allocation methodology evolved into the Highway/Byway**  
2 **methodology being used today?**

3 A: Once SPP received RTO status in 2004, the focus shifted from individual utilities and  
4 transmission owners planning for their individual Zones to coordinated regional planning  
5 for the whole SPP Region.

6           Following the Base Plan funding methodology came the Balanced Portfolio, an  
7 initiative to develop a group of transmission upgrades that would benefit the entire SPP  
8 region and to allocate those project costs regionally based on load ratio share (the ratio of  
9 a transmission customer’s network load to the total SPP load). KCP&L currently has  
10 approximately an 8 percent load share responsibility for those projects as well as other  
11 transmission upgrade costs in the SPP region that are allocated on a region-wide basis.  
12 KCP&L Greater Missouri Operations Company (“GMO”) has a separate and additional  
13 share of approximately 4 percent of those regionally allocated costs. Therefore, the  
14 companies together have approximately a 12 percent responsibility for regionally  
15 allocated costs. This is in addition to the zonally allocated costs of SPP-approved  
16 projects.

17           In 2010, SPP implemented a Highway/Byway cost allocation methodology which  
18 was a hybrid zonal (“byway”) and regional (“highway”) allocation model, dependent on  
19 the voltage level of the transmission facility. Concurrently, SPP approved the Priority  
20 Projects, a group of projects that would help reduce congestion, better integrate SPP’s  
21 east and west regions, improve SPP members’ ability to deliver power to customers and  
22 further the addition of new generation to the electric grid.

1           The Highway/Byway methodology effectively regionalizes transmission costs  
2 associated with regionally-focused transmission facilities. More specifically, the  
3 Highway/Byway cost allocation methodology was structured in the following manner:

<b>Voltage</b>	<b>Regional</b>	<b>Zonal</b>
<b>300 kV and above</b>	<b>100%</b>	<b>0%</b>
<b>Above 100 kV and below 300 kV</b>	<b>33%</b>	<b>67%</b>
<b>100 kV and below</b>	<b>0%</b>	<b>100%</b>

4           SPP’s cost allocation methodology has changed over time as the needs of the SPP  
5 region and its members have changed. The methodology used prior to SPP becoming an  
6 RTO was based on local, reliability-based transmission solutions and zonally-allocated  
7 costs. This mirrored an operating environment where utilities were responsible for  
8 maintaining and operating systems within their operating Zone. Once SPP received RTO  
9 status, that environment changed and SPP began planning regionally to meet the needs of  
10 its transmission customers which now include retail load in eight states. The regional  
11 focus of the RTO created the need for regional allocation of the resulting costs, in order  
12 to effectively meet the needs of the SPP region as a whole instead of utility by utility.

13 **Q: How are SPP transmission costs allocated amongst SPP transmission customers?**

14 A: In general, SPP’s transmission costs are charged to SPP’s Network and Point-to-Point  
15 Transmission Customers based on the zonal and regional Annual Transmission Revenue  
16 Requirement (“ATRR”) amounts approved by the FERC and the magnitude of load  
17 associated with each customer’s transmission service. The zonal rate, allocated from the



1 zonal ATRR amounts specific to the Zone of the load served by the transmission  
2 reservation, plus the regional rate, calculated on a regional load ratio share basis, equals  
3 the total rate for a transmission customer under the SPP Tariff. As mentioned previously,  
4 KCP&L's load ratio share is approximately 8 percent and GMO's is approximately 4  
5 percent. Therefore, the companies together pay approximately 12 percent of regionally  
6 allocated costs in addition to the zonally allocated costs of SPP-approved projects.

7 **Q: How is the zonal ATRR calculated for SPP-approved projects?**

8 A: Table 1 from Attachment H of the Tariff delineates by Zone the revenue requirement  
9 used to determine various charges. The Zonal ATRR for each company is calculated by  
10 adding together Column (4), the Base Plan Zonal ATRR for projects issued a NTC prior  
11 to June 19, 2010 and Column (5), the Base Plan Zonal ATRR for projects issued a NTC  
12 on or after June 19, 2010, and subtracting Column (6), the ATRR Reallocated to  
13 Balanced Portfolio Region-wide ATRR.<sup>4</sup>

14 **Q: How is the region-wide ATRR calculated for SPP-approved projects?**

15 A: Table 2 from Attachment H of the Tariff describes the Region-wide ATRR for SPP-  
16 approved transmission projects. The Region-wide ATRR (Line 5) is calculated by  
17 adding together the Base Plan Region-wide ATRR values (Lines 1 and 2), the Balanced  
18 Portfolio Region-wide ATRR reallocated from Table 1 (Line 3), and the Balanced  
19 Portfolio Region-wide ATRR (Line 4). The Region-wide charge to network customers is  
20 then calculated by multiplying each customer's regional load ratio share by the total  
21 Region-wide ATRR, Line 5.<sup>5</sup> In this manner, network transmission customers are

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<sup>4</sup> SPP Tariff Attachment H, Effective April 1, 2012, [http://www.spp.org/publications/For\\_Bills\\_2012-01-01\\_Revenue\\_Requirements\\_and\\_Rates\\_v20120117%20\(includes%20SPA\).xls](http://www.spp.org/publications/For_Bills_2012-01-01_Revenue_Requirements_and_Rates_v20120117%20(includes%20SPA).xls).

