SOUTHWEST POWER POOL
FINANCE COMMITTEE MEETING

January 17, 2020
Teleconference

MINUTES

AGENDA ITEM 1 – ADMINISTRATIVE ITEMS

SPP Chair Bruce Scherr called the meeting to order at 7:30 a.m. The following members were in attendance or represented by proxy:

Bruce Scherr	SPP Director
Susan Certoma	SPP Director
Sandra Bennett	AEP
Sarah Stafford	OG&E
Mike Wise	Golden Spread Electric Coop

Others in attendance:

Jason Regehr	City Utilities – Springfield, MO
Denise Buffington	Evergy
Jeffrey Parkison	City Utilities – Springfield, MO
Jason Chaplin	Oklahoma Corporation Commission
Mark Holler	Tenaska Power Services
Rob Janssen	Dogwood Energy
Rodney Massman	Missouri Public Service Commission
Nick Brown	SPP
Barbara Sugg	SPP
Jared Barker	SPP
Scott Smith	SPP
Tom Dunn	SPP
Keith Collins	SPP
John LuAllen	SPP
Will Vestal	SPP
Patrick Clarey	FERC

A quorum was present. Minutes from the October 14, 2019 meeting were reviewed. Susan Certoma made a motion to accept the minutes. The motion was seconded by Mike Wise and approved by unanimous voice vote.

AGENDA ITEM 2 – CREDIT POLICY ENHANCEMENT ACTIVITIES

Scott Smith, SPP's director of treasury and risk management, presented material describing the efforts of the Credit Practices Working Group ("CPWG") to develop enhancements to SPP's credit policy to better protect market participants from uplifted default losses. The CPWG is nearing completion of its work to enhance SPP's credit application, increase capitalization requirements to qualify as a market participant, and enhance transmission congestion rights exposure calculation to better collateralize riskier holdings. The CPWG expects to work on even more enhancements once the ones currently under development are implemented. The future enhancements are expected to include forward-looking reference pricing based on transmission system changes, position limits based on capitalization, and mark to auction methodology, to name a few.

AGENDA ITEM 3 – ACTUARY ASSUMPTIONS

SPP staff discussed its recommendations for the four primary assumptions required for pension accounting and valuation: i) discount rate – staff recommended a discount rate of 4.50% in accordance with SPP's process for determining the discount rate assumption; ii) investment rate of return – staff recommends remaining at 7.00% long-term rate of return; iii) rate of compensation change – staff recommends remaining at 4.00% iv) staff recommended utilizing the current IRS mortality tables in accordance with Finance Committee directives from December 2015. These assumptions were reviewed by Steve Osborn of Osborn, Carreiro & Associates, the actuary for SPP's pension plan; Mr. Osborn agreed with the recommended assumptions.

Susan Certoma made a motion to accept the assumptions presented by staff. The motion was seconded by Sandra Bennett and approved by unanimous voice vote.

AGENDA ITEM 4 – 2019 FINANCIAL AUDIT

Bruce Scherr advised the committee members that he visited with the auditors in December 2019 to discuss any known areas of fraud and focus areas for the audit. The three areas the auditors intend to focus on are revenue recognition, regulatory matters (specifically related to the impact regulatory orders may have on SPP's outstanding debt), and SPP's activities in the western interconnection.

AGENDA ITEM 5 – ORG GROUP EFFECTIVENESS

Materials from SPP's organization group effectiveness survey, which were specific to the finance committee, were presented. Bruce Scherr noted the quantitative scores were generally among the highest in the organization and were essentially unchanged from prior periods. Noted in the comments section of the survey were comments that the meetings felt rushed and that the meeting to review and approve the budget may deserve additional time.

There being no further business, the meeting was adjourned at 9:20am.

Respectfully Submitted,

Tom Dunn

Secretary

SOUTHWEST POWER POOL, INC.
FINANCE MEETING

January 17, 2020 (7:30am – 10:30am CST)
Teleconference – WebEx

AGENDA

1. Administrative Items.. Bruce Scherr
2. 2019 Stewardship Report (*45 minutes*) .... Stephens Insurance, LLC
3. Credit Practices Working Group (*75 minutes*) .... Scott Smith
4. Actuary Assumptions (*30 minutes*) .... Tom Dunn
5. 2019 Financial Audit .... Bruce Scherr
6. Org Group Effectiveness (*30 minutes*) .... All
7. Future Meetings..

SOUTHWEST POWER POOL
FINANCE COMMITTEE MEETING

October 14, 2019
SPP Office – Little Rock, AR

MINUTES

AGENDA ITEM 1 – ADMINISTRATIVE ITEMS

SPP Chair Bruce Scherr called the meeting to order at 10:00 a.m. The following members were in attendance or represented by proxy:

Bruce Scherr	SPP Director
Susan Certoma	SPP Director
Sandra Bennett	AEP
Laura Kapustka	Lincoln Electric
Sarah Stafford	OG&E
Mike Wise	Golden Spread Electric Coop

Others in attendance:

Holly Carias	Nextera
Denise Buffington	Evergy
Jim Jacoby	AEP
Jason Chaplin	Oklahoma Corporation Commission
Richard Ross	AEP
Heather Starnes (phone)	Healy Law Office
Nick Brown	SPP
Carl Monroe	SPP
Lanny Nickell	SPP
Scott Smith	SPP
Dianne Branch (phone)	SPP
Zeynep Vural (phone)	SPP
Sheri Dunn	SPP
Chad Moore	BKD
Cynthia Burns	BKD

A quorum was present. Minutes from the July 15, 2019 meeting were reviewed. Susan Certoma made a motion to accept the minutes. The motion was seconded by Mike Wise and approved by unanimous voice vote.

AGENDA ITEM 2 – BKD PRE-AUDIT DISCUSSION

Chad Moore of BKD, LLC presented the 2019 financial audit plan identifying significant focus areas for the audit and seeking input from the Committee on other areas which the Committee would like audited. The Committee did not note any additional areas of focus at this time.

AGENDA ITEM 3 – 2020 OPERATING AND CAPITAL BUDGETS

SPP staff presented highlights from the 2020 budget starting with a reconciliation of SPP's net revenue requirement from the 2019 budget through the 2019 forecast then to the 2020 budget. Next, staff presented a closer view into major budget categories including salary and benefit expenses, outside services expenses, capital expenditures, debt service requirements, and outstanding debt. Areas of focus by the Committee members included:

- Contract services: particularly ensuring direct and shared overhead costs of administering those contracts were not included in the net revenue requirement paid by RTO transmission customers

- Staffing: particularly ensuring expansion of the engineering staff would result in reductions in outside services engagements in the future

- Prior year over-recovery: understanding what led to the significant over-recovery in 2018 that reduced the 2019 net revenue requirement by $11 million

Several Committee members indicated SPP should include the Finance Committee members on the notice that is sent to all SPP members seeking input on the budget in advance of the Finance Committee meeting. Staff committed to doing so in 2020. The Committee also requested SPP staff report its results from expanding the engineering staff to reduce future costs.

Following additional dialogue on individual aspects of the budget, Mike Wise made a motion to accept the budget as submitted and set the 2020 administrative fee rate at 43¢/MWh. The motion was seconded by Laura Kapustka and approved by unanimous voice vote.

AGENDA ITEM 4 – CREDIT PRACTICES WORKING GROUP

SPP staff presented a summary of the actions SPP's Credit Practices Working Group is evaluating to strengthen some of the credit practices prescribed in the Credit Policy. The working group anticipates bringing formal recommendations to the Finance Committee in January 2020.

AGENDA ITEM 5 – ADMINISTRATIVE COMMITTEE

SPP staff presented highlights of the Administrative Committee's work during 2019, focusing primarily on the performance of the investment managers for the SPP Retirement Plan assets and the SPP 401(k) plan investment options. The Administrative Committee has been pleased with the performance of the managers.

Respectfully Submitted,

Tom Dunn

Secretary

2019 STEWARDSHIP REPORT

November 2019

Stephens

SPP Southwest Power Pool

1. STEPHENS TEAM

Southwest Power Pool Account Team

Executive Team
Nick Brown, CEO

Internal Risk Management Team
Tom Dunn & Scott Smith

Stephens Inc.
Enterprise Resources

Account Executive
Stan Payne, SEVP

Executive
Market Relationships

Brokerage	Risk Management	Claims	Loss Control
Senior Account Manager Matt Jones, AVP	**Account Executive** Jim Goss, SVP	**Account Executive** Denver Fletcher, SVP	**Account Executive** David Nigus, VP
Executive Risk Kevin McBride, SVP	**Acct. Manager/Special Projects** Chris Triggs, SVP	**Claims Counsel** Courtney McLarty, VP	**Account Executive** Preston Keller, VP
Executive Risk Sam Robles, AVP	**Legal** Patrick McAlpine, SVP	**Claims Management** Heba Brown	
Account Executive Bob Watkins, SVP	**Legal** Joe Ramsey, VP	**Claims Coordinator** Tag Grace	
Account Executive Prentice McIntosh, VP		**Claims Specialist** Joseph Brown	
Customer Service Nancy Jo Jeffery			

Property & Casualty Division

93%

Rollover

All Property & Casualty

Decade Average = Low 90s

102%

Retention

Risk Management, Excluding M&A

Consistently at 100%

+12%

Organic Growth

Property & Casualty

Decade Average = 10%+

2. STATE OF INSURANCE MARKET

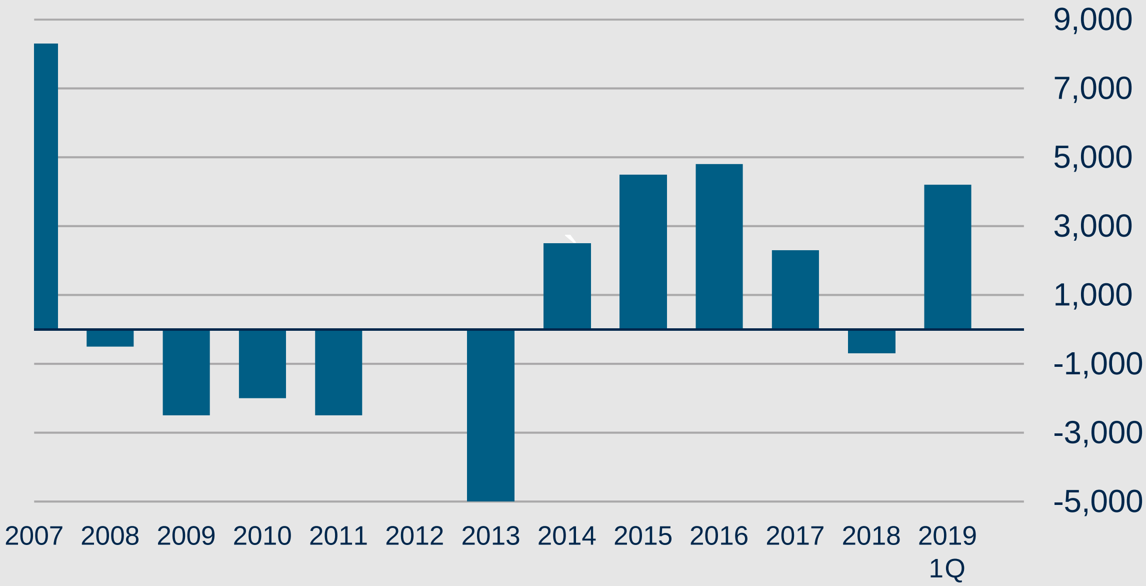
P&C Market Update: First Half of 2019

MARKET OVERVIEW

- As reported by the Insurance Information Institute, the U.S. Property/Casualty insurance industry recorded **a $5.3 billion underwriting gain**for the first quarter of 2019. This compares to an underwriting gain of $4.1 billion for the same period of 2018.
- CAT losses for the first quarter of 2019 were **$4.8 billion**, essentially flat compared to the same period of 2018 when they totaled $5,0 billion. CAT losses have been historically low in the first quarter. With the exception of the first quarter of 1994 which included the Northridge earthquake, first quarter losses have been below $4 billion for the 68 year period from 1950 to 2017, Now we have four consecutive first quarters with CAT losses exceeding $4.8 billion.
- Alternatively, Non-CAT losses for the first quarter **grew by $5.8 billion** to $97 billion compared to $91.2 billion for Q1 2018.

