December 2018

U.S. Power Industry Update

In this Issue

A Message from Mark Fishbaugh

On behalf of Aon Global Power, I am pleased to share our U.S. Power Industry newsletter for December 2018. In this issue, we provide an overview of the latest market updates and a look ahead to industry trends in 2018 for Property, Casualty, Financial Products, Cyber and renewable risks.

In 2018, our Power Practice has once again achieved double digit growth! We bolstered our Power Property Bench and added to our casualty team as well. As we look to 2019, we plan further investment in U.S. power. Aon Global Power remains committed to bringing you specialized power expertise to drive optimal solutions for our clients.

On behalf of the entire U.S. Power team, we wish all of you a very joyous holiday season and blessings for the new year!

Best,

Mark Fishbaugh
U.S. Power Practice Leader
Aon Global Power Specialty

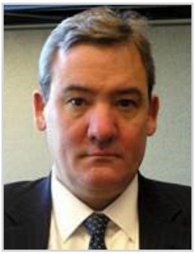
Upcoming Aon Power Industry Events for 2019

Event Name	Date	Location
Aon Client Reception (Post-EIM)	February 26th, 2019	Orlando, Florida
Aon RIMS Client Reception	April 30th, 2019	Boston, Massachussetts
Aon Power Summit	Week of May 13th, 2019	New York, New York
Aon Client Reception (Pre-AEGIS)	July 15th, 2019	Boston, Massachussetts

Empower Results®

D&O Market Update

By Ken McBrady and Ross Wheeler


Ken McBrady


Ross Wheeler

Exposure

Securities Class Action Filings

D&O exposure, as measured by Securities Class Actions ("SCAs"), is approaching all-time high levels. An unprecedented 412 total SCAs were filed in 2017. Those 412 SCAs represent a 52 percent increase vs. 2016, and a 118 percent increase vs. the prior ten-year (2007-2016) average of 189. Further, as of October 17, 2018, 305 SCA's had been filed in 2018, which is equivalent to approximately 350 for the full year.

While the spike in the number of SCAs is remarkable, the probability of a public company facing a shareholder suit is quite concerning. With an estimated 4,000 U.S. public companies (4,336 at the end of 2017 to be exact, according to the World Federation of Exchanges), the probability that a U.S.-listed company will be defending itself against alleging shareholders is approaching 10 percent. While the 412 SCAs in 2017 are well-above recent averages, the probability of an SCA is significantly above long-term averages. This trend has D&O underwriters pointing to SCA activity levels with heightened concern.

Other D&O Exposures

While SCAs are considered the bellwether indicator of overall D&O claims activities, other emerging trends are gaining importance. First, "Event-Driven" exposure refers to unique, and largely unpredictable, events impacting business results that lead to D&O claims. Examples of these include Facebook (various 2018 filings, related to privacy breaches and the General Data Protection Regulation ("GDPR") events), Twenty-First Century Fox (November 2017, sexual harassment scandal), Arconic (July 2017, London Grenfell Tower fire), SCANA (September 2017, failed nuclear projects), Anadarko Petroleum (May 2017, home explosions / well closures). See Exhibit 1 for a sample of Event-Driven securities litigation.

Second, derivative claims are emerging as a larger source of claims, with at least one leading insurer pointing to both an increased severity associated with derivative claims, as well as an increased frequency of derivative claims in conjunction with a securities claim. See Exhibit 2 for an example of large derivative claim settlements.

Management Liability Market Update

Event-Driven Litigation Examples

Company	Date Filed	Case Status	Event
Facebook, Inc.	3/12/18	Ongoing	Cambridge Analytics / Privacy Violation
Johnson & Johnson	2/8/18	Ongoing	Reports alleging that talc increased risk over ovarian cancer
Wynn Resorts	2/7/18	Ongoing	Dozens of allegations of sexual misconduct involving Steve Wynn
RYB Education	11/27/17	Ongoing	Video footage of alleged child abuse at company preschool facilities
Twenty-First Century Fox	11/20/17	Settled for $90M on 11/20/17	Sexual harassment scandal (Roger Ailes and Bill O'Reilly)
SCANA Corporation	9/27/17	Ongoing	Failed nuclear project / lack of disclosure
Equifax Inc.	9/8/17	Ongoing	Data breach of personal information involving 143 million Americans
Arconic Inc.	7/13/17	Voluntarily dismissed on 8/14/17	Grenfell Tower fire
Anadarko Petroleum Corporation	5/3/17	Ongoing	Home explosion / well closures
BP, PLC	5/21/10	Settled for $175M on 11/7/16	Deepwater Horizon