<sup>5</sup> Ibid.

1 charged for facilities constructed throughout the region based on their load ratio shares,  
2 understanding that these transmission facilities benefit the entire SPP region.

3 **Q: How are SPP transmission costs allocated to KCP&L expected to change?**

4 A: SPP transmission costs allocated to the Company have been rising, and projections from  
5 SPP show that these expenses will continue to increase through 2017, recede slightly in  
6 2018, and then increase again in 2019. SPP projects that transmission costs allocated to  
7 KCP&L will be \$18.4 million for the calendar year 2012. SPP further projects the  
8 Company's share of the SPP transmission costs will increase to \$25.1 million in 2014 and  
9 peak at over \$45.2 million in 2019 (Schedule JRC-1). This equates to an approximate  
10 14% increase per year over that timeframe. These projections reflect both zonal and  
11 region-wide components of the costs of SPP-approved projects and the increases are  
12 primarily driven by the region-wide components.

13 **SCHEDULE 12 FEES**

14 **Q: What are the Schedule 12 fees?**

15 A: FERC assesses fees to transmission providers, including SPP, based on the actual  
16 megawatt-hours of energy transmitted in interstate commerce during a calendar year, as  
17 reported on FERC Form 582. Each transmission owning public utility is required to  
18 reimburse the transmission provider (SPP) for charges assessed by the FERC pursuant to  
19 Part 382 of its regulations. Schedule 12 of the Tariff allows SPP to recover, from  
20 transmission owning utilities, the estimated amount to be assessed by FERC in the next  
21 year for transmission service provided in the current year, with true-up to actual cost  
22 when such cost is known.

1 **Q: Why should Schedule 12 fees be included in a Missouri retail rate case?**

2 A: After the SPP was approved by FERC as an RTO in 2004, the FERC assessment criteria  
3 for SPP member companies changed. Instead of basing its annual assessment on  
4 wholesale transactions only, FERC began basing its assessment on all load under SPP  
5 rates, including retail load served by member companies. Under this procedure, FERC  
6 bills SPP for the assessment, and SPP then passes a share of this cost through to all point-  
7 to-point and network service customers it serves. As a result, FERC's assessment basis  
8 for this charge includes the retail and wholesale loads for which KCP&L is responsible.  
9 The overall magnitude of the assessment rose commensurately with this change in  
10 FERC's assessment basis. With the change in methodology, the assessment cost becomes  
11 primarily a retail load responsibility since the bulk of load that serves as the basis for the  
12 SPP pass-through is retail load.

13 **Q: Are Schedule 12 fees expected to change?**

14 A: The Company does not expect to see much variability in Schedule 12 fees in the near  
15 term because the Schedule 12 rate has remained somewhat constant over the last couple  
16 of years and the Company expects that to continue. Further, the Company does not  
17 expect its load requirements to substantially change the Schedule 12 fees.

18 **Q: What SPP administration charges, SPP transmission costs and Schedule 12 fees did  
19 KCP&L use to develop its cost of service?**

20 A: The SPP administration charges, SPP transmission costs and FERC Schedule 12 fees are  
21 included in adjustments CS-86, CS-45 and CS-85, respectively, included in Schedule  
22 JPW-4 attached to the direct testimony of Company witness John P. Weisensee. We

1 expect to adjust these projected charges to actual levels during the true-up in this  
2 proceeding.

3 **Q: In addition to the requested dollar amount in the case, are you requesting anything**  
4 **to address the anticipated increase beyond the test period?**

5 A: Yes. As addressed in the testimony of Company witness Darrin Ives, the Company is  
6 requesting a transmission tracker to recover the changes that occur in the SPP  
7 administration charges, SPP transmission costs and Schedule 12 fees.

8 **Q: Does that conclude your testimony?**

9 A: Yes, it does.

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of Kansas City Power & Light                 )  
Company's Request for Authority to Implement            )  
A General Rate Increase for Electric Service             )        Case No. ER-2012-0174

**AFFIDAVIT OF JOHN R. CARLSON**

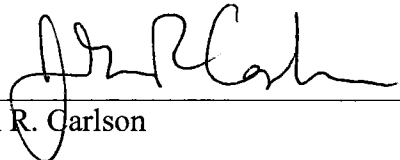
**STATE OF MISSOURI     )**  
  ) **ss**  
**COUNTY OF JACKSON    )**

John R. Carlson, being first duly sworn on his oath, states:

1. My name is John R. Carlson. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Originator, Supply Resources.

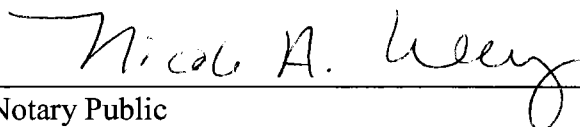
2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Kansas City Power & Light Company consisting of eleven (11) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

  
\_\_\_\_\_

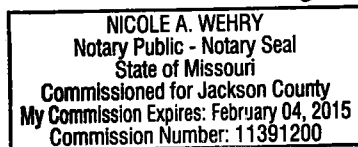
John R. Carlson

Subscribed and sworn before me this 27<sup>th</sup> day of February, 2012.