Net Underwriting Gains & Losses

Net Underwriting Gains for first three months of each year (in $Billions)



Source: ISO/PCI; Insurance Information Institute

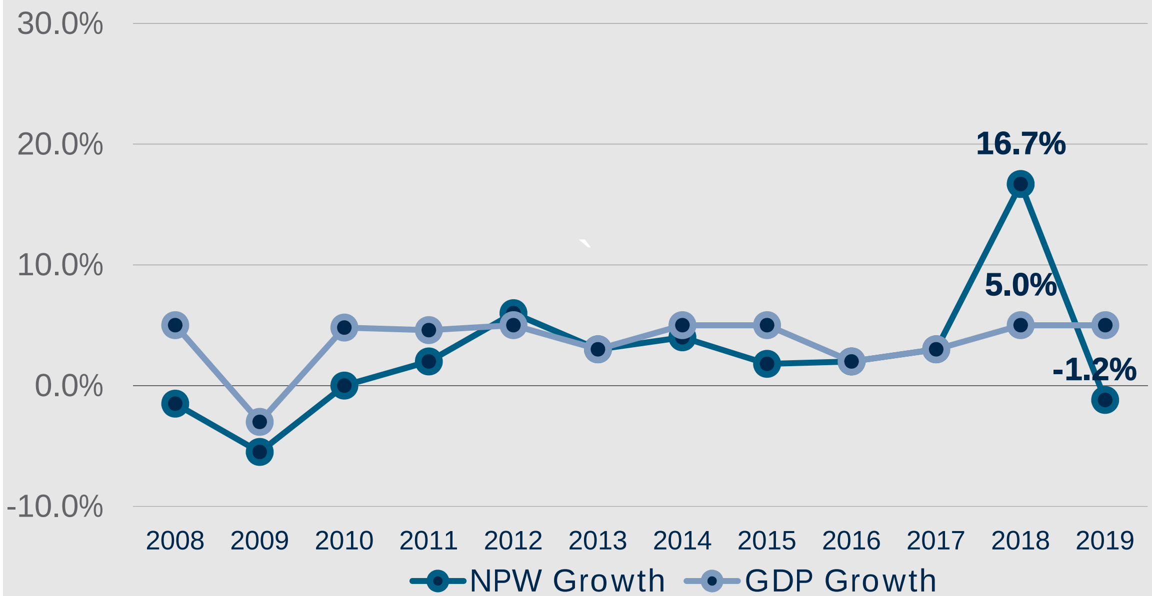
P&C Market Update: First Half of 2019

MARKET OVERVIEW

- In spite of the modest increase in total losses, **the trend for both commercial and personal auto losses continues to be increased frequency and severity driven by several factors** including more drivers on the road, particularly at rush hour (10 million more people employed in the last four years), bad weather and distracted driving.
- For the First Quarter, **Net written premium**, which is direct written premium net of reinsurance, **fell by $1.8B to $154.8 billion, a decline of 1.2%.** Changes in the tax law had a significant impact on reinsurance transactions for 2018 resulting in unusually high net written premium. Net written premium tends to grow based upon exposure growth and rate activity. Exposure growth is driven primarily by economic activity which has been unusually strong**.**
- Insurers' **combined ratio deteriorated to 97.4% for Q2 2019 compared to 96.4% for the same period of 2018**.

Annual Change in Net Premium Written & GDP

Tax reform led to a spike in net written premium in 2018



Source: Insurance Information Institute/ Veririsk

P&C Market Update: US Remains Strong

MARKET CAPACITY

- US domestic market capacity continues to be abundant as measured by **policyholders surplus which remained near all-time highs at $779.5 billion**, an increase of 5% from year-end 2018. Policyholder surplus is the equivalent of net worth in other industries. Insurance Linked Securities ("ILS"/ "Cat Bond") capacity has contracted due to "dismal returns' (Standard and Poor) related to high catastrophe losses in 2017 and 2018 and continued loss creep.

FIRMING MARKET

- As reported in the second quarter 2019 survey report from *CIAB,* released August 22, the market showed continuing signs of firming. **Premium pricing across all-sized accounts saw average increases of 5.2% in Q2 2019** compared to 3.5% in Q1 2019. Pricing for medium-sized accounts increased the most in comparison to large and small accounts, at 6.2%, nearly double its Q1 2019 increase of 3.5%. All lines of business, with the exception of Workers' Compensation, experienced slight to moderate pricing increases in Q2 2019. Commercial Property and Commercial Auto were hit the hardest in Q2, with increases of 8.5% and 8.4%, respectively. This is the first time since the end of 2014 that any line of coverage increased more that auto. The average premium increase across commercial lines excluding workers compensation was 4.6%, in comparison to 3.4% in Q1 2019 and 2.1% in Q4 2018.

CATASTROPHIC EXPOSURE

- As reported by *Business Insurance*, "**Catastrophe-exposed property accounts, umbrella and excess liability and public company directors and officers policyholders are seeing double-digit rate increases**, compounding this problem, insurers are reducing their limits from an average of $25 million to $10 million/$15 million with no corresponding rate decrease in the price per million dollars of coverage."
- Auto losses and adverse development of property CAT losses and tighter treaty renewals are causing carriers to look at lower catastrophic exposure (property and umbrella). **Tightening underwriting guidelines, raising deductibles, increasing attachment points and decreasing limits are measures being implemented across the market**.

P&C Market Update: London Market in Transition

LONDON MARKET TIGHTENS

- The Stock Throughput market is upside down from years of competitive pricing and recent rounds of losses. We are seeing increases and accounts often require heavy marketing. Pricing is up and syndicates are pulling out of tougher classes. **London is more restrictive on CAT exposure and has tightened up this market substantially, requiring more information and offering much higher pricing.** Modeling is now an absolute. *Source: CRC State of the Market Report 2019*
- London remains a key source of capacity for the E&S space. However, the London market is at a critical inflection point given the heightened focus of Lloyds' on syndicate performance. For retailers, it means uncertainty and a market in a state of potentially significant change. *Source: AmWINS State of the Property Market 2019*

GROWING LOSSES, MOUNTING PRESSURE

- It's been a challenging few years for Lloyd's of London. The specialty lines market has been operating against a backdrop of high expense ratios, growing attritional losses, and significant pressure upon underwriting profitability. As a result, the Fitch Ratings sector outlook for the London market in 2019 remains negative. "In the last few years, attritional loss ratios have been increasing as a result of the soft market," said Ekaterina Ishchenko, director at Fitch Ratings. "We've also seen that expense ratios have been increasing [and that] reserve releases are contributing less to underwriting profitability than they were in the past. These are the natural consequences of the softer market. *Source: Fitch February 2019*
- The changes in the London marketplace go deeper than the Stock Throughput space. Syndicates' annual business plans have been scrutinized more than usual by the Central Committee at Lloyds. Some plans have been rejected while others have required significant reduction in underwriting capacity. Other syndicates have been required to cease underwriting. In addition to London's book of business, the ripples of tighter reinsurance terms can continue to affect the market.

P&C Market Update: Property

CAT wind/hail exposed properties are seeing double digit rate increases and those with adverse loss experience or that have lost capacity from incumbents can expect higher range double digit increases. With good loss records, property accounts with no CAT exposure have seen relatively small rate increases. A recent CIAB survey reports **commercial property rates up by 5.9%** with a disparity of from -15.0% to +45.4%.

The 2017 and 2018 storm seasons brought to an end the below-average losses the U.S. market has experience from Named Windstorms for the past several years and reminds us of the extremely volatile nature of those events and how quickly they can overshadow overall industry experience.

According to Willis Towers Watson, there were **$1.69 billion of ILS CAT bonds** issued in the second quarter of 2019, a significant drop from the $4.0 billion issued in the second quarter of 2018 and $6.2 billion n the second quarter of 2017.

The lower funding in the ILS market required primary insurance carriers to **turn back to traditional relationship-driven reinsurance treaties**. Carriers without long established relationships found it more difficult to fill gaps in their programs.

Part of what is driving the contraction in the ILS market in continuing increases in **CAT bond losses from Harvey, Irma and Maria** in the 2017 account. At the end of the second quarter of 2018 these losses were estimated at $755 million. A year later at the end of the second quarter of 2019, those losses have grown to just **over $1 billion** reflecting approximately a quarter billion of "loss creep."

The June 2019 **CAT Reinsurance Treaty renewals saw increases in the range of 15% to 20%** for most carriers.

Non-CAT Wind/Hail events (i.e. convective Midwest storms) have become a high profile risk and carry separate percentage deductibles, higher pricing and more stringent underwriting. Many underwriters are now treating this as a new CAT exposure.

The frequency and severity of California **wildfires** over the past few years have caused underwriters to change their guidelines for this exposure and to treat as a potential CAT exposure

Property CAT reinsurance rates for insurers with reinsurance programs previously hit with losses increased from 5% to 25% in Florida and from 5% to 20% nationwide. Loss-free catastrophe programs renewed from flat to 7.5% in Florida and flat to 5% higher nationwide.