Source: Stanford Law School Securities Class Action Clearinghouse; D&O Diary

Management Liability Market Update

Selected Derivative Claim Settlement

Case	Industry Sector	Settlement Year	$ in millions	Bankruptcy Related	Self-Dealing Allegations
Activision Blizzard	Information Technology	2015	$275.0	No	Yes
AIG	Financials	2011	$150.0	No	No
News Corp.	Consumer Discretionary	2013	$139.0	No	Yes
Freeport-McMoRan	Basic Materials	2015	$137.5	No	Yes
Broadcom	Communications	2009	$118.0	No	No
AIG	Financials	2013	$115.0	No	No
21st Century Fox	Consumer Discretionary	2017	$90.0	No	No
PG&E	Utilities	2017	$90.0	No	No
Del Monte Foods	Consumer Non-Discretionary	2011	$89.4	No	No
Pfizer	Health Care	2011	$75.0	No	No
Wells Fargo	Financials	2014	$67.0	No	No
New Century Financial	Financials	2010	$65.1	Yes	No
Bank of America	Financials	2013	$62.5	No	No
Community Health Systems	Health Care	2017	$60.0	No	No
FX Real Estate & Entertainment	Consumer Discretionary	2012	$51.0	Yes	Yes
SandRidge Energy	Energy	2015	$38.0	No	Yes

Notes:
1 Sources: Advisen loss data; Cornerstone Securities Filings; Aon research
2 Includes large U.S. derivative settlements in the last ten years, as identified by Aon; Not intended to be a comprehensive listing

Event-Drive Risk: Cyber Risk is D&O Risk

One specific example of Event-Driven exposure is Cyber Risk. For years, insurance industry pundits predicted that cyber-related losses could lead to D&O claims. Prior to 2017, that concern was largely overstated since most headlining cyber breaches resulted in dismissal of the related ‘follow on’ shareholder derivative litigation. However, 2017 chronicled a different story. The $350 million reduction in purchase price for a leading technology company following its disclosure of massive breaches, the WannaCry ransomware incident, the NotPetya ransomware incident, and the Equifax security breach have changed the paradigm. More recently, in 2018 GDPR has led to at least two D&O claims, and several more companies have been subject to securities filings following an information breach. For Power companies, business interruption and bodily injury / property damage arising from cyber breaches are significant concerns. Cyber events now rank among the top three triggers for D&O derivative actions (along with M&A activity and environmental issues). It is paramount that corporate leaders assess, test, quantify, mitigate, and plan for such a risk.

Event-Driven Risk: EPL Risk is D&O Risk

An additional example of Event-Driven exposure is EPL Risk. Workplace harassment allegations are front page news, with examples ranging from pop culture icons, to government leaders, to corporate-wide scandals. These allegations are first and foremost devastating for the victims involved. The increasing exposure is impacting companies’ bottom lines and no industry is immune. Workplace harassment can have a significant adverse business impact, such as damage to a company’s reputation or strained relationships with investors and may mandate change in the c-suite. While many of the recent headline examples have involved media or entertainment companies, no industry is immune.

Utilities-Specific Claims Frequency

Specific to the Utilities industry, as classified by S&P, the exposure to Securities Litigation is roughly “average” relative to other industries. While this may seem surprising given the regulated nature of the industry, the industry’s environmental impact, exposure to large financing requirements, and volatility of energy prices all likely contribute to the industry’s level of Securities Litigation.

D&O Market Litigation and Trends

Heat map of S&P 500 Securities Litigation–Percentage of Companies Subject to New Core Filings

	Average 2001 – 2016	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Consumer Discretionary	4.8%	4.5%	3.8%	5.1%	3.8%	4.9%	8.4%	1.2%	0.0%	3.6%	8.5%
Consumer Staples	2.9%	2.6%	4.9%	0.0%	2.4%	2.4%	0.0%	0.0%	5.0%	2.6%	2.7%
Energy/ Materials	1.4%	0.0%	1.5%	4.3%	0.0%	2.7%	0.0%	1.3%	0.0%	4.5%	3.3%
Financials/ Real Estate	8.4%	31.2%	10.7%	10.3%	1.2%	3.7%	0.0%	1.2%	1.2%	6.9%	3.3%
Health Care	8.3%	13.7%	3.7%	13.5%	2.0%	1.9%	5.7%	0.0%	1.9%	17.9%	8.3%
Industrials	3.1%	3.6%	6.9%	0.0%	1.7%	1.6%	0.0%	4.7%	0.0%	6.1%	8.7%
Tele-communications/ Information Tech	5.9%	2.5%	1.2%	2.4%	7.1%	3.8%	9.1%	0.0%	4.2%	6.8%	8.5%
Utilities	5.1%	3.2%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%	3.4%	3.4%	7.1%
All S&P 500 Companies	5.2%	9.2%	4.4%	4.8%	2.8%	3.0%	3.4%	1.2%	1.6%	6.6%	6.4%

0% | 0–5% | 5–15% | 15–25% | 25%+

1 The chart is based on the composition of the S&P 500 as of the last trading day of the previous year.
2 Sectors are based on the (S&P) Global Industry Classification Standard (GICS).
3 Percentage of Companies Subject to New Filings equals the number of companies subject to new securities class action filings in federal courts in each sector divided by the total number of companies in that sector.

Pricing

Insurers have been pressing for rate increases since late 2017, and their efforts are beginning to have an impact on D&O pricing. According to Aon's Q2 2018 D&O Price Index, the index increased to 0.70 in Q2 2018 from 0.66 in Q2 2017, which represents a 6.1 percent increase. Notably, in five of the six most recent months, average primary pricing has increased. Expect further rate pressure in the management liability world as exposure remains heightened, pricing is still near all-time lows, and loss development trends are expected to be challenging for insurers.