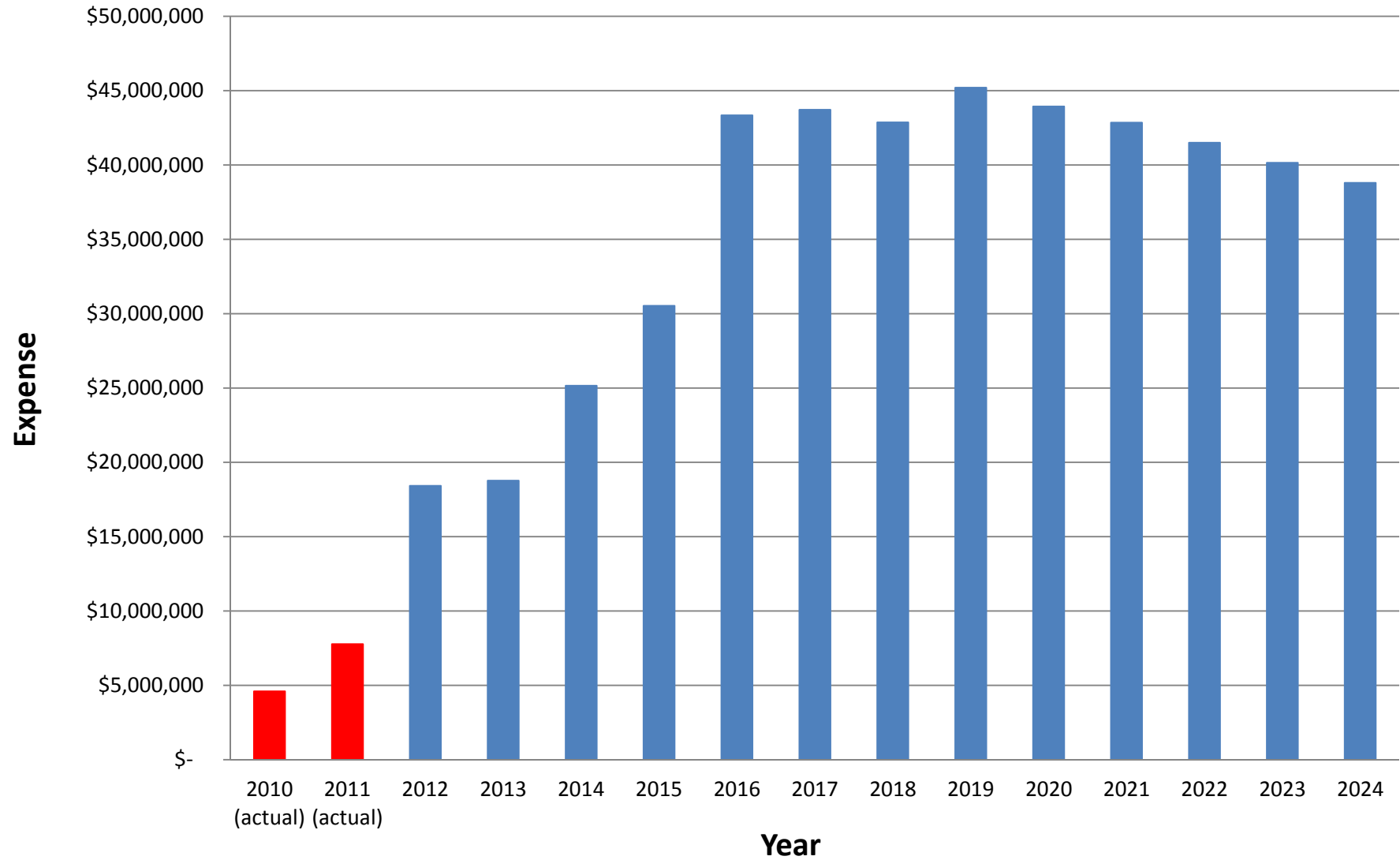
  
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Notary Public

My commission expires: Feb. 4, 2015



## SPP Transmission Costs (KCP&L)



<sup>1</sup> Projections for 2012 – 2024 taken from: FINAL SPP 10 Year ATRR Forecast Jan 25 2012 for Posting to RTWG REV 5.xlsx, Maintained by SPP Engineering, Posted January 25, 2012, <http://www.spp.org/publications/2012%20January%20ATRR%20Forecast.zip>