P&C Market Update: Property

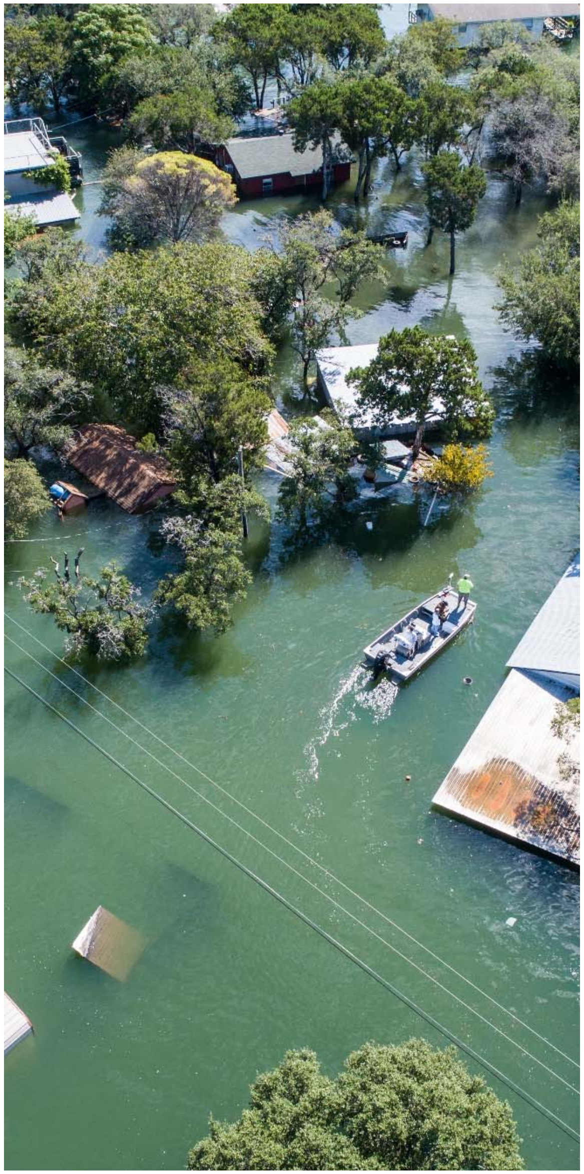
EARTHQUAKE

- The **earthquake market is also deteriorating** particularly for the Pacific Northwest and parts of Zone A (San Francisco and North Bay areas). RMS 17 has driven up loss estimates in Zone A. Some challenging risks in this market include manufacturing with large business interruption exposures, very old buildings, tuck-under parking and tilt-up construction.

HIGH HAZARD FLOOD

- High hazard flood resisted the competitive market trend seen in other lines in recent years. **Floods can and do happen anywhere and in any season which makes them much less predictable and therefore not easily modeled and priced.**

  The recent devastation in Houston is clear evidence of widespread catastrophic damage posed by flood and has resulted in more firming in this market. Many underwriters have exited the Harris county market as a result of the recent flood losses. Claims from the recent flooding in the Midwest are just materializing and yet to be accurately valued. Underwriters who are willing to write flood typically buy more reinsurance and will likely be impacted by changes in the reinsurance market.



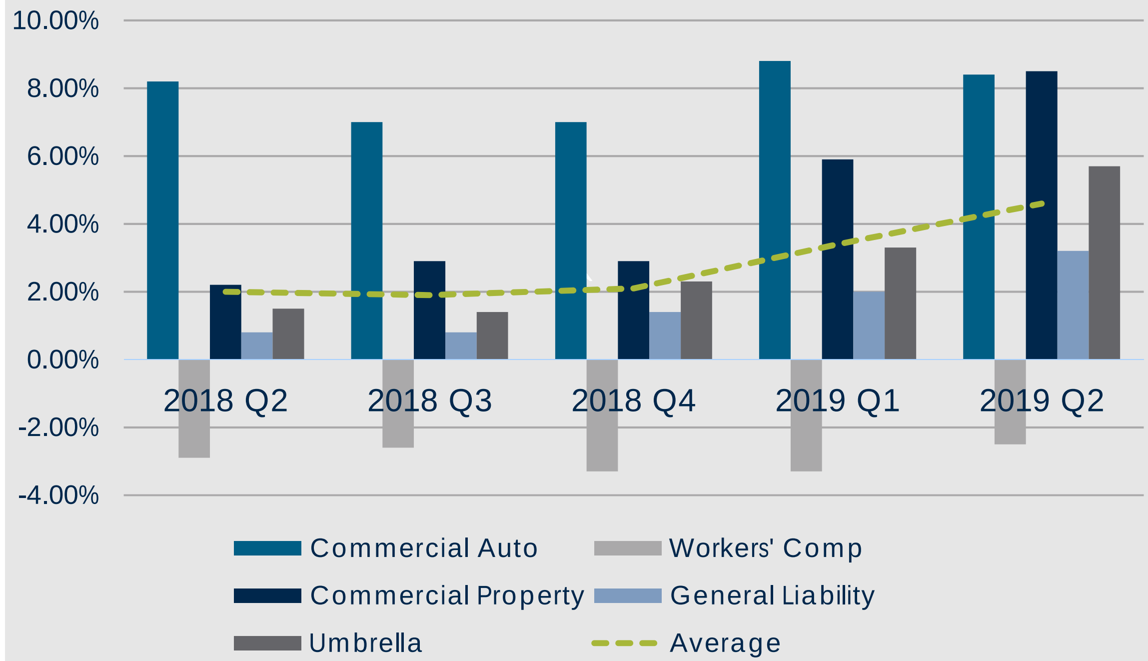
P&C Market Update: Primary & Excess Casualty

MARKET TRENDS

- Workers Compensation is the notable exception to the **general market trend of increasing rates and tightening capacity seen particularly in property, auto liability and umbrella.** As workers compensation experience continues to improve due to prior year reserve reductions and some moderation in medical inflation trends, underwriters continue to be competitive on workers' compensation in most jurisdictions.
- **Workers Compensation and specialty lines such as Cyber, Pollution and Terrorism continue to generate competition among underwriters as the few profitable lines of coverage in the industry.** More underwriters are competing for workers compensation on a monoline basis. California, New York, Massachusetts, Florida, Pennsylvania and Illinois continue to be the most challenging jurisdictions with generally unfavorable results.

By-Line Rate Changes

Premiums increased across all coverage classes, except for workers' comp



Source: Council of Insurance Agents & Brokers

P&C Market Update: Primary & Excess Casualty

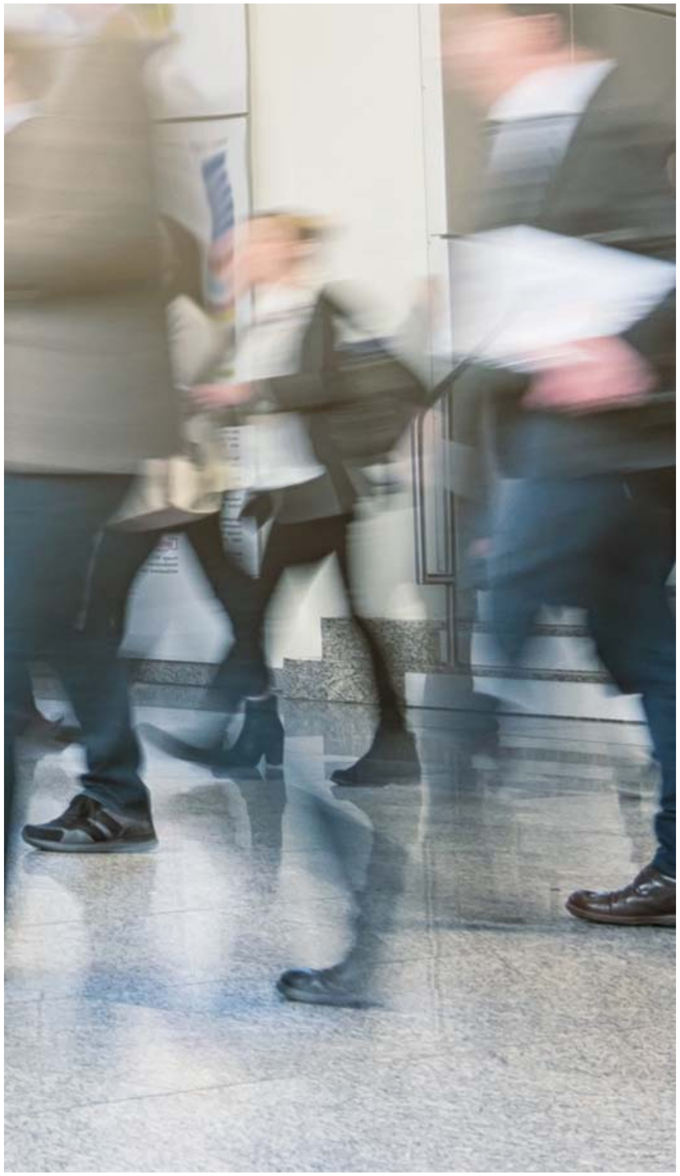
UMBRELLA TRENDS

- Tightening underwriting guidelines, raising deductibles, increasing attachment points and decreasing limits are being implemented across the market. According the CIAB**, Umbrella rates increased an average of 5.7% in Q2 2019.**

WORKERS COMP DOWN, AUTO UP

- According to the 2nd Quarter CIAB survey, **increased capacity has driven workers compensation rates down by an average of 2.5%** in the first which follows reductions in the four previous quarters.

- At the same time **auto rates increased by 8.4%.** This reflects the continuing trend for the past several quarters of firming in the auto market. The second quarter of 2019 was the 32nd consecutive quarter of increased commercial auto rates. Increased frequency and severity of losses are the driving factors in these increases.



P&C Market Update: Directors & Officers, Employment Practices, Fiduciary, Crime

MARKET TRENDS

- The **D&O market for both public and private companies is firming** but is not considered a traditional "hard market." While capacity in the market is available, few insureds will receive pricing reductions on their D&O program in 2019.
- For **public companies**, Insurers are generally seeking anywhere from **5% to 15% rate increases** and /or increased self insured retentions on their primary D&O renewals. Further, many insurers are attempting to reduce their limit exposed **by cutting capacity from $15M to $10M or $10M to $5M**. Excess insurers are also pushing for rate increases. Whereas a year ago, many insurers will willing to provide excess capacity for 50% (or even less) of the underlying insurers pricing, many are now requiring 60% - 70% of the underlying pricing.
- In general, **private company pricing is flat to up single digits**. Insurers continue to pay claims that they never intended to pay claims for. They are reviewing their book performance closely and charging additional rate where they deem necessary. Carriers are also attempting to restrict coverage when they can so it is important to watch changes in terms and conditions closely.

Cyan, Inc. v. Beaver County Employees Retirement Fund

Following the SCOTUS decision in *Cyan, Inc. v. Beaver County Employees Retirement Fund*, the IPO D&O market is challenging. Insurer loss history for IPOs was already poor, and now they are particularly concerned about future defense costs with concurrent litigation in both state and federal court. As a result, many insurers will not offer greater than a $2.5M to $5.0M limit with self insured retentions of $5M and higher. Premiums have also increased significantly following *Cyan.*

It is advised that that **firms considering an IPO speak with their Stephens Insurance representatives early in the process to craft a strategy**.

History of Liability Insurance for Utilities

Important Role of Industry Insurers: AEGIS and EIM

Liability insurance for utilities in the past 60+ years fluctuated wildly as insurers entered the utility arena with great promise, only to depart abruptly a few short years later, leaving utilities scurrying for insurance and third party liability protections. Resulting uncertainty of available insurance and related cost led utilities to form their own dedicated insurers.

Some major insurers such as Lloyds of London, General Reinsurance, The Home Insurance company, Lloyds again – and countless minor players who took very small portions of large accounts at times when premiums were at peak during "tight" markets – **abandoned utilities when claims caught up with premiums** and/or the competition was attracted to the peak-level premiums and ultimately forced the prices down. Many of those insurers later filed for bankruptcy leaving policyholders high and dry without the protection for which they had contracted.

This behavior was evident from the 1950s through around 1986. **A significant number of the utility insurers that were active in those years no longer exist.**

Meanwhile, the dedication and commitment of AEGIS (and EIM) for over thirty years to the energy industry is an insurance record. These utility-owned companies starkly differ from the multiple piece-players of the 1970s and 1980s.