D&O Coverage

With few exceptions, 2018 is once again a year of enhanced coverage for most industries, products, and insureds. General trends include:

- Entity investigation coverage continues to be available for most public company clients, albeit with a meaningful additional premium
- Aiding and abetting, books & records costs, express plaintiff's attorneys fee and mootness fee coverage are more commonplace
- Side A limits reinstatement provides additional protection for individuals; enhanced fines and penalties cover also is available on a Side A basis
- Side A enhancement cover (within the ABC tower) continues to grow in availability with selected markets

While pricing is beginning to flatten or trend upward, the 2018 market presents an excellent opportunity for insureds to achieve additional coverage enhancements (in many cases, for no impact to premium).

Other Lines

Similar to the D&O market, Other Lines are mixed as well. Some general observations and predictions include:

- **Crime:** Significant social engineering limits are available (often for additional premium);
- **EPL / Wage & Hour:** Traditional EPL pricing is starting to exhibit upward pressure, at least partially a result of the #metoo movement; Pricing and retentions for Wage & Hour coverage continue to become more attractive.
- **Fiduciary:** Excessive fee exposures are of particular focus for underwriters, and insureds can expect more questions and potentially higher retentions specific to financial institutions. Some insurers are excluding loss related to proprietary funds in sponsored retirement plans, which has resulted in numerous "excessive fee" claims.

Conclusion

2018 has been a unique year in the D&O market, with rates trending upward for the first time in a very long time. However, on a relative basis the market remains favorable for attractive D&O risks, and companies across all industries, including the Power industry, still have the ability to secure favorable coverage terms.

Cybersecurity Market Update

By Nolan Wilson

Nolan Wilson

Capacity

Capacity continues to increase in the broader cyber insurance marketplace. Individual insurers are deploying higher capacity, while new markets enter the cyber insurance marketplace. Viable primary insurer options specific to the power and utility industry are more limited compared to many other industries, as some markets do not want to provide business interruption coverage for a power and utility company or have higher waiting period and / or retentions to provide business interruption coverage. At least one industry mutual insurer continues to be a large player in the power and utility industry primary cyber marketplace. However, ample primary and excess capacity exists in the U.S. and London, and to a lesser extent, Bermuda. $300M+ capacity is available in the marketplace specific to the power and utility industry.

Coverage

Cyber coverage is expanding in favor of buyers. Insurers are growing more comfortable with privacy exposure relative to business interruption and system failure risk. At the same time, coverage is evolving greatly in the business interruption and system failure insuring agreements. While insurers cite unknowns in modeling and predicting exposure, due to competition within the cyber marketplace, coverage across cyber insuring agreements is expanding. The rapid development in claims and competition means insurers release updated policy forms to keep up with the advancements in coverage terms and conditions. Given the flexibility in the cyber marketplace, tailoring unique policy terms and conditions is feasible, subject to higher retention and pricing. Other lines of coverage, including property, crime, kidnap and ransom may have elements of cyber coverage, many times at varying limits and retentions from what may exist under a cyber insurance program. Markets are typically open to amending other insurance clauses to allow insureds to maximize insurance payouts.

Program Structure

Retentions of all levels are available in the marketplace and may vary from insurer to insurer. In the current environment, few clients consider higher retentions and the premium savings for higher retentions typically do not equal significant premium relief. While adjusting retentions can lead to increased coverage and / or limit and / or pricing flexibility, most insurers are maintaining retentions year over year, unless losses force a higher retention. As a result of competition in the marketplace, pricing is flat to down on a primary basis. There is more competition in the excess layers compared to the primary layer.

Cyber Risk Quantification

Quantifying cyber risk is a top question in discussions with clients. The decision-making process on cyber risk varies by client. Many clients select cyber limits based on peer benchmarking. Other clients purchase a cyber insurance program to have one in place, satisfy board level discussions, and complete further analysis in the future to determine appropriate limits. There are ample analytical tools to determine loss scenarios including business interruption from a profitability and severity standpoint. Many models predict losses in conjunction with cyber security controls. Completing an analysis brings more certainty and justification to the cyber buying process.

Conclusion

In 2018, cyber risk has advanced. With growing Internet of Things (IoT) botnets, ransomware that targets backups, and an increasingly complex regulatory environment—cyber risk management must keep up. The goals stay the same: to protect business continuity and your organization's information. What needs to be done, however, to achieve these goals changes as rapidly as do the threats.