Today, **AEGIS is the insurer of choice for 314+ members** consisting of gas and electric utilities in the U.S. and Canada with some similar entities in Europe joining in recent years.

Recognizing a need for higher limits than AEGIS can provide ($35 million for Liability, Directors and Officers, for example), **utilities formed Energy Insurance Mutual (EIM) to provide more limits** (up to $100 million for Liability and $50 million D&O in addition to the AEGIS limits).

AEGIS and EIM are recognized in the global insurance marketplace as the leaders for utility insurance. Other insurers in Europe and Bermuda (the major insurance centers for the world) are now very keen to follow these industry leaders and to offer additional limits over those provided by YOUR industry's mutuals.

AEGIS & EIM Market Update

AEGIS & EIM, focus continues to be on providing products and services to their members. This focus starts with fulfilling the insurance needs of their members with meaningful capacity with terms and conditions that are often unmatched in the commercial marketplace. Coupled with their insurance products, AEGIS provides world class services to their members from loss control/safety/engineering to claims management.

Since both AEGIS' & EIM's inception, they have taken a conservative approach to underwriting with the intention to provide a stable product for their members year in and year out. In light of what is transpiring in the commercial marketplace, reduction of capacity and major increases in rates, it seems AEGIS' and EIM's focus is where it should be – on their members.

Both AEGIS & EIM are poised to be stable, constant partners in 2020 and beyond. A few company specific notes are below:

AEGIS

- $1.57B Gross Written Premium (All lines)
- $1.64B Policyholder Surplus
- $62M Member Credits (34% increase)
- 88% Combined Ratio
- "A" Stable – AM Best Rating
- Increased limits for Excess Liability, D&O, Property and Cyber
- Evaluating and launching new products – Generation Outage

EIM

- $158M Gross Written Premium (All lines)
- $1.2B Policyholder Surplus
- $75M in Member Distributions
- 64.5% net loss ratio
- "A" Stable – AM Best Rating
- Ability to provide additional limits for Excess Liability, Cyber and Property

As you can see, both AEGIS and EIM are well positioned for the future. They will continue with client specific underwriting with a plan for manageable and conservative rating changes.

3. ACTIVITIES & ACCOMPLISHMENTS

Activities & Accomplishments

Stephens appreciates the opportunity to continue to serve Southwest Power Pool in the role of insurance and risk management advisor.

✓

Maintained flat rate renewal for all lines except Auto Liability (due to claims history).

✓

Traveled to New Jersey for **Aegis underwriter meeting** in October 2019.

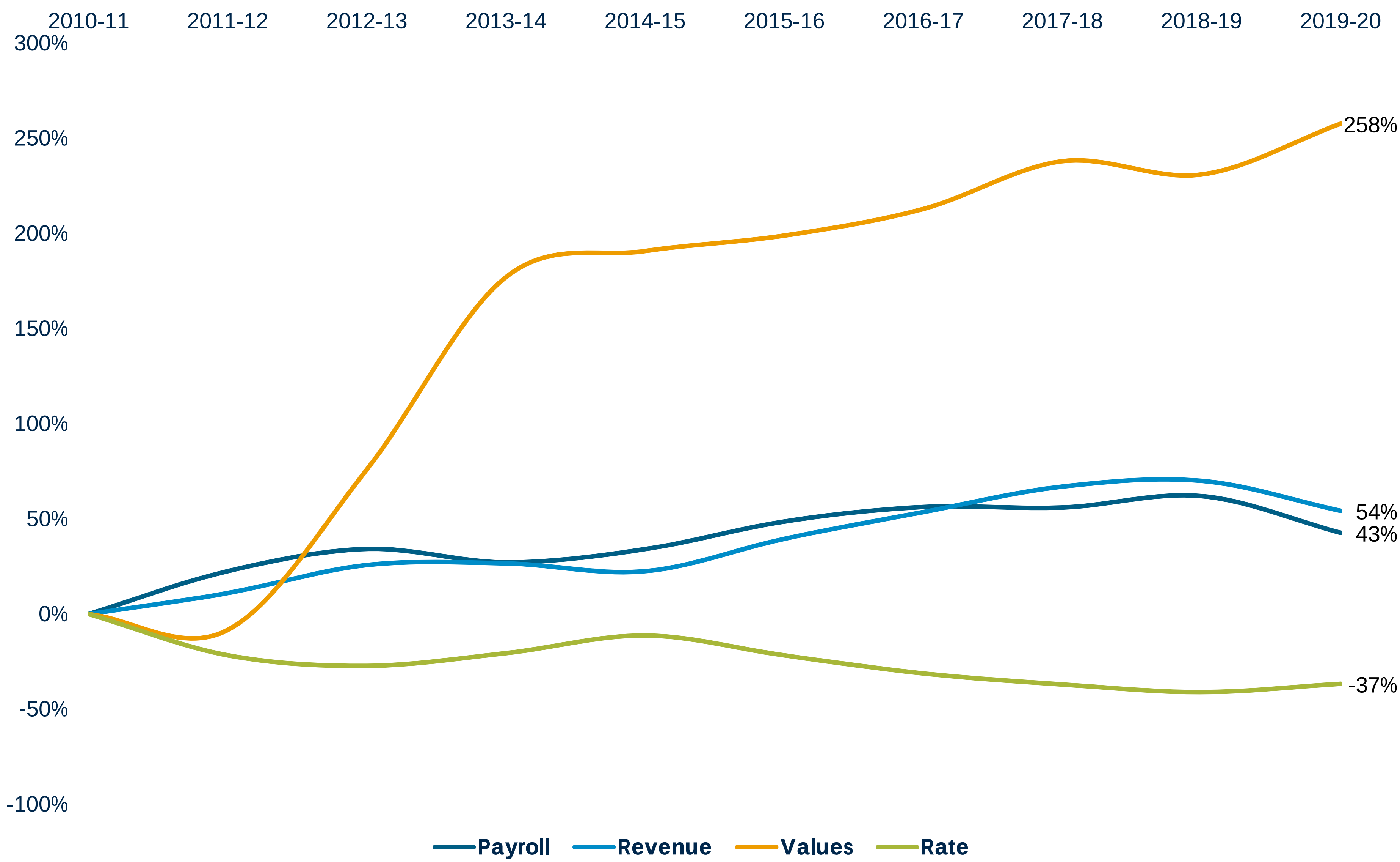
- Jim Goss and Prentice McIntosh from Stephens and SPP leadership in attendance.
- Review of Western Interconnection Unscheduled Flow Mitigation Plan (WIUFMP) and Reliability Coordinator Services Agreement and agreement to add to the Aegis Designated Services portion of policy.
- Final endorsement pending.

✓

Review of SPP Non-owned aviation coverage with Stephens Aviation team.

4. INSURANCE PROGRAM OVERVIEW

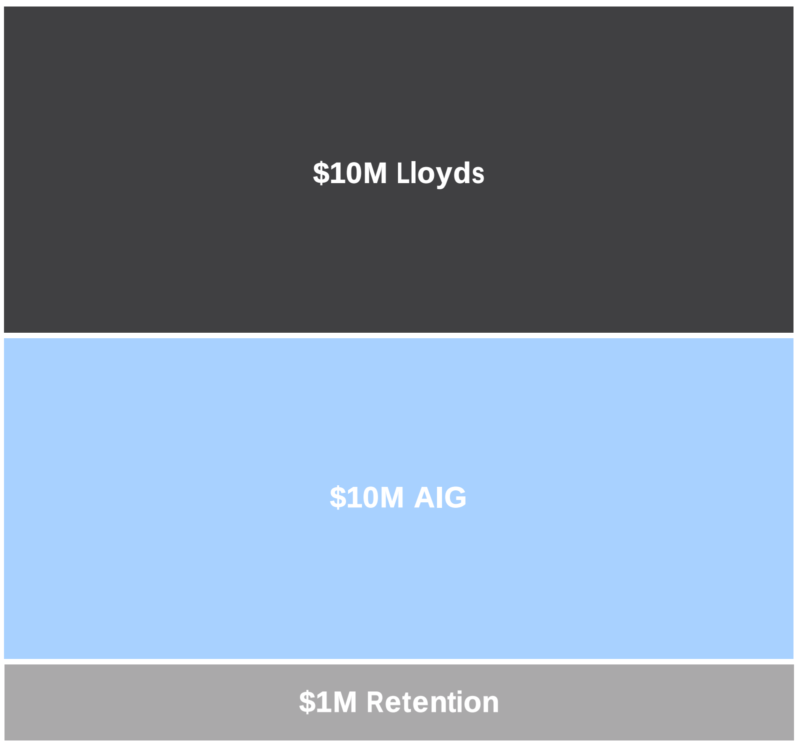
Premium Base Rate Versus Rate Change



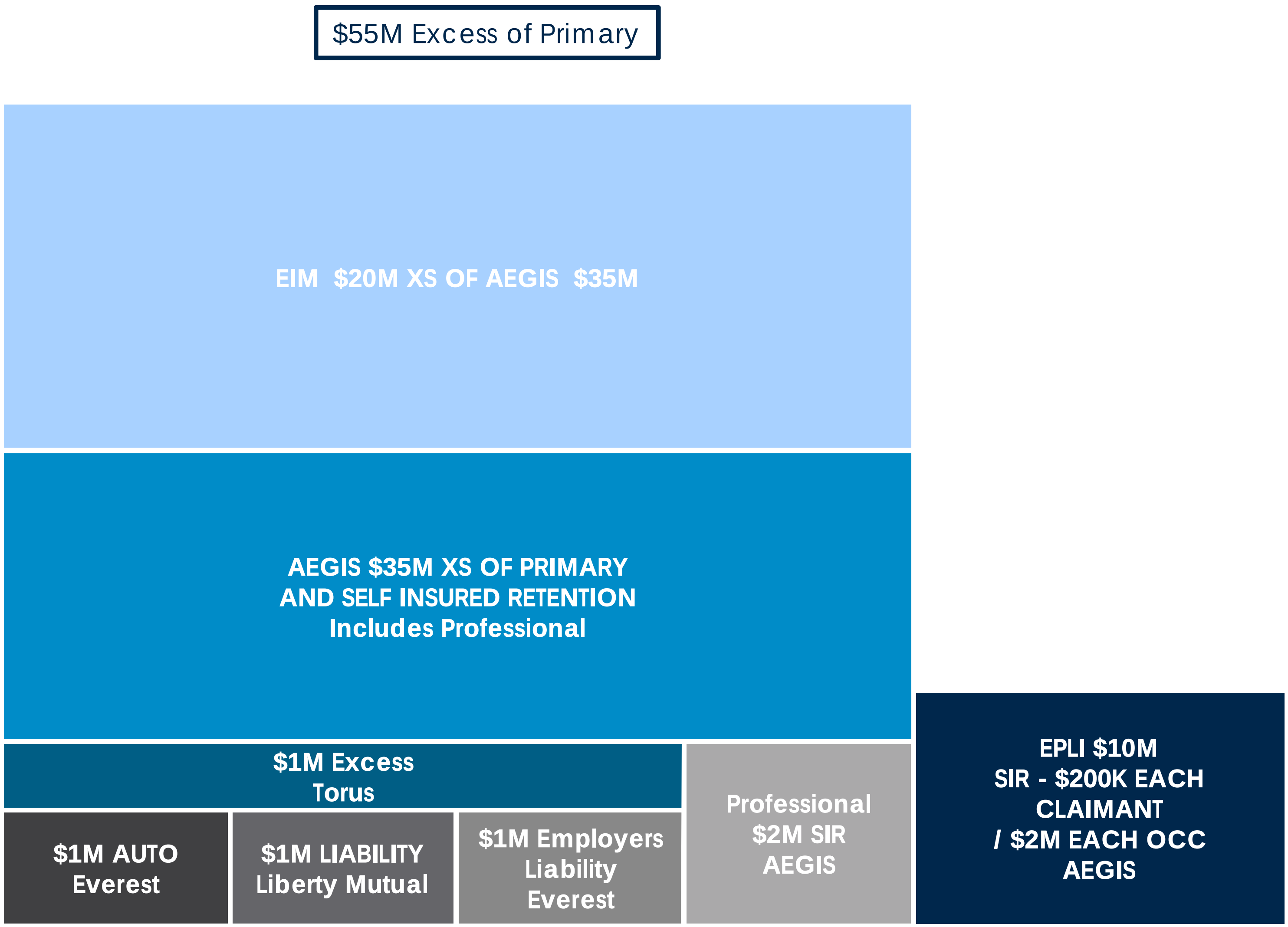
Executive Liability & Financial Products

LIMITS	DIRECTORS & OFFICERS LIABILITY		FIDUCIARY LIABILITY
$10 million excess $50 million	Ironshore		
$10 million excess $40 million	Axis		
$10 million excess $30 million	AIG		
$10 million excess $20 million	Zurich		
$10 million excess $10 million	Chubb / ACE		
$5 million excess $5 million	Travelers		
$5 million	Chubb	$5 million	Travelers
RETENTIONS			
D&O	$0 Non-indemnified / $15k indemnified & entity		$2,500

Cyber Liability Limits



Liability Limits



Property Limits

Blanket Real & Personal Property

Property Limits: $122,465,206

<u>Sublimits</u>
Business income and Extra Expense: $1.5M
Flood: $50M
Earthquake: $50M

Boiler & Machinery
$50Million

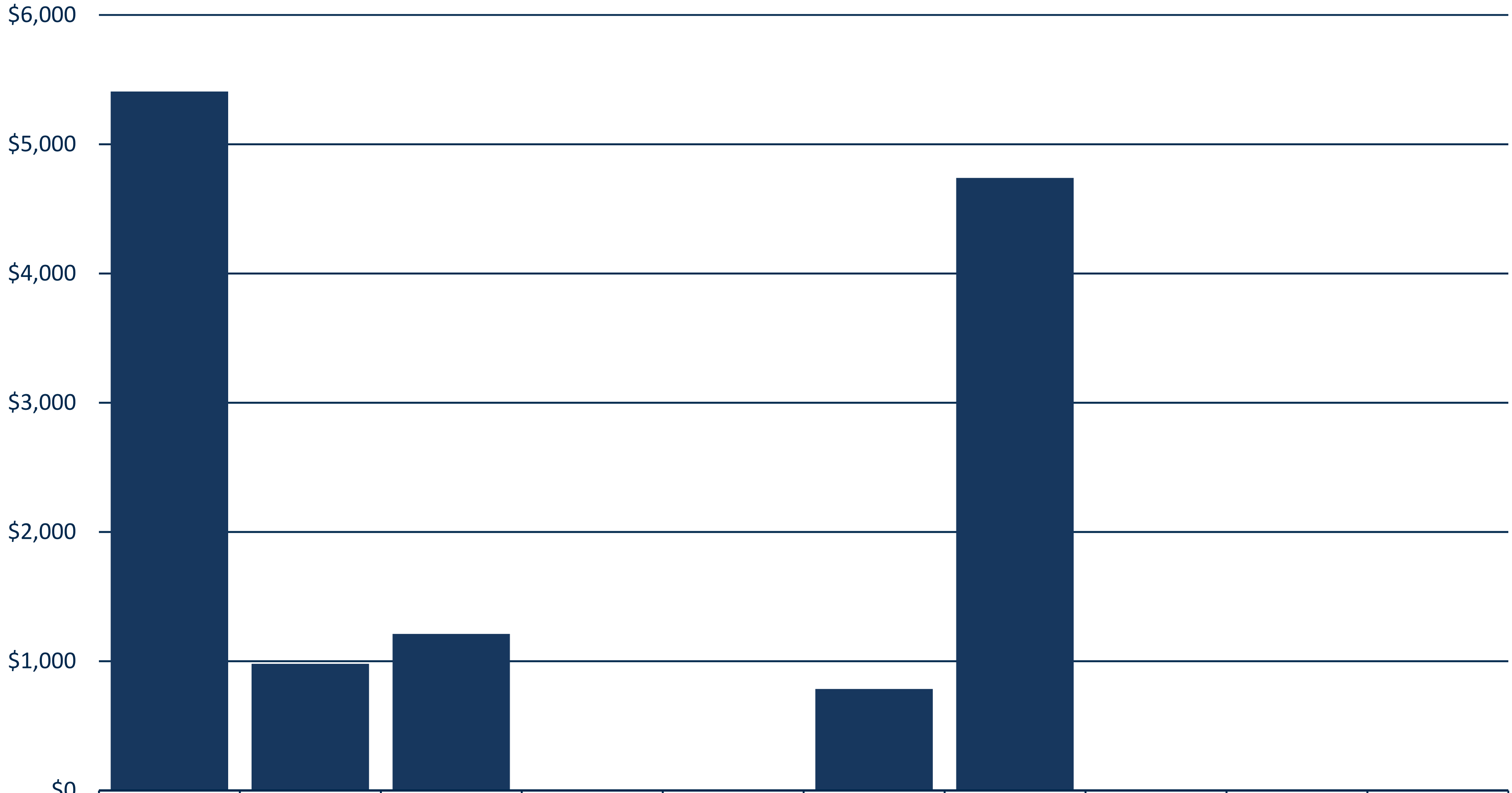
DEDUCTIBLES

Deductibles:

All Perils	$250,000
Flood	$250,000
Quake	$250,000
Named Storm	$250,000
Other Wind/Hail	$250,000
Time Element	$250,000
Machinery	$ 10,000

5. CLAIM SUMMARIES

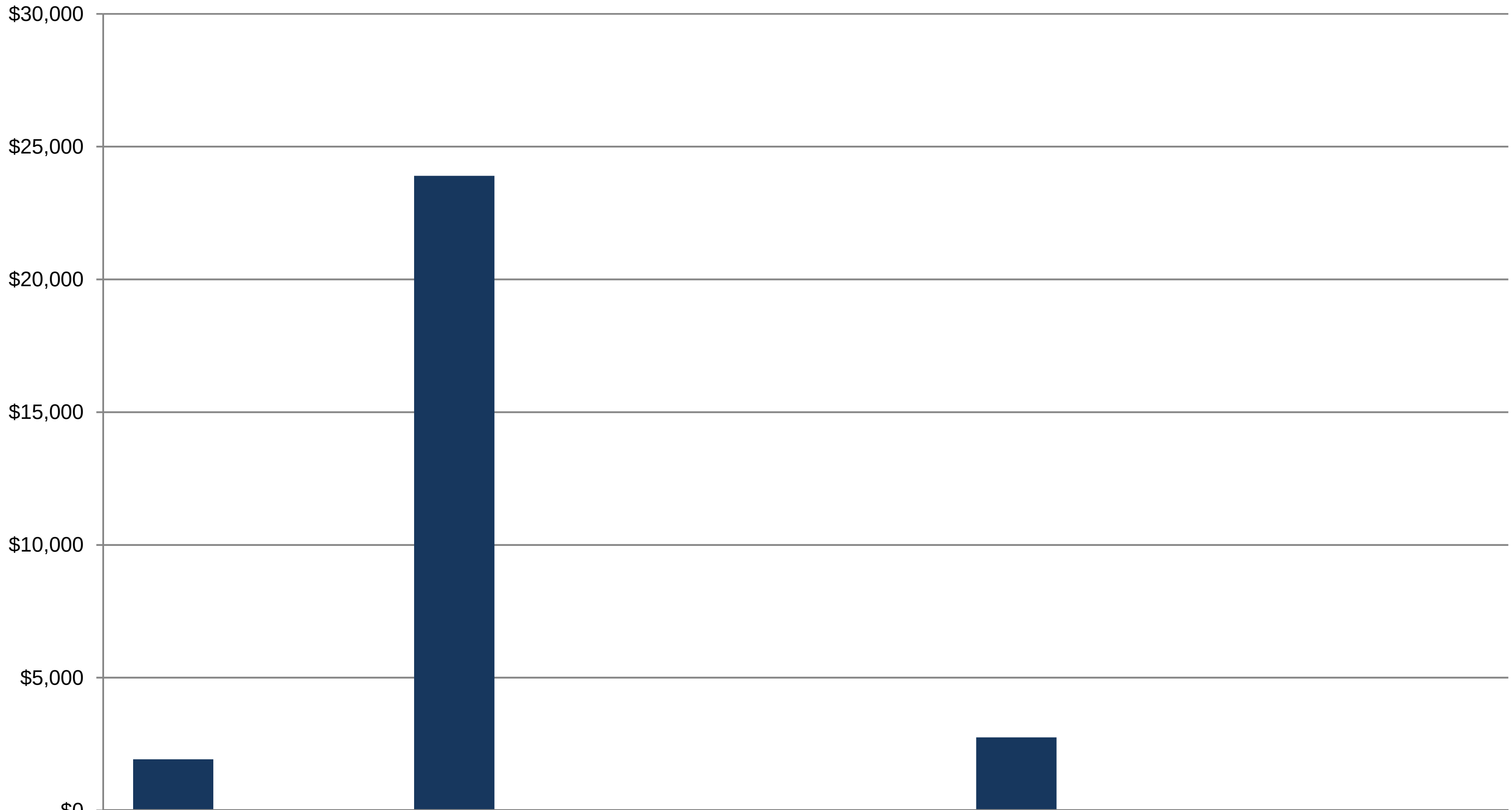
Workers' Compensation Claims Summary



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
■ Total Claims Incurred	$5,408	$980	$1,211	$0	$0	$785	$4,739	$0	$0	$0
Claim Count	2	1	1	0	0	3	4	0	0	0
Loss / Premium Ratio	9.31%	1.16%	1.68%	0.00%	0.00%	0.92%	8.71%	0.00%	0.00%	0.00%