To help clients and the broader enterprise community stay a step ahead of the newest tactics of cyber attackers, Aon's Cyber Solutions offers annual predictions each January. These forecasts come straight from our elite force of incident responders, proactive security advisors, cybersecurity testing technicians, and cyber insurance leaders—based on their first-hand experiences in the field, working with boards and C-Suites across multiple industries and company sizes. Please see Aon's 2018 Cyber Predictions: Reality Check https://content.strozfriedberg.com/updated-2018-cybersecurity-trends-predictions-report

With growing Internet of Things (IoT) botnets, ransomware that targets backups, and an increasingly complex regulatory environment—cyber risk management must keep up

Casualty Market Update

By Christine Palomba and Cindy Fee

Christine Palomba

Cindy Fee

2018 largely continued the cycle of a strong and stable casualty market. Ample capacity remained on both the primary and excess casualty front, with healthy competition keeping rates steady. There were exceptions to this rule, mainly in the areas of Commercial Auto, where we continue to see single-digit to low double digit increases and, in particular, California Wildfire Liability which saw a major reduction in capacity and significant rate increases as the market reacted to the 2017 wildfire losses. Outside these more challenged areas, we did not see many disruptions in the market over the course of 2018, and anticipate this will continue into the new year.

NEIL, the Nuclear Energy captive mutual, is also in the process of exploring the potential of offering excess liability limits to its members as a way to further support their membership and expand their conventional product offerings. Aon is participating on the Non-Core Working Group that is part of NEIL's formal review process and will keep clients updated as this continues to develop.

Conclusion

Looking forward to 2019, we see no indications of impending major market shifts which should allow stable conditions to continue. Of note are the November 2018 wildfire losses, in particular, The Camp Fire loss which has now surpassed the October 2017 wildfires as the most severe wildfire in history. This could cause further market restriction for CA Wildfire capacity which may impact the many power and utility clients who have CA operations, even if they are limited in nature.

Outside these more challenged areas, we did not see many disruptions in the market over the course of 2018, and anticipate this will continue into the new year.

The industry mutual carriers, AEGIS and EIM, both had some impactful changes this past year:

AEGIS	continued to offer the availability of $50M Occurrence /$100M Aggregate limits with potential to offer up to $70M Occurrence / $100M Aggregate if facultative reinsurance is used
AEGIS	also rolled out a "bonus" continuity credit where members can earn additional credits if 4 or more major product lines of coverage are purchased
EIM	confirmed their ability to attach at a $25M limit
EIM	began offering 3 year rate lock agreements with flat rates
EIM	announced a 60% increase in member distribution at their February RMIM and then declared an additional $25M in distributions in Q3 of 2018

Property Market Update

By Derek Whipple, Kathleen Musselman, and David Reisinger

Derek Whipple

Kathleen Musselman

David Reisinger

Property Market Update

The last half of 2018 is proving to be an active period for events in the power and utility section. We have experienced Hurricane Florence in September and Hurricane Michael in October, a major gas explosion in the Northeast, a large steam turbine event in October and continued Wildfires in the West. In addition, we have seen the emergence of a potential new technology issue in the GE HA machine so the industry will be paying close attention to this development.

Although there has been a flurry of activity, property market capacity for power and utility clients remains abundant. We are continuing to see some markets pushing for rate increases but on average they are not at the levels the industry is seeking. With rate increases being sought, there are still opportunistic markets looking to write new business or to expand their lines on some accounts, effectively applying pressure to keep rate increases to a minimum. Overall, rate changes have been in the low single digits with outliers for clients with adverse loss experience.

The industry mutual insurers (FM, AEGIS, NEIL, and EIM) continue to have strong support from their clients. NEIL has introduced additional membership credits due to their excess surplus which is a benefit some clients are looking to maximize. AEGIS is offering a Member Loyalty Credit of 20% of the total applicable continuity and premium credits if clients purchase four or more qualifying lines of coverage. As rate increases are sought by the mutual(s), clients are carefully weighing these membership credits against the possibility of testing the broader insurance market to achieve cost savings.

Although there has been significant loss activity, there is still no shortage of required Natural Catastrophe coverage for our clients. However, underwriters are certainly being conservative offering capacity as they continue to access and monitor their line size based on individual risks.

Clients are seeking alternative ways to insure assets that are planned for retirement. In lieu of replacement cost, several alternatives such as Actual Cash Value or Demolition coverage are being evaluated along with any associated credit in premium.

Conclusion

Aon is continuing to monitor any additional changes or adjustments to various insurers' underwriting stances as they pertain to coal. Our view is that despite recent changes by several key insurers, there is still a strong appetite within the global insurance market for coal and other fossil fuel power generation.

As we approach 2019, we will carefully watch treaty renewals as well as interest rates increases. Both may impact clients' future premium levels as insurers will use these changes to seek rate increases. Given some of the uncertainly in the market, time will be critical for upcoming renewals to provide buyers with options during the renewal process and possibly seek alternatives.