Claims valued 11/01/2019

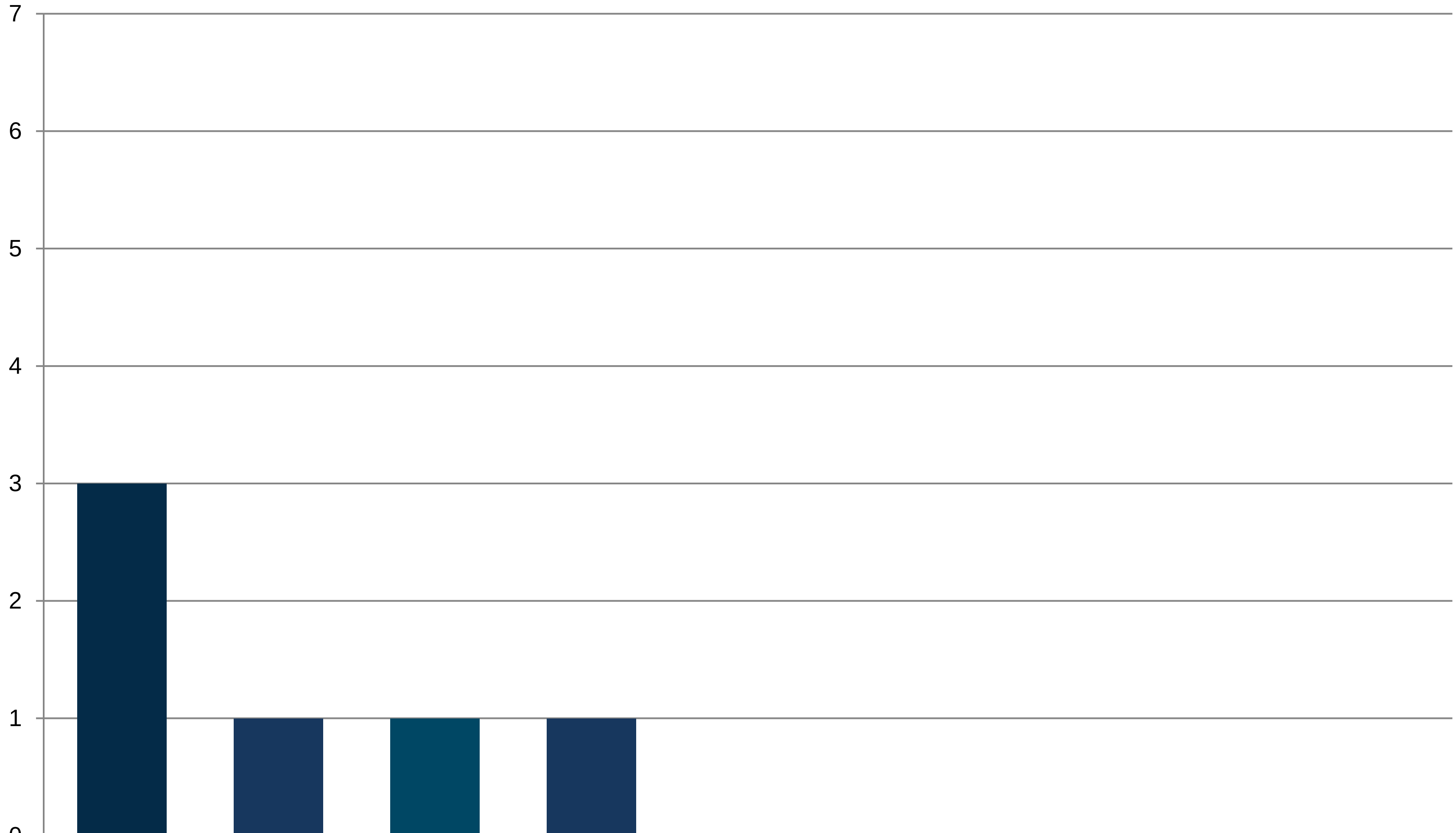
Auto Claim Summary



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total Incurred	$1,924	$0	$23,902	$0	$0	$0	$2,750	$0	$0	$0
Claim Count	1	0	3	1	0	0	1	0	0	0
Loss / Premium Ratio	192.40%	0.00%	726.50%	0.00%	0.00%	0.00%	106.96%	0.00%	0.00%	0.00%

Claims valued 11/01/2019

Employment Practices Liability Claims (Number of Reported Claims)

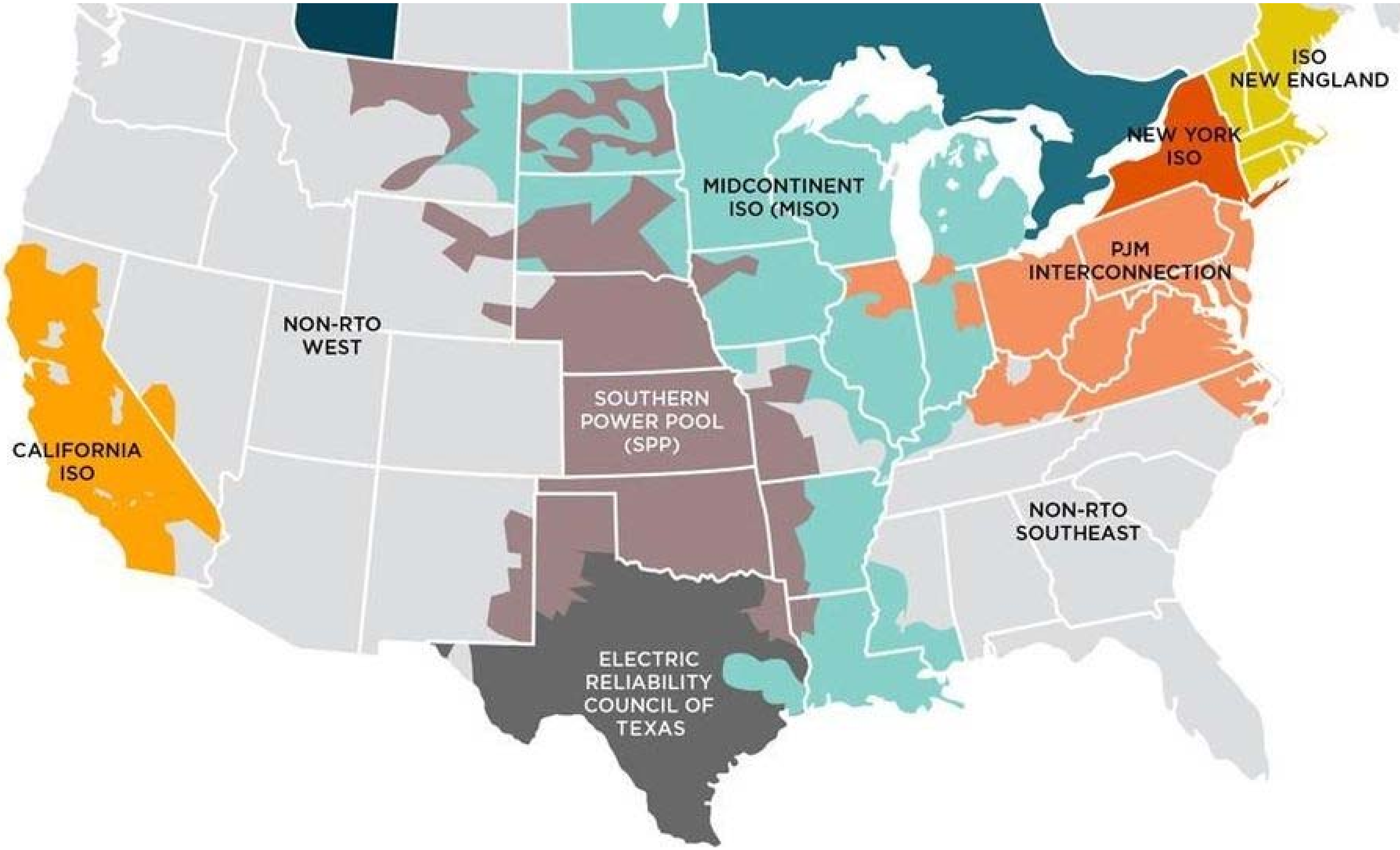


	2010	2011	2012	2013	2014	2015	2016	2017	2018
Claim Count	3	1	1	1	0	0	0	0	0

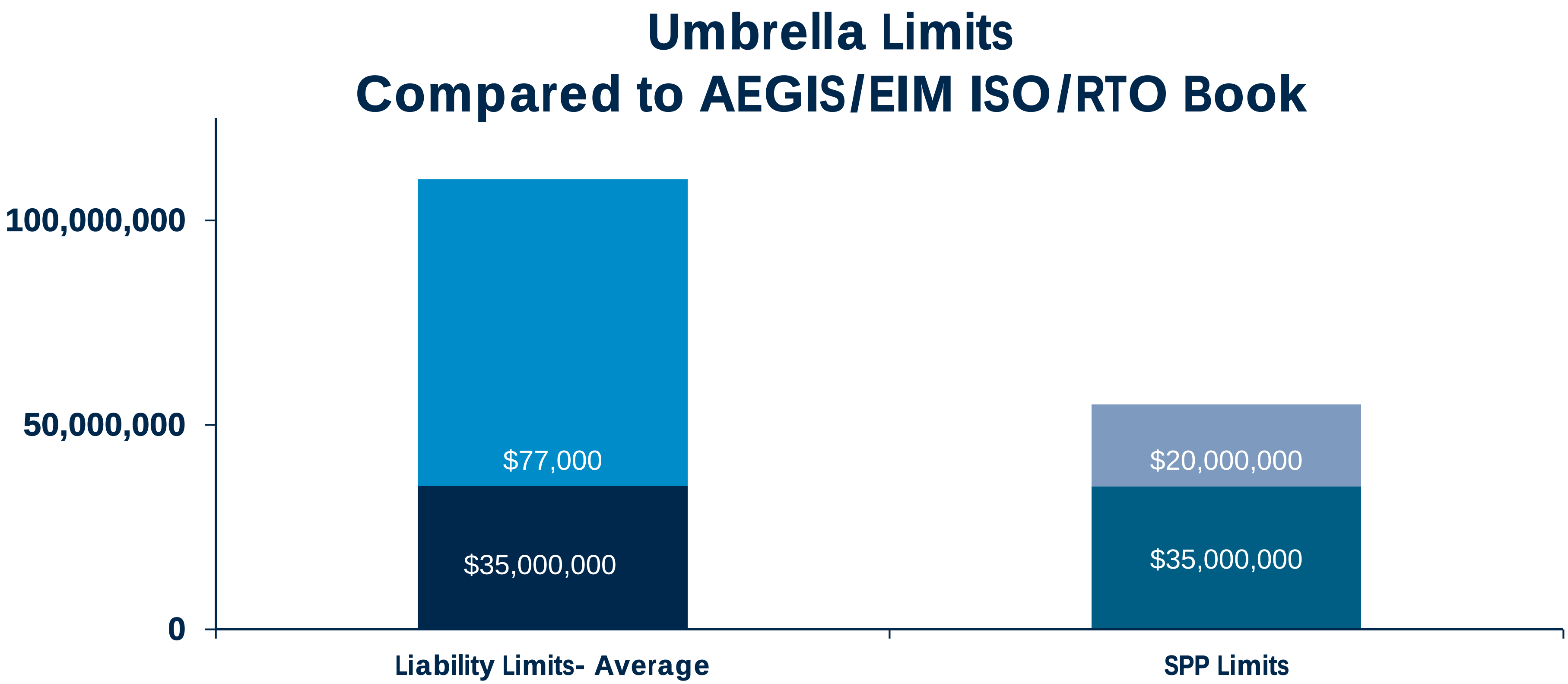
Claims valued 11/01/2019

6. BENCHMARKS

Regional Transmissions Organizations

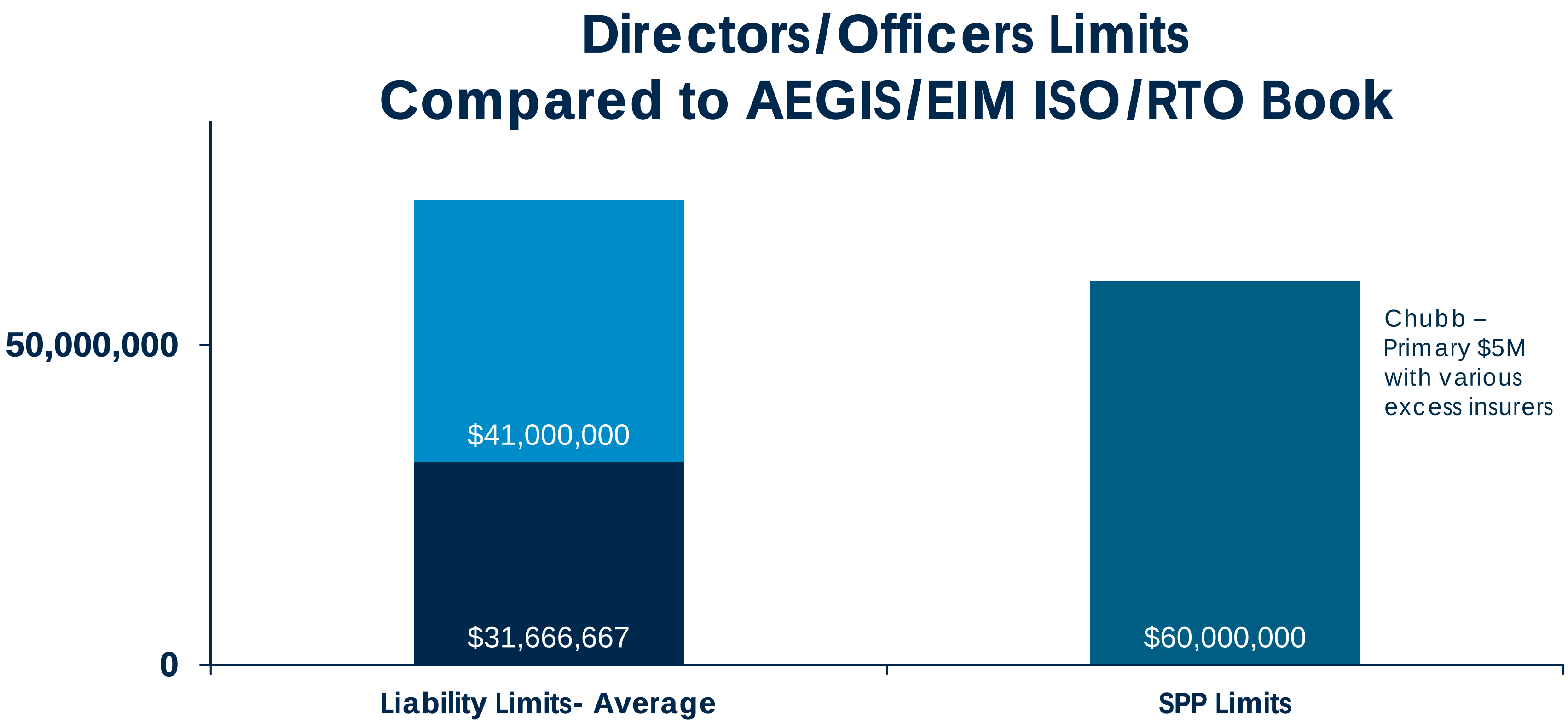


Benchmark – Excess Liability



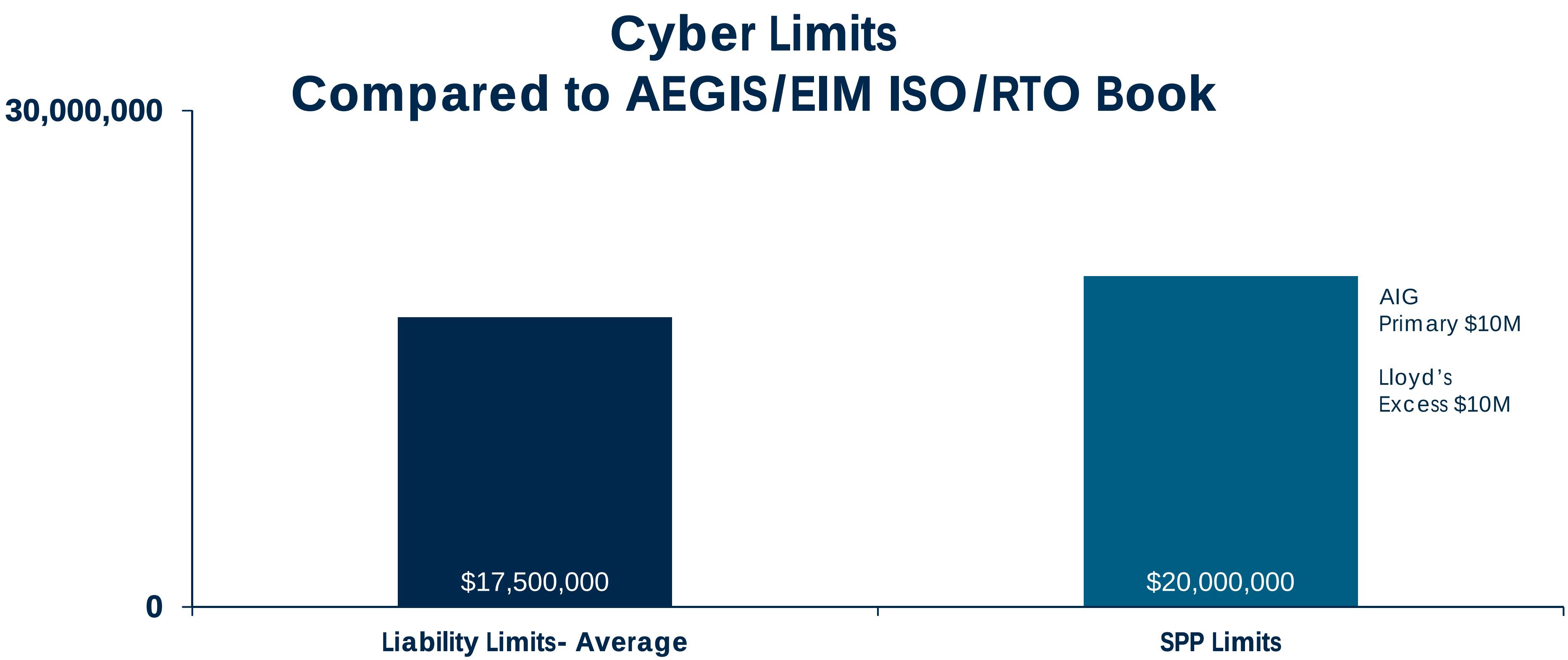
AEGIS insures all nine RTO/ISO's. All carry $35M limits (primary GL/Professional).
EIM insures six of the nine RTO/ISO's. Limits average $77M in excess coverage.

Benchmark – Directors & Officers Liability



AEGIS insures three RTO/ISO's for D&O. Two buy $35M in limits and one buys $25M.
EIM insures four RTO/ISO's for D&O. Limits carried vary from $25M to $50M. The average carried is $41M.

Benchmark – Cyber Liability



Of the RTO's insured by AEGIS, two have purchased cyber liability insurance. One has purchased $5M in limits from an outside commercial market and the other has purchased $25M in limits from AEGIS.

7. DISCUSSION ITEMS/RENEWAL PLANNING

2020 Planning & Discussion

Renewal Expectations for SPP

- ✓ Workers Compensation – Flat
- ✓ Casualty - Flat

(possible rate increase in Auto due to claims)

- ✓ Umbrella/Excess - Flat to +3%
- ✓ Property + 5% to + 30%
- ✓ Management Liability Flat to +12%
  - Deliver Primary Proposal by March 1, 2020

Other Cover Discussion

- ✓ Punitive Wrap
- ✓ Crime
  - Traditional coverage, beyond just ERISA
  - Workplace Violence
  - Social Engineering Fraud
- ✓ Workplace Violence / Active Shooter
- ✓ Patent Infringement (Defense coverage)

CREDIT PRACTICES WORKING GROUP

CREDIT POLICY ENHANCEMENT ACTIVITIES

SPP Southwest Power Pool

SCOPE OF ACTIVITIES

CREDIT PRACTICES WORKING GROUP

SPP and its stakeholders recognize there are potential deficiencies in SPP's credit policy and business processes that could have an adverse effect on market efficiency in the form of credit defaults or reduced confidence in market operations.

A recent default in a neighboring RTO resulted in an exhaustive review that helped to provide a roadmap for practical enhancements to that RTOs policies and processes. SPP's Credit Practices Working Group has reviewed and used this roadmap to address specific enhancements in an effort to strengthen its policies and procedures.

Led by member-stakeholders, the working group created two subgroups to address both the quantitative and qualitative aspects of credit protections. The following information is the result of those efforts and contain three recommendations for immediate action and additional ideas to continue research and vetting for future enhancements.

BACKGROUND ON PJM CREDIT DEFAULT

- GreenHat default estimate: $200MM
- Acquired 890 million MWh long-term TCR portfolio
  - *Less than $1MM in collateral required by tariff*
  - Transmission upgrades eroded portfolio value
- Kittell & Bartholomew (JPMorgan): FERC market manipulation settlement of $410MM in 2013
- Speculative trading firm with minimal capitalization:

SPP Southwest Power Pool

POTENTIAL ENHANCEMENTS

PHASE ONE

ENHANCE SPP'S CREDIT APPLICATION

"Kittell & Bartholomew (JPMorgan): FERC market manipulation settlement of $410MM in 2013"

- Current application is stale and does not provide for effective credit profile
- Potential Enhancements:

Affiliates in all RTOs	Board, Shareholder, Owner	Compliance
Adverse Regulatory Actions	All RTO Collateral	Adverse Civil Actions or Bankruptcy

Pros:
- More timely and accurate information

Cons:
- Add'l effort for MPs
- No assurance against fraudulent activity

INCREASE CAPITALIZATION REQUIREMENTS

"Speculative trading firm with minimal capitalization"

- Potential Enhancement:
  - Increase to $20MM assets
  - Increase to $10MM net worth
  - Increase Alternative Collateral Requirement
  - Remove collateral from assets & equity

Pros:	Cons:
• Demonstrates ability to absorb losses	• Some MPs may choose not to participate

Current Tariff Requirements *(must meet one)*

- $10MM assets
- $1MM net worth
- Investment grade credit rating
- Guarantee
- $200k non-tradable deposit

ENHANCE TCR EXPOSURE CALCULATIONS

"Acquired 890 million MWh long-term TCR portfolio (Less than $1MM collateral requirement)"

- Current exposure methodology can allow significant portfolio volume with minimal collateral
- Potential Enhancements:
  - Value-at-Risk (*RR311*)
  - Minimum Portfolio Requirements

Pros:	Cons:
• Somewhat addresses zero collateral portfolios	• Significant reduction in overall collateral holdings