2018 has also seen some markets announcing that they are divesting from coal-related business:

Allianz	will stop insuring new coal projects. It will also divest from major coal interests. Allianz will end stand-alone coverage for the construction and operation of coal mines & coal-fired power plants, as well as non-renewing existing policies except in exceptional cases. Companies that generate energy from multiple fuel sources will continue to be insured. Allianz has committed to completely withdrawing from the coal sector by 2040.
Aviva	will not write any stand-alone coal. They will only consider risks where less than 50% of the installed capacity is coal (or there are plans to reduce coal capacity to less than 50% within 5 years).
Lloyd's of London	has excluded coal from its investment strategy for the central mutual fund. However, at this stage there are no changes to any Syndicate underwriting guidelines with respect to insuring thermal coal assets.
Scor	has announced that they will not offer insurance that would specifically encourage new coal mines. There is no change in underwriting of existing thermal coal plants. They have also introduced an environmental, social and governance requirement into their underwriting, but we have not seen this impact their risk appetite to date.
Swiss Re	has announced that if more than 30% of an insured's total megawatt output is from thermal coal-fired generation, then Swiss Re will no longer underwrite the risk.
Zurich	has announced significant changes to their underwriting strategy, with implementation phased over the next 2 years. They will discontinue underwriting power companies that generate more than 50% of their generation from thermal coal. Zurich has suggested that there may be exceptions based on the client's strategy and position on climate risk. If clients demonstrate that they are building or acquiring renewable energy projects, it may be sufficient for Zurich to grant an exception.

Offshore and Onshore Wind Market Update

By Tim Halpern-Smith and Todd Burack


Tim Halpern-Smith


Todd Burack

Offshore Wind

Offshore wind has been long talked about in the U.S., with Cape Wind getting very close but ultimately never quite reaching the finishing line. While Block Island (which reached Commercial Operation in 2016) was a positive milestone, to date the utility scale projects seen in Europe have not come to fruition in the U.S.

2018, however, has been a positive year for the U.S. wind industry with some recent auction results and M&A activity bringing many of the European offshore wind companies into the U.S. (Iberdrola, CIP, Orsted, EDF) with many industry experts thinking this will signal the start of significant growth in the U.S. wind industry over the next five years.

The well-established and growing offshore wind insurance market has been watching this development closely. The offshore wind insurance market has grown out of Europe with many major insurers and specialist insurers now participating in the sector. It continues to attract new insurance capacity from traditional market leaders, as well as new entrants in the offshore wind sectors, therefore creating enhanced competitive pressure among insurers. There is now in the region of 10+ Lead Insurers and 20+ follow insurers with the experience and appetite to write offshore wind risks.

These European insurers have followed the offshore wind industry into new locations across Europe and more recently Asia (e.g. Taiwan), and we expect this trend to continue in the U.S., with such insurers partnering with their U.S. offices. The offshore wind industry now relies on a proven insurance approach covering in excess of 20 GW+ of offshore wind farms being built or operating across the world, on a bespoke and broad offshore wind wording. This approach is well tested, paying in excess of USD 350M of claims to date, and is accepted and expected by international lenders, insurers, contractors and suppliers.

Of course local considerations (see below) and insurance practices will need to be considered, but the appetite and capacity is certainly available for this growing U.S. offshore wind industry.

In recent years, the appetite of insurers (and re-insurers) for the offshore wind sector has grown in scale, which has resulted in a downward trend of premium rates over the last five years. Recently, however, there have been signs of a gradual hardening of conditions in pricing, terms and conditions, particularly related to claims on certain technology types, as well as increasing design issues with foundation and cables. This worsening claims performance has left insurers under pressure, particularly as the previously well performing operating covers are now suffering large losses, on top of the general insurance market impact of recent hurricane events. Nevertheless, the offshore wind class has not suffered from an EML event to date and consequently these construction claims have had only limited impacts on insurance conditions and claims negotiations, rather than being market changing events in themselves.

Conclusion

Therefore, the international insurance market for offshore wind is ideally placed to support the growing U.S. offshore wind sector but for entrants new to this sector, early engagement and transparent discussion will be an important part of achieving the pricing, terms and conditions available in Europe. We continue to engage with the U.S. and international insurers to share our insights in the sector and lessons learned across our global offshore wind placements to date – it's important we help grow and support a sustainable U.S. insurance market for this exciting new sector, supported by the significant experience and capacity of the international insurance market.

Insurers are always cautious in new offshore wind locations and the U.S. will be no different. In particular they will be paying close attention to the following considerations for offshore wind projects in the U.S.:

- Local content requirements and how quality control is being governed at suppliers new to the sector
- Lead times for critical spares, assuming they are coming from Europe
- Lead times for vessels and critical equipment, assuming they are coming from Europe (subject to Jones Act requirements)
- Local infrastructure including ports and whether they are there suitable for the industries growth plans
- Exposure to Natural Catastrophe perils and project design to address these exposures
- MWS involvement – balance between local knowledge and experience in offshore wind.

Information about Aon's Offshore Experience:*

1. Aon is currently the insurance placement broker to sixty of the worlds offshore wind farms, including wind farms in the U.S., China and Taiwan;
2. Aon places the construction insurances for the five largest offshore wind farms currently under construction;
3. Aon is insurance broker to seventeen of the top twenty largest operating offshore wind farms in the world;
4. Aon places insurances for the world's largest floating offshore wind farm;
5. Aon has placed the insurances for an offshore wind farm in every country in the world which currently has an offshore wind farm under construction or in operation;
6. Aon is the offshore wind insurance broker to four of the top five largest offshore wind operators in the world.