ENHANCE TCR EXPOSURE CALCULATIONS

- Current proposal to use great of:
  - 5th percentile of historical values (RR311-VAR), or
  - $0.10/MWh not to include acquisition costs

Millions of Dollars					A	B	C	> B or C	
Credit Holders by Current Collateral Requirement		MWh Awarded	%	Acquisition Costs	Current Collateral Requirement	RR311 - Value at Risk	$0.10 x MWh	**Current Proposal**	*Staff Proposal*
AO = $0	*(19)*	83,272,060	*27%*	$6.1	$0.0	$0.0	$8.3	**$8.3**	*$10.2*
AO > $0	*(17)*	45,005,039	*14%*	$8.1	$19.4	$1.2	$4.5	**$5.2**	*$25.0*
FO = $0	*(12)*	56,327,448	*18%*	$19.4	$0.0	$0.0	$5.6	**$5.6**	*$22.2*
FO > $0	*(29)*	126,175,656	*41%*	$68.5	$61.0	$3.8	$12.6	**$13.8**	*$93.3*
TOTAL	*(77)*	310,780,203	*100%*	$102.1	$80.4	$5.0	$31.1	**$32.9**	*$150.7*

Pros:

- Somewhat addresses zero collateral portfolios

Cons:

- Significant reduction in overall collateral holdings

FURTHER ENHANCEMENTS

PHASE TWO

FUTURE ENHANCEMENT POSSIBILITIES

- Forward-looking reference prices based upon economic studies of transmission upgrades
- Position limits based upon an MPs capitalization
- Mark to Auction methodology
  - Would require significant changes to overall TCR market methodology and processes
- Use electrically equivalent values for new settlement locations (proxy prices)

SPP Southwest Power Pool

Memorandum

To: **SPP Finance Committee**

From: **Tom Dunn**

CC:

Date: **January 17, 2020**

Re: **Actuarial Assumptions for Pension Valuation**

The SPP Finance Committee, at its April 2013 meeting, requested SPP staff provide an early look at assumptions utilized in valuation of SPP's pension plan and post-retirement healthcare plan. This memo provides that look at the four major assumptions: discount rate, long-term rate of return, compensation change rate, and mortality tables.

Discount Rate: The SPP Finance Committee, at its April 2008 meeting, concurred on a process to set the discount rate used in valuing pension liabilities. In general, the method used to set the discount rate follows the framework described in the Pension Protection Act of 2006. Section 102 of Title I of the Pension Protection Act of 2006 defines interest rates for determining the funding targets of covered plans. These interest rates are based on the Corporate Bond Yield Curve prescribed by the U.S. Treasury Department and reflect the twenty four month average of investment grade corporate bonds (the top three rating tranches).

Also described in the Pension Protection Act of 2006 are three Segment Rates that can be used for the purpose of assigning a discount rate. These rates are differentiated based on the maturities of the corporate bonds underlying the yield curves used to determine each rate. The segments are broken down as follows:

1. First – zero through five years
2. Two – six through fifteen years and
3. Three – greater than fifteen years

The final issue to address is the selection of a Segment Rate for the SPP plan. One of the most pertinent demographic points to consider here is that the average age of the participants in the SPP retirement plan is less than 45 years. This would indicate that major distributions from the plan should not begin occurring, on average, for another twenty years.

The Internal Revenue Service publishes periodic updates to segment rates throughout the year. The most recent update, published December 2019 indicated 24-month average segment rates of 2.78%/3.85%/4.30%. SPP used a discount rate of 5.00% in 2019. **SPP staff recommends a discount rate to 4.50% going forward, in line with the 3rd segment discount rate.** The 50 basis point reduction in discount rate will have the effect of increasing accrued pension expense by approximately $1.7 million and the balance sheet pension liability by approximately $11 million. We do not expect a significant change in annual contribution based on this change.

Long-term Rate of Return: The SPP Finance Committee, at its April 2008 meeting, concurred on a process to set the long-term rate of return used in pension valuation. The method used by SPP to assign the long-term rate of return is based upon an analysis of the long-term returns of widely recognized benchmark investments similar in asset allocation to the investments held in the pension plan trust. The benchmark returns are weighted based on SPP's desired asset allocation described in the Investment Policy Statement.

The Russell 3000 Index measures the performance of the largest 3000 U.S. companies representing approximately 98% of the investable U.S. equity market. The Russell 3000 Index is constructed to provide a comprehensive, unbiased, and stable barometer of the broad market and is completely reconstituted annually to ensure new and growing equities are reflected. The Bloomberg Barclays Government/Credit Bond Index is a non-securitized component of the Bloomberg Barclays U.S. Aggregate

Index. The U.S. Government/Credit Index includes U.S. Treasury with remaining maturities of more than one year, U.S. government-related issues (agency, sovereign, local authority, supranational) and corporate issues.

	Russell 3000	Barclays Gov't/Credit 5-10 yearIndex
15 Year Return (1/1/2004 – 12/31/2019)	9.21%	
10 Year Return (1/1/2009 – 12/31/2019)	14.70%	5.79%
Target Allocation	70%	30%
Weighted Avg. Return	6.45%	1.74%
Historical Expected Portfolio Return	**8.19%**	

SPP used a long-term rate of return assumption of 7.00% in 2019. **SPP staff recommends retaining the long-term rate of return at 7.00%**

Compensation Change Rate: SPP's year over year growth rate in compensation has significantly exceeded the long-term growth rate of 4% SPP has used in its pension valuation. SPP expects compensation growth to slow absent unforeseen growth in total staffing levels. A 4% long-term growth rate is consistent with that used by many of SPP's members in their pension plan evaluations and is consistent with the compensation changes for 2019 approved by the SPP Human Resources Committee (3% increase in base compensation and 0.75% funding for non-standard and promotion increases). **SPP staff recommends retaining the 4.00% compensation rate change for the upcoming valuation.**

Pension Mortality Table: The SPP Finance Committee, at its December 7, 2015 meeting, determined a preference to maintain the mortality table consistent with the table used by the U.S. Internal Revenue Service. The IRS updates its mortality tables annually. SPP utilized the IRS-2019 table for its prior valuation. **SPP will use the IRS-2020 table for the upcoming valuation.**

Finance Committee	2019 Members	2019 Non-members	2018	2017	2016	2015	2014	2013	2012	2011	2010
Number of members	8	6	7	7	7	7	7	7	7	7	7
Number of responses	7	1	6	5	6	6	4	6	6	6	6
Response rate	88%	17%	86%	71%	86%	86%	57%	86%	86%	86%	86%
Overall effectiveness score	4.7	4.0	4.7	4.8	4.7	4.0	4.8	4.8	4.8	4.5	#REF!
Lowest score	4.4	4	4.4	4.2							
Highest score	5	5	5	5							
Question					**Average score**						
					2016	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**
The agenda reflects the actions to be taken during the meeting.	5.0	4.0	4.7	4.8	4.8	4.8	5.0	4.8	4.8	4.7	4.5
Meeting materials are provided in a timely manner.	4.9	5.0	4.8	4.6	4.5	4.3	4.2	4.8	4.0	4.2	4.2
The information provided prior to the meeting is utilized during the meeting.	4.8	5.0	4.7	4.2	4.3	4.7	4.8	4.8	4.5	4.3	4.0
The information presented in meetings is clear.	4.7	5.0	4.7	4.2	4.3	4.2	4.4	4.5	4.7	n/a	n/a
Meeting minutes are an accurate reflection of the meeting.	4.6	4.0	4.7	4.8	4.5	4.5	4.6	5.0	4.7	4.7	4.2
Additional comments:											
Membership represents the diversity of the SPP organization.	4.43	4.00	4.4	4.6	4.3	4.3	4.4	4.0	4.2	4.3	4.2
Membership has the necessary expertise and/or skills to accomplish its goals.	4.6	5.0	5.0	4.8	4.8	4.7	4.8	4.8	4.3	4.3	4.5
Members come prepared to meetings.	4.4	5.0	4.5	4.4	4.3	4.0	4.2	4.7	4.3	4.0	3.8
Members are committed to participate and accomplish the group's goals.	4.7	5.0	4.5	4.6	4.5	4.6	4.6	4.7	4.8	4.5	4.0
Members are supportive and respectful of the individual needs and differences of group members.	4.6	5.0	4.7	5.0	4.8	4.7	4.6	4.7	4.5	4.7	4.2
											5
Members are engaged during the meeting.	4.43	5.0	4.8	4.8	4.5	4.8	4.8	4.8	4.8	4.3	4.2
Decisions are identified and action is recommended.	4.9	5.0	4.7	4.6	4.2	4.7	4.4	4.8	4.7	4.7	4.0
Facilitation is sufficient to guide discussion.	4.6	4.0	4.7	4.6	4.3	4.7	4.4	4.5	4.7	4.3	4.0
Dissenting voices are heard.	4.7	4.0	4.7	4.6	4.7	4.5	4.8	4.8	4.8	4.6	4.5
I depart with a feeling that we have accomplished something.	4.6	4.0	4.4	4.6	4.3	4.2	4.4	4.8	4.8	4.2	4.0
Additional comments:											
The chair seeks input, and organizational group members are able to influence key decisions and plans.	4.57	4.00	4.4	4.6	4.5	4.7	4.8	4.8	4.8	4.7	4.7
The chair is supportive and respectful of the individual needs and differences of group members.	4.5	5.0	4.8	4.6	4.8	4.7	4.8	4.8	4.8	4.8	4.7
The chair keeps the group on task to achieve appropriate outcomes.	4.6	4.0	4.8	4.8	4.2	4.2	3.8	4.5	4.3	3.7	3.5
The chair ensures follow-through on questions and commitments.	4.6	4.0	4.6	4.8	5.0	4.3	4.6	4.5	4.7	4.6	4.2

Additional comments:

occasionally there is not enough time on the agenda to fully discuss topics.

The content and conduct of the committee are excellent. Members are engaged. My only recommendation is to review the timing and location of the committee meetings given that they involve travel and time within the same month as the Board meeting and the location requires at least one connection which lengthens the time of travel.

Sometimes the meetings seemed rushed. For example I think the budget should be taken over 2 meetings, with the first to be discussion and the second to be followup and approval.

Please provide three or more recommendations for improvement of this particular group and/or SPP's overall organizational group structure.

1. provide background on topics that members may not be familiar with if they aren't on other committees. 2. allow more time in the agenda to fully discuss topics 3. encourage opinions to be spoken/provided by all members. some members can hijack a conversation.

Please share any additional comments

The chair does a good job keeping the meetings on task.

Memorandum

To: **Finance Committee Members**

From: **Tom Dunn**

CC: **Shaun Scott**

Date: **January 22, 2020**

Re: **2020 Meeting Schedule**

Detailed below is a schedule for meetings of the Finance Committee for 2020 along with suggested agenda items to be covered at the meetings.

Meeting Date	Time	Location	Agenda
Jan 17, 2020	7:30 – 10:30	Teleconference	Liability Insurance, Actuary Assumptions
Apr 27, 2020	8 – 11:30	Little Rock	2019 Financial Audit, Benefit Plan Funding, Auditor Engagement
Jul 13, 2020	10 – 3:30	Rapid City, SD	Mid-year Review, 2021 Operating Plan
Oct 12, 2020	10 – 5:00	Little Rock	2021 Operating and Capital Budgets