** As of November 2018*

Onshore Wind

A natural catastrophe filled 2017 has yet to have a significant impact on the level of onshore renewable insurance capacity and pricing, and thus the marketplace remains competitive and well capitalized. The notable losses incurred and insurers' subsequent push for rate have been tempered by this continued saturation of capacity in the renewable space. New market participants–such as Pioneer Underwriters out of London–are slowly emerging as viable competition to the historically condensed underwriting landscape with the likes of PERse, Gcube, Travelers, and Axis (through Aon's exclusive facility, RE-GEN). A combination of leveraging portfolio-type renewable risks and the inherent competition brought on by new market players has fended off upward trending rates, leaving most renewals in the realm of flat with multiyear options and no claims bonuses becoming more standard.

Insurer	Capacity per Project	S&P
RE-GEN	$500M	A+
PERse	$1B	A+
GCube	$700M	A+
Travelers Lloyd's	$250M	A+
Pioneer Lloyd's	$40M	A+
Liberty Lloyd's	$150M	A+

Although this saturation of renewables capacity should help weather any significant bumps in clients' premiums, underwriters are forced to remain diligent in their approach as margins continue to be eroded from attritional type losses. In an industry focused on rapid growth, it is important to note that plenty of the technology still operating is nearing its end of warranty coverage, leaving a big question mark regarding whether insurers are prepared to offer competitive terms for fleets outside the scope of warranty. Without extended warranties in place, under-writers may look to higher retentions and lower sublimits to ease market fears that their involvement goes beyond fortuitous loss. Renewals coming out of warranty are seeing premium rate loads of anywhere between 7.5% - 15%, although these adverse charges can be mitigated by the existence of a comprehensive O&M contract in place with a recognized OEM. Specifically with wind, the severity of loss has grown in tandem with the physical size of the turbines; however, deductible levels have remained relatively consistent. Insurers have been forced to opt for quota share options in lieu of 100% offerings of the past as pushing rate or increasing deductibles in the competitive environment remains a challenge.

Renewables development remains at the forefront of MW's coming online as governing bodies continue to set renewable portfolio standards. With funding pouring into onshore wind and solar, it has never been more appropriate for Aon to act as an educator on contractual requirements involving OEM's, EPC's, and tax equity/lenders. Establishing what is not only reasonable but also commercially viable should remain a focal point in all conversations with prospective project owners. As an example, 2017's notable hurricane activity resulted in tax equity placing sizable Named Windstorm capacity requirements on a Texas gulf coast wind project. A combination of Aon's involvement in bridging the gap between investors' desired NAT CAT capacity, the project owner's pricing capabilities and RE-GEN's ability to secure suitable lead terms led to making a complex risk bankable.

Conclusion

As the onshore renewables landscape continues to mature and the technology's capacity and size grows, it is imperative that risk management be involved in every facet of project development and operation due to the increasing severity of potential loss. Tax credits are too lucrative, lead times have grown too long, and contractual requirements are too strict to not have an accurate picture of the risk profile throughout the life cycle of a project.

Nuclear Market Update

By Brian DeBruin and Thomas Magnuson

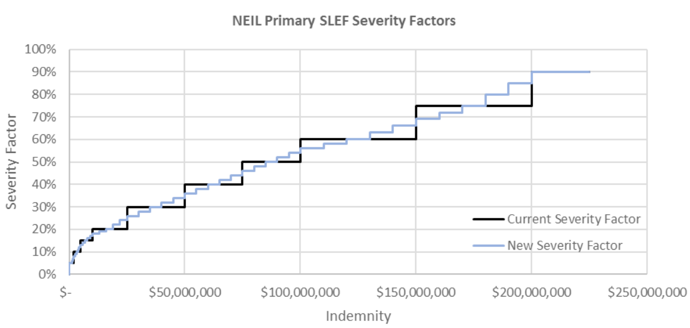
NEIL Continued Improvement – Site Loss Experience Factor

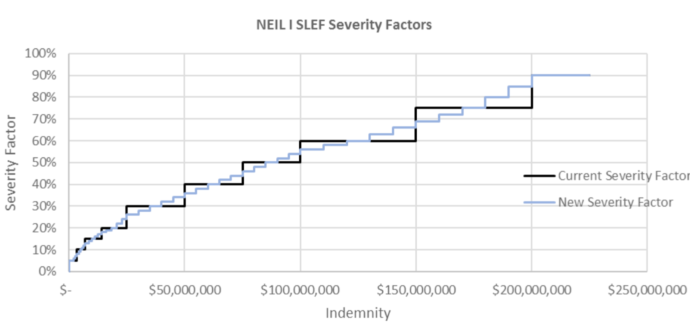
Brian DeBruin

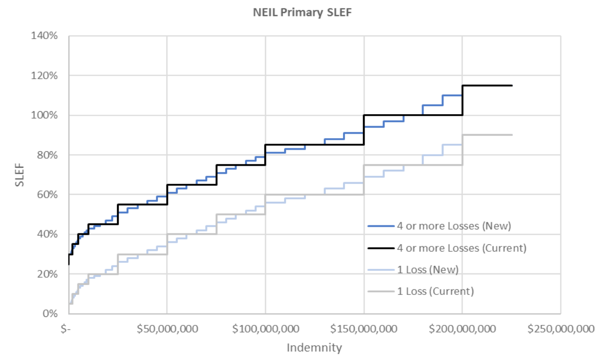
Thomas Magnuson

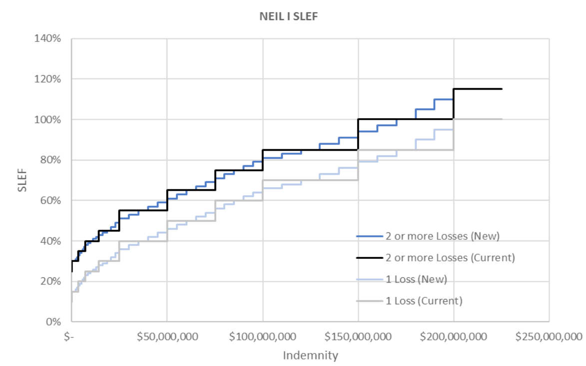
At the October 2018 NEIL Insurance Advisory Committee (IAC) meeting, Members voted to amend the Site Loss Experience Factor (SLEF) to expanded severity and frequency tables for assessing premium increases based on paid indemnity. This reduces the large step changes that would occur with the current SLEF calculation method; thus reducing the potential for large impacts to future premiums depending on whether the indemnity paid lands on one side or the other of these breakpoints. The change to SLEF will be voted on by the NEIL board of directors in December and if approved will go into effect on April 1st, 2019.

According to NEIL, SLEF was originally developed to differentiate risks across the Mutual by applying a premium increase for those sites that were indemnified by NEIL for claims incurred. The system that was developed applies only to the Primary and Accidental Outage policies and only for losses that have been indemnified in the last three years. The inputs for the SLEF are the amount of indemnification and number of losses, and can result in a premium increase anywhere from 0% - 115%. In practice, the SLEF has resulted in only $18.5 million of additional premiums over the past ten years. This equates to 2.7% of the total amount of indemnity paid ($687 million) over that same period.









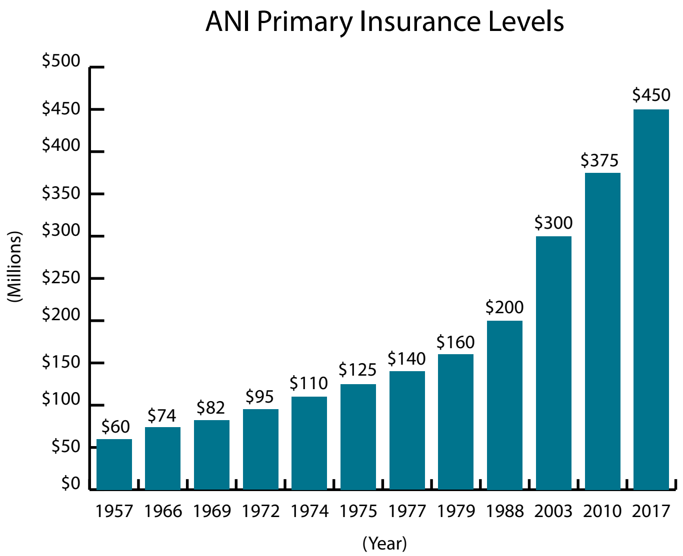
The driving factor for the most recent change can best be illustrated with an example. In the current system, if a site had a loss on their Primary policy that was indemnified for $9.9M, a severity factor of 15% would be applied to their policy and if that indemnified loss was $10M, the severity factor would go up to 20%. With the new expanded breakpoints, those same indemnified losses would result in severity factors of 17% and 18%, respectively. The change smooths out the severity factor curve and drives closer to the intended goal.

When analyzing the effects of SLEF on individual risk management programs we need to consider the choice of deductible. The objective is to try and minimize SLEF effects on low dollar indemnity while ensuring that the risk retention remains at a comfortable level. However, the effect of SLEF on a program will most likely not be significant enough to cause a change in risk retention structure.

Conclusion

The overall effect from the changes to SLEF is positive and a testament to NEIL and its Members for their process of continued improvement. The Underwriting Subcommittee will continue to evaluate different SLEF methodologies in 2019.

SFP change and history



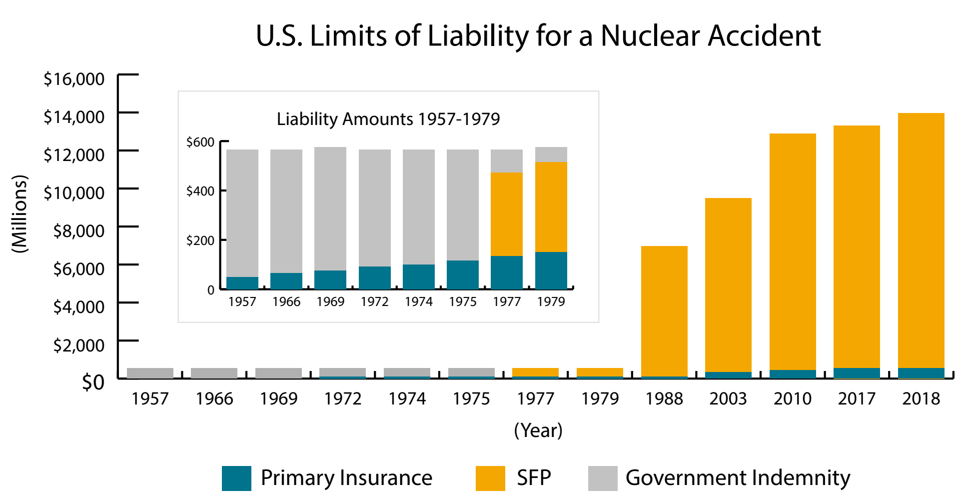
The Price-Anderson system was launched in 1957 with a financial protection requirement of $60M for operators of large power reactors with $500M of government indemnity applying in excess. This initial arrangement was a simple design and limited duration to help a young nuclear industry grow while addressing costs related to potential accidents. However, by 1965 substantial pressure for an increase in private insurance capacity had developed leading to the passing of Public Law 89-210, which amended Price-Anderson extending it out until 1977. As amended, it established strict liability to the licensee and reduced the government indemnity by the amount by which the financial protection required exceeded $60 million. That same year, ANI increased their capacity from $60 million to $74 million. By 1977 the financial protection requirement and associated private insurance capacity had reached $140 million.

In 1975, it was decided to extend Price-Anderson again but with a key amendment. A requirement was created to establish regulations for licensees of operational large power reactors to participate in a new insurance retrospective rating plan called “Secondary Financial Protection”. This new system made each licensee vulnerable to an assessment for a deferred premium of up to $5 million per reactor, per nuclear incident but not more than $10 million per year, per reactor. This amendment established a structure in which government indemnity would quickly be superseded by commercial insurance and retrospective obligations, and by 1983 it was completely eclipsed.

The renewal of the Price-Anderson act in 1988 provided the largest change and formed the program we see today. Since 1977, the SFP retrospective premium amount per reactor had remained unchanged. The signing of Public Law 100-408 brought that amount up to $63 million per reactor, per incident but not more than $10 million per year, per reactor. Additionally, this overall limit was subject to an inflationary adjustment at least once every 5 years and up to a 5% legal expense surcharge. The final piece that Congress added was the explicit comment that in the event of a nuclear accident with losses in excess of the SFP Congress will “take whatever action is deemed necessary” and no provision may be “construed to preclude the Congress from enacting a revenue measure, applicable to licensees”. This simple change provided public assurance that they would be compensated if limits of liability were exceeded but it also allowed an avenue for the government to possibly turn back to the licensees for that revenue. After a few inflationary adjustments and a couple of short term extensions, the Price-Anderson Act was extended out to 2025 via the Energy Policy Act of 2005. This most recent amendment brought with it a new inflationary requirement for the annual SFP sub-limit.

Conclusion

Today, with the most recent inflationary adjustment coming into effect in November, the SFP requirements stand at $131 million per reactor, per year with an annual limit of $20.5 million per year for a total limit of liability of $14.07 billion inclusive of the 5% surcharge.



Key Contacts

Todd Burack
Account Specialist, Onshore Renewables
Aon Global Power Specialty
214.989.2105
todd.burack1@aon.com

Brian DeBruin, CPCU, CRIS, ARM
Managing Director
Aon Global Power Specialty
212.441.1372
brian.debruin@aon.com

Tim Halperin-Smith
Chief Commercial Officer, Offshore Renewables
Aon Global Power Specialty
+44 (0)20 7086 3364
tim.halperinsmith@aon.com

Mark A. Fishbaugh
U.S. Power Practice Leader
Aon Global Power Specialty
704.343.8648
mark.fishbaugh@aon.com

Cynthia Fee
Senior Casualty Specialist
Aon Global Power Specialty
916.369.4808
cynthia.fee@aon.com

Thomas Magnuson
Broker, Nuclear Risk
Aon Global Power Specialty
212.441.2254
thomas.magnuson@aon.com

Ken McBrady
Managing Director
Aon Financial Services Group
212.441.1209
ken.mcbrady@aon.com

Kathleen Musselman
Senior Property Placement Broker
Aon Global Power Specialty
847.771.0451
kathleen.musselman@aon.com

Christine Palomba
U.S. Power Casualty Team Leader
Aon Global Power Specialty
401.553.6638
christine.palomba@aon.com

David Reisinger
Senior Property Placement Broker
Aon Global Power Specialty
312.381.2160
david.reisinger@aon.com

Chris Scontras
Managing Director
Aon Global Power Specialty
617.210.4964
chris.scontras@aon.com

Ross Wheeler
Regional Managing Director
Aon Financial Services Group
312.381.4569
ross.wheeler@aon.com

Derek Whipple
Managing Director, Property
Aon Global Power Specialty
415.486.7354
derek.whipple@aon.com

Nolan Wilson
Broker
Aon Cyber Solutions
305.961.6001
nolan.wilson@aon.com

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